Governors State University
empower yourself

TU WIEN TECHNISCHE UNIVERSITÄT WIEN
Vienna University of Technology

SAKARYA UNIVERSITY



INTE

INTERNATIONAL CONFERENCE ON NEW HORIZONS IN EDUCATION

JULY 13-15, 2016 WIEN, AUSTRIA

Proceedings Book

Volume 3

ISSN: 2146-7358

Editors

Prof. Dr. Aytekin İŞMAN

Assoc. Prof. Dr. Ahmet ESKİCUMALI

Technical Editor

Assist. Prof. Dr. İrfan ŞİMŞEK

Published Date: *December 4, 2016*

Foreword

Dear Guests,

International Conference on New Horizons (INTE) is international educational activities for academics, teachers and educators. These conferences are now well-known international academic events and the number of paper submissions and attendees increase every year. They promote the development and dissemination of theoretical knowledge, conceptual research, and professional knowledge through conferences activities, the conference proceedings books and TOJET & TOJNED. Their focus is to create and disseminate knowledge about new developments in their field. This year, INTE is organized collaboratively in Vienna University of Technology. This Conference has received almost 1300 applications. The Conference Academic Advisory Board has accepted approximately 600 paper to be presented in INTE Conference.

We would like to thank Prof. Dr. Muzaffer ELMAS, Rector of Sakarya University and Prof. Dr. Hellmuth STACHEL from Vienna University of Technology for their supports of organizing these Conferences

We also would like to thank all participants who will present their academic works in INTE 2016, Vienna, Austria and especially to our distinguished guests and keynote speakers for their collaboration and contribution for the success of INTE 2016.

We wish you a successful conference and good time in Vienna, Austria.

Prof. Dr. Aytekin İŞMAN

Doç. Dr. Ahmet ESKİCUMALI

 Copyright © International Conference on New Horizons in Education (INTE)

INTE 2016 Organizing Committee

Honorary

Prof. Dr. Elaine P. MAIMON, President, Governor State University, United States

Prof. Dr. Muzaffer ELMAS, President, Sakarya University, Turkey

Prof. Dr. Sabine SEIDLER**,** President, Technische Universität Wien, Austria

General Coordinator

Prof. Dr. Aytekin İŞMAN, Dean, Sakarya University, Turkey

Coordinators

Prof. Dr. Carlos De Sousa REIS**,** Coimbra University, Portugal

Prof. Dr. Colleen SEXTON, Governors State University, United States

Prof. Dr. Deborah E. BORDELON, Governors State University, United States

Prof. Dr. Hellmuth STACHEL, Vienna University of Tecnology, Austria

Prof. Dr. J. Ana DONALDSON, AECT Former President, United States

Prof. Dr. Teresa FRANKLIN**,** Ohio University, United States

Assoc Prof. Dr. M. Ahmet ESKİCUMALI, Sakarya University, Turkey

Associate Coordinator

Assist. Prof. Dr. İrfan ŞİMŞEK, Istanbul University, Turkey

Conference Secretary

Lect. Mustafa ÖZTUNÇ, Sakarya University, Turkey

 Copyright © International Conference on New Horizons in Education (INTE)

INTE 2016 Editorial Board

Aaron DAVENPORT, Grand View College, United States

Ahmet ESKİCUMALI, Sakarya University, Turkey

Andreja Istenic STARCIC, University of Primonska, Slovenija

Antoinette MUNTJEWERFF, University of Amsterdam, Netherlands

Antonis LIONARAKIS, Hellenic Open University, Greece

Arif ALTUN, Hacettepe University, Turkey

Arvind SINGHAL, University of Texas, United States

Asuman Seda SARACALOĞLU, Adnan Menderes University, Turkey

Aytekin ISMAN, Sakarya University, Turkey

Brent G. WILSON, University of Colorado at Denver, United States

Buket AKKOYUNLU, Hacettepe University, Turkey

Carlos De Sousa REIS, Instituto Politecnico da Guard, Portugal

Cem BİROL, Near East University, North Cyprus

Charlotte GUNAWARDENA, University of New Mexico, United States

Colleen SEXTON, Governor State University, United States

Dale HAVILL, Dhofar University, Oman

Danguole RUTKAUSKIENE, Kauno Tech. University, Lithuania

Dougles Franklin, Ohio University, United States

Don FLOURNOY, Ohio University, United States

Elnaz ZAHED, University of Waterloo, UAE

Eric Zhi-Feng LIU, National Cenral University, Taiwan

Francine Shuchat SHAW, New York University, United States

Gianni Viardo VERCELLI, University of Genova, Italy

Gilbert Mbotho MASITSA, Universirty of The Free State - South Africa

Giovanni ADORNI, University of Genova, Italy

Gregory ALEXANDER, Universirty of The Free State - South Africa

Gulriz IMER, Mersin University, Turkey

Heli RUOKAMO, University of Lapland, Finland

Hj. Mohd Arif Hj. ISMAIL, National University of Malaysia, Malaysia

Hüseyin YARATAN, Eastern Mediterranean University, North Cyprus

Iman OSTA, Lebanese American Universiy, Lebanon

Ina Joubert, University of Pretoria, South Africa

Jagannath DANGE, Kuvempu University, India

James C. HOLSTE, Texas A&M University at Qatar, Qatar

Jerry WILLIS, Manhattanville College, United States

Kakha SHENGELIA, Caucasus University, Georgia

 Copyright © International Conference on New Horizons in Education (INTE)

Karel RYDL, Pardubice University, Czech Republic

Manoj Kumar SAXENA, Advanced Institute of Management, India

Mariam MANJGALADZE, Institute of Linguistics, Georgia

Marina STOCK MCISAAC, Arizona State University, United States

Martin STEIN, Westfalische Wilhems University, Germany

Miguel j. ESCALA, Ins. Tech. de Santa Domingo, Dominican Republic

Min JOU, National Taiwan Normal Uni., Taiwan

Mohammad YAMIN, King Abdulaziz University, Saudi Arabia

Monte CASSIM, Ritsumeikan Asi Pacific University, Japan

Nabi Bux JUMANI, Allama Iqbal Open University, Pakistan

Osman TİTREK, Sakarya University, Turkey

Ozcan DEMIREL, Hacettepe University, Turkey

Pamela EWELL, Central College of IOWA, United States

Paul KGOBE, Centre of Edu. Pol. Dev., South Africa

Paul Serban AGACHI, Babes-Bolyai University, Romania

Paula FITZGIBBON, University of Victoria, Canada

Pedro TADEU, Instituto Politecnico da Guarda, Portugal

Psaltis IACOVOS, European University Cyprus, Cyprus

Raja Rizwan HUSSAIN, King Saud University, Saudi Arabia

Rozhan IDRUS, Sains Malaysia University, Malaysia

Saedah SIRAJ, University of Malaya, Malaysia

Seçil KAYA, Anadolu University, Turkey

Serap OZBAS, Near East University, North Cyprus

Stefan AUFENANGER, University of Mainz, Germany

Tam Shu SIM, University of Malaya, Malaysia

Teressa FRANKLIN, Ohio University, United States

Tülen SANER, Near East University, North Cyprus

Veysel SÖNMEZ, Cyprus International University

Vincent Ru-Chu SHIH, National Pingtung Univ. of Sci. & Tech., Taiwan

Vu Thi Thanh HOA, Oxfam Great Britain, Vietnam

Yavuz AKPINAR, Bogazici University, Turkey

Prof. Dr. Paolo DISIA, Free University of Boucano, Italy

Dr. Hanna ONYI YUSUF, Bello University, NIGERIA

 Copyright © International Conference on New Horizons in Education (INTE)

INTE 2016 Keynotes



Assistive Technology: Expanding Higher Education to All Students

Prof. Dr. Robert G. Doyle
Harvard University, United States



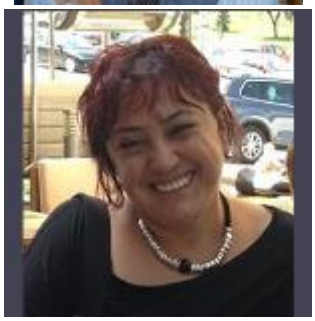
Developing Causal Evidence using Different Research Methods: Applications in Education

Prof. Dr. John Hitchcock
University of Indiana, United States



Applied Geometry: Foldings and Unfoldings

Prof. Dr. Hellmuth STACHEL
Vienna University of Technology, Austria



The Future of Education: Bring Your Own Device (BYOD) in the Classroom

Prof. Dr. Buket AKKOYUNLU
Hacettepe University, Turkey



Philosophical Foundatıons of Science and Technology The Historical Context

Prof. Dr. Durmus GÜNAY

Maltepe University, Turkey

 Copyright © International Conference on New Horizons in Education (INTE)

TABLE OF CONTENT

IMPACT OF MISSING DATA ON RASCH MODEL ESTIMATIONS 1
Sümeyra SOYSAL, Çiğdem Akın ARIKAN, Hatice INAL
IMPACT OF THE DEMOGRAPHICS ON ACADEMIC ACHIEVEMENT IN ARCHITECTURE EDUCATION 13
Filiz ŞENKAL SEZER, Yasemin ERBİL
IMPLEMENTATION OF TAX EDUCATION ON ELEMENTARY SCHOOL STUDENTS AS AN EFFORT TO RAISE TAX AWARENESS IN DIRECTORATE GENERAL OF TAXES REGIONAL OFFICE FOR WEST JAVA II 18
Anita Setia Winartati, Milla Sepliana Setyowati
IMPLEMENTING DIDACTIC MEASURING TECHNOLOGY JOINED WITH INQUIRY APPROACH – A WAY TO ENHANCE STUDENTS UNDERSTANDING OF PHOTOSYNTHESIS. 25
RYPLOVA RENATA, CEKAL TOMAS
IMPORTANCE OF ETHICAL PRINCIPLES IN ADVERTISING AND BOARD OF ADVERTISEMENT'S FUNCTION AS A METHOD OF ADMINISTRATIVE CONTROL 31
Abdullah ÖZKAN
IMPROVING HERITAGE AWARENESS THROUGHOUT ARCHITECTURAL EDUCATION IN DESIGN STUDIOS 37
Gözde Kırlı OZER, Rengin Beceren ÖZTÜRK, Arzu ÇAHANTİMUR
IN-SERVICE SCIENCE TEACHER EDUCATION IN PORTUGAL: AN ANALYSIS OF THE SHORT COURSES AVAILABLE 45
Luís DOURADO, Laurinda LEITE, Sofia MORGADO
INFLUENCES OF PHYSICS EDUCATION SUPPORTED BY COMPUTER SIMULATIONS ON MOTIVATION LEVELS AND TEACHING STRATEGIES OF TEACHER CANDIDATES 57
Mustafa KAHYAOĞLU, Veysel ÇELİK
INNOVATIVE TEACHING IN HIGHER EDUCATION: THE BIG DATA APPROACH 64
Miftachul HUDA, Muhammad ANSHARI, Mohammad Nabil ALMUNAWAR, Masitah SHAHRILL, Abby TAN, Jainatul Halida JAIDIN, Sabrina DAUD, Masairol MASRI
INTEGRATING RESPONSIBLE RESEARCH AND INNOVATION IN PRIMARY SCHOOL PROJECT-BASED LEARNING - THE "LOTUS EFFECT" ACTIVITY 70
Gabriela Alina ANGHEL, Gabriel GORGHIU
INTELLECTUAL STRUCTURE OF STEM EDUCATION IN EDUCATIONAL RESEARCH 75
Mutlu Tahsin ÜSTÜNDAĞ, Haydar YALÇIN Erhan GÜNEŞ
INTER-CULTURAL PROFESSIONAL COMPETENCE AS A KEY ASPECT OF TRANSLATORS TRAINING 84
Leila Yu. Mirzoyeva, Aigul K. Zhumabekova
INTERCULTURAL AWARENESS OF CZECH STUDENTS AT SECONDARY SCHOOLS 90
Lucie Cviklova
INTERDISCIPLINARY APPROACH IN FOREIGN LANGUAGE TEACHING: USE OF VIDEO MATERIAL IN FORMING CULTURAL COMPETENCE OF INTERNATIONAL RELATIONS STUDENTS 106
Natalia KUZMINYKH, Ksenia Tabarintseva ROMANOVA
INTERNATIONAL ACCREDITATION OF THE MAIN EDUCATIONAL PROGRAM AS POSSIBILITY OF OPENING THE NEW EDUCATIONAL HORIZONS 109
Loginova I.O., Volkova O.V., Andrejeva J.V., Serduk T.I., Kononenko I.O.
INTERNET ADDICTION AMONG VOCATIONAL STUDENTS IN ÇANAKKALE; EXAMPLE OF BIGA VOCATIONAL SCHOOL 114
Ayten DINÇ, Ayşin AŞKIN

 Copyright © International Conference on New Horizons in Education (INTE)

INTERPRETATIONS OF THE CONCEPT OF PROBABILITY: AN INTRODUCTION 122
Paolo DI SIA
INTIMATE PARTNER VIOLENCE: SOCIAL SUPPORT AND COMING OUT 127
Garro Maria, Cirami Federica, Elena Ayllón Alonso
INTRAPSYCHICAL FACTOR INFLUENCE ON THE RATIONALITY OF THOUGHT 133
Andrea JUHÁSOVÁ
INVESTIGATING PRESCHOOL TEACHERS' USE OF INFORMATION TECHNOLOGIES IN TERMS OF SPECIAL FIELD COMPETENCES 141
Fatma Elif KILINC, Guluzar Sule TEPETAS CENGIZ
INVESTIGATING THE ANATOMY EDUCATION SELF-EFFICACY BELIEFS OF THE STUDENTS OF BIOMEDICAL INSTRUMNET TECHNOLOGY PROGRAM 145
Tuncay ÇOLAK, İsmail SİVRİ, Mehmet Deniz YENER, Dilşad GÜZELORDU, Rabia TASDEMİR, Elif AKSU, Belgin BAMAÇ, Serap ÇOLAK
INVESTIGATING THE ATTITUDES OF PRE-SERVICE PSYCHOLOGICAL COUNSELING AND GUIDANCE TEACHERS TOWARDS THE PREPARATION PROCESS OF INDIVIDUALIZED EDUCATIONAL PROGRAM 151
Tamer AYDEMİR, Tolga COŞGUNER
INVESTIGATION OF ACADEMIC PROCRASTINATION AND ACADEMIC SELF-EFFICACY OF PHYSICAL EDUCATION AND SPORT TEACHER CANDIDATES IN TERM OF SOME VARIABLES 158
Zehra CERTEL, Ziya BAHADIR, M. Levent ÖZGÖNÜL
INVESTIGATION OF ATTITUDE TOWARDS THE COMPUTER GAME OF MİDDLE SCHOOLS STUDENTS 164
Ayşe ALKAN, Metin ÇENGEL
INVESTIGATION OF BEING A CYBER BULLY AND VICTIM IN ADOLESCENTS ACCORDING TO DEMOGRAPHIC VARIABLES 171
Mehmet ŞAM, Erdinç DURU
INVESTIGATION OF GENERAL AND SCHOOL LIFE SATISFACTION OF ADOLESCENTS WITH DIFFERENT ACADEMIC SUCCESS LEVEL 178
Tuncay ORAL
INVESTIGATION OF RELATIONSHIP BETWEEN JUST WORLD PERCEPTIONS (BELIEF IN A JUST WORLD) AND DECISION MAKING PROCESS OF STUDENTS AT THE SCHOOL OF PHYSICAL EDUCATION AND SPORTS 183
Gokhan ACAR, Mihriay MUSA, Ahmet SAHIN, Nuri KARABULUT, Nigar YAMAN, Muhammet OZER
INVESTIGATION OF TECHNO-STRESS LEVELS OF TEACHERS WHO WERE INCLUDED IN TECHNOLOGY INTEGRATION PROCESSES 192
Ahmet Naci ÇOKLAR, Erkan EFİLTİ, Yusuf Levent ŞAHİN, Arif AKÇAY
INVESTIGATION OF THE ATTITUDES OF COLLEGE STUDENTS TOWARDS DATING VIOLENCE ACCORDING TO DEMOGRAPHIC VARIABLES 200
Ebubekir ÖZDEMİR, Erdinç DURU
INVESTIGATION OF THE PERCEPTIONS OF SELF-EFFICACY OF SECONDARY SCHOOL STUDENTS WITH DIFFERENT LEVELS OF FRIEND, FAMILY AND TEACHER SOCIAL SUPPORT 208
Tuncay ORAL
INVESTIGATION OF THE READING HABITS AND INTERESTS OF THE ELT STUDENTS WHO STUDY AT ATATÜRK UNIVERSITY: A CASE STUDY 215
Furkan CANBAY
İŞGÜCÜ PİYASALARINDA GENÇLER VE MESLEKİ YETERLİLİKLER SİSTEMİ 256
Verda CANBEY-ÖZGÜLER
İLKOKUL 3. SINIF ÖĞRENCİLERİNİN ÇEVRE ve ÇEVRE SORUNU ALGILARI İLE ÇÖZÜM ÖNERİLERİ 228
Salih CEYLAN, Ramazan PEKER

 Copyright © International Conference on New Horizons in Education (INTE)

İNGİLİZCE ÖĞRETMENLERİNİN İLKOKUL 2. ve 3. SINIFLARDA İNGİLİZCE ÖĞRETİMİNE YÖNELİK GÖRÜŞLERİNİN İNCELENMESİ 247
Ahmet ESKİCUMALI , Serhat ARSLAN , Zeynep DEMİRTAS, Yunus Emre DEMİR
IT COMPETITION FROM THE STUDENTS' PERSPECTIVE: THEIR MOTIVATION AND ATTITUDES TOWARD SUCCESS 220
Nikolina BUBICA, Ivica BOLJAT
JUST ASK! WHAT PROMPTS ELEMANTARY SCHOOL STUDENTS TO ENGAGE IN CRITICAL THINKING IN READING AND MATHEMATICS CLASSES IN THE UNITED STATES? 265
Robert G. CRONINGER, Rachel M. V. CRONINGER
KLASİK İSLAM AHLAK KİTAPLARININ GÜNÜMÜZDE DİNİ VE AHLAKİ DEĞERİN EĞİTİMİNDEKİ YERİ VE ÖNEMİ 273
Ayşe Sıdıka OKTAY
KNOWLEDGE LEVELS OF THE STUDENTS OF MEDICAL IMAGING TECHNIQUES PROGRAM ABOUT THE RADIATION IN THE PRACTICE SETTINGS 515
Nurhan GÜMRÜKÇÜOĞLU
KULLANIMLAR VE DOYUMLAR YAKLAŞIMI TEMELİNDE ÜSTÜN YETENEKLİ ÖĞRENCİLERİN İNTERNET KULLANIMLARI VE İNTERNETE BAKIŞ AÇILARI ÜZERİNE BİR ARAŞTIRMA 281
Fatma NİSAN, N. Tülay ŞEKER
LANGUAGE DEVELOPMENT OF CHILDREN AGED 18 TO 36 MONTHS ACCORDING TO BUTZKAMM 296
Mihriban CAF
LEARNING AND TEACHING ENVIRONMENTS BY USING VIRTUAL REALITY TECHNOLOGY 300
Paitoon SRIFA
LEARNING DATABASE THROUGH INTERACTIVE MOBILE ASSISTED INSTRUCTION 305
Ömür AKDEMİR, Tunç D. MEDENİ, İ. Tolga MEDENİ
LEARNING LEADERSHIP OF THAI SCHOOL PRINCIPALS: A GROUNDED THEORY STUDY 313
Kanokorn SOMPRACH, Keow Ngang TANG
LEARNING OUTCOMES OF GROUP TASKS IN AN ENGINEERING TECHNOLOGY COURSE: LEARNING VS. LEARNED 320
Chee-Ming CHAN, Alina SHAMSUDDIN, Azeanita SURATKON
LEARNING STYLE DIFFERENCES IN THE PERCEIVED EFFECTIVENESS OF INCORPORATING SOCIAL NETWORKING SITES INTO FORMAL LEARNING 329
Tugba Orten Tugrul
LEARNING TRADITIONAL MALAY FOLK SONG AND TEMPO CONTROL BY USING AN M-LEARNING MODEL DESIGNED FOR BEGINNER PIANISTS 338
Fung Ying LOO, Fung Chiat LOO, Khai Ern CHAI
LEARNING VIRTUAL REALITY TOUR OF SUAN SUNANDHA PALACE 344
Kunyanuth Kularbphettong
LEVEL OF THE INFORMATION SECURITY AWARENESS OF THE NURSERY SCHOOL STUDENTS 348
Gabor Kiss, Zuzanna Arki, Antonia Szasz
LIFELONG LEARNING IN EUROPE 358
Bahar BERBEROĞLU
LINGUISTIC STEREOTYPING IN MASS MEDIA 365
Kalbike ESENOVA, Guldana SEIDALIYEVA, Bakhyt SMAGULOVA
LİSE ÖĞRENCİLERİNİN DENETİM ODAKLARINA GÖRE KARİYER KARAR VERME GÜÇLÜKLERİNİN İNCELENMESİ 370
Oğuzhan KIRDÖK, Esranur HARMAN

 Copyright © International Conference on New Horizons in Education (INTE)

LİSE ÖĞRENCİLERİNİN SOSYAL MEDYA YOLUYLA GELİŞTİRDİĞİ TUTUMLAR (SAKARYA/KAYNARCA ÖRNEĞİ) 371
Kadir KORKUT, Ahmet ESKICUMALI
MAKING SENSE OF PUBLIC RELATIONS AS CULTURE POLICY 377
Seda MENGÜ, Murat MENGÜ
MATEMATİK DERSİ ALAN ÖĞRENCİLERİN MATEMATİK DERSİNE YÖNELİK ALGILARI VE ÖĞRETİM ELEMANLARINDAN BEKLENTİLERİ: BARTIN MESLEK YÜKSEKOKULU ÖRNEĞİ 384
Şaziye ALTINTAŞ
MATEMATİK UYGULAMALARI DERSİNİN AMAÇ, İÇERİK VE ÖLÇME DEĞERLENDİRME AÇISINDAN İNCELENMESİ 392
Mustafa GÜÇLÜ, Hilal BOYRAZ
MATHEMATICAL MODEL OF FARADAYS´ LAW AND ITS EMBEDDED SIMULATION IN REMOTE EXPERIMENT 398
Petra ŠPILÁKOVÁ, František SCHAUER, Petr DOSTÁL
MEASUREMENT OF TEACHERS' SELF-EFFICACY AND OUTCOME EXPECTATIONS FOR TECHNOLOGY INTEGRATION IN EDUCATION 405
Serkan PERKMEN, Yeşim SÜRMELİOĞLU
MEASURING ENTREPRENEURSHIP PROFILES IN HIGHER EDUCATION, CASE STUDY IN UNIVERSITAS INDONESIA 411
Iqbal Jordy Putranto, Eko Sakapurnama
MENTAL IMAGES OF CHILD DEVELOPMENT AND PRESCHOOL EDUCATION STUDENTS ON THE CONCEPT OF "CHILD" (KIRIKKALE SAMPLE) 417
Aygen Çakmak, Damla Pektaş, Ezgi Akıncı Demirbaş
MESLEK YÜKSEKOKULLARI ELEKTRİK PROGRAMI "ELEKTRİK MAKİNELERİ I" DERSİNİN ÖĞRENCİ VE ÖĞRETİM ELEMANI GÖRÜŞLERİNE GÖRE DEĞERLENDİRİLMESİ 424
Engin DEMİR, Halime Şenay ŞEN
MESLEK YÜKSEKOKULU ÖĞRENCİLERİNİN GÖRSEL OKURYAZARLIK YETERLİKLERİNİN İNCELENMESİ 432
Hakkı BAĞCI, Ersin BAŞARAN
MİLLİ EĞİTİM OKULLARINDA GÖREV YAPAN ÖĞRETMENLERİN PAYLAŞILAN LİDERLİK ALGILARI 438
Erkan YAMAN, Nihan ORUÇ BATMAN
MODA TASARIMI EĞİTİMİNDE JÜRİLİ ÖLÇME VE DEĞERLENDİRMEYE YÖNELİK ÖĞRENCİ GÖRÜŞLERİ 444
Esra VAROL
MODA TASARIMI EĞİTİMİNDE TASARIMCI ADAYLARININ MEZUNİYET DEFİLESİ KONUSUNDAKİ GÖRÜŞLERİ 454
Nilay ERTÜRK, Esra VAROL
MODEL OF NON-FORMAL EDUCATION AND INFORMAL EDUCATION IN ASEAN 461
Sumolnit KERDNOONWONG
MULTI-LAYERED IDENTITY IN LIFE STORIES OF KORYO SARAM 469
Heejin YUN, Youngsoon KIM
MUSICAL PERFORMANCE OF THE HOLY QURAN WITH ASSISTANCE OF THE ARABIC MAQAMS 473
Tsonka Al BAKRI, Mohammed MALLAH
NAMIK KEMAL'İN TİYATRONUN EĞİTİCİ İŞLEVİ HAKKINDAKİ FİKİRLERİ 485
Refika ALTIKULAÇ DEMİRDAĞ
NARRATIVE THINKING AND MOTIVATION TO STUDY IN UNIVERSITY STUDENTS. 491
Marco PICCINNO

 Copyright © International Conference on New Horizons in Education (INTE)

NEW ENTREPRENEURS CREATION AND THE SURVIVAL OF THE CERAMIC ENTERPRISE 499
Phainphin Kowuttiphong, Wanno Fongsuwan
NORTH KOREAN DEFECTOR PARENTS' PERCEPTION OF SCHOOL ACTIVITIES PARTICIPATION 502
Hee CHOI, Hyeonmin KANG
NOVEL APPROACH TO THE FORMATION OF THE ENGINEERING SKILLS OF STUDENTS 510
Alexander A. SYSOEV, Elena B. VESNA
ÖĞRETMEN ADAYLARININ AKADEMİK ERTELEME DAVRANIŞLARI 594
Sevilay YILDIZ, Meriç TUNCEL, Kaya YILDIZ, Nermin KARABACAK, Özlem YALÇIN
ÖĞRETMEN ADAYLARININ MESLEKI KAYGI DÜZEYLERININ ÇEŞITLI DEĞIŞKENLER AÇISINDAN İNCELENMESI 596
Osman ÇEPNİ, Bahadır KILCAN, Ali Çağatay KILINÇ
ÖĞRETMEN ADAYLARININ SOSYAL MEDYA KAVRAMINA İLİŞKİN ALGILARININ DEĞERLENDİRİLMESİ: BİR METAFOR ANALİZİ ÇALIŞMASI 604
Esen TURAN ÖZPOLAT, Hakkı KONTAŞ
ÖĞRETMENLERİN HİZMETİÇİ EĞİTİM İHTİYACINA İLİŞKİN GÖRÜŞLERİNİN BAZI DEĞİŞKENLER AÇISINDAN İNCELENMESİ 619
Mehmet ŞAHİN
ÖĞRETMENLİK MESLEĞİNİ ALGILAMA BİÇİMLERİ ÖLÇEĞİ GEÇERLİK-GÜVENİRLİK ÇALIŞMASI 630
Engin DEMIR, Cennet Göloğlu DEMIR
OKUL ÖNCESİ EĞİTİM KURUMUNA DEVAM EDEN 60-72 AYLIK ÇOCUKLARIN PROSOSYAL DAVRANIŞLARININ ÇEŞİTLİ DEĞİŞKENLER AÇISINDAN İNCELENMESİ 520
Ali ÖZCAN
OKUL REHBER ÖĞRETMENLERİNİN (OKUL PSİKOLOJİK DANIŞMANI) OKULDA EN SIK KARŞILAŞTIĞI SORUNLAR 528
Zeynep KARATAŞ, Özlem TAGAY
OKUL YÖNETİCİLERİNİN ÖĞRETMENLERE MENTORLUK YAPMA YETERLİLİKLERİNE İLİŞKİN GÖRÜŞLERİ 538
Celal GÜLŞEN
ON THE BORDER OF MANAGEMENT AND BUSINESS INFORMATICS 543
Petr DOUCEK, Lea NEDOMOVA
ONTOLOGICAL CONVERSION: THE PLACE OF SELF-KNOWLEDGE, THE CONTEMPLATIVE TRADITION AND CONTEMPORARY MINDFULNESS IN EDUCATION 548
Carlos Sousa Reis, Albertina Oliveira
OPINIONS OF CANDIDATE TEACHERS ON ACHIEVING TURKISH NATIONAL EDUCATION SYSTEM'S GOALS 559
Aygül OKTAY
ORGANISATIONAL COMMITMENT AMONG ACADEMICS IN MALAYSIAN PUBLIC UNIVERSITIES 568
Rahman Hashim, Safiah Sidek, Norain Ismail, Rahimah HP Shawkataly
ÖRGÜTSEL SİNİZM VE KİŞİSEL BAŞARI ARASINDAKİ İLİŞKİ 637
Esef Hakan TOYTOK, Eda ÇELEPÇIKAY
ORTAÖĞRETİM BRANŞ ÖĞRETMENLERİNİN ÖĞRENME-ÖĞRETME ORTAMLARINDA BİLİŞSEL FARKINDALIK STRATEJİLERİNİ KULLANMA DÜZEYLERİ 585
Pınar BİLASA
ORTAÖĞRETİM ÖĞRENCİLERİNİN BEDEN EĞİTİMİ DERSİNE YATKINLIKLARININ ÇEŞİTLİ DEĞİŞKENLERE GÖRE İNCELENMESİ 586
Enes IŞIKGÖZ, Erkan KONAÇ, Hakan EKİN, Esra TUNÇ, Mizgin YILDIZ

 Copyright © International Conference on New Horizons in Education (INTE)

ORTAOKUL MATEMATİK DERS KİTAPLARINDAKİ PROBLEM TÜRLERİNİN SUNUŞ, İÇERİK VE ÇÖZÜM BAĞLAMINDA İNCELENMESİ 573
Cemalettin YILDIZ, Mihriban Hacısalihoğlu KARADENİZ
ORTAOKUL ÖĞRENCİLERİNİN EĞİTSEL BİLGİSAYAR OYUNLARINA YÖNELİK TUTUMLARI İLE YANSITICI DÜŞÜNME BECERİLERİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ 582
Mustafa KAHYAOĞLU, Mithat ELÇİÇEK
ÖZEL EĞİTİM DERSİNİN ÜNİVERSİTE ÖĞRENCİLERİNİN YETERSİZLİĞİ OLAN BİREYLERE YÖNELİK TUTUMLARI ÜZERİNE ETKİSİNİN İNCELENMESİ 638
Asya ÇETİN, Nadire Ferah YAVUZ, Arzu ÖZYÜREK
PECULIARITIES OF INDIRECT TRANSLATION FROM ENGLISH INTO KAZAKH VIA RUSSIAN LANGUAGE 644
Aigul K. Zhumabekova, Leila Yu. Mirzoyeva
PEOPLE WITH DISABILITIES AND THEIR QUALITY OF LIFE 650
Zuzana BRUNCLÍKOVÁ, Katarína CABANOVÁ, Dana ĎURIŠOVÁ
PERCEIVED INSTRUMENALITY OF EDUATIONAL SCIENCES COURSES BY PROSPECTIVE TEACHERS 654
Ali ARSLAN, Ali SICAK, Elif Akdemir, Esma N. Karameşe
PERCEPTION OF USE TOWARDS FREE TECHNOLOGICAL TOOLS IN TEACHING 658
Carlos Arturo TORRES-GASTELÚ
PHILOSOPHICAL MEDIATION: “FIELD OF THOUGHT” 664
Daniela DE LEO
POINTS OF VIEWS ON THE TEACHING AND LEARNING OF GRAMMAR AS PART OF FRENCH AS A FOREIGN LANGUAGE IN A TECHNICAL UNIVERSITY 668
Cristina MĂLUŢAN

 Copyright © International Conference on New Horizons in Education (INTE)

IMPACT OF MISSING DATA ON RASCH MODEL ESTIMATIONS

Sümeyra SOYSAL
Hacettepe University, Turkey
sumeyrasoysal@hotmail.com

Çiğdem Akın ARIKAN
Hacettepe University, Turkey
akincgdm@gmail.com

Hatice INAL
Hacettepe University, Turkey
haticeinall@hotmail.com

ABSTRACT
This study aims to investigate the effect of methods to deal with missing data on item difficulty estimations under different test length conditions and sampling sizes. In this line, a data set including 10, 20 and 40 items with 100 and 5000 sampling size was prepared. Deletion process was applied at the rates of 5%, 10% and 20% under conditions of completely missing at random (MCAR) and missing at random (MAR) data structures in these full data sets. Pursuant to deletion process, values were assigned through regression and mean imputation methods being among missing data methods. The method of leaving the missing data blank (non-imputation) was also examined. In Rasch model, CML, JML and Pairwise estimations of item difficulty parameter were evaluated in comparison with parameters estimated from full data sets. To this end, RMSE was used as an evaluation criterion. At the end of the research, the least amount of estimation errors was obtained in JML method of Rash model than CML and Pairwise methods and it was found that Pairwise method had similar performance as CML method. It was found that errors in the estimations obtained through three different estimation methods among the methods to deal with missing data increased as missing data rate increased; and decreased as sample size increased. In a big sampling, non-imputation of missing data and regression-based estimations offered good results under many conditions as missing data rate increased. It was found that test length affected CML and Pairwise estimations among missing data imputation methods under many conditions

INTRODUCTION

Missing data is a very common problem for researchers in many studies in the field of education and psychology. De Ayala, Plake and Impara (2001) reported that there are three reasons for missing data in their research. The first reason is that individuals respond to only one subgroup of test in test applications such as individualized tests, multi-staged tests or common item design for nonequivalent groups and thus missing data emerges in sub-test sections which are not submitted to individuals (Eggen and Verhelst, 2011; Misley and Wu, 1988; Shin,2009). However, this situation does not cause any problem in ability estimation of individuals. As a second reason, missing data may emerge in lack of sufficient time to complete test application of an individual. In this case, non-responded items do not give information about abilities of individuals; therefore these items can be excluded for ability estimations. As a third reason, individuals do not want to respond to some test items even though they have time. Misley and Wu (1988), on the other hand, report that the presence of missing data may be dependent on ability level besides characteristics and demographic features of individuals.

Missing data is a remarkable problem since many model and theories such as item response theories (IRT) are based on the expectation that data are complete. However, amount and distribution of missing data in data matrix obtained especially at the end of research are more important for statistical estimations. Missing data were collected in three classes being completely at random, at random and not at-random by Little and Rubin (2002). Data missing completely at random (MCAR) are independent from observed and non-observed data and are random sampling of the observed data. Data missing at random (MAR) are dependent on observed variable and not dependent on non-observed variable. MCAR and MAR missing structures do not lead to systematic error in statistical estimations. Missing data, which are not MCAR and MAR, are data missing not at-random (MNAR) and dependent on variable which is observed to be missing or not. According to Mislevy and Wu (1988), a suitable algorithm must be used considering missing data estimation in parameter estimation of IRT-based data in presence of missing data.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The effect of missing data on the estimation of IRT -based individual and ability parameters has been discussed for years in psychometrics. In this field, studies were conducted on the effect of missing data on parameter estimations under the conditions of different missing data structures and rate; the effect of missing data on parameter estimations; comparison of methods to deal with missing data or methods of parameter estimations on missing data.

In their study, De Ayala, Plake and Impara (2001) investigated ability parameter estimations of dealing with missing data for 3-parameter logistic (3 PL) model. Accordingly, they reported that considering missing data as incorrect response leads more biased results than considering them as blank. In the study conducted by Finch (2008) on the effect of missing data imputation methods on the estimation of item difficulty and discrimination parameters based on 3PL model, it was found that efficiency of missing data imputation methods differs by missing data structure. In their study, Andreis and Ferrari (2012) investigated item parameter estimations in different missing rates and missing data structures in terms of methods to deal with missing data according to multi-dimensional two-parameter logistic (M2PL) model. In the present study, it was found that estimation bias increased as the rate of missing data increased; miss forest, forward imputation and multivariate imputation by chained equations gave similar results under almost every condition. Zhang and Walker (2008) investigated the effect of methods to deal with missing data in data sets having different missing data rates, sample size and item number on individual-model fit and individual ability estimations. At the end of this research, it was found that individual-model fit decreased and ability estimation bias increased as missing data rate increased; considering missing data as incorrect response gave the worst result while pairwise deletion method gave the best.

DeMars (2002) investigated the effect of missing data in MCAR and MAR structures on difficulty parameter through joint maximum likelihood (JML) and marginal maximum likelihood (MML) estimation methods. De Mars (2003) researched the correlation between individual abilities rate of not-reached items in terms of JML and MML estimations of 1PL model. In this study, it was found that two estimation methods estimated item parameters unbiasedly when rate of not-reached items was not dependent on abilities of individuals, JML estimated unbiasedly and MML estimated lower than real situations when not-reached rate was correlated with abilities of individuals.

Heine and Tarnai (2015) investigated estimations based on MML, CML and Pairwise methods at different rates of data missing completely at random in item difficulty parameter in the context of Rasch model. According to this research, it was found that three methods gave similar results when there was no missing data and pairwise-based parameter estimations even at %35 rate of missing data were as stable as those obtained from MML method. Custer, Sharairi and Swift (2012) discussed the effect of missing data on parameter estimations on the basis of JML method while Mislevy et al. (2005) investigated it on the basis of MML method.

Studies (Hohensinn & Kubinger, 2011) reported that missing data lead to bias in statistical results. The effect of missing data methods to deal with them on statistical estimations could be more clearly examined through IRT models that can estimate with missing data matrix. At this point, to research this case through Rasch model estimation methods was considered important. Apart from maximum likelihood estimation methods which are frequently used in the literature, it was aimed to attract attention to less known and less used pairwise-based estimations. In this content, this study aims to investigate the effect of methods to deal with missing data on item difficulty estimations under different test length conditions and sampling sizes. To this end, following three questions were asked.

1) What is the effect of data structures being missing at random or completely at random and missing data rate on CML estimations of item difficulty parameter?
2) What is the effect of data structures being missing at random or completely at random and missing data rate on JML estimations of item difficulty parameter?
3) What is the effect of data structures being missing at random or completely at random and missing data rate on Pairwise estimations of item difficulty parameter?

Rasch Model and Estimation Methods

Rasch Model: In item response theory, models are named by the number of parameters included. Rasch model known as 1 PL model in the literature is mathematically same with 1 PLM. However, discrimination parameter in Rasch model equals to 1 when it is equal for all items in 1 PL model (de Ayala, 2009). Rasch model is a special form of 3-parameter logistic model in which opportunity parameter is minimum and discrimination parameters are the same for all items (Hambleton and Swaminathan, 1985). Mathematical formula of Rasch model is presented as follows.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

$$P_i(\theta) = \exp(\theta - b_i) \Big/ 1 + \exp(\theta - b_i)$$

$P_i(\theta)$: Likelihood of an individual with θ to give correct response to item i.

bi : difficulty of item i

Parameter b in Rasch model is item difficulty parameter and generally gets a value between -2 and +2. In this model, it is assumed that performance of an individual is solely affected by item difficulty.
In this research, CML, JML and pairwise estimation methods were used for the estimation of item difficulty parameter based on Rasch model.

Joint maximum likelihood (JML): JML 1, 2 and 3 parameters used in estimations of both ability and item parameters can also be used in models (Hambleton, Swaminathan and Rogers, 1991). Unknown ability levels in JML are considered as known values by using estimated ability levels. Afterwards, unknown ability levels are used to estimate item parameter and arrangements are made in the estimations of ability levels through estimated item parameters. In other words, JML estimation is iterative and includes estimation of item and ability parameters. In the first stage, individual parameters are estimated and in the second stage, item parameters are estimated. The first iteration of these two stages includes initial values for item parameters; in this way, ML estimations of individual parameters are obtained. Afterwards, item parameters are estimated by using first individual parameters and this process maintains until the change of item parameter is very little among iterations (Hambleton, Swaminathan and Rogers, 1991; Embretson and Reise, 2000; de Ayala, 2009). JML has some advantages and disadvantages.

Constrained Maximum Likelihood (CML): CML can be applied only to Rasch model and other models that are extension of Rasch model (Hambleton, Swaminathan and Rogers, 1991; Embretson and Reise, 2000). In CML estimation; unknown ability levels examine response pattern likelihood without the parameters of ability level. Since total score of individual is a sufficient statistical information for the estimation of ability level, there is no need for more information for parameter estimations (Embretson and Reise, 2000). Therefore, 2 PL and 3 PL are not used in the model.

Pairwise Method: It is method that ensures the calculation of parameters based on constrained item category frequencies obtained from pairwise comparisons of items. Chopin (1968, 1985) showed the practical application of this method which was considered as an alternative to the calculation of item difficulty parameter by Rasch (1966). Chopin (1985) developed two methods being iteractive based on maximum likelihood for the estimations based on these pairwise comparisons (e.g. Andrich and Luo, 2003) and non-iteractive based on the estimation of the least squares of item parameters as well. In the present study, pairwise method based on the estimation of the least squares of item parameters was used (e.g. Heine, 2015). Pairwise method is based on the comparison of responses given to two items taking stand from the likelihood of an individual for giving correct or incorrect response to an item. An individual can give four different responses to two items; correct response to both items, correct response to at least one item and incorrect response to both items. These likely cases are presented with equations below by Rasch (1966) and Chopin (1985).

$$P(x_{vi}= 0, x_{vj}=0)= \frac{1}{1+ e^{(\Theta_v-\sigma_i)}} \times \frac{1}{1+ e^{(\Theta_v-\sigma_j)}}$$

$$P(x_{vi}= 1, x_{vj}=0)= \frac{e^{(\Theta_v-\sigma_i)}}{1+ e^{(\Theta_v-\sigma_i)}} \times \frac{1}{1+ e^{(\Theta_v-\sigma_j)}}$$

$$P(x_{vi}= 0, x_{vj}=1)= \frac{1}{1+ e^{(\Theta_v-\sigma_i)}} \times \frac{e^{(\Theta_v-\sigma_j)}}{1+ e^{(\Theta_v-\sigma_j)}}$$

$$P(x_{vi}= 1, x_{vj}=1)= \frac{e^{(\Theta_v-\sigma_i)}}{1+ e^{(\Theta_v-\sigma_i)}} \times \frac{e^{(\Theta_v-\sigma_j)}}{1+ e^{(\Theta_v-\sigma_j)}}$$

 Copyright © International Conference on New Horizons in Education Conference (INTE)

In these equations Θ_v, v presents ability level of an individual and σ_i and σ_j present item difficulty of items i and j. Taking stand from these four likelihood, constrained frequency matrix of items and the least square estimations of item parameters are calculated. Individual parameters are estimated through weighted likelihood approach under the assumption of stable item parameters. Choppin's (1985) studies can be examined for all calculations in Pairwise method and Heine's (2015) studies can be examined for a sample application matrix.

METHOD

Research Type

This study is a fundamental research since it investigates the effect of different ability estimation methods on estimation errors of item difficulty parameter in the presence of missing data.

Data Production and Analysis

R 3.5 program was used to produce full data sets within the context of this research. Full data sets were produced in accordance with Rasch model according to three test lengths being 10, 20 and 40 and two sampling sizes being 100 and 1000. Item difficulty parameter (β) and ability parameter (θ) N~(0.1) had normal distribution. Data sets with missing data were obtained by deleting data at the rates of 5%, 10% and 20% in missing completely at random (MCAR) and missing at random (MAR) structures through codes written in R program from full data set. Afterwards, mean and regression imputation methods were used for the missing data and these data sets were turned into full data sets. HotDeckImputation (Joenssen, 2015) package was used for mean imputation and mice (van Buuren and Groothuis-Oudshoorn, 2015) package was used for regression imputation being among missing data imputation methods.

In this research, 196 conditions; being 2 (100x1000) sample sizes, 2 missing data types (MCARxMAR), 3 missing data rates (5x%10x%20%), 3 test lengths (10x20x40), 3 estimation methods (JMLxCMLxPairwise) and 2 (mean and regression) methods to deal with missing data were investigated. 30 replication was applied for each condition.

Current R packages were used for the estimation methods used in this research. eRM (Mair et al., 2015) was used for CML estimation, sirt (Robitzsch, 2016) was used for JML and pairwise (Heine, 2015) package was used for pairwise method.

Research results were evaluated by comparing parameters estimated from full data sets which were obtained according to full data sets and missing data imputation methods based on these sets. To this end, RMSE was used as an evaluation criterion for the validity of the estimations of item difficulty parameter.

FINDINGS

In this chapter, the difference between estimations of item difficulty parameter obtained from data sets which were completed by the methods to deal with missing data and estimations obtained from full data sets under the conditions detected within the context of the research. The findings are presented based on the research questions.

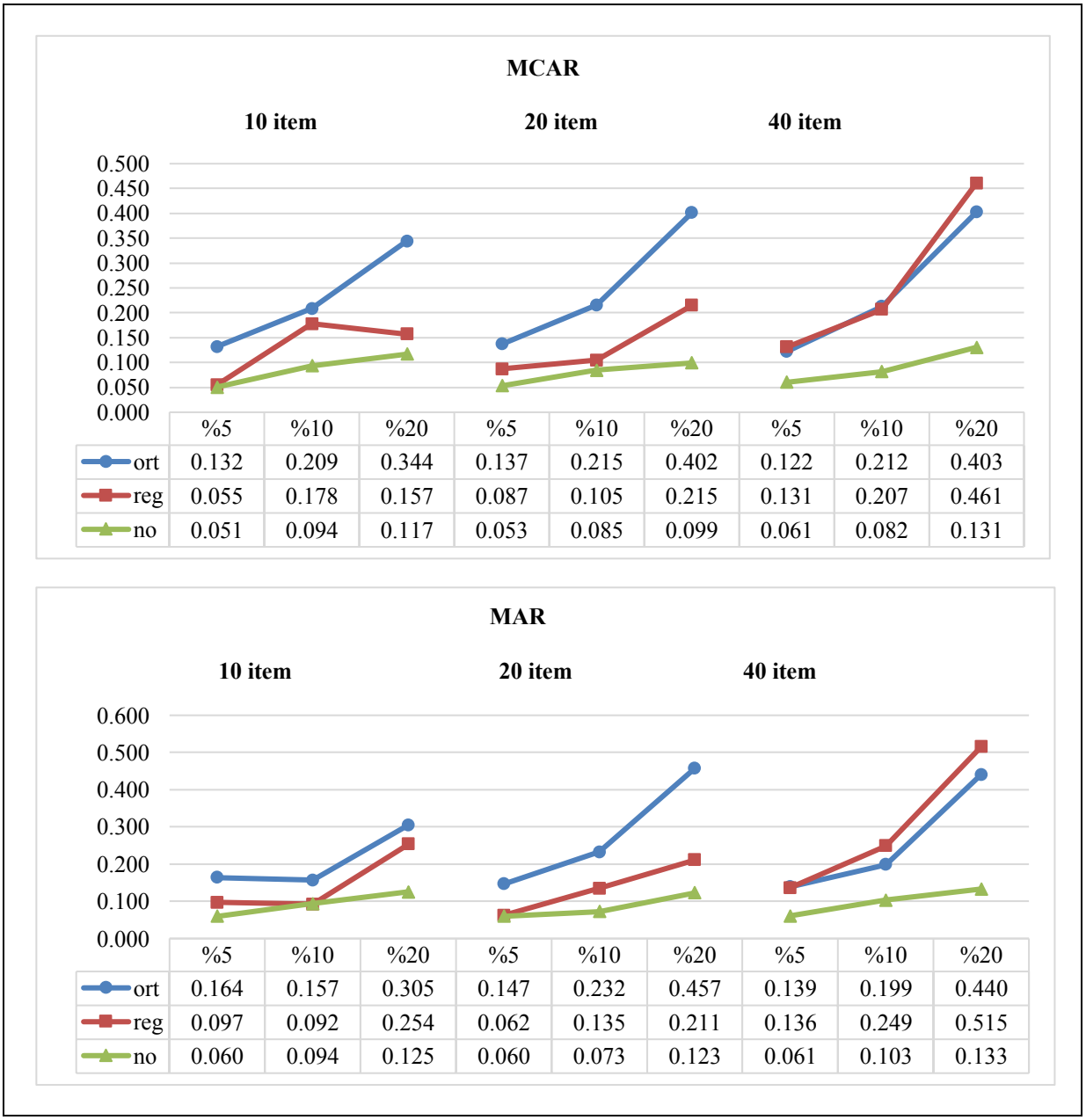
What is the effect of data structures being missing at random and missing completely at random and missing data rates on CML estimations of item difficulty parameter under different sampling size and test length conditions?

According to sample size, test length and and missing data structures, RMSE values of conditional maximum likelihood (CML) estimations of item difficulty parameter are presented in Figure 1 and Figure 2.

According to Figure 1, the least erroneous estimations were obtained from leaving the missing data blank for all conditions of missing data rate and item length for N=100 under MCAR missing data structure. RMSE values of CML estimations obtained through regression imputation method were lower than mean imputation when test length was 10 and 20 while the results were reverse when test length was 40 items. It was found that estimation errors increased for each method to deal with missing data as missing data rate increased under all conditions. This finding is remarkable especially for mean and regression imputation methods. It was found that estimation errors obtained through the method of leaving missing data blank and mean imputation method did not vary

 Copyright © International Conference on New Horizons in Education Conference (INTE)

much according to the variable of test length while estimation errors generally increased as item numbers increased in regression imputation method. Similar results were obtained for MAR missing data structure.



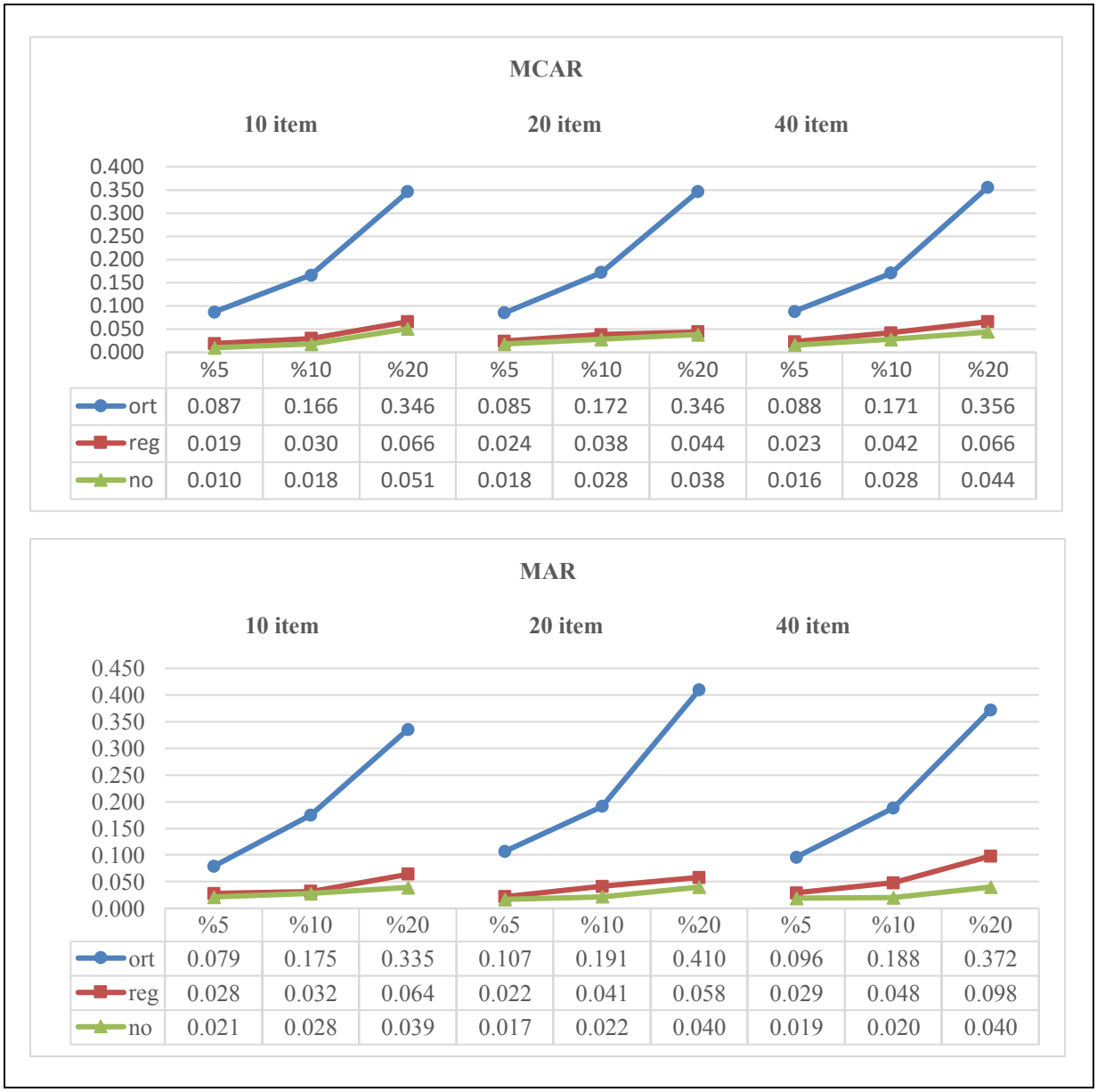
	%5	%10	%20	%5	%10	%20	%5	%10	%20
ort	0.132	0.209	0.344	0.137	0.215	0.402	0.122	0.212	0.403
reg	0.055	0.178	0.157	0.087	0.105	0.215	0.131	0.207	0.461
no	0.051	0.094	0.117	0.053	0.085	0.099	0.061	0.082	0.131

	%5	%10	%20	%5	%10	%20	%5	%10	%20
ort	0.164	0.157	0.305	0.147	0.232	0.457	0.139	0.199	0.440
reg	0.097	0.092	0.254	0.062	0.135	0.211	0.136	0.249	0.515
no	0.060	0.094	0.125	0.060	0.073	0.123	0.061	0.103	0.133

Figure 1. RMSE Values of CML Estimations of Item Difficulty Parameter (N=100)

According to Figure 2, RMSE values obtained through regression imputation methods and the method of leaving the missing data blank under all conditions of test length and missing data rates for N=1000 within the context of MCAR missing data structure are very close to each other and the least erroneous estimations are obtained from these two methods. Estimation errors increased as missing data rate increased for each method to deal with missing data while this finding changed at minimum level by test length. Similar results were obtained in MAR missing data structure for N=1000 as well.

 Copyright © International Conference on New Horizons in Education Conference (INTE)



	%5	%10	%20	%5	%10	%20	%5	%10	%20
ort	0.087	0.166	0.346	0.085	0.172	0.346	0.088	0.171	0.356
reg	0.019	0.030	0.066	0.024	0.038	0.044	0.023	0.042	0.066
no	0.010	0.018	0.051	0.018	0.028	0.038	0.016	0.028	0.044

	%5	%10	%20	%5	%10	%20	%5	%10	%20
ort	0.079	0.175	0.335	0.107	0.191	0.410	0.096	0.188	0.372
reg	0.028	0.032	0.064	0.022	0.041	0.058	0.029	0.048	0.098
no	0.021	0.028	0.039	0.017	0.022	0.040	0.019	0.020	0.040

Figure 2. RMSE Values of CML Estimations of Item Difficulty Parameter (N=1000)

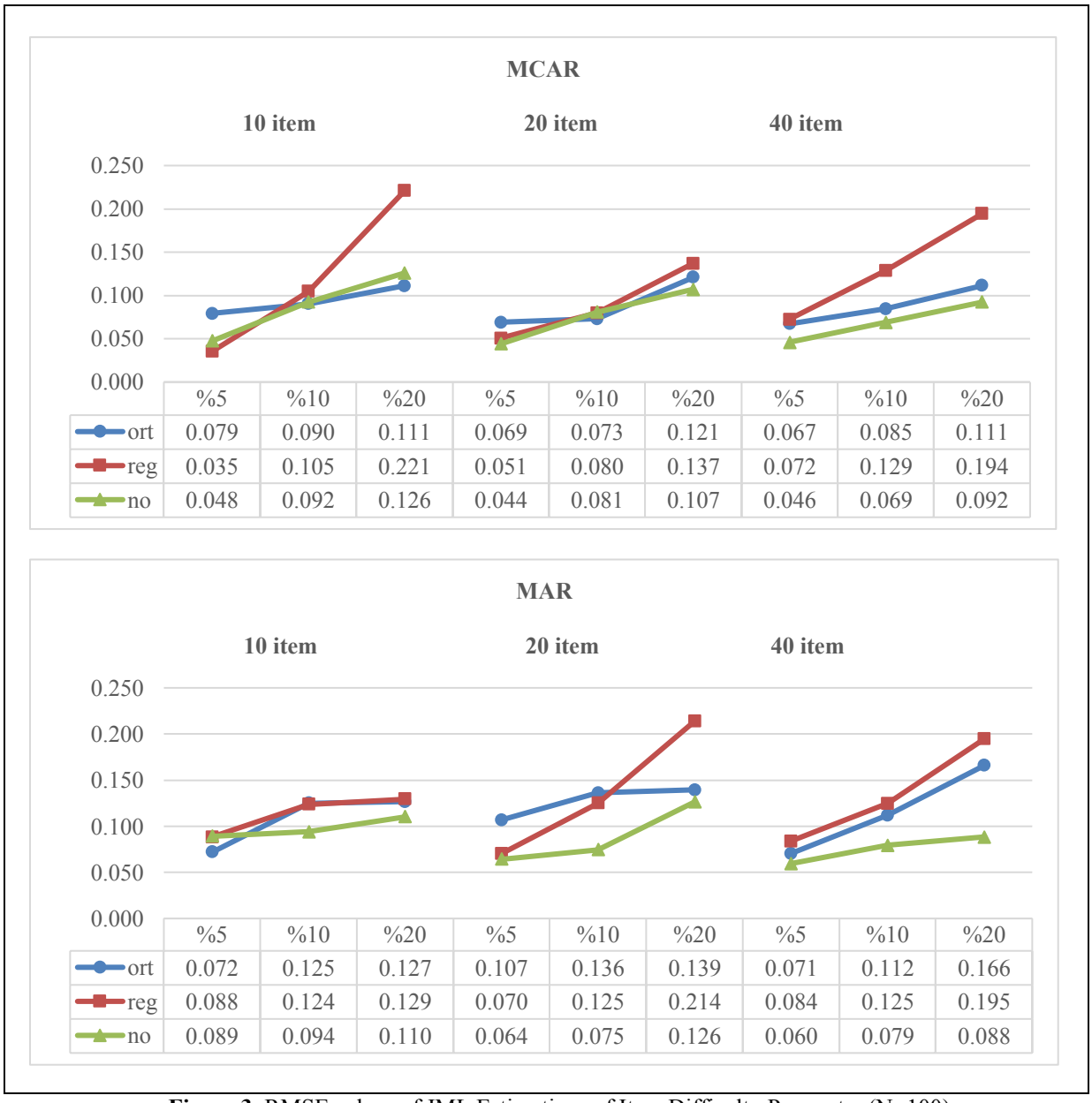
What is the effect of data structures being missing at random and missing completely at random and missing data rates on JML estimations of item difficulty parameter under different sampling size and test length conditions?

According to sample size, test length and and missing data structures, RMSE values of joint maximum likelihood (JML) estimations of item difficulty parameter are presented in Figure 3 and Figure 4.

According to Figure 3, the least erroneous JML estimations were obtained from leaving the missing data blank for all conditions of missing data rate and item length for N=100 under MCAR missing data structure. RMSE values obtained for mean imputation method and the method of leaving missing data blank were close to each other under all conditions. The most erroneous estimations were obtained from regression imputation method under many conditions. It can be seen that estimations obtained from three methods are similar to each other when the item number is 20. It can be seen that error increases as missing data rate increases for each method according to test length, yet regression imputation method is mostly affected by the change in item number. It can also be seen that similar results are obtained for MAR missing data structure for N=100 and the least erroneous estimations are obtained from the method of leaving the missing data blank. In contrast to results

 Copyright © International Conference on New Horizons in Education Conference (INTE)

obtained from MCAR structure, three methods had similar results under MAR structure when the item number was 10.



	%5	%10	%20	%5	%10	%20	%5	%10	%20
ort	0.079	0.090	0.111	0.069	0.073	0.121	0.067	0.085	0.111
reg	0.035	0.105	0.221	0.051	0.080	0.137	0.072	0.129	0.194
no	0.048	0.092	0.126	0.044	0.081	0.107	0.046	0.069	0.092

	%5	%10	%20	%5	%10	%20	%5	%10	%20
ort	0.072	0.125	0.127	0.107	0.136	0.139	0.071	0.112	0.166
reg	0.088	0.124	0.129	0.070	0.125	0.214	0.084	0.125	0.195
no	0.089	0.094	0.110	0.064	0.075	0.126	0.060	0.079	0.088

Figure 3. RMSE values of JML Estimations of Item Difficulty Parameter (N=100)

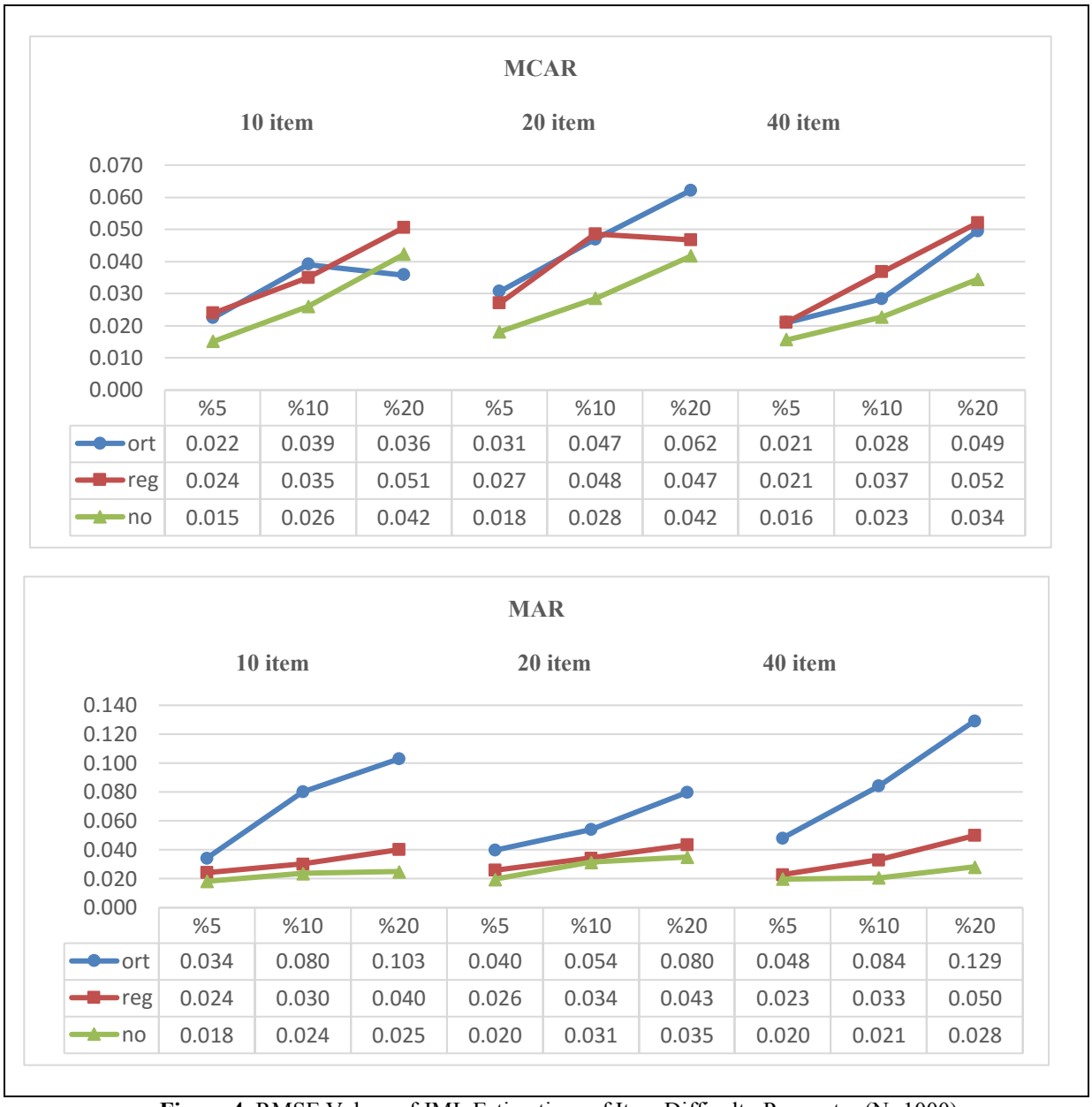
According to Figure 4, estimation errors obtained from three methods are similar to each other for all conditions of item number and missing data rate for N=1000 under MCAR missing data structure while the lowest RMSE values were obtained from the method of leaving the missing data blank. It can be seen that error obtained for every three method did not change much by item number and missing data rate. Although the results obtained for MAR missing data structure for N=1000 were similar, higher RMSE values were calculated by mean imputation method compared to two other methods.

What is the effect of data structures being missing at random and missing completely at random and missing data rates on Pairwise estimations of item difficulty parameter under different sampling size and test length conditions?

According to sample size and missing data structures, RMSE values of pairwise likelihood estimations of item difficulty parameter are presented in Figure 5 and Figure 6.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

According to Figure 5, the least erroneous pairwise estimations were obtained from leaving the missing data blank for all conditions of missing data rate and item length for N=100 under MCAR missing data structure. The most erroneous estimation was obtained from mean imputation method under most of the conditions while it was obtained from regression imputation method when item number was 40. Estimation errors obtained from each method increase as missing data rate increases. It can be seen that estimation errors obtained from regression methods increase as item number increases and the least affected method from this case is the method of considering the missing data blank.



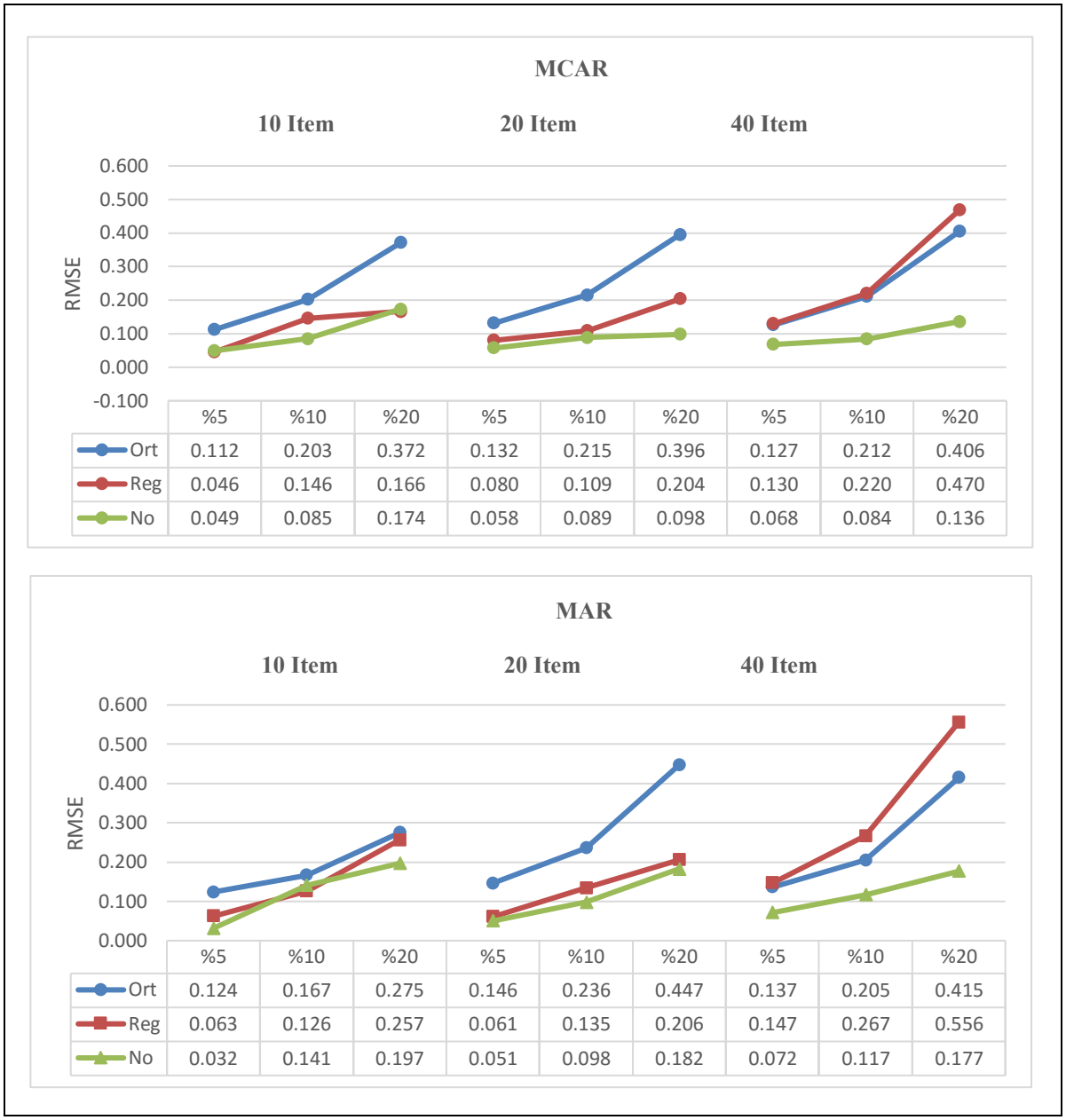
	%5	%10	%20	%5	%10	%20	%5	%10	%20
ort	0.022	0.039	0.036	0.031	0.047	0.062	0.021	0.028	0.049
reg	0.024	0.035	0.051	0.027	0.048	0.047	0.021	0.037	0.052
no	0.015	0.026	0.042	0.018	0.028	0.042	0.016	0.023	0.034

	%5	%10	%20	%5	%10	%20	%5	%10	%20
ort	0.034	0.080	0.103	0.040	0.054	0.080	0.048	0.084	0.129
reg	0.024	0.030	0.040	0.026	0.034	0.043	0.023	0.033	0.050
no	0.018	0.024	0.025	0.020	0.031	0.035	0.020	0.021	0.028

Figure 4. RMSE Values of JML Estimations of Item Difficulty Parameter (N=1000)

It can also be seen the least erroneous estimations are obtained from the method of considering the missing data blank under MAR missing data structure for N=100 as well. Except for the condition having 40 items, the most erroneous estimations were obtained from mean imputation method. It can be seen that estimation errors obtained from regression imputation methods increase as item number increases.

 Copyright © International Conference on New Horizons in Education Conference (INTE)



	%5	%10	%20	%5	%10	%20	%5	%10	%20
Ort	0.112	0.203	0.372	0.132	0.215	0.396	0.127	0.212	0.406
Reg	0.046	0.146	0.166	0.080	0.109	0.204	0.130	0.220	0.470
No	0.049	0.085	0.174	0.058	0.089	0.098	0.068	0.084	0.136

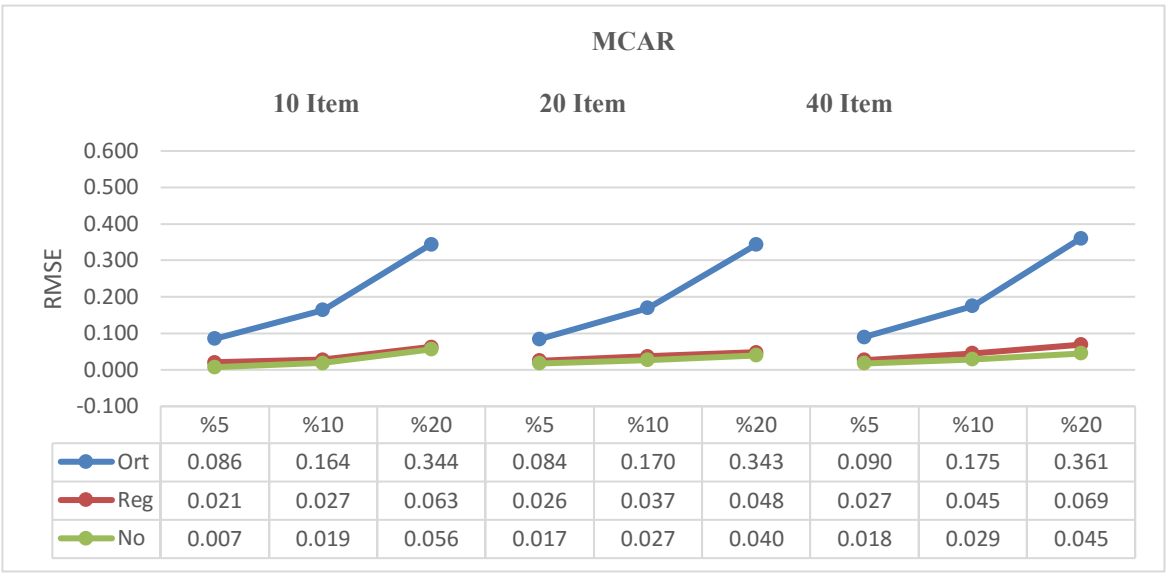
	%5	%10	%20	%5	%10	%20	%5	%10	%20
Ort	0.124	0.167	0.275	0.146	0.236	0.447	0.137	0.205	0.415
Reg	0.063	0.126	0.257	0.061	0.135	0.206	0.147	0.267	0.556
No	0.032	0.141	0.197	0.051	0.098	0.182	0.072	0.117	0.177

Figure 5. RMSE values of Pairwise Estimations of Item Difficulty Parameter (N=100)

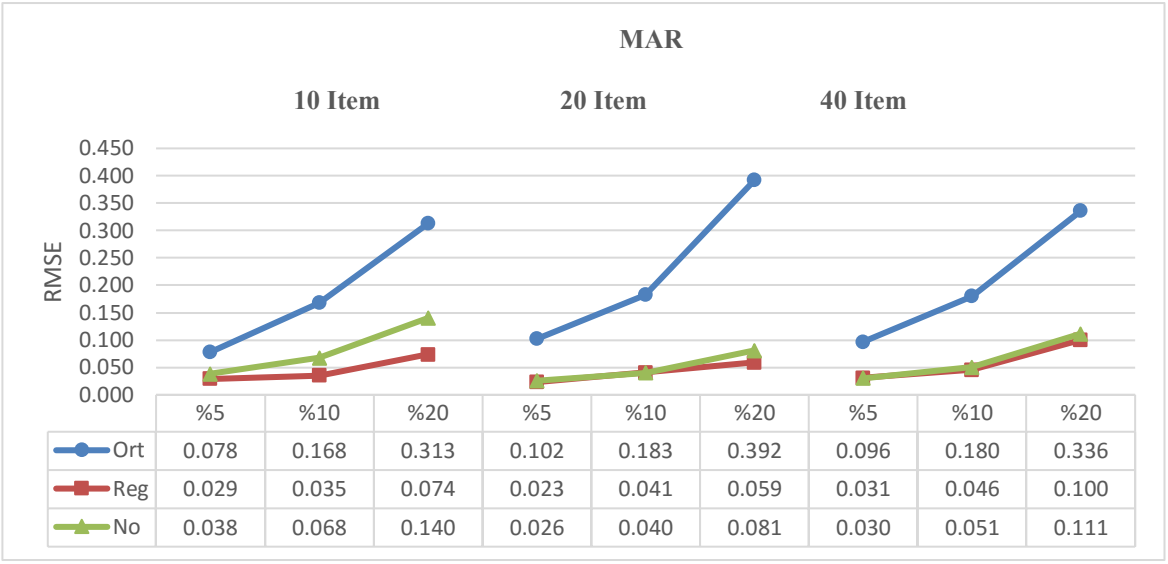
According to Figure 6, the least erroneous pairwise estimations were obtained from leaving the missing data blank for all conditions of missing data rate and item length for N=1000 under MCAR missing data structure. Under all conditions, estimations obtained from regression imputation method and the method of considering the missing data blank were similar to each other while the most erroneous estimations were obtained from mean imputation method. Estimation errors obtained from each method increase as missing data rate increases while they are affected by item number at minimum level.

It can be seen that regression imputation method offers similar results with the method of leaving the missing data blank, but less erroneous results under many conditions within MAR missing data structure for N=1000. The most erroneous estimations were obtained from mean imputation method. Estimation errors obtained from each method increase as missing data rate increases while they are affected by item number at minimum level.

 Copyright © International Conference on New Horizons in Education Conference (INTE)



	%5	%10	%20	%5	%10	%20	%5	%10	%20
Ort	0.086	0.164	0.344	0.084	0.170	0.343	0.090	0.175	0.361
Reg	0.021	0.027	0.063	0.026	0.037	0.048	0.027	0.045	0.069
No	0.007	0.019	0.056	0.017	0.027	0.040	0.018	0.029	0.045



	%5	%10	%20	%5	%10	%20	%5	%10	%20
Ort	0.078	0.168	0.313	0.102	0.183	0.392	0.096	0.180	0.336
Reg	0.029	0.035	0.074	0.023	0.041	0.059	0.031	0.046	0.100
No	0.038	0.068	0.140	0.026	0.040	0.081	0.030	0.051	0.111

Figure 6. RMSE Values of Pairwise Estimations of Item Difficulty Parameter (N=1000)

CONCLUSIONS

This study investigated the effect of missing data on Rasch model estimations under the conditions of missing data structure, missing data rate, methods of dealing with missing data, sample size and test length. In addition to likelihood estimations methods frequently used in the literature, pairwise method was also used as a different approach. It was aimed to attract attention to this method based on constrained pairwise for item categories.

The least erroneous constrained maximum likelihood (CML) estimations of item difficulty parameters were obtained from the method of considering the missing data blank under all conditions of sample size, test length and missing data rates under MCAR and MAR missing data structures. In the majority of the conditions, the most erroneous estimations were obtained from mean imputation method. In small sampling, estimation errors increased for each three methods to deal with missing data as missing data rate increased by item number. In big sampling, estimation errors increased as missing data rate increased in mean imputation method; estimation errors changed in minimal level according to missing data rates in the methods of regression imputation and considering the missing data blank. The increase in item number increased estimation errors in regression imputation and mean imputation methods, respectively only for small sampling; while the effect of item number on estimation errors was minimal under the rest of conditions.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The least erroneous joint maximum likelihood (JML) estimations of item difficulty parameters was obtained from the method of considering the missing data blank under all conditions of sample size, test length and missing data rates under MCAR and MAR missing data structures. In small sampling, it was observed that regression imputation method was most affected by the change in item number while estimation errors increased as item number increased under most of the conditions. In big sampling, on the other hand, regression imputation method was most affected by the increase in item number under MCAR structure while mean imputation method was most affected under MAR structure. Estimation errors increased as missing data rate increased in mean imputation method; estimation errors changed in minimal level according to missing data rates in the methods of regression imputation and considering the missing data blank.

The least erroneous pairwise estimations of item difficulty parameters was obtained from the method of considering the missing data blank under all conditions of test length and missing data rates for small samplings under MCAR and MAR missing data structures. In big samplings, it was found that regression imputation method gave similar, yet better results than the method of leaving the missing data blank under MAR structure and the most erroneous estimations were found from mean method. In small sampling, it was observed that estimation errors obtained from regression imputation method increased as item number increased.

Considering all simulation conditions, it was found that joint maximum likelihood (JML) method offered a better result compared to two other estimation methods. Constrained maximum likelihood (CML) and pairwise methods had similar performances under many conditions.

Estimation errors obtained from the method of leaving the missing data blank were lower than those obtained from mean and regression imputation methods under all conditions except for pairwise estimations under MAR structure and N=1000 condition. In general, the most erroneous estimations were obtained from mean imputation method. It was found that regression imputation method generally gave more biased results compared to JML-based estimations.

Errors of item difficulty parameter estimations obtained through three different estimation methods among three methods to deal with missing data increased as missing data rate increased (Andreis and Ferrari, 2012; Zhang and Walker,2008); and decreased as sample size increased. In big samplings, considering the missing data blank and regression-based estimations offered good results although missing data rate was high. It was observed that CML and Pairwise estimations based on mean and regression imputation were affected by test length under many conditions. However, Heine and Tarnai (2015) reported that Pairwise method gave better results than CML method under MCAR missing data structure. Considering that the study conducted by Heine and Tarnai (2015) was based on real data and depended on the result of a single application, performances CML and Pairwise methods can be investigated through different simulation studies.

According to the research, it can be suggested that mean imputation method should not be used where an imputation method is needed to deal with missing data during the parameter validation studies based on Rasch model and CML, JML and pairwise methods. Instead, regression imputation method which gives similar results as the ones obtained through missing data matrix can be preferred. JML method can give less erroneous results than CML and Pairwise methods in item parameter validation studies in Rasch model. This study showed that Pairwise method has a similar performance with CML method. Therefore, it can be suggested as an alternative estimation method for parameter estimation studies of researchers.

In further studies, the conditions studied in this research can be repeated for individual parameter estimations or for different levels of these conditions. Similarly, the effect of missing data can be examined in various item response theory models. It is assumed that the performance of pairwise method which is based on matrix with or without missing data during parameter validation studies must be investigated in similar or different studies.

REFERENCES

Andreis, F., & Ferrari, P. A. (2012). Missing Data And Parameters Estimates in Multidimensional Item Response Models. *Electronic Journal of Applied Statistical Analysis*, *5*(3), 431-437.

Andrich, D., & Luo, G. (2003). Conditional Pairwise Estimation in the Rasch Model for Ordered Response Categories using Principal Components. *Journal of Applied Measurement, 4(3),* 205–221.

Ayala, R. J., Plake, B. S., & Impara, J. C. (2001).(2001). The Impact Of Omitted Responses On The Accuracy of Ability Estimation in İtem Response Theory. *Journal of Educational Measurement*, *38*(3), 213-234.

Choppin, B. (1968). Item Bank Using Sample-free Calibration. *Nature*, 219(5156), 870–872.

Choppin, B. (1985). A fully Conditional Estimation Procedure for Rasch Model Parameters. *Evaluation in Education*, 9(1), 29–42.

Custer, M., Sharairi, S., & Swift, D. (2012). A Comparison of Scoring Options for Omitted and Not-Reached Items through the Recovery of IRT Parameters When Utilizing the Rasch Model and Joint Maximum Likelihood Estimation.*Online Submission*.

DeMars, C. (2002). Incomplete data and item parameter estimates under JMLE and MML estimation. *Applied Measurement in Education, 15*, 15–31.

DeMars, C. (2003) Missing Data and IRT Item Parameter Estimation. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.,

April , 2003. [ERIC Document Reproduction Service No. ED 476 175]

Eggen, T. J., & Verhelst, N. D. (2011). Item calibration in incomplete testing designs. *Psicológica: Revista de metodología y psicología experimental*, *32*(1), 107-132.

Embretson, S.E., & Reise, S.P. (2000). *Item response theory for psychologists.* Maheah, New Jersey: Lawrence Erlbaum Associates, Publishers

Finch, H. (2008). Estimation of Item Response Theory Parameters in the Presence of Missing Data. *Journal of Educational Measurement, 45(3),* 225-245.

Hambleton, R. K., & Swaminathan, H. (1985*). Item response theory: Principles and applications* (Vol. 7). Springer Science & Business Media.

Hambleton Ronald K, Swaminathan H, Rogers HJane. (1991).*Fundamentals of item response theory*. Newbury Park, CA: Sage Publications

Heine, J. H., & Tarnai, C. (2015). Pairwise Rasch model item parameter recovery under sparse data conditions. *Psychological Test and Assessment Modeling*, *57*(1), 3-36.

Heine, J., H. (2015). Package "pairwise", https://cran.r-project.org/web/packages/pairwise/pairwise.pdf.

Hohensinn, C., & Kubinger, K. D. (2011). On the impact of missing values on item fit and the model validness of the Rasch model. *Psychological Test and Assessment Modeling*, *53*(3), 380-393.

Joenssen, D.W. (2015). Package "HotDeckImputation", https://cran.r-project.org/web/packages/HotDeckImputation/HotDeckImputation.pdf.

Mair, P., Hatzinger, R., Maier, M. J., Rusch, T. (2015). Package "eRM", https://cran.r-project.org/web/packages/eRm/eRm.pdf.

Mislevy, R.J. & Wu, P-K (1996). Inferring examinee ability when some item responses are missing. Research Report RR-96-30-O R. Princeton: Educational Testing Service.

Rasch, G. (1966). *An informal report on the present state of a theory of objectivity in comparisons*. Universitetets Statistiske Institut.

Robitzsch, A. (2016). Package "sirt", https://cran.r-project.org/web/packages/sirt/sirt.pdf.

Schafer, J. L. (1997). *Analysis of incomplete multivariate data*. Boca Raton, FL: Chapman and Hall/CRC.

Shin, S. H. (2009). How to treat omitted responses in Rasch model-based equating. *Practical Assessment Research & Evaluation*, *14*(1).

Zhang, B., & Walker, C. M. (2008). Impact of missing data on person—model fit and person trait estimation. *Applied Psychological Measurement*, *32*(6), 466-479.

IMPACT OF THE DEMOGRAPHICS ON ACADEMIC ACHIEVEMENT IN ARCHITECTURE EDUCATION

Filiz ŞENKAL SEZER
Uludağ University Department of Architecture
filizss@gmail.com

Dilek MURAT
Uludağ University Department of Econometrics
dilekm@uludag.edu.tr

Yasemin ERBİL
yasemin.erbil@bou.edu.tr

ABSTRACT
This study has been designed to show the correlation between academic achievement and the concept of gender. The following were initially examined;

- The relation between general academic achievement and gender,
- The relation between achievement in architecture design classes and gender
- The relation between gender and academic standing of students that pass architecture design classes in their first attempt or that repeat architecture design classes.

In the sample there are 55 students that are enrolled to the Architecture Department of Uludag University. The design point average (DPA), which indicates the academic achievement of architecture students from architecture design classes, and the weighted grade point average (WGPA) of students were calculated via transcripts of students. The statistical information gathered has shown that general academic achievement varies by gender; however design point averages does not. It has been determined that there is a significant and negative correlation between general academic achievement and age. Another finding of this study is that the levels of academic achievement of students who pass their classes in the first time or who repeat their classes vary by their gender.

Keywords: Architectural education, academic achievement, gender, demographics

INTRODUCTION

In Turkey students who receive adequate grades in the YGS (Transition to Higher Education Examination) and LYS (Undergraduate Placement Exam) examinations of ÖSYM (Student Selection and Placement Center) are given the right to enroll at universities. Therefore students who have received very similar grades in these examinations are enrolled to the same departments – especially in state universities. However there are various factors that influence the academic achievement of students throughout their university education.

The academic achievement is both related to the education received by students and the individual skills of the students. In this regard there are various studies in the literature that examine the correlation between academic achievement and various criteria. For example Erbil, (2015), Nazidizajia, Toméa, Regateirob, (2014), Birer, (2012), Fayombo, (2012), Fallahzadeh, 2011; Afolabi, Ogunmwonyi, Okediji, (2009), Newsome, Day, Catano, (2000) examined the correlation between academic achievement and emotional intelligence; Kavcar (2011) examined the correlation between emotional intelligence and various demographics; and Balkıs, Duru, Buluş, Duru, (2011), Balkıs, Duru, (2009) Mecek, Taşlıdere, (2015), Özgüngör, Duru, (2015) examined the correlation between academic achievement and demographics.

When we look at the subject from the architecture point of view undergraduate level architecture education is 4 years in Turkey. In addition to the occupational information and skills gained throughout the education related to the design and production of a building, the students are expected to learn how to analyze the information received. Therefore, Architecture Design Theory and Methods, Building Information, Structure Information, Physical Environmental Control, Architecture History, Restoration, Project and Construction Management classes are provided in Turkish architecture education programs. Architecture design studios aim to create a connection between theory and implementation in the architecture education programs.

Yürekli (2003) has gathered the qualities that are expected from an architect under the categories of design, creativity, emotional intelligence and character development, and intellectual development. Architecture education should be programmed to train students that have all these qualities. The interdisciplinary status of

 Copyright © International Conference on New Horizons in Education Conference (INTE)

architecture occupation requires architects to be versatile. The academic achievement of undergraduate students in architecture departments can be related to many areas. According to researchers, who examined academic achievement and various criteria, such as Demirbas (2001), Demirbas & Demirkan (2003), Kvan & Yunyan (2005), Uluoglu (2000) the characteristics of learning styles of students that can be used for the enhancement of learning in design, according to Demirbas & Demirkan (2007) there is a significant mean difference in performance scores across gender in technology-based, artistic and fundamental courses, and according to Özyaba, Polat, Erbil, Yurtkuran (2013) five variables have an impact on the academic achievement of architecture students, which are gender, the region that the family lived for the last ten years, education status of the mothers, the median income of the family, and the housemate of students.

THE STUDY

The Purpose of the Study: Although there are many studies examining the academic achievement in architecture education, the limited number of studies taking into consideration the correlation between gender and academic achievement, and the limited information about this is attention grabbing. Therefore a research has been designed to show the correlation between academic achievement (AA) and the concept of gender. The following were initially examined;

- The relation between general academic achievement and gender,
- The relation between achievement in architecture design classes and gender
- The relation between gender and academic standing of students that pass architecture design classes in their first attempt or that repeat architecture design classes.

Methodology: The population of the study is composed of 56 students who enrolled to Uludağ University Architecture Department in the 2011-2012 year and 57 architecture students who enrolled in the 2012-2013 education year. Among these students 55 were selected using convenience sampling method; these were 4th year students during the 2014-2015 and 2015-2016 education year in Uludağ University Architecture Faculty.

The weighted grade point average (WGPA) of students in the sample and their design point average (DPA) received at the Architecture Design I-II-III-IV-V-VI-VII-VIII classes were calculated using the transcripts of students.

FINDINGS

Frequency analysis, correlation analysis, independent-samples t test, and chi-square test were used to analyze the data collected for the students. The frequency statistics related to the demographics of the students and the descriptive statistics related to all classes and design classes are shown in Table 1.

Table 1: Frequency Analysis and Descriptive Statistics

		n	%
Gender	Women	38	69.1
	Men	17	30.9
Age	20-25	53	96.4
	26-31	2	3.6
Architecture design class achievement	Pass in the first attempt	29	52.7
	Repeat	26	47.3
		Mean	Std deviation
(WGPA)		2.52	0.40
(DPA)		69.7	6.50

38 (69,1%) of the students in the study are women, whereas 17 (30,9%) of them are males. Currently there are 368 students receiving education in Uludağ University Architecture Department, of the 368 students 215 are female (58%), and 153 are male (42%). The fewer number of males in the study represent the fewer number of males receiving education in the Architecture department. 53 (96.4%) of the students are aged 20 to 25 and 2 (3.6%) are aged 26 to 31. The number of students, who pass the architecture design class at the first attempt, are 29 (52.7%) and the number of students, who repeat the class are 26 (47.3%).

In this study the relation between academic achievement and gender and the relation between academic achievement in Architecture Design classes and gender is examined. In this regard independent samples t-test

 Copyright © International Conference on New Horizons in Education Conference (INTE)

was applied to the WGPA and DPA, and gender variables of the students participated in the study. The results of the test are given in Table 2.

Table 2: Results of the independent samples t-test

		Levene's Test for Equality of Variances		t test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
(WGPA)	Eq. var. assumed	0.954	0.333	2.714	53.00	0.009	0.29783	0.10794
	Eq. var. not assumed			2.478	25296.00	0.020	0.29783	0.12020
(DPA)	Eq. var. assumed	0.210	0.648	0.839	53.00	0.405	1,59536	1,90217
	Eq. var. not assumed			0.910	37.724	0.369	1,59536	1,75370

The hypotheses tested are given below. These hypotheses are testing if general academic achievement and achievement in architecture design classes of students differ by gender.

H_0: $\mu_E = \mu_K$ (Academic achievement scores do not differ according to gender.)
H_1: $\mu_E \neq \mu_K$ (Academic achievement scores differ according to gender.)

When the results given in Table 2 are examined it can be seen that the null hypothesis for the WGPA variable is rejected and the alternative hypothesis is accepted, and for the DPA variable the null hypothesis is not rejected. Therefore it has been understood that the general academic achievement of male and female students were significantly different from each other. While the general academic achievement of female students was 2.61 the males had an academic achievement of 2.31, which is a statistically significant difference. However it was seen that the design point averages of males and females did not differ. The design point averages of female students were 70.49 whereas it was 68.89 for males. It has been seen that the statistical difference between those averages were not significant.

The relationship between general academic achievement, achievement in design classes with age was examined with correlation analysis. According to the analysis there is significant negative and weak correlation between age and general academic achievement (r=-0.306; p=0.023) and no relation between achievement in design classes and age was found (r=-0.145; p=0.290). In the phase of the study the relation between gender and student that pass the class in their first attempts and students that repeat the class was examined with the chi-square analysis. The results of the test are given in Table 3.

Table 3: Chi-square Test Results

	Value	df	Asymp Sig. (2-sided)
Pearson Chi-Square	5.366	1	0.021
Continuity Correction	4.098	1	0.043
Likelihood Ratio	5.469	1	0.019
Fisher's Exact Test			
Linear-by-Linear Assoc.	5.269	1	0.022
N of Valid Cases	55		
Symmetric Measures	**Value**	**Approx. Sig.**	
Nominal by Phi	0.312	0.021	
Nominal Cramer's V	0.312	0.021	
N of Valid Cases	55		

When the results in Table 3 are examined it can be seen that the null hypothesis will be rejected and the alternative hypothesis will be accepted. The alternative hypothesis indicates that there is a relation between

 Copyright © International Conference on New Horizons in Education Conference (INTE)

gender and students who pass the architectural design classes in their first attempts. Using the Cramer's V value we can see that the level of this relationship is approximately 0.31. Therefore it can be argued that passing architectural design classes in the first attempt and repeating architectural design classes differ according to gender.

In this regard it has been seen important to review the Cross tabulation given in Table 4.

Table 4: Crosstabulation Results

		Academic achievement in architectural design classes		
		Pass in the first attempt	Repeat	Total
Gender	Female	24	14	38
	Male	5	12	17
Total		29	26	55

When the values of the observed frequency in the table are examined it can be seen that the ratio of females that pass the design class in their first attempts is higher than males. Regarding the repeat of design classes no significant difference between males and females were observed.

4. CONCLUSIONS

In this study the impact of demographics on academic achievement was examined in three phases and the following results were obtained:

The relation between general academic achievement and gender: It has been seen that general academic achievement differed based on gender and female students had a higher academic achievement. This is also in line with various researches that indicate academic achievement of females is higher than males. (Duckvvorth and Seligman, 2006; Pomerantz and Altermatt and Saxon, 2002; Mau ve Lynn, 2001; Wilberg and Lynn, 1999)

The relation between achievement in architecture design classed and gender: These statistical findings have shown that the academic achievement scores in architectural design classes does not differ based on gender. In order to analyze the factors that influence academic achievement in architectural design classes features other than demographics that are personal such as critical thinking, investigative personality, being versatile, time management should be taking into consideration.

The relation between gender and academic standing of students that pass architecture design classes in their first attempt or that repeat architecture design classes: Therefore it can be argued that the academic achievement levels of students that pass design classes in the first attempt and that repeat architectural design classes differ according to gender. A possible interpretation of the findings is: "Females passed this course in their first attempt more than males" and "the level of repetition of the class is the same for both genders and none is superior to the other".

It would be beneficial for increasing academic achievement in architecture education to examine factors that might influence academic achievement. In this study demographic features were examined. Additionally the matter should be approached from different angles such as socioeconomic structure, personal features of students, physical environmental conditions, learning styles and the results of such studies should be used to increase the quality of architecture training and success levels.

REFERENCES

Afolabi, O. A., Ogunmwonyi, E., & Okediji, A. (2009). Influence of emotional intelligence and need for achievement on interpersonal relations and academic achievement of undergraduates. Educational Research Quarterly, 33(2), 60-72.

Balkıs, M., Duru, E. (2009). Prevalence of academic procrastination behavior among pre-service teachers, and its relationship with demographics and individual preferences, Journal of Theory and Practice in Education, 5 (1): 18-32

Balkıs, M., Duru, E., Buluş, M., Duru, S. (2011). Tükenmişliğin Öğretmen Adayları Arasındaki Yaygınlığı, Demografik Değişkenler ve Akademik Başarı ile İlişkisi, Pamukkale Üniversitesi Eğitim Fakültesi

Dergisi, 29:151-165
Birer E. (2012). An Evaluation of the Effect of Emotional Intelligence on Achievement Orientation in Architectural Design Education Gazi University Journal of Science GU J Sci 25(2):541-553
Demirbas, O. O. (2001). The relation of learning styles and performance scores of the students in interior architecture education. Unpublished Ph.D. Dissertation. Ankara: Bilkent University.
Demirbas, O.O., Demirkan H. (2007). Learning styles of design students and the relationship of academic performance and gender in design education. Learning and Instruction. 17(3) : 345-359.
Demirbas, O. O., & Demirkan, H. (2000). Privacy dimensions: a case study in the interior architecture design studio. Journal of Environmental Psychology, 20, 53-63.
Duckvvorth, A.L., Seligman, M.E. (2006). Self-discipline gives girls the edge: gender in self-discipline, grades, and achievement test scores. Journal of Educational Psychology, 98 (1), 198-208.
Erbil Y. (2015). Relationship between emotional intelligence on student achievement: case study for architecture students. European International Journal of Science and Humanities, 1(7):37-44.
Fallahzadeh, H. (2011). The relationship between emotional intelligence and academic achievement in medical science students in Iran. Procedia-Social and Behavioral Sciences, 30, 1461-1466.
Fayombo, G.A. (2012). Emotional intelligence and gender as predictors of academic achievement among some university students in Barbados. International Journal of Higher Education, 1(1),102-111.
Kavcar B. (2011). Duygusal Zekâ İle Akademik Başarı Ve Bazı Demografik Değişkenlerin İlişkileri: Bir Devlet Üniversitesi Örneği Doktora Tezi Ankara Üniversitesi Sosyal Bilimler Enstitüsü İşletme Anabilim Dalı Ankara.
Kvan, T., & Yunyan, J. (2005). Students' learning styles and their correlation with performance in architectural design studio. Design Studies, 26, 19-34.
Mau, W.C., Lynn, R. (2001). Gender diffcrences on the scholastic aptitude test the American college test and college grades. Educational Psychology, 21 (2), 133-136.
Mecek, S., Taşlıdere, E. (2015). Üstün Zekâlı/Yetenekli Öğrencilerin Matematik ve Fizik Akademik Başarılarının Çeşitli Değişkenler Açısından İncelenmesi, Pegem Eğitim ve Öğretim Dergisi, 5(5): 733-746
Nazidizajia, S., Toméa, A., Regateirob, F. (2014). Search for design intelligence: A field study on the role of emotional intelligence in architectural design studios. Frontiers of Architectural Research, 3(4): 413-423.
Newsome, S., Day, A.L., Catano, V.M. (2000). Assessing the predictive validity of emotional intelligence. Personality and Individual Differences, 29, 1005-1016.
Özgüngör, S., Duru, E. (2015). Course and Instructor Characteristics Distinguishing Highest and Lowest Student Ratings of Instructors, Eurasian Journal of Educational Research, Issue 61, 2015, 118-136.
Özyaba, M., Polat, S., Erbil, Y., Yurtkuran, S. (2013). Socio-Economic Status and Undergraduate Success: A Case Study in Architectural Education, Uludağ Üniversity The Journal of Faculty of Engineering, 18(13): 1-6
Pomerantz, E. M., Altermatt, E. R., Saxon, J. L. (2002). Making the grade but feeling distressed: gender differences in academic performance and intemal distress. Journal of Educational Psychology, 94 (2), 396-404.
Uluoglu, B. (2000). Design knowledge communicated in studio critiques. Design Studies, 21, 35-58.
Yürekli, İ. (2003). Play in architectural design education. Unpublished Ph.D. Dissertation. İstanbul: İTÜ
Wilberg, S., Lynn, R. (1999). Sex differences in historical knowledge and school grades: a 26 nation study. Personality and Individual Differences, 27, 1221-1229.

IMPLEMENTATION OF TAX EDUCATION ON ELEMENTARY SCHOOL STUDENTS AS AN EFFORT TO RAISE TAX AWARENESS IN DIRECTORATE GENERAL OF TAXES REGIONAL OFFICE FOR WEST JAVA II

Anita Setia Winartati
Faculty of Administrative Sciences
Universitas Indonesia, Indonesia
anitawinartati@gmail.com

Milla Sepliana Setyowati
Faculty of Administrative Sciences
Universitas Indonesia, Indonesia
milla.s.setyowati@gmail.com

ABSTRACT
Raising tax awareness in society is an effort to manifesting voluntary tax compliance. Tax Education is the most appropriate strategy in raising level of awareness. Tax education shall be applied since primary school because on that level, children are actually on The Golden Age, the dominant period of character development. If we can embed perfectly the important values of taxation, for sure it would generate effective results in the future. Alongside with that idea, tax education becomes essential to be implemented as an attempt of manifesting voluntary tax compliance. The implementation of early tax education was aimed to internalizing values such as discipline, honesty, obedient, and others. The tax education's policies which are influenced by "content of policy" and "context of policy", basically has done in structured, directed, and measured way, but has not been carried out as sustained way. The implementation of tax education on primary school student did not have high portion. Hence, it needs such a high commitment from Directorate General of Tax (DGT) to carry it out as sustainable strategy. It is not easy to manifesting voluntary tax compliance. Moreover, it clearly requires a quite time to make such a fruitful result. Therefore, tax education on primary school student should be believed as the spearhead efforts to manifesting voluntary tax compliance in the future. Remembering the role of tax become more vital in term of nation-building, it demands early awareness from young generation so they can truly conscious and care about taxation. Due to the fact that without any early internalization concerning the importance values of taxation, the hope of manifesting voluntary tax compliance will be further to be attained. Based on that consideration, implementation of tax education on primary school students is important. For that reason, tax education tax on primary school student must be well planned, so that activity became a process that is structured, targeted, measured, and continued as an effort to manifesting voluntary tax compliance.

Keywords: Tax administration, tax education, tax awareness, voluntary tax compliance

INTRODUCTION
To realize voluntary tax compliance, conjuring awareness towards taxes is of the essence. Tax education is a strategic move to instigate such awareness. Tax education must be initiated from an early stage, to the extent of undergoing it from an elementary level. Psychology experts conveyed that instilling values is best to be done at the early stages of life (Fadlillah and Khorida, 2013, 43) because at that phase a child will go through fundamental progress in terms of character building also known as The Golden Age, a fundamental phase in terms of character building. Utilizing The Golden Age as an instance for development, guidance, counseling, and character building will surely be a rewarding action that will bear its fruit in the future (Fadlillah and Khorida, 2013, 49). Specific for tax related matters, embedding values about collection of taxes and responsibility in taxation will surely build awareness towards the existence of taxes which will be a strong foundation to build obedience towards taxation in the long run. Therefore, tax education for elementary school students held by Indonesia's Directorate General of Taxes must be an organized endeavor, so that it may translate into a structured, accurate, measurable and sustainable process to realize voluntary tax compliance. To realize such goal, we need a continuous effort from Directorate General of Taxes because tax education needs a long time to build and cannot be measured in sense of result instantenousley. The ever-growing importance of tax for the development of infrastructure demands the attention of youths to know and understand the role of tax since an early age. Tax education that is commenced since The Golden Age is an embedding process that needs to be applied correctly so that we may create adults that are aware

 Copyright © International Conference on New Horizons in Education Conference (INTE)

and caring toward taxes. This is created to do an early internalization on the importance of tax for the development of infrastructure so that we may achieve voluntary tax compliance.

According to Chan et al (2000), having a higher level of education usually translates into a higher level of moral development and obedience. Educated citizens commonly are more aware of their responsibility in terms of taxes and the consequences that follow should they choose to disregard such obligations. That said, a higher level of education is important in terms of elevating the level of tax obedience throughout the world. One way to increase the degree of voluntary compliance is to make sure that citizens obligated to pay taxes have the qualifications, ability, and confidence to execute their tax related obligations (Mohani, 2001). Citizens who have undergone tax related education and seminar are expected to have a higher amount of knowledge and obedience than their non-undergoing counterparts (Mohd, 2010). Hite and Hasseldine (2001) highlighted the fact that the authorities need to emphazise on the need of tax related training because of its significant impact towards compliance.

Because of their consistent tenacity to realize high levels of tax compliance in the society, especially in the West Java II region, West Java II's Directorate General of Taxes Regional Office was chosen to be the site in this research. This statement was proven by past commencement of tax educations due to increase the level of awareness such as the Tax Goes to School and Early Tax Introduction events which entail them visiting an elementary level sphere ten times in a year. Additional reasons such as them achieving a high performance grade point average in the field of national tax input that made them ranked up to number fifth on a national scale (Susilawati, 2013, 11) and them being a region that encompasses a higher number of elementary school students in comparison to the surrounding regions which totaled into 22,837 schools accommodating 5,179,312 students (*Tinjauan Ekonomi dan Keuangan Daerah Provinsi Jawa Barat*, 2012, 10).

THEORETICAL FRAMEWORK

Grindle mentioned that implementation establishes a link that allows goals of public policies to be realized as outcomes of governmental activity (Purwanto dan Sulistyastuti, 2012, 65). Next, Grindle argued that it involves, therefore, the certain of "policy delivery system", in which specific means are designed and pursued in the expectation of arriving at particular ends (1980, 6). Policy implementation becomes a bridge because it is through this step we do the delivery mechanism, which is when variations of policy output are converted from policy inputs are conveyed to the control group as a real measure to achieve the policies' goals. Grindle states that the implementation of a policy depends on the content of policy and its context (1980,6). The basic idea of Grindle's model is built upon the fact that after the creation of a policy, it will transform into an action program and also an individual project with accommodative budget which will make it eligible to be executed (Wibawa, Purbokusumo, dan Pramusinto, 1994, 22). In light of this, as what Wibawa, Purbokusumo, dan Pramusinto (1994, 23-24) and Agustino (2008, 154-155) summarized, the content of policy includes:

1. *interest affected*
   Interest affected is inclusive of different interests that affect implementation of a policy. The higher number of interests included, the harder for it to be implemented.
2. *types of benefit*
   In a policy there needs to be numerous benefit that show the positive impact of policy implementation. The higher the degree of actual benefits, the easier for it to be implemented.
3. *extent of change envisioned*
   The extent of change envisioned needs to have a clear scale. Policies that dictate a change of behavior firsthand is hard to be implemented.
4. *site of decision making*
   Decision-making in policy plays an important role in the policy implementation. The contents of policy indicate status of the policy-makers, so the policymaker's position influence how policy implemented.
5. *program implementators*
   In running a policy there needs to be the support of a competent and capable program implementator(s) to make sure the success of a policy.
6. *resources commited*
   To optimalize the running of a policy, the resources committed to it must be available preferably in abundance.

Next, the context of the policy that Grindle mentioned which was cited by Agustino (2008, 156) are:

1. *power, interests, strategies of actor involved*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

In a policy there needs to be a calculation of the power, importance, and strategy utilized by the actors involved due to the easement of implementation of said policy.

2. *institutions and regime characteristics*
   The environment where the policy is executed also affects its success, ergo the characteristics of the regime's institutions are a factor to be accounted for.
3. *compliance and responsiveness*
   The compliance and responsiveness of the implementator in responding the policy is also important.

After the implementation plan is executed (which is affected by content and context of policy), then we will know whether the implementators have lived up to the standards expected and whether the policy is affected by its environment, thus showing the level of change expected (Agustino, 2008, 156) in which the intensity of the actors involved, such as the policy makers, implementators, and control group interacted with one another thus compromising the effectivity of implementation (Wibawa, Purbokusumo, dan Pramusinto, 1994, 25). In its turn, the implementation of the policy will be evaluated with a measurement of the outcome of the program in correlation with the goals of the policy (Grindle, 1980, 6).

FINDINGS

Implementation of Tax Education on Elementary School Students as an Effort to Raise Tax Awareness in Directorate General of Taxes Regional Office for West Java II

Generally, the function of an implementation is to build a bridge so that the goal of a public policy can be achieved and translated into an outcome of an acitivty of the government (Gridnle, 1980, 6). Said public policy is then turned into a program set to reach the end goal of that policy (Grindle, 1980, 6). In regards to this, tax education for elementary school students is a program created to be incorporated to be a part of policies made by the Directorate General of Taxes to build awareness on tax related matters.

Essentially, implementation of tax education in elementary school is contingent to several factors in its implementation in order to achieve its ideal goals. Those factors consist of resource availability, intergovernmental structure and the tenacity of executor of the program. In general, those factors could be categorized into two scopes, which are factors that are inherent within the policy called 'content of policy' and factors related to the specific surroundings of implementation called 'context policy'.

In content of policy, the first thing is about the interests affected by the policy, tax education policy targeting future taxpayer especially elementary school students is basically a policy that is not affecting many interests of stakeholders, thereby, this policy should be convenient to be implemented. However, tax education must be regarded as a common interest because the outcome or consequences entailed would be influential for the country, especially tax administration. Since, tax is a matter concerning everyone; be it government, legislative body (DPR), or society in general. Tax education initiated in elementary school is a program to build awareness towards taxes for prospective taxpayer from the early age. This program is a long-term investment as an effort to pursue higher voluntary tax compliance in society. The causal nexus of elevating tax awareness and voluntary tax compliance through this tax education would highly prompt the national tax revenue, it is in alignment with the statements of Simanjutak and Mukhlis saying that the higher number of people paying tax, the bigger number of taxes could be garnered (2012, 163). With regards to higher tax revenue collected by the state, it therefore would directly support the national budget for the national development agenda.

Second, in regards to advantages as the outcome, education is a part of important tax policy to build an awareness upon tax itself and fairness in tax administration system. As given above because through tax education the state fulfills its responsibility to disseminate information related to taxes so that the taxpayers could know their main rights and responsibilities as well as knowing how to comply with it. In the end, it is expected that it would result into fairness within the system of tax administration that encompasses equity, verity, and conformity to the procedures. The advantage of tax education includes providing necessary tax-related information for society to achieve level of fairness expected from tax administration system which comprises of equity, verity, and conformity to the procedures that would then nurture awareness in society. The expected outcome from tax education in elementary school is to instill tax-related information from early age. Subsequently after information about tax is well-understood, there would be a well-preserved awareness towards tax in early age among elementary students.

Level of information introduced in the program is not complex because the target is elementary students as prospective taxpayer in the future. These students should be introduced to tax in early age with simple explanation

 Copyright © International Conference on New Horizons in Education Conference (INTE)

about the importance of taxes and the role of taxes in relation to daily life that would easy to relive of how important tax is. Consequently, the kids would become aware of their role as citizens in the future within the spirit of togetherness to build the nation. With the embedded awareness, they would not problematize the tax that it is collected based on law and it is compulsory in nature. The action of compliance to tax regulations would not need coercive measure to force the payment because they already understand the importance of tax since early age. The long-term advantage that would be garnered from this tax education program for elementary students is a result of in-depth understanding about tax among future generation. Furthermore, the implementation of tax education for elementary student could become the initial point to achieve voluntary tax compliance in the future. Unfortunately, the implementation of this tax education program has not been done continuously in which the advantage transcended from this program for elementary student is still marginal.

Third, tax education for elementary school student is expected to change level of voluntary tax compliance in the future. The effort to build tax awareness is realized through common values such as value of responsibility, honesty, as well as the importance of tax so that those values would be reflected in the behavior of targeted elementary students as prospective taxpayer with compliance and honest attitude in fulfilling their responsibility as in filling tax return in the future. The expected changing level of voluntary tax compliance is also realized through a more profound tax introduction regarding the philosophical background of tax imposition. Introduce the important of tax is contribution and national spirit to actualize national development, so that when they reach adulthood, there would be no mindset about 'tax as coercive state's imposition' because society is aware and understand benefit of taxation regardless indirect benefits. It is important to note that instilling values as well as changing mindset of society are not an easy job. Therefore, the education process is necessary to be early and meticulously designed to make sure it is being implemented, monitored, and evaluated properly. Parallel with the internalization of religious values, for instance in practice of zakat. People willingly pay zakat because of its long-time internalization. Taxation could also be that way. It could be an action collectively done by society willingly without coercive force.

Fourth, the decision about tax education done by Directorate General of Taxes, especially Public Relations Department (Direktorat P2 Humas), so that the enactment of this policy is nation-wide. This type of decision-making renders tax education to be more structured, well-directed, and measurable. However, the main duty of Office of Directorate General of Taxes as well as West Java's II Regional Office is to accumulate tax revenue. Either in national or regional level, effort to educate society about taxation is heavily focused on those with capacity to pay tax, which are new taxpayers or registered taxpayers. Whereas tax education for prospective taxpayer especially elementary school students is not main focus of DGT.

Fifth, in terms of program implementer, the implementer of tax education is Education and Public Affairs Section. This section is assisted by Tax Educators Team. The establishment of this team is based upon consideration that the vertical authority with outreaching and educating role is not able to maximally execute the program, even in the level of Tax Service Office there is no specific unit with educational function. Further, the long-lasting idea of "all tax officers are tax educators" implicates to two different things. At one side, it is interpreted as if the educational action is responsibility of all Directorate General of Taxes' officers. Nevertheless, in practice it creates unclear share of burden as to who should be the main actor to bear burden and responsible to conduct educational function. In the end, competence fostering process for educators is hampered because of unclear target for intended capacity building. As such, the establishment of Tax Educators Team is necessary to make a clear responsibility regarding educational function of the body and making clear of target of capacity building program. In the enactment of tax education, especially with elementary students, the intensity of activity depends on the implementer. If the implementers have passion in early age tax education, so it can be executed maximally, even to the bigger extent of implementation.

Sixth, it is about resource committed for the program, implementation of tax education for elementary students especially for West Java's II Directorate General of Taxes Regional Office demands considerable amount of resources. It is because the requisite is varied in the process of education. However, West Java's II Directorate General of Taxes Regional Office attempts to maximize the tax education program with limited resources, including human resources.

Continuing to the context of policy, firstly, implementation of certain policy has to consider the power, interests, strategies of actor involved due to the easement of policy implementation. However, tax education policy for elementary school students is basically not involving many actors of power, interests, or other stakeholders' strategy.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Nonetheless, it should be noted that this policy would affect all stakeholders; government with its derivative institutions, DPR, and public as a whole. Unfortunately, not all actors are aware of the importance of tax education for early age children. Whereas if this tax education is being implemented properly, the advantages would highly influence society's tax compliance in the future. Because of this, intergovernmental partnership revitalization is immensely needed to maximize the implementation of tax education for elementary school. Intergovernmental partnership revitalization can be initiated with building partnership with Ministry of Education, Ministry of Communication and Information, Ministry of Tourism and Creative Industry, and other ministries. This partnership system could reach out to non-governmental entities such as Corporate Social Responsibility from private companies. The importance of this partnership is to assist the function of Directorate General of Taxes. In fact, the pre-requisite of successful policy implementation is the existence of resources support system, it could be financial, technological, political, information support, qualified human resources, et cetera. The difficult part is those supports are spread among different institutions or entities. Thus the success of implementation is strongly influenced by implementer's ability to consolidate these resources in a way of exchange that legal (allowed by law) (2012, 15). Therefore, with the existence of partnerships, it is expected eventually all will deploy a number of resources that can help the tax education program. Hopefully, with adequate resources, it will further support the success of the education program.

Secondly, in terms of the characteristics of institutions and regimes, in alignment with the characteristics of DGT as the institution that focuses on achieving a targeted tax revenue, DGT created organizational framework that supports achievement of expected values. One part of the organizational framework that supports achievement of these values is implementation of tax education, which its known educational purpose is divided into three, namely Prospective Taxpayer, New Taxpayer, and Registered Tax Payer. The linkage between organizational characteristics of DGT which focus on tax revenues with the implementation of tax education renders a large portion of tax education to be targeted to the New Taxpayer and Registered Taxpayers compared to Prospective Taxpayer including elementary school students. Early tax education activities for elementary school students is deemed necessary, but not as first priority. Since tax revenues is the main focus, the elementary school students are still very young to be able to directly pay tax. Furthermore, basically tax education on elementary school students is solely aimed to build tax awareness, it is quite deviated from the main duties and functions of DGT because it is not part of quick gilding to the State Revenue from tax. However, the implementation of tax education for elementary school students should be deemed as an investment which result would be obtained when the students become the taxpayer, in the form of tax revenue or even in the form of voluntary tax compliance.

Thirdly, in terms of compliance and responsiveness, respond of Regional Office of DGT West Java II, as the operator of tax education at elementary school students, to tax education policies is respectable. Albeit it is recognized that there is also resistance, but implementers still realize that it is part of duty that is necessary to be executed. However, if we examine more deeply, it would be much better if the implementation of tax education for elementary school students is conducted wholeheartedly not only on the basis of solely fulfilling their duties. It is expected that the educators are able to deliver a comprehensive and understandable tax education for the prospective taxpayer. If this education program is based solely on compliance and responsibility of executing policy, not because of the spirit to share their knowledge regarding tax, this tax education program for the elementary school students as a form of voluntary tax compliance efforts embodiment is significantly reduced in essence.

Furthermore, tax education for elementary school students is a manifestation of the efforts in changing the negative stigma and mindset of society in the future about the necessity to pay the tax, the tax is bad, tax is sinister, and taxes that do not provide enough utility in daily life as explained before. Purposes of tax education that targets elementary school students is to build tax awareness. Even more, efforts to build tax awareness is realized by instilling values such as national cooperativeness, social solidarity, contributing to the country, and avoiding free rider to children to help their understanding that the tax is a necessity, not merely a coercive pressure through legislation. After that, we nurture the mindset that tax is part of a national cooperativeness, national solidarity, and also evidence of patriotism, to be cultivated since childhood, since the child is in elementary school. This is because the provision of such understanding is a matter of "flipping the fact" that exists in society nowadays. This understanding could be well-received by the students later on in university level, but later it will be dogmatic understanding. In fact, the expected outcome is internalization of values though tax education that able to provide knowledge and understanding of tax philosophy in more in-depth perspective. Furthermore, tax education for elementary school students is an implementation of a policy that has long-term goals in the realization of voluntary compliance by the public and it should be embodied as reachable outcome. Unfortunately, the outcome of this policy cannot be measured as soon as

 Copyright © International Conference on New Horizons in Education Conference (INTE)

the policy is being implemented, measurements need about 10-20 years of waiting. Even so, further research is needed to measure the outcome of the tax education program for elementary school students who are part of long-term investments in an effort to foster voluntary tax compliance society. Additional research is also needed about the tax morale that is formed through socialization of taxation to the elementary school students. This is because there is no certainty that a society will be obedient if they have undergone education. There is another factor as subject of matters, namely intrinsic motivation factor related to tax morale that is also believed to be able affect one's motivation in paying taxes. Tax morale will later be able to comprehensively explain the level of tax compliance of a person. This is because "to resolve this puzzle of tax compliance, many Researchers have argued that tax morale, seen as the intrinsic motivation to pay taxes, can help to explain the high degree of tax compliance" (Torgler, 2007, 4).

In the implementation of tax education for elementary school students, there are no significant obstacles. However, if studied further, the Directorate General of Taxes has not had a grand strategy for standard outreach and education management (Annual Report of the Directorate General of Taxes In 2011, 30) that causes monitoring and evaluation process of the effectiveness of counseling in the form of survey is not functioning optimally. Especially tax education for elementary school students, there is no specific provisions that regulates the program. Probably, that is the reason underlying unsustainable enactment of tax education.

Tax education for elementary school students that has been implemented by the Directorate General of Taxes has to be improved optimally. Therefore, tax education for elementary school students should be meticulously designed, so that the tax education activities not only become structured, well-directed, measurable, but also become sustainable. Education must also be enacted in three approaches, namely multimedia, multichannel and multiplatform. In a multimedia approach, assisted by the print media in order to create and provide information in multiple formats text, photos, graphics, animation, audio, and video. Whereas for multichannel approach, enacted by using and maximizing various methods and channels of information distribution. While the multiplatform approach, is executed using variety of tools and devices to access information, such as paper, computers, smartphones and televisions (Pandu Pajak, 2013, para.14).

Tax education for elementary school students can be optimized by building an integrated environment in the future, so it is necessary to have inclusions of taxation information to educational curriculum materials, and collaboration with the Ministry of Communication, Ministry of Tourism and Creative Industry, and other ministries in order to build the expected integrated environment. Last but not least, there should be an evaluation of each education program by distributing questionnaires to students. It can be used as input in enhancing the quality and effectiveness of the implementation of tax education in elementary school in the future.

CONCLUSIONS

Implementation of the tax education that specifically aims to build early age tax awareness is done through character building of students with internalization of values such as honesty, discipline, mutual cooperation, and so forth. The policy is highly influenced by the content of the policy and the context of this policy, essentially has been conducted in a structured, targeted and measurable manner. However, it has not been conducted continuously for sustainable result. Tax education program for elementary school students has marginal portion in its implementation. Therefore, it takes a considerable big amount of commitment from the Directorate General of Taxes to implement it in an ongoing basis. Tax education is not a policy that would obtain results immediately. It takes about 10-20 years to be able to reap the results of the implementation of the socialization of taxation on these elementary school students. Subsequently, there needs to be constant effort both in terms of implementation, monitoring and evaluation not solely to improve the quality and effectiveness of education tax on elementary school students, but also to surely be able to build tax awareness within the elementary students. In the end, the tax education for elementary school students should be conceived as one of the activities for the realization of voluntary tax compliance in the future society.

REFERENCES

Alstadsater, Annette dan Martin Jacob. (2013) "The Effect of Tax Awareness and Incentives on Tax Evasion."

Chan, C.W., Troutman, C.T., and O'Bryan, D. (2000), 'An expanded model of taxpayer compliance: Empirical evidence from United States and Hong Kong', *Journal of International Accounting, Auditing and Taxation* 9(2), 83 –103.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Creswell, John W. dan Vicki L. Plano Clark. (2007) *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage publications.

Direktorat Jenderal Pajak. (2007). *Laporan Tahunan Direktorat Jenderal Pajak 2007,* Jakarta.

Direktorat Jenderal Pajak. (2012). *Laporan Tahunan Kanwil Ditjen Pajak Jawa Barat II*, Bekasi.

Direktorat Jenderal Perimbangan Keuangan. (2012). *Tinjauan Ekonomi dan Keuangan Daerah Jawa Barat 2012*. Jakarta.

Fadlillah, Muhammad dan Lilif Mualifatu Khorida. (2013) *Pendidikan Karakter Anak Usia Dini*. Yogyakarta: Ar-Ruzz Media.

Grindle, Merilee S. (1980) *Politics and Policy Implementation in The Third World*. New Jersey: Priceton University Press.

Hirsh, Nahil. (2011) "The Development and Strengthening of the Tax Citizenship Concept: The Tax Education Programs." *National Tax Superintendent National Superintendency of Tax Administration*.

Hofmann, Eva, Eric Hoelzl, dan Erich Kirchler. (1999) "Preconditions of Voluntary Tax Compliance: Knowledge and Evaluation of Taxation, Norms, Fairness, and Motivation to Cooperate." *Europe PMC Funders Group, PMC 2012 March 14*. 2012 James Alm. "Tax Compliance and Administration." *Handbook on Taxation (New York: Mercel Dekker, 1999)*

Kementrian Keuangan. (2013). *Anggaran Pendapatan dan Belanja Negara 2013*, Jakarta.

Marziana Bt. Hj. Mohamad, Norkhazimah Bt. Ahmad and Mohmad Sakarnor Bin Deris. (2010) "The Relationship Between Perceptions and Level of Compliance Under Self Assessment System – A Study in The East Coast Region." *Journal of Global Business and Economics July 2010 Volume 1 Number 1*.

Mohani, A. (2001), '*Personal income tax non-compliance in Malaysia*'. PhD thesis, Victoria University: Melbourne, Australia.

Mohd, R. (2010), '*Tax knowledge and tax compliance determinants in self assessment system*', a thesis submitted to the University of Birmingham for the degree of Doctor of Philosophy, available at http://www.acta.uob.edu.au/asfc.html, accessed in March 2011.

National Tax Agency. (2013). *The National Tax Agency Report 2013*, Tokyo. Park, C.G., and Hyun, J.K. "Examining The Determinants of Tax Compliance by Experimental Data: A Case of Korea. *Journal of Policy Modeling 25, 673-68.*

Prasetyo, Bambang dan Lina Miftahul Jannah. (2005) *Metode Penelitian Kuantitatif*. Jakarta: PT RajaGrafindo Persada.

Prastowo, Andi. (2011) *Metode Penelitian Kualitatif Dalam Perspektif Rancangan Penelitian*. Yogyakarta: Ar-Ruzz Media.

Purwanto, Erwan Agus dan Dyah Ratih Sulistyastuti. (2012) *Implementasi Kebijakan Publik: Konsep dan Aplikasinya di Indonesia*. Yogyakarta: Gava Media.

Rahardjo, Satjipto. (1987) "*Beberapa catatan sosiologis tentang kesadaran membayar pajak". Prospek dan faktor penentu reformasi perpajakan*. Editor: B. Wiwoho. Jakarta: Yayasan Bina Pembangunan.

Republik Indonesia. (2006) Surat Edaran Direktorat Jenderal Pajak No. SE-05/PJ/2011 tentangTata Cara Pelaksanaan Kegiatan Penyuluhan Perpajakan. Richardson, G. "Determinants of Tax Evasion: A Cross Country Investigation." *Journal of International Accounting, Auditing & Taxation 15, 150-169*.

Saira, K., M. A. Zariyawati dan L. Yoke-May. (2003) "An Exploratory Study of Goods and Services Tax Awareness in Malaysia." *Seminar on National Resilience Political Managements and Policies in Malaysia.* n.d. Sarker, Tapan K. "Improving Tax Compliance in Developing Countries via Self Assessment System – What Could Bangladesh Learn from Japan?" *Aisa-Pacific Tax Bulletin Vol.9 No.6 June 2003*.

Simanjuntak, Timbul Hamongan dan Imam Mukhlis. (2012) *Dimensi Ekonomi Perpajakan Dalam Pembangunan Ekonomi*. Depok: Raih Asa Sukses.

Susilawati, Neni, dkk. (2013). *Review Satu Dekade Reformasi Perpajakan di Indonesia: Strategi dan Tantangan dalam Implementasi Modernisasi Administrasi Perpajakan (Studi Kasus Kantor Wilayah Direktorat Jenderal Pajak Jawa Barat II)*. Laporan Akhir Hibah Riset Awal UI. Diterbitkan.

Torgler, Benno. (2007) *Tax Compliance and Tax Morale: A Theoritical and Empirical Analysis*. Cheltenham: Edward Elgar Publishing, Inc.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

IMPLEMENTING DIDACTIC MEASURING TECHNOLOGY JOINED WITH INQUIRY APPROACH – A WAY TO ENHANCE STUDENTS UNDERSTANDING OF PHOTOSYNTHESIS.

Ryplova RENATA
University of South Bohemia in Ceske Budejovice, CZECH REPUBLIC
ryplova@pf.jcu.cz

Cekal TOMAS
Faculty of Education, University of South Bohemia in Ceske Budejovice
CZECH REPUBLIC
tcekal@seznam.cz

ABSTRACT

The topic of photosynthesis is considered by students as one of the most difficult and unpopular in biology learning. Inquiry learning as well as didactic technology are believed to attract the students to study and to increase their achievement. From this reason we have conducted a study aimed to the impact of inquiry based and by didactic measuring technology supported teaching programme for learning photosynthesis on students' knowledge. An inquiry based teaching programme concluding the use of didactic measuring sets was constructed and tested at Czech basic schools. To study an influence of this programme on students' achievement a pre-test – post-test experimental design was used. The students of 7 th grade were divided into 2 groups. Focus group was taught by using this inquiry teaching programme while control group by frontal teaching.

Inquiry approach supported by technology was accepted enthusiastic by students. According to the results of our research this approach lead to higher increase of students' knowledge compared to the classical frontal teaching. We concluded, that the use of didactic measuring technology together with inquiry approach seemed suitable and efficient method for enhancing students' knowledge of photosynthesis.

INTRODUCTION:

Photosynthesis is a core process of plant physiology highly influencing human environment. It influences the whole life being on the Earth due to the photosynthetic release of oxygen, stays on the beginning of the food chains, influences significantly the total CO_2 budget of the atmosphere due to photosynthetic carbon fixation and thus impact significantly the greenhouse effect (Lawlor, 1990, Taiz & Zeiger, 2002). The basic processes are already well understood (Lawlor, 1990; Taiz & Zeiger, 2002; Govindjee & Krogmann, 2003), and further research aimed to deeper understanding of the photosynthetic regulatory mechanisms still continues. Certainly, because of its great significance, also a big attention is given to the learning of photosynthesis starting already from the basic school.

Unfortunately, previous studies indicated, that most of the students still have difficulties and confusion in understanding not only the photosynthetic processes, but also the ecological circumstances of photosynthesis in our environment (Canal, 1999, Carlsson, 2002, Marmaroti & Galanopoulou 2006). Possible explanation of the students' difficulties in learning and understanding of photosynthesis could be abstract photosynthetic concepts and processes which are not visible by eyes and hence lend often to misconceptions. (Hershey, 2005). Therefore lot of authors are reporting the necessity to change the educating approach during teaching photosynthesis from just words explaining the concepts to new innovative methods (Barak et al., 1999, Tytler & Peterson, 2003, Vikström 2008).

Among these methods, inquiry approach is regarded internationally in last decades as alternative strategy attracting students to study of science and suitable for improvement of students' achievement in science education (Bybee, 2004, Rochard et al., 2007, Uno, 2009) Inquiry based science education (IBSE) is a learner – centred strategy, having a potential to engage students into the learning process (NRC, 1996). During inquiry learning students come to the findings on their own by the similar process like scientists do their research work (Edelson et al., 1999, Bybee, 2004). By this way, students earn the experience in identifying questions, formulating hypothesis, planning experiments, collecting and analysing data, concluding and formulating explanations, and also communicating and interpreting their conclusions (Rochard et al., 2007, NRC, 2012). IBSE has been implemented into the science education in Czech Republic just during several last years

 Copyright © International Conference on New Horizons in Education Conference (INTE)

(Papacek, 2010). The Czech teachers are trained at universities to use properly inquiry in science education. For the purposes of the implementation of the inquiry approach into science education also new according to the inquiry principles correctly constructed model lessons are needed.

Several previous studies documented, that to enhance and facilitate inquiry learning, the introduction of modern technologies into inquiry is highly recommended (Higgins & Spitulnik, 2008, Lee et al., 2010). Teaching supported by technology is mostly very good accepted by children (Lee et al., 2010). The children are attracted by modern technologies. They are used to get information prevailingly from digital media, smart technologies are the part of their everyday life, (JWT, 2012).
In the field of photosynthesis modern technologies are used for the measurement of CO_2/O_2 gas exchange. Modern measuring devices enables an output of the measuring signal via computer. Hence, visualisation of not visible abstract processes of photosynthetic gas exchange is possible. This could be use with an advantage in education.

From all these reasons we have conducted a study aimed to the impact of inquiry based and by didactic measuring technology supported teaching program for learning photosynthesis on students' knowledge. An inquiry based teaching program including the use of didactic measuring set for photosynthetic CO_2/O_2 gas exchange (Vernier Software & Technology, Beaverton,USA) was constructed and implemented into the education at Czech basic schools. This contribution brings the results of our didactic survey made with an aim to find an answer to the main research question: Does technology supported inquiry learning improve students' achievement in understanding to photosynthesis?

INQUIRY BASED AND TECHNOLOGY SUPPORTED LESSON ON PHOTOSYNTHESIS

The teaching programme on photosynthesis used in this study was designed to meet the recommendation of National Research Council (NRC, 2012) and involved by this recommendation mentioned processes, which are crucial for the implementation of inquiry approach into science education: asking questions, planning and carrying out investigations, analysing and interpreting data, constructing explanations and obtaining, evaluating and communicating information. The programme was constructed with regard to reach two main goals in students' understanding of photosynthesis:

1) Proper understanding of CO_2/O_2 gas exchange

2) Students should find out, that beside the mineral nutrition, also carbon dioxide and sun energy are the sources for the nourishments of plants.

These two topics were found by previous research as most difficult and bringing serious misconceptions in the field of learning photosynthesis (Cannal,1999, Marmaroti & Galanopoulou 2006).

The programme intended for the 7 th grade of Czech basic schools took 90 minutes and consisted of steps designed according to the rules of inquiry learning mentioned above (NRC, 2012). Contradictory to the traditional photosynthetic experiments, where students follows explicit, step-by-step instruction, in this programme, students were provided by the set of questions or situation from which they concluded the inquiry questions. Under the control of teacher, students constructed the hypothesis and proved them by the experiments planed by them own with the use of device for CO_2 and O_2 gas exchange measurement.

Basic steps of the programme used in this study:
1) Initial motivation - a problem solving situation: Two pea plants prepared by teacher in advance – one of them grown under full light, second one grown under dark in carton box. Students were asked to answer the introductory question: What all need the plants for healthy growth? Brainstorming.
2) Further motivation – a mystery story: Imagine yourself, that there are plants sitting in the school benches in your classroom instead of children. What will happen with the air in the classroom after 15 minutes? What will happen under the dark? What will happen under the light?
3) Introduction of the didactic measuring set, equipped with CO_2 sensor to the children. The students were asked to breathe deeply near of the CO_2 sensor and to observe the response of the sensor displayed on graph by data projector. The student could see the significant CO_2 increase. This activity was included to engage the students into the learning and to learn, how to use the measuring device. Question: What will happen with the air in your classroom after 15 minutes, if you consider, that all of your schoolmates are breathing similarly like you? Conclusion of the answer from the foregoing activity.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

4) Return to the step 2, creating of the hypothesis
5) Planning of the experiments to prove the hypothesis
6) Carrying out of the experiments (measurement of CO_2 and O_2 exchange of living pea plants under light and dark conditions, output – graph displayed by data projector, collecting the data, writing down of the data into the prepared tabs
7) Writing scientific paper (work in group): Conclusion of the findings, communicating them with the colleagues
8) Students' presentation of the findings, discussion
9) Answer to the initial question from step 1, final conclusion and summary done by teacher.

During the experiment the students worked with living pea plants, which allowed them to see the real reaction of the plant to the changing environmental condition (light/ dark). The use of living plant was documented as crucial in students photosynthetic experiments already by Vikström (2008), who pointed out, that the use of living material provide the good opportunity to students to understand ecological circumstances of photosynthesis,

METHODOLOGY OF DIDACTIC RESEARCH

The inquiry and technology supported teaching programme on photosynthesis described above was put into the practice at three different Czech basic schools in four different classes. Together 107 students of 7 th grade (12 - 13 years) were tested. Each class was divided into two groups, which were taught always by the same teacher. The focus group absolved the inquiry and technology supported lecture, while control group was taught by classical frontal teaching without use of technology. To study an influence of the teaching programme on students' achievement a pre-test – post-test experimental design was used. The pre-test was conducted before the lessons to compare the level of the knowledge of the both tested groups before the teaching. The post- test was realized in each class in 7 – 10 days after the lessons. The testing of the students' knowledge level was done by using the test consisting of 10 question. The average test score of the both tested groups was compared and the differences were tested statistically by using Students' t- test. Beside the general test score special attention was given to the questions testing students' understanding of the sources of plants nourishment, and relationship between plants and atmosphere in this contribution.

FINDINGS AND DISCUSSION:

The students worked very actively during the inquiry lessons and were attracted significantly by the measuring technic. We found like a big disadvantage to have just one measuring device available in the classroom, because most of children wanted to do the measurement with sensors on their own, which was not possible during the limited time with just one measuring device. According to this experience it is recommended for the future to use more devices simultaneously and to work with students in groups. Unfortunately, the use of more devices could be limited by the financial possibilities of the school.

According to the results of our didactic survey we can concluded, that the used inquiry based and technology supported programme affected positively students' achievement in learning photosynthesis. The general average test score reached by students taught by using this programme was higher than the general average test score reached by students taught by frontal teaching, (Fig.1). Because the results of the pre-test did not show any significant difference between the levels of the knowledge among the both tested groups before the lectures, the better results of the focus group must be caused by the type of teaching approach.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

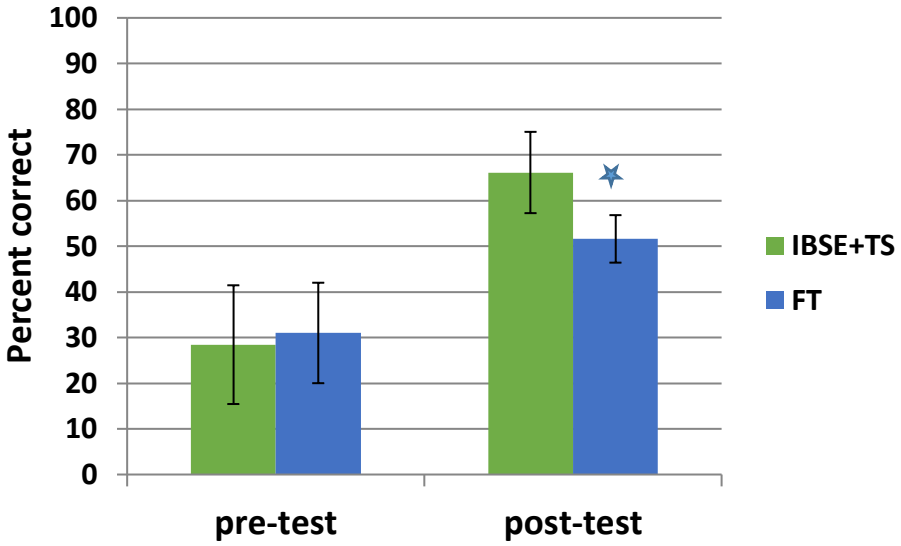


Figure 1: Comparison of the student achievement expressed as average percentage of the maximum test score between the students taught by inquiry based and technology supported learning (IBSE+TS) and students taught by frontal teaching (FT). Statistically significant differences are marked by an asterisk (n=107, Students' t- test, $p \leq 0,05$)

Special attention was given to the proper understanding of the photosynthetic gas exchange. Three of the ten questions were aimed to this topic. According to the analysis of these results, in this field the positive influence of inquiry based and technology supported education was even more significant (Fig.2). According to the results of the pre-test, the level of the knowledge of the CO_2/O_2 gas exchange was the same in both groups and very low before the lessons, despite the basic processes were explained to the pupils already at the elementary school. Difficulties in understanding of photosynthetic gas exchange were discovered also by previous works (Cannal, 1999, Keles & Kefeli, 2010). In the post- test, the results of the both groups were improved, but the increase in the test score of these questions was much higher in the case of group taught by inquiry and technology supported education. The students of the focus group had an advantage of the visualisation of the gas exchange during the measurement with CO_2 and O_2 sensors and the inquiry approach helped them probably to understand better these processes.

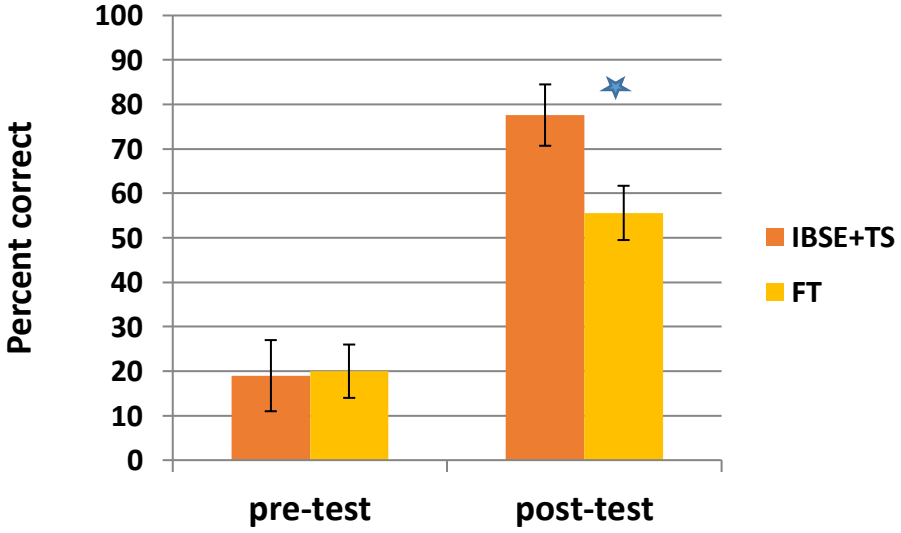


Figure 2: Comparison of the students' achievement in the questions aimed to the photosynthetic gas exchange, expressed as average percentage of the maximum obtainable score in these questions between the students taught by inquiry based and technology supported learning (IBSE+TS) and students taught by frontal teaching (FT). Statistically significant differences are marked by an asterisk (n=107, Students' t- test, $p \leq 0,05$)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Similar trend was evident in the case of questions related to the understanding of the sources of plant nutrition. Also in this field reached the students of the focus group better results that the control group (Fig.3). The inquiry approach and the use of measuring technology helped them to understand better the mechanisms between photosynthetic processes and nutrition of the plant. In the focus group more students considered the solar energy and carbon dioxide as sources for plant nutrition. On the other hand, in the control group, more students believed, that the only source of plant nutrition is mineral nutrition obtained by roots from soil. This is considered by previous work as one of the most serious misconceptions in photosynthesis (Cannal, 1999).

Hence, it seems possible, that using inquiry approach supported by technology is a way to avoid misconceptions in students' understanding of photosynthesis. This is to be proved by further research.

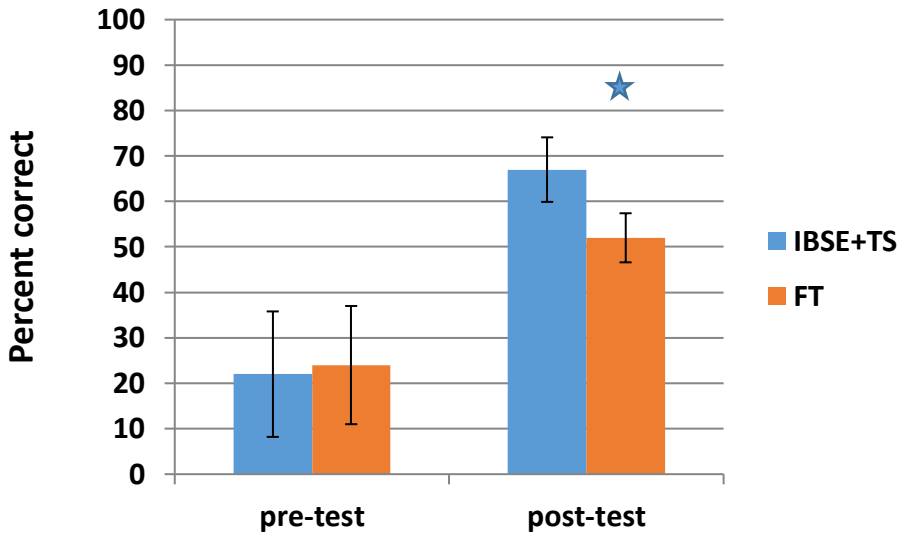


Figure 3: Comparison of the students' achievement in the questions aimed to sources of plant nutrition, expressed as average percentage of the maximum obtainable score in these questions between the students taught by inquiry based and technology supported learning (IBSE+TS) and students taught by frontal teaching (FT). Statistically significant differences are marked by an asterisk (n=107, Students' t- test, $p \leq 0,05$)

CONCLUSIONS:

1) Inquiry based and technology supported programme on photosynthesis improved students' achievement in learning photosynthesis
2) The use of measuring technology during inquiry learning was attractive for students
3) It is recommended for the future to work with more measuring devices simultaneously with students in the groups

ACKNOWLEDGEMENT:

This contribution was supported by the Project GAJU *118/2016/S*

REFERENCES

Barak, J., Sheva, B., Gorodetsky, M. & Gurion, B. (1999). As 'process' as it can get: students' understanding of biological processes. *International Journal of Science Education*, 21, 1281-1292.

Bybee, R.V. (2004). Scientific inquiry and science teaching, in Flick, L.B. & Lederman, G. (eds.), *Science inquiry and nature of science. Implications for teaching, learning, and teacher education*, Kluwer Academic Publisher, Dordrecht, Netherlands pp. 1 – 14.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Canal, P. (1999). Photosynthesis and 'inverse respiration' in plants: an inevitable misconception? *International Journal of Science education* 21, 363-371.

Carlsson, B. (2002). Ecological understanding 1: ways of experiencing photosynthesis. *International Journal of Science education*, 24, 681-699.

Edelson, D.C., Gordin,D.N., Pea, R.D. (1999). Addressing the Challenges of Inquiry-Based Learning Through Technology and Curriculum Design . *The journal of the learning sciences*, 8(3&4), 391-450

Govindjee & Krogmann, D. (2004). Discoveries in oxygenic photosynthesis (1727-2003): a perspective. *Photosynthesis Research*, 80, 15-27.

Hershey, D.R. (2005). Avoid misconceptions when teaching about plants. *California Journal of Science Education* 5 (2), 69–84.

Higgins, T.E. & Spitulnik, M.W. (2008). Supporting teachers' use of technology in science instruction through professional development: a literature review. *Journal of Science Education and Technology* 17, 511–521.

JWT, (2012). Gen Z: Digital in their DNA. [viewed 2016-03-18] available on line at http://www.jwtintelligence.com/wp-content/uploads/2012/04/F_INTERNAL_Gen_Z_0418122.pdf

Keles, E.& Kefeli, P. (2010). Determination of student misconceptions in "photosynthesis and respiration" unit and correcting them with the help of cai material. *Procedia Social and Behavioral Sciences* 2, 3111–3118.

Kim, M. C., Hannafin, M. J. & Bryan, L.A. (2007). Technology-enhanced inquiry tools in science education: An emerging pedagogical framework for classroom practice. *Science Education* 91(6), 1010 – 1030.

Lawlor D.,W (1990). Photosynthesis: metabolism, control and physiology. Longman Singapore Publishers.

Lee H., Linn, M.C., Varma, K. & Liu, O.L. (2010). How do technology enhanced inquiry science units impact classroom learning? *Journal of Research in Science Teaching* 47, 71–90.

Marmaroti, P. & Galanopoulou, D. (2006). Pupils' Understanding of Photosynthesis: A questionnaire for the simultaneous assessment of all aspects. *International Journal of Science education* 28, 383-403.

National Research Council (NRC), (1996). National Science Education Standards; National Academies Press: Washington, DC.

National Research Council (NRC).(2012). A Framework for K-12 Science Education: Practices,Crosscutting Concepts, and Core Ideas. Washington, DC: The National Academies Press, , [viewed 2016-03-18] available on line at: http://www.nap.edu/catalog.php?record_id=13165#

Papacek, M. (2010). Inquiry based science education: A way for the biology education of generations Y, Z, and alpha? Scientia in educatione, 1 (1), pp. 33-49. [viewed 2016-03-18],available on line at: http://www.scied.cz – in Czech

Rochard, M. Csermely, Jorde, D. Lenzen, D. Walberg-Henrikson, H. & Hermmo, U. (2007). Science education now: A renewed pedagogy for the future of Europe. European Comission, Directorate- General for Research, Science, Economy and Society, Information and Communication Unit, Brussels.

Taiz, L., Zeiger, E. (2002). Plant Physiology. Sinauer Associates, Inc., Publishers.

Tytler R. & Peterson S. (2003). Tracing Young Children's Scientific Reasoning. *Research in Science Education*, 33, 433-465.

Uno G. (2009). Botanical literacy: What and how should students learn about plants? *American Journal of Botany* 96(10), 1753–1759.

Vikström, A. (2008). What is Intended, What is Realized, and What is Learned? Teaching and Learning Biology in the Primary School Classroom. *Journal of Science Teacher Education*, 19, 211-233.

IMPORTANCE OF ETHICAL PRINCIPLES IN ADVERTISING AND BOARD OF ADVERTISEMENT'S FUNCTION AS A METHOD OF ADMINISTRATIVE CONTROL

Abdullah ÖZKAN
Faculty of Communication
İstanbul University, Turkey
abdullahozkan@istanbul.edu.tr

ABSTRACT
Advertising, which plays an important role in the promotion of products and services, as well as in the purchase decisions made by a target audience, aims to draw attention to a brand or organization or to address a particular thought at the same time it convinces people to act a certain way of their own accord. Advertisement aims to change the target audience's views and habits and to also ensure they adopt a certain opinion or attitude through the message it gives. Advertisers can sometimes sponsor ads that are not in accordance with ethical principles and that are incompatible with the values of integrity and honesty; they can advocate while also sheltering these improper behaviors behind a variety of excuses. This article, in examining how important ethical principles (which advertisers can sometimes ignore) are for the advertising industry and profession, emphasizes the importance for the development of the advertising industry to advertise while abiding by ethical principles. Ads that are carried out in accordance with ethical principles increase trust in the brand and their message's credibility. Monitoring ads that don't comply with ethical principles or the law carries importance in terms of protecting society and individuals. In this article, the method of executive control is examined in detail from these methods of control, and the Board of Advertising's function within this control mechanism is discussed.

INTRODUCTION

Advertisement in the new millennium plays a very important role in the promotion of products and services produced by the industry of culture; thus, it occupies a large part of individuals' daily lives. Brands and businesses, in conveying to consumers through advertisement the most comprehensive information about their products and services, also benefit again from the, if it may be said, magical world of advertising in order to convince their audiences to carry out their purchases. The advertising sector is fed by creativity, makes a difference while protecting originality, and fulfills the task of convincing the masses while also laying claim to their independence. The elements of creativity, originality, and independence, which are very important capital of the sector, become more significant when supported and surrounded by the rule of law and by ethical principles. This is because advertisements and advertisers are expected to have a sense of social responsibility, to respect the public's rights, and to comply with the principles of honesty and integrity. The boundaries of the ethical principles of advertising have been drawn by the International Chamber of Commerce Code on Advertising Practice; ads that are made in accordance with these guidelines are accepted as ads that are appropriate to ethical values and have a sense of responsibility.

Although there are many scientific publications regarding the technical aspects of the advertising profession in the literature, only a limited number of publications have addressed the ethical dimensions of advertisement. Advertising ethics and the importance of moral values in advertising are mostly discussed in brief in books on advertising. In this regard, *Advertising Ethics in Turkey: Problems and Solutions* fills this gap as a recently published book that features a comprehensive scientific study. This article, therefore, aims to draw attention to the ethical dimension (which has been mostly unmentioned) that remains in the background, yet is an important factor. Furthermore, the structure and resolutions of the Board of Advertisement, as a method of administrative control that exhibits significance because it is closely concerned with both the sector and society, deserve an examination and discussion.

The Board of Advertisement was established by law with the purpose of auditing advertisements through the method of administration and is a control mechanism that has the power of sanction. While supervising, the Board of Advertisement looks at compliance with the principles of public morality, accuracy, and honesty; it aims to protect against social violence, abuse, and other adverse conditions.

This article discusses why ethical principles are important for ads and advertisers; it investigates how to respond to the need for the Board of Advertising to control this while putting emphasis on advertisement's sense of control. In order to detect how the function is viewed in the administration of the Board of Advertising, this article discusses one decision that has been made by the Board.

THE CONCEPT OF ADVERTISING

Advertisement can be defined as the entirety of efforts to introduce a product or service to the public, who will certainly pay the cost of the product or service by buying space and time from mass media (Elden, Ulukök, &Yeygel, 2005, p. 62). The scope of advertisement consists of the act of introducing and adopting people,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

institutions, goods, and services to the public. When considered from the perspective of marketing, advertising is presented to the target audience through non-personal methods in the exchange of ideas, institutions, goods, and services for a certain fee that is paid to the advertising medium (Okay, 2009, p. 6). Advertisement aims to convince people to perform a particular behavior of their own accord; address a particular thought; or draw attention to a product, service, idea, or organization. Advertisement conveys the information that it wants to give the target audience and also a message by drawing their attention; it precedes the change of opinion and habit, ensuring they adopt a particular view or attitude (Gülsoy, 1999, p. 9). Advertising has two main goal; sales and communication (Kocabaş & Elden, 2009. P. 77).

The American Marketing Association's definition of advertising, meanwhile, is as follows: "Advertising is the placement of messages and announcements to the tools of mass media by purchasing time and space to entice companies, non-profit organizations, public institutions, and individuals for the purpose of informing and/or persuading the members or viewers that form a specific target market about products, services, organizations, or thoughts" (Elden, 2009, p. 136). In this definition, two main features of advertising draw the attention: to inform and to persuade. Advertisement primarily involves informing consumers about a product. In particular, advertisement plays a strategic role in informing consumers about a product that has been put on the market for the first time. Persuasion is also another key feature of advertising. Consumers need to be convinced to able to decide to buy something. In order to convince, it is essential to obtain enough information and find the answer to the questions that are on one's mind. Advertisement plays a facilitating role in consumer decisions in the complex and arduous process of persuasion. No matter how believable or reliable a product is, no matter how robust, high quality, or affordable it is, the message of advertising is easy to the extent that persuasion also occurs (Özkan, 2014b, p. 38).

SOCIAL EFFECTS OF ADVERTISING

Advertisement has a significant effect on society, characterized by sending a message to the public aimed at convincing a target audience. Advertising must use this power on society with a sense of responsibility; it must act in accordance with ethical values and the principles of law. Irresponsible behaviors related to the message and rhetoric of advertising can cause attitudes that oversee the general morality of society to perceive ads negatively; this undoubtedly damages the brand and overshadows the prestige and reputation of the brand in the eyes of the consumer (Özkan, Tandaçgüneş, & Doğan, 2015, p. 4).

Ads closely affect the lives of individuals in society in four important ways (Kavas, 1988, p. 69; Özkan, 2014b, p. 147):

Power of persuasive advertising: Firstly, accurate information needs to be transferred to convince the target audience. Through information, consumer and target audiences form a conviction about a product. However, there is a need in the creative aspect of advertising to turn that conviction into a decision to purchase. Advertising performs a strategic function in turning information passed to the consumer into the decision to buy.

Conformity of advertising to the principles of honesty: Ads must convey true and accurate information when transferring information to the target audience, because the slightest insecurity that is created in the target audience will injure both the product and company's image and reputation. Conveying information that hides something from the consumer or isn't true is definitely not proper behavior.

Aesthetic and visual dimension of advertising: Society closely follows the visual presentation of the message that ads give. Mankind has always trended towards the aesthetic and the beautiful. Ads that are visually attractive and aesthetic carry value in terms of persuasion. As much as they can be truthfully used, aesthetics and visual elements also realize positive social effects.

Relationship of advertising with value judgments and lifestyle: Social values and cultural assets are the main elements of advertisement communications. The more the message of advertisement hosts elements that are generally accepted in society, the more its influence increases. Ads also offer a way of life to society; at the same time the message is given that people who have the products and brands that an ad shows will also have that lifestyle.

IMPORTANCE OF ETHICS PRINCIPLES IN ADVERTISING

Ethics, which analyzes the rules and values of morality as an indicator of ideals and abstractions, is the art of specifying what is proper and decent (Dedeoğlu, 2004). The concept of ethics (which defines what is good or bad and what is true or false) seeks the good, the beautiful, and the true through the principles it forms. Mass media has the power to direct and influence society. For this reason, mass media needs to act with a sense of absolute responsibility and behave appropriately within the limits of the law. The same thing is valid for advertisements that give messages and try to persuade society. Advertising messages are no different from a report or commentary printed in the newspaper or from a program broadcast on television. The responsibility and understanding of publishing within the legal limits in accordance with the ethical values that are expected from mass media are also similarly expected from advertisers. When ethics in the advertising industry is spoken

 Copyright © International Conference on New Horizons in Education Conference (INTE)

of, first to come to the fore is the personal ethics of advertising, then come the concepts of organizational ethics and professional ethics (Özkan, 2014b, p. 151).

The source of personal ethics is primarily formed through an individual's own conscience. The positive and negative effects of advertised messages that are presented to society must be determined individually for the structure of the society where each advertiser is found (Yeygel, 2007, p. 357). Organizational ethics includes the principles that allow the same type of behaviors to be placed on those who are active in a legal framework and that indicate some social responsibilities that organizations are assumed to fulfill while performing the services they bring to a community (Yeygel, 2007, p. 358). Professional ethics is the set of principles that a particular professional group creates, maintains, and complies with regarding the profession. It limits personal tendencies, expects certain patterns of behavior from the ones who perform the profession, and regulates competition within the profession (Aydın, 2002, p. 4).

Through the existence of ads that deceive and mislead consumers, public critiques on the content of ads have made the creation of ethical principles mandatory. Ethical principles have formed ad suppliers, advertisers, and media representatives together. The demands of associations and foundations that represent the consumer have been taken into account in determining ethical principles. The International Advertising Practice Guidelines (IAPG) that determined the International Chamber of Commerce (ICC), which is internationally accepted as the basic text on the subject of ethics principles in advertising, was issued in 1937. The IAPG have also been adopted in Turkey (Çelik, 2013, p. 156). The ethics principles in the IAPG cover important issues in advertising such as compliance with morals; accuracy; honesty; social responsibility; the protection of children and youth; respect for individual rights and health; environmental awareness; and consumer protection (Özkan, 2014a, p. 5). When looking at the contents of the basic ethics principles located in the IAPG, protection of the individual and society are observed to have been given priority (Özkan, 2014b, p. 190). The IAPG shows sensitivity on the topic of ads that are prepared and published in accordance with the values of ethics; they emphasize the importance of advertisements that are prepared with an awareness of social responsibility and that protect the individual.

MAIN SOURCES OF ADVERTISING LAW

In Turkey, the sources of advertising law show the variability of advertising regulations that have been collected in different texts. Relevant provisions of the Commercial Code that apply to unfair acts of competition that were perpetrated through ads, together with those that were not directly associated with ads, form the classic and oldest source of advertising law. Legal regulations regarding ads are situated in two main sources of the legislation: Consumer Law Legislation and the Legislation of Radio and Television Law (İnal & Baysal, 2008, p. 10).

Commercial advertising and unfair commercial practices are discussed in Section 6 of Law no. 6502 on the protection of consumers (2013), one of the main sources of advertising law. Arrangements made regarding commercial ads are listed in detail in Article 61 of this same law. When looking at the content of the article, the principles of "compliance with the law, public morality, accuracy, and fairness" are observed to come to the fore among the general principles to be followed in ads. Also, ads that promote violence; endanger life or property; abuse children, the elderly, or the disabled; deceive or mislead; imply; or disrupt public health are observed to be illegal. Article 63 of the Law on Consumer Protection also regulated the establishment of an Advertising Board that works under the Customs and Trade Ministry; the Board's wide powers are recognized by this law (GTB, 2014). The second main source of advertising law is Articles 9 through 13 of Law no. 6112, regarding the Establishment and Broadcasting of Radios and Televisions. Also, Regulations on the Principles and Procedures of Radio and Television, published by the Radio and Television Supreme Council (RTÜK), was established by this law, which includes provisions relating to ads and regulations on how to implement articles related to this law.

PHENOMENON OF ADVERTISING CONTROL AND ADVERTISING BOARD

Ads are controlled judicially in the following four ways: administrative control, private litigation, prosecution, and self-regulation (Avşar & Elden, 2004, p. 85; İnal & Baysal, 2008, p. 10). The method of administrative control of ads and the Board of Advertisement's practices that operate this control mechanism are discussed within the scope of this article. The Board of Advertisement, which was established under the Ministry of Customs and Trade due to Article 63 in the Law on Consumer Protection, has the authority "to determine the principles to be followed in commercial advertising, to make arrangements to protect consumers against unfair commercial practices, to conduct audits within the framework of these issues, to investigate when necessary, to have them stopped in accordance with the audit results, to use necessary correction methods, and to punish through administrative fines, or if deemed necessary, bring it to a halt" (İnal & Baysal, 2008, p. 80). Fitting the Board of Advertisement with extensive powers and appointing the Chairman of the Board by the Ministry also bring the debate together. The most important discussion on this issue is the claim that political power can negatively guide the advertising sector in several ways through the board.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

EXAMPLE OF A DECISION FROM THE ADVERTISING BOARD

An example of a board decision will be examined to understand better the duties of the Board of Advertising. What follows is one of the 238 decisions made during a board meeting on July 14, 2015. These decisions were published on the Customs and Trade Ministry's website (www.gtb.gov.tr) and are available to the public.

File No: 2015/12

Complaintant: Vodafone Telecommunications A.Ş.

Complaintant's Ad: *"Vodafone Supernet Phoneless ADSL"* banner ads

Ad Publishing Date: January-April 2015

Publishing Channels: TV, Newspaper, Internet

Observations: In ads published in various media, *"No Internet at home? Nope. I kept saying they said connect a home phone. How's there no internet at home? How amazing, be brave, buddy, the internet thing you said, how slow. What's becoming slow, come on, let's go; let's get on our horse and grab our sword. (...) During this period, a home without internet appears (taaaa). Vodaphone Supernet phoneless ADSL comes home. Homes are catching the times. Vodaphone, only 49.90 per month with no extra charge, giving you unlimited internet at home. It's so easy to bring in the internet at home in the New Year."* These words were found to be given.

Evaluation/Decision: subject of the review in the ads, *"No internet at home? Nope. I kept saying they said to connect a home phone. How's there no internet at home. How amazing, be brave, buddy. The internet thing you said, how slow. What's becoming slow, come on, let's go, let's get on our horse and grab our sword. (...)During this period, a home without internet appears (taaaa). Vodaphone Supernet phoneless ADSL comes home. Homes are catching the times. Vodaphone Supernet phoneless ADSL comes home. Homes are catching the times. Vodaphone, only 49.90 per month with no extra charge, giving you unlimited internet at home. It's so easy to bring in the internet at home in the New Year."* This statement gives the impression to consumers that a home phone connection is necessary in order for the company that offered internet service to be able to provide internet service. However, as of 12/3/2010, customers who want to receive internet service were offered a bare DSL service; customers were not required to get a home phone along with internet service; this reason was not reflected factually in the cited ads.

Therefore, which of the ad's words misled customers and which ones constitute a violation of the principles of fair competition in this situation:

-in the period of reflection of the examination of the subject of the ad, in force are Articles 5a, 5e, 7a, 7c, and 21 of the Principles Related to the Commercial Advertising and Notices and the Regulation on the Implementation of Principles.

- Articles 5, 7, and 32 of the Commercial Advertising and Unfair Commercial Practices, 1/10/2015 and enacted while printed in no. 29,232 of the Official Gazette.

- Contrary to the provisions of Article 61 in Law about Consumer Protection no. 6502

Accordingly, in regard to Vodafone Telecommunications, Inc., who provided the advertisement, in accordance with Articles 77 and 12 of Law no. 63, the *punishment of halting the ad* has been decreed."

As was seen, the Board of Advertisement evaluated by itself the reference that was made in the field of communication services, and they concluded that the ad, which had been posted on television, in newspapers, and on Internet channels, had misled customers; they concluded that it was contrary to the principles of fair competition. Using the authority given to them by the law, they had the ad suspended.

As previously stated, the International Chamber of Commerce Code on Advertising Practice has stated that ads are required to comply with the principles of integrity and honesty and be willing to respect consumers' rights. Ads that mislead consumers, that deceive, and that bear elements which are contrary to the principles of honesty and integrity are not only a violation of law but are also contrary to ethical values. The Board of Advertisement monitored whether or not the ad had complied with ethical principles while checking its legality. Advertisements that deceive consumers and violate the conditions of competition are not only a violation of law, but they also exhibit unethical attitudes. The announcement to the public and raising of consumer awareness by the Board of Advertisement about organizations and brands that don't exercise due diligence on these sensitive issues and habitually breach legal and ethical values are important in terms of creating the necessary resistance to this kind of behavior. Consumers who sympathize towards and also choose the brands and institutions that are careful to take laws, ethics, and societal values into account are essential for reducing negative examples.

CONCLUSIONS

In the advertising sector, first advertisers' own sense of personal ethics, and later, their organizational and professional understanding of ethics stand out. As much as advertisers improve the strength and health of the personal ethics that they create in their own conscience, so can they perform their profession by depending on ethical values. The understanding of organizational ethics that determines the relationship between an

advertising agency and ad provider forms the main condition that can be performed in the advertising professions' principle framework of trust, transparency, and honesty. The strength of the trust-bond between these two factors will also appear in the ads that come out. The understanding of professional ethics expects that employees adhere to specific behavior patterns, excludes those that don't, and contributes to professional development. If the principles of professional ethics in the advertising sector can be healthily operated and successfully internalized, events that exceed legal limits can be minimized. If these events comply with the principles of professional ethics and at the same time remain within the legal framework, they will clearly be far removed from illegal practices. If the seriousness of the media's impact on society can influence the public, then advertising also has this same power. The message of advertising, which adheres to ethical principles, uses mass communication, and can even enter the capillaries of society through social media, carries great importance. If advertising messages carry elements that can adversely affect the community, the consequences can be more severe than predicted; ethical principles that are violated through too much greed for profit may lead to results that could harm society. These days, when a business concept that adheres to ethical principles excels, those who do not adhere to these principles are excluded (Özkan, 2014b, p. 153).

One condition that is expected and requested is to advertise in accordance with the legal rules of the advertising sector and with ethical values. When this is done, the mechanisms of control circuitry enter. From among the mechanisms of advertising control, the most important and most frequently used method in Turkey is administrative control. Administrative control, which is conducted by the Board of Advertisement as established by law, oversees that ads comply with morals, comply with the principles of straightforwardness and truth, and are socially responsible; it aims to protect society and individuals. The Board of Advertisement is based on principles that are specified in the International Chamber of Commerce Code on Advertising Practice in its audits and is not just the legal rules of advertisement. It also encourages preparations appropriate to ethical principles. When the Board of Advertisement is evaluated as a necessary institution from the perspective of its visible function, its control mechanism is found to be important in terms of protecting individuals and society against violence, abuse, hate speech, and more. However, the board's location close to the political power structure brings with it the anxiety that there may be some traces of political influence in its decisions. To eliminate these feelings, the structure of the Board should be rearranged and the number of its members who come from industry, academia, and civil society organizations should be increased.

The advertising sector can not be left unchecked, for it performs a function that affects society. However, instead of the control mechanism of administrative control, strengthening the industry's self-regulating model of self-control will be the most accurate and reliable method for realizing this. The most important task in ensuring the independence of advertising communications is related to the advertising self-regulatory boards. The effective and healthy operation of these establishments will mitigate the legal control mechanisms over the advertising sector and will also provide an important contribution to the production of ads that are more appropriate to ethical values. It is necessary to help individuals who conform to the legal rules, emphasize ethical values, and move with social responsibility to internalize ethical principles while taking ownership of a brand.

REFERENCES

Avşar, Z., & Elden, M. (2004). *Reklam ve reklam mevzuatı.* Ankara: RTÜK Yayınları.
Aydın, İ. P. (2002). *Yönetsel, Mesleki ve Örgütsel Etik.* Ankara: Pegem A Yayıncılık.
Çelik, Y. (2013). Reklamda etik, yasal düzenlemeler ve denetim. B. Dağtaş (Ed.), *Medya ve reklam* (pp. 156–170). Eskişehir: Anadolu Üniversitesi Yayınları.
Dedeoğlu, G. (2004). *Etik düşünce ve postmodernizm*. İstanbul: Telos Yayıncılık.
Elden, M. (2009). *Reklam ve reklamcılık.* İstanbul: Say Yayınları.
Elden, M., Ulukök, Ö., & Yeygel, S. (2005). *Şimdi reklamlar.* İstanbul: İletişim Yayınları.
Gülsoy, T. (1999). *Reklam terimleri sözlüğü.* İstanbul: Adam Yayınları.
İnal, E., & Baysal, B. (2008). *Reklam hukuku ve uygulaması*. İstanbul: 12 Levha Yayınları.
Kavas, A. (1988). Reklamın toplumsal etkileri, reklamcılıkta toplumsal ve ahlaki sorumluluk düşüncesi. A. Atıf Bir & F. Maviş (Ed.), *Reklamın gücü* (pp. 69–80). Ankara: Bilgi Yayınevi.
Kocabaş, F., & Elden, M. (2009). *Reklamcılık: Kavramlar, kararlar, kurumlar.* İstanbul: İletişim Yayınları.
Okay, A. (2009). *Kurumsal reklamcılık: Reklamdan kurumsal reklama giden yol*. İstanbul: Derin Yayınları.
Özkan, A. (2014a). Strategic importance of ethic values in advertising and concept of self-regulatory [Special Issue]. *European Journal of Research on Education, 2*, 1–9. http://dx.doi.org/10.15527/ejre.201426555
Özkan, A. (2014b). *Reklam Yönetimi.* İstanbul: Ticaret Odası Yayınları.
Özkan, A., Tandaçgüneş, N., & Doğan, B. (2015). *Yeni medya ve reklam*. İstanbul: Derin Yayınları.
T.C. Gümrük ve Ticaret Bakanlığı. (2014). *Reklam Kurulu yönetmeliği*. http://www.tuketici.gov.tr/source.cms.docs/etuketici.gov.tr.ce/docs/kanunmevzuat/reklam_kurulu_yonetmelik.pdf (01.10.2015).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

T.C. Gümrük ve Ticaret Bakanlığı. (2014). *Reklam Kurulu kararları*. http://www.tuketici.gov.tr/index.snet?wapp=reklamkurulukararlari_tr&open=2 (05.10.2015).
Tüketicinin Korunması Hakkında Kanun. (2013). http://www.resmigazete.gov.tr/eskiler/2013/11/20131128-1.htm (02.10.2015).
Yeygel, S. (2007). Reklam, çocuk ve etik üzerine… İ. Sayımer & P. Eraslan Yayınoğlu (Ed.), *Halkla ilişkiler ve reklam üzerine etik değerlendirmeler* (pp. 358–370). İstanbul: Beta Yayınları.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

IMPROVING HERITAGE AWARENESS THROUGHOUT ARCHITECTURAL EDUCATION IN DESIGN STUDIOS

Gözde Kırlı OZER
Department of Architecture
Uludag University
gozdekrl@gmail.com

Rengin Beceren ÖZTÜRK
Department of Architecture
Uludag University

Arzu ÇAHANTİMUR
Department of Architecture
Uludag University

ABSTRACT
In architectural education one of the main topics is to make the students understand the necessity of physical and socio-cultural factors and the relationship between them for architectural and urban design. Gaining the ability of using relationships of physical and socio-cultural environment factors in design process has a vital importance for architecture students. In order to be successful in their professional career they should learn to handle the architectural and urban design problems in a holistic and integrative approach. For this aim, topics about heritage conservation and management are used throughout architectural studios as a tool. Especially in countries like Turkey, which has a rich and valuable cultural and historical heritage this topic gains more importance in architectural education. In this study, an undergraduate architectural studio process that has the aim of making students conscious about the importance of heritage values for the development of settlements is presented. Throughout this studio experience the consciousness level of the third grade undergraduate architectural students is evaluated. The interviews made by the students and their visual presentations including cognition maps are used for the evaluation. The possible educational strategies for increasing their level of awareness about heritage conservation are discussed as a conclusion.

INTRODUCTION: ARCHITECTURAL DESIGN STUDIO AND HERITAGE AWARENESS

As stated in UNESCO reports, the cultural heritage is linked to the lives of communities and is fully integrated into social, economic and environmental processes, making it an integral part of people's daily experience. Thus, any effort aimed at protecting the environment and improving the social and economic wellbeing of communities needs to consider the cultural heritage (Unesco, 2013). The positive impacts of these efforts may offer some opportunities whereas negative impacts may cause some threads. Understanding the identification of cultural values and assessment of the significance of these values have great importance in heritage conservation studies.

On the other hand, architecture is the main profession that has been not only creating heritage values for centuries, but also in some cases causes demolition of them. The masterpieces of mankind are architectural monuments and they can also be conserved by architectural practices. Every architect should be aware of this significant responsibility and try his best in order to safeguard the world's heritage values. At this point the important role of architectural education should be stressed. The UNESCO-UIA (International Union of Architects) charter on architectural education explains the main aims of architectural education. These are; *to produce competent, creative, critically minded and ethical professionals* and *to produce good world citizens who are intellectually mature, ecologically sensitive and socially responsible designers and builders (UIA,2002).* UIA(2008) also defines architecture as a creative intellectual task of research and design that draws on humanity, culture, nature and society. These definitions explain the notion of architecture and architects and its vitality for heritage conservation clearly.

It is a common acceptance that architectural design studio is the core of architectural education. Architectural design studios constitute the basis of this education where theoretical knowledge and designing skills penetrate each other. The students begin to feel and act like an architect throughout this designing experience and develop their ability of holistic and also problem solving thought. Shon (1985), stated that the central pedagogic vehicle for architectural education is project-based learning. Students are expected to offer architectural design proposals

 Copyright © International Conference on New Horizons in Education Conference (INTE)

for a given problem and program. However, there is no one correct form of this design project. Rather the works of the students are unique and individualistic, but they should meet the requirements of the given architectural program and should offer a sufficient solution for every actor included in the given problem.

In the light of these, the study presents an architectural studio experience of 3rd. grade undergraduate students of architecture at Uludag University, Faculty of Architecture. In the following sections, after explaining the aims, inclusive and development stages of the studio process, some examples of student projects are presented. The students' proposals to solve the problems of such valuable heritage sites and the change in their degree of heritage awareness are discussed as a conclusion.

'DESIGN FOR WORSHIP' ARCHITECTURAL PROJECT

The Republic of Türkiye is situated on a transition point between Asia and Europe, which make the country both multi-cultural and multi-religious and for centuries different civilizations built cities and exterminated others to survive in this geography and this settlements and exterminations made the country archaeologically and culturally multi-layered. As being a multi-cultural, multi-religious and multi-layered living organism, Turkey makes architects very hard to design and build new settlements in. And basically forced to be a part of the historical cities as an infill.

The 'Design for Worship' project is built on the idea of ; nevertheless religion being objectively different for every person, religious worshiping shows slight differences between different religions. In the context of this project design of sanctuaries for a minimum of three different religions that still have communities in the country (İslam, Judaism and Christianity) was an obligation. Also architectural design of supportive spaces such as library, community center, residents for ecclesiastics, city park, etc. to compose a cultural complex was a necessity. The project was expected to be designed with an infill approach, which is a must for architects living and working in multi-layered cities and countries.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The aims of this project for participators are (1) to understand the necessity of physical and socio-cultural factors and the relationship between them for architectural and urban design (2) to gain the ability of using relationships of physical and socio-cultural environment factors in design process (3) learn to handle the architectural and urban design problems in a holistic and integrative approach (4) to gain consciousness about the importance of heritage values for development of the presented settlements (5) to earn the ability to design sensitively for a historical city.

The studio took place in 2015-2016 spring term Architectural Project 5, class of 3rd graders. The Studio lasted for 14 weeks with the participation of 40 students and 3 moderators.

As study areas; Tirilye and İznik counties were chosen to be infilled for them being culturally, historically multi-layered settlements and close to the city of Bursa where architectural studio participators study and live. Both of the study areas have histories dated back to the Hellenistic period and contain archaeological ruins to be protected and also have a living city interwoven.



Figure 1. The relationship between Bursa City Centre-Tirilye-İznik Historic Towns

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Figure 2. Aerial Photo of Tirilye



Figure 3. Aerial Photo of İznik

In the following, the three main stages of the development process of the architectural studio is explained in detail.

Stage 1. Explaining the Theme, Field Search & Modeling

At the beginning of the studio, participators were enlightened about the project theme, workload distribution throughout 14 weeks of study, the expectations and the evaluation criteria of the moderators, which are based on the curriculum and Bologna credit system were stated. Participators were also given a booklet containing studio schedule and advised readings to be helpful for their design process such as; '*A Report on Protecting Historical Development, Monuments of Nicaea.* Kuban', '*Searching of the concept in Tirilye; an architectural design studio.* Sağdıç', '*City image, City Gate; Urban Identity; Shore and Definitions about shore.* Ersoy.'.

After explaining the theme, participators were asked to overview the project areas by analyzing via physical and socio-cultural researches (observations, surveys, field identification studies, etc.) through out their field trips to both Tirilye and İznik. They, as the groups of four, prepared a digital presentation to explain the findings of the researches they undertook and express their ideas about the areas.

At the second course, the groups made presentations to all students and moderators and the whole group discussed the findings and identified urgent needs of the areas. The students were asked to prefer one of the study areas in order to handle the design process. At the beginning of this process as a second step after the field studies they were asked to build a 1:1000 scaled model of both of the areas to understand the topography, green and built-up area with all of its components.

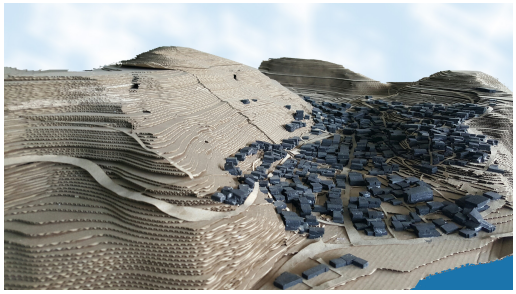

Figure 4. 1:1000 Scaled Tirilye Model


Figure 5. 1:1000 Scaled İznik Model

Stage 2. Cognitive Mapping

At the second week of the studio the participants were asked to draw a map, containing the buildings and other components (green areas, people, patterns….etc.) they remember, on a blank sheet. Blank sheet provided a scale free platform to figure the components in the scale of importance they perceived. The aim of the cognitive mapping is to make students realize what they found important about these settlements except from the other sanctuaries, which will give them guidance for design.

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Figure 6. Cognitive Map by Participator 1 | İZNİK

Participator drew and colorized two main roads, historic city walls partially and İznik Lake as boarders also drew Ayasophia Mosque (Hagia Sophia Church) as a landmark.



Figure 7. Cognitive Map of Participator 2 | TİRİLYE

Participator drew Taş Mektep bold and as a landmark. He did not draw other significant buildings or monuments of the historic city, but he drew a dog nearly as big as Taş Mektep which can have many different meanings like he was attacked by a dog or he likes dogs and he remembers one significant …etc.

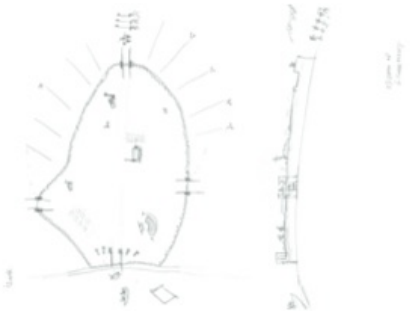


Figure 8. Cognitive Map of Participator 3| İZNİK

Participator had a different approach to city than the other participators, he drew a historical war image with horses and archers and added Ayasophia Mosque (Hagia Sophia Church), city walls, archaic theatre, the sunken basilica and all city gates including non existing Lake Gate.

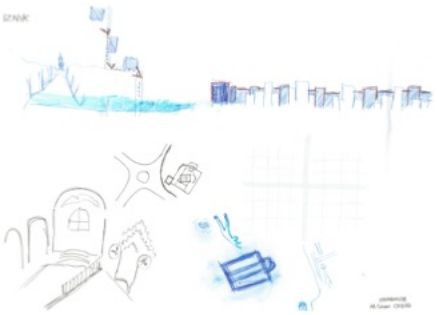


Figure 9. Cognitive Map of Participator 4| İZNİK

Participator did not actually draw a map, his drawing mostly composed of sections and detail drawings of both the city and Ayasophia Mosque (Hagia Sophia Church) and the only part he drew as a map is the same mosque (church). Another remarkable detail in the drawing is that he drew the sunken basilica as a picture with a man (can be imaginary of himself) diving to discover.

Stage 3. Architectural design studio

Studio took place 2 days a week and during studio time moderators and participants were divided into two equal groups consisted of 20 students each with mixed study areas. Every student had a chance to show and explain their ideas to the moderators who acted not as a commentator but a guide helping the participants to find their own deficiencies and fulfill them. Three juries took place during 14 weeks of study, during juries not only moderators but also the students spoke their minds about the project presented to improve.

Evaluation criteria can be listed under two main headings as subjective and objective. Subjective criteria include the answers of the questions as follows; does the project include an integrative and holistic approach?
Is the project proposed able to protect the unique image of the settlement together with providing it to be used in a sufficient way today? Does the project propose suitable architectural and urban design solutions for the determined problems via field analysis? Do the architectural solutions and details offer livable and sustainable places? Objective criteria include the two-dimensional and three-dimensional presentation techniques of the project and quality of the presentation.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

SOME EXAMPLE PROJECTS



Figure 10-11. Participator 1 | Final İZNİK Posters

Participator's aim was to reunite three religions in a common place; heaven. Because heaven also means garden in Turkish language she decided to design a common garden which all three sanctuaries can use as a recreation area. She also aimed to have a relaion with the lake because of the sacred meaning of water for all religions. The relation she described is aspired to give a new usage to the lake shore which is being used effetely.



Figure 12-13. Participator 2 | Final TİRİLYE Posters

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Main axis of the historic city is the commonly used and well known axis located at the ground level of the valley but there is another axis -Karacabey road- which lost its importance but consists of important monuments and historic buildings. Participator aimed to exhilarate Karacabey axis and balance the importance of two axles by infilling new social and spiritual functions along it. Another problem aroused interest of the participator is the community beach being used rarely by the local people and to solve this problem he placed residential buildings around to help resurrect.



Figure 14-15. Participator 3 | Final İZNİK Posters

Participator's aim was to bring three different religions together around a yard. He also spotted the absence of entertainment venues, sports halls and arenas, and shopping places and residential areas for tourists and considering these needs he suggested to design a complex situated at different places among the main axis to revitalize this axis.



Figure 16. Participator 4 | Final İZNİK Posters

Participator spotted that the city is divided to 4 pieces because of the 2 concurrent axles. 2 pieces between İstanbul Gate and Ayasophia Mosque (Hagia Sophia Church) are observed to contain most of the historical ruins of the city and the other two pieces to contain recent residental areas. He decided to settle in the residental areas to avoid damaging historical ruins and to exhilarate the shore. Participator also chose to settle close to the Lake Gate to correlate sanctuaries with water which is sacred for all three religions.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

CONCLUSION

The presented architectural studio experience shows again, that in order to promote students' awareness of the heritage significance and conserving and revitalizing its values, the design studio courses are very important tools. Working in a historical environment is an enriching experience, which not only combines the creative aspects of architectural design with in-depth research to understand the existing environment and its context, but also a great training to improve the design of new buildings in a valuable built environment. At the end of the 14 weeks course time, it is monitored that the students understanding about social significance of historic buildings progressed. They gained the ability of analyzing the existing situation of the built environment together with the historic development process of the city and consider it as a cultural heritage where necessary.

Revitalization of historic environments including adaptive reuse proposals is a special and important area of architectural work, which requires specialist training and knowledge to deal with its multidisciplinary and interdisciplinary nature. And this architectural studio provided the students to experience such a complicated work including many kinds of difficulties. First of all they tried to learn the physical and socio-cultural characteristics of the settlements and drew their own cognitive maps of these study areas. They developed some architectural and urban proposals in order to revitalize the selected historical settlements with different scenarios that include physical and socio-cultural solution alternatives. Then they developed the architectural projects of the proposed buildings in their scenarios. At the end of the process they drew their cognitive maps again and saw that they are more aware of the environment and its heritage values.

On the other hand, the moderators of the architectural studio think that these proposals and the projects could put a light on the way of local authorities for the conservation and revitalization studies of these historic settlements. Iznik, experiencing the Unesco World Heritage Site membership preparation process and Tirilye, still having too many visitors from Greece because of being their former homeland, should be livable and sustainable settlements in order to survive. Both of them could benefit from these fresh ideas and projects, all of which include public and semi-public, open and semi-open places that enable the inhabitants to improve their social life.

REFERENCES

Schon,D.,(1985),The design studio: an exploration of its traditions and potentials, RIBA Pb. London, from Roberts (2006), "Cognitive styles and student progression in architectural design education" , Design Studies, Volume 27,ıssue 2,167-181.

UIA, 2002, *UIA And Architectural Education, Reflections and Recommendations*, Document prepared by the UIA Architectural Education Commission, Text adopted by the XXIIth UIA General Assembly (Berlin: July 2002), p. 1111, taken from Srinivasan, B., et.al.,(2011), " Application of Kolb's experiental learning theory to teaching architectural design principles" in Design Principles and Practices: An International Journal Volume 5, Number 3, 2011, http://www.Design-Journal.com, ISSN 1833-1874.

UIA (2008). International union of architects (Ed.2) Built Environment Education Guidelines., taken from Danacı,H.M.,(2015), "Aesthetics in Cultural Landscape and architectural Education" Procedia-Social and Behavioral Sciences 191 (2015) 190-195

UNESCO 2013 Annual Report from; http://unesdoc.unesco.org/images/0022/002271/227146e.pdf

 Copyright © International Conference on New Horizons in Education Conference (INTE)

IN-SERVICE SCIENCE TEACHER EDUCATION IN PORTUGAL: AN ANALYSIS OF THE SHORT COURSES AVAILABLE

Luís DOURADO
Research Centre in Education, Institute of Education
University of Minho, Portugal
ldourado@ie.uminho.pt

Laurinda LEITE
Research Centre in Education, Institute of Education
University of Minho, Portugal
lleite@ie.uminho.pt

Sofia MORGADO
Research Centre in Education, Institute of Education
University of Minho, Portugal
sofiamorgado@ie.uminho.pt

ABSTRACT
Although teaching-related relevant competences development starts during pre-service teacher education programmes, teachers' professional knowledge has to be further developed through in-service training. In-service training should lead teachers to develop and update the knowledge base acquired during initial teacher education and to fulfil their professional needs. In Portugal, in-service training courses are organized by diverse institutions, being the most common higher education institutions and school network training centres. This raises questions about the consistency between science teachers' needs and the in-service training courses offered to them, as well as between the in-service courses and the recent science education research agenda. Courses organized by higher education institutions and school networks from the north of Portugal, accredited by the national agency and available from its webpage, were analysed. Results indicate that in-service training courses focus on diverse teacher education components but they tend to concentrate on general issues. However, it may be hard for science teachers to find in-service training in some subjects and/or issues. These results may motivate a follow up investigation on whether or not those in-service courses fit science teachers' educational needs so that teacher educators can find ways to better make their actions fit teachers' own training needs.

INTRODUCTION

The demands of the teaching profession

Teaching is a complex and demanding task (Dillon & Maguire, 2007; Berry & Loughran, 2012; Wallace & Loughran, 2012; Lederman & Lederman, 2015; Schneider, 2015) as teachers have to play many different roles in school and especially in the classroom (Schneider, 2015). As a matter of fact, Harrison and Killion (2007) argued that a teacher has to be: resource provider; instructional specialist; curriculum specialist; classroom supporter; learning facilitator; mentor; school leader; data coach; catalyst for change; and learner. On one hand, a teacher that is able to play this huge variety of roles is a teacher that acts as a full member of an institution, fosters students' scientifically accurate and methodologically appropriate learning, and promotes his/her own training. The latter is needed for the teacher to keep acquainted with the scientific and technological developments and to fulfil his/her perceived pedagogical practice needs (Ponte, 2006; OECD, 2014a). It is also a teacher that creates learning situations that enables students to develop competences to learn how to learn and to act as informed, responsible and active citizens (Snoek & Zogla, 2009; OECD, 2014a). Besides, it is a teacher that possesses a large body of multidisciplinary knowledge and skills (Ponte, 2006; Snoek & Zogla, 2009; OECD, 2014a) and that feels motivation and enjoyment towards the profession (Blonder, Benny, & Jones, 2014; Kazempour & Sadler, 2015). As Hargreaves (1998) has stated:

> "Good teaching is charged with positive emotion. It is not just a matter of knowing one's subject, being efficient, having the correct competencies, or learning all the right techniques. Good teachers are passionate beings who connect with their students and fill their work and their classes with pleasure, creativity and joy." (p.835).

This is one of the reasons why novice teachers must be supported to develop an awareness of the ways in which emotions influence and shape their work as science teachers (Saka, Southerland, Kittleson, & Hutner, 2013) so that throughout their careers they can fight for their pedagogical goals specially in conflicting settings that are

 Copyright © International Conference on New Horizons in Education Conference (INTE)

very common within nowadays accountability driven contexts. Hence, opposite to what some people may think, initial teacher education (ITE) cannot concentrate on subject matter knowledge only (Leite, 2005; Frost, 2010; Eurydice, 2011). Rather, it should lead teachers to acquire multidisciplinary knowledge and to develop competences useful for them to deal with a variety of problem-situation that they may face in their future career (Frost, 2010; Schneider, 2015). Day and Sachs (2004) reinforce this idea when they state that

> "[…] higher quality teaching demands teachers who are well qualified, highly motivated, knowledgeable and skilful, not only at the point of entry into teaching but also throughout their careers." (p.3&4).

If it is acknowledged that "Teachers learn as students learn and students learn as teachers learn" (Wallace & Loughran, 2012, p.295), then the way ITE is carried out becomes a key element for educational success (Rebmann, Schloemer, Berding, Luttenberger, & Paechter 2015). This may be the reason why several researchers have advocated that teacher education should take place in constructivist and diversified environments (Leite, 2005; Wallace & Loughran, 2012), promote teachers' reflection on his/her own learning (Snoeck & Sogla, 2009; NRC, 2010; Rebmann, Schloemer, Berding, Luttenberger, & Paechter, 2015), make them able to critically analyse curriculum innovations and methodologies (Bell, 2005; Leite, 2005; Rebmann, Schloemer, Berding, Luttenberger, & Paechter, 2015) and to resist to the possible mismatches between knowledge conveyed to them during ITE programs and their school counterparts' attitudes and beliefs (Saka, Southerland, Kittleson, & Hutner, 2013).

The newly formed teachers are asked to transfer their initial knowledge base to their new work context, often without any support. Successful knowledge transfer would be possible only if ITE was able to reduce the gap between the theoretical and the practical components of teacher training, to make it easier for novice teachers to cope with the diverse demands that they have to face at once. Otherwise, as Stenberg, Karlsson, Pitkaniemi, and Maaranen (2014) found out, they will concentrate on the didactical issues and neglect the contextual (about school and society, and matters related to content, such as the curriculum) ones.

Anyway, ITE should not be expected to be enough for the newly formed teachers to be able to appropriately deal with the diversity of ever changing problem-situations along their lifespan (Ponte, 2006). In fact, continuous training will be needed (Marcelo, 2009). To be successful, in-service training should be guided by experts or critical colleagues whose mission would be to help teachers to continuously develop as persons, as members of society and as professionals (Bell, 2005) and improve their ways of teaching, interacting with students and engaging into the educational community (Zeichner, 2010; Hénard & Roseveare, 2012).

Science teachers' knowledge and skills

At a first glance, teaching science may seem similar to the teaching of any other subject and the science teachers' knowledge base may be seen as to differ from the knowledge base of other teachers on the subject content knowledge only (Sickel, Banilower, Carlson, & van Driel, 2015). However, teaching science has to take into account the nature of the discipline and the characteristics of the content to be taught (Wallace, 2014) which prospective teachers may not be aware of due to their experiences as learners with science teaching practices that "often carry 'a heavy reliance on didactic teaching styles' and a 'cookbook' approach to investigative work" (Berry & Loughran, 2012, p.401). Besides, as teachers' ideas about science interfere not only with what they teach about science but also with the way they teach it (Wallace, 2014: Anderson, 2015; Henze & van Driel, 2015), Bianchini (2012) argues that science teacher education should convey to the newly formed teachers appropriate ideas about science and scientists' work so that they may convey an updated image of science to their students as well.

In addition, teachers' beliefs about the best ways of teaching science, and their experiences as science learners may inform the ways they teach science (Mansour, 2009; OECD, 2014a). Therefore, in-service teacher education should provide an opportunity for teachers to think about what they do and the way they do it and to find out about the best ways to proceed in order to foster students' learning.

Research has shown that teachers trained under an inquiry learning model may be more likely to adopt more constructivist, student centred forms of learning than if they were trained under a teacher centred approach (OECD, 2014b). These results are consistent with and reinforce the idea that successful teaching depends on the quality of the interaction between teachers and students (Wallace, 2014) and may inform methodological choices in the in-service training context. Besides, different students have different preferred learning styles (Pritchard, 2009; Mestre, 2012; Yassin & Almasri, 2015) and these may depend on the subject content area. This means that in-service teacher education should convey teachers a range of teaching approaches and skills so that at each

 Copyright © International Conference on New Horizons in Education Conference (INTE)

occasion they can choose the one that best fits their teaching style, and their students' preferred learning styles, conveys an appropriate image of science and facilitates students' science learning.

According to Frost (2010), science teachers need to hold a variety of types of knowledge (including content knowledge, epistemological knowledge, knowledge of teaching and assessment strategies, curriculum knowledge and knowledge about students' learning in science) and to develop a range of attitudes (including attitudes towards science and towards teacher's own professional development) in order to put into practice a science teaching that is consistent with the commonly agreed values and aims of education and the specific goals of science education. Gil-Pérez (1991) also has acknowledged the relevance of these types of knowledge and attitudes but he emphasized the role of research and innovation, placing them at the centre of all the types of knowledge and competences that science teachers should held. He also emphasized teachers' critical awareness towards teachers' spontaneous thinking and towards the usual teaching approaches. In fact, research is the basis for informed pedagogical innovation (Davies, 1999) and the latter requires critical analysis of traditional ways of thinking and doing, so that teaching can be both more effective and motivating, and that learning can be less painful and more meaningful for the learners.

On their analysis of teachers' required types of knowledge, Frost (2010) and Gil-Pérez (1991) focused mainly on the classroom, and did not make it explicit knowledge or abilities required to deal with students that differ from the mainstream. Bianchini (2012) has added that science teachers need to both become aware of the requirements of a curriculum for students with special educational needs and to find the best ways to help these students to make sense of the world.

To help in-service teachers to develop approaches to science teaching that effectively challenge taken-for-granted models and beliefs is a big challenge for teacher educators. As Berry and Loughran (2012) have put it,

> "developing a pedagogy of science teacher education requires educators to be awake to, and aware of, the complex and problematic nature of science and of teaching, as well as having a preparedness to create and engage in experiences that enable genuine learning to take place for all participants in the learning to teach process." (p.413).

Each single teacher should be expected neither to hold all this variety of types of knowledge and skills nor to be able to cope with all the challenging situations a school can offer to teachers. Rather, he/she should be expected to have a basis for professional and personal growth which Hargreaves (1998) conceptualizes as being tied up with the quality, range and flexibility of teachers' classroom work. Therefore, in-service teacher education institutions should do their best in order to promote in-service science teacher education. To achieve this goal, "they must recruit and support teacher educators who have a broad mandate, an expansive world-view, a collaborative approach, and the skills to enact a rich curriculum." (Goodwin & Kosnik, 2013, p.343). The point is that teacher educators become so without taking any training program (Bayrakci, 2009). In addition, there is a variety of profiles of teacher educators (OECD, 2013), ranging from university qualified staff on science education, science or general education to school teachers with a variety of expertise and teaching experience.

Thus, at least four related questions can be raised. First of all, how should in-service teacher educators be prepared and supported to play their role and to do it well? Goodwin and Kosnik (2013) stated that this question cannot yet be answered because the profession has not yet agreed on that teacher educators need formal preparation. Secondly, is there a profile of in-service teacher educator? Traditionally, teacher training has used to be done at higher education institutions (OECD, 2013), which have specialized staff in several areas from content knowledge to general education passing by pedagogical content knowledge and teaching practice. However, some teachers were used to argue that teacher educators from higher education institutions are away from school real life and cannot provide useful in-service training. They would try to fulfil the needs they perception in teachers that act in a school imagined context instead of fulfilling teachers' own (felt) needs in a real context. Hence, recently, there has been an increasing tendency for advocating school-based teacher education done by peers. The argument draws on the idea that peer-tutors can provide school contextualized teacher education that may focus on teachers real (felt) contextual needs and that fit the school real conditions (Hénard & Roseveare, 2012). However, a third question can be asked: as peer tutors are teachers that belong to the same school and are not systematically engaged in research, how can they be aware of new issues that emerge from scientific and educational research and promote educational change? As no one feel the need of what he/she does not know, this would point towards training be done by school-based teacher educators and also by higher education institutions staff. Still, a final question should be raised: is the profile of a teacher educator independent of the subject he/she trains teacher for? It can be argued that even though some dimensions that teachers need to develop are subject independent, other and probably the most important, depend on the

 Copyright © International Conference on New Horizons in Education Conference (INTE)

subject that is on the content knowledge that they teach. In fact, some of the types of teachers' professional knowledge are specific of a science teacher and would not apply to a language or even a maths teacher.

Teachers' professionalization and professional development: the case of Portugal

As any other professional, a teacher should have an organized body of knowledge that is specific of the teaching profession and of the subject he/she teaches. The specific features of this body of knowledge are what separate teachers from other professionals. To acquire the necessary and varied knowledge-base and to develop the relevant competences to teach in educational changing contexts, those that intend to become teachers need a formal period of preparation to enter the profession, even though they should engage into continuous growth and development actions afterwards (Eurydice, 2015; Ogunniyi & Rollnick, 2015; Schneider, 2015; Treagust, Won, Petersen, & Wynne, 2015). It can be argued that to do ITE is far more than to provide a teaching qualification; it is about forming teaching professionals (Snoek & Zogla, 2009; Lederman & Lederman, 2015), able to not only play a diversity of roles, but also play them well with students holding a wide range of needs and abilities, in a variety of work contexts (Ogunniyi & Rollnick, 2015; Schneider, 2015). However, in contemporary changing societies, societal expectations on teachers are ever changing, and so are the demands on the teaching profession. Therefore, teachers need to be not only professionals but also "proactive in order to respond adequately to the ambiguity, uncertainty and increasing complexity which characterize the educational settings in which they are expected to operate." (Hilton, Flores, & Niklasson, 2013, p.434).

Thus, educating professional teachers is much more than conveying knowledge to prospective teachers; it is about helping teachers to find the best fit among factors that, according to Murray (2014) interact to influence teachers' professionalism: their individual biography, their institutional setting, and the national context. Based on Korthagen's (2010) ideas for ITE, it can be argued for an in-service teacher education model that blends together theory and practice and that acknowledges teachers' previous experiences so that professional learning becomes a bottom-up process taking place in the individual teacher and building from his/her experiences in order to lead to fruitful knowledge development about teaching.

European countries as well as countries in other continents face a common challenge: train effective teachers for the 21st century students' needs (Musset, 2010; Eurydice, 2011; OECD, 2014a). Within the scope of the Bologna process, European member states agreed on a common credit transfer system as well as on a cycles-based structure of higher education. However, they seem to have failed to reach a common framework for ITE (Snoek & Zogla, 2009; Castro, 2015; Lederman & Lederman, 2015) and to agree on a minimum level of qualification (Eurydice, 2015), even though they seem to be aware of the common challenges that teacher education has to face and overcome. Nevertheless, they also failed to design a teacher general profile as well as a subject teacher specific profile. The point is that Member States are different in terms of political orientation and teacher education is very sensitive to politics (Goodwin & Kosnik, 2013) as most governments dictate the kind of teachers they want.

Thus, even though teaching is a universal profession, the teacher profile is heavily influenced by differences on the roles played by the government, the universities, the teachers, and the schools in the educational systems around the world (OECD, 2013). The work context dependency of teacher identity (Flores & Day, 2006; Luehmann, 2007), that is the way teachers see themselves as teachers, may make it hard for teacher education to overcome what Snoek and Zogla (2009) took as one of the most relevant challenges of teacher education - how to promote teachers' identities - as these exerts a meaningful effect on teachers' actions and engagement.

Arguments for in-service teacher education are often associated with curriculum reforms and they are based on the need to make teachers up to date with the newly advocated contents and methods. However, "in modern circumstances, an initial professional training is altogether inadequate for a career which can extend for forty years" (Coolahan, 2002, p26). This is especially true for teachers who seek to equip and motivate their pupils to be lifelong learners. This may explain why professional development for teachers is compulsory at every level in about three-quarters of OECD and partner countries and in some countries it required for promotion or salary increase (OECD, 2014a). In Portugal, the content of in-service training is specified collectively by the central education authorities, teachers' professional organisations, teachers' unions, universities and schools (OECD, 2014b). However, teachers can choose what in-service courses they will engage in given that they can gain a few general credits but that they should gain credits on specific area they teach.

There are several ways of organizing in-service teacher training and the Portuguese law acknowledges a variety of them. Findings from the 2013 teaching and learning international survey (TALIS) suggest that courses are the type of training in which teachers engage more often and that it is followed by conferences or seminars and by participation in teacher networks (OECD, 2014a).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The duration of in-service courses varies from long duration degree leading courses to short-term (being most of them of 25 hours long) or summer courses, or seminar/conference like courses (Coolahan, 2002; OECD, 2014a) and taking in-service courses is part of teachers' contractual obligations (OECD, 2014b), namely in Portugal (Law 22/2014, November 11). Whatever the way it is organized, in most countries, including Portugal, the design of in-service courses has been decentralized and therefore it can be done by the different types of training institution (OECD, 2014b) even though some of them offer more courses than others. However, educational authorities settled accreditation and evaluation systems in order to guaranty quality of the in-service training provided (Eurydice, 2011). Portugal has got both an accreditation system that analyses and eventually accredits the training courses and an evaluation system that audits samples of the training courses that are run. It is called the In-service Scientific and Pedagogic Council (Law 4635/2014, March 31).

Accreditation and evaluation of in-service training courses is guided by the Portuguese law which was first approved in 1992 and that has evolved since then in order to make it clearer the aims focus and types of in-service training courses to be provided to teachers (law 22/2014, November 11). This law states that in-service training should: fulfil the teachers training needs so that they can contribute to the development and improvement of the school educational and curricular project; to the improvement of teaching quality and learning results; teachers' professionals development so that they can give a contribution to the school results; to knowledge dissemination and capacity building so that school and school networks management and autonomy can be reinforced; share knowledge and skills towards teacher professional development. As far as the focus of the training courses is concerned, the Portuguese law states that they should concentrate on areas that coincide with the main teacher education components: content knowledge, pedagogic content knowledge; general education; teaching practice, cultural, social, and ethics knowledge.

In fact, research (Eurydice, 2015; Zhang, Parker, Koehler, & Eberhardt, 2015) has shown that teachers need development and training in some science topics as well as in multiple areas of pedagogical content knowledge. In-service teacher educators have a crucial role to play in meeting the professional learning needs of teachers of the future (OECD, 2013). Their role is very complex because, as O'Dwyer and Atlı (2015) concluded, they have to be more than simply effective teachers of teachers; they have to cater for affective needs, coach a broad range of clients, interpret contextual variables and provide appropriate feedback.

OBJECTIVES

In Portugal, courses specially designed for in-service teacher education purposes are organized by diverse institutions, being the most common higher education institutions (HEI) and school network training centres (SNTC). Most of the times, these institutions organize the courses, publicize them and teachers register in selected courses according to their interest or self-perceived needs. This raises questions about the consistency between teachers' needs and the in-service training courses offered to them, as well as between the in-service courses and the recent science education research agenda. Hence, this paper analysis in-service training courses targeted to science teachers or to teachers who teach science components in order to find out how they respond to these questions and to find out if the answers are the same for both training institutions.

THE STUDY

The open access website http://www.ccpfc.uminho.pt/ shows the in-service training courses accredited by the Portuguese in-service Scientific and Pedagogic Council, in the diverse subject areas and school levels. In March 2015 the website was accessed and the in-service training courses offered by the north of Portugal higher education institutions and school networks were identified. A total of 3106 courses were identified, being 430 offered by higher education institutions and 2776 offered by school networks. Afterwards, some of those courses were selected. They were courses targeted to:

- science teachers, focusing on science content knowledge themes or on science education themes;

- teachers of the diverse subjects, including science teachers. These courses focus on: general educational issues (e.g.: assessment, special education needs) that are relevant for teaching science; cultural, social and ethics themes; educational research issues; teaching practice issues.

The result of this selection was 1555 training courses offered by HEI (190) and by SNTC (1365). However, they include two types of in-service courses: courses specially designed for the purpose of in-service training; seminars/conferences accredited for in-service training purposes. An analysis of the data provided on the 1555 courses showed that 172 were of seminar/conference type. These courses were excluded as they are not specially designed for in-service training purposes. Therefore, 1383 short courses organized for the purpose of in-service

 Copyright © International Conference on New Horizons in Education Conference (INTE)

training were selected to be analysed. They were offered by HEI (184) and by SNTC (1199). Table 1 synthesises and relates the number of training courses available with the number of in-service training courses analysed, per type of training intuition. It is worth noting that considering the proportion of courses offered by the two types of institutions is similar when the courses available and the courses analysed are considered. This means that the proportion of courses offered to science all teachers by HEI and by SNTC compares to the one of offered to teachers of other subjects.

The title of the in-service course was content analysed in order to identify the teacher education component it focuses on. Afterwards, those focusing on: science content knowledge were content analysed in order to identify the science area they deal with; science education courses were content analysed in order to identify the science education themes they concentrate on; general education courses were content analysed in order to identify the education issues they deal with. The courses focussing on educational research, on cultural, social and ethics and on teaching practice were not further analysed because there were very few courses in each of these categories.

Table 1: In-service courses offered and analysed, by type of training institution

Type of training institution	Training courses on the website (n=3106)		In-service training courses analysed (n=1383)	
	f	%	f	%
Higher education institution	430	13,8	184	13,3
School networks training centre	2676	86,2	1199	86,7

FINDINGS

Table 2 shows that the majority of the in-service training courses analysed focus on general issues that are relevant to science teaching but do not have a science focus and do not include a science component. A comparison of HEI and SNTC with regard to these two types of training courses indicates that the percentage of training courses dealing with specific issues is larger in the former (38,0%) than it is in the latter (23,8%) type of institution. This difference seems to be mainly due to content knowledge courses (that is courses focusing on science themes) that are offered by HEI (14,1%), through science faculties or equivalent, and that can hardly be organized by SNTC. To offer an in-service training course, training institutions need to have accredited trainers, with an academic degree that is higher than the degree of the training teachers and with a specialization on the area they are to become teacher educators. Thus, it is much easier for universities to offer courses on science knowledge as they have got much more qualified staff on the area than SNTC do. In addition, as there must be a minimum number of trainees for a course to be offered, it is much worth for HEI to offer this type of courses (because they can gather training teachers from different schools) than it is for SNTC that tend to gather teachers from the school network only.

Table 2: Focus of the training courses per type of training institution (%)

(N=1383)

Focus of the training courses		HEI (n=184)		SNTC (n=1199)	
		f	%	f	%
Specific issues (n=355)	Content knowledge themes	26	14,1	19	1,6
	Science education themes	44	23,9	266	22,2
General issues (n=1028)	General educational issues	102	55,4	793	66,1
	Cultural, social and ethics themes	7	3,8	74	6,2
	Educational research issues	2	1,1	1	0,1
	Teaching practice issues	3	1,7	46	3,8

As far as general issues courses are concerned, the percentages of courses are high (over 50%) whatever the type of institution even though HEI differ from SNTC as the latter offer a larger percentage of training courses focusing on the general educational issues than the HEI do. As it will be shown latter, general educational issues is a broad category that includes courses on several themes that can be attended by teachers of every school subject. This may mean that it is worth for SNTC to organize courses on general issues because these courses can gather school network teachers of the different school subjects and therefore it is easy to reach the minimum number of trainees.

The training courses focusing on science content knowledge themes are reduced in number (n=45). They include large scope courses (dealing with interdisciplinary science themes or with a set of topics that belong to diverse science areas) or subject focused courses, concentrating on biology, chemistry, geology or physics (table 3).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Comparing the two types of training institutions, the percentages of physics and science courses offered by HEI surpass those of the SNTC while the percentage of biology and geology courses offered by SNTC surpass HEI. This result may be due to the fact that, as students perceive physics as being a difficult subject (Angell, Guttersrud & Henriksen, 2004), science faculties feel like helping teachers to overcome their lack of knowledge by offering in-service training courses focusing on physics issues. The percentages of courses focusing on chemistry are low, in both types of institutions. As it is our belief that teachers' chemistry knowledge base also needs to be updated, these so low percentages were unexpected. A consequence of this is that teachers may find it hard to attend an in-service course on Chemistry knowledge to update their content knowledge base.

Table 3: Science scope of the content knowledge training courses (%)

(N=45)

Science scope	HEI (n=26)	SNTC (n=19)	Examples of training courses themes
Science	30,8	21,1	Contemporary science themes; Earth and life science topics
Biology	11,5	26,3	Ethnobotanics; Mycology & environment
Chemistry	3,9	5,2	Biodiesel production; Chemistry, health and environment
Geology	19,2	26,3	Viana do Castelo geologic Patrimony; Geology and sustainability
Physics	34,6	21,1	Topics and history of astronomy; Sound and light waves

Courses on cultural, social and ethics themes, on educational research issues and on teaching practice issues are very few (table 2) and they were not further analysed. However, it is worth noting that educational research is a teacher education component prescribed in the post-Bologna law and that every teacher should hold knowledge on in order to being able to permanently evaluate and improve his/her own teaching practice. Besides, training on the cultural and social components is relevant not only because it is prescribed in nowadays teacher education law but also because teachers need to be aware of the culture and the society characteristics of the school environment if they are going to adopt a science, technology and society perspective. Finally, the ethics component is relevant not only from a teacher own action point of view but also from a student education point of view. In fact, issues like access to information and easy use of text and image raise questions of copyright and authorship that today students need to be educated for using.

As shown by table 4, the science education training courses focus on a variety of themes, whatever the type of institution, even though there are some differences between the courses they offer. The themes compare to those that Mortimer (2002) and Paixão, Lopes, Guerra, and Cachapuz (2008) have identified as being in the science education agenda.

With regard to practical work courses, the percentage of courses offered by HEI is higher than the percentage of courses offered by SNTC. It should be noted that the Portuguese secondary school syllabuses includes a set of laboratory activities that must be performed with/by the students. As some teachers lack laboratory skills, they may look for training courses that concentrate on those activities and HEI may offer them because they want to help teachers and they have appropriate lab equipment to perform those activities.

Table 4: Focus of the science education training courses (%)

(N=310)

Science education issues	HEI (n=44)	SNTC (n=266)	Examples of training courses themes
ICT in science education	13,6	23,3	ICT in science teaching
Practical work	27,3	17,7	Lab activities in science teaching; The Penha mountain as a Geology teaching resource
Health education	20,5	39,8	Sex education in school context; Health education in school for tobacco prevention.
Environmental education	6,8	8,6	Biodiversity, nature conservation and environmental education
Problem-based learning of science	9,1	0,4	The learning of science and geography through PBL
Science, technology and society	2,3	0,8	Applying STEM in the classroom
History of science	4,5	0,0	History of science in science teaching
Science curricula	6,8	3,0	Teaching and learning Environment/Geography Study and the horizontal and vertical curriculum articulation

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Science teaching approaches	9,1	4,5	Sound and light: possibilities in the classroom Physical Sciences: a modern and global approach
Other	0,0	1,9	Science and mathematics inclusive teaching strategies

The percentages of information and communication technology (ICT) in science education and of health education courses offered by SNTC are higher than the percentages of courses offered by HEI. Health education is even the area that got the highest percentage of training courses. This may be due to the fact that since 2005 (law 25994/2005, December 16) the ministry of education has been increasingly valuing health education in schools and settling training requirements for teachers that were appointed to engage into health education projects (law 2506/2007, February 20; law-60/2009, August 6, law 196-A/2010 April 9). As some teachers, namely some science teachers (as it is the case of physics and chemistry teachers), have no undergraduate training in health education, then they may put pressure on their school counterparts so that those teachers that fulfil the formal requirements can organize some training on health education in their school or in their school network. In addition, the analysis of the titles of the health education courses suggests that they concentrate on a variety of different issues like healthy life styles, oral health, sex education, nutrition, etc. which also explains the large number of courses offered in the area.

Problem-based learning of science got a higher percentage in the case of HEI (9,1%) than it did in the case of SNTC (0,4%). This may be due to the fact that Problem-based learning is a new methodology in science teaching (Hung, Jonassen, & Liu, 2008) and, as it should be expected, it has to do with a methodological innovation that comes from educational research carried out by HEI and it takes time before school teachers feel comfortable not only to teach with it but moreover to train their counterparts on it. Some history of science in-service training is offered by HEI only. This may be due to the fact that some HEI have specialists on history of science which are not to be expected in the schools.

As far as courses within the scope of general education are concerned, they cover the diverse general education teacher training components (table 5) but there are some differences between HEI and SNTC.

Table 5: Focus of the general education training courses (%)

(N=895)

General educational issues	HEI (n=102)	SNTC (n=793)	Examples of training courses themes
Curriculum development	4,9	0,5	Curriculum horizontal and vertical articulation
ICT	20,6	40,5	Exploration of educational software - Movie Maker
Special educational needs	5,9	12,1	Improving educational practices for students with special needs
Learning difficulties	7,8	8,4	Learning difficulties and educational success
Teacher characteristics	0,0	1,8	The importance of voice and corporal posture in the teaching profession
School management	25,5	12,2	School management
Assessment	14,7	11,9	Students' learning assessment; Supervision and assessment of teacher performance; Schools self-assessment and educational project
Students' misbehaviour	0,0	8,7	Misbehaviour in the school
First aid	0,0	1,4	The basics of first aid in the school context
Educational mediation	20,6	2,5	Conflicts mediation in the school community

The highest percentage of courses was got for ICT courses offered by SNTC, which is about the double of the one obtained for HEI. In today's technologically advanced information societies, ICT is a relevant device to teach science and to make science teaching more appealing to students. Teachers' awareness of this may lead them to look for training in order to try to be updated. However, it may be that they feel afraid of taking in-service training at HEI, which they tend to imagine as being more theoretical and/or complex, and to prefer to do it at SNTC, that they may imagine as being more practice focused.

School management and educational mediation are the areas in which the percentages of courses offered by HEI are higher than the percentages of the courses in the same areas, offered by SNTC. This may be due respectively to the specialization and the novelty of these areas.

In some themes the percentages are similar (e.g., assessment) but in other areas (e.g., special educational needs)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

they are a bit higher for SNTC. The remaining types of courses are quite rare and some of them are offered by SNTC only. Some of them focus on very practical issues like students' misbehaviour and first aid. Some of these results may be explained by the fact that some schools may have a special education teacher and/or a psychologist which may be asked to organize training for their school teachers, namely on students' behaviour and on special education.

CONCLUSIONS AND IMPLICATIONS

The results of this study suggest that a variety of training courses is available to science teachers and that SNTC offer much more courses than HEI. The courses offered cover the diverse teacher education components but they do it differently. In fact, in some areas a lot of courses are offered but in other areas it may be hard for teachers to find an in-service training course. Of course, teachers can ask for a course in a specific area of their own interest but it requires them to find the right training institution, to take some initiative to get in touch with it and to be lucky to have a teacher trainer available to organize the required training. It is worth noting that the analysis reported in this paper focused on the title of the in-service courses only. Of course research is needed not only in order to find out how the course content is a good development of it and how the courses are put into practice which something that depends partly on the teacher educators that are in charge of it and also on the availability of the resources required.

Institutions that offer in-service training to teachers need to be accredited and therefore the training they offer fulfils minimal quality requirements. However, some issues may be raised with regard to in-service training. On one hand, HEI for their mission should be expected to offer more up to date and innovative courses (Hénard & Roseveare, 2012) in all the teacher education dimensions. Nevertheless, even though there are six HEI (versus 32 SNTC) in the geographic area considered for the purpose of this study, the number of courses they offer and that are targeted to the population of this study is quite low and it could be argued that many teachers may not be able to enter a course offered by a HEI. Teachers can ask HEI to offer a specific training course but teachers may feel afraid of approaching it to ask for training. Therefore, there may be a problem with HEI in-service training offer: HEI may not offer courses because teachers do not look for them; and if HEI do not offer courses, then teacher cannot choose them. Also, HEI formative offer is a top-down one that may be disconnected from teachers' real needs (Hénard & Roseveare, 2012).

On the other hand, most SNTC teacher trainers are experienced teachers (OECD, 2013) which are expected to offer quite practical and contextualized courses. However, they are not professional science education researchers and therefore cannot be expected to be as much specialists on the course issues as HEI teacher trainers should be. Consequently, they may not be enough up dated in terms of recent science education knowledge. However, they may be easier to approach by their colleagues to organise a specific training course. This bottom-up approach gives rise to a sense of empowerment and confidence favours collaborative, interactional (Coolahan, 2002) and context dependent training techniques. In addition, SNTC offer in-service training free of charge and organize it in (or very near) the place where teachers work, while HEI charge teachers for course attendance and may be far away from the school where they teach. Nevertheless, OECD (2013) emphasizes the importance of external assistance to the process of in-service teacher education, such as support from HEI, education centres, and regional or specialist support teams.

However, if in-service training is to have any positive effect on teacher professional development, the in-service training courses that qualify for teachers' progression should be well identified so that teachers do not complete the required credits with courses that give a limited contribution for their professional knowledge base and that have low relevance for improving science teaching in schools.

According to Coolahan (2002), in-service training needs may have two main origins: education system needs, which may be regarded as being prominent; and the personal and individual needs of the teachers. As the former cannot exclude the latter, the challenge is to find ways of combining trainings with the two aims as well as trainings offered by the diverse types of training institutions, namely by HEI and SNTC, and given by qualified teacher educators. As most teacher educators' have no training (Bayrakci, 2010), this may require the definition of general and content dependent teacher educator's profiles as well as the formalization of a teacher educator's development system.

A coherent system of professional development activities for teacher educators should be based on knowledge and research regarding the work and learning of teacher educators (OECD, 2013). In addition, and in order to improve in-service training, teacher educators' accreditation should be stricter and require a specialization on the issues the courses focus on, which may require support in terms of their own educational and professional development.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ACKNOWLEDGEMENTS

This work is funded by CIEd – Research Centre in Education, Institute of Education, UMinho, UID/CED/01661/2013 - through national funds of FCT/MCTES-PT.

REFERENCES

Anderson, D. (2015). The nature and influence of teacher beliefs and knowledge on the science teaching practice of three generalist New Zealand primary teachers. *Research in Science Education*, *45*(3), 395-423. doi: 10.1007/s11165-014-9428-8.

Angell, C., Guttersrud Ø., & Henriksen, E. (2004). Physics: frightful, but fun: pupils' and teachers' views of physics and physics teaching. Science Education, *88*, 683-706.

Bayrakci, M. (2010). In-Service teacher training in Japan and Turkey: a comparative analysis of institutions and practices. *Australian Journal of Teacher Education, 34*(1), 10-22.

Bell, B. (2005). *Learning in science*. London: Routledge.

Berry, A. & Loughran, J. (2012). Developing science teacher educators' pedagogy of teacher education. In B. Fraser, K. Tobin, & C. McRobbie (Eds.), *Second international handbook of science education* (pp. 401-416). Dordrecht: Springer.

Bianchini, J. (2012). Teaching while still learning to teach: beginning science teachers' views, experiences, and classroom practices. In B. Fraser, K. Tobin, & C. McRobbie (Eds.), *Second international handbook of science education*, Vol. 24 (pp. 389-400) Dordrecht: Springer.

Blonder, R., Benny, N., & Jones, M. (2014). Teaching self-efficacy of science teachers. In R. Evans, J. Luft, C. Czerniak, & C. Pea (Eds.), *The role of science teachers' beliefs in international classrooms: from teacher actions to student learning* (pp. 3-16). Rotterdam: Sense Publishers.

Castro, R. (2015). Teacher education in Portugal: a history of transitions. In L. Leite, M. Flores, L. Dourado, M. Vilaça, & S. Morgado (Orgs.), *Proceedings of the ATEE annual conference 2014 - transitions in teacher education and professional identities* (pp. 3-14). Brussels: ATEE. https://repositorium.sdum.uminho.pt/handle/1822/36281?locale=en. Accessed 14 November 2015.

Coolahan, J. (2002). Teacher education and the teaching career in an era of lifelong learning. *OECD education*, 2. doi: 10.1787/226408628504.

Davies, P. (1999). What is evidence-based education? *British Journal of Educational Studies*, *47*(2), 108-121.

Day, C. & Sachs, J. (2004). Professionalism, performativity and empowerment: discourses in the politics, policies and purposes of continuing professional development (pp. 3-32). In C. Day, & J. Sachs (Eds.), *International handbook on the continuing professional development of teachers*. Maidenhead: Open University Press.

Dillon, J. & Maguire, M. (2007). Developing as a beginning teacher. In J. Dillon, & M. Maguire (Eds.), *Becoming a teacher: issues in secondary teaching*, 3rdEd. (pp. 3-25). Berkshire: Open University Press.

Eurydice (2011). *Science education in Europe: national policies, practices and research*. Brussels: Eurydice. http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/133en.pdf. Accessed 15 September 2015.

Eurydice (2015). *The teaching profession in Europe: practices, perceptions, and policies. Eurydice Report.* Luxembourg: Publications Office of the European Union.

Flores, M. & Day, C. (2006). Contexts which shape and reshape new teachers' identities: a multi-perspective study. *Teaching and Teacher Education*, *22*, 219-232. doi: 10.1016/ j.tate.2005.09.002.

Frost, J. (2010). Learning to be a science teacher. In J. Frost (Ed.) *Learning to teach science in the secondary school: a companion to school experience* 3Ed. (pp. 2-10). New York: Routledge.

Gil-Pérez, D. (1991). ¿Qué han de saber y saber hacer los profesores de ciencias? *Enseñanza de las Ciencias*, *9*(1), 69-77.

Goodwin, A. & Kosnik, C. (2013) Quality teacher educators = quality teachers? Conceptualizing essential domains of knowledge for those who teach teachers. *Teacher Development*, *17*(3), 334-346. doi:10.1080/13664530.2013.813766.

Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education*, *14*(8), 835-854.

Harrison, C. & Killion, J. (2007). Ten roles for teacher leaders. *Teachers as Leaders, 65*(1), 74-77.

Hénard, F. & Roseveare, D. (2012). Fostering quality teaching in higher education: policies and practices. *OECD Publishing*. https://www.oecd.org/edu/imhe/QT%20policies%20and%20practices.pdf. Accessed 04 August 2016.

Henze, I. & van Driel, J. (2015). Toward a more comprehensive way to capture PCK in its complexity. In A. Berry, P. Friedrichsen, & J. Loughran (Eds.), *Re-examining pedagogical content knowledge in science education* (pp. 120-134). New York: Routledge.

Hilton, G., Flores, M., & Niklasson, L. (2013). Teacher quality, professionalism and professional development: findings from a European project. *Teacher Development*, 17(4), 431-447. doi: 10.1080/13664530

.2013.800743.
Hung, W., Jonassen, D., & Liu, R. (2008). Problem-based learning. In *Handbook of research on educational communications and technology*, edited by M. Spector, D. Merrill, J. van Merrienboer, & M. Driscoll, 485-506. New York: Lawrence Erlbaum Associates.
Kazempour, M. & Sadler, T. (2015) Pre-service teachers' science beliefs, attitudes, and self-efficacy: a multi-case study. *Teaching Education*, 26(3), 247-271. doi:10.1080/10476210.2014.996743.
Korthagen, F. (2010). How teacher education can make a difference. *Journal of Education for Teaching, 36*(4), 407-423. doi:10.1080/02607476.2010.513854.
Lederman, N. & Lederman, J. (2015). The status of preservice science teacher education: a global perspective. *Journal of Science Teacher Education, 26*, 1-6. doi: 10.1007/s10972-015-9422-7.
Leite, C. (2005). Percursos e tendências recentes da formação de professores em Portugal. *Educação*, *3*(57), 371-389.
Luehmann, A. (2007). Identity development as a lens to science teacher preparation. *Science Education, 91*, 822-839. doi: 10.1002/sce.20209.
Mansour, N. (2009). Science teachers' beliefs and practices: issues, implications and research agenda. *International Journal of Environmental & Science Education, 4*(1), 25-48.
Marcelo, C. (2009). Professional development of teachers: past and future. *Sísifo: Educational Sciences Journal*, *8*, 5-20.
Mestre, L. (2012). *Designing effective library tutorials: a guide for accommodating multiple learning styles.* Oxford: Chandos Publishing.
Mortimer, E. (2002). Uma agenda para a pesquisa em educação em ciências, *Revista Brasileira de Pesquisa em Educação em Ciências*, *2*(1), 36-59.
Murray, J. (2014). Teacher educators' constructions of professionalism: a case study. *Asia-Pacific Journal of Teacher Education, 42*(1), 7-21. doi:10.1080/1359866X.2013.870971.
Musset, P. (2010). *Initial teacher education and continuing training policies in a comparative perspective: current practices in OECD countries and a literature review on potential effects*. OECD Publishing. http://dx.doi.org/10.1787/5kmbphh7s47h-en. Accessed 14 September 2015.
National Research Council (2010). *Preparing teachers: building evidence for sound policy*. Washington: the National Academies Press.
O'Dwyer, J. & Atlı, H. (2015). A study of in-service teacher educator roles, with implications for a curriculum for their professional development. *European Journal of Teacher Education*, *38*(1), 4-20. DOI: 10.1080/02619768.2014.902438.
OECD (2013). Supporting teacher educators: for better learning outcomes. OECD Publishing. http://ec.europa.eu/education/school-education/teacher-cluster_en.htm. Accessed 22 March 2016.
OECD (2014a). *TALIS 2013 results: an international perspective on teaching and learning. OECD Publishing*. http://dx.doi.org/10.1787/9789264196261-en. Accessed 14 September 2015.
OECD (2014b). Education at a Glance 2014. OECD Indicators, *OECD Publishing*. http://dx.doi.org/10.1787/eag-2014-en. Accessed 14 September 2015.
Ogunniyi, M. & Rollnick, M. (2015). Pre-service science teacher education in Africa: prospects and challenges. *Journal of Science Teacher Education, 26*, 65-79. doi: 10.1007 /s10972-014-9415-y.
Paixão, M., Lopes, B., Guerra, C., & Cachapuz, A. (2008). Where are we? A contribution to a better understanding of the state of the art in science education research. *Journal of Science Education*, *9*(1),4-8.
Ponte, J. (2006). Os desafios do processo de Bolonha para a formação inicial de professores. *Revista da Educação*, *14*(1), 19-36.
Pritchard, A. (2009). *Ways of learning: learning theories and learning styles in the classroom*. London: Routledge.
Rebmann, K., Schloemer, T., Berding, F., Luttenberger, S., & Paechter, M. (2015). Pre-service teachers' personal epistemic beliefs and the beliefs they assume their pupils have. *European Journal of Teacher Education, 38*(3), 284-299. http://dx.doi.org/10.1080/02619768.2014.994059. Accessed 10 December 2015.
Saka, Y., Southerland, S., Kittleson, J., & Hutner, T. (2013). Understanding the induction of a science teacher: the interaction of identity and context. *Research Science Education*, *43*, 1221-1244. doi: 10.1007/s11165-012-9310-5.
Schneider, R. (2015). Pedagogical content knowledge reconsidered: a teacher educator's perspective. In A. Berry, P. Friedrichsen, & J. Loughran (Eds.), *Re-examining pedagogical content knowledge in science education* (pp. 162-177). New York: Routledge.
Sickel, A., Banilower, E., Carlson, J., & van Driel, J. (2015). Examining PCK research in the context of current policy initiatives. In A. Berry, P. Friedrichsen, & J. Loughran (Eds.), *Re-examining pedagogical content knowledge in science education* (pp. 199-213). New York: Routledge.
Snoek, M. & Zogla, I. (2009). Teacher education in Europe; main characteristics and developments. In A.

Swennen & M. Klink (Eds.), *Becoming a teacher educator: theory and practice for teacher educators* (pp. 11-27). Dordrecht: Springer.

Stenberg, K., Karlsson, L., Pitkaniemi, H., & Maaranen, K. (2014). Beginning student teachers' teacher identities based on their practical theories. *European Journal of Teacher Education*, *37*(2), 204-219.

Treagust, D., Won, M., Petersen, J., & Wynne, G. (2015). Science teacher education in Australia: initiatives and challenges to improve the quality of teaching. *Journal of Science Teacher Education, 26*, 81-98. doi: 10.1007/s10972-014-9410-3.

Wallace, C. (2014). Overview of the role of teacher beliefs in science education. In R. Evans, J. Luft, C. Czerniak, & C. Pea (Eds.), *The role of science teachers' beliefs in international classrooms: from teacher actions to student learning* (pp. 17-31). Rotterdam: Sense Publishers.

Wallace, J. & Loughran, J. (2012). Science teacher learning. In B. Fraser, K. Tobin, & C. McRobbie (Eds.), *Second international handbook of science education*, Vol. 24 (p. 295-306). Dordrecht: Springer.

Yassin, B. & Almasri, M. (2015). How to accommodate different learning styles in the same classroom: analysis of theories and methods of learning styles. *Canadian Social Science, 11*(3), 26-33. doi: 10.3968/6434.

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, *61*(1-2), 89-99. doi: 10.1177/0022487109347671.

Zhang, M., Parker, J., Koehler, M., & Eberhardt, J. (2015). Understanding in-service science teachers' needs for professional development. *Journal Science Teacher Education*, *26*, 471-496. doi: 10.1007/s10972-015-9433-4.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INFLUENCES OF PHYSICS EDUCATION SUPPORTED BY COMPUTER SIMULATIONS ON MOTIVATION LEVELS AND TEACHING STRATEGIES OF TEACHER CANDIDATES

Mustafa KAHYAOĞLU
Siirt University, Faculty of Education Siirt, Turkey
mustafa.kahyaoglu56@gmail.com

Veysel ÇELİK
Siirt University, Faculty of Education Siirt, Turkey
veysel3@gmail.com

ABSTRACT
This study is performed for the purpose of determining the influence of physics education supported by computer simulations on motivation levels and learning strategies of teacher candidates. Sample of the study consists of total 19 teacher candidates who are studying in university of Siirt, Faculty of Education, department of Elementary Mathematics Teaching and taking the course of General Physics I in 2015-2016 academic year. In the study, single group pretest-posttest weak experimental design model is used. In scope of this study, so as to determine motivation levels and learning strategies of teacher candidates; it is used the "motivation and learning strategies" questionnaire which is developed by Pintrich et al. (1991) and adopted to Turkish by Buyukozturk et al. (2004) by doing effectiveness and reliability studies. Wilcoxon signed ranks test which is not one of the parametric tests, is used for data analysis. SPSS 22.0 statistical package program is used for data analysis. In performed study, it is determined that there is a meaningful difference in task value dimensions which is one of the motivation sub-dimensions of teacher candidates; while there is no meaningful difference between internal target, external target, control belief for learning, self-sufficiency related to learning and performance, motivation levels related to exam anxiety dimensions. In addition, when examining the sub-dimension Wilcoxon test results of learning strategies of teacher candidates; it is determined that there is no meaningful difference among repetition, arrangement, dissection, critical thinking, help search, peer-collaboration, meta-cognitive , effort method, time and working environment.

Keywords: Physics teaching, computer simulations, motivation teaching strategies

INTRODUCTION

Physics is a branch of science, which takes part in all event and case encountered almost every day in all fields of daily life from turning electrons to galaxies, from electric currency to buoyancy of water, from electromagnetic waves to the gravity. It is a branch of science which searches the reason of natural event and examine these events depend on which rules or laws (Inan, 1988). In other words, physics is a branch of science which tries to explain the laws of our universe (Tatar, 2010). On one hand, it is in cooperation with natural sciences such as Biology, Chemistry, Geology; on the other hand, it is a close cooperation with engineering fields such as Computer, Electric and Electronics. For this reason; teaching physics is one of the most important fields of teaching physical sciences. It takes part in many academic programs (such as Biology, Chemistry, Engineering, Medical, Pharmacy) in high school and university level starting from the fourth grade in elementary school. The main purpose of teaching physics, is to develop scientific literacy in students. So as to reach the purpose, it is aimed students to show progress in both mental and affective and psychomotor fields. (MEB, 2013) In this framework, the purposes of teaching physics course are;

- To arouse interest in students for physics science and encourage them to discover.
- To understand the nature of scientific inquiry, produce scientific information by using scientific process skills and solve the problems.
- To understand the contribution of historical and cultural process to the physics science.
- To use the scientific information and methods to explain an event or apply in new situations.
- To gain awareness for the nature of science.
- To provide justification about claims depending on the proofs and demonstration, evaluate it and share the scientific information.
- To take decisions having scientific bases related to applications of physics by considering the ethical and social influences (MEB, 2013).

On the contrary, it is determined that teachers have difficulties in teaching physics, students cannot comprehend the physics subjects, they cannot make mathematical operation related to physic subjects and they have many

 Copyright © International Conference on New Horizons in Education Conference (INTE)

misconceptions (Aydogan, Gunes and Gulcicek, 2003; Bayrak and Bezen, 2013; Demirci and Efe, 2007; Karakuyu, 2008; Tunc, Akcam and Dokme, 2012). It is also stated that success rates are considerably low, of students for physics courses in high school entrance and university entrance exams (Marulcu and Dogan, 2010). Motivation and learning strategies of students are one of the most important factors providing the active attendance to course and affecting the success. Motivation is one of the most important factors which start and sustain the attitude, and provide to be successful (Dilekmen and Ada, 2005). It affects the direction, intensity and stability of an attitude (Fidan, 1996). Learning strategies are defined as scientific plans created so as to fulfill a task successfully (Wienstein and Mayer, 1986) or a whole of tactics of individuals that they have related to a certain learning state (Derry and Murphy, 1986) (Quoted by: Oral, 2011). It is each of the techniques which make self-learning of a student easier (Erdem, 2005). It provide the student to process the information and learn easily and permanently. Furthermore, it increases learning efficiency by providing students to control their self-learnings and to direct if necessary. In body of literature, there many studies on academical motivation levels and learning strategies of teachers and teacher candidates, factors affecting motivation and learning strategies, influence of motivation and learning strategies on academical success (Demir and Ari, 2013; Kiziltepe, 2011; Sahin and Cakar, 2011).

In addition, computer aided simulations are utilized in increasing academic success of students, teaching complex information, getting them comprehended, clearing misconceptions, practice and repetitions recently. According to dictionary of Turkish Language Association (TDK); simulation means "simulation (benzetim)" (http://www.tdk.gov.tr). It is to design or imitate models resembling their real ones. Simulations are softwares prepared to show the operating mechanism of a system or how it works (Kuzu, 2007). It is defined as representing events of real life in a controlled way (Demirel, 2005). Educational simulations are computer aided educational type which is risky, dangerous in real life, and which provide to show events that is impossible to be shown in time context, provide individual differences to be taken into consideration with its economic and repetitive features and with its interesting and motivative features its usage increases day by day (Ozdener and Erdogan, 2001).

When examining the body of literature, Akkagit and Tekin (2012) stated that simulation based education has an influence on academic success of high school students. Atam and Tekdal (2010) stated that simulation based softwares prepared for Science and Technology courses have influences on academic success of elementary students; Ulukok, Celik and Sari (2013) stated that simulation aided Science and Technology laboratory applications have a meaningful influence on experimental process skills of students. Emrahoglu and Bulbul (2010) stated in their study that simulation aided computer education in physics course of high school 9th grade, have a positive influence on academic success of students. In the study where influence of simulation aided cooperative learning in Biology education on student's team success; Efe et al. (2011) stated that simulation aided cooperative learning method influence more on academic success in comparison to traditional learning method. When examining the body of literature, there are a lot of studies about usage of simulation in education process. However, it is seen that most of performed studies are focused on academic success of students. On the other hand, there are no study related to influence of simulations on motivation and learning strategies of students. When considering the importance of motivation and learning strategies in education, it is considered that to reveal the influence of using computer aided simulation in physic teaching on motivation and learning strategies of students will provide contribution to both educators and academicians who will perform study in this field.

The Aim of the Study

This study is performed for the purpose of determining influences of computer simulation aided physics course education on usage levels of motivation and learning strategies of teacher candidates. An answer is seeked for the following questions in this respect.

1. What is the influence of computer simulations aided physics course education on motivation levels of teacher candidates?

2. What is the influence of computer simulations aided physics course education on usage levels of learning strategies of teacher candidates?

METHOD

Research Model

In this study, single group pretest-protest weak experimental design model is used. In this design, the influence of experimental process via the study performed on a single group Measurements of experimental subjects related to dependent variable are obtained by using the same subjects and measuring devices as of pretest before

 Copyright © International Conference on New Horizons in Education Conference (INTE)

the application and protest after the application. There is no randomness and matching in this design (Buyukozturk, 2007). The design of study is presented in Table 1.

Table-1. Design of the Study

Groups	Pretest	Application	Protest
Single sample	Motivation and Learning strategies' scale	Computer aided simulation model	Motivation and Learning strategies' scale

In this study, a motivation and learning strategy the pretest is applied to sample and the same test is applied to sample as a protest. Computer aided simulation technique is used for the application.

Working Group

Working group of the study consists of total 19 teacher candidates who are studying in university of Siirt, Faculty of Education, in 2nd grade in department of Elementary Mathematics Teaching in 2015-2016 academic year. 10 candidates are women and 9 candidates are men. Attendance of students to pretest and protest measurements and their class attendance states are taken into consideration in determining teacher candidates.

Data Collection Tool

In scope of this study, so as to determine motivation and learning strategies of teacher candidates; it is used the "motivation and learning strategies" scale which is developed by Pintrich et al. (1991) and adopted to Turkish by Buyukozturk et al. (2004) by doing effectiveness and reliability studies. The scale consists of two sub-scales as of motivation and learning strategies, and total 81 articles. Motivation scale consists of 7 factors and 31 articles. These are respectively consist of sub-dimensions of internal target arrangement (4 articles), external target arrangement (4 articles), task value (6 articles), control belief for learning (4 articles), self-efficiency related to learning and performance (8 articles) and exam anxiety (5 articles). Findings of scale related to Cronbach alpha values are given in Table-2.

Table-2. Cronbach alpha coefficient of motivation scale

Factor name	Cronbach alpha value		
	Original	Turkish	In performed study
Internal target arrangement	,74	,59	,78
External target arrangement	,62	,63	,59
Task value	,90	,80	,71
Control belief for learning	,68	,52	,68
Self-efficiency related to learning and performance	,93	,86	,90
Exam anxiety	,80	,69	,49

As is seen in the Table-2; in performed study, for sub-scales of motivation scale, Cronbach alpha internal reliability coefficient is determined as .78 for internal target arrangement, .59 for external target arrangement, .71 for task value, .68 for control belief for learning, .90 for self-efficiency related to learning and performance, and .49 for exam anxiety. The sub-scale used for determining learning strategies of teacher candidates, consists of 9 factors and 50 articles. Each of factors respectively consists of dimensions of repetition (4 articles), arrangement (4 articles), dissection (6 articles), critical thinking (5 articles), help search (4 articles), peer-collaboration (3 articles), meta-cognitive strategies (12 articles), effort management (4 articles), time and working environment (8 articles). Findings of scale related to Cronbach alpha reliability values are given in Table-3.

Table-3. Cronbach alpha coefficient of learning strategies

Factor name	Cronbach alpha value		
	Original	Turkish	In performed study
Repetition	,69	,62	,75
Arrangement	,64	,61	,69
Dissection	,75	,74	,74
Critical thinking	,80	,74	,69
Help search	,52	,49	,29
Peer-collaboration	,76	,46	,66
Meta-cognitive	,79	,75	,13

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Effort management	,69	,41	,28
Time and working environment	,76	,61	,44

As is seen in the Table-3; in performed study, for sub-scales of learning strategies scale, Cronbach alpha internal reliability coefficient is determined as .75 for repetition, .69 for arrangement, .74 for dissection, .69 for critical thinking, .29 for help search, .66 for peer-collaboration, .13 for meta-cognitive, .28 for effort management and .44 for time and working environment.

Application Process and Data Analysis

Application process of the study started in January 2015. In this process; it came into effect after completing theoretical preparation conducted in way of literature review, method construct, scale determination and simulation determination to be used in applications. In application process; before starting to experimental process, course executive made necessary statements to the students about how the course will be tought and usage of computer aided simulations. Before starting computer aided simulation application, motivation and learning strategies scale is applied to teacher candidates as a pretest. During the application, in scope of the General Physics I course, it is performed for experiment group teacher candidates, in guidance of instructor in a way to cover the subjects of "Work Power and Energy". In this study, it is used the open access simulations which are developed by Colarado university (http://phet.colorado.edu). Application of simulations carried out through smart board and application lasted for four weeks in total. After completing experimental process, the same data collection tool is applied to the same group as a protest.

Wilcoxon signed ranks test which is not one of the parametric tests, is used for data analysis; because of the facts that as single sample pretest-protest research design is carried out for determining the influence of computer aided simulations on motivation levels of teacher candidates and their learning strategies, it does not show normal distribution, and attendant number of experiment group consists of 19 teacher candidates, and this sample number falls short of the expectations about sample number of parametric tests. SPSS 22.0 statistical package program is used for data analysis.

FINDINGS

Findings obtained from the study are presented below according to sub-problems of research. Wilcoxon test results related to intragroup comparisons of pretest-protest average motivation sub-dimension points of experiment group, are given in Table-4.

Table-4. Wilcoxon test results of motivation scale sub-dimension pretest/protest average points of experiment group

		N	Mean rank	Rank sum	Z	Sig (p)
Internal target Protest-pretest	Negative rank	6	7,33	44,00	-,536	,562*
	Positive rank	8	7,63	61,00		
	Ties	5				
External target Protest-pretest	Negative rank	9	8,17	73,50	-,768	,442*
	Positive rank	6	7,75	46,50		
	Ties	4				
Task value Protest-pretest	Negative rank	12	8,42	101,00	-2,343	,019**
	Positive rank	3	6,33	19,00		
	Ties	4				
Control belief for learning Protest-pretest	Negative rank	11	9,77	107,50	-964	,335*
	Positive rank	7	9,07	63,50		
	Ties	1				
Self-efficiency related to learning and performance Protest-pretest	Negative rank	9	9,11	82,00	-,725	,468*
	Positive rank	7	7,71	54,00		
	Ties	3				
Exam anxiety Protest-pretest	Negative rank	7	11,86	83,00	-,308	,758*
	Positive rank	10	7,00	70,00		
	Ties	2				

* p >.05; **p<.05

 Copyright © International Conference on New Horizons in Education Conference (INTE)

As is seen in Table-4, when examining Wilcoxon test results related to motivation scale sub-dimension of students in experiment group; while there is a meaningful difference (Z=-2,343; p<0.5) in task value dimension, there are no meaningful differences between pretest-protest point averages of internal target (Z=-,536; p>.05), external target (Z=-,768; p>0.5), control belief related to learning (Z=-,964; p>0.5), self-efficiency for learning and performance (Z=-,725; p>0.5), exam anxiety (Z=-,308; p>0.5). Wilcoxon test results related to pretest-protest average of learning strategies scale sub-dimension points of experiment group, are given in Table-5.

Table-5 Wilcoxon test results related to pretest/protest average of learning strategies scale sub-dimension points of experiment group

		N	Mean rank	Rank sum	Z	Sig (p)
Repetition	Negative rank	8	9,19	73,50	-,285	,775*
	Positive rank	8	7,81	62,50		
	Ties	3				
Arrangement	Negative rank	10	8,90	89,00	-,593	,553*
	Positive rank	7	9,14	64,00		
	Ties	2				
Dissection	Negative rank	12	10,38	124,50	-1,708	,088*
	Positive rank	6	7,75	46,50		
	Ties	1				
Critical thinking	Negative rank	8	9,00	72,00	-,683	,495*
	Positive rank	7	6,86	48,00		
	Ties	4				
Help search	Negative rank	6	10,50	63,00	-,642	,521*
	Positive rank	11	8,18	90,00		
	Ties	2				
Peer-collaboration	Negative rank	8	8,75	70,00	-,682	,495*
	Positive rank	10	10,10	101,00		
	Ties	1				
Meta-cognitive	Negative rank	12	9,75	117,00	-1,374	,169*
	Positive rank	6	9,00	54,00		
	Ties	1				
Effort management	Negative rank	11	9,73	107,00	-1,450	,147*
	Positive rank	6	7,67	46,00		
	Ties	2				
Time and working environment	Negative rank	14	10,18	142,50	-1,917	,055*
	Positive rank	5	9,50	47,50		
	Ties	0				

* p >.05; **p<.05

As is seen in Table-4, when examining Wilcoxon test results related to learning strategies scale sub-dimension of teacher candidates in experiment group; it is determined that there are no meaningful differences between pretest-protest point averages of repetition (Z=-,285; p>.05), arrangement (Z=-,593; p>0.5), dissection (Z=-1,708; p>0.5), critical thinking (Z=-,683; p>0.5), help search (Z=-,642; p>0.5), peer-collaboration (Z=-,682; p>0.5), meta-cognitive (Z=-1,374; p>0.5), effort management (Z=-1,450; p>0.5), time and working environment (Z=-1,917; p>0.5).

DISCUSSION AND RESULT

In this study, it is examined the influence of physics course education supported by computer simulations on motivation and learning strategies of teacher candidates. The study is limited to 19 teacher candidates who are studying in university of Siirt, faculty of Education, department of Elementary Mathematics Teaching. In carrying out an effective physics teaching; active attendance of students to learning environment and being enthusiastic about learning namely being motivated are considerable important. In the performed study, it is determined that there is a meaningful difference in dimension of task value from motivation sub-dimensions of teacher candidates attended to the study, while there are no meaningful differences between motivation levels related to internal target, external target, control belief for learning, self-efficiency for learning and performance, exam anxiety dimensions. According to this, it can be said that computer aided simulation technique conducted

 Copyright © International Conference on New Horizons in Education Conference (INTE)

in matter of work, power and energy partaking in scope of General Physics I course, increases and influences the task value motivation levels of teacher candidates; while it does not influence the dimensions of internal target, external target, control belief for learning, self-efficiency for learning and performance, time and working environment. In addition, when examining the influence computer aided simulation technique of teacher candidates on their learning strategies; it is determined that there are no meaningful differences between repetition, arrangement, dissection, critical thinking, help search, peer-collaboration, meta-cognitive, effort management, time and working environment dimensions from learning strategies sub-dimensions. According to this, it can be said that there are no influence of repetition, arrangement, dissection, critical thinking, help search, peer-collaboration, meta-cognitive, effort management, time and working environment which are sub-dimensions of learning strategies of experiment group students of physics education supported by computer simulations.

It is stated in literature that computer aided simulations help students to imagine the concepts (Griffiths and Preston, 1992), remove misconceptions (Hameed, Hacking and Garnett, 1993), make conceptual learning easier (Pekdag, 2010), increase academic success (Buyukkara, 2011; Akkagit and Tekin, 2009; Tatli and Ayas, 2011) and develop scientific thinking skills (Abdullah and Shariff, 2008). Similarly, Yilmaz and Eren (2014) stated that school teaching program increase considerably successes of teacher candidates in physics course where computer aided simulations are used. In addition, Civelek (2008) stated that there is a meaningful influence of computer aided simulation technique on learning and motivations of students, in study where the influence is examined of computer aided simulation technique on learning and motivation level of students. In our study, it is determined that computer aided simulation technique does not influence enough the motivation levels and learning strategies of teacher candidates. This situation may take its source from difference of sample or subjects of events (Work-Power-Energy).

As a result, more researches should be performed on computer aided simulation technique in physics teaching. To perform studies in levels (elementary education, secondary education, higher education) of different samples especially in different physics subjects, may reveal applicability of computer aided simulation technique in physics education more clearly.

Motivation is a considerably important factor in many fields especially in education. Although influences of motivation on learning and teaching are known; it is not laid an emphasis on how it is used in class environment.

REFERENCES

Akbaba, S. (2006). Motivation in education. *Journal of Kazim Karabekir Faculty of Education.* 13, 343-361.

Aydogan, S., Gunes, B., & Gulcicek, C. (2003). Misconceptions in heat and temperature. *Gazi University Journal of Gazi Faculty of Education, 23(2).*

Bayrak, C. and Bezen, S. (2013). 9. Teachers' opinions on the problems encountered in teaching subjects of physics education and new teaching program. *Hacettepe University Journal of Faculty of Education.* Special Edition (1), 27-38.

Coban, A. and Hancer, A. H. (2006). Evaluating physics course in terms of high school programs and OSS (Student Selection Examination) questions. *Kastamonu Education Journal* 14 (2), 431-440.

Dilekmen, M. and Ada, S. (2005). Motivation in education. *Journal of Kazim Karabekir Faculty of Education.* 11, 113-123.

Demir, M. K., & Arı, E. (2013). Examining Academic Motivation Levels of Teacher Candidates in terms of Different Variables. *Theory and Application in Education, 9*(3), 265-279.

Demirci, N., & Efe, S. (2007). Determining misconceptions of elementary students about sound. *Necatibey Faculty of Education Electronics Science and Mathematics Education Journal, 1(1).*

Erdem, A. R. (2005). Effective ways in learning: Learning strategies and teaching them. *Elementary Online, 4(1).*

Fidan, N. (1996). Learning and Teaching in School. Alkım Publications, Ankara.

Griffiths, A. K., & Preston, K. R. (1992). Grade-12 students' misconceptions relating to fundamental characteristics of atoms and molecules. *Journal of Research in Science Teaching*, *29*(6), 611-628.

Hameed, H., Hackling, M. W., & Garnett, P. J. (1993). Facilitating conceptual change in chemical equilibrium using a CAI strategy. *International Journal of Science Education*, *15*(2), 221-230.

Inan, D. (1988). *Physics I - Kinesis.* **(**2. Edition). Ankara: Hacettepe University Publications - Oztek Matbaacılık.

Kızıltepe, Z. (2011). The elements which increase, don't influence, decrease the motivations of teachers in elementary schools. *Bogazici University Education Journal, 28(2).*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Marulcu, I. and Dogan, M. (2010). Views of teachers and students in Afyonkarahisar for secondary physics course books and curriculum. *Erciyes University Social Sciences Institution Journal, 9(2), 193-209.*

MEB (2013). Secondary physics course teaching program Presidency of Board of Education and Discipline Ankara

Sahin, H., & Cakar, E. (2011). Learning Strategies of Students of Faculty of Education and Influence of Their Academic Motivation Levels on Their Academic Successes. *Turkish Educational Sciences Journal, 9(3).*

Tatar, B. (2010). *Teachers' opinions for that 9th grade physics course book written in accordance with the new physics teaching program brings in skill acquisitions.* Postgraduate Thesis. Gazi University, Institute of Educational Sciences, Ankara.

Tunc, T., Akcam, K. H., & Dokme, I. (2012). Misconceptions of teacher candidates about some physics subjects and influence of technique applied in the study on research result. *Journal of Turkish Science Education*, *9*(3), 137-153.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INNOVATIVE TEACHING IN HIGHER EDUCATION: THE BIG DATA APPROACH

Miftachul HUDA
Sultan Omar 'Ali Saifuddien Centre of Islamic Studies, Universiti Brunei Darussalam, Brunei Darussalam
halimelhuda@gmail.com

Muhammad ANSHARI
Continuing Education Centre, Universiti Brunei Darussalam, Brunei Darussalam
anshari.ali@ubd.edu.bn

Mohammad Nabil ALMUNAWAR
UBD School of Business and Economics, Universiti Brunei Darussalam, Brunei Darussalam
nabil.almunawar@ubd.edu.bn

Masitah SHAHRILL
Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam, Brunei Darussalam
masitah.shahrill@ubd.edu.bn

Abby TAN
Faculty of Science, Universiti Brunei Darussalam, Brunei Darussalam
abby.tan@ubd.edu.bn

Jainatul Halida JAIDIN
Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam, Brunei Darussalam
halida.jaidin@ubd.edu.bn

Sabrina DAUD
UBD School of Business and Economics, Universiti Brunei Darussalam, Brunei Darussalam
sabrina.daud@ubd.edu.bn

Masairol MASRI
UBD School of Business and Economics, Universiti Brunei Darussalam, Brunei Darussalam
masairol.masri@ubd.edu.bn

ABSTRACT
Across the Internet where massive amounts of data are being created every second. Widely known as the big data, this tool can be signified as the techniques to capture, store and analyse data of resources. It enables us to provide instrumental means in formulating data such as for communication, sending information and online activities purpose. Moreover, it can also offer innovative teaching and learning for higher learning institution. This study aims to discuss the teaching based on big data application and practices to enhance innovation in teaching, learning, sociality, and technology for students. In this study, we deploy thematic analysis to construct a model for higher institutions to regulate their scenario on big data application. The findings reveal that it can be used to improve decision-makings, provide insights, knowledge discoveries, and optimise learning processes. Higher learning institution can adopt big data analytics-based teaching and learning strategy to sustain in providing innovative teaching and learning experience to the students with opportunities to improve learning experiences to them with big data analytics. In fact, students nowadays rely on online resources and at the same time they produce data for sharing purposes.
Keywords: Big data, Innovative teaching, Pedagogical instrument, Higher education

INTRODUCTION
Many universities have begun to take benefit of the recent development in Information and Communication Technology (ICT) by embracing innovation in online learning (Livingstone, 2012). These higher educational institutions are aware that ICT is currently a major component in reforming teaching and learning. The role of ICT is to formulate and to enhance mobile teaching and learning process and it drives student-centred learning (Williams et al., 2000). For instance, a teacher can manage the delivery of teaching and support materials with minimum cost and simultaneously interact with students at any time by using a Learning Management System (LMS) (Weaver et al., 2008). The students can also actively participate in online discussion forums moderated by the teacher or a tutor. This may bring the innovation in the teaching and learning activities. Besides investing in ICT, higher learning institutions have made a lot of investments for teachers in integrating technologies into their

 Copyright © International Conference on New Horizons in Education Conference (INTE)

teaching and learning practices (Palak & Walls, 2009). For instance, introducing multimedia into a problem-based learning environment makes students think critically and become active participants in the learning process. Furthermore, multimedia-based projects can be used alternatively as an innovative and effective tool in a problem-based learning environment for the acquisition of problem-solving skills (Neo & Neo, 2001).

To be innovative in one's teaching, we need to take into account the advancement of ICT like smartphones, social media, LMS, etc. Smart mobile devices are not limited to just making calls, but students can send text messages to anyone around the world (Shin et al., 2011). There are many Apps in smartphones, which make sending text messages and calling even easier, and at a lower or no cost at all. Students can even make groups using one of the available Apps in their smartphones and send messages instantly to everyone within the group. These functions are useful for students, as they can use it to discuss their coursework. Social media is another innovative invention used by majority of students (Dabbagh & Kitsantas, 2012). The use of smartphones enables students to do their work on their phones which 5 years ago was only possible on computers. Word documents can now be accessed and used from the smartphones. If a student is on the go and does not have access to a computer or a laptop, the student can just work on a task on his or her phone. These are just some examples where ICT has made an impact in learning innovation. Information from multiple sources is needed to enhance it and this can be supported easily with the big data framework (Levin & Wadmany, 2006). And especially in providing feedback for enhancing innovative teaching performance to enable students to search for resources with borderless space (Ertmer, 2005).

Adopted as a new technological approach, the big data framework can incorporate many aspects related to massive data generation and its growth in supporting and enhancing innovative teaching and learning. Big data is a new generation of data analytical approach designed from collecting, aggregating and analysing very large amounts of data (Mayer-Schönberger & Cukier, 2013; Villars et al., 2011). Big data is a utilization of massive amounts of data which is created every second across the Internet (Villars et al., 2011) and subsequently, it is extracted to gain its potential and value for the user (Mayer-Schönberger & Cukier, 2013). Since teaching and learning involve data in every stage, it is interesting to assess big data application in contributing to the innovative teaching. In order to deliver innovative teaching, numerous sources provide complex of data like social networks, surveys, newspapers, magazines, volume and assortment. The question of what do we want to accomplish from these data then arise. This study attempts to propose a model in enhancing innovative teaching and learning by incorporating big data framework in a higher education setting. The model is expected to contribute by considering multi-channels of sources of knowledge.

INNOVATIVE TEACHING IN HIGHER EDUCATION

There are many theories and application for innovative teaching related to students' behaviours, methods, approaches, and strategies (Anderson, 2008). Teacher competency plays an important factor in delivering innovative teaching in higher education. Those competencies are professional certification, cognitive abilities, affective-motivational characteristics, mastery of teaching and learning contents, and pedagogical approach (Blömeke & Delaney, 2014; Harris et al., 2009). There are four core competencies to deliver innovative teaching; innovative learning competence, innovative social competency, innovative educational competency, and innovative technological competency (Zhu et al., 2013).

Innovative learning competence refers to the knowledge on how teachers update subject knowledge and contents enhance methods to gather new knowledge, improve ways in getting learning materials, and solve learning problems through self-reflection (Soto Gómez et al., 2015). This competence aims to improve individual knowledge competencies so that the teacher can deliver knowledge effectively to his or her students. In addition, the ability to access reliable data can help the teacher enhance innovative learning (Livingstone, 2012).

Innovative social competence is an ability to communicate socially with students from different backgrounds (Jeffrey & Craft, 2004). In online learning, this refers to the innovative skills of the teacher's ability to tolerate the social aspect of the digital nature of communication where students are absent from physical interaction and expression. Therefore, innovative social competence must have a presence in order to avoid confusion, frustration, miscommunication, and the challenging behaviour of online users. Teachers need innovative social competence in online teaching and learning environments (Runco, 2003).

Innovative educational competency refers to the ability of integrating subject knowledge, pedagogical aspect, and learning psychology to achieve the development of students in understanding the topics taught (Runesson & Runesson, 2015). In online learning context, the teaching facilitators need to guide students effectively with the passion of encouraging active learning in virtual teaching effectively (Asyari et al., 2016).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Innovative technological competency helps teachers to find reliable and comprehensive information from online sources to enhance teaching and learning activities (Lawless & Pellegrino, 2007). This also refers to the method in data gathering from a multitude of data sources to use effectively in supporting innovative teaching (Salleh, 2016). In fact, ICT has been used often as a tool to support innovative teaching (McPherson & Nunes, 2004). For instance, ICT has been used to develop creative learning for cognitive abilities and emotional aspects of students (Anderson, 2008; Bates & Poole, 2003; McPherson & Nunes, 2004; Smith & Hardaker, 2000). According to Shin et al. (2011), a teacher uses a smartphone to share online resources directly to students. Utilizing smartphones in a class setting combines technological competency and interactive contents' delivery to promote innovative teaching (Bates & Poole, 2003; Salleh, 2016). Additionally, combining technological competency to promote innovative teaching can help teachers develop their students' learning abilities (Bates & Poole, 2003; Salleh, 2016).

In this study, we focus on innovative teaching, which is driven by the advancement in ICT such as big data as a new concept. The application of data analytics can incorporate many aspects related to massive data generation and its growth in supporting and enhancing innovative teaching and learning. These are the benefits that are expected to encourage students to enrich their learning experiences as well as to generate value for students' development, performance, and achievement during the learning process.

BIG DATA AND EDUCATION

With huge amounts of data created every second across the Internet, big data is a new approach in data analytics for discovery, analysis, and also to extract value from large volumes of data (Villars et al., 2011). The capabilities of big data range from transferring and sharing, predicting, visualizing, capturing and searching data. It is known as the fourth generation of computing (Kitchin, 2014). Due to the growth and evolution of ICT, big data extends its capacity in terms of volume, velocity, and variety (Anshari et al., 2015). In fact, educational institutions produce large amount of data daily, which can be extracted for its value added functions for its stakeholders. For instance, big data can the support learning process by providing the access to reliable data sources. Furthermore, it can help students' engagement, interaction, and pervasive knowledge delivery to the students and community at large. Big data is in real time with the ability to explore data and understand students' behaviour and is able to offer personalized and customized services to each student.

Moreover, Anshari et al. (2015) stated that the concept of big data provides new opportunities to maximize the potential of data collection to gain its value in online learning systems. Through these opportunities, big data could offer customization and personalization of knowledge delivery with more precision for each student from the perspectives of its stakeholders. For example, students would undergo online learning from the materials provided by the instructor. Subsequently, for each topic of discussion the system would supply relevant and reliable links to resources (Hoi et al., 2012). Students may generate records of their lives by frequently posting details of activities they undertake to understand various students' blogs so that the instructor understands the students' quality to develop the course structure or make decisions based on this context (Lyon, 2014).



Figure 1: Big data analytic process

Figure 1 shows a general concept on how big data generates value for education. Big data analytics is the process of extracting raw data either from structured or unstructured data sources. Structured data sources in education can come from students' records, students' financial records, e-library records, web click behaviours, enterprise resource planning (ERP) records, etc. Whereas, unstructured data sources can originate from CCTV, audio, social networks interactions, etc. The outcome of the data analytic is the prediction and pattern of each student. Prediction and pattern for each student is important in delivering better service for students because, it offers personalization of service, customization of modules, and intervention to ensure performance and quality control. Customization refers to the ability of students to choose and pick any module or topic that fits their interests. Meanwhile, intervention is needed when the performance of students is declining. For example, notification or alert can be sent to students when the student cannot perform well in a specific course or topic.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

PHASES OF ANALYSES

This paper focuses on the phases of literature analysis to the reference model. We build on recent reviews of big data and innovative teaching in higher education settings. The Google Scholar was used to search keywords on innovative teaching, big data and online learning. After removing duplicates and articles beyond the scope of this study, 40 peer-reviewed journals and books were then selected for the subsequent review. We employed meta-synthesis to integrate, evaluate and interpret the findings of multiple research studies so that phenomenological and grounded theories can be integrated and used. The ideas were extracted to identify their common features, elements, and functionalities. We then analyse and synthesize key elements into new interpretations, conceptualizations, and modelling of innovative teaching with big data approach.

DISCUSSION

Big data is a large amount of data, which capture, link, collect, store and organize data into meaningful information. Many organizations stressed the needs to apply big data in their operations. Merely collecting and storing data only in educational institutions are not useful without proper analysis. Through proper analysis, one can reap the benefits of big data.

However, how is value being created from big data? Big data can capture patterns, trends, and students' behaviour and habits. Big data are gathered from structured data sources and unstructured data sources. Structured data sources can be from social networks and Internet messenger activities. While, unstructured sources can be gathered from CCTV at the library or even, vehicle registration numbers. From those data sources, big data analytic works to form patterns, trends or even forecasting. The analytic results can be presented to users through push message, alert, notification or suggestion based on their patterns.

Using big data is one of the major breakthrough, which saw the advancement since 2014, and seeing how businesses frequently practice this method and yet there were some reactions predicted happening in the year after, that is 2015 (Chen et al., 2014). Attempting better approaches to delivering innovative teaching and learning could expand potential outcomes and break up limits through the utilization of big data analytics. In this section, we assess some considerations of big data from the aspects of innovative teaching as discussed above (learning, teaching, social, and technology).

LEARNING RESOURCES

Figure 2 below shows the business process on how big data can become an alternative approach to offer innovative teaching for higher learning institutions. Learners generate data from many sources such as smartphones, social networks, LMS and so on. At the same time, an institution has data and records of students from their systems (library information systems, academic records, financial records, etc.). All the data sources are analysed and thus forming a profile for each and every student.

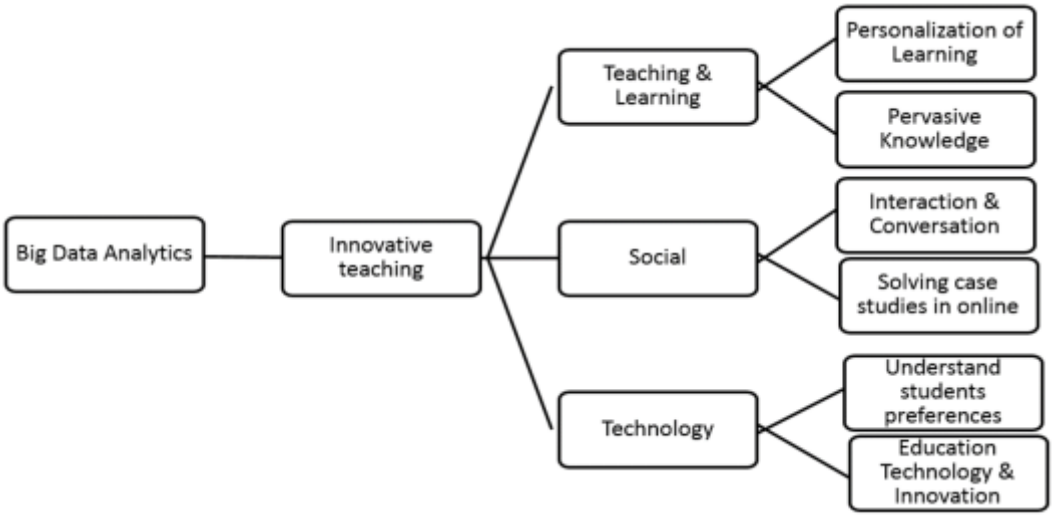


Figure 2: Big data and innovative teaching process

A student's profile is based on real data of the student's behaviour. Big data analytic can come up with prediction about their teaching and learning preference like content materials, subject preferences, library visit habits, and others. Understanding the student's profile based on the students' habit can provide them personalization of services. A student can receive alerts from the big data systems when there are deviations from his usual pattern. For instance, a student can get notifications on his smartphone when he has not visited the library for some time,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

or has not downloaded any journal articles for a couple of days, or never participated in any online discussions about the subject.

INNOVATIVE SOCIAL

The advancement of online learning has introduced many aspects of innovative teaching competency including student learning activities. Students can work through the same online activities, distribute online surveys, share web-based searches, interact in online discussions, solve case studies, watched online videos, and published articles on the web. In addition, conversations from social networks as one of big data's source could improve the trust of the community at large from reading the positive comments. Social media analytics are the analysis of data from social media channels such as blogs, Facebook, twitter and forums, which are used to analyze the stakeholders' responses on the new course being introduced. This is much faster as compared to using a conventional method, such as waiting for the survey's reports.

INNOVATIVE TEACHING

The innovation in teaching has improved from class-based activities where students are occupied with note-taking activities to searching for rich content materials, which is easily more accessible than before. However, when students get a huge amount of data then it is very challenging to refine the materials within the time constraint. Here, big data offers the ability to extract value from a big volume and large varieties of data, and within the velocity of analytic, this could help students utilize those resource knowledge. In order to successfully apply big data in innovative teaching, support from the stakeholders should be involved. The Government need to fund more research regarding this matter. In addition, researchers and educational practitioners need to start providing more data into the media, social networks and any websites so that big data can analyse the valuable information. Similarly, higher learning institutions need to invest into big data analytic for innovative teaching.

INNOVATIVE TECHNOLOGY

Big data can be used to detect future trends and issues such as educational technology trends and product preference. This is due to its capabilities to gather data at a massive speed and able to distinguish the value of the data. For instance, with the aid of data generated from smartphones like social networks or IM (Instant Messaging) or news updates, higher learning institutions have the capability to understand the preferences and expectations of stakeholders including its students. It also provides useful insights on how the organization should improve their educational technology component. Data analytics can come from the students' behavioural patterns based on their clicks, comments, sharing contents, and conversations (Anshari et al., 2015). Another notable benefit of data analytics is that the organization will be able to know their students' preferences and personalities as well as predict what their next expectations might be, hence can consider fulfilling the stakeholders' expectations. Big data can also be used to detect future problems in education systems like innovative teaching delivery. Big data can gather data at an immense speed and is able to distinguish the value of the data. Moreover big data, when captured, formatted, stored and analysed, can help an organization to gain useful insights to improve its operation, especially to education institutions and society.

CONCLUSION

The explosion of big data emerges from variety of data sources. This includes excessively using the Internet. Its benefit can be extended to higher education institutions in terms of offering innovative teaching experiences to their students. The adoption of big data in innovative teaching has been a promising new experience to the students, education providers, instructors, and the community. In fact, learning technological innovations will continue to have major effects on teaching approaches over the coming years. It provides useful guidelines for incorporating big data into innovative teaching from different perspectives for guiding teachers in effective integration of big data into teaching and learning. Thus, being more attractive to motivate and engage learners, the pedagogy, social interaction and technology could become the critical components of an innovative enhanced learning environment. It is important for higher learning institutions to explore the future impact of deploying big data by extending the learning experiences to students. In short, with their efforts to integrate pedagogical skills and big data approach, this model is supposed to enhance the development of innovative teaching performance for teacher as an insightful standard of making curriculum design in teacher education in particular and for schools in general.

REFERENCES

Anderson, T. (2008). *The theory and practice of online learning*. Athabasca University Press.

Anshari, M., Alas, Y., & Guan, L. S. (2015). Developing online learning resources: Big data, social networks, and cloud computing to support pervasive knowledge. *Education and Information Technologies*, 1-15.

Asyari, M., Al Muhdhar, M. H. I., Susilo, H., & Ibrohim. (2016). Improving critical thinking skills through the integration of problem based learning and group investigation. *International Journal for Lesson and Learning Studies, 5*(1), 36-44.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Bates, A. W., & Poole, G. (2003). *Effective Teaching with Technology in Higher Education: Foundations for Success*. Washington: Jossey-Bass.

Blömeke, S., & Delaney, S. (2014). Assessment of teacher knowledge across countries: A review of the state of research *International Perspectives on Teacher Knowledge, Beliefs and Opportunities to Learn* (pp. 541-585). Springer.

Chen, M., Mao, S., & Liu, Y. (2014). Big data: A survey. *Mobile Networks and Applications, 19*(2), 171-209.

Dabbagh, N., & Kitsantas, A. (2012). Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and Higher Education, 15*(1), 3-8.

Harris, J., Mishra, P., & Koehler, M. (2009). Teachers' technological pedagogical content knowledge and learning activity types: Curriculum-based technology integration reframed. *Journal of Research on Technology in Education, 41*(4), 393-416.

Hoi, S. C., Wang, J., Zhao, P., & Jin, R. (2012). *Online feature selection for mining big data.* Paper presented at the Proceedings of the 1st international workshop on big data, streams and heterogeneous source mining: Algorithms, systems, programming models and applications.

Jeffrey, B., & Craft, A. (2004). Teaching creatively and teaching for creativity: Distinctions and relationships. *Educational studies, 30*(1), 77-87.

Kitchin, R. (2014). Big data, new epistemologies and paradigm shifts. *Big Data & Society, 1*(1), 1-12.

Lawless, K. A., & Pellegrino, J. W. (2007). Professional development in integrating technology into teaching and learning: Knowns, unknowns, and ways to pursue better questions and answers. *Review of Educational Research, 77*(4), 575-614.

Livingstone, S. (2012). Critical reflections on the benefits of ICT in education. *Oxford Review of Education, 38*(1), 9-24.

Lyon, D. (2014). Surveillance, snowden, and big data: capacities, consequences, critique. *Big Data & Society, 1*(2), 1-13.

Mayer-Schönberger, V., & Cukier, K. (2013). *Big data: A revolution that will transform how we live, work, and think*. New York, NY: Houghton Mifflin Harcourt.

McPherson, M., & Nunes, M. B. (2004). *Developing innovation in online learning: An action research framework*. London: Taylor & Francis.

Neo, M., & Neo, K. T. (2001). Innovative teaching: Using multimedia in a problem-based learning environment. *Educational Technology & Society*, *4*(4), 19-31.

Palak, D., & Walls, R. T. (2009). Teachers' beliefs and technology practices: A mixed-methods approach. *Journal of Research on Technology in Education, 41*(4), 417-441.

Runco, M. A. (2003). Education for creative potential. *Scandinavian Journal of Educational Research, 47*(3), 317-324.

Runesson, U., & Runesson, U. (2015). Pedagogical and learning theories and the improvement and development of lesson and learning studies. *International Journal for Lesson and Learning Studies, 4*(3), 186-193.

Salleh, S. (2016). Examining the influence of teachers' beliefs towards technology integration in classroom. *The International Journal of Information and Learning Technology, 33*(1), 17-35.

Shin, D.-H., Shin, Y.-J., Choo, H., & Beom, K. (2011). Smartphones as smart pedagogical tools: Implications for smartphones as u-learning devices. *Computers in Human Behavior, 27*(6), 2207-2214.

Smith, D., & Hardaker, G. (2000). E-learning innovation through the implementation of an internet supported learning environment. *Educational Technology & Society, 3*(3), 422-432.

Soto Gómez, E., Serván Núñez, M. J., Pérez Gómez, A. I., Peña Trapero, N., & McGregor, M. (2015). Lesson study and the development of teacher's competences: from practical knowledge to practical thinking. *International Journal for Lesson and Learning Studies, 4*(3), 209-223.

Villars, R. L., Olofson, C. W., & Eastwood, M. (2011). Big data: What it is and why you should care. *White Paper, IDC*.

Weaver, D., Spratt, C., & Nair, C. S. (2008). Academic and student use of a learning management system: Implications for quality. *Australasian Journal of Educational Technology, 24*(1), 30-41.

Williams, D., Coles, L., Wilson, K., Richardson, A., & Tuson, J. (2000). Teachers and ICT: Current use and future needs. *British Journal of Educational Technology, 31*(4), 307-320.

Zhu, C., Wang, D., Cai, Y., & Engels, N. (2013). What core competencies are related to teachers' innovative teaching? *Asia-Pacific Journal of Teacher Education, 41*(1), 9-27.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTEGRATING RESPONSIBLE RESEARCH AND INNOVATION IN PRIMARY SCHOOL PROJECT-BASED LEARNING - THE "LOTUS EFFECT" ACTIVITY

Gabriela Alina ANGHEL
Teacher Training Department
Valahia University of Targoviste, Romania
anghelalina2002@yahoo.com

Gabriel GORGHIU
Teacher Training Department
Valahia University of Targoviste, Romania
ggorghiu@gmail.com

ABSTRACT

The paper aims to identify key issues, as best educational practices, for science lessons, at the primary school level - more precisely, its last grade -, based on the introducing of *Responsible Research and Innovation* (*RRI*) in project-based learning activities. In this respect, the paper analyzes the formal educational activity called "*Lotus Effect*", which had as main objective to develop the students' conscious and responsible attitude towards the importance of using natural properties of nanomaterials in practice.
The specific objectives of the proposed research are: (a) measuring the level of students' satisfaction concerning the learning methods used; (b) measuring the learning methods importance and efficacy, as that was perceived by the students. The following working hypothesis has been considered: a method is considered a best educational practice when the students' satisfaction is positively correlated with the teacher's satisfaction related to its implementation. It is also known that the project-based learning method actively engages the students in the scientific investigation and supports the development of higher level of cognitive skills. The proposed research was a qualitative type-one and the results confirmed the working hypothesis and indicated the conditions needed to consider particular issues as "best educational practices" in project-based learning activities.

INTRODUCTION

Responsible Research and Innovation projected early, is like an ascendant activator and facilitator of the sustainable social development. In this sense, the education centered on RRI is to be found successfully in the educational formal and non-formal environments (Gorghiu, Anghel, Ion, 2015, p.602)

Project based learning identifies itself as a model of training by which students are involved in activities investigating a problem with the purpose of obtaining answers that are part of the research.
Project based learning is a training model principally based on the students' involvement in investigative activities in order to obtain learning products. This is realized in the context of a specific teaching strategy described as follows: it uses collaborative learning methods, it maximally uses the potential of each student, it encourages the development of an autonomous management for the student in relation to the actions in the project. (Cerghit, 2002, Neacşu, 2015).

Project based learning is closely correlated to investigation based learning, and especially to scientific investigation. Therefore, the specified teaching strategy successfully integrates the characteristics bound to the aspects of Research and Responsible Innovation. In this case, this project method supports active teaching and successfully develops the students' cognitive, behavioral and attitudinal skills at a superior level. Project-based learning strategy includes: information, planning, decision, implementation, monitoring, and evaluation. Its educational methods and procedures are: discovery learning, heuristic conversation, explanation, exposure, problem solving, case study, experiment, demonstration, scientific investigation, brainstorming, systematic observation, and portfolio. Its forms of activity organization**:** frontal, in groups, and individual Its educational means**:** piece of fir wood, pine wood fragment treated with protective varnish, natural wax fine film, aluminium foil, glass pane, cabbage leaf, vine leaf, lotus leaf; pane of glass, stainless steel spoon, 100% cotton fabric, polyester fabric (at least 80%), nanotex material, vegetable oil, natural berry juice, chocolate, stain solution (vanish), window cleaner, water; microscope, fixed microscopic preparations; projector, laptop, digital images.

The educational activities included in the theme *Lotus Effect* offer to the students the opportunity to learn this effect from the perspective of the nanotechnologies. The **aim** of these educational activities is to develop the pupils' conscious and responsible attitude towards the importance of using the natural properties of nanomaterials in

 Copyright © International Conference on New Horizons in Education Conference (INTE)

various industries. In this regard, experiments will be developed to show the structural and functional properties of several natural nanomaterials and discussions centred on topics related to responsible research will be organized.

The proposed experiments' aim is to analyse a series of innovative materials completely hydrophobic or stainless, as a result of nanotechnology which uses nature as an inspirational source, in this case, the lotus leaf. It will be analysed the property of super-hydrophobicity of these leaves, as a result of surface chemistry and macro and nano topography. The proposed experiments aims to: study and test lotus leaf properties (from the perspective of biology, physics and chemistry); highlight the properties of nanomaterials that are applications of Lotus effect, both in terms of strengths and limits of nanotechnology and in terms of responsible research and innovation.

RESEARCH METHODOLOGY

The paper aims to identify key issues, as best educational practices, for science lessons, at primary school level - more precisely, its last grade -, based on the introducing of Responsible Research and Innovation (RRI) in project-based learning activities. In this respect, the paper analyzes the formal educational activity called "*Lotus Effect*", whose main objective has been to develop the students' conscious and responsible attitude towards the importance of using natural properties of nanomaterials in practice. In this sense, the specific objectives is:

(a) measuring the level of students' satisfaction concerning the used learning methods; (b) measuring the learning methods importance and efficacy, as that was perceived by the students.
We considered the following working hypothesis: a method is considered a best educational practice when the students' satisfaction is positively correlated with the teacher's satisfaction related to its implementation.
In this framework, the design of Learning Activities based on the integration of RRI was projected in correlation with the model of the 6E (Engage, Explore, Explain, Elaborate, Expose, Evaluate).

The specific of the implementation of each stage had in view active teaching strategies mainly based on the use of collaborative teaching methods. Their design can be described as follows: during the first stage, *Engage:* students develop a ppt presentation and a small exhibition to present the uses, at industrial level, of Lotus effect; create an account on Facebook – ProLotus – to state their opinion about Lotus effect applications in nanotechnology, to promote new findings in the field, to present limits and benefits of using nanotechnology. The teaching results were: presentation PPT, posters, mini-models of lotus leaf epidermal papillae, Facebook account, knowledge related to novelties in the nanotechnology field, technical skills (of using, handling media tools).

The second stage, namely *Explore*, includes: handle laboratory instruments, emit hypotheses, make experiments, record collected data, fill tables, charts and check the solutions. In this stage, the teaching results were: knowledge – related to morphology / anatomy of several leafs of different plant species, knowledge related to the existence of several types of forces acting on a drop of water, related to the behaviour of various materials under the action of water. In the activity were conducted as follows: images, pictures made during the experiments, microscopic observations; skills of handling laboratory instruments. During the stage *Explain* were used: check theories, fill-in sheets, tables, disseminate in group/class the scientific knowledge identified, provide feedback to peers, restructure/ complete / correct knowledge in relation to the feedback received and socio-scientific value, with the following teaching results (tables, questionnaires).

The stage called *Elaborate* organizes a motivating learning environment, stimulating, likely to place the student in the position of responsible researcher; students, "experts" in various scientific problems, consult the opinions of scientists, learning (before preparing reports). The results of the learning activity were: "Teaching results - experts" reports, supporting documentation.

During the stage Disseminate /Share/Present/*Expose* were carried out: designs, together with students, an exhibition that will be open in Museums and / or libraries. The exhibition will include posters, videos, models and other items made by students; the teachers will coordinate the selection process of the most relevant/representative student's works, with the following results of the learning activity: "expert" reports, reports supporting documentation.

In the stage called *Evaluate*, the following activities were carried out: evaluate portfolios, check the extent to which students have achieved sustainable procurement, in terms of targeted finality; assure joining of assessment with self-assessment and peer-assessment.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

RESULTS AND DISCUSSIONS

After having analyzed the specific of each stage, the following specific educational methods and procedures were identified (Table 1)

RRI STAGES	*TEACHING METHODS USED*
Engage	conversation, explanation, questioning, brainstorming
Explore	brainstorming , experiment, explanation, questioning, discovery learning, scientific investigation
Explaine	conversation, explanation, questioning
Elaborate	questioning, conversation, discussion
Disseminate /Share/Present/Expose	explanation, case study, problem solving, debate
Evaluate	questionnaires fbk

Table 1. Distribution teaching methods

Lotus Effect teaching activities involve valorisation of basic knowledge specific to the following school subjects: biology, physics and chemistry.

By the promoted teaching strategies, especially inductive, deductive and heuristic ones, students will form / develop skills / abilities of exploration, investigation, communication and work effectively in groups, analysis and synthesis, evaluation and anticipation etc. Students will also realize the need to respect ethical principles and values in making research and innovation.

Regarding the measuring of the learning methods' importance and efficacy, as it was perceived by the students, the distibution of the answers appears as follows (Fig.1)

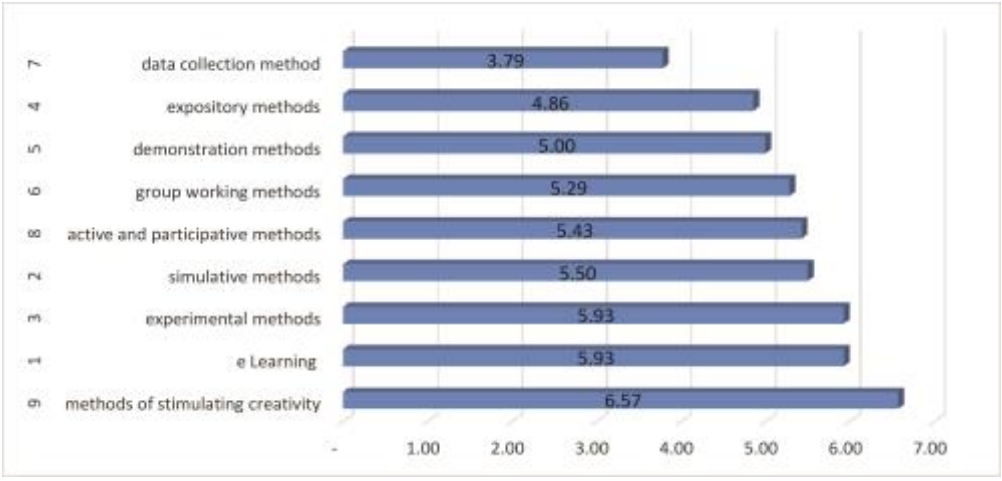


Fig.1 Perception Importance of students before teaching methods

One can notice that, in project based learning, the methods stimulating the students' creativity are appreciated as being the most important, along with the e learning and experimental ones (Fig. 2). This is explained in the logical context of the role and place of the project in learning. Project based learning, being an active learning method, fully valorises creative learning methods in the "Lotus Effect" lesson.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

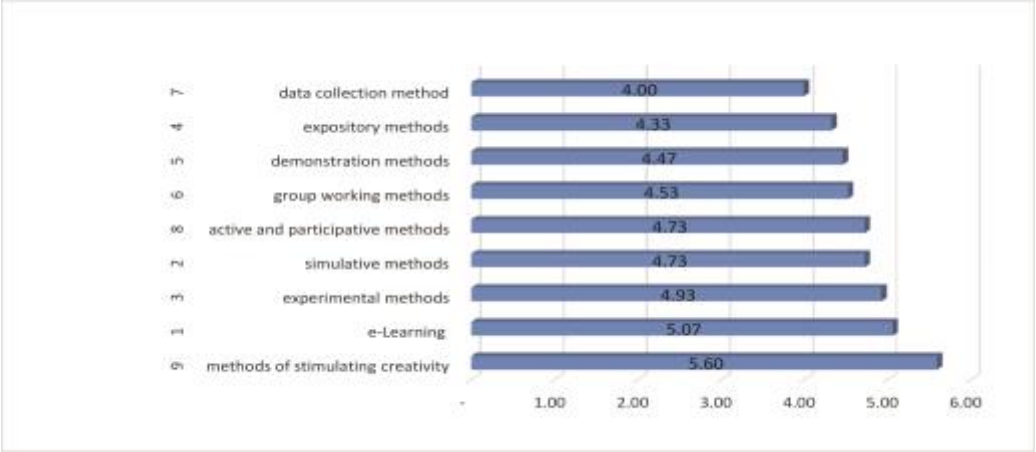


Fig. 2. Perception satisfaction of students before teaching methods

Concerning the students' satisfaction in relation to the methods used by the teachers, one can notice that the highest scores also go to the methods stimulating creativity, the expository then the experimental ones, which leads to the following conclusion: the methods appreciated as being important by the teacher also record a higher score on the level of the students' satisfaction concerning their use in the instructive educative process and are considered efficient learning methods (Fig 3).

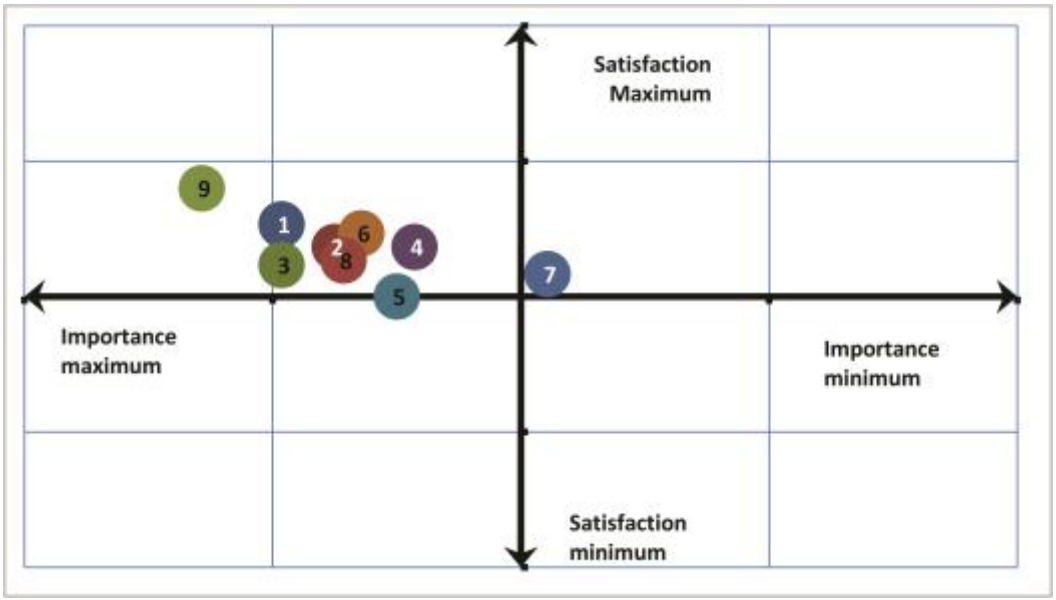


Fig.3 The bidimensional Nice &Gaps

CONCLUSION

All training methods used by a teacher are considered by the students to be important by declaring their satisfaction about the teaching results being reported to the method that the teacher applied. The diagram above demonstrates that the expository method is the least attractive.

This method makes students to have a passive participation in the learning process, a situation that represents an obstacle in their success of learning. Beside that, the teaching methods responsible for stimulating creativeness generated the highest score. This score is considered efficient and supporting learning success.

This aspect is considered relevant also by the teachers and they approve the students' perception regarding the satisfaction upon the used teaching methods. The results confirmed the working hypothesis and indicated the conditions needed to consider particular issues as "best educational practices" in project-based learning activities.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ACKNOWLEDGEMENTS

This work was funded through the Seventh Framework Programme Project "IRRESISTIBLE - Including Responsible Research and Innovation in Cutting Edge Science and Inquiry-based Science Education to Improve Teacher's Ability of Bridging Learning Environments" - a coordination and support action under FP7-SCIENCE-INSOCIETY-2013-1, ACTIVITY 5.2.2 "Young people and science" - Topic SiS.2013.2.2.1-1: Raising youth awareness to Responsible Research and Innovation through Inquiry Based Science Education. This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration, under grant agreement no 612367. The support offered by the European Commission, through the project mentioned above, is gratefully acknowledged.

REFERENCES

Cerghit, I.. (2002). *Sisteme de instruire alternative şi complementare. Structuri, stiluri, strategii*. Bucureşti: Editura Aramis

Gorghiu, G., Anghel, G.A., Ion, R. (2015). *Students' Perception Related to a Responsible Research and Innovation Demarche.* Elsevier: Procedia - Social and Behavioral Sciences 180 (2015) 600 – 605.

Neacsu, I. (2015). *Metode si tehnici de învăţare eficientă. Fundamente şi practici de succes*. Iasi: Editura Polirom

http://www.irresistible-project.eu/index.php/en/

https://ec.europa.eu/programmes/horizon2020/en/h2020-section/science-and-society

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTELLECTUAL STRUCTURE OF STEM EDUCATION IN EDUCATIONAL RESEARCH

Mutlu Tahsin ÜSTÜNDAĞ
Gazi University, Gazi Faculty of Education,
Computer Education and Instructional Technologies, Turkey
mutlutahsin@gmail.com

Haydar YALÇIN
İzmir Katip Çelebi University,
Faculty of Humanities and Social Sciences,
Information Management and Technologies, Turkey
haydar.yalcin@gmail.com

Erhan GÜNEŞ
Ahi Evran University, Faculty of Education,
Computer Education and Instructional Technologies, Turkey
guneserhan@gmail.com

ABSTRACT
The aim of this research is to put forward the intellectual structure of STEM (Science, Technology, Engineering and Mathematics) education concept in educational research. STEM education has emerged as a highly accepted paradigm in education especially in the USA and European countries in recent years. The theoretical substructure of STEM education that is seen as an important factor in attaining the expected qualities in human profile for the changing conditions of the 21st century has started to be formed. STEM education prioritizes team study and interdisciplinary approach. It is of great importance to put forward the intellectual structure of STEM education, that will play an important role in training people for the conditions of the present day, for better comprehension by the researchers, curriculum developers and practitioners. Moreover, when the literature on this concept is investigated, lack of comprehension of the concept and vision is seen. For this reason, the investigation of the development and current status of STEM education will contribute to literature in terms of understanding the intellectual structure of the concept. The dataset of the study is composed of all types of studies in at least one of the categories of Education & Educational Research and "Education, Scientific Disciplines" published in Web of Science (WoS). Basing on WoS categories the relationship of the concept with other disciplines have been examined and visualized with web graphics on the accessed publications. It has been possible to refer to which focus the scientific data has been developed nourishing via the journals by mapping the journals in the dataset as citation giving and citation attaining. In addition to these, contribution of disciplines and countries to STEM education has been compared.

Keywords: Scientometrics, STEM education, knowledge diffusion

INTRODUCTION

In recent years STEM education that is shaped by science, technology, engineering and mathematics disciplines altogether has emerged as a new paradigm instead of a traditional science education. Bybee (2010b) defines STEM education as "although focusing on science and mathematics disciplines including technology and engineering fields". For Dugger (2010) STEM education which advocates the integration of information and skills on science, technology, engineering and mathematics fields by including engineering design processes into science education aims to educate students as individuals who are open to communication, systematical thinkers, creative, possessing ethical values and ones who can present the most convenient solutions to problems by directing them to cooperation to different disciplines like an engineer. Lacey and Wright (2009) sees STEM education -that aims to attain individuals the required knowledge and skills to see the problems with an interdisciplinary point of view- important for leadership in scientific field and economic growth.

The responsibility of countries to raise and train the individuals according to the necessities of today's fast changing and developing technology brings forward a must. Because qualified human resource means a strong economy. At this point it can be said that individuals should attain skills such as critical and analytical thinking, investigate, inquiry, problem solving and decision making. It is a reality in the competitive business World that countries producing information and technology establish superiority on the other countries in economic and

 Copyright © International Conference on New Horizons in Education Conference (INTE)

social domains. Furthermore, technology education or technology literacy is of great importance at this point. Sanders (2008) states this situation as: "*Technology education has a key role to play in integrative STEM education, and could play a significant role in twenty-first century American education if it can demonstrate relevance in this way.".* Miaoulis (2009) points out that today when the country economies are determined by information and innovations it is very important to train engineers and scientists and increase science and technology literacy. The reality that qualified human resource can only be achieved via qualified education proves itself day by day. Countries producing information and technology place great importance to their people's mathematics and science educations. For these reasons, in the USA necessity for a science education based on engineering design has been emphasized (Çavaş, Bulut, Holbrook & Rannikmae, 2013). In a science education based on engineering design, the design process correlate with the real life. Furthermore, this kind of education provides the learners to realize that there is more than one solution to problems and understand the importance of cooperative work (Ercan & Bozkurt, 2013; National Research Council, 2012).

It is possible to say that there is hereupon an apparent critical concentration in countries that pay attention to STEM education. At this point the report written by Marginson, Tytler, Freeman, and Roberts (2013) titled *STEM: country comparisons: international comparisons of science, technology, engineering and mathematics (STEM) education*" shows that some countries have started to receive the fruits of this education. The emergence of these kinds of comparison and evaluation reports show that there has been some amount of concentration in STEM education. However, some studies in the literature reveal that although some countries have comprehended the philosophy of STEM education, they have not realized it fully or there is still need to research on this concept. The study conducted by Brown, Brown, Reardon, and Merrill (2011) starts as follows: *"Many in the field of technology education have embraced STEM education, but there is a lack of understanding of STEM education in schools.".* These statements imply that there is a need for the serious support of the academic community for the practitioners in schools and model practices that will help the comprehension of STEM education that is coherent with the internal dynamics and cultures of each country. To shortly summarize the study and its results we can say that the study aimed to find out whether teachers, students and school principals could comprehend STEM education or not. A questionnaire composed of open-ended questions have been used as data collection tool as well as observations and interviews have been conducted. According to the findings of the study it has been seen that STEM education has not been comprehended. Another result is that STEM education has no vision. Yet another study has been carried out by Breiner, Harkness, Johnson, and Koehler (2012). The title of the study summarizes the situation best by stating "*What Is STEM?".* The results of the study titled "*A Discussion About Conceptions of STEM in Education and Partnerships"* indicated that there is not a consensus on STEM concept. Bybee (2010a) has tried to set forth a 2020 vision for STEM education. This study implies that there is still much more to be done. Yet it is seen in literature that there is a need for understanding STEM education and concept. When we examine the situation in our country, STEM education should be defined specific to our country within the scope of the aims in 2023 Vision and Ministry of National Education (MEB) strategic documents (Çorlu, Adıgüzel, Ayar, Çorlu, Özel, 2012). However, studies on STEM education in our country seem to be in the preparation phase. The findings of the study conducted by Marulcu and Sungur (2012) indicate that studies on STEM education are in the preparation phase even in teacher training system and teacher candidates are not prepared to STEM education.

As seen from the literature that there is not a concept integrity but also lack of vision; this study is thought to contribute to this field. And as revealing the intellectual structure of STEM concept will help STEM concept and STEM education to be better understood and offer a solution and guidance for researchers and practitioners shows the importance of this study. It would be useful to include some research done in this context. The study conducted by Greenseid and Lawrenz (2011) investigated a less studied field; they studied the usage of citation analysis on the influence of program evaluations in STEM education. Their citation analysis has been focused on three STEM education program evaluations' products. The aim of the study was comparing the influence of the STEM education evaluations. In analyzing the citations; single-level Poisson regression analysis, content analysis and network analysis have been conducted. With the purpose of whether citation data usage is functional in comprehending the evaluation impacts; the result has been although with limited extent, methods of citation data analysis supports the comprehension of the influence of extensive scale and multi-site STEM education and evaluation fields.

Another research by Assefa and Rorissa (2013) titled "*A bibliometric mapping of the structure of STEM education using co-word analysis"* sought to define the structure that underlies STEM education and its main areas as well as the relationship between them by using co-word analysis, visualization and bibliometric mapping tools. The authors used co-occurrence analysis in order to organize bibliometric maps. With this "word association method" there has been a significant relationship between word that "co-occur" has been figured.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Composed of two databases 7265 documents have formed the data of the study.

We are in the opinion that an increase in the studies that will help better understanding of STEM education concept in literature will provide better formation and practices of the concept in the future.

THE AIM OF THE STUDY

The aim of this research is to put forward the intellectual structure of STEM (Science, Technology, Engineering and Mathematics) concept in educational research. The investigation of the emergence, development and current situation of the concept will contribute to the literature in terms of understanding the intellectual structure of the concept. Our research questions that will serve for this aim are as follows:

1. How is the distribution of STEM research according to countries?
2. How is the distribution of STEM research according to WoS categories?
3. How is the distribution of STEM research according to WoS research domains?
4. How is the distribution of keywords WoS and the authors give to STEM researches?
5. What are the prominent disciplines that STEM researches nourish from?
6. From which disciplines is the knowledge dissemination in STEM researches provided?

METHOD

In this research the current situation of STEM education research in WoS publications has been tried to be put forward; so it is a descriptive research. In descriptive research the situations are presented wholly and exactly as far as possible (Fraenkel, Wallen and Hyun, 2014)

The Dataset of the Study

The dataset of the study was obtained by querying from Web of Science (WoS). "Topic research" code that makes searches in abstract, title and key words of the publications in WoS was used. At this stage it was seen that the concept "STEM" is used frequently in field of medicine. For this reason in order to exclude the publications in medicine field NOT=(TS=("stem cell") statement was added to the query. The final version of the query to reach the dataset is thus: (TS=("Science, Technology, Engineering and Mathematics" OR "STEM" or "STEM EDUCATION") AND TS=(education)) NOT=(TS=("stem cell")). Via this query all types of publications in SCI-E, SSCI, A&HCI, CPCI-S, CPCI-SSH and ESCI indexes between 1945 and 2016 were accessed. The total number of the accessed publications is 1985. First, the accessed 1985 publications were analyzed via "Vantage Point" and "SciMAT" software and publications that have no relation with STEM education or those published in the field of medicine were filtered and a separate dataset was formed from publications that have at least one of the "Education & Educational Research" and "Education, Scientific Disciplines" categories. The final number of the publications was 908. In all the analyses and visualizations dataset that has been composed of these 908 study was used.

Data Analysis

As the dataset of the study was very big and complex, data mining techniques were used in the analysis of the data obtained. One of the definitions of data mining in literature has been made by Larose (2014) as "the process of discovering useful patterns and trends in large datasets". Bibliometric analysis was used in the study for providing to seeing the trends and patterns. According to Pritchard (1969) bibliometrics is "the application of mathematical and statistical methods to books and other media of communication". Glanzel (2003) states that in bibliometric studies of scientific publications the information types to be used are as follows: title of the journal, authors' names, corporate addresses, references used, type of the documents, publication title, abstract, keywords, acknowledgements and subject headings. Again for Glanzel (2003) bibliometric method has been widely used for research management and science policy for more than 10 years. Data of the study has been analyzed via "Vantage Point" and "SciMAT" software and "Pajek" software has also been used for analysis results.

FINDINGS

This study sought answers to six questions. Findings of these six research questions were presented with separate titles according to their orders in the aim section.

1. How is the distribution of STEM research according to countries?

Concerning the research question, Figure 1 is presented:

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Figure 1. Distribution of STEM Research According to Countries

The publication distribution according to the country published in, according to author address is seen in Figure 1. It is possible to state that North America countries are pioneers for STEM studies according to Figure 1. They are seen to be followed respectively by European countries, Australia and Turkey. When the literature is examined, the starting time of the USA for STEM education studies go back to 1990s and have accelerated since the last decade.

2. How is the distribution of STEM research according to WoS categories?

Created by using Aduna algorithm, when Figure 2 is examined it is seen that the biggest cluster of WoS categories related to STEM education are respectively *Education & Educational Research* and *Education, Scientific Disciplines*. When the relations of the publications with other categories are investigated it is easily observed that they are related with many WoS categories.

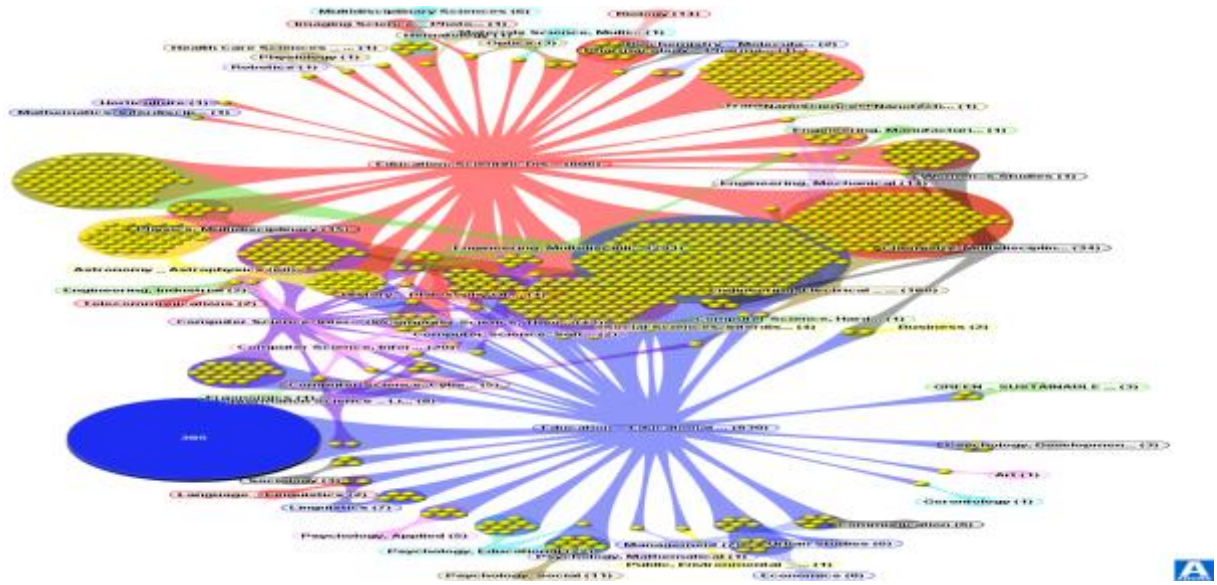


Figure 2. The Distribution of STEM Research According to WoS Categories and the Relationship Status (Aduna Alg.)

When Figure 3, created by Pajek, is examined the categories and the proximity to the center can be seen more clearly:

 Copyright © International Conference on New Horizons in Education Conference (INTE)

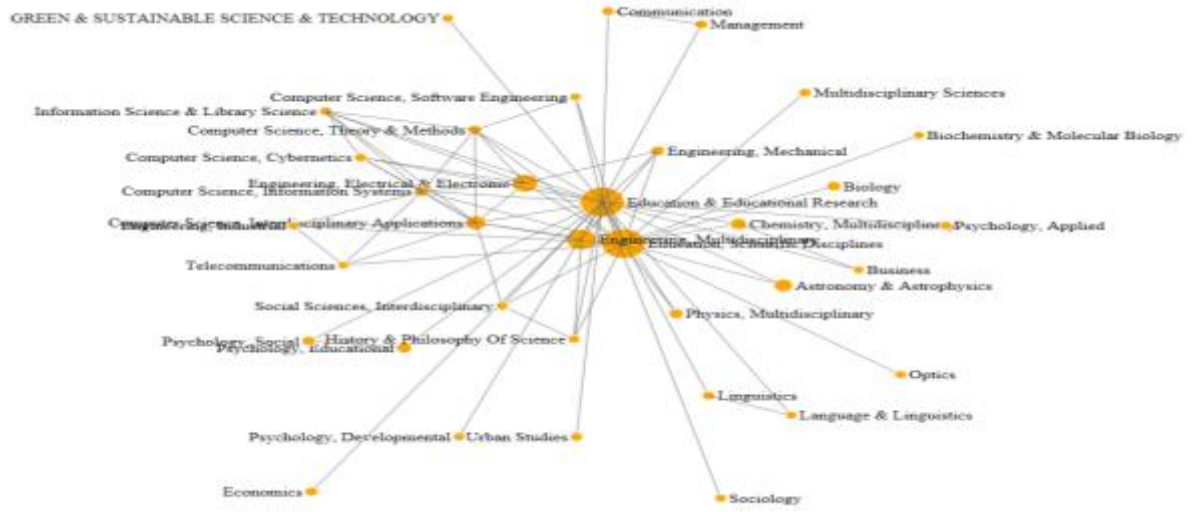


Figure 3. The Distribution of STEM Research According to WoS Categories and the Relation Status (Pajek)

When Figure 3 is analyzed again *Education & Educational Research* ile *Education, Scientific Disciplines* Categories show themselves. Just beside them appears *Engineering, Multidisciplinary* category as the biggest node. We could say that they are followed respectively by the other categories of *Engineering* fields with *Astronomy & Astrophysics, Interdisciplinary Applications, Computer Science, Cybernetics, Information Management, Social Sciences* categories. These all reveal how large amount of discipline STEM concept addresses and studies. In other words, it is possible to say that the concept that is thought to be about just 4 disciplines is in fact examined by researchers studying in many disciplines.

3. How is the distribution of STEM research according to WoS research domains?

It is possible to say after the analysis of STEM education studies in WoS according to the research domains with Figure 4 created by Aduna algorithm that, studies indexed under *Education & Educational Research* study field are published more in journals that are indexed in *Science* ve *Technology Research, Astronomy & Astrophysics* study fields. Cluster with the largest ratio of publication is again seen to belong to journals in *Education & Educational Research* research domains.

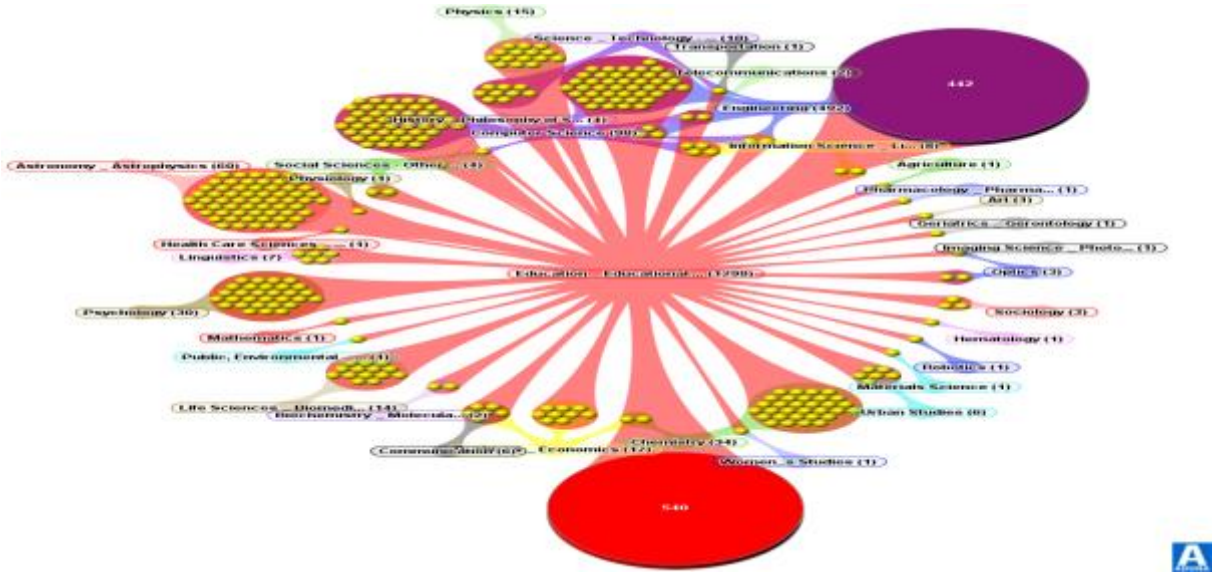


Figure 4. The Distribution of STEM Research According to WoS Research Domains and The Relationship Status (Aduna Alg.)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Figure 5 prepared by using Pajek in the analyses is presented to closely examine the relationship among WoS research domains:

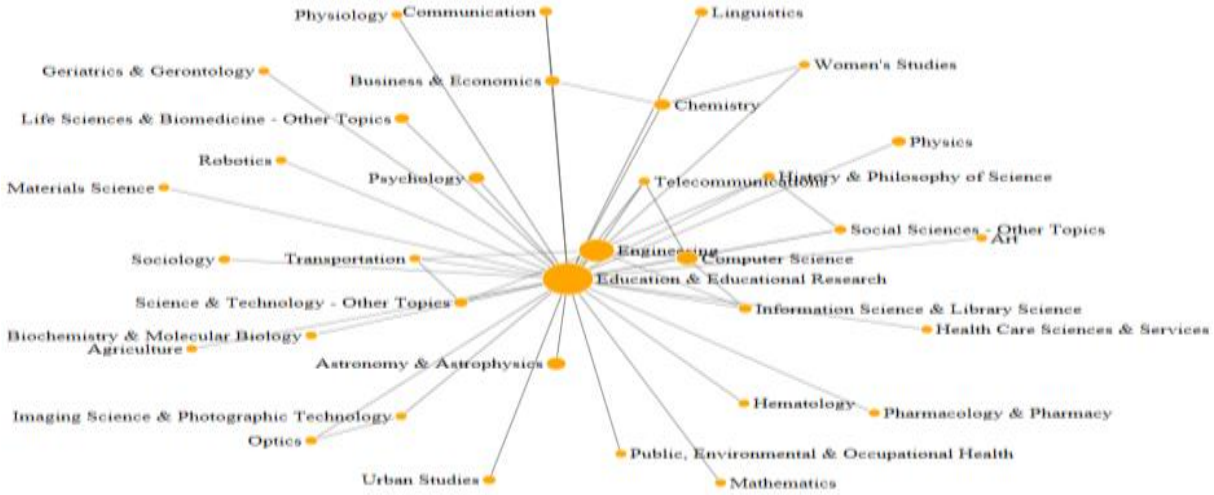


Figure 5. The Distribution of STEM Research According to WoS Research Domains and The Relationship Status (Pajek)

Education & Educational Research research domain could be possibly stated as the biggest node in the center when Figure 5 is examined. It is followed respectively by *Engineering, Computer Science, Astronomy & Astrophysics* and *Psychology.*

4. How is the distribution of keywords WoS and the authors give to STEM research?

The visual created by Aduna algorithm related with the key words WoS gives to the studies is presented in Figure 6:

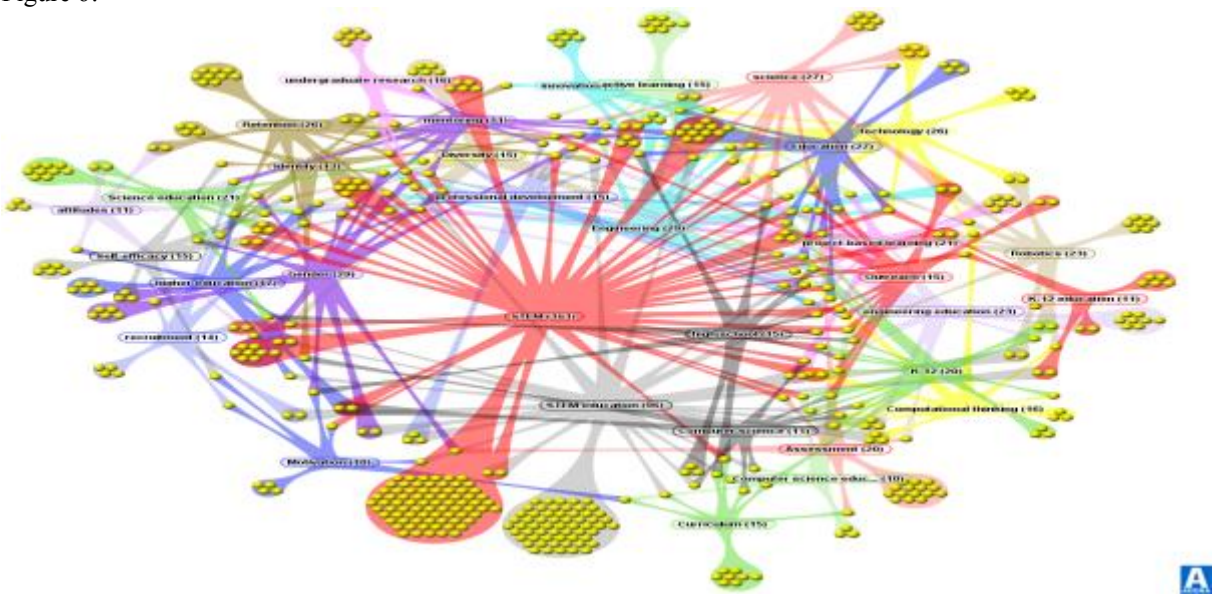


Figure 6. The Distribution of Keywords WoS Gives To STEM Research (Aduna Alg.)

It is seen that research fields such as *science education, higher education, motivation, robotics, computational thinking, innovation active learning* and *curriculum* will increasingly have a research field in the forthcoming period when Figure 6 is examined and STEM field is closely looked at. It is again possible to state that the field is in a close relationship with disciplines such as *computer science, technology, engineering* and etc. considerably.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

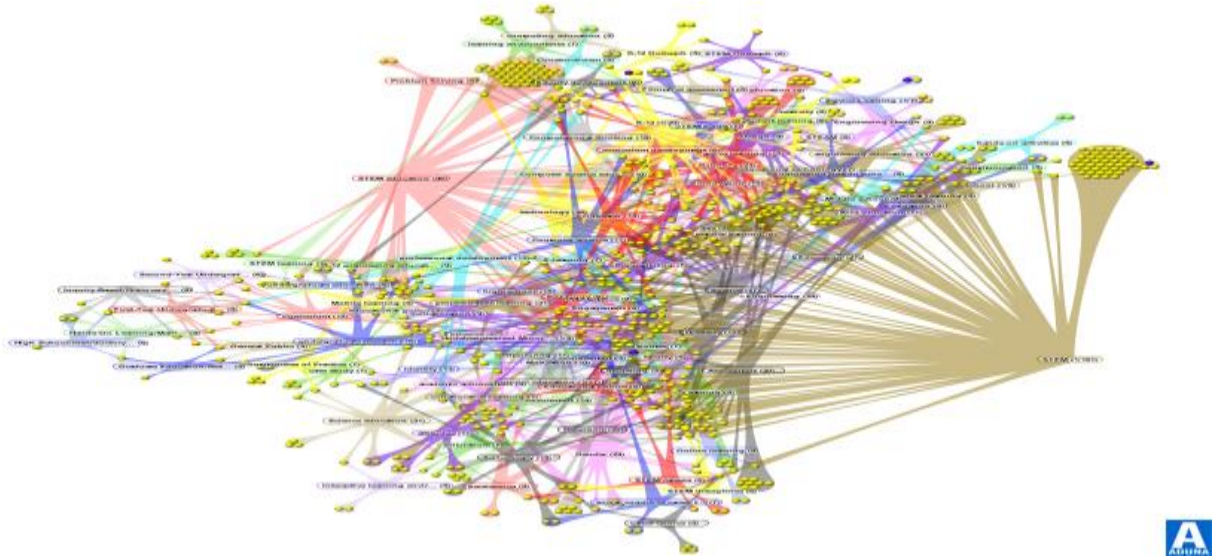


Figure 7. The Distribution of Keywords (100+) The Authors Give to STEM Research (Aduna Alg.)

When Figure 7, illustrating the keywords given to the articles by the authors, is examined it is seen that the starting point of all articles in STEM field is STEM. When we examine how the discipline is shaped under STEM we see that the studies are stated with rather different words. A more systematic way is seen to be followed in classifying the studies the keywords of which are given by WoS.

5. What are the prominent disciplines that STEM research nourish from?

Journal based science map is one of the scientific presentation methods provided by Sci2 program depending on University California San Diego science map system. This map has been created by using 2001-2010 Web of Science and 2001-2008 SCOPUS dataset. There are 13 main research fields on the map. The main aim of the map is to demonstrate which research fields do the journals in the examined dataset focus on. Circle caliber in the presentation illustrates the size of the publication in the research field.

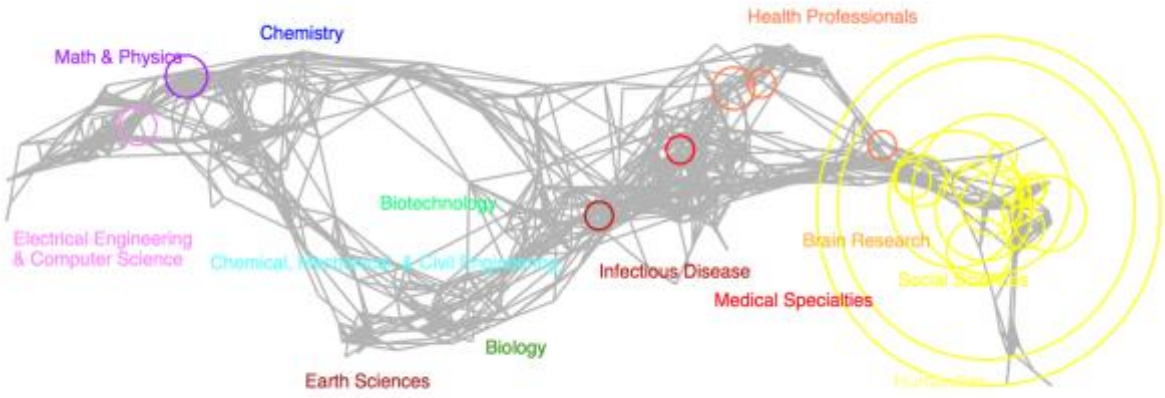


Figure 8. Prominent Disciplines That Nourish STEM Research (Journal Reconcile)

Even though science, engineering, mathematics fields seem to be the top priority for STEM education; the number of the publications towards social sciences and human sciences attract attention as concepts about psychology like cognitive structure, perception, self-realization and etc. still have an important place in educational practices. It is possible to say that the volume stems from the journals oriented towards psychology and educational sciences. In addition to the journals towards social and human sciences, it is observed that a remarkable publication volume has started also in journals published in especially Mathematics and Physics (Figure 8).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

6. From which disciplines is knowledge dissemination in STEM researches provided?

Binary map presentation has been developed for the aim of visualizing the citation process in the scientific journals according to the database format included in CiteSpace software. The visual design covers the journals in 2011 Journal Citation Report (10.546 journals). Dual binary map is composed of two sub-maps. Map in the right side expresses the publications cited whereas the map in the left side expresses the publications that give citations. Scientific research fields are clustered with VOS or Blondel Algortym for specifying the study fields. Publications in the general presentation dataset form connections towards the cited journals according to their citation numbers and frequency in the dataset. Whether this flow is meaningful or not can be controlled via the help of normalized Z-values.

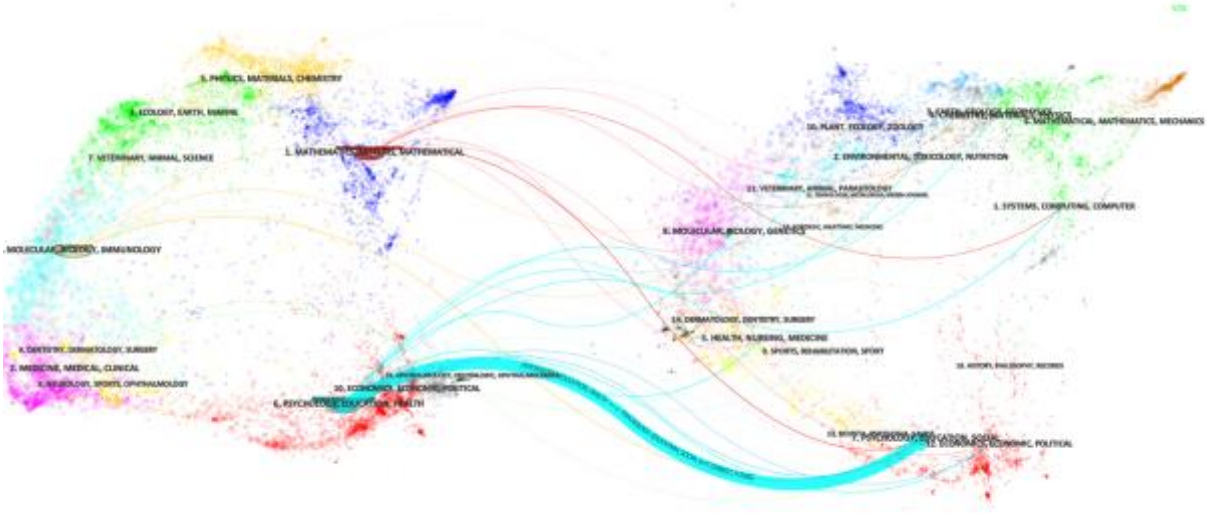


Figure 9. Knowledge Dissemination of STEM Researches

It is observed from the visualization made for the aim of knowledge dissemination to STEM field that there is a knowledge dissemination towards *psychology, education* and *social science* field from *psychology, education* and *health* field. In other words; in forming STEM literature *psychology* and *health* literature especially nourishes *psychology, education* and *social science* fields.

CONCLUSIONS

Among the results of our research; the first is that even though STEM field seems to be related with four fields, as a result of our analyses, arising by the basic principles and methods used in STEM education, the intensive effect of concepts that are directed to psychology's investigation areas can be reported. According to another result it is possible to state that basic distinctive qualities about STEM field has not arisen yet. However, the fact that publications about the concept are still published in especially social and human sciences journals could be a guiding information for decision and policy makers. Yet it is possible to say that this information is important for researchers and graduate students in order to follow the related literature.

Being able to visualize the subject fields, the related literature nourishes from could be guiding in determining the competences needed to give the training stated in the literature. On the other hand, it is obvious that it will contribute to see whether STEM education has developed as it should be or is following the traditional ways as seen in the other education literatures. The quantitative contribution to the related literature is seen to be made from the USA and it is possible to state that the studies go back to the beginning of 90s.

In our study we have tried to provide the big Picture of the field by putting forward the intellectual structure of the field. Among the future research to be conducted, especially on which sub-subjects are concentrated via the analyses made in article abstracts should be established. Moreover, with citation analysis studies, determining the basic reading list towards the field and identifying the Pioneer author and institutions of the field could be provided.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

REFERENCES

Assefa, S. G., & Rorissa, A. (2013). A bibliometric mapping of the structure of STEM education using co-word analysis. *Journal of the American Society for Information Science and Technology, 64*(12), 2513-2536.

Breiner, J. M., Harkness, S. S., Johnson, C. C., & Koehler, C. M. (2012). What is STEM? A discussion about conceptions of STEM in education and partnerships. *School Science and Mathematics, 112*(1), 3-11.

Brown, R., Brown, J., Reardon, K., & Merrill, C. (2011). Understanding STEM: Current perceptions. *Technology and Engineering Teacher, 70*(6), 5-9.

Bybee, R. W. (2010a). Advancing STEM Education: A 2020 Vision. *Technology and Engineering Teacher, 70*(1), 30-35.

Bybee, R. W. (2010b). What is STEM education? *Science, 329*(5995), 996-996. doi:10.1126/science.1194998

Çavaş, B., Bulut, Ç., Holbrook, J., & Rannikmae, M. (2013). Fen eğitimine mu¨ endislik odaklı bir yaklaşım: ENGINEER projesi ve uygulamaları. *Fen Bilimleri Öğretimi Dergisi, 1*(1), 12-22.

Çorlu, M. A., Adıgu¨ el, T., Ayar, M. C., Çorlu, M. S., & Özel, S. (2012). *Bilim, teknoloji, mühendislik ve matematik (BTMM) eğitimi: Disiplinler arası çalışmalar ve etkileşimler.* Paper presented at the X. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Niğde, Turkey.

Dugger, W. E. (2010). *Evolution of STEM in the United States.* Paper presented at the 6th Biennial International Conference on Technology Education Research, Queensland, Australia.

Ercan, S., & Bozkurt, E. (2013). *Expectations from engineering applications in science education: decision-making skill.* Paper presented at the The International Organization for Science and Technology Education (IOSTE); IOSTE Eurasian Regional Symposium & Brokerage Event Horizon 2020 Symposium Antalya, Turkey.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2014). *How to design and evaluate research in education* (9 edition ed.): McGraw-Hill New York.

Glanzel, W. (2003). Bibliometrics as a research field. A course on theory and application of bibliometric indicators. (Course Handouts). Retrieved from http://nsdl.niscair.res.in/jspui/bitstream/123456789/968/1/Bib_Module_KUL.pdf.s.

Greenseid, L. O., & Lawrenz, F. (2011). Using citation analysis methods to assess the influence of science, technology, engineering, and mathematics education evaluations. *American Journal of Evaluation, 32*(3), 392-407.

Lacey, T. A., & Wright, B. (2009). Occupational employment projections to 2018. *Monthly Labor Review, 132*, 82-118.

Larose, D. T. (2014). *Discovering knowledge in data: an introduction to data mining*: John Wiley & Sons.

Marginson, S., Tytler, R., Freeman, B., & Roberts, K. (2013). *STEM: country comparisons: international comparisons of science, technology, engineering and mathematics (STEM) education. Final report* (0987579800). Australian Council of Learned Academies, Melbourne, Vic. Retrieved from http://hdl.handle.net/10536/DRO/DU:30059041

Marulcu, İ., & Sungur, K. (2012). Fen bilgisi öğretmen adaylarının mu¨h ndis ve mu¨h ndislik algılarının ve yöntem olarak mühendislik-dizayna bakış açılarının incelenmesi. *Afyon Kocatepe Üniversitesi Fen Bilimleri Dergisi, 12*(1), 13-23.

Miaoulis, I. N. (2008). Engineering the K-12 curriculum for technological innovation. Retrieved from http://legacy.mos.org/NCTL/docs/MOS_NCTL_White_Paper.pdf

National Research Council [NRC] (2012). *A Framework for k-12 science education: practices, crosscutting concepts, and core ideas*. Washington DC: National Academic Press.

Pritchard, A. (1969). Statistical bibliography or bibliometrics. *Journal of documentation, 25*, 348-349.

Sanders, M. (2008). STEM, STEM Education, STEMmania. *Technology Teacher, 68*(4), 20-26.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTER-CULTURAL PROFESSIONAL COMPETENCE AS A KEY ASPECT OF TRANSLATORS TRAINING

Leila Yu. Mirzoyeva
Suleyman Demirel University, Kazakhstan
mirzoeva@list.ru

Aigul K. Zhumabekova
Kazakh National University, Kazakhstan
aigzhum@mail.ru

ABSTRACT
In the frame of implementation of tri-lingualism strategy in Kazakhstan the reliance on integrated course aimed at development of intercultural translators' competence is quite obvious. That discipline fits the situation in Kazakhstani higher education as a few years ago multilingual groups for all undergraduate majors were founded. This subject should be treated as a "bridge" that links language study (in Kazakhstan, primary focus is on such languages as Kazakh, Russian and English) and major-specific disciplines in the field of translation studies. Therefore, the principles of theoretical knowledge representation and practical tasks solution are designed to combine multi-lingual specialists training with their prospective work as mediators in intercultural communication process (both in our country and abroad). In our viewpoint, the key aspects in that field are the following:

- first of all, intercultural competence development requires both scientific approach to communication and study of translation as intercultural communication process. Also, would-be translators should be familiar with structural characteristics of culture and cultural values.
- secondly,intercultural translators competence requires specific knowledge about different types of communicative failures in the field of translation as well as retention of key strategies of acculturation. Special emphasis is placed on intercultural communication in business and science (especially in the field of abstracting and referring).
Keywords: intercultural professional competence, translators training, multi-lingualism,

INTRODUCTION

One of challenges in contemporary world as well as one of current tendencies in teaching translation is the development of intercultural competence of would-be translators. On the other hand, in accordance with language policy in Kazakhstan, the whole range of translators' competences should be developed for tri-lingual communication. Thus, in his Message President of Kazakhstan N. A. Nazarbayev pointed out that our country follows the traditions of multi-lingual and multi-cultural community. So that, one of the most important purposes for Kazakhstani people is to learn Kazakh (for all of them), Russian (for 95% of them); also, it is necessary for at least to 25% of our commonwealth to use English language as a means of intercultural communication. Moreover, at three National Universities in Kazakhstan, from 2013 year we have multilingual groups on different specialties at the level of both Bachelor and Master programs. Finally, in 2016 Ministry of Education is going to start the implementation of tri-lingualism strategy in secondary (and even in primary!) schools.

All aforementioned circumstances presuppose the relevancy of skills in intercultural communication; in course of its development, our programmes are being adopted for changing language reality. So that, our research consisted of three stages:
- pre-experimental analysis of the situation; which was aimed at choosing relevant topics for working out the appropriate content of the course;
- conducting one-year experiment in the frame of the discipline "Intercultural communication in translaTion";
- elaboration of the electronic manual which comprises specific teaching materials in intercultural/cross-cultural communication.

At all stages of our experiment we kept in mind that our students are inhabitants of Cyber-space; so our classes as well as course book were supplemented with video materials.

OBJECTIVES OF RESEARCH IN THE AFOREMENTIONED FIELD are the following**:**
- to analyze current status of the discipline and teaching experience in the field of intercultural communication;
- to reveal the specificity of those translators' competences development in multilingual environment;
- to elaborate a system of interactive tasks motivating students to learn the course;
- to work out the appropriate materials for manual designing.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

In our opinion, peculiar situation of multi-lingual community presupposes specificity of application of ICC principles that is why future translators should be familiar with such kind of information.

RESEARCH QUESTIONS

In order to study current status of ICC course in Kazakhstani education system as well as main ways of its implementation and prospective application, the following research questions were stated:

- Which problems of Intercultural communications are considered as the most topical for would-be translators training in the Republic of Kazakhstan?
- How to represent those problems in the most attractive and interesting way in order to motivate our students for studying courses in intercultural professional communication?

LITERATURE REVIEW

INTERCULTURAL COMMUNICATIVE COMPETENCE AS ESSENTIAL COMPONENT OF INTERPRETERS' PROFESSIONAL TRAINING

First of all, the definition of intercultural communication in contemporary science is indistinct. Also, there is an ambiguity in the field of terminology: in Russian and Kazakh scientific tradition, *intercultural communication* is used much more frequently than *cross-cultural* communication. In accordance with it

As it was stated by the Indonesian scholar Morin, I., "before an interpreter steps up on stage he should equip himself with some adequate linguistic and non-linguistic knowledge and skills as a part of strategies he has to take into account" (Morin, 2005). The relevance of such translators competences is also underlined in lingua-cultural studies, i.e. by Lustig, Myron W., and Koester, J. (2010) who argued: "Cultures look, think, and communicate as they do for very practical reasons: to have a common frame of reference that provides a widely shared understanding of the world and of their identities within it; to organize and coordinate their actions, activities, and social relationships; and to accommodate and adapt to the pressures and forces that influence the culture as a whole" (Lustig, Myron W., and Koester, J., 2010: 16). Hereafter, they said that culture is a set of shared interpretations: "Shared interpretations establish the very important link between communication and culture. Cultures exist in the minds of people, not just in external or tangible objects or behaviors. Integral to our discussion of communication is an emphasis on symbols as the means *by* which all communication takes place. The meanings of symbols exist in the minds of the individual communicators; when those symbolic ideas are shared with others, they form the basis for culture" (Lustig, Myron W., and Koester, J., 2010: 16). There is no doubt that such competences in the field of translation should be included in general models of translators' and interpreters' competences. Thus, analyzing various competence models, Omar Ali Fraihat (2013) focused on 5 main ones, which include different competences. On the other hand, Neubert (1994: 412) offers three main components of competence: language competence, subject competence and transfer competence.

PACTE model is also mentioned as one of the most effective in many scientific papers. The PACTE group is very active in finding out the answers for three questions (1) what translation competence is, (2) how translation competence can be acquired (3) and how translation sub-competences integrate and amalgamate with each other. The PACTE scholars use mostly procedural process based methodology rather than product oriented in finding out answers to these questions. Unlike Campbell's model, the PACTE model (2003) (as cited in PACTE, 2011: 4) is based on the empirical-research approach and concludes that the translation competence includes five sub-competences, as well as, psycho-physiological components: 1) Bilingual sub-competence – predominantly procedural knowledge required to communicate in two languages. It comprises pragmatic, socio-linguistic, textual, grammatical and lexical knowledge. 2) Extra-linguistic sub-competence – predominantly declarative knowledge, both implicit and explicit. It comprises general world knowledge, domain-specific knowledge, bicultural and encyclopedic knowledge. 3) Knowledge about translation – predominantly declarative knowledge, both implicit and explicit, about translation and aspects of the profession. It comprises knowledge about how translation functions and knowledge about professional translation practice. 4) Instrumental sub-competence – predominantly procedural knowledge related to the use of documentation resources and information and communication technologies applied to translation (dictionaries of all kinds, encyclopedias, grammars, style books, parallel texts, electronic corpora, search engines, etc.). 5) Strategic sub-competence – procedural knowledge to guarantee the efficiency of the translation process and solve problems encountered. This sub-competence serves to control the translation process. Its function is to plan the process and carry out the translation project (selecting the most appropriate method); evaluate the process and the partial results obtained in relation to the final purpose; activate the different sub-competences and compensate for any shortcomings; identify translation problems and apply procedures to solve them. 6) Psycho-physiological components – different types of cognitive and attitudinal components and psycho-motor mechanisms, including cognitive components such as memory, perception, attention and emotion; attitudinal aspects such as intellectual curiosity, perseverance, rigor, the ability to think critically, etc.; abilities such as creativity, logical reasoning, analysis and synthesis, and so forth (PACTE, 2011: 4-5)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

As it is shown above, intercultural professional competence is treated as one of crucial aspects of would-be translators training because of being one of priority problems in contemporary world.

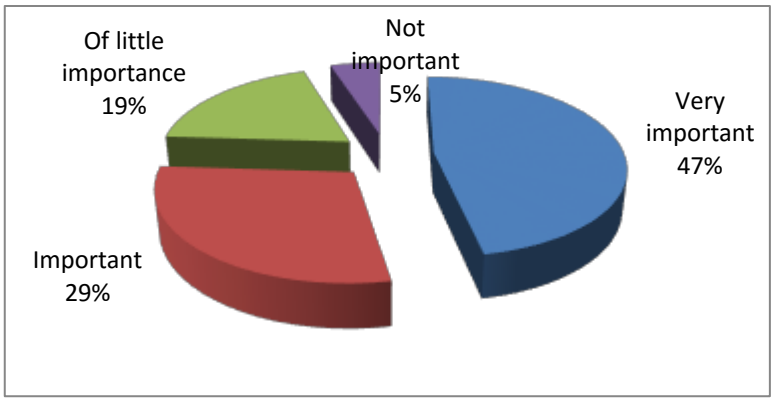
PRE-EXPERIMENTAL STAGE

As is was stated before, one of essential stages of our experiment consisted in survey of instructors' opinion concerning the aforementioned discipline, i.e. its purposes, key concept, and components. The survey was conducted among 67 instructors who worked for different institutions in Kazakhstan in the field of translators' training; the main purpose of the survey was to clarify their viewpoints concerning key terms of the discipline and to range those terms in accordance with their preferences. After introductory questions concerning age groups and scientific degree (it should be pointed out that most of our target audience was highly-skilled professionals), they were asked to range the following components of suggested course as very important, important, of little importance, and not important.

Samples of answers are represented on Figures 1-3 and, as it is shown below, most of the manual components were well-received by instructors working in the field of translators' training.

Figure 1. Respondents attitude concerning translation theory as a component of manual in Intercultural Communication

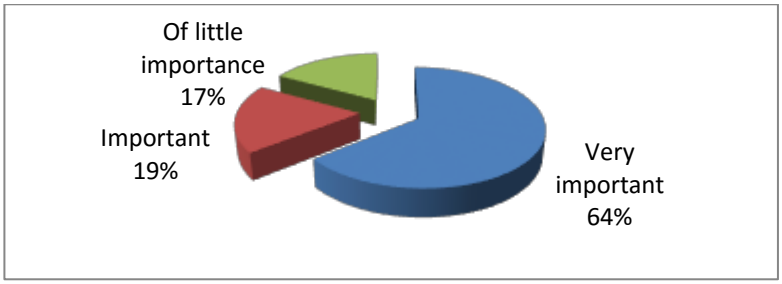
Question 1. In your opinion, representation of main statements of translation theory in Intercultural Communication manual is…



Answering the question most of instructors (47%) highlighted the importance of main statements of translation theory as a part special professional training in the field of intercultural professional competence, and only 5% of them characterized that aspect as a not important one.

Figure 2. Respondents' attitude concerning the relevance of communicative strategies related to various cultures, for the course in Intercultural Communication

Question 2. Your consider representation of communicative strategies related to various cultures as…

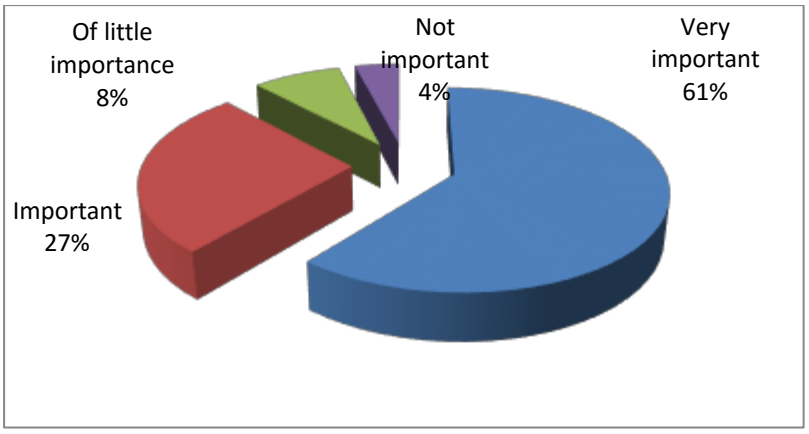


It is not surprising that the target audience considered the representation of communicative strategies related to various cultures as a preferable task of the discipline (64% of respondents pointed out that it is key aspect of translators' training; 19% treated this part of the course as an important one whereas just 17% of them evaluated it as a problem of little substance).

Figure 3. Respondents' attitude concerning would-be translators' abstracting skills as an aspect of the course in Intercultural Communication

Question 3. For future translators, abstracting skills are…

 Copyright © International Conference on New Horizons in Education Conference (INTE)



By means of that question we made an attempt to estimate how important it was for the respondents to improve would-be translators' abstracting skills. The results showed that 61% of the respondents consider this aspect as very important (56%), or important (27%), whereas 8% considered such kind of information to be "of little importance" for translators' work, and, finally, 4 % of respondents did not realize the necessity of translators work in that sphere.

So, as it was shown above the results of the survey proved the necessity of the aforementioned aspects for special translators training in the field of intercultural communication.

EXPERIMENTAL STAGE: PRINCIPLES OF MANUAL DESIGN AND SAMPLES OF TASKS

On the basis of the given survey, main parts of the manual were designed. Thus, the principles of presentation of theoretical knowledge and practical tasks introduced in this manual are aimed at combining professional needs of future multilingual specialists with their duties to act as mediators in intercultural communication (both in our country and abroad). The first section provides fundamentals and a brief history of formation of intercultural communication theory; the role of translation in social sciences and humanities; also, definitions of such basic terms as intercultural communication, inter-ethnic communication, translation are represented here. The manual contains scientific definitions of communication as well as translation as a form of intercultural communication; different forms and types of translation are under consideration, too. The second section of the manual lists the types of intercultural communication and describes the types of communicative failures in the field of translation. Also, it examines the concept of acculturation and settles the problem of intercultural competence formation for multi-lingual specialists. It should be noted that this part describes the main strategies of acculturation as well as key characteristics of intercultural competence. The next section of the manual explains the concept of professional communication and specific requirements for a specialist in the field of intercultural communication. At the same time, this part of the manual deals with peculiarities of scientific texts translation. The main aim of the fourth section is to familiarize would-be translators with the main rules and techniques of abstracting and annotating because it is also a specific kind of activity in the field of intercultural communication. Furthermore, each section of the manual contains control questions and tasks for self-study.

As it was stated before, all parts of manual are supplemented with the appropriate video and audio materials. Some of them are authentic whereas others are considered as special materials for training in the field of intercultural communication. So that the authors made a point of presentation of some tasks related to supplementary materials. Thus, Part 1 is extended by the video which represents cultural differences between English people and Americans. Sample questions aimed at students' cultural competence and critical thinking development, are the following:

1. What cultural differences are related to lexical variants represented in the video?
2. Speak on the discrepancies between British and American cultures
3. What kind of social antitheses is represented in the video?
4. Speak on your impressions concerning the process of communication represented on the video.

Also, for Part 2, we have designed specific questions in order to identify cultural negotiations errors committed in the context of cultural conflict resolution:

1. Which cultural peculiarities of Italian and German people are represented in the video?
2. Define the most important factors which presuppose successful business communication between representatives of different communicative cultures.
3. Is it possible to use the terms "cultural shock" or "culture clash" in order to describe that situation? Why/why not?

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Since many students consider abstracting and annotating as a very boring and impractical part of the course, the authors make an attempt to motivate them. Some problem tasks related to video about Parts of Paragraphs are represented below:

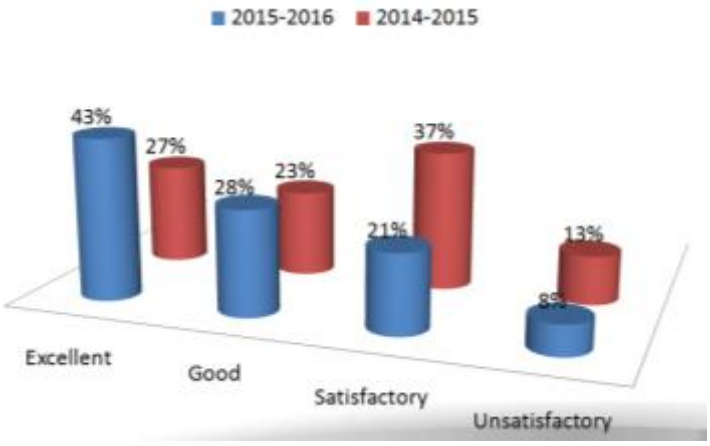
1. Are there any specific elements of paragraphing in different cultures?
2. North American Style is characterized by…
3. An effective topic sentence is based on…
4. The "heart of your paragraph" is … because…
5. The two ways of the details ordering are…
6. What are the functions of the closing sentence?
7. Topic sentence is also named as…
8. Analyze the sample from the point of view of the Russian and Kazakh traditions of essays composing. What are the difference between Russian and Kazakh traditions, on the one hand, and the North American Style? On the other?

In our opinion, all those tasks are motivating (both in form and content), so that the electronic manual can also be considered as the appropriate way of teaching Cyber-space inhabitants.

SOME RESULTS OF OUR EXPERIMENT

Figure 4 shows the students results of this academic year in comparison to the previous one. In is necessary to point out that during 2015-2016 academic year the manual was used in teaching process.

Figure 4. Exam results in 2014/2015 in comparison to 2015/2016



As observed in Figure 4, the amount of excellent marks rose dramatically (from 27% to 43%) whereas number of satisfactory and unsatisfactory marks showed an opposite tendency (thus, in 2014-2015 academic year we had 13% of unsatisfactory marks in Intercultural Professional Communication in contrast to 2015-2016 academic year when the amount of such marks decreased to 8%). In our opinion, the progress is closely associated with the manual materials implementation in teaching process.

REFLECTIONS OF THE LEARNERS

Analysis of the students' answers indicated that 79% of the students found the aforementioned activities based on the implementation of specific tasks related to intercultural competence development more useful and practical in comparison to traditional approach to translators training. Use of the aforementioned tasks was described by the participants as "practical, "enhancing translators' adaptability and flexibility", "exciting". None of the students reported negative opinions about using those tasks in would be translators/interpreters training. Only 7% of the participants favoured traditional methods and exercises compared to using of materials.

Detailed analysis revealed that there were three factors that influenced the learners' opinions as to the use of authentic videos in the classroom: practicality, the contribution of the authentic videos to the communication and discussion among the students in course of peer-evaluation and the contribution of authentic video materials to the motivation of the students.

CONCLUSION

In terms of ongoing state language policy of tri-lingualism in Kazakhstan, future development of multi-lingual and multi-cultural personality of a translator is a factor of paramount importance. So, we cannot underestimate

 Copyright © International Conference on New Horizons in Education Conference (INTE)

the value of translators' intercultural communicative competence as they are the mediators in the process of intercultural communication.

Using various materials included in our electronic manual, we predetermine formation of such interpreters' competencies as:

- skills in Intercultural Business Communication on the basis of patterns represented in innovative form;
- linguistic competence, because work with such materials provide a lot of opportunities for language skills improvement;
- competence in the field of text formation on the basis of rules and linguistic characteristics of a genre, stereotypes of language communities;
- communicative competence including intercultural communicative skills in the field of rendering text with specific national color, stylistic peculiarities and different extra-linguistic factors;
- theoretical translator/interpreter's competence lying in the sphere of key translation studies concepts
- operational competence aimed at adequate translation obtaining;
- strategic competence based on knowledge in the field of culture, tradition; skills of extrapolation, conceptual foresight and their appropriate use in the process of intercultural communication.

REFERENCES

Lustig, Myron W., Koester, J. (2010). *Intercultural competence: Interpersonal communication across cultures.* - 6th ed.

Morin, I. (2005). Strategies for New Interpreters: Interpreting in the Indonesian Environment. *Translation Journal, Volume 9, No.* 4 October 2005. Available at: http://translationjournal.net/journal/34interpret.htm

Neubert, A. (1994). Competence in translation: A complex skill, how to study and how to teach it. In *Translation Studies: An Interdiscipline,* Snell-Hornby, Mary, Franz Pöchhacker and Klaus Kaindl, eds. 411 ff.Bell.

Omar Ali Fraihat (2013). Professional Consecutive vs. Simultaneous Interpreters' Required Competence Catalogue. *Arab World English Journal (AWEJ),* Volume.4 Number.1, 2013. pp. 175- 188

PACTE. (2005). Investigating translation competence: Conceptual and methodological issues. Meta translator's journal.50, 609-619. Available at: http://www.erudit.org/revue/meta/2005/v50/n2/011004ar.html

PACTE. (2011). Results of the validation of the PACTE translation competence model: Translation Project and Dynamic Translation Index. Available at: 2011_PACTE_Continuum.pdf.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTERCULTURAL AWARENESS OF CZECH STUDENTS AT SECONDARY SCHOOLS

Lucie Cviklova
Charles University, Czech Republic
lucie.cviklova@yahoo.com

ABSTRACT
Social science research shows that intercultural awareness and intercultural communicative competence are developed throughout one's life and shaped by various factors, including informal and formal socialization and schooling practices that in turn influence the development of social capital. Cultural differences have become the object of study within a growing interdisciplinary field, including by cultural anthropologists and psychologists. This study is theoretical and rooted in five cultural dimensions by means of which the degree of cultural awareness can be measured: power distance, particularism versus universalism, uncertainty avoidance, collectivism versus universalism and, finally, achieved versus ascribed status. The sample was constituted on the basis of these five dimensions and the cultural awareness of Czech students at selected secondary schools in Prague was measured. Items in the semi-structured questionnaire included statements such as: differences are dangerous, authority is comforting, decisions are made by consensus, people believe that conflict clears the air, etc. In the conclusion, data obtained by means of empirical research at several Czech secondary schools are compared to those publicly available regarding the economically active population in order to show differences regarding cultural awareness between segments of Czech youth and Czech adults.

INTRODUCTION

European integration has been considered important in the Czech educational system mainly at institutions of higher education, and the influence of common European policies as well as Czech national reforms at primary and secondary schools has only existed at the level of competences in mathematics, science and languages. Nevertheless, educational specialists and employers have found that the low performance of Czech high school and university graduates is related to a lack of intercultural communicative competence and that this can be explained by deficiencies in the curricula at Czech secondary schools and universities (Storti, 1990, pp. 99- 103). In addition, the answer to the question 'how can the average Czech student can acquire intercultural communicative competence?' is to a large degree complicated by the fragmentation of curricula and teaching methods at various types of Czech secondary schools. To put it differently, the current condition is determined by the coexistence of various secondary schools, vocational schools, and different types of international schools administered by national ministries, such as the Lycée Français, Waldorf high schools, etc. Nevertheless, intercultural communicative competence is rarely taught at Czech secondary schools.

Intercultural communicative competence can be defined as comprising various types of communication, including code switching, by means of which individuals who share more than one culture express their values and worldviews on different occasions, verbally as well as non-verbally (Bennett, 1998, p.1-35). Intercultural communicative competence is related to intercultural cultural awareness that can be measured by different dimensions/variables and particularly their individual values (Peterson, 2004.) One can find various cultural dimensions, such as the conception of time, low context versus high context cultures, emotional versus neutral cultures, etc. (Gannon, 1994). Nevertheless, for my research objective and namely the necessity to operationalize the issues, the number of cultural dimensions was reduced to five: high versus low power distance, particularism versus universalism, high versus low uncertainty avoidance, collectivism versus individualism and achieved versus ascribed status. For example, power distance can be examined through the answers yes/no to attitudes such as 'people are less likely to question the boss', 'freedom of thought could get you into trouble', 'management style is authoritarian and paternalistic', etc. Universalism and particularism can be measured by yes/no answers to attitudes such as 'objectivity, not letting personal feelings affect decision making, is possible and desirable', 'principles have to get bent once in a while', 'people tend to hire friends and associates', etc. High and low uncertainty avoidance can be evaluated using yes/no answers to attitudes such as 'people expect more formality in interactions', 'rules can be broken if it makes sense, for pragmatic reasons', 'people should keep emotions under control', etc. Collectivism and individualism can be examined by yes/no answers to attitudes such as 'people answer the phone by giving the name of the organization', 'it's okay to stand out', 'face saving is important', etc. Ascribed and achieved status can be measured by yes/no answers to attitudes such as 'people adhere to tradition', 'people are promoted based on productivity and results', 'I expect people to judge me by my affiliations', etc.

THE STUDY

Under the global condition actors have been more and more often confronted with various cultural patterns that have been acquired at individual stages of socialization processes by means of the official school system as well as through channels of informal learning originating in family structures, peer groups, work units in seasonal summer jobs as well as in the framework of other interactions. How can one identify the intercultural awareness of students at Czech secondary schools and the most important variables relevant for prospective intercultural training? Are these cultural variables separate or can one identify any clustering of similar values concerning two or more of them?

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The first principle, power distance - omnipresent not only in educational institutions but also in political life, at workplaces and in families - is reflective of the fact that actors in specific cultural environments accept and respect the superiority of power structures over legal principles and justification arguments. Power distance is particularly reflective of the stance on inequality of institutions/organizations and of expectations concerning the conduct of the superior on the one hand and the subordinate on the other.

While particularism as the first principle of the second dimension prefers orientation to given roles and neglect of specific actors as well as relationships among them, the opposite particularism emphasizes personal relations and approaches to individual actors. To put it differently, particularism and universalism explain contradictory principles of this dichotomy, i.e. conflict or tension between obligations to family, friends and colleagues and to society/community.

The third cultural dimension deals with the issue of uncertainty avoidance and points to the fact that in some cultural and social environments actors accept uncertainty as something common and consider it part of everyday life, while in others they adopt a negative attitude to risk and uncertainty and strive for those norms and regulations that can eliminate them. More concretely, uncertainty avoidance explains the degree to which societies/communities feel threatened by uncertainty and anxiety and why some feel more threatened by it than others: it also presents specific ways in which different communities invented various strategies for dealing with the phenomenon.

The fourth dimension, collectivism versus individualism. differentiates between communities/societies where actors prefer group to individual interest and those where individual actors hold themselves responsible for their deeds and relations among them are more or less loose. Collectivism versus individualism also points to the orientation of every community/society concerning collective and individual motivation for decision-making and actions: in individualist societies the social action of the individual is more motivated by the satisfaction of his or her needs than by that of the group, while in collectivist societies one's identity is to a large degree a function of his or her membership in the whole system/group.

The fifth dimension, achieved versus ascribed status, divides cultural environments into those where actors justify their social status by their own efforts and have constantly to confirm it and those where social rank is derived from social origin, education, employment, age, membership of some social group, etc.

Data based on the semi-structured questionnaire were collected at several secondary schools in Prague and 50% of the Czech students were male and 50% of the Czech students were female (Giddens, 1997, pp. 530 - 558). Data were analyzed for evidence of intercultural awareness regarding perception of power structures, cleavages between universalist and particularist values, efforts to avoid uncertainty or strategies how to confront it, tendencies to collectivist or individual behaviour and, finally, justification of his or her status by either achievement or ascription principles.

The sociological analysis draws on an approach to cultural differences that takes into account the above mentioned cultural dimensions. Statements concerning the cultural dimensions in the semi-structured questionnaire were formulated on the basis of a preliminary questionnaire that had previously been distributed to several students of Prague secondary schools (Booth, W., Colomb, G. & Williams, J., pp. 10 - 56). During the preliminary research some questions had not been answered and were therefore omitted in the final version, while some new statements were included. Data presented here regarding the intercultural awareness of Czech students at secondary schools are the result of original research into one hundred students at several Czech secondary schools. In addition, the data collection for this research draws on contemporary knowledge concerning ethnic stereotyping in schools (Stevens and Görgöz, 2010, pp. 1350-1371). For example, it has been found that differences concerning stereotyping in educational institutions can in part be explained by the influence of nationally specific regulations.

FINDINGS

1. INTERCULTURAL AWARENESS OF CZECH STUDENTS AT SECONDARY SCHOOLS THROUGH THE PERSPECTIVE OF POWER DISTANCE

Specific double or pair attitudes were introduced in order to measure the power distance index of Czech students at selected Czech secondary schools and students were asked about their preferences. These double or pair attitudes reflect whether Czech students accept unequal influence and different roles of students and teachers at their secondary schools as well as in other parts of their lives. They reveal whether Czech students perceive power and status as artificial and to what degree they would like to de-emphasize or minimize differences between teachers and students (Aronhime, 1997, p. 112).

(1a) Students don't question teachers (since there is more fear of displeasing the teacher in high power distance cultures); 1b) Students question teachers (since teachers don't have to be deferred to). (2a) Elitism is the norm (since emphasizing distinctions between teacher and students is the norm); (2b) Teachers have no special privileges (since rank does not bring about privileges). (3a) Freedom of thought is encouraged (since no one is threatened by the independence of thinking for oneself); (3b) Freedom of thought could get you into trouble (since independence is not valued in

 Copyright © International Conference on New Horizons in Education Conference (INTE)

students). (4a) The chain of command is mainly for convenience (since power differences among teachers and students are not emphasized); (4b) The chain of command is sacred (since rank must be respected and you should not go around people). (5a) Students prefer precise instructions from teachers (since close supervision or the visible exercise of power is common to their culture); (5b) Students prefer only general instructions (since autonomy and an invisible exercise of power is common to their culture). (6a) Interaction between teacher and students is more informal (because the distance is minimized); (6b) Interaction between teacher and students is formal (because it is necessary to emphasize the power gap). (7a)The teaching style is authoritarian (because teachers are supposed to exercise their power); (7b) The teaching style is consultative and democratic (because we are all in this together and power distance is de-emphasized).

Table 1: High Power Distance versus Low Power Distance

Table 1: High Power Distance versus Low Power Distance

Statement	Supporters of it	Non-Response
High power distance 1a, 2a, 3b, 4a, 5a, 6b, 7b	241 (35%)	4
Low power distance 1b, 2b, 3a, 4b, 5b, 6a, 7a	448 (65%)	7
Total	689 (99%)	11 (1%)

2. INTERCULTURAL AWARENESS OF CZECH STUDENTS AT SECONDARY SCHOOLS THROUGH THE PERSPECTIVE OF PARTICULARISM AND UNIVERSALISM

Specific double or pair attitudes were introduced in order to measure the degree of universalism and particularism at selected Czech secondary schools and students were asked about their preferences. These double or pair attitudes are reflective of whether Czech students respect universal values at their secondary schools as well as in other parts of their lives. While one cannot claim that specific cultural environments are totally particularistic or universalistic, one can speak about certain attitudes or tendencies of individual societies/communities to treat family, friends and their in-groups the best they can and let the rest of the world protect alternative in-groups. On the other hand, members of other individual societies are convinced that at least certain absolute moral standards can be applied everywhere in the world, regardless of specific circumstances (Aronhime, 1997, p. 68).

(1a) The law is the law (since for universalists the law does not depend on who you are); (1b) Principles get bent once in a while (since particularists would say that principles can be adjusted to circumstances). (2a) You don't compromise on principles (since universalists are convinced that certain principles apply regardless of the particular situation); (2b) Decision making can be affected by personal feelings (particularists would say personal feelings would have to be taken into account). (3a) Exceptions to the rule should be minimized (universalists avoid exceptions since they believe in absolutes); (3b) People tend to hire friends and associates (because particularist logic says a bond is more important than the facts of the case). (4a) The logic of the heart is what counts (since particularist logic is of the heart); (4b) Logic of the head is important (since universalist logic is of the head). (5a) Subjectivity is the rule (since particularists are subjective/universalists are objective); (5b) Consistency is desirable and possible (universalists like consistency because principles are absolute). (6a) Contracts guarantee that friends stay friends (since universalists believe in rules anchored in contracts); (6b) Contracts aren't necessary between friends (according to particularists, friends can always be trusted and you don't do business with strangers anyway). (7a) Ethics are ethics no matter who you are dealing with (universalists believe in absolutes and no circumstances are relevant); (7b) Situational ethics are the norm (particularists believe that social action should be guided by a specific situation and not by general maxims).

Table 2: Universalism versus Particularism

Table 2: Universalism versus Particularism

Statement	Supporters of it	Non-Response
Universalism 1a, 2a, 3a, 4b, 5b, 6a, 7a	281 (41%)	6
Particularism 1b, 2b, 3b, 4a, 5a, 6b, 7b	409 (59%)	4
	690 (99%)	10 (1%)

3. INTERCULTURAL AWARENESS OF CZECH STUDENTS AT SECONDARY SCHOOLS THROUGH THE PERSPECTIVE OF UNCERTAINTY AVOIDANCE

Specific double or pair attitudes were introduced in order to measure the degree of the uncertainty avoidance index at selected Czech secondary schools where students were asked about their preferences. These double or pair attitudes are reflective of whether Czech students respect uncertainty at their secondary schools as well as in other parts of their lives (Aronhime, 1997, 118).

Concrete social environments are characterized either by high uncertainty avoidance or low uncertainty avoidance; while national units with high uncertainty avoidance demand compliance, with many regulations, laws and procedures that were elaborated in order to avoid prospective insecurities, national units with a low uncertainty avoidance limit, regulate or control fewer areas of human interaction and feel more curious than frightened about the unknown. (1a) People should let their emotions out (because there's nothing to fear from emotions); (1b) Students should keep emotions under control (since when people lose control of their emotions, anything can happen. (2a) Differences are intriguing and challenging (because the unknown is enticing); (2b) Differences are dangerous (because it is unpredictable or unknown). (3a) People change jobs infrequently (because stability is sought and change is threatening); (3b) People change jobs with more frequency (because change is not so frightening). (4a) Rules can be broken if it makes sense, for pragmatic reasons (because rules can be limiting and there's nothing inherently satisfying about rules); (4b) Rules should not be broken (because rules are foundations or order). (5a) Risks should be avoided (since risks are inherently unsettling because they involve the unknown); (5b) Risks are opportunities (since the unknown isn't particularly worrying, risks are not to be feared). (6a) Conflict in organizations is natural, nothing to be afraid of (order doesn't break down or get undermined that easily); (6b) Conflict in organizations should be eliminated (because conflict threatens the smooth running of things). (7a) People accept authority more readily; authority is comforting (since authority guarantees order and keeps things under control); (7b) People accept authority less readily and authority is limiting (because control is not that comforting).

Table 3: Uncertainty Avoidance

Table 3: Uncertainty Avoidance

Statement	Supporters of it	Non-Response
High uncertainty avoidance 1b, 2b, 3a, 4b, 5a, 6b, 7a	191 (28%)	5
Low uncertainty avoidance 1a, 2a, 3b, 4a, 5b, 6a, 7b	498 (72%)	6
	689 (99%)	11 (1%)

4. INTERCULTURAL AWARENESS OF CZECH STUDENTS AT SECONDARY SCHOOLS THROUGH THE PERSPECTIVE OF COLLECTIVISM VERSUS INDIVIDUALISM

Specific double or pair attitudes were introduced in order to measure the degree of collectivism and individualism at selected Czech secondary schools where students were asked about their preferences. These double or pair attitudes are reflective of whether Czech students prefer collectivism to individualism at their secondary schools as well as in other parts of their lives. While in individualist societies, one is supposed to take care of oneself and independence as well as self-reliance are highly valued, in collectivist societies the success and survival of the group presupposes the well-being of the individual as well as harmony (Aronhime, 1997, p.31).

1a) There is a need for autonomy (since individuals need independence); (1b) There is a need for affiliation (since people are defined by what they belong to). (2a) Face Saving is important (because saving face maintains harmony and is the glue that keeps the group together; (2b) People believe that conflict clears the air (collectivists shun conflict because it could damage harmony. (3a) Decisions are made by consensus (because no-one feels left out as opposed to majority rules which leave the minority out); (3b) It's okay to stand out (because individualists reject self-effacement). (4a) People change worldviews frequently (since they have to adapt to abrupt changes given by the global condition; (4b) People adhere to tradition (in the sense that older, senior people are listened to). (5a) Short-term relationships are common (since long-term relationships tie the individual down); (5b) Marriages are arranged (since they keep the group, the family happy). (6a) People answer the phone by giving the name of the organization (since collectivists present themselves through their affiliations); (6b) It's common to ask students how they want to be addressed (since individualists present themselves through their name). (7a) Friends can be made relatively quickly (since the individual enters and leaves relationships on his or her own); (7b) It takes a long time to make a new friend (since it is necessary to become familiar with members of the group your new friend belongs to).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 4: Collectivism versus Individualism

Table 4: Collectivism versus Individualism

Statement	Supporters of it	Non-Response
Individualism 1a, 2b, 3b, 4a, 5a, 6b, 7a	434 (62%)	7
Collectivism 1b, 2a, 3a, 4b, 5b, 6a, 7b	255 (37%)	4
	99%	1%

5. INTERCULTURAL AWARENESS OF CZECH STUDENTS AT SECONDARY SCHOOLS THROUGH THE PERSPECTIVE OF ACHIEVED VERSUS ASCRIBED STATUS

Specific double or pair attitudes were introduced in order to measure the degree to which students are convinced that status should be achieved or ascribed. These double or pair attitudes are reflective of whether Czech students prefer social environments in which status is achieved to those in which status is ascribed and vice versa. In 'achieved status' societies and communities, professional accomplishments, performance and record of success are highly valued and the status of the individual is conditioned by his or her actual deeds, while in 'ascribed status' societies the individual is to a large degree seen through the lens of his or her function, birth, age and seniority. In 'ascribed status' communities/societies the social standing of the individual cannot be lost completely and it is determined by the family situation, the social class into which he or she is born, the amount of education he or she receives and similar variables (Aronhime, 1997, p. 123).

1(a) Informal education determines your career and success (since practice is more important than formal education); (1b) A university degree determines your career and success (since at universities you meet privileged people). (2a) Hard work and ingenuity are the most important things for your success (since on the labour market you are judged by your performance); (2b) The social standing of your family is important for your career and success (since at your workplace you are also judged by your origin.) (3a) You should date and marry someone regardless of their origin or social standing (since private life and public achievements are separate; (3b) You should date and marry someone from your own social class (since marriage helps to maintain your social status). (4a)You can never completely lose your social standing (since your social position is determined by education and family origins); (4b) It is necessary to make constant efforts in order to maintain and justify your social standing (since you have to justify it constantly). (5a)You should not make friends with people with a lower social status than yours (since by means of these friendships your social status can be endangered); (5b) You can be friends with anybody if he or she complies with fair principles (since your social status depends on your own achievements and not on your formal affiliations). (6a) You can start your own business using loans from people you trust, regardless of their background, and family support (since your business partners will judge you by your performance); (6b)You cannot start your own business without family investment and moral support (since your business partners will consider your family background). (7a) It is necessary to show off wealth and social rank in public and private life (since your standing at your workplace is interrelated with your private life); (7b) One does not have to show off one's wealth and social rank in private (since your status in private and public life is separate).

Table 5: Achieved versus Ascribed Status

Table 5: Achieved versus Ascribed Status

Statement	Supporters of it	Non-Response
Achieved Status 1a, 2a, 3a, 4b, 5b, 6a, 7b	528(76%)	6
Ascribed Status 1b, 2b, 3b, 4a, 5a, 6b, 7a	161 (23%)	5
	99 %	1%

 Copyright © International Conference on New Horizons in Education Conference (INTE)

CONCLUSIONS

The analysis of the questionnaires demonstrated that students are not particularly in favor of unequal influence and different roles for students and teachers at their secondary school and that they would like to promote these ideas in other parts of their lives. Only 35% of students agreed that relationships should be formal and should involve a hierarchical component. The results of research realized by Hofstede and his team (Hofstede, 2001) regarding the Czech economic population found that Czechs are listed among countries with a high power distance index where the population more or less accept power asymmetry between superiors and subordinates in organizations and institutions (67%). Nevertheless, the results of the recent research realized at Prague secondary schools have shown intergenerational differences concerning the perception of power by Czechs, i.e. a tendency to replace vertical forms of communication with horizontal ones.

The analysis of the questionnaires demonstrated that students are not completely in favour of being protected by their families and friends and that they are more or less in favour of fair principles. Only 41% of students agreed that preferences should be made on the basis of family background or informal position and they endorsed equal principles not only at school but also in other parts of life. The results of research realized by Fons Trompenaars regarding the Czech economic population found that Czechs are listed among particularist nations where clientelism as well as a merger between the private and public domains of life are omnipresent (Thornton & Bureš, 2012, pp. 46 - 62).

Nevertheless, the results of the recent research realized at secondary schools in Prague have shown intergenerational differences concerning a disrespect of universal principles such as laws and other regulations, i.e. the tendency to replace various forms of favoritism with fair treatment of all the actors involved.

The analysis of questionnaires demonstrated that students are not afraid of uncertainty and that – at least to a certain degree - they are willing to accept risks. Only 28% of students agreed that social environments, including their schools, should be based on strict rules enforced by different authorities, including their teachers. The results of the research realized by Hofstede and his team (Hofstede, 2002) regarding the Czech economic population found that Czechs are listed among nations with a high uncertainty avoidance where, similarly to countries such as Austria or Germany, actors are expected to agree with official state doctrines (including scientific ones) and the deliberation of individuals has been considered to be a potential threat. Nevertheless, the results of the recent research at secondary schools in Prague have shown intergenerational differences regarding resistance to innovation and new ideas, i. e. the tendency to replace a lack of tolerance of non-systemic phenomena with an approach seeing risks as opportunities.

The analysis of questionnaires demonstrated that students only partially share collectivistic worldviews and that they are aware of individual responsibility for their education and advancement. Only 37% of students thought that the collective at their secondary schools should be a higher unit and that individual students should comply with its needs. The results of the research realized by Hofstede and his team (Světlík, 2003, pp. 50 - 51) regarding the Czech economic population found that Czechs are listed among collectivist nations where the interests of the group are more important than the interest of the individual (56%). Nevertheless, the results of the recent research at Czech secondary schools have shown intergenerational differences regarding the superiority of the group interests to those of the individual; i. e. a tendency to replace strong bonds between the group and the individual with looser ones.

The analysis of questionnaires demonstrated that students are more or less convinced that their social status should be achieved and not ascribed by variables such as education, family background, age, etc. Only 23% of students think that their social status at their school as well as in other parts of their life should be ascribed and that it should be only partially a result of their individual efforts. Hofstede and his team found that that there is correlation among power distance, uncertainty avoidance and collectivism versus individualism, not only in the case of Czechs but also in the case of other European and non-European nations: correspondence among these variables also influences arguments concerning the source or justification of social status. To put it more concretely, the combination of a low power distance index, low uncertainty avoidance index and diversion of collectivism found by means of the research in Czech secondary schools have been important values for the justification of social status by means of individual achievement.

REFERENCES

Aronhime, R. (1997). *Culture Matters. The Peace Corps Cross-Cultural Workbook*. Washington, Peace Corps.
Bennett, M. (1998). *Basic Concepts of Intercultural Communication.* Yarmouth, Maine, Intercultural Press.
Booth, W., Colomb, G. & Williams, J. (1995). *The Craft of Research*. Chicago, University of Chicago Press.
Gannon, G. (1994). *Understanding Global Cultures*. London, Sage Publications.
Giddens, A. (1997). *Sociology.* Cambridge, Polity Press.
Hofstede, G. (2001). *Culture's Consequences.* Thousand Oaks, Sage Publications.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Hofstede, G. (2002). *Exploring Culture: Exercises, Stories and Synthetic Cultures*. London, Intercultural Press.
Peterson, B. (2004). *Cultural Intelligence. A Guide to Working with People from Other Cultures*. London, Intercultural Press.
Stevens, P. & Görgöz R. (2010). Exploring the Importance of Institutional Contexts for the Development of Ethnic Stereotypes: A Comparison of Schools in Belgium and England. In: *Ethnic and Racial Studies* 33 (8): 1350 - 1371.
Storti, C. (1990). *The Art of Crossing Cultures.* Intercultural Press, 1990.
Světlík, J. (2003). *Marketing pro světový trh [Marketing for World Market]*.Praha, Grada.
Thorton, R.B. (2012). Cross-Cultural Management: Establishing a Czech Benchmark. In: *Economis and Management* 3: 46 - 62.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTELLECTUAL STRUCTURE OF STEM EDUCATION IN EDUCATIONAL RESEARCH

Mutlu Tahsin ÜSTÜNDAĞ
Gazi University, Gazi Faculty of Education,
Computer Education and Instructional Technologies, Turkey
mutlutahsin@gmail.com

Haydar YALÇIN
İzmir Katip Çelebi University,
Faculty of Humanities and Social Sciences,
Information Management and Technologies, Turkey
haydar.yalcin@gmail.com

Erhan GÜNEŞ
Ahi Evran University, Faculty of Education,
Computer Education and Instructional Technologies, Turkey
guneserhan@gmail.com

ABSTRACT
The aim of this research is to put forward the intellectual structure of STEM (Science, Technology, Engineering and Mathematics) education concept in educational research. STEM education has emerged as a highly accepted paradigm in education especially in the USA and European countries in recent years. The theoretical substructure of STEM education that is seen as an important factor in attaining the expected qualities in human profile for the changing conditions of the 21st century has started to be formed. STEM education prioritizes team study and interdisciplinary approach. It is of great importance to put forward the intellectual structure of STEM education, that will play an important role in training people for the conditions of the present day, for better comprehension by the researchers, curriculum developers and practitioners. Moreover, when the literature on this concept is investigated, lack of comprehension of the concept and vision is seen. For this reason, the investigation of the development and current status of STEM education will contribute to literature in terms of understanding the intellectual structure of the concept. The dataset of the study is composed of all types of studies in at least one of the categories of Education & Educational Research and "Education, Scientific Disciplines" published in Web of Science (WoS). Basing on WoS categories the relationship of the concept with other disciplines have been examined and visualized with web graphics on the accessed publications. It has been possible to refer to which focus the scientific data has been developed nourishing via the journals by mapping the journals in the dataset as citation giving and citation attaining. In addition to these, contribution of disciplines and countries to STEM education has been compared.

Keywords: Scientometrics, STEM education, knowledge diffusion

INTRODUCTION

In recent years STEM education that is shaped by science, technology, engineering and mathematics disciplines altogether has emerged as a new paradigm instead of a traditional science education. Bybee (2010b) defines STEM education as "although focusing on science and mathematics disciplines including technology and engineering fields". For Dugger (2010) STEM education which advocates the integration of information and skills on science, technology, engineering and mathematics fields by including engineering design processes into science education aims to educate students as individuals who are open to communication, systematical thinkers, creative, possessing ethical values and ones who can present the most convenient solutions to problems by directing them to cooperation to different disciplines like an engineer. Lacey and Wright (2009) sees STEM education -that aims to attain individuals the required knowledge and skills to see the problems with an interdisciplinary point of view- important for leadership in scientific field and economic growth.

The responsibility of countries to raise and train the individuals according to the necessities of today's fast changing and developing technology brings forward a must. Because qualified human resource means a strong economy. At this point it can be said that individuals should attain skills such as critical and analytical thinking, investigate, inquiry, problem solving and decision making. It is a reality in the competitive business World that countries producing information and technology establish superiority on the other countries in economic and

 Copyright © International Conference on New Horizons in Education Conference (INTE)

social domains. Furthermore, technology education or technology literacy is of great importance at this point. Sanders (2008) states this situation as: "*Technology education has a key role to play in integrative STEM education, and could play a significant role in twenty-first century American education if it can demonstrate relevance in this way.".* Miaoulis (2009) points out that today when the country economies are determined by information and innovations it is very important to train engineers and scientists and increase science and technology literacy. The reality that qualified human resource can only be achieved via qualified education proves itself day by day. Countries producing information and technology place great importance to their people's mathematics and science educations. For these reasons, in the USA necessity for a science education based on engineering design has been emphasized (Çavaş, Bulut, Holbrook & Rannikmae, 2013). In a science education based on engineering design, the design process correlate with the real life. Furthermore, this kind of education provides the learners to realize that there is more than one solution to problems and understand the importance of cooperative work (Ercan & Bozkurt, 2013; National Research Council, 2012).

It is possible to say that there is hereupon an apparent critical concentration in countries that pay attention to STEM education. At this point the report written by Marginson, Tytler, Freeman, and Roberts (2013) titled *STEM: country comparisons: international comparisons of science, technology, engineering and mathematics (STEM) education*" shows that some countries have started to receive the fruits of this education. The emergence of these kinds of comparison and evaluation reports show that there has been some amount of concentration in STEM education. However, some studies in the literature reveal that although some countries have comprehended the philosophy of STEM education, they have not realized it fully or there is still need to research on this concept. The study conducted by Brown, Brown, Reardon, and Merrill (2011) starts as follows: *"Many in the field of technology education have embraced STEM education, but there is a lack of understanding of STEM education in schools.".* These statements imply that there is a need for the serious support of the academic community for the practitioners in schools and model practices that will help the comprehension of STEM education that is coherent with the internal dynamics and cultures of each country. To shortly summarize the study and its results we can say that the study aimed to find out whether teachers, students and school principals could comprehend STEM education or not. A questionnaire composed of open-ended questions have been used as data collection tool as well as observations and interviews have been conducted. According to the findings of the study it has been seen that STEM education has not been comprehended. Another result is that STEM education has no vision. Yet another study has been carried out by Breiner, Harkness, Johnson, and Koehler (2012). The title of the study summarizes the situation best by stating "*What Is STEM?".* The results of the study titled "*A Discussion About Conceptions of STEM in Education and Partnerships"* indicated that there is not a consensus on STEM concept. Bybee (2010a) has tried to set forth a 2020 vision for STEM education. This study implies that there is still much more to be done. Yet it is seen in literature that there is a need for understanding STEM education and concept. When we examine the situation in our country, STEM education should be defined specific to our country within the scope of the aims in 2023 Vision and Ministry of National Education (MEB) strategic documents (Çorlu, Adıgüzel, Ayar, Çorlu, Özel, 2012). However, studies on STEM education in our country seem to be in the preparation phase. The findings of the study conducted by Marulcu and Sungur (2012) indicate that studies on STEM education are in the preparation phase even in teacher training system and teacher candidates are not prepared to STEM education.

As seen from the literature that there is not a concept integrity but also lack of vision; this study is thought to contribute to this field. And as revealing the intellectual structure of STEM concept will help STEM concept and STEM education to be better understood and offer a solution and guidance for researchers and practitioners shows the importance of this study. It would be useful to include some research done in this context. The study conducted by Greenseid and Lawrenz (2011) investigated a less studied field; they studied the usage of citation analysis on the influence of program evaluations in STEM education. Their citation analysis has been focused on three STEM education program evaluations' products. The aim of the study was comparing the influence of the STEM education evaluations. In analyzing the citations; single-level Poisson regression analysis, content analysis and network analysis have been conducted. With the purpose of whether citation data usage is functional in comprehending the evaluation impacts; the result has been although with limited extent, methods of citation data analysis supports the comprehension of the influence of extensive scale and multi-site STEM education and evaluation fields.

Another research by Assefa and Rorissa (2013) titled "*A bibliometric mapping of the structure of STEM education using co-word analysis"* sought to define the structure that underlies STEM education and its main areas as well as the relationship between them by using co-word analysis, visualization and bibliometric mapping tools. The authors used co-occurrence analysis in order to organize bibliometric maps. With this "word association method" there has been a significant relationship between word that "co-occur" has been figured.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Composed of two databases 7265 documents have formed the data of the study.

We are in the opinion that an increase in the studies that will help better understanding of STEM education concept in literature will provide better formation and practices of the concept in the future.

THE AIM OF THE STUDY

The aim of this research is to put forward the intellectual structure of STEM (Science, Technology, Engineering and Mathematics) concept in educational research. The investigation of the emergence, development and current situation of the concept will contribute to the literature in terms of understanding the intellectual structure of the concept. Our research questions that will serve for this aim are as follows:

1. How is the distribution of STEM research according to countries?
2. How is the distribution of STEM research according to WoS categories?
3. How is the distribution of STEM research according to WoS research domains?
4. How is the distribution of keywords WoS and the authors give to STEM researches?
5. What are the prominent disciplines that STEM researches nourish from?
6. From which disciplines is the knowledge dissemination in STEM researches provided?

METHOD

In this research the current situation of STEM education research in WoS publications has been tried to be put forward; so it is a descriptive research. In descriptive research the situations are presented wholly and exactly as far as possible (Fraenkel, Wallen and Hyun, 2014)

The Dataset of the Study

The dataset of the study was obtained by querying from Web of Science (WoS). "Topic research" code that makes searches in abstract, title and key words of the publications in WoS was used. At this stage it was seen that the concept "STEM" is used frequently in field of medicine. For this reason in order to exclude the publications in medicine field NOT=(TS=("stem cell") statement was added to the query. The final version of the query to reach the dataset is thus: (TS=("Science, Technology, Engineering and Mathematics" OR "STEM" or "STEM EDUCATION") AND TS=(education)) NOT=(TS=("stem cell")). Via this query all types of publications in SCI-E, SSCI, A&HCI, CPCI-S, CPCI-SSH and ESCI indexes between 1945 and 2016 were accessed. The total number of the accessed publications is 1985. First, the accessed 1985 publications were analyzed via "Vantage Point" and "SciMAT" software and publications that have no relation with STEM education or those published in the field of medicine were filtered and a separate dataset was formed from publications that have at least one of the "Education & Educational Research" and "Education, Scientific Disciplines" categories. The final number of the publications was 908. In all the analyses and visualizations dataset that has been composed of these 908 study was used.

Data Analysis

As the dataset of the study was very big and complex, data mining techniques were used in the analysis of the data obtained. One of the definitions of data mining in literature has been made by Larose (2014) as "the process of discovering useful patterns and trends in large datasets". Bibliometric analysis was used in the study for providing to seeing the trends and patterns. According to Pritchard (1969) bibliometrics is "the application of mathematical and statistical methods to books and other media of communication". Glanzel (2003) states that in bibliometric studies of scientific publications the information types to be used are as follows: title of the journal, authors' names, corporate addresses, references used, type of the documents, publication title, abstract, keywords, acknowledgements and subject headings. Again for Glanzel (2003) bibliometric method has been widely used for research management and science policy for more than 10 years. Data of the study has been analyzed via "Vantage Point" and "SciMAT" software and "Pajek" software has also been used for analysis results.

FINDINGS

This study sought answers to six questions. Findings of these six research questions were presented with separate titles according to their orders in the aim section.

1. How is the distribution of STEM research according to countries?

Concerning the research question, Figure 1 is presented:

 Copyright © International Conference on New Horizons in Education Conference (INTE)

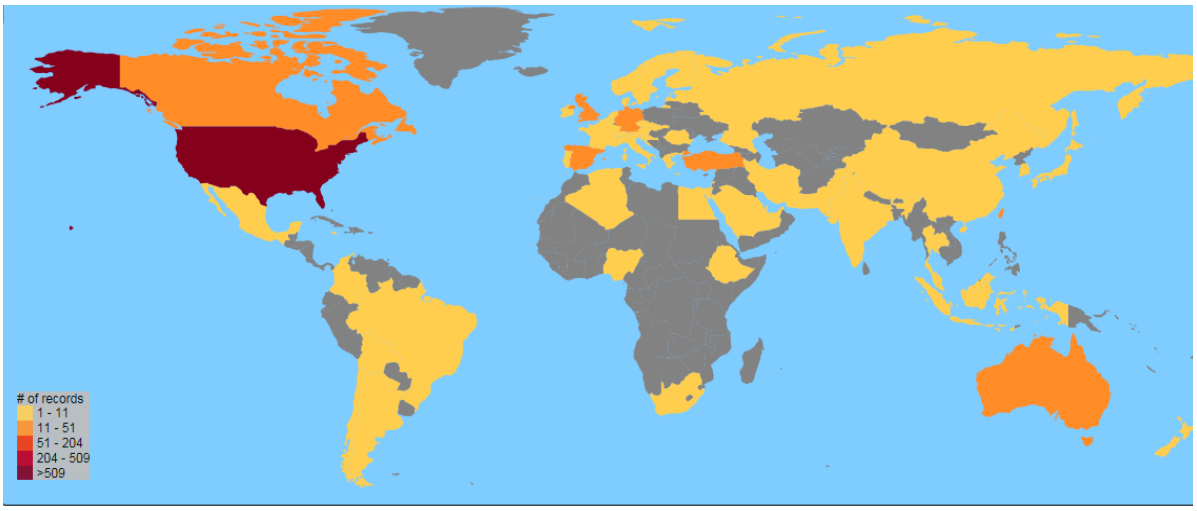


Figure 1. Distribution of STEM Research According to Countries

The publication distribution according to the country published in, according to author address is seen in Figure 1. It is possible to state that North America countries are pioneers for STEM studies according to Figure 1. They are seen to be followed respectively by European countries, Australia and Turkey. When the literature is examined, the starting time of the USA for STEM education studies go back to 1990s and have accelerated since the last decade.

2. How is the distribution of STEM research according to WoS categories?

Created by using Aduna algorithm, when Figure 2 is examined it is seen that the biggest cluster of WoS categories related to STEM education are respectively *Education & Educational Research* and *Education, Scientific Disciplines.* When the relations of the publications with other categories are investigated it is easily observed that they are related with many WoS categories.

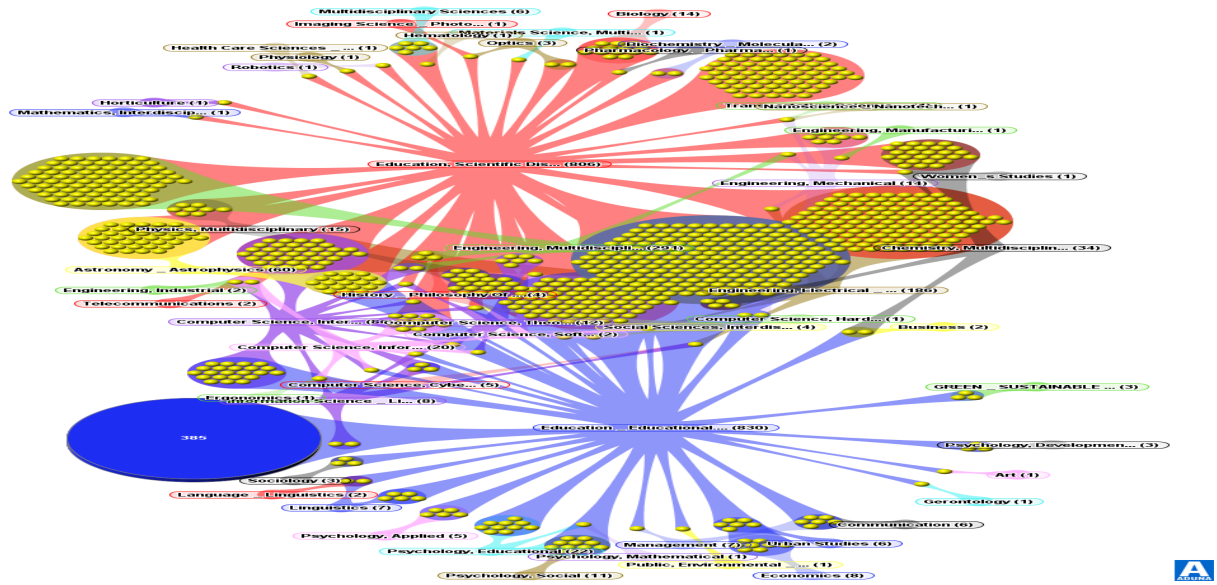


Figure 2. The Distribution of STEM Research According to WoS Categories and the Relationship Status (Aduna Alg.)

When Figure 3, created by Pajek, is examined the categories and the proximity to the center can be seen more clearly:

 Copyright © International Conference on New Horizons in Education Conference (INTE)

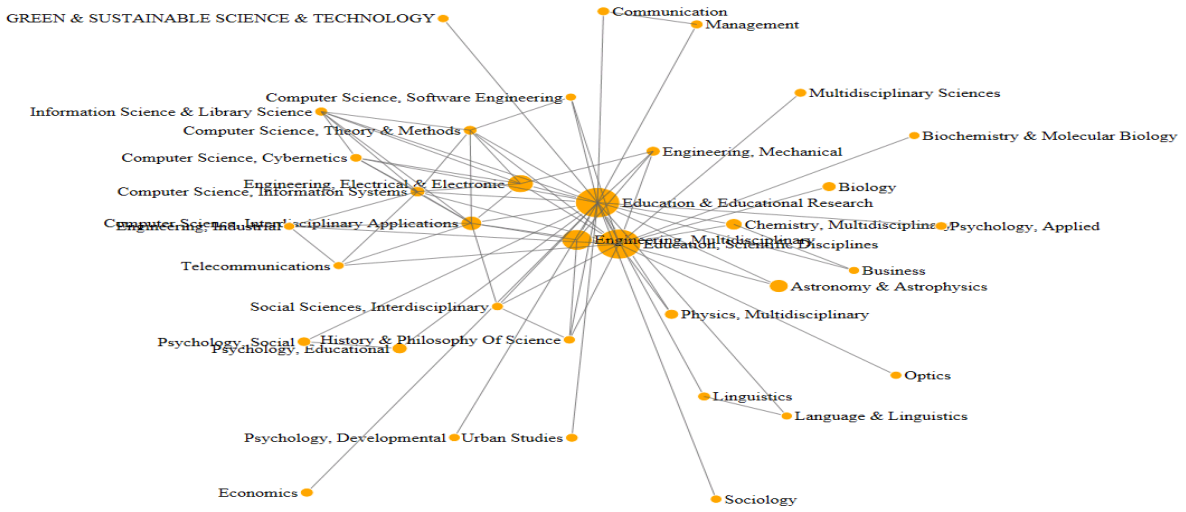


Figure 3. The Distribution of STEM Research According to WoS Categories and the Relation Status (Pajek)

When Figure 3 is analyzed again *Education & Educational Research* ile *Education, Scientific Disciplines* Categories show themselves. Just beside them appears *Engineering, Multidisciplinary* category as the biggest node. We could say that they are followed respectively by the other categories of *Engineering* fields with *Astronomy & Astrophysics, Interdisciplinary Applications, Computer Science, Cybernetics, Information Management, Social Sciences* categories. These all reveal how large amount of discipline STEM concept addresses and studies. In other words, it is possible to say that the concept that is thought to be about just 4 disciplines is in fact examined by researchers studying in many disciplines.

3. How is the distribution of STEM research according to WoS research domains?

It is possible to say after the analysis of STEM education studies in WoS according to the research domains with Figure 4 created by Aduna algorithm that, studies indexed under *Education & Educational Research* study field are published more in journals that are indexed in *Science* ve *Technology Research, Astronomy & Astrophysics* study fields. Cluster with the largest ratio of publication is again seen to belong to journals in *Education & Educational Research* research domains.

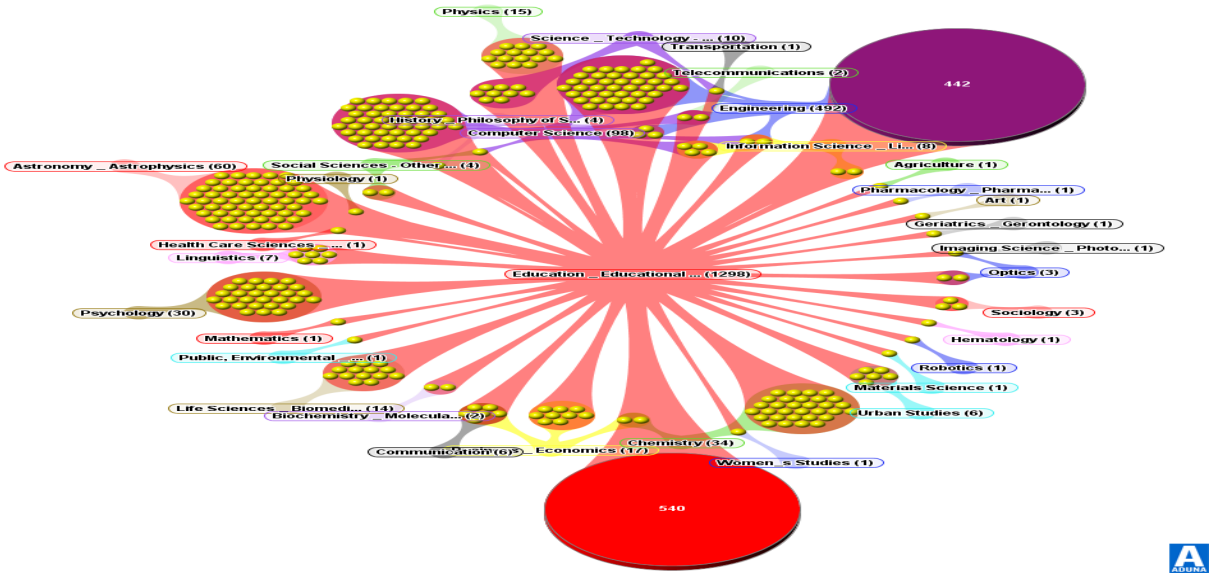


Figure 4. The Distribution of STEM Research According to WoS Research Domains and The Relationship Status (Aduna Alg.)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Figure 5 prepared by using Pajek in the analyses is presented to closely examine the relationship among WoS research domains:

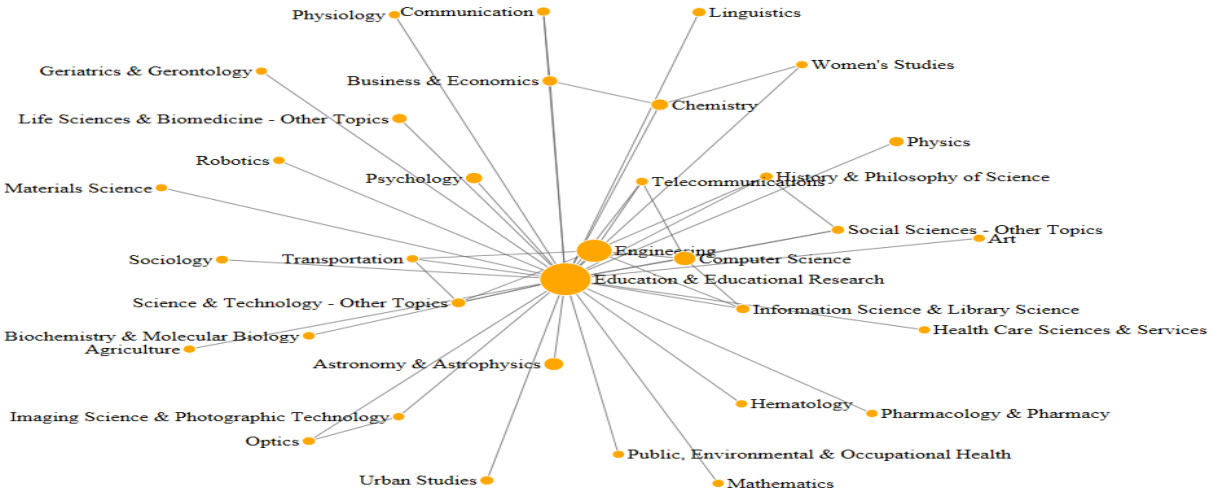


Figure 5. The Distribution of STEM Research According to WoS Research Domains and The Relationship Status (Pajek)

Education & Educational Research research domain could be possibly stated as the biggest node in the center when Figure 5 is examined. It is followed respectively by *Engineering, Computer Science, Astronomy & Astrophysics* and *Psychology.*

4. How is the distribution of keywords WoS and the authors give to STEM research?

The visual created by Aduna algorithm related with the key words WoS gives to the studies is presented in Figure 6:

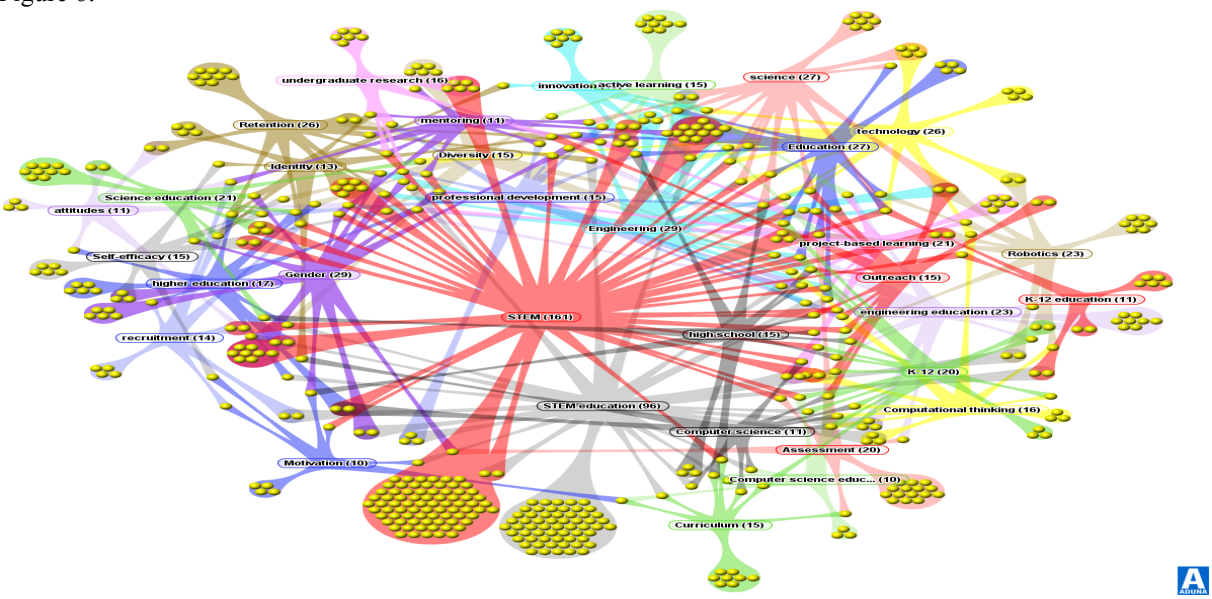


Figure 6. The Distribution of Keywords WoS Gives To STEM Research (Aduna Alg.)

It is seen that research fields such as *science education, higher education, motivation, robotics, computational thinking, innovation active learning* and *curriculum* will increasingly have a research field in the forthcoming period when Figure 6 is examined and STEM field is closely looked at. It is again possible to state that the field is in a close relationship with disciplines such as *computer science, technology, engineering* and etc. considerably.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

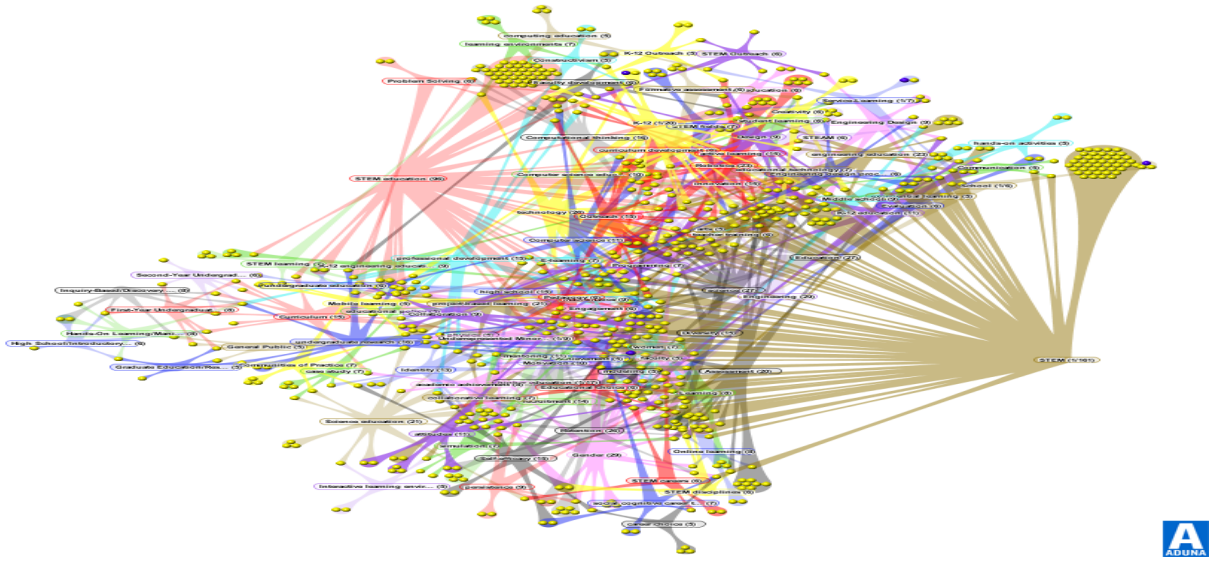


Figure 7. The Distribution of Keywords (100+) The Authors Give to STEM Research (Aduna Alg.)

When Figure 7, illustrating the keywords given to the articles by the authors, is examined it is seen that the starting point of all articles in STEM field is STEM. When we examine how the discipline is shaped under STEM we see that the studies are stated with rather different words. A more systematic way is seen to be followed in classifying the studies the keywords of which are given by WoS.

5. What are the prominent disciplines that STEM research nourish from?

Journal based science map is one of the scientific presentation methods provided by Sci2 program depending on University California San Diego science map system. This map has been created by using 2001-2010 Web of Science and 2001-2008 SCOPUS dataset. There are 13 main research fields on the map. The main aim of the map is to demonstrate which research fields do the journals in the examined dataset focus on. Circle caliber in the presentation illustrates the size of the publication in the research field.

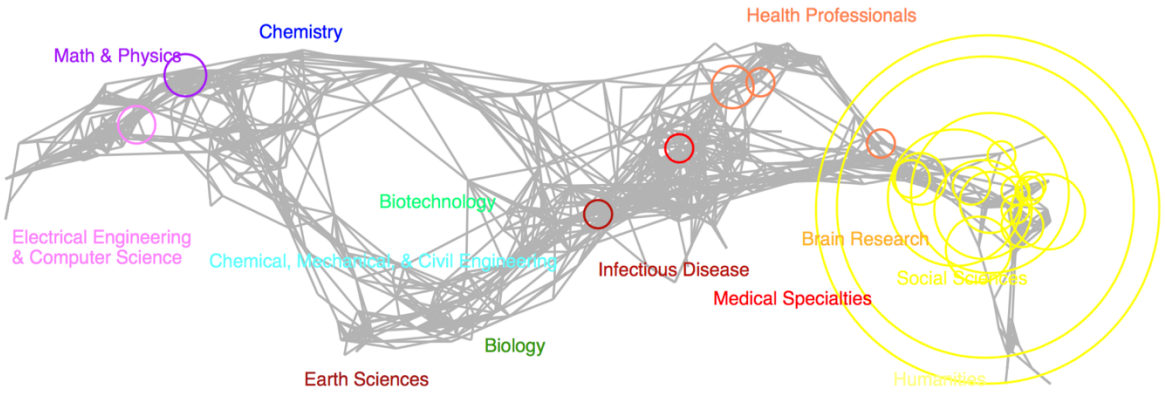


Figure 8. Prominent Disciplines That Nourish STEM Research (Journal Reconcile)

Even though science, engineering, mathematics fields seem to be the top priority for STEM education; the number of the publications towards social sciences and human sciences attract attention as concepts about psychology like cognitive structure, perception, self-realization and etc. still have an important place in educational practices. It is possible to say that the volume stems from the journals oriented towards psychology and educational sciences. In addition to the journals towards social and human sciences, it is observed that a remarkable publication volume has started also in journals published in especially Mathematics and Physics (Figure 8).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

6. From which disciplines is knowledge dissemination in STEM researches provided?

Binary map presentation has been developed for the aim of visualizing the citation process in the scientific journals according to the database format included in CiteSpace software. The visual design covers the journals in 2011 Journal Citation Report (10.546 journals). Dual binary map is composed of two sub-maps. Map in the right side expresses the publications cited whereas the map in the left side expresses the publications that give citations. Scientific research fields are clustered with VOS or Blondel Algortym for specifying the study fields. Publications in the general presentation dataset form connections towards the cited journals according to their citation numbers and frequency in the dataset. Whether this flow is meaningful or not can be controlled via the help of normalized Z-values.

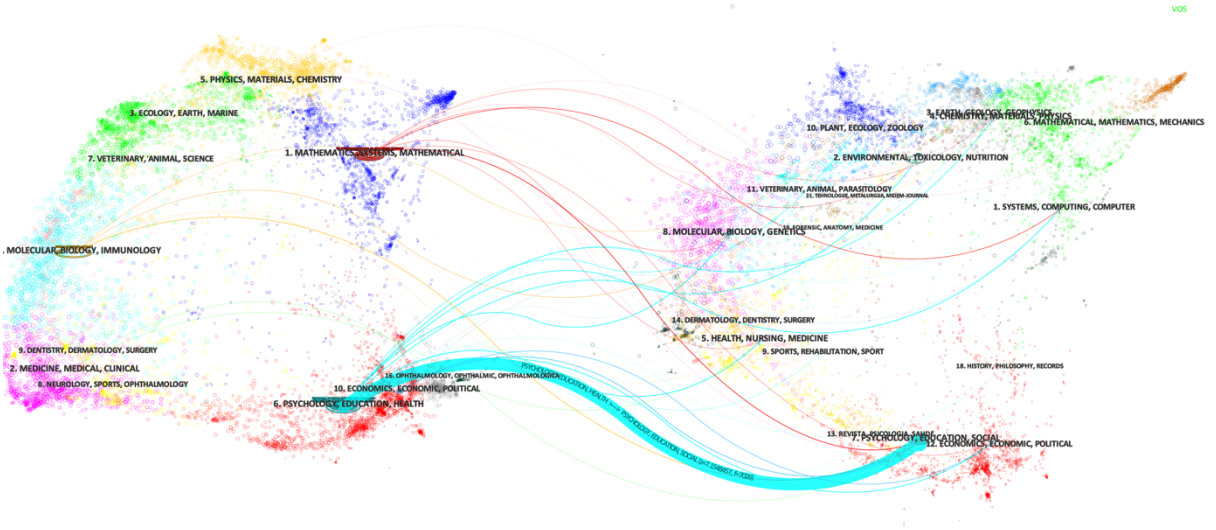


Figure 9. Knowledge Dissemination of STEM Researches

It is observed from the visualization made for the aim of knowledge dissemination to STEM field that there is a knowledge dissemination towards *psychology, education* and *social science* field from *psychology, education* and *health* field. In other words; in forming STEM literature *psychology* and *health* literature especially nourishes *psychology, education* and *social science* fields.

CONCLUSIONS

Among the results of our research; the first is that even though STEM field seems to be related with four fields, as a result of our analyses, arising by the basic principles and methods used in STEM education, the intensive effect of concepts that are directed to psychology's investigation areas can be reported. According to another result it is possible to state that basic distinctive qualities about STEM field has not arisen yet. However, the fact that publications about the concept are still published in especially social and human sciences journals could be a guiding information for decision and policy makers. Yet it is possible to say that this information is important for researchers and graduate students in order to follow the related literature.

Being able to visualize the subject fields, the related literature nourishes from could be guiding in determining the competences needed to give the training stated in the literature. On the other hand, it is obvious that it will contribute to see whether STEM education has developed as it should be or is following the traditional ways as seen in the other education literatures. The quantitative contribution to the related literature is seen to be made from the USA and it is possible to state that the studies go back to the beginning of 90s.

In our study we have tried to provide the big Picture of the field by putting forward the intellectual structure of the field. Among the future research to be conducted, especially on which sub-subjects are concentrated via the analyses made in article abstracts should be established. Moreover, with citation analysis studies, determining the basic reading list towards the field and identifying the Pioneer author and institutions of the field could be provided.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

REFERENCES

Assefa, S. G., & Rorissa, A. (2013). A bibliometric mapping of the structure of STEM education using co-word analysis. *Journal of the American Society for Information Science and Technology, 64*(12), 2513-2536.

Breiner, J. M., Harkness, S. S., Johnson, C. C., & Koehler, C. M. (2012). What is STEM? A discussion about conceptions of STEM in education and partnerships. *School Science and Mathematics, 112*(1), 3-11.

Brown, R., Brown, J., Reardon, K., & Merrill, C. (2011). Understanding STEM: Current perceptions. *Technology and Engineering Teacher, 70*(6), 5-9.

Bybee, R. W. (2010a). Advancing STEM Education: A 2020 Vision. *Technology and Engineering Teacher, 70*(1), 30-35.

Bybee, R. W. (2010b). What is STEM education? *Science, 329*(5995), 996-996. doi:10.1126/science.1194998

Çavaş, B., Bulut, Ç., Holbrook, J., & Rannikmae, M. (2013). Fen eğitimine mühendislik odaklı bir yaklaşım: ENGINEER projesi ve uygulamaları. *Fen Bilimleri Öğretimi Dergisi, 1*(1), 12-22.

Çorlu, M. A., Adıgüzel, T., Ayar, M. C., Çorlu, M. S., & Özel, S. (2012). *Bilim, teknoloji, mühendislik ve matematik (BTMM) eğitimi: Disiplinler arası çalışmalar ve etkileşimler.* Paper presented at the X. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Niğde, Turkey.

Dugger, W. E. (2010). *Evolution of STEM in the United States.* Paper presented at the 6th Biennial International Conference on Technology Education Research, Queensland, Australia.

Ercan, S., & Bozkurt, E. (2013). *Expectations from engineering applications in science education: decision-making skill.* Paper presented at the The International Organization for Science and Technology Education (IOSTE); IOSTE Eurasian Regional Symposium & Brokerage Event Horizon 2020 Symposium Antalya, Turkey.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2014). *How to design and evaluate research in education* (9 edition ed.): McGraw-Hill New York.

Glanzel, W. (2003). Bibliometrics as a research field. A course on theory and application of bibliometric indicators. (Course Handouts). Retrieved from http://nsdl.niscair.res.in/jspui/bitstream/123456789/968/1/Bib_Module_KUL.pdf.s.

Greenseid, L. O., & Lawrenz, F. (2011). Using citation analysis methods to assess the influence of science, technology, engineering, and mathematics education evaluations. *American Journal of Evaluation, 32*(3), 392-407.

Lacey, T. A., & Wright, B. (2009). Occupational employment projections to 2018. *Monthly Labor Review, 132*, 82-118.

Larose, D. T. (2014). *Discovering knowledge in data: an introduction to data mining*: John Wiley & Sons.

Marginson, S., Tytler, R., Freeman, B., & Roberts, K. (2013). *STEM: country comparisons: international comparisons of science, technology, engineering and mathematics (STEM) education. Final report* (0987579800). Australian Council of Learned Academies, Melbourne, Vic. Retrieved from http://hdl.handle.net/10536/DRO/DU:30059041

Marulcu, İ., & Sungur, K. (2012). Fen bilgisi öğretmen adaylarının mühendis ve mühendislik algılarının ve yöntem olarak mühendislik-dizayna bakış açılarının incelenmesi. *Afyon Kocatepe Üniversitesi Fen Bilimleri Dergisi, 12*(1), 13-23.

Miaoulis, I. N. (2008). Engineering the K-12 curriculum for technological innovation. Retrieved from http://legacy.mos.org/NCTL/docs/MOS_NCTL_White_Paper.pdf

National Research Council [NRC] (2012). *A Framework for k-12 science education: practices, crosscutting concepts, and core ideas*. Washington DC: National Academic Press.

Pritchard, A. (1969). Statistical bibliography or bibliometrics. *Journal of documentation, 25*, 348-349.

Sanders, M. (2008). STEM, STEM Education, STEMmania. *Technology Teacher, 68*(4), 20-26.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTERDISCIPLINARY APPROACH IN FOREIGN LANGUAGE TEACHING: USE OF VIDEO MATERIAL IN FORMING CULTURAL COMPETENCE OF INTERNATIONAL RELATIONS STUDENTS

Natalia KUZMINYKH
Ural Federal University, Russia
kuzminykh.natalia@yandex.ru

Ksenia Tabarintseva ROMANOVA
Ural Federal University, Russia
kmromanova@mail.ru

ABSTRACT
The purpose of this paper is to describe how interdisciplinary approach, and, in particular, use of video material, can contribute to the process of formation of cultural competence, which is considered to be crucial in university students' preparation by educators and included into new state educational standards. Interdisciplinary approach in language teaching is viewed as intersection between disciplines and methods. Case study of introduction of fiction film to Italian Language Curriculum, with its results, is presented.

INTRODUCTION

The value of interdisciplinarity is widely acknowledged in modern education. UNESCO report entitled, correspondingly, "Interdisciplinarity in General Education", which dates back to 1986, defines it as "a form of co-operation between different disciplines with regard to problems whose complexity is such that they can only be apprehended through the convergence and careful combining of different points of view". Interdisciplinarity can be performed in different forms: as Interdisciplinarity of disciplines, Interdisciplinarity of concepts or as Interdisciplinarity of methods (1986, p. 9-11).

In case of foreign language, many researches (Zimnyaya, 1991) point to a seemingly "lack of object" of this discipline, for language is studied, in a first place, as a mean of communication and often becomes an instrument for discovering other fields of knowledge, related both to Humanities and Science. Thus, it becomes relevant to connect teaching of foreign language to other disciplines. Interdisciplinary approach in language learning is believed to be highly efficient as it brings to systematization of knowledge and practical skills acquired before.

This approach is found in line with current trends in modern education, i.e. the change of educational paradigm to a more individual-oriented one, when the student is expected to develop various competences crucial for his/her personal and professional growth. Thus, one of the goals in teaching foreign language is developing such language skills that are coherent with students' major, applicable for future career, useful for interpersonal and intercultural communication. In this setting cultural competence is rightfully viewed as crucial one for the correct and appropriate use of language.

This disciplines' intertwining becomes even more evident in case of students of International Relations, as the latter study History, Theory of International Relations and Foreign Languages in equal amount. Better professional competences are formed by implementing interdisciplinary approach: it is performed in terms of content (use of texts and other materials related to specific professional topics), and methods and forms of work (individual/group, class/home).

Indeed, brand new Educational Standard for International Relations (in force in Russian Federation from 2016, FGOS 3+) requires that a graduate of Bachelor program has the following general cultural competences among others: the ability to use basics of philosophical knowledge to form a worldview (1), the ability to analyze basic steps and trends of historical development (2), knowledge of the main methods, ways and means of production, storage, and processing of information; computer skills; ability to handle information on a global computer networks (5), the ability to communicate in Russian and foreign languages (orally and in writing) to meet the challenges of interpersonal and intercultural interactions (7), the ability to work in a team, being tolerant towards social, ethnic, religious and cultural differences (8).

Development of these competences is more likely to be successful due to interdisciplinary approach, i.e. using basic foreign language, set of professional disciplines, and innovative tools and teaching methods.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

One of the examples of tasks aimed at interdisciplinary synthesis of a foreign language and professional training component is to view films and videos related to professional topics. Reference to watching TV and films as one of the activities aimed to develop audio-visual reception of a language learner is contained in CEFR (Common European Framework of Reference for Languages).

Interest towards visual component in teaching is not accidental: the dominance of visual culture is acknowledged in various fields. Concepts of "visual turn" and "clip thinking" are not new and have already been affirmed in philosophical and other discourses. It is not just a simple increase in visual production in terms of quantity, but of a mode of perception that is changing. Studies show the transformation of the speed of the perceptual and cognitive reactions of new generations, certifying that the time required for basic reactions decreases (e.g. Colzato, Wildenberg, 2012).

Visual space simulates all the necessary socio-cultural characteristics of society and has a great effect on the development of socio-cultural competence of students who are learning a foreign language outside the language environment.

FICTION FILM AS AN INSTRUMENT OF TEACHING

In accordance with principles of interdisciplinarity and the goals of Educational Standard it has been chosen to introduce video material to the course of Italian Language for the 3-year students of Department of International Relations in Ural Federal University (Ekaterinburg, Russia).

Italian Language Curriculum for the 6th semester covers topics connected to Italian history, from the Prehistory and Etruscans to the 20th century and current socio-political and economic situation. Huge amount of information is presented as an overview, and, in line with the Educational Standard requirements, is aimed to form the ability to analyze trends of historical development. Special attention is given to the period following the WWII and further, to the present time, out of its particular relevance to International Relations Studies.

Hence, while choosing appropriate video material the following characteristics were considered:

- language material (suitable for the 3-year students, B1-B2 CEFR);
- pertinence of the video to the topics covered in the semester (post-war Italy up to present days);
- quality of video (professionally-made, suitable for educational purposes);
- accessibility of video (whether it is available on DVD, online or in streaming).

The choice was made for the fiction film *La meglio gioventù* (*The Best of Youth*, 2003, director Marco Tullio Giordana), a 6 hours long family saga consistent with the above-mentioned requirements: in terms of language standard Italian is used, with rare inclusions of dialect words (thus, it is adequate to intermediate and upper-intermediate level); narration starts in 1966 and finishes in 2003, covering all the major events of Italian history of that period, from "economic boom" to the drastic changes in political life after 1992; the film is advised for Italian courses (Diadori, Micheli, 2010); video is available on DVD and in streaming on YouTube, thus there is an opportunity to use it in a classroom and for home assignments, as well.

Italian History Class was held once a week for two academic hours, as a part of Italian Language Curriculum, together with classes on grammar, conversation and business language course, of total amount of 8 academic hours per week.

Before the start of this course students were already familiar with some events of Italian modern and contemporary history due to other disciplines related to their major, i.e. International Relations, thus, a brief quiz was offered to verify their entrance knowledge of Italian history of 20th century. Then, an introduction to the film was made, with a reference to its director, actors, set (Rome, Turin, Florence, Sicily). After that the students were encouraged to watch the first sequence of the film and make notes about characters (their relationships, role in the story, etc). The sequence was shown in Italian with Italian subtitles to familiarize students with the way characters speak and foster comprehension of material.

During the course various types of assignments were given:

- general comprehension exercises (e.g. to watch the sequence at home/in class and make a brief/detailed retelling (oral or in writing); to make a list of main characters and write essential information about them (role in the story, description of his/her character, important dates and events related to them);
- vocabulary exercises (e.g. to watch the sequence and fill in cloze in the dialogues; to write down the words relevant to the topic (Scuola e università, Legge e giustizia, Economia etc), to find a synonym/antonym; to give a definition, etc)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

- grammar exercises (e.g. gap-fill exercises, to make a list of certain grammar structures used in a sequence, etc).
-

Supplementary reading (Cernigliaro, 2008) was offered to give more detailed information about the periods showed in the film (Students' movements of 1968, Brigate Rosse, Antimafia, Corruption and Tangentopoli).

At the end of the course students had to write a 150-words essay based on one of the quotes taken from the film, and complete a final test comprising questions on the plot (true of false, to put events in chronological order), grammar exercises (based on structures revised beforehand), and a written task (a brief review).

Video turned out to be an efficient instrument for the course, and certainly increased students' motivation. Apart from learning facts about Italian history and increasing their general language competence, students had the chance to analyze verbal and non verbal behavior of Italian-speaking community. All these factors contribute to development of general cultural competence. During the final assessment and discussion the whole experience was viewed as a positive one.

CONCLUSIONS

The effectiveness of the visual representation of events and foreign language cultural artifacts is undoubtful. Modern digital technology represents a breakthrough in the production and quality of the video, and has a great potential for successful application of video in teaching and learning. Digital video does not only facilitate the perception of the material, creating visual images, but also simulates alternative learning strategies, contributes to the motivation of learners, provides authentic learning content, promotes cooperation and teamwork skills, contributes to the creative potential of students, opens up new possibilities for monitoring and evaluation of students' knowledge, contributes to the creation and strengthening of interdisciplinary relations.

REFERENCES

Cernigliaro, M.A. (2008) *L'Italia è cultura (Storia)*. Roma: edizioni Edilingua.

Common European Framework of Reference for Languages: Learning, Teaching, Assessment. (2016, May 30) Strasbourg, Language Policy Unit. [On-line] Available: http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf

Diadori, P., Micheli, P. (2010) *Cinema e didattica dell'italiano L2*. Perugia: Guerra Edizioni.

Interdisciplinarity in General Education (1986) UNESCO, Division of Educational Sciences, Contents and Methods of Education. [On-line] Available: http://www.unesco.org/education/pdf/31_14.pdf

Зимняя, И.А. (1991) *Психология обучения иностранным языкам в школе*. М: Просвещение. / Zimnyaya, I.A. (1991) *Psihologija obuchenija inostrannym jazykam v shkole*. M: Prosveshhenie.

Приказ об утверждении федерального государственного образовательного стандарта высшего образования по направлению подготовки 41.03.05 Международные отношения (уровень бакалавриата (2016, May 18)*) / Prikaz ob utverzhdenii federal'nogo gosudarstvennogo obrazovatel'nogo standarta vysshego obrazovanija po napravleniju podgotovki 41.03.05 Mezhdunarodnye otnoshenija (uroven' bakalavriata)* [On-line] Available: http://fgosvo.ru/uploadfiles/fgosvob/410305.pdf

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTERNATIONAL ACCREDITATION OF THE MAIN EDUCATIONAL PROGRAM AS POSSIBILITY OF OPENING THE NEW EDUCATIONAL HORIZONS

Loginova I.O., Volkova O.V.
Krasnoyarsk State Medical University
Krasnoyarsk, Russia
loginova70_70@mail.ru

Andrejeva J.V.
Krasnoyarsk State Medical University
Krasnoyarsk, Russia

Serduk T.I.
Krasnoyarsk State Medical University
Krasnoyarsk, Russia

Kononenko I.O.
Krasnoyarsk State Medical University
Krasnoyarsk, Russia

ABSTRACT
Development of education market is followed by formation of the market of services in the sphere of education quality assurance, emergence of demand for an independent external assessment of education quality. The international accreditation of the basic educational professional program gains the special importance at confirmation of graduates training level in "Clinical psychology" specialty, as this is a new branch which was created in the last three decades in Russia as a result of integration of some disciplines, adjacent, but having different history and perspective. First of all, it was formed by such fields of psychology recognized by all world psychological community as a neuropsychology and a pathological psychology, and also by corporality psychology (psychosomatics), psychology of abnormal ontogenesis, psychological correction, and health psychology created a bit later. In 2014 the basic educational program "Clinical psychology" which is being performed in Krasnoyarsk State Medical University underwent procedure of professional-public and also international accreditation. Achieving this result (in addition to other factors) became possible thanks to the collaboration developing since 2013 between Krasnoyarsk State Medical University (Russia) and Klaipeda University (Lithuania). It is possible to declare that the international accreditation procedure certifies and states the strong relations of the higher education institution as implementer of the basic educational professional program with various social institutes and the international partners, providing thereby possibility of career developing for its graduates and opening the new professional horizons for them.

INTRODUCTION
Russian education is undergoing serious changes at the moment, which find the direct reflection in activity of the educational organizations of various levels. The modern educational organizations introduce the existing mechanisms, models, techniques of quality assessment which allow developing various activities of the organization, increasing productivity and efficiency of the work. They also increase competitiveness of the educational organization that, in turn, opens the new educational horizons. Development of education market is followed by market of services formation in the sphere of education quality assurance, emergence of demand for an independent external assessment of education quality. Quality education is a competitive education, only in this case it will provide the present and the future of our country, realization of innovative economy and increase of efficiency in all spheres of human activity (Nikulina, Buyankina & Loginova, 2015).

THE PRINCIPLES AND OBJECTIVES OF INTERNATIONAL ACCREDITATION
One of mechanisms which serve increasing both quality of education and competitiveness of higher education institution is the international accreditation of the main educational professional program. The international accreditation of educational programs is carried out on the principles of voluntariness; unities of requirements at an assessment of quality and level of training of the persons who have mastered educational programs for one specialty; independence of the international accreditation from the government; objectivity and competence of experts; openness, reliability and relevance of information on procedures and results of professional and public accreditation. Results of the international accreditation are one of the elements which are considered at further assessment of educational programs and also at distribution of resources in education, an assessment of higher

 Copyright © International Conference on New Horizons in Education Conference (INTE)

education institutions' efficiency within monitoring and competitiveness of higher education institutions and separate educational programs.

The purposes of the international accreditation of the main educational professional program are:
- assessment of quality and level of graduates training compliance to the requirements of the Russian and international professional standards and inquiries of labor market to experts,
- escalating the directions and tools of improvement for processes of educational program realization taking into account the best Russian and foreign educational experiences,
- formation of quality management system of education at the level of an educational program according to modern standards and the best world experiences,
- development of such feature as culture of quality among administrative and teaching stuff of the faculty,
- formation of external quality assurances of an educational program in the form of international accreditation of educational programs,
- development of international academic mobility,
- inclusion the educational programs in the international ratings.

Responsibility for quality of education was conferred on the state in our society for a long time. The new position which was lately designated declares that quality assurances of education have to be provided by educational institutions, and the independent expert organizations and professional communities have to certify quality of education. This tendency is based on the fact that the system which controls itself can't be effective (Loginova, 2012).

SCOPE OF ASSESSMENT OF INTERNATIONAL ACCREDITATION

For this reason in recent years practice of programs' accreditation on the basis of expert assessment results which is carried out by the expert organizations is arising. Such organizations provide objectivity of examinations results and seek to consider positions of all interested parties in the activity, without getting under influence of any of them, they cover a wide range of indicators, actively react to changes of economic and social situation, are guided by labor market. In Russia the Agency on Quality Control of Education and Development of Career (AQCEDC) became the first organization which has developed the criteria of an external independent assessment of education quality coordinated both with the ESG standards, and with Federal Governmental Educational Standards (FGES).

The objects of expertise assessment are as follows:
- results of training;
- education quality assurances provided by the higher education institution.

Criteria for evaluation by AQCEDC are divided into 2 groups:

1) Criteria for evaluation of training results quality:
   - the level of graduates' demand in federal and regional labor markets;
   - the level of total competences formation of the graduate;
   - satisfaction with results of training.

2) Criteria for evaluation of education quality assurances:
   - strategy and purposes of the program;
   - internal quality management system;
   - structure and contents of the program;
   - educational and methodical materials;
   - technologies and techniques of educational activity;
   - stuff of the faculty;
   - material and financial resources of the program;
   - information resources;
   - research activity;
   - participation of employers in implementation of the program;
   - participation of students in determination of the program content;
   - student's services;
   - career guidance and training of entrants.

The first block contains criteria which allow estimating actually created competences, and the second block is presented with criteria focused on assessment of systems of the administrative and educational processes, as well as different resources which allow realizing the main educational programs with a due level of quality.

These criteria are focused on achievement of two purposes:

 Copyright © International Conference on New Horizons in Education Conference (INTE)

– stimulation of universities on creation and maintenance of internal system of education quality assurances;
– confirmation of the quality level to students and their parents, employers, the state.

It should be noted that professional and public accreditation is not final action for the sake of obtaining the specific status by higher education institution. It is preceded by process of the educational activity organization in such a way that has included various social institutes sharing responsibility for training of the competitive expert by higher education institution. For example, in the State Educational Institution of Higher Professional Education "Krasnoyarsk state medical university named after professor V.F. Voyno-Yasenetsky" of the Russian Federation Health Ministry (KSMU) representatives of the employer participate in development of the main educational program, separate educational subjects and courses, act as group coachers of professional practice, participate in final state assessment. Rather big layer of joint activity with representatives of the public and professional community is developed in the extra curriculum activity: these are discussions on problems of health care, meetings with experienced professionals, professional competitions (professional Olympic Games), conferences and work-shops. It is possible to say that procedure of professional and public accreditation just certifies and states the strong relations of higher education institution as implementer of the main educational program with various social institutes, providing thereby possibility of graduates' career creation (Gavrilyuk, Tepper & Loginova, 2012).

THE EXPERIENCE OF INTERNATIONAL ACCREDITATION OF THE HIGHER EDUCATION BASIC EDUCATIONAL PROGRAMS "CLINICAL PSYCHOLOGY"

The international accreditation of the main educational professional program gains the special importance at confirmation of graduates training level in "Clinical psychology" specialty, as this is a new branch which was created in the last three decades in Russia as a result of integration of some disciplines, adjacent, but having different history and perspective. First of all, it was formed by such fields of psychology recognized by all world psychological community as a neuropsychology and a pathological psychology, and also by corporality psychology (psychosomatics), psychology of abnormal ontogenesis, psychological correction, and health psychology created a bit later.

Clinical psychology is centered on the person with soul "pains" and problems, with the difficulties of adaptation and self-realization connected with conditions of his health. Psychological diagnostics, examination, rehabilitation and correction are necessary components of modern complex measures of prevention and overcoming not only diseases, but also various conditions of disadaptation of the person. The social importance of clinical psychology is expressed also by the fact that Psychological associations of various countries of the world are presented by clinical psychologists on about 60%. Recognition of clinical psychology importance in our country is marked by the official state statement of this (still the only) field of psychology as separate independent specialty.

Today in Russia there are 65 higher educational institutions implementing in the main educational professional program "Clinical psychology", 6 of them are in Siberian Federal District:

1. Siberian state medical university (Tomsk);
2. National research university "Tomsk State University" (Tomsk);
3. Novosibirsk state medical university (Novosibirsk);
4. Altai state university (Barnaul);
5. Kemerovo state university (Kemerovo);
6. Krasnoyarsk state medical university (Krasnoyarsk).

At the regional level 1 higher education institution is presented: The Krasnoyarsk state medical university (Krasnoyarsk). Aim (mission) of the main educational professional program 37.05.01 "Clinical psychology. The specialist program" in KSMU is determined by the content, system of training and fundamental bases of education as the psychological specialty of a wide profile having inter-brunch character. Clinical psychologists participate in the solution of health care problems, national education and psychological assistance to the population. Their practical and research activities are directed to health protection, increase of mental resources and adaptation opportunities of the person, harmonization of mental development, prevention and overcoming illnesses, psychological rehabilitation. The educational program aims at development in students personal qualities as well as common cultural (universal), professional competences according to requirements of Federal Governmental Educational Standards (FGES) for this direction of education.

In 2014 the main educational program "The clinical psychology" underwent procedure of professional, public and international accreditation. The organization which is carrying out expertise - Agency on Quality Control of Education and Development of Career (AQCEDC) – is the leading independent expert organization in the sphere

 Copyright © International Conference on New Horizons in Education Conference (INTE)

of professional education in Russia. AQCEDC is the expert organization for carrying out procedure of professional and public, and international accreditation of educational programs authorized by associations of employers and professional communities. The procedure of accreditation was carried out in several stages.

The first stage is preparation of **the self-inspection report** conducted by the representatives of all departments participating in implementation of this program. During preparation of the report it has been revealed that since 2010 till 2014 within strategy of development of the main educational program the following activities were carried out:
1. Creation of special conditions for implementation the main educational program on the specialty "Clinical Psychology" (curricula on internal, intramural and extramural forms of education are developed and approved, strategy of development of the main educational program is developed, it is developed and coordinated with employers and representatives of professional community, the contracts with bases of professional practice are signed, the material and technical resources: classroom fund, the laboratory, psychodiagnostic and relaxation equipment, the software, etc., are created).
2. Educational process on applied disciplines of the curriculum is removed to various places of the clinical (medical) psychologist activity: educational institutions, the centers medico-psychological- social maintenance of population, clinical bases, etc.; as they allow to fulfill the practical skills and to form professional competences. Along with educational process formation of professional competences is carried out in public work of students (there are volunteer groups on various clinical bases of the city and the psychological center of university).
3. A starting point at realization of the main educational program is emphasis not on psychology of the patient or his illness, but on psychology of health and methods, receptions of a health care and health-saving activity that corresponds to the general ideology of university which territory is declared by the territory of a healthy lifestyle. It is a natural idea for the university which is a winner of the All-Russian competition among medical schools of the country in 2012 "Higher education institution of a healthy lifestyle".
4. The unique style of teaching at faculty was developed: interactive methods of training, partner relationship between colleagues and between teachers and students, critical ideas of own competence limits, mutual support, mutual assistance and mutual aid dominate; creative atmosphere and creative installation. Dialogue forms of work, discussion during seminars; joint discussion of criteria, definitions, diagnostic inferences; role-playing games, trainings, psychotherapeutic workshops, laboratory and clinical practical works, working off of skills of communication and culture of communication are implemented and successfully tested forms of teaching.
5. Quality of the faculty stuff providing realization the main educational program (professional development, increase of PhD attestation, etc.) is improved.

The second stage **- internal visit of members of the accreditation commission** was passed on October 21-22, 2014. By results of visit, at a meeting with the rector Ivan Artyukhov, the vice rector for the international activity and innovative development Alla Salmina and the dean of Clinical psychology faculty Irina Loginova, experts have read a pre-trial detention: *"During internal visit we were convinced of a high level of specialists' training quality in the field of clinical psychology, have seen deep involvement of all subjects of educational process from the first-year students and tutors realizing the main educational program to employers".*

The third stage **- consideration of experts' reports on accreditation boards and stating the period of accreditation validity.** Following the results of quite difficult and unusual procedure of accreditation the main educational program the "Clinical psychology" realizing at the university received: the international accreditation for a period of 3 years. It is a great honor to notice that from 58 main educational programs accredited in 2014 by Agency on Quality Control of Education and Development of Career (AQCEDC), only our program "Clinical Psychology" has obtained accreditation for such long term that points to a high level of training quality of specialists in higher education institution and on guarantees of this quality which the university provides.

THE RESULTS OF INTERNATIONAL COOPERATION AS THE DISCOVERY OF NEW EDUCATIONAL HORIZONS

Achieving this result (in addition to other factors) became possible thanks to the collaboration developing since 2013 between Krasnoyarsk State Medical University (Russia) and Klaipeda University (Lithuania).

After signing the Memorandum of collaboration with Klaipeda university the directions of cooperation had been defined:

- participation of Klaipeda university staff in scientific conference "Psychological health of the person: life resource and life potential" (KSMU, Krasnoyarsk, Russia);

 Copyright © International Conference on New Horizons in Education Conference (INTE)

- discussion of organizing regulations and forms of a teleconference concerning the problem of art therapy and psychosomatic medicine;
- discussion the scope of perspective work on cooperative publications and monographs on a joint of allied branches;
- discussion of students and teachers mutual exchange organization within programs of the academic mobility;
- discussion of a potential possibility of collaboration over grant projects;
- discussion of prospects concerning the organization of lecture courses and the practical courses within the after graduate program.

What do the international accreditation of the main educational professional program and the developing international cooperation give to University and its personnel?

– formation of the effective tool of responsibility and demonstration of a education quality level to consumers (the state, entrants, students, graduates, consumers and the staff of University);
– increase of a credibility level of external and internal consumers to quality of educational services, productivity and efficiency of University;
– strengthening of image and brand of University in education market;
– increase of University graduates competitiveness in labor market;
– involvement of University staff in work on quality development in the field of educational professional services, increase of degree of employees commitment to idea of quality;
– using the international accreditation results in procedures of the state accreditation.

CONCLUSION

It is possible to declare that the international accreditation procedure certifies and states the strong relations of the higher education institution as implementer of the basic educational professional program with various social institutes and the international partners, providing thereby possibility of career developing for its graduates and opening the new professional horizons for them. Thus, development of the international cooperation and receiving the international accreditation of the main educational professional program "Clinical Psychology" at faculty of Clinical psychology of the State Educational Institution of Higher Professional Education "Krasnoyarsk state medical university named after professor V.F. Voyno-Yasenetsky" of the Russian Federation Health Ministry (KSMU) is one of the priority directions in positioning of our university in world scientific and educational community.

REFERENCES

Gavrilyuk, O. A., Tepper, E. A. & Loginova, I. O. (2012). The study of educational autonomy of students in various educational systems. *Psychology courses,* 5, 27-40.

Loginova, I. O. (2012). Pedagogical innovations in medical education: the social order and the possibility of educational environment. *Actual problems and prospects of development of the Russian and international medical education.* Krasnoyarsk, 175-178.

Nikulina, S. Y., Buyankina, R. G. & Loginova, I. O. (2015). Preparation for professional public accreditation of educational programs in Krasnoyarsk Medical University. *Alma mater (Journal of the Higher School)*, 2, 63-68.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTERNET ADDICTION AMONG VOCATIONAL STUDENTS IN ÇANAKKALE; EXAMPLE OF BIGA VOCATIONAL SCHOOL

Ayten DINÇ
School of Health, Çanakkale, Turkey
Çanakkale Onsekiz Mart University, Türkiye

Ayşin AŞKIN
Lecturer, Çanakkale Onsekiz Mart University, Biga Vocational School, Çanakkale, Turkey
Çanakkale Onsekiz Mart University, Türkiye

ABSTRACT:
Internet addiction is one of the major problems of today's technology age, especially among the younger generation. This study is to investigate computer-internet addiction among vocational students in Çanakkale. The study was performed with a total of 266 students present at the school on the date when the study was carried out and agreed to participate in the study. In this study the "Internet Addiction Scale" and "Demographic Information Form" were used as a means of collecting data. 84% of the students have internet connection at home. Most of the time they connect to the internet through their mobile phones when they are away from home. 69.6% of them use the internet every day. 54.5% of students are normal internet users, 42.1% are risky internet users and 3.4% are internet addicted.

Key Words: Internet, internet addiction, student, vocational

ÇANAKKALE'DE MESLEK YÜKSEKOKULU ÖĞRENCİLERİ ARASINDA İNTERNET BAĞIMLILIĞI; BİGA MESLEK YÜKSEK OKULU ÖRNEĞİ

ÖZET
İnternet bağımlılığı, günümüz teknoloji çağının, özellikle genç nesil arasındaki önemli sorunlarından birisidir. Bu araştırmada Çanakkale'de bir meslek yüksekokulu öğrencilerinin bilgisayar-internet bağımlılığı incelenmiştir. Araştırmanın yapıldığı tarihte okulda bulunan ve araştırmaya katılmayı kabul eden 266 öğrenci çalışma kapsamına alınmıştır. Araştırmada veri toplama aracı olarak kişisel bilgi formu ve internet bağımlılık ölçeği kullanılmıştır. Araştırmada öğrencilerin %84'ünün evinde internet bağlantısı vardır. Öğrenciler, çoğunlukla internete evden ve cep telefonlarından bağlanmaktadırlar. Öğrencilerin %69.6'sının interneti her gün kullandığı görülmektedir. Günde ortalama 8±7.2 saat internet kullanmaktadırlar. Öğrencilerin %54.5'inin normal internet kullanıcısı, %42.1'inin riskli internet kullanıcısı, % 3.4 ünün ise internet bağımlısı olduğu saptanmıştır.
Anahtar kelimeler: İnternet, internet bağımlılığı, öğrenci, meslek yüksekokulu

GİRİŞ

1990'ların ikinci yarısından itibaren bireylerin yaşamlarına ve gündemlerine giren internet, gün geçtikçe kullanıcılarını kendine bağlayan bir araç konumundadır. Günümüzde internet kullanımı hem dünyada hem ülkemizde oldukça yaygındır. Internet World Stats verilerine göre, 2000 yılında dünyada 300 milyon civarında internet kullanıcısı varken, 2009 yılında internet kullanıcısı 1,5 milyara ulaşmış; 2016 yılı verilerine göre ise dünyada internet kullanıcısı 7 milyarı geçmiştir (Internet World Stats, 2016).

Günümüz gelişmiş teknolojilerinden olan bilgisayar ve internet kullanımı, yaşamımızda istenilen bilgiye anında ulaşabilme, bilgi paylaşımını sağlayabilme gibi getirdiği kolaylıklar yanında çok sık kullanımından kaynaklanan bir çok problemi de beraberinde getirmektedir. Günlük yaşamlarının ayrılmaz bir parçası haline gelen internet, özellikle çocuklar ve gençler için birtakım riskler taşımaktadır. Son dönemlerde internet kullanımı için en çok üzerinde durulan risk, internetin aşırı kullanımıdır. Araştırmacıların bireylerin aşırı internet kullanımını betimlemek için farklı kavramlar kullandıkları görülmektedir. Örneğin, internet bağımlılığı (Young 1996), internet bağlılığı, patolojik internet kullanımı (Morahan-Martin ve Schumacher 2000), problemli internet

 Copyright © International Conference on New Horizons in Education Conference (INTE)

kullanımı (Davis, Flett ve Besser 2002) ve internet davranış bağımlılığı bunlardan bir kaçıdır. Bu makalede ise literatürde yaygın olarak kullanılan internet bağımlılığı kavramı tercih edilmiştir.

"İnternet bağımlılığı" genel olarak internetin aşırı kullanılması isteğinin önüne geçilememesi, internete bağlı olmadan geçirilen zamanın önemini yitirmesi, yoksun kalındığında aşırı sinirlilik hali ve saldırganlık olması ve kişinin iş, sosyal ve ailevi hayatının giderek bozulması olarak tanımlanmaktadır (Young,2004)

Üniversite ortamında internet'e erişim daha kolay ve hızlı olmakta, üniversiteler gelişen teknolojiye daha fazla uyum sağlamakta ve internetten daha fazla yararlanmaları nedeniyle, üniversite öğrencilerinin interneti daha fazla kullandıkları gözlenmektedir. Özellikle bu dönemde bireyler sosyal ilişkiler kurma konusunda sorunlarla karşılaştıklarında, interneti kendilerini rahatça ifade edebilecekleri bir ortam olarak değerlendirebilmektedirler (Sarıkaya&Seferoğlu, 2013; Balcı& Gülnar, 2009).

Türkiye İstatistik Kurumu'nun (TUIK) 2015 Yılı Hane Halkı Bilişim Teknolojileri Kullanımı Araştırması sonuçlarına göre 16-74 yaş grubu internet kullanan bireylerin oranı %55,9'dur. Bilgisayar ve internet kullanım oranının en yüksek olduğu yaş grubu 16-24'tür (%70). Eğitim durumuna göre en fazla internet kullanım oranı % 91.7 ile yüksekokul, fakülte ve daha üstü bireylerdedir. Bu bilgi benzer yaş gruplarında olan meslek yüksekokulu öğrencilerinin de aynı problemle karşılaşma risklerinin olduğunu düşündürmüştür.

İnternet kullanımıyla ilgili risk grubunda olan gençlerin internet bağımlılığının bilimsel verilerle ortaya konulması; riskin önlenmesi, müdahale edilmesi ve risklere karşı korunmaları açısından önem arz etmektedir. Bu çalışma Çanakkale Onsekiz Mart Üniversitesi Biga Meslek Yüksekokulu öğrencilerinde internet bağımlılığı sıklığını ve internet bağımlılığını etkileyen etmenleri belirlemek amacıyla yapılmıştır.

GEREÇ VE YÖNTEM

Kesitsel tipteki bu araştırmanın evrenini Biga Meslek Yüksekokulu'nda okuyan tüm öğrenciler oluşturmuştur. Örneklem seçimine gidilmeden araştırmanın yapıldığı tarihte okulda bulunan ve araştırmaya katılmayı kabul eden 266 öğrenci çalışma kapsamına alınmıştır.
Çalışma öncesinde gerekli kurumsal izinler ve katılımcılardan yazılı onam alınmıştır. Araştırmanın verileri Nisan 2016'de toplanmıştır. Veriler Sosyodemografik Özellikler Formu ve İnternet Bağımlılığı Testi (Internet Addiction Test-IAT) kullanılarak toplanmıştır.

Sosyo-demografik Özellikler Formu: Araştırmacılar tarafından geliştirilen formda, katılımcıların sınıf, cinsiyet, internet bağlanma aracı, yeri, haftalık internet kullanım süresi, interneti en sık kullanma nedenleri, alkol ve sigara kullanımı gibi bilgilerin sorgulandığı 20 soru yer almakta idi.

İnternet Bağımlılığı Testi (Internet Addiction Test-IAT):
Young tarafından 1996 yılında geliştirilen "İnternet Bağımlılığı Testi" Ülkemizde Bayraktar tarafından 2001 yılında Türkçe'ye uyarlanmış ve 12-17 yaş grubu ergenler üzerinde yapılan çalışmanın Cronbach alpha değeri açısından güvenirliği 0.91 olarak bulunmuştur. Likert tipi bir ölçek olan internet bağımlılık ölçeğinde katılımcıdan "hiçbir zaman", "nadiren", "ara sıra", "çoğunlukla", "çok sık" ve "devamlı" seçeneklerinden birini işaretlemesi istenmektedir. Bu seçeneklere sırasıyla 0, 1, 2, 3, 4 ve 5 puan verilmektedir. 20 soruluk testten katılımcılar en az "0" , en fazla "100" puan almaktadırlar. İnternet bağımlılığı anket soruları 3 kategoriye ayrılmış olup; 20-49 puan arası "***normal internet kullanıcısı***", 50-79 puan arası "***riskli internet kullanıcısı***" ve 80-100 puan arası ise "***bağımlı internet kullanıcısı***" olarak tanımlanmaktadır.

Verilerin Analizi:

Elde edilen veriler SPSS 16 paket programında ferkans dağılım, ortalama, ki kare ($\chi 2$) ile analiz edildi.

BULGULAR

KATILIMCILARIN TANITICI ÖZELLİKLERİ VE İNTERNET KULLANIM DURUMLARI

Çalışmamıza Biga Meslek Yüksekokulu'nda %17,7 Gıda İşleme Bölümü (Süt ve Ürünleri Teknolojisi ve Gıda Teknolojisi), %16,5 Malzeme ve Malzeme İşleme Teknolojileri Bölümü (Mobilya ve Dekorasyon), %37,2 Elektrik ve Enerji Bölümü (Elektrik), %8,3 Makine ve Metal Teknolojileri Bölümü (Metalurji), %20,3 Motorlu Araçlar ve Ulaştırma Teknolojileri Bölümü (Otomotiv) olmak üzere 5 farklı programda okuyan öğrenciler katılmıştır. Araştırmamızda öğrencilerin %84,6'sı erkek, %15.4'ü kız, % 55,6'sı 1. sınıf, %44,4'ü 2. sınıf öğrencisidir. Öğrencilerin %42,1'i düzenli spor yapmakta, %51,1'i sigara, %43,6'sı alkol kullanmaktadır (Tablo 1).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Öğrencilerin internet kullanım durumları incelendiğinde; %68,8'i internete cep telefonu ile bağlanmakta, %54,9'u ev/yurttan, %33,9'u okul/wifi olan yerlerden ulaşmaktadır. İnterneti en sık kullanma nedenleri sırasıyla; sosyal paylaşım ve chat (%89), video izlemek (%79), ders çalışmak (%63,4), oyun oynamak (%62,1), e-posta bakmak (%56,7) gelmektedir. Öğrencilerin günlük internet kullanımına bakıldığında; öğrencilerin %33,5'i günlük 1 ile 3 saat arası, %27,1'i 4 ile 7 saat arası, % 39,5'i ise 8 saatten fazla olmak üzere, öğrenciler günde ortalama 8,2 ±7,2 saat internete bağlanmaktadırlar (Tablo2)

Tablo 1: Katılımcıların tanıtıcı özellikleri (n=266)

Program adı	n	%
Gıda İşleme Bölümü	47	17,7
Malzeme ve Malzeme İşleme Teknolojileri Bölümü	44	16,5
Makine ve Metal Teknolojileri Bölümü	22	8,3
Elektrik ve Enerji Bölümü	99	37,2
Motorlu Araçlar ve Ulaştırma Teknolojileri Bölümü	54	20,3
Cinsiyet		
Erkek	225	84,6
Kadın	41	15,4
Sınıf		
1	148	55,6
2	118	44,4
Düzenli spor		
Evet	112	42,1
Hayır	154	57,9
Sigara kullanma		
Evet	136	51,1
Hayır	130	48,9
Alkol kullanma		
Evet	116	43,6
Hayır	150	56,4

Tablo 2: Öğrencilerin internet kullanma durumları

İnternete bağlanılan araç	n	%
Cep Telefonu	183	68,8
Tablet	2	,8
PC	21	7,9
Cep Telefon ve PC	56	22,5
İnternete bağlanma yeri		
Ev/yurt	146	54,9
internet kafe	4	1,5
okul	90	33,9
hepsi	26	9,8
İnterneti en sık kullanma nedeni*		

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Amaçsızca dolaşmak	65	49.6
Sosyal paylaşım ve chat	202	89.8
Ders çalışmak	92	63.4
Oyun oynamak	87	62.1
Video izlemek	132	79
e-posta bakmak	72	56.7
diğer	20	21.1
Günlük internet kullanımı		
1-3 saat (az kullananlar)	89	33,5
4-7 saat (Fazla kullananlar)	72	27,1
8 saat ve üzeri (Aşırı kullananlar)	105	39,5
Ortalama 8,2 ±7,2 saat/günde internet kullanımı		

*Satır yüzdesi alınmıştır. Birden fazla şıkka cevap verilmiştir.

Tablo 3: Öğrencilerin sosyal paylaşım sitelerini kullanma durumları

Kullandıkları sosyal paylaşım siteleri*		
Facebook	232	89.2
Twiter	89	34.2
Youtube	182	70
Linkedin	72	27.7
Google	96	36.9
Diğer		
Kimin daveti ile katıldığı		
Kendisi	237	89,1
Arkadaşının daveti	23	8,6
Aileden birinin daveti	1	,4
diğer	5	1,9
Sosyal paylaşım sitelerinde en sık ne paylaşır?		
Fotoğraf	109	41,0
Güzel söz	6	2,3
Video	10	3,8
Yer bildirimi	9	3,4
Duygu düşünce	10	3,8
Diğer	41	15,4
Hepsi	81	30,4

*Satır yüzdesi alınmıştır. Birden fazla şıkka cevap verilmiştir.

Kullandıkları sosyal paylaşım siteleri arasında en sık facebook olmak üzere daha sonra youtube, google arama motoru, twiter yer almaktadır. Öğrencilerin büyük çoğunluğu sosyal paylaşım sitelerine kendi isteği ile katılmış (%89,1) ve bu sitelerde en sık fotoğraf paylaşımında bulundukları saptanmıştır (%41) (Tablo 3).

Katılımcıların İnternet Bağımlılık Düzeyleri ve Etkileyen Kişisel Etmenler

Tablo 4: Öğrencilerin bağımlılık kategorileri ve bir hafta süreyle interneti kullanmasalar yapacakları aktiviteleri (n=266)

İnternet bağımlılık kategorileri	n	%
Normal internet kullanıcısı (20-49 puan)	145	54,5
Riskli internet kullanıcısı (50-79 puan)	112	42,1
Bağımlı internet kullanıcısı (80-100 puan)	9	3,4

 Copyright © International Conference on New Horizons in Education Conference (INTE)

İnternet kullanmadığında aktiviteler		
Spora giderdim, yürürdüm.	40	15
Arkadaş veya ailemle vakit geçirirdim	33	12,4
Sıkılır, depresyona girerdim	52	19,5
Uyurdum	10	3,8
Gezerim	46	17,3
Kitap okur ve farklı aktiviteler yapardım	30	11,3
İnternet kafeye giderdim	3	1,1
Ders çalışırdım	12	4,5
Tv izlerim	16	6,0
Önemli olmazdı	24	9,0

Çalışmamızda öğrencilerin %54,5'i normal internet kullanıcısı, %42,1'i riskli internet kullanıcısı, %3,4'ü internet bağımlısı olarak saptanmıştır (Tablo 4).

Öğrencilere "Bir hafta süreyle interneti kullanmasanız ne yapardınız?" diye sorduğumuzda; % 19,5'i sıkılıp depresyona girebileceğini, %17,3'ü gezmek istediğini, %11,3'ü kitap okuyacağını, %9'u farklı bir aktivitede bulunmayacağını, % 6'sı TV izleyeceğini, %15'i ders çalışacağını belirtti (Tablo 4).

Tablo 5: İnternet bağımlılık düzeylerini etkileyen kişisel etmenler

	İnternet bağımlılığı kategorileri			
	Normal Kullanıcı	Riskli Kullanıcı	İnternet Bağımlısı	Toplam
	n (%)	n (%)	n (%)	n (%)
Sınıf				
1	76 (%52,4)	69 (61,6)	3 (33,3)	148 (55,6)
2	69 (47,6)	43 (38,4)	6 (66,7)	118 (44,4)
	X^2=4,042; sd.= 2; p= .133			
Cinsiyet				
Kız	27(65,9)	12(29,3)	2(4,9)	41
Erkek	118(52,4)	100(44,4)	7(3,1)	225
	X^2= 3,36; sd.= 2; p= .186			
Sigara kullanımı				
Evet	71(52,2)	59(43,4)	6(4,4)	136
Hayır	74(56,9)	53(40,8)	3(2,3)	130
	X^2= 1,249; sd.= 2; p= .536			
Alkol				
Evet	57(49,1)	53(45,7)	6(5,2)	116
Hayır	88(58,7)	59(39,3)	3(3,4)	150
	X^2= 3,66; sd.= 2; p= .160			
Günlük internet kullanımı				
1-3 saat	59 (66,3)	30(33,7)	0	89
4-7 saat	41(56,9)	30(41,7)	1(1,4)	72
8 saat ve üzeri	45(42,9)	52(49,5)	8(7,6)	105
	X^2= 17,25; sd.= 4; **p= 0.002**			
Düzenli spor yapma				

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Evet	60 (41,4)	49 (43,8)	3 (33,3)	112 (42,1)
Hayır	85 (58,6)	63 (56,2)	6(66,7)	154 (57,9)
	X^2= 0,440 ; sd.=2; p=0 .803			

Tablo 5'te öğrencilerin internet bağımlılık düzeylerini etkileyen kişisel etmenler görülmektedir. Çalışmamızda öğrencilerin günlük internet kullanım süreleri ve bağımlılık düzeyleri karşılaştırıldığında, günlük kullanım süresi arttıkça riskli kullanıcı ve bağımlıların oranının arttığı saptanmış ve sonuç istatistiksel olarak da anlamlı bulunmuştur (p=0.002)

Cinsiyete göre internet bağımlılığına bakıldığında erkeklerin %44,4'ü riskli kullanıcı, %3,1' bağımlı grupta iken, kızların %29,3 ü riskli kullanıcı, %4,9'u bağımlı gruptadır ve gruplar arasında anlamlı bir fark bulunamamıştır (p=0.186).
Sigara içme açısından internet bağımlılığına baktığımızda sigara içenlerde riskli kullanıcı oranı %43,4, bağımlı oranı %4,4 iken, içmeyenlerde riskli kullanıcı %40,8, bağımlı oranı %2,3 çıkmıştır ve bu sonuç istatistiksel olarak anlamlı bulunmamıştır (p=0.536).

Alkol kullanma açısından internet bağımlılığına baktığımızda alkol kullananlarda riskli kullanıcı oranı %45,7, bağımlı oranı %5,2 iken, içmeyenlerde riskli kullanıcı %39,3, bağımlı oranı %3,4 oranındadır ve bu sonuç istatistiksel olarak anlamlı bulunmamıştır (p=0.160).

TARTIŞMA VE SONUÇ

İnternet hayatımızda birçok kolaylıklar sağlayan önemli teknolojik gelişmelerden biridir. İnternet amacı doğrultusunda bilinçli olarak kullanıldığında zamanı verimli kullanmak, tasarruf sağlamak gibi pek çok faydaları bulunmaktadır. Ancak, internet kullanım oranının dünya genelinde artması ve internet başında geçirilen zamandaki artış, bireyleri "internet bağımlılığı" problemiyle karşı karşıya getirmiştir.

KATILIMCILARIN İNTERNET KULLANIM DURUMLARININ TARTIŞILMASI

İnternete bağlanma yeri: Kullanım kolaylığı, taşınabilirliği ve internete bilgisayar olmadan da bağlanılabilmesi cep telefonlarının kullanım oranlarını artırmaktadır. Özellikle sosyal ağlarda paylaşılan bilgilerin anında cep telefonlarına iletilmesi, bu sayfaların bireyler tarafından sürekli olarak kontrol edilmesini sağlamaktadır. Çalışmamızda öğrencilerin %68,8'i internete cep telefonu ile bağlanmaktadır. Kuzey Kıbrıs'ta üniversite öğrencilerinde yapılan bir çalışmada öğrencilerin %61,5'inin ev ve yurt ortamından, %25'inin cep telefonundan internete bağlandıkları bildirilmektedir (Fuat&Him, 2013).

Sosyal paylaşım siteleri: Son 10 yıldır dünyada ve ülkemizde bir çok sosyal medya sitesi ortaya çıktı. Facebook dünyanın en büyük sosyal paylaşım sitesidir. Mark Zuckenberg tarafından 2004 yılında kurulmuştur. Aktif 1.3 milyardan fazla üyesi bulunmaktadır. İnsanların yukardan aşağıya doğru akan bir zaman tünelinde resim, video, durum, mekan gibi kişisel bilgilerini paylaştığı, birbirleriyle mesajlaştığı sosyal ağdır (https://tr.wikipedia.org/wiki/Mark_Zuckerberg). Çalışmamızda öğrencilerin %89,2'si sosyal paylaşım sitelerinden facebook kullanmaktadır. Öğrencilerin bu sitelerde daha fazla fotoğraf paylaştıkları ve bu sitelere davet olmadan kendi istekleri ile girdikleri görülmektedir.

İnternete bağlanma nedeni: Çalışmamızda katılımcıların interneti en sık kullanma nedenleri sırasıyla, sosyal paylaşım ve chat (%89), video izlemek (%79), ders çalışmak (%63,4), oyun oynamak (%62,1), e-posta bakmak (%56,7) gelmektedir. Ergin ve ark. (2013) tıp fakültesi öğrencilerine yaptıkları çalışmada; katılımcıların %28.8'i interneti en sık chat için, %20.2'si websörf için kullanırken, %14.8'i ders için ve %4.9'u da oyun için kullanmaktadırlar. Balcı&Gülnar (2009) çalışmalarında katılımcıların interneti en sık e-maillerine bakmak ve anında mesajlaşmak için (%34,8), olayları takip etmek (%24,4) ödevler için (%16,3), hobi olarak(%13) kullandıklarını belirlemişlerdir. Fuat&Him (2013) yaptıkları araştırmada öğrencilerin %47'sinin iletişim amaçlı, %26'sının araştırma ve bilgilenme amaçlı interneti kullandıklarını bildirmişlerdir.

Katılımcıların İnternet Bağımlılık Düzeyleri ve Etkileyen Kişisel Etmenlerin Tartışılması

İnternet bağımlılık düzeyi: İnternet bağımlılığı ile ilgili çalışmalarda, bağımlılık oranı ile ilgili çok farklı sonuçlar bildirilmiştir. Ni ve ark. (2009), çalışmalarında birinci sınıfta okuyan 3557 üniversite öğrencisinde internet bağımlılığının yaygınlığını %6.44 oranında saptamışlardır. Kır&Sulak (2014) Eğitim Fakültesi öğrencilerine

yaptıkları çalışmalarında 337 öğrenciden %88,7'si normal kullanıcı, %10,1'i riskli kullanıcı ve %1,2'si patolojik internet kullanıcısı olarak belirlemişledir. Taylan&Işık (2015) Sakarya'da ortaokul ve lise öğrencilerine yaptıkları çalışmalarında öğrencilerin %4,1'inin internet bağımlısı, %28,5'inin risk grubunda, %67,4'ünün ise normal kullanıcı olduğunu bildirmişlerdir. Alaçam ve ark. (2015) Pamukkale Üniversitesinde 2096 öğrenci ile yaptıkları çalışmada internet bağımlılığı oranı %8.6 olarak bulunmuştur. Canan ve ark. (2011) 1034 üniversite öğrencisi ile yaptıkları çalışmada internet bağımlılığı oranını %9,7 bulmuştur. Ergin ve ark. (2013) tıp fakültesi öğrencilerine yaptıkları çalışmada %94.'ü normal kullanıcı, %5.2'si riskli kullanıcı ve %0.8'ü internet bağımlısı olarak saptanmıştır.

Çalışmamızda öğrencilerin %54,5'i normal internet kullanıcısı, %42,1'i riskli internet kullanıcısı, % 3,4'ü internet bağımlısı olarak saptanmıştır. Ancak, çalışmamızda öğrencilerin "Bir hafta boyunca internete bağlanmasanız ne yapardınız? " sorusuna %19,5'i sıkılır, depresyona girerdim ifadesi riskli kullanıcılar açısından üzerinde durulması gereken bir konudur. İnternet kullanımının sıklığı gençleri sosyal yaşamdan, sportif faaliyetlerden ve gündelik işlerinden alıkoymaktadır.

İnternette geçirilen zaman: Araştırmalar, internete bağımlı olan bireylerin haftalık ya da günlük internet kullanım miktarının bağımlı olmayan bireylere nazaran önemli miktarda daha fazla olduğunu, internet başında geçirilen zaman arttıkça internet bağımlılığı riskinin de arttığını göstermektedir (Taylan&Işık, 2015; Balcı& Gülnar, 2009; Cengizhan, 2005). Gece geç saatlere kadar internet başında olan bu bireylerin bazıları internet başında kalabilmek için kafein hapları kullandıklarından; oluşan uyku düzensizliği bireylerde yorgunluğa neden olmakta, bu durum iş ve okul yaşantılarını olumsuz etkilemekte, bağışıklık sistemlerini zayıflatmaktadır (Young, 2004)

Çalışmamızda öğrencilerin günlük internet kullanımına bakıldığında; öğrencilerin %33,5'i günlük 1 ile 3 saat arası, %27,1'i 4 ile 7 saat arası, % 39,5'i ise 8 saatten fazla olmak üzere, öğrenciler günde ortalama 8,2 ±7,2 saat internete bağlanmaktadırlar. Ayrıca günlük kullanım süresi arttıkça riskli kullanıcı ve bağımlıların oranının arttığı saptanmış ve sonuç istatistiksel olarak da anlamlı bulunmuştur. Araştırma sonucumuz literatür bulguları ile paraleldir.

Cinsiyet: Yapılan araştırmalar cinsiyet faktörünün internet bağımlılığın önemli bir belirleyicisi olduğunu ortaya koymaktadır. Araştırma bulguları bağımlılık eğiliminin, ilköğretimden yükseköğretime erkek öğrencilerde, kızlardan daha fazla olduğunu göstermektedir (Akdağ ve ark. 2014; Canan ve ark. 2011; Ergin ve ark 2013; Kır&Sulak, 2014). Türkiye'de (TÜİK, 2013) erkeklerin % 59.3'ü internet kullanırken, kadınlarda bu oranın % 38.7 olduğu görülmüştür. Bizim çalışmamızda da erkek öğrencilerde internet bağımlı olanların oranı %77,8, kız öğrencilerde ise %22,2 oranında bulunmuştur. Ancak istatistiksel olarak bağımlılık kategorileri arasında cinsiyete göre anlamlı bir fark çıkmamıştır. Taylan ve Işık (2015) çalışmasında da bizim bulgularımıza benzer şekilde internet bağımlılığı yönünden cinsiyete dayalı fark bulunmamıştır.

Sigara ve alkol: İnternet bağımlılığı ve sigara alkol kullanımı arasındaki ilişkiyi araştıran birçok çalışma vardır. Alaçam ve ark (2015) çalışmalarında internet bağımlılığı olan öğrencilerde sigara ve alkol kullanım oranlarının internet bağımlılığı olmayan öğrencilere göre daha yüksek olduğu saptanmıştır. Greenberg ve arkadaşları da (1999) internet bağımlılığı olan kişilerde alkol ve diğer madde bağımlılıklarının daha yüksek oranda görüldüğünü bildirmişlerdir. Canan ve ark. (2011) yaptıkları çalışmada internet bağımlılığı ile alkol kullanımı arasında ilişki bulunurken, internet bağımlılığı ve sigara içme arasında ilişki saptanmamıştır. Bizim çalışmamızda ise sigara ve alkol kullanımı ile internet bağımlılığı arasında ilişki bulunamamıştır.

SONUÇ VE ÖNERİLER

Araştırmaya katılan üniversite öğrencilerinin yaklaşık yarısı (%54,5) normal internet kullanıcısı iken, geri kalan %42,1'i riskli internet kullanıcısı, %3,4'ü internet bağımlısı olarak saptanmıştır. Öğrencilerin internet bağımlılık düzeyleri günlük internet kullanımına göre farklılaşırken; cinsiyet, sigara, alkol kullanma, sportif faaliyetlere katılma değişkenlerine göre herhangi bir farklılık göstermemiştir. Ayrıca, öğrencilerin internetten daha çok iletişim/sohbet ve eğlence amacıyla yararlandıkları sonucuna ulaşılmıştır. Özellikle Türkiye'nin genç bir nüfusa sahip olduğu göz önünde bulundurulduğunda, konunun önemi daha da artmaktadır. Burada yürütülen çalışma, söz konusu sorunun mevcut değerlendirilmesine bir nebze katkı sağlamış olsa da, bu alanda daha fazla çalışmanın yapılmasına ihtiyaç duyulmaktadır. Gelecekteki araştırmalar daha geniş bir örneklemeye giderek toplumun farklı kesimlerini hedef alabilirler.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Bu çerçevede internet kullanımına ilişkin öneriler aşağıda sıralanmıştır;

- Tüm toplumun öncelikle çocukların, gençlerin ve ailelerin hem teknolojinin doğru, etkin, verimli ve sağlıklı kullanımı konusunda bilinçlendirilmeleri gerekmektedir.
- İnternetin sağlıksız kullanımının oluşturabileceği potansiyel riskler ve bağımlılıklar konusunda toplum bilgilendirilmeli, bilinçlendirilmeli ve bu konuda yapılan çalışmaların artırılması ile farkındalık kazandırılmalıdır.
- Gençler internetten nasıl faydalanmaları gerektiğini öğrenmeli, bir amaç belirleyerek internet ve bilgisayar kullanmalıdır.
- Temel önleyici çalışmalar kapsamında tüm kurumlar, sivil toplum kuruluşları ve medya da önemli sorumluluklar üstlenmelidir.
- Üniversiteler gençleri internetin yararlı kullanımı konusunda bilinçlendirmeli, onları sosyal ve sportif faaliyetlere yönlendirmeli, arkadaşları ile internet dışı yollarla iletişim kurmaya özendirmelidir.

KAYNAKLAR

Internet World Stats, usage and papulation statistics, Avaliable at: 22.07.2016 http://www.internetworldstats.com/stats.htm,

Young, K. S. (1996). Internet addiction: The emergence of a new clinical disorder. *Cyber Psychology and Behavior,* 1(3), 237-244.

Morahan-Martin, J., & Schumacher, P. (2000). Incidence and correlates of pathological internet use among college students. *Computer-Human Behaviour*, 16, 13-29.

Davis, R. A., Flett, G. L., & Beser, A. (2002). Validation of a new scale for measuring problematic internet use: Implications for pre-employment screening. *CyberPsychology and Behavior*, 5, 331-346.

Young, K. S. (2004). Internet addiction. *Am Behav Sci* , 48:402-441.

Sırakaya, M., & Seferoğlu, S. S. (2013). Investigation of problematic internet usage of teacher candidates [in Turkish]. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi,* 28(1), 356-368.

Balcı, Ş., Gülnar, B. (2009). Üniversite Öğrencileri Arasında İnternet Bağımlılığı ve İnternet Bağımlılarının Profili, *Selçuk İletişim*, 6 (1), 5-22.

Türkiye İstatistik Kurumu, 2015 yılı hanehalkı bilişim teknolojileri kullanımı araştırması. Avaliable at: http://www.tuik.gov.tr/PreHaberBultenleri.do?id=18660, 18 Ağustos 2015.

Bayraktar F. İnternet kullanımının ergen gelişimindeki rolü; Yayımlanmamış Yüksek Lisans Tezi. Ege Üniversitesi Sosyal Bilimler Enstitüsü, İzmir, 2001

Fuat, N., Him, T. Üniversite öğrencilerinin internet kullanım durumları ve saldırganlık düzeyleri arasındaki korelasyon; GAÜ Rehberlik ve Psikolojik danışmanlık Bölümü öğrencilerinde internet kaynaklı tutum değişiklikleri, *II. International Conference on Communication, Media, Technology and Design* 02-04 May 2013,Famagusta – North Cyprus.

https://tr.wikipedia.org/wiki/Mark_Zuckerberg Erişim. 01.07.2016.

Ergin, A., Uzun, S. U., Bozkurt**,** A. İ. (2013). Tıp fakültesi öğrencilerinde internet bağımlılığı sıklığı ve etkileyen etmenler. *Pam Tıp Derg,* 6(3), 134-142.

Ni X, Yan H, Chen S, Liu Z. Factors influencing Internet addiction in a sample of freshmen university students in China. *Cyberpsychol Behav* 2009; 12(3):327-330.

Kır, İ., & Sulak, Ş. (2014). Eğitim Fakültesi Öğrencilerinin İnternet bağımlılık Düzeylerinin İncelenmesi. *Elektronik Sosyal Bilimler Dergisi*, *13*(51), 150–167.

Taylan, H. H., & Işık, M. (2015). Sakarya'da ortaokul ve lise öğrencilerinde internet bağımlılığı. *International Periodical For The Languages, Literature and History of Turkish*, *10*(6), 855–874.

Alaçam, H., Ateşçi, F. Ç., Şengül, A, C., Tümkaya, S. (2015). Üniversite öğrencilerinde internet bağımlılığının sigara ve alkol kullanımı ile ilişkisi, *Anadolu Psikiyatri Derg,* 16(6):383-388.

Canan, F., Ataoglu, A. (2011). The association between internet addiction, dissociation, and sociodemographic features among college students. *Eur Psychiatry*, 26(1): 1705.

Cengizhan, C. (2005).Öğrencilerin bilgisayar ve internet kullanımında yeni bir boyut : "İnternet Bağımlılığı" *M.Ü. Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi,* 22; 83-98.

Akdağ, M., Yılmaz, B. Ş., Özhan, U., Şan, İ. (2014). Üniversite öğrencilerinin internet bağımlılıklarının çeşitli değişkenler açısından incelenmesi (İnönü Üniversitesi örneği), *İnönü Üniversitesi Eğitim Fakültesi Dergisi,* 15(1), 73-96.

Greenberg, J. L., Lewis, S. E., Dodd, D. K. 1999. Overlapping addictions and self esteem among college men and women. *Addict Behav*, 24(4):565-571.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTERPRETATIONS OF THE CONCEPT OF PROBABILITY: AN INTRODUCTION

Paolo DI SIA
University of Padova, Lungadige Porta Vittoria 17, I-37129 Verona (Italy)
Higher Institute of Religious Science, Via Alto Adige 28, I-39100 Bolzano (Italy)
ISEM, Institute for Scientific Methodology, I-90146 Palermo (Italy)
paolo.disia@gmail.com
www.paolodisia.com

ABSTRACT
In this paper we consider important aspects characterizing the concept of probability. Starting by the historical background, we deal with the basic mathematical properties of probability, considering then the various interpretations, i.e. the classical, frequentist, preferential interpretation, the logicism and the subjectivism. Lastly interesting considerations about the birth of quantum statistics will be done. The scientific rigorous treatment allows the use of this paper as a pedagogical introduction to these interesting and important concepts.

Keywords: Probability; Mathematics; Physics; Classical Statistics; Quantum Statistics; Science; Pedagogy; History of Science; Philosophy of Science.

INTRODUCTION

The notion of probability has a quantitative nature and refers to the study, conducted with mathematical methods, of phenomena with an uncertain outcome. It is expressed through a real number running between 0 and 1; $P = 0$ means impossibility, $P = 1$ means certainty. The modern notion of probability is born in the mid-seventeenth century, with the study of French mathematicians Blaise Pascal (1623-1662) and Pierre de Fermat (1601-1665), who took inspiration from problems related to gambling for searching general principles, applicable to all phenomena governed by the case. Since then, the study of probability has rapidly grown, becoming part of the study of natural and social phenomena.

In the same period, the Dutch scientist Christiaan Huygens (1629-1695) published his treatise on probability "De ratiociniis in ludo aleae" (1657) (Huygens, 2010). With the work of Pascal, Fermat, Huygens and with the results obtained in the same years by Gottfried Wilhelm von Leibniz (1646-1716), who applied the combinatorial theory to legal problems, the study of probability received in the second half of the seventeenth century huge boost.

Important studies have been carried out by Pierre Rémond de Montmort (1678-1719), Abraham de Moivre (1667-1754), Nikolaus Bernoulli (1687-1759), Daniel Bernoulli (1700-1782), Pierre Simon de Laplace (1749-1827), Carl Friedrich Gauss (1777-1855), Siméon Denis Poisson (1781-1840), Pafnuty Lvovich Chebyshev (1821-1894), Andrei Andreyevich Markov (1856-1922), Andrei Nikolaevich Kolmogorov (1903-1987), Émile Borel (1871-1956), Francesco Cantelli (1875-1966) and many others.

Thomas Bayes (1701-1761) analyzed the "inverse probability", proving a result, which is currently known as "Bayes theorem" (Hazewinkel, 2001). It allows to assess the probability of the statistical hypothesis at the light of data provided by the experience and how to modify that, following the acquisition of new experimental data. An important school of thought, called "Bayesian school", considers today this theorem as the basis of the statistical inference. The idea that the probability could be a valuable aid to the study of man and society had great development in the nineteenth century, especially with the work of Adolphe Quetelet (1796-1874) and Francis Galton (1822-1911).

At the same time the "statistics" received great impetus; it studies in quantitative and qualitative way the phenomena under uncertain and not determinism conditions. From the study of the "average value" of a quantity, we get:

- the analysis of the "variability" of phenomena around the average values;
- the study of the "correlation" related to the strength that characterizes the links between observable phenomena;
- the study of "regression" related to the form of such links, represented by straight lines or curves of various type;
- the "tests of significance", i.e. methods for assessing how the consequences of the statistical assumptions are reflected in the experimental data, and to discard assumptions that do not hold up to the test of facts (Karl Pearson (1857-1936), Raphael Weldon (1860-1906), William Sealy Gosset (1876-1937), Ronald

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Aylmer Fisher (1890-1962), Egon Pearson (1895-1980), Jerzy Neyman (1894-1981) and many others) (Di Sia[a], 2013).

The probability is gradually entered in the natural sciences, penetrating into the description of physical phenomena. Among the milestones of this process we remember:

- the analysis of the random motion of pollen particles suspended in a fluid, made by the Scottish botanist Robert Brown (1773-1858) and remembered as "Brownian motion";
- the elaboration of the kinetic theory of gases;
- the "thermodynamics", particularly studied by James Clerk Maxwell (1831-1879) and Ludwig Boltzmann (1844-1906);
- the probabilistic description of Brownian motion, performed by Marian von Smoluchowski (1872-1917) and Albert Einstein (1879-1955);
- the birth of quantum mechanics with Einstein, Max Planck (1858-1947), Erwin Schrödinger (1887-1961), Louis de Broglie (1892-1987), Paul Dirac (1902-1984), Werner Heisenberg (1901-1976), Max Born (1882-1970), Niels Bohr (1885-1962) and many others.

In summary we can say that the probability is entered in contemporary science in at least three ways:

a) as an ingredient of the theory of measurement errors;

b) as a tool for the analysis of complex phenomena, which can be described using only the average values;

c) as part of the description of quantum phenomena, in accordance with the Heisenberg "uncertainty principle", which states that, at microscopic level, the result of an observation always leads to statements of probability of future events.

THE BASIC MATHEMATICAL PROPERTIES OF PROBABILITY

The mathematical properties of probability are the subject of the so-called "probability calculus"; we distinguish between "primitive probabilities", relating to simple facts, such as "tomorrow it will be sunny" or "throwing a dice, it will come out the number 5", and "complex probabilities", relating to not so simple facts, such as "tomorrow it will be sunny but not the day after tomorrow", or "throwing a dice, it it will come out the number 5 or the number 3", which are obtained by combining the primitive ones. The probability calculation shows how, starting from simple probabilities, one can calculate the complex ones.

The "classical interpretation" indicates the probability of an event E as the ratio between the number of favorable cases and the number of those "equally" possible:

$P(E)$ = real number = number of favorable cases / number of equally possible cases.

All "possible cases" constitute the "events space" Ω associated with the phenomenon of which we evaluate the probability and it is assumed that such cases are "equally possible".

We have five basic postulates of probability calculus:

1) the probability of occurrence of the impossible event is zero: $P(\emptyset) = 0$;

2) the probability of occurrence of the safe event is one: $P(\Omega) = 1$;

3) given an event E ($E \subset \Omega$), the probability that E occurs is a real number running between zero and one: $0 \leq P(E) \leq 1$;

4) the probability that an event "does not happen" is the unit less the probability that the event occurs: $P(\bar{A}) = 1 - P(A)$;

5) if two events A and B are "incompatible", the probability of occurrence of A or B is given by the sum of the probabilities of the two events:

$$P(A \cup B) = P(A) + P(B) \quad (1)$$

If two events A and B are "compatible", Eq. (1) becomes:

$$P(A \cup B) = P(A) + P(B) - P(A \cap B) \quad (2)$$

 Copyright © International Conference on New Horizons in Education Conference (INTE)

also called "the law of total probabilities".
If it needs the calculation of the probability of an "event that occurred after another event", logically or temporally linked to the first one, we say that we have a "conditioned probability" of the event A, knowing that the event B occurred:

$$P(A|B) = P(A \cap B) / P(B) \quad (3)$$

if $P(B)$ is different from zero. Eq. (3) can also be written in the form:

$$P(A \cap B) = P(B) \cdot P(A|B) = P(A) \cdot P(B|A) \quad (4)$$

said "law of compound probabilities" (Di Sia[a], 2013).

THE CLASSICAL INTERPRETATION OF PROBABILITY
The "classical interpretation of probability" has been developed by Pierre Simon de Laplace (1749-1827); he wrote two works about it: "Théorie analytique des probabilités" (1812) and "Essai philosophique sur les probabilités" (1814) (Laplace, 2012). Laplace was a mathematician, physicist and astronomer and worked on Newtonian mechanics, based on "determinism", according to which the laws of the world follow a causal chain, where each state is determined by the previous one and determines the next. In this path, he used also the concept of probability.
Laplace considered the probability as a vital tool for knowledge, and founded upon it the "induction" and the "analogy", as basic methods for acquiring the knowledge. He defined the probability as "the ratio of the number of favorable cases with respect to the occurrence of an event and the number of equally possible cases". This definition reflects his idea of probability as determined partly by knowledge and partly by ignorance; where there is no reason to differently assign the possibilities, these will be "equally" evaluated.

THE FREQUENTIST INTERPRETATION OF PROBABILITY
The frequentist theory is born in the nineteenth century with the works of Robert Leslie Ellis (1817-1859) and John Venn (1834-1923), and has received a big boost with the study of Richard von Mises (1883-1953) and Hans Reichenbach (1891-1953) (Reichenbach, 1971). This interpretation considers the probability as a characteristic of empirical phenomena, expressed through the frequency with which they present themselves to observation. Its object are therefore "repeatable phenomena", considered through the random pattern, so unpredictable, of the series they create. From the behavior of these series, ratios of frequency are drawn, which tend to stabilize themselves increasing the number of observed cases.
The frequentist defines the probability based on those frequencies, putting the value equal to the limit to which tends the frequency of a given attribute, observed in relation to the initial sample of a series, ideally extendable to infinity. A sample is "random" when the limit values of the relative frequencies of its attributes remain unchanged in all subsequences that can be derived from it by means of place choices. In this view, therefore, the randomness plays a major role with respect to the probability, of which is both theoretical and empirical basis assumption. For the frequentism the probability applies only to phenomena that occur on a large scale, while it cannot tell on probabilities of individual events.
This marks the boundary of the frequentist setting, although undoubtedly there are large areas of natural sciences, such as the population genetics and the kinetic theory of gases, in which the probability is associated with multitude phenomena, thus raising issues of applicability. The need to ensure a broader applicability has been particularly felt by Reichenbach, who has produced a more ductile version of it, intended to be applied to only potentially infinite sequences, and which can be said "random" in relation to a restricted class of place choices.
To the individual case it is given a "weight"; the choice of the reference class must satisfy a criterion of "uniformity", which operates according to the concept of "statistical significance". In essence, it is required that the case is reported to the class containing the greatest possible number of similar cases. Also for Reichenbach the probability is the foundation of knowledge, especially in science, which opens to indeterminism too.

THE PROPENSIONIST INTERPRETATION OF PROBABILITY
Karl Raimund Popper (1902-1994) thought to an interpretation of probability for giving a meaning to the probabilities related to the individual case, which also are met in the new emerging physics, the quantum physics (Popper, 2002). This is the "propensionist interpretation" of probability, which he introduced in the mid-fifties, in order to take that over the eighties. In its original formulation, the propensionist theory is configured as a variant of the frequentism, corresponding to the concept of taking as primitive not the frequency, but the probability of the result of each single experiment, considered in relation to the boundary conditions.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The probability thus configures itself as a "property of the experimental apparatus", understood as the context in which the experiment takes place. For Popper the propensities are "physically real" as the forces. They generate frequencies, through which one can trace the propensities. The idea of propensity has assumed increasing importance in the thought of Popper, who in the last years of his life used it as the foundation of a metaphysical program for reconciling within a single framework all kinds of causal tendencies at work in the world, from microphysics to human action. The propensity theory has aroused great interest among philosophers of science. Several authors, including David Miller, Hugh Mellor, James Fetzer, Ronald Giere, Isaac Levi and Donald Gillies, have looked with favor at this interpretation, catching and modifying it in various ways.

THE LOGICIST INTERPRETATION OF PROBABILITY

According to the logical interpretation, the probability has an epistemic meaning, and is defined as a logical relationship between sentences that express a hypothesis and as a set of experimental data taken in support of this hypothesis. The most illustrious forerunner of this interpretation has been Gottfried Wilhelm Leibniz (1646-1716), followed by Bernard Bolzano (1781-1848). During the nineteenth century, the logicism took place in England with studies of George Boole (1815-1864), Stanley Jevons (1835-1882), Augustus De Morgan (1806-1871), and taken up by William Ernest Johnson (1858-1931) and John Maynard Keynes (1883-1946) (Keynes, 2007).

The probability is seen as object of the logic, considered as the science of the "rational belief", respect to which the certainty arises as a limiting case. One of the most controversial aspects of Keynes's theory is the belief that the probabilistic relations are not always quantitatively measurable. It follows that we have probabilistic relations to which the calculus of probabilities is not appliable. Even Ludwig Wittgenstein (1889-1951) adopted in the work "Tractatus" the logicist perspective, without achieving major developments.

Waismann influenced directly Rudolf Carnap (1891-1970), author of the monumental work "Logical Foundations of Probability" (1950), where he developed an "inductive logic", using the instruments of symbolic logic and of formal semantics. A supporter of the logical interpretation of probability has been also the geophysicist Harold Jeffreys (1891-1989), who gave birth to a probabilistic-Bayesian epistemology, which includes elements similar to the subjectivism, as the belief that the notions of "objectivity" and "reality" are ultimately based on the probability, and the idea that empirical evidence can be uncertain.

THE SUBJECTIVISM

Anticipated by William Donkin (1814-1869), the subjective interpretation has been advanced by Émile Borel (1871-1956) in stark contrast with the Keynesian theory, and became definitive with Frank Plumpton Ramsey (1903-1930) and Bruno de Finetti (1906-1985) in the second half of the twenties (Sooyoung, 2011). Ramsey laid the foundations of modern subjective conception of probability. He replaced the logical relations posed by Keynes at the base of probability with the beliefs that the subject has about the occurrence of events. He defined the probability as "subjective degree of belief", giving a psychological, rather than logical foundation.

Then he associated to this notion of probability an operational definition that provides a measure, i.e. the degree of probability assigned by a person to an event based on the "amount" at which he would be willing to accept to bet a certain amount on its occurrence. The notion of "coherence" thus constitutes the pillar of subjectivism, ensuring their suitability as interpretation of probability. With de Finetti the subjective interpretation has been provided with a method that allows immediate applicability to statistical inference.

This method, expressed in the work "The prévision: ses lois logiques, ses sources subjectives" (1937), is the adoption of the Bayesian method, combined with the notion of "exchangeability". Used in combination with the Bayes rule, it provides a model on how to proceed inductively, in order to make possible the interaction between subjective probability and observed frequencies. The "a priori" probabilities are assigned according to the individual's beliefs; this corresponds to a way of looking at probability that de Finetti defines "elastic", as opposed to the attitude which he calls "rigid", typical of the objectivist perspective.

THE BIRTH OF QUANTUM STATISTICS

In the thirty years between 1900 and 1930 great discoveries in physics led to the creation of the two pillars of modern physics: the theory of relativity of Albert Einstein and the quantum physics by many authors. With relativity we assist to the revision of the concepts of space and time; with quantum physics we discover that the energy does not vary continuously, but assumes only values that are integer multiples of an indivisible quantity, the "quantum". The quantization of energy comes from an unresolved problem of the late nineteenth, related to the "black-body radiation" (Bogolubov & Bogolubov Jr, 2009; Di Sia, 2005; Di Sia[b], 2013; Di Sia, 2015).

Applying the laws of Maxwell of the classical electromagnetism, one obtains that the intensity of radiation emitted by a black body at a fixed temperature depends by the inverse of the fourth power of the wavelength. Wilhelm Wien (1864-1928) treated the radiation within a cavity in a similar manner to a gas of molecules and has been able to reproduce the general trend of the black-body curve, including the presence of a maximum of emission, but his theory failed in reproducing experimental data to long wavelengths. Another attempt has been

made by Lord Rayleigh (1842-1919) and James Jeans (1877-1946), which considered the radiation inside a cavity as formed by a number of stationary waves. Their result well reproduced the black-body curve at long wavelengths, but failed to short wavelengths and showed no maximum of emission.
In 1900 Max Planck (1858-1947) derived a formula reproducing the observed values in the black-body spectrum. His idea was to consider the total energy of the system as a "not divisible without limit" quantity, dividing it into "energy elements" (energy "quanta"). By calculating the probability P of the process, he found a spectral distribution formula that well accorded with the experimental curves only on condition that the energy was discretized into finite "packages" of energy $\varepsilon = h\nu$, where h is a constant, historically baptized as "Planck's constant", or "quantum of action" ($h = 6{,}6261 \cdot 10^{-34}$ Js) and ν is the oscillation frequency.
In 1923 Satyendranath Bose (1894-1974) derived the Planck law with a new statistical method, only using the hypothesis of the light quantum and considering the light quanta as indistinguishable. He did something totally new with respect to the tradition of classical mechanics; thus the "Bose-Einstein" (B-E) statistics and the "Fermi-Dirac" (F-D) statistics were born. The first (B-E) determines the statistical distribution relative to energy states at thermal equilibrium of a "bosons system" (bosons are particles with integer spin); the second (F-D) determines the statistical distribution of a "fermions system" (fermions are particles with half-integer spin). The two new statistics are approximated by the Maxwell-Boltzmann statistics, where high temperature or high densities are involved (Di Sia, 2014).

CONCLUSIONS

The interpretations of probability correspond to different schools of thought, which include supporters among statisticians, scientists and philosophers. The frequentism is still a rather credited trend between statistical and natural scientists, despite the difficulties encountered in quantum physics. The propensionist interpretation is acclaimed especially among philosophers of science. The classical view seems a bit outdated, mainly because of the determinism that underlies it.
The logicism, while still counting a number of supporters, has given way to subjectivism, which enjoys considerable popularity, especially among statisticians, researchers working in human and epistemological sciences. The birth of quantum physics has brought new light on science and statistics. The concept of probability and the following statistics are and remain a useful, interesting and important field of scientific and philosophical inquiry, ranging from pure speculation to the simplest problems of phenomenological character.

References

Bogolubov, N. N., Bogolubov Jr, N. N. (2009). *Introduction to Quantum Statistical Mechanics* (2nd Ed.). Singapore: World Scientific Publishing Company.
Di Sia, P. (2005). Un intervento sull'evoluzione dei concetti di spazio e tempo. *Periodico di Matematiche - Organo della Mathesis*, 5(3), 55-68.
Di Sia, P. (2014). *Fondamenti di Matematica e Didattica II.* Roma: Aracne Editrice.
Di Sia, P. (2015). Approaching youngs to unified theories: the charm of string theories. *Procedia - Social and Behavioral Sciences Journal* (Elsevier), 174C, 10-16.
Di Sia[a], P. (2013). *Fondamenti di Matematica e Didattica I.* Roma: Aracne Editrice.
Di Sia[b], P. (2013). Exciting Peculiarities of the Extreme Physics. *Journal of Physics: Conference Series.*, 442(1), 012068 (6 pp.).
Hazewinkel, M. (Ed.) (2001). *Bayes formula.* Encyclopedia of Mathematics, Berlin: Springer.
Huygens, C. (2010). *Christiani Hugenii libellus de ratiociniis in ludo aleæ. Or, the value of all chances in games of fortune; ... mathematically demonstrated.* Farmington Hills: Gale ECCO, Print Editions.
Keynes, J. M. (2007). *A Treatise on Probability.* New York: Dover Publications.
Laplace, P. S. (2012). *A Philosophical Essay on Probabilities* (Classic Reprint). New York: John Wiley & Sons.
Popper, K. (2002). *The Logic of Scientific Discovery* (Routledge Classics) (2nd Ed.), Vienna: Springer.
Reichenbach, H. (1971). *The Theory of Probability: An Inquiry into the Logical and Mathematical Foundations of the Calculus of Probability* (Library Reprint) (2nd Ed.), Oakland: University of California Press.
Sooyoung, S. (2011). *Academic Genealogy of Mathematicians.* Singapore: World Scientific.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTIMATE PARTNER VIOLENCE: SOCIAL SUPPORT AND COMING OUT

Garro Maria
Department of Psychological
Educational and Training Science
University of Palermo, Italy
maria.garro@unipa.it

Cirami Federica
PhD Student in European Cultural Studies
Department of Culture and Society
University of Palermo
federica.cirami@unipa.it

Elena Ayllón Alonso
Department of Social Psychology
Faculty of Psychology
University Complutense of Madrid, Campus Somosaguas
elena.ayllon@ucm.es

ABSTRACT
Violence in same sex relationships is characterized by systematic path of dominance and control, even often stigmatized by abusive and powerful behaviors; especially, in the homosexual relationships some risk factors, as the lack of balance between the couple and the threat of public outing, play fundamental role.
The relevance to identify both risk and protective factors, suggested by variable dispositions in intimate partner violence (dependence's style, violation), situational dispositions (social support homo-negativity) and factors connected to the quality and managing ability of intimate dynamics (communication, conflict, sexuality).
Some findings collected by an investigation conducted by a group of Sicilian participants (Italy) show their tendency to not have specific role, in absence of outing, in the dynamics of intimate partner conflicts. Rather, they tend to value positive aspects of the relationships, minimizing the danger of aggressive behaviors. Findings highlight the need to contrast deeply the phenomenon integrating interventions with specific actions. Especially, these actions should be addressed to social, educational, informational and political dimension, in order to fight the strong sexual discrimination in Italian area.

INTRODUCTION

Gender-based violence in heteronormative discourse has dominated researchers and interest among scholars. Particularly, violence against women predominates in epistemic understanding of culture of violence. Otherwise, there is less attention regarding violence between lesbian, gay, bisexual, transgender and queer (LGBTQ) due to limitation in determining the complex phenomenon into societies which discriminate same-sex relationships forcing them to isolation, marginalization and stigmatization. Particularly, the violence in intimate relationships is part of a systematic pattern of dominance and control, and it is often characterized by the abuse of power that produces social isolation and impoverishment of social skills, participation and freedom of action. The severity of the consequences of this relational configuration on direct victims (the partner who suffers violence, and children, if there are any) required a series of surveys on the level of knowledge of the phenomenon, of preventive interventions, of taking charge of abuser and victim, of legal protection in defense of individuals involved.
Some researchers argue that the cyclical pattern of violence supported by Walkers (1979) is still useful for understanding the development and maintenance of violent dynamics (McClennen, Summers, & Vaughn, 2002; Richards, Noret, & Rivers, 2003; McClennen, 2005). According to this model, which supposes the possibility to distinguish the role of the victim and the role of the author/authoress of violence, the cycle is divided in three stages: the first - called the phase of growth and anxiety- is one where there is a predominance of one of the two components of the couple who acts through emotional abuse and evident hostility against the rules and expectations that actually are broken. In the second stage, targeted as attacking stage, not only the severity of the attack produces results physically observable but the coping skills of the victim are reduced due to the escalation

 Copyright © International Conference on New Horizons in Education Conference (INTE)

of aggression and the fear of being abandoned. In fact, the victim becomes less able to cope with situations of risk.
Reaction caused by the manipulative behavior of the author of the violence that urges the victim to doubt about her/himself and her/him judgments of reality (*gaslighting*). In the third stage ("honeymoon") it stands out a kind of rapprochement: the executioner, playing down, apologizes to the partner promising not to be more violent. The motivation of the violent act is detected by the author in external factors (situational variables) such as stress. However, it is only a short period of quiet since, after the lag phase, another cycle of violence will start.
In particular, in same-sex couples the need to not reveal their sexual orientation or the presence of conditions that expose them to risk of coming out, impose additional stress of social isolation.

SEXUAL PREJUDICE IN ITALY

In Italy, about one million people declared her/himself homosexual or bisexual, especially among young adults of central Italy. Another two million or so said that they had experienced in their lives falling in love, having sex or sexual attraction to people of the same sex. Data shows of course only a part of LG (Lesbian and Gay) population since it is an underestimated phenomenon; serious difficulties for the coming out- that is to say, the voluntary act of revealing their homosexual identity - emerge because of social discrimination that in Italy is also present within the natural family. In fact, about 20% of the parents know the sexual orientation of their children, unlike the brothers (45.9%), the colleagues (55.7%) and especially the friends (77.4%) are in the dark about gender identity's issue (ISTAT, 2012).
Especially, homo-negativity refers to both the aversion and to the anxiety of homophobia, as well as to the range of attitudes towards homosexuality, also including the cultural components and the social roots of intolerance (Herek , 2000; Lingiardi, 2007), also it is still present among young people, not allowing the coming out (Garro, Novara, & Di Rienzo, 2013). All this despite the awareness of the Italian public opinion of the presence of homosexual people, their needs and rights are often unknown; a reality currently subject of attention by virtue of controversy concerning the possible formation of a homosexual family, which lives an absolute anomie.
These are also the reasons for which gay and lesbian couples are forced to invisibility and silence in case of possible incidents of violence within them.

VIOLENCE IN SAME-SEX RELATIONSHIP

The theme of violence in same-sex couples seems to have no mutable content by the violent dynamics in heterosexual couples. In fact, as Ristock and Timbang (2002) claimed, according to the conducted surveys among homosexual people the heterosexual paradigms of domestic violence cannot fully explain the experience of same-sex couples where partners cannot always tell who is the victim and who the perpetrator.
In fact, the power is managed depending on the interpersonal and social context in which it develops in alternately way from both partner (ibid.). Considering that discrimination, negative stereotypes and prejudices are regularly directed to anyone who is not part of a dominant cultural group, for LG people may be more difficult, compared to heterosexuals, to address violence in intimate relationships and to get the support that they need to deal with it .
Further, the mainstreaming of same-sex intimate partner violence into public discourse presents critical questions about the purpose of dominant gender paradigms such as gender categorization and sexual orientation applied to understand heterosexual intimate partner violence. Problematic results the use of heterosexual language to describe and frame homosexual reality. Few studies have stressed the relevance of differences between homosexual and heterosexual community highlighting the impact of social, political and geographic contexts. Several important studies have stressed specific abusive behaviors that reflects context of homophobia, threats to reveal the sexual identity of a partner to family, friends or workplace or threats to reveal HIV/AIDS status of a partner (Ristock and Timbang 2005). For these reasons it is important to consider contexts and spaces in which violence is experienced so as the relevant role of specific risk factors as the stigmatization of illness such HIV/AIDS, the effects of alcohol or drug use, the social isolation in rural communities, the experiences of immigration or general moving so as different structural factors that produce and reproduce inequalities and disadvantages (ibid). Recent studies have interrogated critically the concept of being "at risk" (Hiebert-Murphy, Ristock and Brownridge 2011) for violence among relationships of same-sex, so as the nature and consequences of violence in the lives of same-sex couples using a postmodernist intersectional framework in order to overtake heteronormative construction of violence concerning the understanding of nature, consequences, risk factors and protective factors (Davis, Glass 2011).
In Italy studies that examine homosexual relations are not abundant because it is an underestimated phenomenon due to sexual prejudices and gender stereotypes. As consequence, LG subjects are obligated to live in the invisibility and silence. For this reason, the research sector, relatively new, on violence in same-sex intimate relationships is often examined, as well as in international level, in master Thesis and dissertations that often are

 Copyright © International Conference on New Horizons in Education Conference (INTE)

not readily available to the public (McClennen, 2005; Rohrbaugh, 2006). From the silence escape only the members of the association Rainbow Families that since 2005 represents in Italy those who have realized their project about parenting, or who aim to create family based not on biology or on the law but on the responsibility, daily mutual commitment, so as on the respect and love (www.famiglieарcobaleno.org). However, the data obtained through international investigations reveal that the phenomenon of violence in same-sex relationships seems to revolve around the balance of power, inextricably linked to socio-cultural, education, employment status and state of health partner. In addition, another risk is the possible presence of threats of homophobia – i.e. the set of feelings and negative attitudes towards homosexual characteristics in themselves and in other people - that is associated with low quality of the couple relationship and the high levels of relationship conflict (Balsam & Szymanski, 2005; Frost & Meyer, 2009). Furthermore, several aspects as guilt's experience and the hope of a change of partner violence are recurrent emotional responses elicited by the victims, both homosexuals and heterosexuals, as well as it is revealed a constant cyclical nature of the abuse, the intensification of harassment over time, the issues of power and control, social isolation and the minimization of suffered violent act (Elliott, 1996; Walsh, 1996). The possible transition from violence to abuse, or intimate terrorism (Johnson, 1995; Rohrbaugh, 2006), takes place instead in the presence of a relational model based on humiliation, control relied on shame, even on intimidation (Neilson, 2004). In fact, a partner can threaten the other to coming out, revealing to social community the sexual orientation against the own will (Corrigan & Matthews, 2003). Moreover, he/she can convince the victim that precisely because of such compulsory disclosure, he/she will lose the opportunity to receive material and psychological support by those who are unaware of his/her sexual orientation, including the original family or friends. Social isolation and the threat of "outing" are extremely powerful factors. Therefore, revealing both the personal sexual orientation and the sexual violence is equivalent to a double -*double closet*- coming out that it often provokes further isolation and psycho-physical vulnerability (McClennen, 2005).

Finally, outing instead of coming out means the voluntarily act to disclose the own homosexual identity, a necessary condition to achieve coherence between public and private identity, social and personal identity (Smart, Marasco & Baiocco, 2011). Relationships with family and friends could be irretrievably damaged if the partner's sexual orientation is revealed or announced in a hostile manner (Rohrbaugh, 2006). Generally, then the revelation of sexual orientation of a child is hardly welcomed by his/her family; It can be accepted only in the course of daily interactions through a process of adaptation. In addition, the existing resources within the family system play an unique role in producing certain developmental outcomes than others as a result of coming out. In such logic, adaptability and family cohesion, understood as the emotional bond, are protective factors (Olson, 1996). In summary a positively coming out processed by the family system can be conceptualized as a series of mutual adaptations between all members of the family and it involves: self-acceptance and affirmation by the son/daughter of his/her homosexual identity, the promotion of well-being and emotional growth of all members of the family, openness of the family system to the outside and the involvement of origin's families and the wider social context (Baiocco, Marasco, Smart, & Lonigro, 2012). Finally, the decision to leave or report the abusive partner depends often even on the possible lack of internal and external resources, on shame about the possible disclosing, the feeling of putting a bad light on the entire gay community, increasing prejudices about homosexuality (Brown, 2008). Therefore, specific attention should be paid to work on the emotions because the victims often do not appear able to react on the basis of how they feel; in fact, they spend their whole energy to understand the meaning of the violent behavior of the partner, to prevent violence and the possible isolation, thereby also minimizing the amount of violent conduct.

IPV IN LG'S RELATIONSHIPS: THE CASE OF ITALY

The analysis of the phenomenon of violence in intimate adulthood homosexual relationships, show the presence of dispositional variables (style of attachment, violence) and situational (socio-economic status, homonegative environments, perceived and received social support) and still variables associated to the quality and the management of internal dynamics (communication, conflict, sexual life), that influence the couple dynamics so as possibly decision by the victim to denounce the suffered behaviors. The possible use, in fact, of the social support network (family, friendship, or significant other) is a protective factor; an opportunity of which enjoy only those who have revealed their sexual orientation (coming out).

This is what has been shown in a preliminary analysis of the results obtained by a qualitative survey. We conducted the study on 502 subjects components of the Sicilian communities LG (185 females and 317 males; mean age = 37.96; Education = 58.4 % Bachelor's degree or higher; 67.9% coming out) that experienced, or were maintaining, or cohabiting relationship at the time of the survey (46.6% cohabiters), and actually it is currently being processed. In Italy, investigations with homosexual participants present some difficulties caused not only by the lack of validated instruments on homosexual couples, which is why one have to borrow self

 Copyright © International Conference on New Horizons in Education Conference (INTE)

report questionnaires from research conducted between heterosexual couples (Coker, Smith, Thompson, McKeown, Bethea & Davis, 2002; Ridley & Feldman, 2003; Stith, Green, Smith & Ward, 2008; Goldenson, Spidel, Greaves, Dutton, 2009; Stith & McCollum, 2011), but also because of the small number of subjects to involve due to the invisibility to which the same are forced.

Italy, in fact, is a country where the negative attitude is widespread, peculiarity which explains the presence of 32% of subjects involved by us who are forced to live in invisibility because they are unable to unfold. These are also who claim to live a relationship at times violent and who are forced into silence because, having not done the coming out, they do not have a social support network. In contrast, 67.9% of the participants who completed the come out claim to have the opportunity to take advantage of a valuable support not only by friends or significant other, but rather by the family whose emotional closeness, for example, is generally more stable over time compared to that of strangers.

Furthermore, it has been possible to highlight the position of those who report the presence of violent dynamics within the intimate relationship, but that tends to enhance all the positive aspects of the report (72%). It seems that the subjects involved tended to minimize the danger of the aggressive behavior and to amplify the magnitude of the external support received especially in cases where the unveiling did not take place. Strong emotions that characterize the pair bond, in fact, urge not to end the relationship because, as some theorists claim, the emotions are most frequently and intensely experienced in the context of close relationships (see Ekman & Davidson, 1994). Lazarus, for example, states that "most emotions involve two people who are experiencing either a transient or stable interpersonal relationship of significance" (1994, p. 209). Balsam (2001) suggests that in such relationships a risk factor for the increase of severity and frequency of violence is the degree of dependence on the abuser; this, according to Peterman and Dixon (2003), makes it even more difficult for victims to end the relationship. Similarly, the anxiety and the fear of being abandoned are associated with violence (Rholes & Simpson, 1998). Consequently, it seems necessary to devote space to the profile of the personality of those involved; potential violent dynamics reside, in fact, in the sphere of the individual characteristics of the protagonists of violence (perpetrators and victims), and not only in the possibility of getting support from their families of origin or in the peculiarity of intimate relationship (McKenry, Srovich, Mason , & Mosack, 2006; Salerno & Giuliano, 2012).

However one ever-present issue in assessment of violent behavior is the absence of a “gold standard” with which compare self-report data. Even if such normative data were available, it would be difficult to draw conclusions on an individual basis regarding whether a participant has accurately reported the dynamics of couple conflict. Unlike behaviors that are directly observable, risky sexual violent behaviors are inherently private, frequently considered taboo, and with characteristics that make them inherently inaccessible to direct assessment strategies. The fact that there is no complaint that corresponds directly to frequency of violent behavior compounds the problem. There have been few studies designed to examine evidence for the validity of self-report violent behavior measures. However, methods such as comparing self-reports with partner reports and comparing self-reports of risk behavior, have been employed in several studies (Schroder, Carey, & Vanable, 2003).

CONCLUSION

The risk of experiencing violence in relationships is reduced if the communication patterns and conflict become the objects of intervention of professional’s healthcare. However, it is also useful, especially for the well-being of same-sex couples and homosexual persons, to combat the ignorance and prejudices regarding sexual orientation, integrating the individual psychological support interventions with specific and coordinated actions as social, educational and informational actions. All that in the respect of human rights with national and international legislative action. In fact, the laws, that exclude lesbian and gay people from the recognition of rights, cause stress among the interested which affects the physical and mental health of the same (Munsey, 2010).

It is clear that the IPV in homosexual relationship is a problem that must be inserted into the socio-political and cultural contexts, challenging the traditional paradigms of understanding and evaluation of the phenomenon. In this sense, it needs a research that deepens characteristics, impact and extensions of this phenomenon at the micro and macro level.

The requirement emerges for future social workers to acquire new competencies and high healthcare training to guarantee social support of ample respite to social minority groups, subjects of discrimination and stigmatization.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

There is the need to get more information and education of professionals who work in this field with the specific nature of violence in same-sex couples in order to identify the role of counseling and support in dealing with victims and the offenders, in the difficult process of separation and affective emancipation.
Intimate partner violence in same-sex relationship is stigmatized deeply by homophobia, HIV and outing's threats (Craft, Serevoich, 2005). Such aspects characterize, therefore, the violence in LG's partners. It is unintelligible, therefore, how many societies generalize the problem of gender-based violence in prevention's measurements. Particularly, in Italy the campaigns about gender-based violence regard merely cases in which women suffer violence and men commit violence. As consequence, gender-based violence against men, lesbian, gay, queer and travesty remains obscured and invisible.
Moreover, it is necessary to encourage primary prevention campaigns and emotional education in order to facilitate the disclosure of homosexuals as well as the acceptance by the people significant emotionally. During the adolescent phase of the son/daughter the acceptance of the family is associated with positive health outcomes of children in terms of self-esteem, social support and general health, and it is a protective factor against depression, abuse of substance, or suicide attempts (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010). All these factors are well correlated with the possibility of succumbing to violence in intimate relationships in adulthood.
In fact, violence activates more easily if it is linked to abuse of alcohol and drug, social isolation in rural communities, to immigration, to risky sexual behavior, the perception of social barriers that prevent the requests' help (Ristock, 2005; Eaton et al., 2008).
Finally, it is important to stress that "the historical legacy of Italian legislation is characterized by negation rather than repression of homosexuality. Same-sex relations, as well as homophobia, remain invisible to state regulation. The only relevant exception is legislative decree no. 216/2003 implementing Directive 2000/78/CE, where sexual orientation is mentioned as one of the grounds of discrimination. (Art.1)
Generally speaking, the Italian legal system lacks documents, statistics and case law concerning discrimination on the ground of sexual orientation. And there is no recognition of same-sex partnerships at national level and no access to adoption for same-sex couples (Art.2). And Art.3: Several LG organizations are mobilizing for the legal recognition of same-sex partnerships and against homophobia and discrimination, including speaking out against the influence of the Catholic Church in hampering new legislation on these issues (Cowi, 2009).

REFERENCES

Astuto, A., Marasco, B., & Baiocco, R. (2011). Parental Reactions to their sons' sexual orientation disclosures, family functioning and internalized sexual stigma in gay and lesbian adolescents. 1° Conferenza Internazionale "Hermes Linking Network to Fight Sexual and Gender Stigma". Napoli, 7 Ottobre, 2011.

Baiocco, R., Marasco, B., Astuto, A. & Lonigro A. (2012). Qualità della relazione con i propri genitori, funzionamento familiare e coming out in giovani gay e lesbiche. *Counseling. Giornale italiano di ricerca e applicazioni*, 5, 193–206.

Balsam, K., & Szymanski, D.M. (2005). Relationship quality and domestic violence in women's same-sex relationships: The role of minority stress. *Psychology of Women Quarterly*, 29,258-269. http://dx.doi.org/10.1111/j.1471-6402.2005.00220.x

Brown, C. (2008). Gender-Role Implications on Same-Sex Intimate Partner Abuse. *Journal of Family Violence*, 23, 457–462. http://dx.doi.org/10.1007/s10896-008-9172-9.

Coker, A.L., Smith, P.H., Thompson, M.P., McKeown, R.E. Bethea, L. & Davis, K.E. (2002). Social Support Protects against the Negative Effects of Partner Violence on Mental Health, *Journal of Women's Health & Gender-Based Medicine*, 11, 5, 465-476. doi:10.1089/15246090260137644.

Corrigan,P. W., & Matthews, A. K.(2003). Stigma and disclosure: Implications for coming out of the closet. *Journal of Mental Health*, 12, 3, 235 – 248. http://dx.doi.org/10.1080/0963823031000118221.

Cowi (2009). The social situation concerning homophobia on discrimination on grounds of sexual orientation in the United Kingdom. Copenhagen: Danish Institute for Human Rights.

Eaton, L., Kaufman, M., Fuhrel, A., Cain, D., Cherry, C., Pope, H. & Kalichman, S.C. (2008). Examining Factors Co-Existing with Interpersonal Violence in Lesbian Relationships. *Journal of Family Violence*, 23: 697-705.

Craft, S.M., Serovoich, J.M. (2005). Family-of-Origin Factors and Partner Violence in the Intimate Relationships of Gay Men Who are HIV Positive. *Journal of Interpersonal Violence*, 20, (7), 777-791.

Ekman, P., & Davidson, R. J. (Eds.). (1994). *The nature of emotion*. New York: Oxford University Press.

Frost, D.M., & Meyer, I.L. (2009).Internalized Homophobia and Relationship Quality Among Lesbians, Gay Men, and Bisexuals. *Journal of Counseling Psychology*, 56, 1, 97-109. http://dx.doi.org/10.1037/a0012844.

Garro, M., Novara, C., & Di Rienzo, G. (2013).Teaching and Sexual Prejudices. New Training Needs. *Procedia-Social and Behavioral Sciences*, 106, 2541-2551. http://dx.doi.org/10.1016/j.sbspro.2013.12.292.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Goldenson, J., Spidel, A., Greaves, C & Dutton, D. (2009). Female Perpetrators of Intimate Partner Violence: Within-Group Heterogeneity, Related Psychopathology, and a Review of Current Treatment with Recommendations for the Future. *Journal of Aggression, Maltreatment and Trauma*, 18,7,752-769.

Herek, G.M. (2000). The Psychology of Sexual Prejudice. *Current Directions in Psychological Science*, 9, 19–22. http://dx.doi.org/10.1111/1467-8721.00051.

Hiebert-Murphy, D., Ristock, J., & Brownridge, D. A. (2011). The meaning of "risk" for intimate partner violence among women in same-sex relationships. In J. L. Ristock (Ed.), Intimate partner violence in LGBTQ lives (pp. 37-55). New York, NY: Routledge.

Johnson M.P. (1995). Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and Family*, 57, 283-294.

Lingiardi, V. (2007). Citizen Gay. Famiglie, diritti negati e salute mentale. Milano:Il Saggiatore.

McClennan, J. C., Summers, A. B., & Vaughn, C. (2002). Gay men's domestic violence: Dynamics, help-seeking behaviors, and correlates. *Journal of Gay and Lesbian Social Services: Issues in Practice, Policy, and Research*, 14, 1, 23–49. http://dx.doi.org/10.1300/J041v14n01_02

McClennen, J.C. (2005). Domestic violence between same-gender partners: Recent findings and future research. *Journal of Interpersonal Violence*, 20, 149-154. http://dx.doi.org/10.1177/0886260504268762.

McKenry, P.C., Srovich, J.M., Mason, T.L., & Mosack, K. (2006). Perpetration of Gay and Lesbian Partner Violence: A Disempowerment Perspective. *Journal of Family Violence*, 21, 4,233-243. http://dx.doi.org/10.1007/s10896-006-9020-8.

Munsey, C. (2010). Psychology's case for same-sex marriage. *Monitor on Psychology*, 41,9,46.

Neilson, L.C. (2004).Assessing mutual partner-abuse claims in child custody and access cases. *Family Court Review*, 42, 411–438. http://dx.doi.org/10.1177/153124450404200304

Olson, D. H. (1996). *Clinical assessment and treatment interventions using the family circumflex model*. In F. Kaslow (Ed.). *Handbook of relational and diagnosis and dysfunctional family patterns* (pp. 59-80). New York: Wiley.

Peterman L.M., & Dixon, C.G. (2003). Domestic Violence Between same-Sex Partners: Implications for Counseling. Journal of Counseling and Development, 81, 40-47.

Richards, A., Noret, N., & Rivers, I. (2003). Violence & abuse in same-sex relationships: a review of literature. *Social inclusion & diversity paper: research into practice*, 5, 3-33.

Ridley, C.A & Feldman C.M. (2003). Female domestic violence toward male partners: Exploring conflict responses and outcomes. *Journal of Family Violence*, 18, 3, 157-170.dx.doi.org/10.1023/A:1023516521612.

Ristock, J. L., & Timbang, N. (2005, January). Relationship violence in Lesbian, Gay, Bisexual, Transgender, Queer [LGBTQ] communities: Moving beyond gender based work", Violence Against Women Online Resources. Retrieved from: http://www.mincava.umn.edu/documents/lgbtqviolence/html.

Rohrbaugh, B. J. (2006). Domestic violence in same gender relationships. *Family Court Review*, 44, 2, 287–299. dx.doi.org/10.1111/j.1744-1617.2006.00086.x.

Ryan, C., Russell, S.T., Huebner, D., Diaz, R. & Sanchez, J. (2010). Family Acceptance in Adolescence and the Health of LGBT Young Adults. *Journal of Child and Adolescent Psychiatric Nursing*, 23, 4, 246 205. dx.doi.org/10.1111/j.1744-6171.2010.00246.x.

Salerno, A., & Giuliano, S. (Eds).(2012). *La violenza indicibile. L'aggressività femminile nelle relazioni interpersonali*. Milano: FrancoAngeli.

Schroder, K. E. E., Carey, M. P., & Vanable, P. A.(2003). Methodological Challenges in Research on Sexual Risk Behavior: II. Accuracy of Self-Reports, *Annals of Behavioral Medicine*, 26,2: 104–123. dx.doi.org/10.1207/S15324796ABM2602_03.

Simpson, J.A., & Rholes, W.S. (1998). Attachment Theory and Close Relationships. New York: Guilford press.

Stith, M.S., Green, N.M., Smith, D.B. & Ward, D.B. (2008). Marital Satisfaction and Marital Discord as Risk Markers for Intimate Partner Violence: A Meta-analytic Review. *Journal of Family Violence*, 23, 149-160. dx.doi.org/10.2307/350547.

Stith, M.S. & McCollum, E.E. (2011). Conjoint treatment of couples who have experienced intimate partner violence. *Aggression and Violent Behavior*, 16, 312-318. dx.doi.org/10.1007/s10896-007-9137-4.

Walker, L. E.(1979). *The Battered Woman*. New York: Harper & Row.

Walsh, F. (1996).Partner abuse. In D. Davies & c. Neal (Eds). Pink therapy: A guide for counselors and therapists working with lesbian, gay and bisexual clients (pp. 187-198). Philadelphia PA: Open University Press.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTRAPSYCHICAL FACTOR INFLUENCE ON THE RATIONALITY OF THOUGHT

Andrea JUHÁSOVÁ
Constantin the Philosopher University in Nitra
ajuhasova@ukf.sk

ABSTRACT
The article addresses the influence of intrapsychic factors on the rationality of thought. It describes rationality in the context of its general and specified definitions, the theory of rational choice, types and historical understanding of rationality, and the role of cognitive science in researching rationality. Further on the article researches to what extent individual intrapsychic factors influence the rationality of human thought. A quantitative research looking into the influence of anxiety on the rationality of human thought forms part of the article. The existence of a correlation between anxiety and thought rationality was verified by means of STAI T-161 and REI questionnaires.

INTRODUCTION
The word “rationality” is of Latin origin and it means mental perception, interpretation. Since the oldest times, one of the most important characteristics of man is considered to be the one which speaks of man as wise, therefore rationally thinking. Thus, at the start we can say it is the utilisation of the mind. When looking more thoroughly into this concept, however, we come to realise the fact that understanding rationality is not at all simple. In the ordinary, everyday perception of the surrounding world, every one of us has surely come across this word, or rather concept. The question is, who, among us, was more deeply interested in understanding it. The expression “rationality” describes some important phenomena, but on the other hand, it is not something one could put their finger on. We were therefore interested, whether it would have helped in the understanding of rationality if we tried, for a while, to address its opposite. What is irrational behavior? Many times, we have come across the actions of humans described as irrational, imprudent, incorrect. This is exactly why we began to think about the phenomenon of irrationality while writing this article. Explaining the concept of irrationality could help us explain, or understand, the concept of rationality. While studying this concept we have quickly come to the conclusion that it is almost not in our power to find a general criteria of irrationality. We were therefore interested in what should be the expression of rationality. Apparently, it should be the accordance between human convictions and some real reasons for these convictions, and also the accordance between correct actions and the reasons for those actions. Piaček (1989) states that rationality is the way people come to conclusions when forced to reason intentionally. Be it consciously or unconsciously, they implement some rules of correct assumption. In further research, our interest turned on whether the term “rationality" had the same application in different areas. Reading diverse articles we found out that in different areas, the application of the concept differs slightly. For example, we will state that a rational decision is not always a decision of the mind, but in one of the ideal cases, is a decision that, at a given moment, is optimal in reaching a set goal or solving a given problem. How the mind looks for the correct decision and the analysis of the procedures leading to it remains a very interesting question for us.
The correctness of decisions and thus rational choice is reflected in diverse variants. Obviously, it depends on who is doing the deciding. Whether it is an economist, a politologist, or a sociologist, it is important to rememeber that this theory does not rely nor build upon how a rational individual will act in a given situation. That involves the subject of the theory of deciding itself.
We do build and rely on some of the models this theory works with. We differ between a narrow model, which concerns a simplified image of man and does not involve the motivation or values of individual people. In wide models, individual values and motivation of individuals are taken into account. In the present, the most used assumption is that the individual tries to gain the biggest fortune possible, which is then transformable into many other tangible assets. We consider it to be a big range of difference in the values in question.
(Hechter, Kanazawa, 1997), concluded in their study various verified sociological theories of rational choice in the mater of family, religion and political sociology while researching society and social mobility, racial and ethnic relationships and in medicinal sociology. If we are rational people, then according to us the correct question is whether everyone has or disposes of this characteristic equally. Does it also have the same effect? According to our experience, we discover that people have a penchant for not considering the decisions of others rational, and we also dispose of judging their way of life from a long-term point of view. From this, it stems that rationality can be ascribed to everyone, but the ways it is implemented are often different. Therefore, a simple example from everyday life emerges, where an individual can be a perfect speaker, can express the rationality of his decision in choosing the correct speeches, but is a very impractical individual while driving or managing a household. Among the most used divisions of rationality, there are theoretical, practical, scientific, and

 Copyright © International Conference on New Horizons in Education Conference (INTE)

a common sense rationality. Gálik (2009) explains theoretical rationality as the one concerning mainly human convictions and assumptions. It stems mainly from logic itself, logical rules and logical consistence. With its help, people can interprete the outside reality based on their senses and the ability to percept and interprete built on them.
Practical rationality concerns the decision itself and the strategy in determining and reaching one´s life goals up to managing their own life and its meaning. It is based on the theory of decision and material human nature as in genetical equipment. The next two types of rationality, to which the author (Nosek, 2007) has dedicated a whole book, are very important and culturally established. According to the author, in scientific and common-sense rationality, the characteristic traits are the reflection on conceptual thinking and therefore also abstractness and universality. According to (Gálik, 2009) the characteristic trait of scientific rationality is the requirement of strict verification of statements. This involves a process in which we, on one hand, research and reason, and on the other hand seek or remove possible errors. Common sense rationality stems from the assumption of communication going on on a level of normal language in an everyday setting. It is important to consider that these two types of rationality overlap partially and, naturally, need each other. Nosek(2007) further states two types of rationality, understood from his analysis in relation to the previous two rationality types, those being scientific and common-sense rationality. Firstly, he states a functional type, and secondly, a type based off the experience of assembly and disassembly, the analytic-constructional type.
The research of the influence of intrapsychic factors on rational thought was brought on by the behavioristic revolution, which meant a radical intervention into the methodology of psychology, Ruisel (2000) brings attention to the fact that if the research of cognitive processes was done exclusively by measuring performance, in the personality research were dominant. In an effort toward methodological integration, many psychologists have tried to class thought as part of personality structure. Despite this, some known experts such as H.J. Eysenck refuse to accept direct relations between intelligence and personality in man. There is a lot of empirical evidence on the influence of personality functions such as anxiety, anger, aggressivity, coping strategies, extroversy and introversy, performance motivation, the concept of "me", authoritativeness and such on intelligence (Ruisel, 2000).
In our article we worked with a factor which encapsulates a long-term state of personality. We targeted the correlation between anxiety as a trait and thought rationality. We were interested in how people with a penchant for anxiety express themselves rationally in individual situations and to what extent their rationality is influenced by this factor. Anxiety shows itself as an internal tremor, an accelerated heartbeat, gut and stomach pressure, weakness of the legs, dizziness, pain and others. These symptoms are a typical, natural reaction of the body to stress. If an individual is experiencing a state of anxiety, they make an effort to lower the tension. If stress situations occur, they tend to evade them. This evasive behavior is then rationalized (excused, explained) but this has nothing to do with rationality, it is but a defensive reaction of the organism. The consequences of anxiety states can of course differ depending on the type, duration and intensity of the experienced troubles. In the article we observed how many of the chosen individuals will show a tendency toward anxiety and how this influences the rationality of their thought.

THE STUDY
The main aim of the study is the research on how intrapsychic factors influence man´s rational thought. This mater being utmostly widespread, we focused on a single intrapsychic factor, the influence of anxiety on the rationality of thought. Thus, we want to find out the correlation between experiencing a state of anxiety and the rationality of human thought, whether this correlation exists and how tight it is.
The main goal of the research was:

- To find out the influence of intrapsychic factors, sprecifically anxiety, on the rationality of thought.

The main goal was observed through the setting of partial goals, in which we focused on the following:

- to find out the presence of an influence of the intrapsychic factor of anxiety on the rationality of thought,
- to find out the difference in expressing rationality and irrationality in male and female participants,
- to find out the presence of an influence of the intrapsychic factor of anxiety on the rationality of thought in males compared to females.

In our study, we empirically verify several hypotheses:
Hypothesis 1 : *A chosen intrapsychical factor influences human rational thinking.*
Operationalization: The influence of the chosen intrapsychic factor of anxiety will be verified in a chosen observational group by means of a STAI X 2 anxiety questionnaire.

Three more hypotheses are built upon the main hypothesis,

Hypothesis 2: *Female participants show a higher degree of experiencing anxiety than male participants.*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Operationalization**:** The degree of expression of the intrapsychic factor of anxiety will be found out in this research by means of a STAI X 2 anxiety questionnaire.

Hypothesis 3: *Male participants show a higher score in expressing rationality compared to females.*
Operationalization: The degree of expressing rationality and irrationality in a chosen group of participants will be found out in this research by means of the REI rationality/irrationality questionnaire.

Hypothesis 4: *The rationality of thought in female participants is more influenced by the intrapsychic factor of anxiety compared to males.*
Operationalization: The degree of influence of the intrapsychic factor of anxiety on rationality of thought in males compared to females will be found out in our research by means of a STAI X 2 anxiety questionnaire.and the REI rationality/irrationality questionnaire.

The research was done in the Nitra department (Slovakia) in the period from the 1st of February until the 1st of April 2016. The basis was composed of 120 respondents. The selection was done based on age and gender. Determining these relevant traits, we chose a participant group aged 20 to 35, while maintaining an equal proportion of males and females.
The research sample was composed of participants in the ontogenetical period of early adulthood, this was chosen because in this period the main concerns are the solidifying of one´s identity, identification with the role of an adult, clarification of personal goals, independence in the emotional and economic spheres. We consider it a period characterizable as the willingness to take upon oneself certain tasks, full of hopes and expectations. There is also a certain dilemma between the need of liberty and independence and that of the taking on of new roles (the role of a spouse or parent). Based on this, the expectations of society are formed, and to an extent, there is increased pressure on the individuals. This period also encapsulates several milestones, as in the choice of profession, marriage, accepting the role of a parent.

In the research, the STAI T – 165 anxiety questionnaire in the X2 form was used, as well as the REI rationality/irrationality questionnaire. This questionnaire is widely accepted within the scientific community and often used in various kinds of validation studies. The REI questionnaire, apart form basic data such as gender and age, contains 40 statements describing certain situations. The participant marks the level which best fits their opinion on the statement. It is free and publicly accessible. Its size can be a minor disadvantage.
Anxiety was measured by means of the STAI T – 161 X2 questionnaire, which, under the same conditions, contains 20 more statements. It measures anxiety, trait, or the penchant for anxiety, and according to Spielberg (in Müllner, 1980) it respects the following general characteristics.

- individual differences in the tendency to perceive the world,
- the disposition to answer in a specific and predictable way,
- individual differences in expressing specific emotional states,
- positive correlation between the strength of personality, traits and the intensity of the corresponding emotional state. It asks the question, "*How do you usually feel?"*

The maximal value a participant can get in every part of the questionnaire is 80, the minimal being 20. The higher the value, the higher the degree of current anxiety. (X-2)
The authors of this questionnaire, called State-Trait Anxiety Inventory (STAI) are C. D. Spielberg, R. Gorsuch and R. Lushen.

FINDINGS

The statistical processing of the data from the research was preceded by the collection and processing the data from the corresponding questionnaires STAI T- 165 form X 2 and REI. Evaluating both questionnaires we were guided by classing individuals into corresponding norms/stens. We created so-called sten norms, processed in the form of charts. It concerned classing a number of respondents having obtained the same score. For example, a score of 39 was achieved in the STAI inventory tests by 3 women and 7 men. (see chart 1). Within the collection of the data from the anxiety questionnaire STAI X 2 the header of the chart was constituted by the achieved score 20 to 80, which it was possible to get after completing the questionnaire. Furthermore, the header is divided into male and female participants (see Chart 1).

Chart 1 The results of STAI X 2 questionnaire testing

Chart 2 REI questionnaire testing results

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Score STAI	females	males
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	2
37	3	0
38	3	0
39	3	7
40	2	1
41	2	2
42	1	3
43	2	5
44	4	4
45	7	5
46	3	1
47	9	6
48	4	2
49	5	4
50	1	4
51	5	2
52	3	4
53	0	1
54	1	1
55	1	1
56	0	0
57	0	1

Score REI	females	males
10	0	0
11	0	2
12	0	3
13	1	2
14	0	0
15	1	1
16	0	2
17	2	3
18	4	6
19	2	7
20	1	5
21	1	1
22	4	3
23	3	2
24	2	0
25	1	3
26	0	3
27	1	3
28	7	2
29	3	0
30	7	0
31	3	1
32	8	2
33	0	1
34	0	1
35	3	4
36	3	3
37	4	0
38	0	0
39	0	0
40	1	0
41	1	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0

Within data collection from the REI rationality measurement questionnaire, the header of the chart was made up of obtained scores in a scope from 10 to 50, and a division of the participants into males and females, similarly to the STAI questionnaire (see Chart 2).
The research results are classed into individual parts bassed on the established hypotheses.

H 1: The chosen intrapsychic factor of anxiety significantly influences the rationality of human thought.
While verifying this hypothesis we used a quantitative method of statistical verification of the results of the REI and STAI T-165 questionnaires, illustrated in graph 1 and graph 2, called "*Gender comparation in the influence of the intrapsychic factor of anxiety on the rationality of thought."* Graph 2 is a completion of graph 1 to enhance

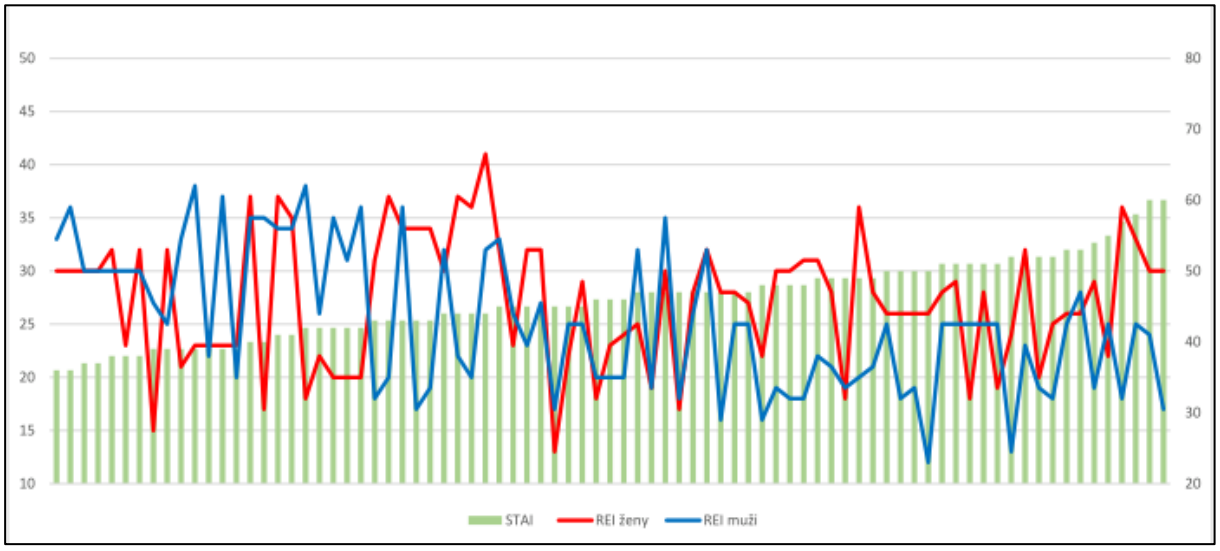
 Copyright © International Conference on New Horizons in Education Conference (INTE)

the illustration of the researched problem. As not every value of the REI questionnaire was represented in males, or females, variables were added to the rationality values for a better visualization and understanding of the graph. These variables were calculated as the average of the closest values rounded to the nearest integer, see Chart 3. If data is modified in graph 1 a source chart will appear (Chart 3), with the added values (variables) marked in yellow. Example: In the REI questionnaire we calculated the female values as an average of the existing values stemming from the STAI X 2 questionnaire, as in (15 + 32 +21): 3 = 23 rounded. . Similarly, REI female values appear as 20 or so.

Chart 3 Source chart

REI females	REI males	STAI
15	*27*	*39*
32	25	39
21	33	39
23	38	39
23	22	39
23	37	39
23	20	39
37	35	40
18	38	42
22	26	42
20	35	42
20	31	42
20	36	42
31	18	43
37	20	43

Graph 1 Comparation of the influence of anxiety on the rationality of thought – gender differences



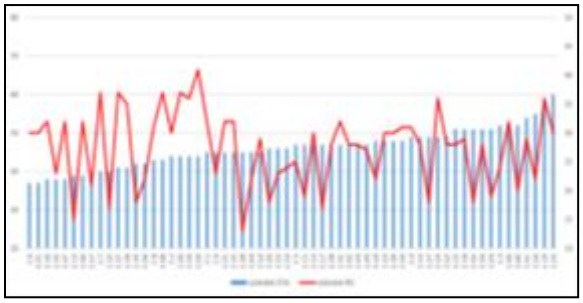
Female – red colour
Male– blue colour

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Graph 2 The influence of anxiety on rationality in females



Graph 3 The influence of anxiety on rationality in males



The results are illustrated in Graph 1, which constitutes the answer to the established hypothesis H1. We used color-code illustration, where REI questionnaire male values are depicted in blue, REI questionnaire female values are depicted in red, and STAI questionnaire values are depicted in green. On the left, the score achieved after completing the STAI questionnaire is mentioned, while the score achieved after completing the REI questionnaire is mentioned on the right. The aforementioned Graph 1 states, that as STAI X 2 values climb, thus, as anxiety levels increase, REI levels drop, which means that human rationality decreases slightly.
Based on these findings, the H1 hypothesis was confirmed, as in, the chosen intrapsychic factor of anxiety does influence the rationality of human thought. Within our research, we state that with an increased anxiety value, only a slight difference in rationality is perceptible in our chosen participant group.

H2: Female participants show a higher degree of experiencing the intrapsychic factor of anxiety than male participants.
To verify this hypothesis, again the statistical method of correlation of mutual relations was used. To explain the results of the statistical processing, we used graphs marked as Graph 2 and Graph 3. Based on comparing theses two graphs, where the anxiety curves in males (Graph 2) and females (Graph 3) are both depicted in blue, we can judge that only a really small difference occurs in expressing anxiety between males and females. The comparation of Graph 2 and Graph 3 shows that in females, anxiety was expressed to a higher degree than in males. We can say, though, that the difference is not evident, only small, as it can be seen in Graphs 2 and 3. The established H2 hypothesis was, therefore, also confirmed, even if we had expected more evident differences in the found values of experiencing states of anxiety between genders.

H3: Male participants show a higher score in expressing rationality in comparison to female participants.
Values obtained after filling out the REI questionnaire by our chosen participant group were used as data to elaborate the statistics to our research. These values can be seen illustrated by Graph 3. The climbing curve of anxiety expression in all participants is depicted in green. The values stemming from the REI rationality measurement questionnaire evaluation are depicted in red for females and in blue for males. From the aforementioned Graph 1, or a comparison between Graphs 2 and 3 we can see that women, in our research, have reached higher values speaking of the rationality of their thought than males. We can therefore conclude that based on the research, our claim was rebutted and, therefore, the hypothesis was not confirmed.

H4: The rationality of thought in female participants is influenced by the intrapsychic factor of anxiety to a higher degree compared to male participants.
In Graph 1, it appears that in a low anxiety expression, no evident difference in rationality expression occurs between genders. As the anxiety expression value rises, though, one can see a minor difference in rationality expression in men compared to women. It has shown that our prediction was false, and that, with rising anxiety, female participants show higher values of thought rationality expression that males. The curve depicted in blue, showing the values of the degree of thought rationality in men, as stemming from the REI questionnaire evaluation, has a tendency to drop as anxiety levels climb. This means a decrease of rationality of thought has shown. We therefore state that in male participants, the influence of the chosen intrapsychic factor of anxiety on the rationality of thought has showed to a higher degree in males than it has in females. Our hypothesis was therefore not confirmed (See Graph 1).
It stems from the research that the intrapsychic factor of anxiety influences the rationality of human thought. Only minor differences have shown in experiencing anxiety between genders. Female participants show higher values of experiencing the influence of anxiety than male participants. The paradox is, that in our chosen research sample the males show a lowered expression of rationality while experiencing a state of anxiety than female participants do. We could state that within the comparison of the influence of the chosen intrapsychical factor between genders, the rationality of thought is influenced by anxiety to a higher degree in males.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

CONCLUSIONS

The goal of our article was to find out how an intrapsychical factor, specifically anxiety, can influence the decision-making style and thus the rationality of human thought. We looked into how and to what extent anxiety influences the rationality of human thought. We put an effort into verifying whether there is a relation between these variables and how tight it is. We measured the occurrence of anxiety and degree of rationality on an individual, while also comparing these phenomena between genders. The principle of our research was to put values obtained from the anxiety measurement questionnaire and the ones obtained from the rationality measurement questionnaire into correlation. Spielberg (1970) predicts that anxiety influences performance more than anxiety as a trait, which practically means this variable is better suited for observing processes than general anxiety as a trait. There is much proof in literature of the validity of the STAI scales. In our conditions, many studies have been carried out, which prove the validity of the theoretical model of measuring anxiety as a trait, as well as the utility of the STAI diagnostical method. Ruisel and coll. (2013) states several examples of mutual correlation from various authors having dealt with this relation. Diverse participant groups were tested (students, blue collar workers, medics, doctors, managers). In our research we aimed for a balanced, homogenous participation of males and females, while we wished to observe the general influence on the rationality of thought in all participants but also the differences among them in the ontogenetical period of early adulthood. We were not concerned with researching a certain social group, or work position, but with observing the general influence and differences between genders. Ruisel and coll. (1978) found that females are more sensitive to the occurrence of situational influence and therefore, are more anxious than males. The overall score in males, though, was significantly lower than expected. Moffit and Sanger (in Ruisel, 2005) ascribed the higher anxiety in females to existing cultural stereotypes. We, in our research, also expected a higher expression of anxiety in female participants. The influence of anxiety and the difference in it between genders was investigated by means of the correlation with the REI questionnaire inventory. The rational-experimental inventory (REI) is often used in relation to other questionnaires. For example, the relation to pathological gambling machine use, looked into by the authors Maclaren, Fugelsang, Harrigan and Dixon (2012). Based on the results, the authors state that REI cannot differentiate among three researched groups. In practice, this means that riskless, moderately risky, and problem groups of gambling machine users are approximately equally rational. Thus, the cognitive style plays no significant part in relation to pathological gambling. In Slovakia, this questionnaire was looked into by various authors regarding diverse relations, for example Pilárik and Sarmány-Schuller (2011). The authors used factor and regressive analysis. Slyšková and Pilárik (2010) researched the relation of the REI questionnaire and Iowa Gambling Task on managers and social workers. Based on their results, we can state that their prediction of a higher degree of intuitive solving in managers was confirmed. Regarding the beneficiality of the solution, there were no differences between rational and experiential (experienciálnymi) participants. Sirota, Juanchich, Hangmayer (2013) was another Slovak author who researched the correlation of the REI questionnaire while comparing the correctness of Bayes task solving on a sample of 160 participants together with the EPI and AOM inventories. Sirota has shown that the REI, or more specifically its higher score in the rational subscale, increases the successfulness of the solutions. To conclude, we specify that REI is one of the oldest questionnaires that measures rationality, which is why we can find sufficient research to back it up. Newstead and colleagues (2004) state, that the REI questionnaire – rational scale predominantly measures motivation and the effort to logically solve problems and tasks , or the thought process of the solution, than the real ability to think rationally.

Hanák, Ballová – Mikušková, Čavojová (2013) researched the successfulness of the CRT reflexive logic as linked to the REI inventory. The authors´prediction was, that the respondents who mark themselves as rational, would be more successful in solving the task. They did not, however, find any difference concerning the successfulness of the solution. The goal of our discussinon is to bring and describe the results of research, where the cognitive style measured by the REI questionnaire was looked into, as well as its predictive validity. It is possible to state that the REI questionnaire cannot predict reaction speed – reaction time, if it is the only variable researched (Sobyra, 2010).

Our research offers results showing that human rationality is influenced by the intrapsychic factor of anxiety. The substance of our findings stems from the fact that with a growing expression of anxiety, thus reaching a higher score in the STAI inventory, the value, or score achieved in the REI inventory drops. The rationality of thought, finally, is vulnerable to being affected by the relations of intrapsychic factors, in our case, anxiety. Within the research, we anticipated that in male participants, rational thought is less affected by anxiety than in female participants. Our predictions have, however, not been confirmed, and we came to find out that the rationality of thought in male participants is affected to a higher degree by this factor than the rationality of thought in females.

Note that our research was carried out within the Nitra department, where we deliberately chose participants based on their age and gender. To increase the validity of the results of our research, a wider data collection with a countrywide scope is planned for the future.

Within the application for further research, we recommend to verify the relation of anxiety to the REI inventory, or some other intrapsychic factor with this inventory within a more specific participant group. The thematical

aim of the research offers possibilities for further questions, which could be beneficial in practice and could involve the areas of human rationality and irrationality and researching their relations and links to mental phenomena and processes through the test material inventories.

This article was made with the support of the grant:
VEGA -> 1/0028/15 – Education toward rationality: cognitive abilities, thinking dispositions and real-life results.

REFERENCES

Gálik, D. (2009). *Racionalita vedy a vedecká metóda*. [Online]. Bratislava: Filozofický ústav SAV, 2009. 8 s. <http://www.klemens.sav.sk/fiusav/doc/filozofia/2009/1/1-8.pdf>.
Hanák, R., Ballová – Mikušková, E., Čavojová, V. (2013). *Rozhodovanie a usudzovanie IV*. Bratislava: Ústav experimentálnej psychológie SAV.
Hechter, M., Kanazawa, S. (1997). *Sociological rational choice theory* [online]. New York: Copyright, 1997. (pp.191-214). [< http://blisty.cz/art/39146.html#sthash.alQM8VwT.dpuf >.
Maclaren, V, Fugelsang, J., K., Dixon,M,. (2012) *Effects of impusivity, reinforcement sensitivity and Cognitive style on Pathological Gambling symptoms among freguent slot machine players. Personality and Individual Difference.* Waterloo: University of Waterloo.
Müllner, J., Ruisel, I., & Farkaš, G. (1980). *Príručka pre administráciu, interpretáciu a vyhodnocovanie dotazníka na meranie úzkosti a úzkostlivosti*. Bratislava: Psychodiagnostické a didaktické testy.
Newstead, S.E., Handley, S.J., Harley, C., Wright, H. and Farrelly, D. (2004). *Individual differences in deductive reasoning.* Quarterly Journal of Experimental Psychology Section A-Human Experimental Psychology, 57, (pp. 33 – 60).
Nosek, J. (2007). *Věda a zdravý rozum. Komparativní studie dvou kompetencí racionality*. Plzeň : Západočeská univerzita v Plzni.
Piaček, J.(1999). *Racionalita*. In: Filit. Otvorená filozofická encyklopédia. [online] http://ii.fmph.uniba.sk/-kravcik/filit/.
Pilárik, L., Sarmány-Schuller I. (2011). *Personality predictors of decision-making of medical rescuers.* Studia psychologica, 53, 2, (pp. 175-184).
Ruisel, I., (2000). *Základy psychologie inteligence*. Praha: Portál 2000.
Ruisel, I., (2005). *Múdrosť v zrkadle vekov*. Bratislava: Ikar.
Ruisel, I., (2013). *Psychológia inteligencie*. Nitra: Univerzita Konštantína Filozofa v Nitre.
Sirota, M, Juanchich, M, Hagmayer, Y. (2013). *Ecological Rationality or Nested Sets. Individual Differences in Cognitive Processing predict Bayesian Reasoning*. Psychonomic Bulletin, Reviex, Max.
Slyšková, I., Pilárik, Ľ., (2010). *Rozhodovanie a intuícia manažérov z perspektívy. Teórie kognitívneho a experienciálneho Self.* In: Zborník z medzinárodnej konferencie "Rozhodovanie v kontexte kognície, osobnosti a emócií II." Nitra: UKF.
Sobyra, J., (2010). *The accuracy of self-reported intuitive and analytical ability*. Honors project. Illinois: Illinois Wesleyan University.
Spielberger, C.D., Gorsuch, R., Lushene, R. (1970). *Dotazník na meranie úzkosti a úzkostlivosti.* (*STAI).*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INVESTIGATING PRESCHOOL TEACHERS' USE OF INFORMATION TECHNOLOGIES IN TERMS OF SPECIAL FIELD COMPETENCES

Fatma Elif KILINC
Sağlık Bilimleri Fakültesi
Yıldırım Beyazıt Üniversitesi, Türkiye
fekilinc@ybu.edu.tr

Guluzar Sule TEPETAS CENGIZ
Sağlık Hizmetleri Meslek Yüksek Okulu
Abant Izzet Baysal Üniversitesi, Türkiye
suletepetas@ibu.edu.tr

ABSTRACT
The study examined "development of awareness about daily use of information technologies" under "Communication" competence field included in Special Field Competences for Preschool Teachers employed in preschools and nurseries. Study group was composed of 107 preschool teachers working in Bolu province. Data were collected with the help of personal information form developed by the researchers and the question form that includes A1 and A2 level performance indicators related to "development of awareness about daily use of information technologies" in the field of Communication Competence. Percentage frequency distributions and one way variance analysis were used in data analysis. Results showed that technological tool use of participating teachers did not differ based on age or seniority, 81,3% of the teachers used social media and 94,4% utilized information technologies in learning environments.
Keywords: *Preschool teacher competences, special field competences, information technologies.*

INTRODUCTION

Preschool is a crucial period in which the foundations of development are laid and basic information and skills are gained (Berrueta-Clement, Schweinhart and Barnet, 1984; Cotton and Conklin 1989; Schweinhart and Weikart, 1980). In addition to influencing the future, the knowledge, skills and habits obtained via experiences in early years will help children grow to be constructive, productive, independent and self expressive (Aral et. al., 2002; Oktay, 1999; Yavuzer, 1999). The quality of education that will be provided to children during this period is very important (Early and Winton, 2001; Shonkoff and Phillips, 2000). Effective programs and well equipped teachers are imperative for the success of preschool education since teachers are the fundamental elements in guiding the process (Şişman and Acat, 2003) (Saracho and Spodek, 2007). Today, teacher qualities have been changing due to advances brought by the information technology (Early and Winton, 2001; Saracho and Spodek, 2007). MoNE has developed "General Teaching Competences" and "Special Field Competences" that include information, skills and attitudes that active and candidate teachers and preschool and primary school teachers should have respectively. Preschool Teacher Special Field Competences prepared in this context have performance indicators composed of 19 competences and 3 levels in a total of 7 fields (MoNE, 2008).

This study aimed to examine "development of awareness about daily use of information technologies" under "Communication" competence field included in Special Field Competences for teachers employed in preschools and nurseries

METHODOLOGY

1. MODEL AND SAMPLE OF THE STUDY

This study was carried out as a survey study with a quantitative design. Study group of the study was composed of 107 preschool teachers employed in Bolu province. All participating teachers were females, 9,3% were 25 or younger, 18,7% were 26-30 years old, 29% were 31-35 years old, 26,2'% were 36-40 years old and 16,8% were 41 or older. In terms of professional experience, it was observed that 22,4% of the participating teachers had 1-5 years, 37,4% had 6-10 years, 15% had 11-15 years, 12,1% had 16-20 years and 13,1% had 21 year or higher seniority.

2. DATA COLLECTION INSTRUMENTS

Data were collected with the help of personal information form developed by the researchers and the question form that includes A1 and A2 level performance indicators related to "development of awareness about daily use of information technologies" in the field of Communication Competence.

3. DATA ANALYSIS

 Copyright © International Conference on New Horizons in Education Conference (INTE)

IBM SPSS 22 package program was used in data analysis. Percentage frequency distributions and one way variance analysis were used in data analysis. Content analysis method was utilized in analyzing the responses provided for open-ended questions.

FINDINGS

Findings of the study that sought whether preschool teachers had the competence for "development of awareness about daily use of information technologies" under "Communication" competence field included in Special Field Competences for teachers employed in preschools and nurseries are presented below:

Table 1: Frequency Distributions for the Items Related to Teachers' Use of Information Technologies

		N	%
Is there an easily accessible internet connection at school?	**Yes**	103	96,3
	No	4	3,7
	Total	107	100,0
Do you have Internet connection (at home)?	**Yes**	105	98,1
	No	2	1,9
	Total	107	100,0
Do you have an e-mail address?	**Yes**	102	95,3
	No	5	4,7
	Total	107	100,0
Do you have a social media account?	**Yes**	87	81,3
	No	20	18,7
	Total	107	100,0
Do you use information technologies in classroom environment?	**Yes**	101	94,4
	No	6	5,6
	Total	107	100,0
Do you have your students use information technologies in the teaching-learning process?	**Yes**	54	50,5
	No	53	49,5
	Total	107	100,0
Do you share your activities, and classroom photos or videos on social media?	**Yes**	23	21,5
	No	84	78,5
	Total	107	100,0

Table 1 shows that almost all the participating teachers had access to internet connection at school and in private life/at home and a great majority of teachers had e-mail addresses. Frequency of e-mail use shows that 56,1% used e-mail every day, 22,4% once a week and 18,7% once a month. In terms of having social media accounts, 81i3% of the participating teachers were found to have social media accounts. When teachers' social media use was investigated in terms of web pages or blogs that contribute to professional or personal development, it was observed that teachers mostly preferred web pages or blogs focusing on preschool. In terms of using information technologies in classroom environment, 94,4% of the teachers were observed to utilize information technologies in classroom environment. Taylor and Todd (1995) investigated the use of information technologies by teachers and found that the majority of teachers utilized information technologies in classroom environment. In their study conducted on preschool, primary school and secondary school teachers, Giorgetti and Antonietti (2006) reported that teachers acknowledged the fact that use of multimedia provide important educational opportunities. Examining the tools used in learning environments shows that 53, 3% of the participating teachers used computers and projections, 28% used only computers, 6,5% used computers and smart boards and 2,8% used only smart boards. The study conducted by Gök, Turan and Oyman (2011) presented that effective use of information technologies have positive contributions to student interest and attention and ensures permanence in learning.

The question related to whether teachers have students use technology in the teaching-learning process provides the findings that 50,5% of the teachers let their students use technology whereas 49,5% did not provide opportunities for technology use in the teaching-learning process, It was found that teachers who let their students use technology in the classroom environment preferred the use of computers in general and a large majority had their students use assessment-evaluation technique (elektroy). Teachers who had their students use computers; projections and smart boards stated that they let their students turn the computers on and off. In their study, Kök, Çiftçi and Ayık (2011) identified that means of the items included in the field of "communication" included in preschool teacher candidates' special field competences pointed to high means in the following items: "uses information technologies in learning environments" and "provides children with opportunities to get to know information technologies1.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Responses provided to the question related to whether teachers shared their activities of records such as classroom photos or videos on social media show that 78,5% of the teachers never shared their activities of records such as classroom photos or videos on social media due to ethical issues and 21,5% shared their activities of records such as classroom photos or videos on social media with parental permission and in classroom groups. Zywica's (2013) study to identify the use of social media as a tool of communication between preschoolers and families shows that use of social media establishes a bond between the school and home.

Table 2: Teachers' Use of Technological Tools Based on Age

Source of Variance	Sum of Squares	sd	Mean squares	F	p
Between groups	62,636	4	15,659	,832	,508
Within groups	1920,336	102	18,827		
Total	1982,972	106			

Table 3: Teachers' Use of Technological Tools Based on Seniority

Source of Variance	Sum of Squares	sd	Mean squares	F	p
Between groups	51,849	4	12,962	,685	,604
Within groups	1931,122	102	18,933		
Total	1982,972	106			

Table 2 and 3 present no significant differences in teachers' use of technological tools based on age and variable. In his study, Dursun (2013) examined information technologies teachers' special field competences and identified that teacher scores related to their won competences did not present any statistically significant differences. When the technological tools used by preschool teachers were examined, it was found that 17,8% of the teachers used only smart phones, 23,4% used only computers, 19,6% used smart phones and computers and 37,3% used smart phones, computers and tablets.

Assessment of teacher responses provided to open-ended questions:
Responses to the question ***"In your opinion, which pages/blogs/users in the social media contribute to your professional and personal development***?" show that preschool teachers mostly used the *web sites related to preschool* followed by *pinterest, instagram and pages geared towards personal development.*
Responses to the question ***"Do you believe technology use is beneficial in the teaching-learning process? Why?"*** show that while almost all the participating preschool teachers believe that use of technology ensures useful and permanent learning, they have a limited repertoire of tools (computers and projections).
Teachers stated that they found technology use beneficial because;

- It is easier to attract student attention via technology
- Technology is an easily accessible tool
- It allows instant access to information and makes it easy to share it
- It integrates sense of vision with sense of hearing in the learning process
- It makes learning more permanent with the use of visuals
- It prevents waste of time in the classroom by making it possible to have access to examples faster

CONCLUSIONS

As a result of the study, it was concluded that preschool teachers did not have any problems related to technological awareness about using technological tools and equipment. It was identified that teachers were not influenced by variables such as age and seniority in terms of technology use and they could use technology regardless of age. It was also found that teachers followed web pages or social media outlets related to personal development. However, it is interesting to note that while all the teachers found the use of technology beneficial in the learning-teaching process, they only let their students use technology by having them turn the technological tools on and off. This fact shows that preschool teachers have trouble integrating information technologies in the teaching-learning process. Although it is rather hard to use technology in a relevant and accurate manner in educational environments, it is crucial to use technological tools and equipment in preschool education. Today, using various technological tools such as computers, TVs, projections, smart boards, cameras and printers in educational programs of state or private preschool institutions for different activities and purposes is crucial and requires special efforts. Suggestions based on study findings are summarized below:

 Copyright © International Conference on New Horizons in Education Conference (INTE)

- Programs should be developed to enhance preschool teachers' use of information technologies
- Teachers should be provided with applied training on how to use technology in the daily flow of educational activities
- Good practices related to use of information technologies in the country and abroad should be presented to preschool teachers
- Fairs should be organized to display new software that can be used by preschool teachers and incentives should be provided for preschool teachers to participate in these fairs.
- Sample guides should be developed and prepared to explain the use of computational technological tools and equipment in line with age appropriate and developmentally appropriate practices as well as their use for preschool purposes
- Use of information technologies as a leisure time tool should be prevented; teachers should be supported with good practice cases.

REFERENCES

Antonietti, A. and Giorgetti. (2006). Teachers beliefs about learning from multimedia, *Computers in Human Behavior, 22*, 267–282.

Aral, N., Kandır, A. ve Can Yaşar, M. (2002). *Okul Öncesi Eğitim ve Okul Öncesi Eğitim Programı* (Geliştirilmiş 2. Baskı). İstanbul: Ya-Pa Yayınları.

Berrueta-Clement, J. R., Schweinhart, L. J., Barnet, W. S., Epstain, A. S. and Weikart, D. P.(1984). *Changed Lives: The Effects of the Perry Pre-school Program on Youths through Age 19.* Ipsilanti: High Scope Press.

Cotton, K. And Conklin, N.F. (1989). *Research on Early Childhood Education*, Northwest Regional Educational Laboratory, School ImprovementResearch Series (SIRS), TopicalSynthesis #3

Dursun, F. (2013). Bilişim teknolojileri öğretmen yeterliklerinin öğretim elemanı, öğretmen adayı ve öğretmen görüşlerine göre değerlendirilmesi. Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı, *Yayınlanmamış doktora tezi.* Aydın: Adnan Menderes Üniversitesi.

Early, D. M. & Winton, P. J. (2001). Preparing the workforce: early childhood teacher preparation at 2- and 4-year institutions of higher education. *Early Childhood Research Quarterly 16,* 285–306.

Gök, A., Turan, S. ve Oyman, N. (2011). Okul öncesi öğretmenlerinin bilişim teknolojilerini kullanma durumlarına ilişkin görüşleri. *Pegem Eğitim ve Öğretim Dergisi, 1*(3), 59-66.

Kök, M., Çiftçi, M. ve Ayık, A. (2011). Öğretmenlik mesleği özel alan yeterliklerine ilişkin bir inceleme (Okul öncesi öğretmenliği örneği). *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 15* (1), 169-183.

MEB. (2008). *Öğretmen Yeterlikleri*. Ankara: MEB Yayınları

Oktay, A. (1999). *Yaşamın Sihirli Yılları*: *Okulöncesi Dönem*, İstanbul: Epsilon Yayınevi.

Saracho, O. N. & Spodek, B. (2007). "Early Childhood Teachers' Preparation and the Quality of Program Outcomes". *Early Child Development and Care, 177*(1), 71–91.

Schweinhart, L.J. and Weikart, D.P. (1980). *Young children grow up: The effects of the Perry Preschool Program on Youths Through Age 15 (Monographs of the High and Scope Educational Research Foundation 7)*. Ipsilanti, MI: High/ScopePress

Shonkoff, J., & Phillips, D. (Eds.). (2000). *From neurons to neighborhoods: The science of early child development*. Washington, DC: National Academies Press.

Şişman, M. ve Acat, M.B. (2003). Öğretmenlik uygulaması çalışmalarının öğretmenlik mesleğinin algılanmasındaki etkisi, *Fırat Üniversitesi Sosyal Bilimler Dergisi, 13*(1), 235-250.

Taylor, S. and Todd, P.A. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research, 6*(2), 144-176.

Yavuzer, H. (1999). *Çocuğunuzun İlk Altı Yılı.* 9. Baskı, İstanbul: Remzi Kitabevi.

Zywica, J. (2013). Using social media to connect families and kindergarten classrooms, Faculty of The School of Education, *Unpublished doctoral dissertation,* PA: University of Pittsburgh.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INVESTIGATING THE ANATOMY EDUCATION SELF-EFFICACY BELIEFS OF THE STUDENTS OF BIOMEDICAL INSTRUMNET TECHNOLOGY PROGRAM

Tuncay ÇOLAK
Kocaeli University School of Medicine Anatomy Department
tuncayc@kocaeli.edu.tr

İsmail SİVRİ
Kocaeli University School of Medicine Anatomy Department
ismailsivri@gmail.com

Mehmet Deniz YENER
Kocaeli University School of Medicine Anatomy Department
m.denizyener@hotmail.com

Dilşad GÜZELORDU
Kocaeli University School of Medicine Anatomy Department
dilsat.guzelordu@kocaeli.edu.tr

Rabia TASDEMİR
Kocaeli University School of Medicine Anatomy Department
rabiatsdmr@gmail.com

Elif AKSU
Kocaeli University School of Medicine Anatomy Department
elifaksu84@hotmail.com

Belgin BAMAÇ
Kocaeli University School of Medicine Anatomy Department
bbamac@hotmail.com

Serap ÇOLAK
Kocaeli University, School of Physical Education and Sports
srpclk@gmail.com

ABSTRACT
The Biomedical instrument technology program (BITP) is a department that trains the people who implements the montage, the preventive maintanance and the innovations of the medical instruments that are used for diagnose and treatment (Magnetic Resonance, Computed Tomography, Ultrasonography, X-ray, Positron Emission Tomography-Computed Tomography). The anatomy underlies at the base of the imaging methods of these instruments. Because, the anatomical structures are investigated with these instruments. The objective at this study is exploring the self-efficacy beliefs about Anatomy education ıf the students in the Biomedical Instrument Technology.

50 male (mean of the age is 19,9184 ± 1,18738) and 7 female (mean of the age is 19,57143 ± 1,13389) attended to our study. The information gathering surveys(gender, age, the regio he/she came from and the place he/she resides) and the scale of Anatomy self-efficacy belief (ASEB) are applied to these students. The scale of Anatomy self-efficacy belief is found 47.933 ± 6,34827 over 75.

The relation between the information gathering survey data and Anatomy self-efficacy belief levels is also explored. It is explored that there is statistically no significant difference in gender, inhabitance and the region he/she came from with Anatomy self-efficacy belief ($p>0,05$). When we group the ages of the students we find out that there is a noteable difference between the groups' ASEB ($p<0.05$).

The Anatomy knowledge of the students of the Biomedical Instrument Technology Program takes an important place on their occupational success. Because, they must know how the instrument monitorizes what anatomical structure for recognizing the instrument.

Keywords: Biomedical, instrument, Anatomy, self-efficacy

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTRODUCTION

The Anatomy is a basic lecture that educates under graduate and associate graduate students in Health field. The basic purpose of the universities that educate in Health Sciences is producting the humans' health and providing their health to get beter during their lives(Acar,2016, Buyukmumcu,2013, Edinburgh Decleration,1988). Biomedical Instrument Technology Program(BITP) is an inter-diciplinary technology department that is essentially associated with the producting, working and maintenance of all of the matherials accessories, instruments with the purpose of the diagnosis and treatment(Wikipedia,2015). BITP is a department that brings up the employees who do the montage, productive maintenance of the instruments(Magnetic Resonance, Computerized Tomography, Ultrasonography, Direct Graphy, Positron Emition Tomogrraphy) that are used in Health field with the purpose of diagnosis and treatment and makes innovations on them. The aim of all of these imaging methods is an anatomic structure. The technicians who graduates from BITP are interested in production, maintenance and repairment of these instruments whose aims are anatomic structure. In this regard, the students of BITP must comprehend the anatomy of human well for being successful in their field.

Firstly Bandura (1977) described the self-efficacy. He described the self-efficacy term as a talent that a human is able to cope with his/her life or his/her encountered problems. There are many studies that use the self-efficacy term evaluating the levels of self-efficacy on various occupation groups or the students in education(Acar,2016, Tasdemir,2015, Colak,2013, Akkoyunlu,2003). BITP students' Anatomy Self-Efficacy Beliefs(ASEB) will be able to provide recognising the instruments in their department in hospitals they will work. There are also some studies using Anatomy Self-Efficacy Beliefs education methodology of the departments that train in Health field(Acar,2016, Tasdemir,2015, Lok,2009, Zimmerman,1999). It is investigated that which models will be applied in these models which methods will be used for projected level in departments associated with Health in universities(Acar,2016, Colak,2014, Buyukmumcu,2013, Akpinar,2004, Nkanginieme,2001).

Determining ASEBs listening the words of BITP students and evaluating the Anatomy education by the students are aimed. Especially, in the developed countries, the term of biotechnology is repeatedly manifested for Health by biotechnological techniques. BITP students' Anatomy knowledge is proportional with their recognising of the instruments that are used in diagnose and treatment. The aim in our study is determining the Anatomy education self-efficacy beliefs that take an important place in BITP students' vocational lifes and comparing with their demographical properties.

MATHERIAL AND METHOD

Our study group consists of 60 BITP students (the mean of 50 male is 19.92±1.19 and the mean of 7 female is 19.57±1.13) whose mean of ages is 19.88±1.176. 3 students don't fill in the gender blank.

Data Collection

Resource data source is data collection survey and ASEB scale(Tasdemir,2015). The grades of the students are provided from their lecturer. The reliability of a survey is associated with a)consistency b)repeatable c)balancing of the evaluation (Erdogan,1998). Within this context, the topics related to self-efficacies are created clause by clause. These are presented to the experts' opinions. They are wanted to evaluate the topics in terms of expediency. The scale whose content validity is provided by the experts' opinions is called ASEB scale is made ready for applying.

Data Collection Survey

The students' ages, genders, anatomy grades, geographic regions and living places are obtained from this survey.

Anatomy Self-Efficacy Belief Scale

This scale is a researchers' preparing survey that consists of 15 topics and evaluates the participants' anatomy self-efficacies. Each question in the survey is ranked 1 to 5(1:never, 2:some, 3: partially, 4: usually, 5: everytime)

Statistical Analysis

The data are analysed by SPSS package program(SPSS for Windows 22, SPSS, Chicago, IL, USA). The means and Standard deviations of all parameters are calculated. Different groups are determined by ages and geographic locations. Non-parametric tests(Mann-Whitney U test and Kruskal Wallis test) are used for whether the differences are exist between these groups. The p value that is lower than 0.05 is accepted as significant.

FINDINGS

Table 1: BITP students' geographic regions they came from

Regions	Percentage	ASEB (mean)	Score(mean)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Marmara	65	48,103 ± 6,274 (n:39)	66,241 ± 18,772 (n:29)
Black Sea	23,3	47,143 ± 6,927 (n:14)	69,750 ± 23,224 (n:8)
Agea	-	-	-
Mediterranean	3,3	50 ± 2,828 (n:2)	55,000 (n:1)
East Anatolia	1,7	42 (n:1)	90 (n:1)
South-East Anatolia	1,7	47 (n:1)	-
Central Anatolia	1,7	43 (n:1)	-
Unknown*	3,3	54 ± 9,899 (n:2)	-

*The students left blank the region in the survey. 2 students left blank the region in the survey. There is no participation from Agean. 10 of 39 students from the Marmara Region, 6 of 14 students from the Black Sea Region, 1 of 2 students from Mediterranean Region, all of the students from Central Anatolia and South-East Anatolia and the students who left blank the regions in the survey didn't state their scores. The numbers of the students from Central Anatolia, East Anatolia and South-East Anatolia are one. Therefore, it isn't calculated Standard deviation for the students who came from these regions.

Table 2: The relationship between the geographic locations and ASEBs of students with Wilcoxon test($p<0.05$ is accepted as significant.). The geographical locations are classified by Marmara and the others.

Questions	ASEB mean (Marmara Region)	ASEB mean (other regions)	p value
1	4,23±0,9	4,05±1,08	0,593
2	3,51±0,82	3,26±0,81	0,243
3	3,18±0,94	3,00±1,05	0,407
4	3,26±1	3,37±1,07	0,737
5	2,55±1,11	2,68±1,16	0,694
6	2,72±0,97	2,63±1,01	0,812
7	2,85±1,09	3,05±1,35	0,596
8	3,16±1,09	3,00±1,15	0,712

 Copyright © International Conference on New Horizons in Education Conference (INTE)

9	3,59±1,19	3,58±1,17	0,850
10	2,74±0,79	2,63±0,83	0,667
11	2,69±1,08	2,79±0,98	0,671
12	4,24±0,95	3,94±1,11	0,350
13	3,37±0,97	3,22±0,94	0,517
14	3,46±1,1	3,42±1,07	0,782
15	3,23±1,22	2,68±1,11	0,077
Total	48,1±6,27 (n:39)	46,95±6,2 (n:19)	0,46

(1: It makes me happy when I learn new things about Anatomy. 2: I try to solve problems that I encounter while learning Anatomy ownself. 3: I think it's easy to study the lecture of Anatomy. 4: I slog on when I need to learn something new about Anatomy 5: Being obliged to use Anatomy knowledge related to my job put me into trouble. 6: When I use my knowledge of Anatomy I usually have a trouble. 7: Anatomy is an over-complicated lecture for me. 8: As it is unneccessary I don't use my knowledge of Anatomy. 9: I believe that I am more successful by learning Anatomy. 10: I believe that I have a good knowledge of Anatomy. 11: I feel panic if I have a problem when learning Anatomy. 12: I believe that everyone who is eager can learn Anatomy. 13: I believe that I have knowledge of Anatomy that meets my needs. 14: I want help from someone if I have a problem when learning Anatomy. 15: I am scared of making irreparable mistakes on behalf of the lack of Anatomy knowledge) ASEB(Created from participants' answers to the questions in the survey.)

Table 3: The relationship between scores and ages (Ages of the students are groupped into two groups as 20≥ and >20). As for Mann Whitney U if $p<0.05$ there is significant difference between these groups.

	20≥ Age	**Age>20**	**p value**
ASEB (n:56)	48,48 ± 5,78(n:46)	44,4±5,54(n:10)	**0,047**
Score (n:39)	67,09 ± 20,12 (n:33)	68,33± 16,93(n:6)	0,845

4 students didn't state their ages in the survey. 21 students didn't state their scores in the survey.

Table 4: The relationship between the residences and ASEB.

	Percentage (%)	**ASEB**	**p value**
Dormitory	15	48,44 ± 6,37 (n:9)	0.535
Home	81,6	47,59 ± 6,25 (n:49)	

 Copyright © International Conference on New Horizons in Education Conference (INTE)

This table is created from Kruskal-Wallis test on the independent samples (2 students didn't state their residences.)

Tablo 5: The relationship between gender and ASEB

Gender	Percentage	ASEB	p value
Male	83,3	48,1 ± 6,14 (n:50)	0.835
Female	11,6	46,86 ± 5,49 (n:7)	

It is calculated with Kruskal-Wallis test on independent samples.(3 students don't fill the gender blank in the survey)

DISCUSSION

When the gender, residences and the regions are scrutinized; it's seen that they haven't significant effects on ASEB levels. Although the ASEB levels of men are higher than that of women, there isn't a significant difference between them.($p>0.05$) When the regions are investigated, the students who left blank have the highest ASEB levels. The second ASEB levels are from the Mediterranean and the third are from the Marmara Region. However, there isn't any significant difference between them($p>0.05$). When we explore the residences, the ASEB levels of the students who stay at dormitories are higher than that of the students who stay at home. Nevertheless, there isn't a significant difference.

The other parameter on the survey is the age. We classify the ages of students in two groups. The one is equal with 20 or higher than 20. The other is lower than 20. Statistically, the ASEB levels of the students who are twenty years old or older than twenty are higher than the other group($p<0.05$). There are also many studies on the effects of the age on self-efficacy. Uysal I and Kosemen S (2013) investigated 117 prospective teachers' general self-efficacies in their study. However they didn't find a significant difference between the different age groups. Kaya Z (2016) also explored 30 students from Music Education Department. Kaya Z (2016) didn't find the significant difference between the ages and the self-efficacies. However, in our study we find that there is a significant difference between the ages and ASEB levels.

The Anatomy success levels at the faculties and colleges that are related to health, will provide the technicians to perform their work efficiently by recognising the human body well. We explore the BITP students' Anatomy self-efficacy levels to specify their Anatomy knowledge in our study. We find that the age of a student is able to effect success levels of not only Anatomy, but also the others.

REFERENCES

Acar D, Colak T, Colak S, Gungor T, Yener MD, Aksu E, Guzelordu D (2016). Fizik Tedavi ve Rehabilitasyon lisans ve Saglik Hizmetleri Meslek Yuksekokulu on lisans ogrencilerinin Anatomi Egitimi oz-yeterlilik inanc duzeylerinin karsilastirilmasi , *International Congresses on Education ERPA 2016*, *Sarajevo/ Bosnia and Herzegovina.*

Akkoyunlu, B. & Orhan F. (2003). Bilgisayar ve Ogretim Teknolojileri Egitimi (BOTE) Bolumu Ogrencilerinin Bilgisayar Kullanma Oz Yeterlik Inanci ile Demografik Ozellikleri Arasindaki Iliski. *Turk. Online J. Educ. Technol. 2 (3), 8693.*

Bandura, A. (1977). Selfefficacy: Toward a unifying theory of behaviour change. Psychol. Rev. 84, 191215.

Buyukmumcu M, Aydin AD, Akin D, Yilmaz MT, Bodur AS. Tip fakultesi ogrencilerinin anatomi pratik derslerinde kullanilan pratik ders slaytlari hakkindaki gorusleri. *Selcuk Tip Derg 2013;29(2):71-4.*

Colak, T. Bamac, B. Ozbek, A. Tasdemir, R. Aksu, E. Yener, M.D.(2014) Opinions of Students Who have Taken Anatomy Lesson at University Regarding the Anatomy Laboratory Education, *INTE 2014, International Conference On New Horizons In Education. Paris, France*.

Colak, S. (2013). The Relationship Among Computer Self Efficacy Scores, Demographic Charecteristics And Grades in Computer Courses Of Students at The School of Physical Education And Sports. *Educational Research And Reviews. 8(8), 374377.*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Edinburgh Declaration of WFME (1988). *World Conference on Medical Education Report*, 7-12 August Edinburgh, Blackwood Pillans & Wilson, Edinburgh.
Erdogan, I. (1998) *SPSS Kullanim Ornekleriyle Arastirma Dizayni ve Istatistik Yontemleri.* Ankara: Emel Matbaasi.
Kaya, Z. (2016), Muzik Egitimi Anabilim Dali Ogrencilerinin Koro Dersine Yonelik Tutum, Oz-Yeterlik Algisi ve Akademik Basarilarinin Incelenmesi, *Current Research in Education (2016), 2(1).*
Lok, S. Tasgin, O. Lok, N. Yildiz, M. (2009). Karamanoglu Mehmet Bey Universitesi Farkli Bolum Ogrencilerinin Anatomi Dersine Olan Oz-Yeterlilik Durumlarinin Karsilastirilmasi. *Selcuk Uni. Sosyal Bil. Ens. Dergisi. 21, 339345.*
Nkanginieme, K.E. & Eke, N. (2001), Learning and evaluation in medical education. (PMID:11487784*) The Nigerian Postgraduate Medical Journal [2001, 8(1):46-51]*
Tasdemir, R. Colak, S. Sivri, I. Yener, M.D. Guzelordu, D. Colak, T. Bamac, B. Rahova, G. (2015). The Comparison of Self-Efficacy Beliefs of Anatomy Between The First And The Second Class Students in Medical School. *TOJET: The Turkish Online Journal of Educational Technology. Special issue 2 for INTE 2015, 570-574.*
Uysal I ve Kosemen S (2013), Ogretmen adaylarinin genel oz-yeterlik inanclarinin incelenmesi, *Egitim ve Ogretim Arastirmalari Dergisi Mayis 2013 Cilt:2 Sayi:2 Makale No:25*
Wikipedia (https://tr.wikipedia.org/wiki/Biyomedikal)
Zimmerman B.J. (2000). SelfEfficacy: An Essential Motive to Learn. *Contemporary Educational Psychology. 25, 82–91.*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INVESTIGATING THE ATTITUDES OF PRE-SERVICE PSYCHOLOGICAL COUNSELING AND GUIDANCE TEACHERS TOWARDS THE PREPARATION PROCESS OF INDIVIDUALIZED EDUCATIONAL PROGRAM

Tamer AYDEMİR
Pamukkale University, Education Faculty, Turkey
taydemir@pau.edu.tr

Tolga COŞGUNER
Pamukkale University, Education Faculty, Turkey
tcosguner@pau.edu.tr

ABSTRACT
The basic way in the education to meet the needs of students with special needs in academic, social and self-care skill areas is preparing a functional individualized education program (IEP). Preparing the program by the IEP Team in the school has become mandatory in 63. article of The Special Education Services Regulation. Psychological Counseling And Guidanceteachers are one of the most important part of this team for a functional IEP for students, providing the organization in terms of guidance and meeting the needs of students' parents.
In this context, the purpose of this study is investigating the attidutes 4th grade of the psychological counseling and guidance teacher candidates studying in the education faculty according to preparation process of an individualized education plan. Therefore, the scale of "The Attitudes towards IEP Development Process Scale" developed by Tike, L. and Kargin, T. (2009) is used. The study was designed in descriptive survey model and collected data was analyzed by using statistical analysis methods. In this study the attidutes of pre-service Psychological Counseling and Guidance teachers towards preparation process of IEP was analyzed in terms of different variables such as having a course about special education, gender. And also the results of the other researches in the project were used as independent variables such as attitudes towards inclusion and level of challenges faced during the preparation of IEP of the same participants.

Key Words: Special Education, Psychological Counseling and Guidance, Attitude.

INTRODUCTION

Each student's educational needs are different due to the special conditions such as intelligence level, type of disabilities, readiness etc. Therefore the main strategy to gain the academic, social, communication and self care abilities is preparing a functional individualized education program (IEP) in accordance with the requirements of students with special needs. IEP is a written document which is requied defining realisable aims, showing the instruction and evaluation methods, guiding parents, allowing students to meet the existing requirements of developing areas and making customizations to achieve the aims (Smith ve Brownell, 1995). IEP was also defined as " The program which is developed in accordance with the requirements of students, parents, teachers and includes the educational support services to be provided the aims of the program (MEB,2000)."
IEP was first adopted in Turkish Republic in Special Education Services Regulation statutory decree No. 573 in 1997. In this regulation it was first described how the evaluation of students with special needs should be, type of suitable environments in placement and preparation process of IEP detailly. Through this regulation, the right of education was provided to all students with special needs so that they could benefit from educational facilities bu using IEP in the schools.

In 2006 it's also added that IEP has to be prepared both in Guidance and Research Center (RAM) and student's school by IEP team. Additionally, participating the IEP Team has begun compulsory by the Regulations No.573 in the schools. The members of this team are; school principal, special education teachers, classroom teachers, psychological counseling and guidance teachers, parents and experts about disorders (MEB,2000).

Although IEP has been legally secured by regulations nearly 20 years, It is still faced with significant problems in the implementation phase (Avcıoğlu, 2009; Güven ve Balat, 2006; Kamens, 2004). The main problem; not preparing an functional and useful program because of the lack of content knowledge and self-efficacy of the teachers who are the member of IEP team (Güven and Balat, 2006; Kargın,2007; Tike and Kargın, 2009). In this phase psychological counseling and guidance teachers have a siginificant role to coordinate the team, provide the requirements of parents and guide the teachers about content knowledge. Because psychological counseling and

 Copyright © International Conference on New Horizons in Education Conference (INTE)

guidance teachers are accepted as the main member of the evaluation of the students and preparation IEP in schools and Guidance and Research Center by MEB Special Education Services Regulation (2006). According to this regulation, duties psychological counseling and guidance teachers are:
a)Planning and carrying out education services for parents of the students with special needs and coorporating with institutions and organizations,
b)Coorporating with the members of IEP Team to follow the development of the students with special needs.
c)Coorporating with teachers and parents to prepare individual development report.
d)Coorparating with counseling and guidance commissions and members of IEP Team to provide special education supports for students with special needs (MEB, 2006).

As can be seen psychological counseling and guidance teachers have a key role in preparing a functional IEP in the schools of the students with special needs. Undoubtedly increasing the efficacy about special education and IEP of the psychological counseling and guidance teachers, provides more effective IEP and more effective guidance to the teachers of the IEP Team. However, when we browsed four-year undergraduate education of the psychological counseling and guidance teachers, we can easily see that there's no lesson about preparation process of IEP. In special education lesson, IEP just can be introduced, can not be worked with students about how to prepare IEP. Therefore, the effectiveness of the IEP can be provided by the self-development efforts of the psychological counseling and guidance teachers about special education and IEP. In this phase the attitudes of the pre-service pyschological counseling and guidance teachers about preparstion process of IEP will be decisive to develope theirselves in special education and preparing IEP.

A review of related literature shows the existence of research including the views of psychological counseling and guidance teachers towards inclusion (Alver, Bozgeyikli ve Işıklar, 2011; Akalın, 2014; Özengi, 2009; Yüksel, Diken, Aksoy and Karaaslan, 2012) but there are limited researches defining the view or efficacy of psychological counseling and guidance teachers towards the effectiveness and preparation process of IEP (Kırbıyık, M.E., 2011; Küçüker, S., Kargın, T. ve Akçamete, G., 2002; Tike Bafra and kargın, 2009). In these researches, members of the IEP team teachers have been indicated that they have negative attitudes because of reguiring lots of paper work, taking up too much time of the teachers and having not enough concept knowledge about preparation of IEP. That's why determining the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP will contribute to the literature.

This research is a baseline study and a part of an project planning several researches to educate a sample of teachers towards preparation process of IEP. In this researches some of the findings were used as variables such as determinnig the attitudes towards inclusion and level of challenges faced during the preparation of IEP of the same participants. The purpose of this research is determining the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and examine the attitudes according to some variables. For this purpose, based on the factors contributing to the success on inclusion the following questions were investigated:
1) How are the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP?
2) Does the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP change according to gender?
3) Does the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP change according to taking special education lesson?
4) Is there any relationship between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and challenges faced during the preparation of IEP?
5) Is there any relationship between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and attitudes of inclusion?

METHOD

This is a descriptive study which aims to analyse the attitudes of pre-service pyschological counseling and guidance teachers educating in an university towards preparation process of IEP and relationships between the independent variables. The model of the research is scanning model. Scanning models aims to describe the datas as their real sitution that exists in the past or in the future and the sitution is tried to define as in its own terms (Karasar, 2000). In the research gender, having a course about special education and also the results of the other researches such as attitudes towards inclusion and level of challenges faced during the preparation of IEP of the same participants were used as independent variables.
The datas collecting in this research will use as pre-test and it's planned to give a course about preparation process of IEP to these participants in third and fourth grade. Considering this sitution the participants in the

 Copyright © International Conference on New Horizons in Education Conference (INTE)

research were selected from among second graders educating in the department of counseling and guidance teacher in a goverment university in Turkey and 111 pre-service pyschological counseling and guidance teachers were participated. The descriptives datas of the participants are shown in Table 1.

Table 1. Descriptive datas of the participants

Independent Variables	Type	N	%
Gender	Female	69	62,1
	Male	42	37,9
Take a Course	Yes	101	91
	No	10	9

In the research the scale " The Attitudes towards IEP Development Process Scale " developed by Tiger, L. and Kargin, T. (2009) is used to determine the attitudes of pre-service pyschological counseling and guidance teachers towards preparation process of IEP. The scale was developed in accordance with Likert type 5 point. The scale also consists of 15 items and responses to items in the scale was determined as “Fully Agree”, “Agree”, “Indecisive”, “Disagree,” and “Fully Disagree”. In attaching points to the scales, items having positive attitudes (Fully Agree) are 5 points and items having negativee attitudes “Fully Disagree” are 1 points. In the scale 2,4,8,9,11,12,14,15. items were reversed. The highest score in the was 75 while the lowest was 15. The higher scores express positive attitudes and lower scores express negative attitudes in the scale. The items in the scale and their mean scores are shown in Table 2.

Table 2. The Attitudes towards IEP Development Process Scale

No.	The Attitudes towards IEP Development Process Scale	Mean Score
1	IEP serves the suitable supports to the students with special needs.	4,288
2	The students with special needs don't benefit from IEP.	3,919
3	IEP shows where and how to begin training.	4,153
4	IEP team is incapable of solving the problems.	3,640
5	The creation of the IEP team allows participating of the team members to the students training in a more effective manner.	4,234
6	IEP team provides to present different solution proposals.	4,180
7	I think I will contribute to the students and members in the IEP team.	4,054
8	I don't want to work in IEP team.	4,018
9	I think that working in IEP team is not my job.	4,099
10	Establishing annual goals for each area where the student has difficulty facilitates training.	4,216
11	I think participating the IEP team will increase my workload..	3,532
12	I don't wan't to take more with working IEP team.	3,721
13	I think participating IEP team would be useful to the students with special needs.	4,288
14	Preparing and implementing the IEP is not practical.	3,432
15	I do not think that continuity of the IEP won't provide.	3,604

FINDINGS

In the research there are 5 questions and the findings were presented in each title included different questions. The descritive datas regarding the main question; attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP are shown in Table 3.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 3. The descritive datas regarding the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP.

Descriptive Statistics	Values
The Highest Score	74,00
The Lowest Score	40,00
Range	34,00
Mean Score	59,38
Standart Deviation	7,920
Skewness	-0,168
Kurtosis	-0,542

According to the Table 3, the highest score is 74, the lowest score is 40 and the mean score is 59,38 over 75. The standart deviation is 7,92. The datas regarding the score of the scale show that basicly, the pre-service teachers has a positive attitudes towards the preparation process of IEP. Skewness value is calculated as "-0,168", kurtosis value is calculated as "-0,542". The datas show that the range of the datas collected from the participants were ranged normally.

The second question in the research is "Does the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP change according to gender?". The datas of the participants about their gender are shown in Table 4.

Table 4. The descriptive datas regarding the gender of the participants.

Gender	N	M	sd	df	t	p
Female	69	59,464	7,751	109	0,145	0,885
Male	42	59,238	8,281			

T-Test technique was used to analyse the differentition of the gender discrimination. According to the datas in Table 4, it's easily seen that two groups has the nearly the same mean score and no significant difference was found between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and gender of participants. Considering this data, it's thought that being male or female pre-service pyschological counseling and guidance teachers doesn't change the level attitudes towards preparation process of IEP.

The third question in the research is "Does the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP change according to taking special education lesson?". The datas of the participants about having a course about special education are shown in Table 5.

Table 5. The descriptive datas regarding taking a course about special education of the participants.

Taking Course	N	M	sd	df	t	p
No	101	59,584	7,854	109	0,869	0,387
Yes	10	57,300	8,706			

However the number of the participants taking course about special education is lees than the other group, the datas included. T-Test technique was used to analyse the differentition of taking a course about special education and the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP. According to datas in Table 5, the datas of the participants taking course about special education don't show significant difference. This question should be repeated in a normally ranged groups in the next researches.

The fourth question in the research is "Is there any relationship between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and challenges faced during the preparation of IEP? The datas of the challenges faced during the preparation of IEP belong to an other research in the project and were collected from the same participants. The datas of the challenges faced during preparation process of IEP are shown in Table 6.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 6. Descriptive datas of the challenges faced during the preparation of IEP

Descriptive Statistics	Values
The Highest Score	87,00
The Lowest Score	38,00
Range	49,00
Mean Score	57,33
Standart Deviation	9,070
Skewness	0,584
Kurtosis	1,196

The datas of the challenges faced during the preparation of IEP was analysed, the highest score is 87,00, the lowest score is 38,00 and the mean score is 59,38 over 100. The standart deviation is 9,07. According to mean scores of the scale show that basicly, the pre-service pyschological counseling and guidance teachers won't have difficulties in preparation process of IEP. Skewness value is calculated as "0,584", kurtosis value is calculated as "1,196". The skewness data collected from the participants shows that the datas were ranged normally but the kurtosis data is higher than normal value that must be. On the other hand according to George and Mallery (2003), the values between -2 and +2 can be accepted as normal vale. In this research the relationships between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and challenges faced during the preparation of IEP was determined by using correlation. The correlation datas of the relationship between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and challenges faced during the preparation of IEP are shown in Table 7.

Table 7. The correlation datas between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and challenges faced during the preparation of IEP

	The Challenges of IEP
The Attitudes towards IEP	0,371*

*p <0,01

According to the correlation data (0,371) in Table 7, a positive and moderately significant relationship between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and challenges faced during the preparation of IEP was determined.

The last question in the research "Is there any relationship between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and attitudes of inclusion?". The datas of the attitudes towards inclusion belong to an other research in the project and were collected from the same participants. The datas of the datas of the attitudes towards inclusion are shown in Table 8.

Table 8. The descriptive datas of attitudes towards inclusion.

Descriptive Statistics	Values
The Highest Score	74,00
The Lowest Score	39,00
Range	35,00
Mean Score	52,79
Standart Deviation	7,920
Skewness	0,304
Kurtosis	0,436

It's seen in Table 8, the hisghest score is 74, the lowest score is 39 and mean score is 52,79. According to mean scores of the scale show that basicly, the pre-service pyschological counseling and guidance teachers have positive attitudes towards inclusion. Additionally the skewness value is calculated as "0,304", kurtosis value is calculated as "0,436". The datas show that the range of the datas collected from the participants were ranged normally.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

In the research the relationships between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and attitudes of inclusion. was determined by using correlation. The correlation datas of the relationship relationships between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and attitudes of inclusion are shown in Table 9.

Table 9. The correlation datas of the relationship relationships between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and attitudes of inclusion

	The Attitudes towards Inclusion
The Attitudes towards IEP	-0,311*

*p <0,01

According to the correlation data (-0,311) in Table 9, a negative and moderately significant relationship between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and attitudes towards inclusion was determined. It's thought that the attitudes of the pre-service and counselling teachers on the rise, their attitudes toward IEP has decreased.

CONCLUSIONS

The purpose of this research is determining the attitudes of the pre-service pyshological counseling and guidance teachers towards preparation process of IEP and examine the attitudes according to some variables. In generally the pre-service pyschological counseling and guidance teachers have positive attitudes towards preparation process of IEP. On the other hand being male or female didn't change the level of attitudes towards preparation process of IEP. This data is the same as the researches in literature (Küçüker, Kargın ve Akçamete, 2002; Tike and Kargın, 2009). The datas of taking a course in the previous also didn't change the level of the attitudes towards preparation process of IEP. This data is the opposite as in the researches in literature (Tike and Kargın, 2009). In this research the participants taking no course have more positive attitudes towards IEP than the participants taking a course. However the number of participants taking a course is less, mean scores are 2 point less than the others is thought to be important. The datas regarding the attiudes of the participants towards inclusion has an significant relationships which is negative and moderate. This can be explained from the items of the scale that pre-service teachers think that services provided to the students with special needs must be increased but preparation of IEP is not their own job. The last datas are the relationship between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and challenges faced during the preparation of IEP. There is positive and moderately significant relationship between the attitudes of the pre-service pyschological counseling and guidance teachers towards preparation process of IEP and challenges faced during the preparation of IEP was determined. This data can be explained that the pre-service pyschological counselling and guidance teachers can participate to the preparation of IEP with positive attitudes. In future it's suggested that dependent variable and the relationhips between the other variables should be determined as post-test after giving a course to the participants.

REFERENCES

Akalın, S. (2014). *Okul Öncesi Eğitim Kurumlarında Çalışan Rehber Öğretmenlerin Kaynaştırma Uygulamalarına İlişkin Gereksinimleri,* International Journal of Early Childhood Special Education (INT-JECSE), 6(1), 115 – 142.

Alver, B., Bozgeyikli, H. and Işıklar, A. (2011). *Psikolojik Danışma ve Rehberlik Programı Öğrencilerinin Kaynaştırma Eğitimine Yönelik Tutumlarının İncelenmesi,* Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi 2011 15 (1): 155-168

Avcıoğlu, H. (2009). *Rehberlik ve Araştırma Merkez (RAM) Müdürlerinin Tanılama, Yerleştirme-İzleme, Bireyselleştirilmiş Eğitim Programı (BEP) Geliştirme ve Kaynaştırma Uygulamasında Karşılaşılan Sorunlara İlişkin Algıları,* Educational Sciences: Theory & Practice, 12(3).

George, D. and Mallery, P. (2003). *SPSS for Windows Step by Step: A Simple Guide and Reference.11.0 update.* Boston:Allyn & Bacon

Güven, Y. ve Balat, G. U. (2006). *1. ve 2. sınıf öğrencilerinin matematik yeteneğinin okul öncesi eğitimi alıp almama ve kurumda veya ailesinin yanında kalma durumlarına göre karşılaştırılması,* I. Uluslararası Okul Öncesi Eğitim Kongresi Bildiri Kitabı I. Cilt, 384-397, İstanbul: Ya-Pa Yayıncılık.

Kamens, M.W. (2004). *Learning to write IEPs: A personalized, reflective approach for preservice teachers*. Intervention in School and Clinic, 40(2), 76-80.

Karasar, N. (2000). *Bilimsel Araştırma Yöntemi.* (10. Basım). Ankara: Nobel Yayın Dağıtım.

Kırbıyık, M.E. (2011). *Özel Eğitim Değerlendirme Kurulunda Görevli Rehber Öğretmenlerin Eğitsel Değerlendirme ve Tanılama Sürecine İlişkin Görüşleri*, Master's Thesis, Uşak University Education Faculty.

Küçüker, S., Kargın, T. ve Akçamete, G. (2002) . *Rehberlik ve araştırma Merkezi Elemanlarının Özel Eğitim Hizmetleri Yönetmeliğine İlişkin Görüşlerinin ve Yeterlilik Algılarının Geliştirilmesi*. Educational Sciences and Practice, 1(1), 101-113.

MEB (1997). Özel *Eğitim Hakkında Kanun Hükmünde Kararname,* Resmi Gazete 6 Haziran 1997, Sayı 23011.

MEB, (2006). *Özel Eğitim Hizmetleri Yönetmeliği*. Ankara.

Özengi, S. Ş. (2009). *Eskişehir İlinde Kaynaştırmanın Yürütüldüğü İlköğretim Okullarındaki Rehber Öğretmenlerin Kaynaştırmaya İlişkin Görüşleri,* Master's Thesis, Eskişehir: Anadolu Üniversity

Smith, S.W., & Brownell, M.T. (1995). *Individualized education programs: Considering the broad Context for Reform*. Focus on Exceptional Children, 28(1), 1-12.

Tike Bafra L. and Kargın, T. (2009). *Sınıf Öğretmenleri, Rehber Öğretmenler ve Rehberlik Araştırma Merkezi Çalışanlarının Bireyselleştirilmiş Eğitim Programı Hazırlama Sürecine İlişkin Tutumları ve Bu Süreçte Karşılaştıkları Güçlüklerin Belirlenmesi*, Kuram ve Uygulamada Eğitim Bilimleri (KUYEB) Dergisi, 9 (4).

Yüksel, K.; Diken, İ. H.; Aksoy, V. and Karaaslan, Ö. (2012). *Rehber Öğretmen Adaylarının Özel Eğitimde Psikolojik Danışma ve Rehberliğe İlişkin Öz-Yeterlik Algıları.* Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 31, 137-148.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INVESTIGATION OF ACADEMIC PROCRASTINATION AND ACADEMIC SELF-EFFICACY OF PHYSICAL EDUCATION AND SPORT TEACHER CANDIDATES IN TERM OF SOME VARIABLES

Zehra CERTEL
School of Physical Education and Sports
Akdeniz University
zcertel@akdeniz.edu.tr

Ziya BAHADIR
School of Physical Education and Sports.
Erciyes University
ziyabahadır40@hotmail.com

M. Levent ÖZGÖNÜL
Medical Faculty
Akdeniz University
leventozgonul@akdeniz.edu.tr

ABSTRACT
The aim of this study is to investigate academic procrastination and academic self-efficacy of sports teacher candidates, based on the variable of gender, academic success perception and actively doing exercise and to determine relationship between academic procrastination and Academic self-efficacy. The research group consist of 458 teacher candidates whom are 194 female and 264 male studying in different classes of four different universities including Erciyes (n=151), Ege (n=131), Akdeniz (n=94) and Adnan Menderes (n=81). The data were collected using scale of Academic procrastination and Academic self-efficacy and the personal information form. For analyzing the data; t-test, ANOVA test and Pearson Correlation coefficient techniques were used in relations between variables. According to findings, there are not significant differences about academic procrastination of candidates according to gender and actively do exercise, but there are significant differences according to academic success perception. While there are not significant differences in terms of academic self-efficacy according to actively doing exercise, there are significant differences according to gender and academic success perception. There are negative significant differences between academic procrastination and self-efficacy of students.

Key Words: Teacher candidate, academic procrastination, self-efficacy, academic success perception, actively doing exercise.

INTRODUCTION

University life can be described as a process, which has an important place in preparing for the professional and social life and where the young people undertake many responsibilities. One of the most important responsibilities is to fulfill academic tasks and to achieve expected success level. But, it can be seen that the academic failures of students gradually grow and one of the most important problems is the potential procrastination behavior of students regarding their academic activities (Day et al., 2000; Haycock, 1993; Solomon & Rothlum, 1984; Özer, 2005). Ellis & Knaus (1977) have reported that 95% of university students in America have defined themselves as individuals exhibiting procrastination behavior, while O'Brien (2002) and Stell (2007) have stated that students exhibited procrastination behavior before or after starting a study and 80% of the students in Turkey postponed their activities at least one hour every day (Klassen & Kuzucu 2009). Procrastination behavior is defined as "unrealistically delaying the tasks that should be completed or finished"

 Copyright © International Conference on New Horizons in Education Conference (INTE)

(Lay, 1986; Kandemir, 2014) or "preferring the benefits to be achieved in short-term to those to be achieved in long-term" (Roberts, 1997; Kandemir, 2014). As a sub-dimension of procrastination, academic procrastination is defined by Solomon & Rothlum (1984) as "doing homework, preparing for the exams, or to prepare term-papers at the last minute". Hence, the students exhibiting procrastination behavior might fail at the courses in semester, prolong the period of study, and even have to leave the school by being negatively affected from the results caused from their behaviors. Thus, the short-term comfort, which is achieved as a result of procrastination behavior, may return with worrisome situations in long-term (Akbay & Gizir, 2008). The frequency and also the reasons of procrastination, which is considered one of the most important factors obstructing the success of students in academic life, may differ among the individuals. In previous studies, for the procrastination behavior, the fear of failing and the avoiding from work have been represented as the main reasons for academic procrastination (Solomon & Rothlum, 1984), it has also been reported that it might be caused from being non-brave and depressiveness, indecision, socially activeness, opposition to the authority, laziness, low self-respect, and anxiety for exams (Beswick et al., 1988; Solomon and Rothblum, 1984; Day et al., 2000; Özer & Altun, 2011). In literature, many studies have reported that academic procrastination is negatively related with self-esteem, self-respect, inner motivation, and self-efficacy (Tuckman, 1998; Van Erde, 2000).

In many studies, the relationship of self-efficacy with academic procrastination has been examined. The concept of "self-efficacy" has been described by Bandura (1989; 1994, 1997) as "a person's belief that he/she is capable of starting an action in the way influencing the people in his/her environment and sustaining that action until getting a result". Given the literature, it can be seen that it is generally divided into sub-dimensions such as emotional, social, and academic self-efficacy. Academic self-efficacy is described as "a student's belief in his/her skills for successfully accomplishing an academic task" (Zimmerman, 1995). Previous studies have revealed that the low self-efficacy belief is an important precursor of gradually increasing procrastination behavior, that there is significant and negative relationship between academic procrastination and self-efficacy belief, and that low level of self-efficacy belief is related with higher academic procrastination behaviors (Haycock et al., 1998; Ferrari, 2000). In studies, it has been reported that academic self-efficacy has an important effect on students' academic life and affects the academic performance positively (Parajes, 1996; Parajes et al. Graham, 1999; Schunk, 1991; Chemers et al., 2001).

Within this context, the aim of this study is to analyze the physical education and sports teacher candidates' tendency to academic procrastination and their self-efficacy from the aspects of gender, academic success perception, actively doing sport, and to reveal the relationship between academic procrastination and academic self-efficacy. This study is thought to be important for determining and eliminating the physical education and sports teacher candidates' deficiencies, which are believed to affect the future success of students in future, during the study period.

THE STUDY

This study is a review study. The study group consists of 458 students (194 (42.4%) female and 264 (57.6%) male students) studying at different grade levels of Physical Education Departments of Akdeniz, Erciyes, Ege, and Adnan Menderes Universities. Mean age of students was $\overline{X}_{age}$=21.69±2.63 years. As data collection tool, 5-pint Likert-type Academic Procrastination Scale (APS), which contains 19 items including the tasks that the students have to accomplish throughout their study period, developed by Çakıcı (2003) in order to determine the academic procrastination behavior was utilized. High scores from the scale indicate high level of academic procrastination behaviors. In this study, the Cronbach Alpha reliability coefficient of this scale was calculated to be 0.84. The other scale used in this study is the Academic Self-Efficacy Scale developed by Jerusalem & Schwarzer (1981) and adapted to Turkish language by Yılmaz, Miraç & Ekici (2007). The 4-point Likert-type scale has single dimension and consists of 7 items. Its Cronbach Alpha reliability coefficient has been determined to be 0.84, while it was found to be 0.74 in this study. In data analysis, since the data showed normal distribution, t-test was used in pairwise comparisons, while ANOVA was used for multiple comparisons and Pearson correlation coefficient for analyzing the relationships between the parameters.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

FINDINGS

Table 1: Comparison of academic procrastination behaviors and self-efficacies of teacher candidates by gender

Scale	Gender	n	X	ss	t	P
Academic Procrastination	Female	194	3.07	.67		
	Male	264	3.12	.59	-.847	.397
Academic	Female	194	2.83	.53		
Self-efficacy	Male	264	2.95	.52	-2.390*	.017

*p<.05

In Table 1, academic procrastination behaviors of physical education and sports teacher candidates didn't show statistically significant difference between the genders (t=-.847, p=.397;p>.05), while the self-efficacy of female candidates was found to be higher than that of male candidates (t=-2.390, p=.017;p<.05).

Table 2: Comparison of teacher candidates' academic procrastination and self-efficacy by their academic success perception

Scale	Success Perception	n	X	ss	F	P	Difference
Academic Procrastination	1.Medium	164	3.21	.62			1-2
	2.Good	231	3.06	.63	5.346*	.005	1-3
	3.Very good	63	2.93	.63			
Academic	1.Medium	164	2.77	.54			1-2
Self-efficacy	2.Good	231	2.96	.51	7.344*	.001	1-3
	3.Very good	63	2.99	.63			

*p<.05

In Table 2, it can be seen that, in terms of academic success perceptions of students, their academic procrastination (F=5.346, p=.005; p<.05) and academic self-efficacy (F=7.344, p=.001;p<.05) showed statistically significant difference. Of a student having medium level of academic success perception, academic procrastination behavior is higher than that of students having good and very good academic success perception and academic self-efficacy is lower.

Table 3: Comparison of teacher candidates' academic procrastination and self-efficacy by actively doing exercise.

Scale	Actively Doing Exercise	n	X	ss	t	P
Academic Procrastination	Yes	300	3.09	.63		
	No	158	3.10	.53	-.203	.839
Academic	Yes	300	2.92	.50		
Self-efficacy	No	158	2.85	.57	-1.326	.186

In Table 3, the academic procrastination behavior (t=-.203, p=.839; p>.05) and academic self-efficacy (t=-1.326, p=.186; p>.05) of physical education and sports teacher candidates do not statistically significantly vary depending on their active sport life.

A negative and statistically significant relationship was found between academic procrastination behavior and self-efficacy of physical education and sports teacher candidates (r=-.127, p=.006; p<.05). As the self-efficacy of students increases, then their academic procrastination behaviors decrease.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

CONCLUSIONS

In this study, which was carried out in order to analyze the physical education and sports teacher candidates' tendency to academic procrastination and their self-efficacy from the aspects of gender, academic success perception, actively doing exercise, and to reveal the relationship between academic procrastination and academic self-efficacy, the following conclusions were obtained.

In this study, no difference was found between male and female students in terms of academic procrastination behavior. It was seen that the study results emphasizing the difference in academic procrastination behavior from the aspect of gender differ from each other. In literature, many studies corroborating these results were found (Solomon & Rothblom, 1984, 2000; Karabıyık çeri et al., 2015; Watson, 2001; Kim & Seo, 2015). In some of the studies, it has been reported that academic procrastination behavior differed between the genders (Washington, 2004; Balkıs et al., 2006; Aydoğan & Özbay, 2012; Şeker & Saygı, 2013). In this study, self-efficacy of male students was found to be higher than that of female students. Similarly, in studies on examining the effect of gender, it has been concluded that women have lower level of self-efficacy than men do (Schunk & Pajares, 2002; Fırat Durkoca 2010; Akbay & Gizir, 2010). In literature, there also are studies conflicting with these results (Üstüner et al., 2009; Çimen, 2007; Zeldin & Pajares, 2000; Aydoğan & Özbay, 2012). In conclusion, it can be said that the different results obtained from different studies may arise from the cultural differences.

In this study, when the academic procrastination behaviors of students are examined in relation with their academic success perceptions, it was found that academic procrastination behavior of students having medium level of academic success perception is higher than those having good and very good academic success perception. Similar results have been obtained in various studies (Balkıs et al., 2006, Senecal et al., 1995; Tuckman, 1998; Orpen, 1998; Tice & Baumeister, 1997; Balkıs, 2007, 2013; Çelebi, 2016). In this study, the academic self-efficacy of students having medium level of academic success perception is lower than those having good and very good academic success perception. Kauchak & Eggen (1998) have reported that self-efficacy is an important factor for increasing the motivation for learning. In many studies in literature, it has been stated that there is a significantly positive relationship between student success and self-efficacy (Zimmerman, 2000; Balkıs & Duru, 2010).

Academic procrastination behaviors of physical education and sports teacher candidates do not differ depending on actively doing exercises. Hence, in study of Çelebi (2016) on 136 basketball player in University Games 2015, mean score of academic procrastination of athletes has been found to be 3.10. The mean score found in this study is very close to this level. Accordingly, it can be said that active sport life doesn't influence the academic procrastination behavior. No statistically significant difference was found between the self-efficacy levels of students that do actively sports and those do not. Certel et al. (2015), in their study on high school students, have concluded that academic, social, emotional, and general self-efficacies of students, who do never physical exercise, were significantly lower than adolescent athletes sometimes doing exercises and playing in a team. Kafkas et al. (2010), in their study on physical education teacher candidates, have reported that self-efficacies of registered athlete students were higher than those not doing exercise. It can be stated that this difference arises from the sample groups.

Significant negative relationship was found between academic procrastination behaviors and self-efficacies of physical education and sports teacher candidates. As the academic self-efficacy of students increases, then the academic procrastination behaviors decrease. Kandemir (2014) has achieved the same result in his study on 630 university students. According to Bandura (1997), high academic self-efficacy can be described as avoiding from academic procrastination by preparing for the exams and fulfilling the academic tasks. Akbay & Gizir (2010), in their study, have determined that self-efficacy belief has high and significant predictive power on procrastination tendency among the males, while no statistically significant relationship was found between the academic procrastination and academic self-efficacy of female students.

In conclusion, while academic procrastination behavior of physical education and sports teacher candidates significantly varied according to the academic success, it didn't significantly vary according to the gender and doing exercise. But, however, academic self-efficacy didn't vary according to actively doing exercise, while it varied significantly according to the gender and academic success. Negative and significant relationship was found between students' academic procrastination behaviors and self-efficacies. According to these results, academic consultancies and counseling should be offered in order to take academic procrastination behavior of university students. Moreover, by investigating the parameters influencing the cognitive, emotional, and psychomotor behaviors of students, it would be beneficial to take measures for gaining self-organizing skills and increasing their self-efficacy.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

REFERENCES

Akbay, S. E. & Gizir C. A. (2010). Cinsiyete göre üniversite öğrencilerinde akademik erteleme davranışı: akademik güdülenme, akademik öz-yeterlik ve akademik yükleme stillerinin rolü. Mersin Üniversitesi Eğitim Fakültesi Dergisi, 6(1), 60-78.

Aydoğan, D. & Özbay, Y. (2012). Akademik erteleme davranışının benlik saygısı, durumluluk kaygı, öz-yeterlik açısından açıklanabilirliğinin incelenmesi. Pegem Eğitim ve Öğretim Dergisi 2(3), 2-9.

Balkıs, M. (2006). Öğretmen adaylarının davranışlarındaki erteleme eğiliminin düşünme ve karar verme tarzları ile ilişkisi. Yayımlanmamış Doktora Tezi, Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü, İzmir.

Balkıs, M. (2007). Öğretmen adaylarının davranışlarındaki erteleme eğiliminin, karar verme stilleri ile ilişkisi. Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 21(1), 67-82.

Balkıs, M., Duru, E., Buluş, M., & Duru, S. (2006). Üniversite öğrencilerinde akademik erteleme eğiliminin çeşitli değişkenler açısından incelenmesi. Ege Eğitim Dergisi, 7(2), 57-73.

Balkıs, M. & Duru, E. (2009). Akademik erteleme davranışının öğretmen adayları arasındaki yaygınlığı, demografik özellikler ve bireysel tercihlerle ilişkisi. Eğitimde Kuram ve Uygulama 5(1), 18-32.

Balkıs, M. & Duru, E. (2010). Akademik erteleme eğilimi, akademik başarı ilişkisinde genel ve performans benlik saygısının rolü. Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 27, 159-170.

Balkıs, M. (2013). Akademik erteleme eğilimi ve öğrencilerin tükenmişlik duygusu arasındaki ilişki. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi. 28(1), 68-78.

Bandura, A. (1989) Social cognitive theory. In E. Barnouw (Ed.), *International Encyclopedia of Communications* (pp. 92–96). New York: Oxford University Press.

Bandura A. (1994). Self-Efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of Human Behavior*. New York: Academic Press vol 4, 71–81.

Bandura A (1997) *Self-efficacy:* The exercise of control. New York Freeman.

Beswick, G., Rothblum, E. D., & Mann, L. (1988). Psychological antecedents of student procrastination. Australian Psychological, 30, 207-217.

Certel Z.,Bahadır Z.,Saraçoğlu S.A., & Varol R. (2015). Lise Öğrencilerinin Öz-yeterlikleri ile Öznel İyi Oluş Düzeyleri Arasındaki İlişkinin İncelenmesi. Eğitim ve Öğretim Araştırmaları Dergisi C:4, 307-318.

Chemers, M. M., Hu, l., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. Journal of educational Psychology, 93 (1), 54-55.

Çakıcı, D.Ç. (2003). Lise ve üniversite öğrencilerinde genel akademik erteleme davranışının incelenmesi. Yayımlanmamış Yüksek Lisans Tezi, Ankara Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.

Çimen, S. (2007). İlköğretim öğretmenlerinin tükenmişlik yaşantıları ve yeterlik algıları. Yayımlanmamış yüksek lisans tezi, Kocaeli Üniversitesi.

Çelebi, S. (2016). Üniversite basketbol takımında yer alan sporcuların akademik erteleme eğilimleri. Araştırma Projesi. Akdeniz Üniversitesi. BESYO.

Day, V., Mensick, D., & O'Sullivan, M. (2000). Patterns of academic procrastination. Journal of College Reading and Learning, 30, 120-134.

Ellis, A., & Knaus, W. (1977). Overcoming procrastination. Examining personality correlates. Journal Of Social Behavior & Personality, 4, 151-156.

Ferrari, J. R. (2000). Procrastination and aattention: factor analysis of attention deficit, boredomness, intelligenmce, self-esteem, and task delay frequences. Journal of Social Behavior & Personality, 15, 185-196.

Fırat Durdukoca, Ş. (2010). Sınıf öğretmeni adaylarının akademik öz-yeterliklerinin çeşitli değişkenler açısından incelenmesi. Abant İzzet Baysal Üniversitesi Dergisi 10(1), 69-77.

Haycock, L., A., McCarthy, P., & Skay, C. L. (1998). Procrastination in college students: the role of self-efficacy and anxiety. Journal of Counseling & Development, 76, 317-324.

Jerusalem, M. & Schwarzer, R. (1981). Fragebogen zur erffassung von "Selbstwirksamkeit. Skalen zur befimdlichkeit und persoenlichkeit In R. Schwarzer (Hrsg.). (Forschungsbericht No. 5). Berlin: Freeeie Universitaet, Instıtut fuer Psychogie.

Kafkas, E. Çoban, B., & Karademir, T. (2010). Investigation of the relationship between preservicephysical education teachers' sense of self-efficacy and professional concerns. *Inonu Unıversıty Journal Of The Faculty Of Educatıon*. 11(2), 93-111.

Kandemir, M. (2014). A model explaining academic procrastination behavior. Pegem Journal of Education& Instruction, + (3), 51-72.

Karabıyık Ceri, B., Çavuşoğlu, C., & Gürol, M. (2015). Üniversite öğrencilerinin akademik erteleme düzeylerinin incelenmesi. International Journal of Social Science. 34, 385-394.

Kauchak, D. P., & Eggen, P. D. (1998). *Learning and teaching: research-based methods* (3rd ed.). Needman Heights, MA: Allyn& Bacon.

Kim, K. R. & Seo E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. Personality and Individual Differences 82: 26-33.

Klassen, R. M., & Kuzucu, E. (2009). Academic procrastination and motivation of adolescents in Turkey. Educational Psychology, 29(1), 69-81.

Lay, C. H. (1986). At last, my research article on procrastination. Journal of Research in Personality, 20, 474-495.

O'Brien, W. K. (2002). Appling the transthheorical model to academic procrastination. Unpublished doctoral dissertation, University of Houston.

Orpen,, C. (1998). The causes and consequences of academic procrastination: A research note. Westmin Studies in Education, 21, 73-75.

Özen, Ö. (2005). Ergenlerin öznel iyi oluş düzeyleri. Yüksek Lisans Tezi, Hacettepe Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.

Özer, A. & Altun., E. (2011). Üniversite öğrencilerinin akademik erteleme nedenleri. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 11(21), 45-72.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66 (4), 543–578.

Pajares, F., & Graham, L. (1999). Self-efficacy motivatiob construct, and mathematic performans of entering middle school students, Comtemporary Educational Psychology, 24 124-139.

Schunk, D. H. (1991). Self-efficacy and academic motivation, Educational Psychologist, 26(3-4), 207-231.

Schunk, D. H., & Pajares, F 82002). The development of academic self-efficacy, A. Wigfield; J. Eccles (Der). Development of Achievement Motivation. San Diego: Academic Press.

Senecal, C., Koestner, R. & Vallerand, R. J. (1995). Self-regulation and academic procrastination. Journal of Social Psychology, 135(19), 607-619.

Solomon, L. J. & Rothblum, E. D. (1984). Academic procrastination: Frewuency and cognitive-behavioral correlates. Journal of Counling Psychology, 31, 503-509.

Steel, P. (2007). The nature of procrastination: a meta-analysis and theorretical review of wuintessential self-regulatory failure. Psychological Bulletin, 133(1), 65-94.

Şeker, S. S., & Saygı, C. (2013). Eğitim fakültesi güzel sanatlar eğitimi bölümü resim-iş eğitimi ve müzik eğitimi anabilim dallarında okumakta oaln öğretmen adaylarının akademik erteleme eğilimlerinin çeşitli değişkenler açısından incelenmesi. International periodical Fort he languages and History of Turkish or Turkic 8,1219-1227.

Tuckman, B. W. (1998). Using tests as an incentive to motivate procrastinators to study. Journal of Experimental Education, (29: 141-47)..

Tice, D. M., & Baumeister, R. F. (1997). Longitudinal study of procrastination, performans, stress, and health: The costs and benefits of dawdling. Psychological Science, 8 454-458.

Üstüner, M., Demirtaş, H., Cömert, M., & Özer, N. (2009). Ortaöğretim öğretmenlerinin öz-yeterlik algıları. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi 9(17), 1-16.

Van Erde, W. (2000). Procrastination. Self-regulation in initianing aversive goals. Applied Psychology: An International Review, 49,372-389.

Washington, J. A. (2004). The relationship between procnastination and depression among graduate and Professional students across academic programs: Implications for counseling, Unpublished Doctoral Dissertation. Texas Southern University.

Watson, D.C. (2001). Procnastination and the five-factor model: A facet level analysis. Persononality and Individual Differences, 30, 149-158.

Yılmaz, M., Gürçay, D., & Ekici, G. (2007). Akademik özyeterlik ölçeğinin türkçe'ye uyarlanması, Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (H. U. Journal of Education) 33: 253-259.

Zeldin, A. L. & Pajares, F. (2000). Against the odd:self-efficacy beliefs of womwn in mathematical, scientific and technolojical careers. American Educational Research Journal, 37, 215-246.

Zimmerman, B. J. (1995). Self-efficacy and educational development. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp.202-231). New York: Cambridge University Press.

Zimmerman, B. J. (1995). *Attaining self-regulation*: A social Cognitive perspective, Handbook of self-regulation, Academic Press: California.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INVESTIGATION OF ATTITUDE TOWARDS THE COMPUTER GAME OF MİDDLE SCHOOLS STUDENTS

Dr.Ayşe ALKAN
ayshe_alkan@hotmail.com

Dr.Metin ÇENGEL
Faculty of Education
Sakarya University Turkey
cengel@sakarya.edu.tr

ABSTRACT
The advancement of information technologies technology It has become an indispensable element of our lives. One of the information technology is computers are used for fun and games. This study is aimed investigate middle school students attitudes of computer games. Studies in the academic year 2014-2015, Studying at Samsun city center was carried out with 255 fifth and sixth grade students. In the study Solak (2012) prepared by the survey was administered. Data were analyzed by SPSS 16 software was used. The analysis of the data, frequency, t-test, one-way analysis of variance (ANOVA) was used and the significance level was accepted as .05. The results of the girls' computer games that they participate more negatively than male students, the students' grade level by changing attitudes towards of computer games, they look more positive to of those who have computer to computer games, the higher the family income of students' computer game has reached the conclusion that the outlook is more positive.
Keywords: Computer games, information technology, game attitude

INTRODUCTION

Along with increased use of computers and the Internet has made the use of leisure-game. Especially among children and young people in recent years games consoles, computer games, on- line (online) use is increasing with each passing day of the game (Gürcan, Ozhan and Uslu, 2008). Tapscott (1997) According to the study, today's young people learn, play, communicate, work and community are different than their parents on issues such as creation. Studies have fun individuals, challenge, competition, social communication, have nothing to do, spend time, relax, escape from stress, to return again many times, providing that can focus on long-term environment, recreation, spare time, escape from real life, be free shows that they play as reasons (Griffiths and Hunt, 1995; Sherry and Lucas, 2001; Inal and ÇAĞILTAY, 2005; Kirriemuir, 2002; Wu and Chiou, 2006).

With the development of technology students play virtual environment in their homes, Internet cafes or computer, and play on the internet with friends or relatives instead of playing in parks Horzum (2011) in this regard in the past playgrounds and the actual activities carried out together with friends in the street games, at home or in an internet cafe today stated that video games and become virtual activities performed on the computer. Prensky (2001) also present students a PC, represents a world they do not know how it is an internet and computer oyunsuz place.

Cesarona (1994), computer games, children are effective in acquiring computer literacy besides the game, providing hand-eye coordination, spatial skills development, to imagine, to explain the reasons of the way, to revive the chemistry and physics related objects in mind, the positive aspects, such as ensuring the integration of shapes in spaceIt indicates that. Furthermore, the game of strategic thinking, planning, communication and decision that provide benefits such as making and video game social and cultural worlds created, it is emphasized that helped to learn through communication and joining technology (Kirriemuir and McFarlane, 2004; Shaffer, Squire, Halverson and Gee, 2005).

Besides the positive aspects of the games show aggressive behavior, tendency to violence, personality changes, reduction of emotions and feelings, antisocial behavior, increased levels of anxiety, fantasy and psychological effects such as live confusion between real and hyperactivity, hand, shoulder, disorders of the spine appearance, loss of vision, headaches, eye dryness there are also biological effects such as being constantly tired and sleepy (Setzer and Duckett, 1994; Hauge and Gentile, 2003; Chiu, Lee and Huang, 2004; Wu and Chiou, 2006).

METHOD

In this section, research model, population and sampling, data collection will be given information about the collection and analysis of data.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Model Research

Scanning model was applied in the research. The main purpose of the screening study is to describe in a way that the existing situation. Everything in this study, are tried in their own conditions and is defined as (Karas, 2005). Demographics of students constitutes part of vision screening for computer games.

Population and sample

The population of the investigation Samsun / Turkey constitutes the fifth and sixth grade students. The sample 2015-2016 academic year Samsun / Turkey are studying 255 fifth and sixth grade students. Socio-demographic characteristics of the students in the sample are shown in Table 1.

Table 1. Socio-demographic variables of the students in the sample

		Frequency	**%**
Gender	Female	140	54,9
	Male	115	45,1
	Total	**255**	**100**
Sınıf	Fifth Grade	144	56,5
	Sixth Grade	111	43,5
	Total	**255**	**100**
Monthly income of the family	TL 800 and below	46	18,0
	Between 800 TL-1500TL	123	48,2
	Between 1500 TL-2500 TL	64	25,1
	2500 TL and over	22	8,6
	Total	**255**	**100**
Do you have a room of your own in your home?	Yes	180	70,6
	No	75	29,4
	Total	**255**	**100**
Do you have computer at home?	Yes	184	72,2
	No	71	27,8
	Total	**255**	**100**
Do you have a computer of your own home?	Yes	98	38,4
	No	157	61,6
	Total	**255**	**100**
Do you play computer games?	Yes	247	96,9
	No	8	3,1
	Total	**255**	**100**
Where do you play computer games?	At home	178	69,8
	Internet cafe	22	8,6
	my friend	30	11,8
	Other	25	9,8
	Total	**255**	**100**
How many hours do you spend at your computer in your average day?	1-2 hours	172	67,5
	2-3 hours	47	18,4
	3-4 hours	21	8,2
	Over 4 hours	15	5,9
	Total	**255**	**100**
How many hours do you play computer games in an average day?	1-2 hours	209	82,0
	2-3 hours	32	12,5
	Over 3 hours	14	5,5
	Total	**255**	**100**
The more you play the computer game types	Sports and racing	46	18,0
	Adventure	41	16,1
	War and strategy	36	14,1
	Intelligence and logic	40	15,7

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	It does not matter	92	36,1
	Total	**255**	**100**
It does the times when your parents forbid you to play?	Yes	170	66,7
	No	85	33,3
	Total	**255**	**100**

According to Table 1 54.9% of those surveyed female and 45.1% of male students. 56.5% of fifth grade students, while 43.5% of the sixth graders. When the family income of the students who participated in the study it is observed that 48.2% have a monthly income of 800TL-1500TL. 70,6% of the students stated that they have their own room.

72.2% of students who participated in the survey that their home computer stated that while 38.4% of personal computers. 96.9% of students that playing computer games, computer games also seems to play at home of 69.8. 67.5% of the students when they spend 1-2 hours a day on the computer and it is seen that 82% of 1-2 hours per day playing computer games. Types of games played by students does not recognize the% 36.1 of game species examined, 18% also stated that they play sports and racing games also students stated that the time has banned the play great family of 66.7%.

Data Collection Tool

In order to collect data, to determine the students' personal characteristics Solak (2012) by validity and reliability studies have been made "Individual Identification Form" Computer games that the company has been developed to determine the attitude level "Computer Game Attitude Scale, It was applied. Computer Games Attitudes were examined in two dimensions.

The articles contained in the first dimension as the "negative features of computer games" is focused on. For example; "Computer games, students are lazy." Another article "Computer games have resulted in the loss of time.", Another "war games on the computer causes the child's shark to be." Such substances are the Negative Personality Dimensions of Computer Game Attitude. The articles contained in the second dimension is seen that for the administrative characteristics of individuals to general computer game. For example; "Computer games are developed practical intelligence", "increases in computer game win people's confidence. "," Computer games are developed sense of leadership. These substances are the managerial attitude Property Size of Computer Games.

Collection and analysis of data

In research Quantitative data were analyzed using SPSS 16.0(The Statistical Package for The Social Sciences) statistical software. .05 significance level of research has been accepted. In the study, descriptive statistics, t-test, one-way analysis of variance (ANOVA) was used.

RESULTS

Table 2. Students' Attitude of Computer Games, Personality Negative Attitudes and administrative Feature Attitudes Gender Differentiation according to the variable T-Test Results

Scales	Gender	N	$\overline{X}$	S	sd	t	p
Computer Games Attitudes	Female	140	65,59	11,52	253	1,90	,058
	Male	115	62,57	13,80			
Personality Negative Attitudes	Female	140	41,67	9,84	253	3,12	,002
	Male	115	37,66	10,61			
Administrative Feature Attitudes	Female	140	23,91	5,82	253	1,24	,215
	Male	115	24,91	7,01			

In Table 2, the 5th and 6th grade students according to gender attitudes computer game, computer game feature negative personality and managerial attitude, which has dimensions of attitude scales were examined. Table 2 student of computer games attitudes and negative attitudes of people in the .05 level shows significant differences according to gender. Given the arithmetic average, female students (x = 65.59) male students (X = 62.57) higher than a computer game in which you have the attitude and female students (x = 41.67) male students (X = 37.66) higher than a negative personality attitude It seems to have. According to this data, computer games, said that more girls joined the boys that there are negative aspects.

Administrative feature size, students are not significantly different according to gender (p> .05). Men administrative feature size of the student (= 24.91) than girls (= 23.91) is higher.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 3. Computer Games Attitudes of Students, Personality Negative Attitudes and administrative Feature Attitudes Toward the Grade Level T-Test Results Variable according to Differentiation

Scales	Class Level	N	$\overline{X}$	S	sd	t	p
Computer Games Attitudes	Fifth	144	63,34	12,67	253	1,27	,205
	Sixth	111	65,37	12,62			
Personality Negative Attitudes	Fifth	144	38,95	10,53	253	1,60	,109
	Sixth	111	41,05	10,08			
Administrative Feature Attitudes	Fifth	144	24,39	6,21	253	,088	,930
	Sixth	111	24,32	6,65			

In Table 3, depending on the level of variable grade student attitudes computer game, computer game, attitude scale, which received negative personality and managerial attitudes size of the property does not show a significant difference at .05 level.

Table 4. Computer Games Attitudes of Students, Personality Negative Attitudes and administrative Feature Attitudes have a computer to be variable according to their own T-Test Results

Scales	To have their own computer	N	$\overline{X}$	S	sd	t	p
Computer Games Attitudes	Yes	98	64,38	11,67	253	,15	,877
	No	157	65,13	13,28			
Personality Negative Attitudes	Yes	98	38,92	9,43	253	1,14	,255
	No	157	40,45	10,91			
Administrative Feature Attitudes	Yes	98	25,45	6,03	253	2,17	,031
	No	157	23,68	6,53			

Attitude of the student computer game "is a computer to be its own" does not show a significant difference depending on the situation (p> .05). The size of the negative personality of students to be self-examination is a computer belonging "does not show a significant difference depending on the situation (p> .05). Negative personality dimensions of students with a computer of their own (= 38.92), non-students (= 40.45) d. These findings have a computer between computer and attitudes towards the game situation can be interpreted as being in a relationship. Administrative feature size of students whether they own a computer, "according to the situation shows significant differences (p <.05). The size of the property management students with a computer of their own (= 25.45), non-students (= 23.68) d. Among these findings to computer games have a computer with a positive attitude towards the situation it can be interpreted that there is a relationship.

Table 5. Computer Games Attitudes of Students, Personality Negative Attitude and administrative Feature in family income compared to the variables of attitude ANOVA Results

Scales	Ailenin Gelir Durumu	N	$\overline{X}$	Ss	F	p
Computer Games Attitudes	800Tl and below	46	59,28	13,27	3,62	,014
	800TL-1500TL	123	64,48	12,32		
	1500TL-2500TL	64	65,84	12,26		
	2500 TL and over	22	68,45	12,18		
Personality Negative Attitudes	800Tl and below	46	36,65	10,89	2,04	,109
	800TL-1500TL	123	40,48	10,22		
	1500TL-2500TL	64	40,17	10,20		
	2500 TL and over	22	42,22	9,86		
Administrative Feature Attitudes	800Tl and below	46	22,63	5,79	2,83	,039
	800TL-1500TL	123	24,00	6,40		
	1500TL-2500TL	64	25,67	6,64		
	2500 TL and over	22	26,22	6,00		

Students' attitudes computer games shows significant differences according to family income status variables (P <.05). Perspectives for computer games increases the family income of the students said that is changing. Family

 Copyright © International Conference on New Horizons in Education Conference (INTE)

income in 2500 and over the students' attitude to computer games (= 68.45) is shown in Tables 5 to be higher. Students are negative personality dimensions no significant difference according to family income status (p> .05). In other words, the student does not depend on the state of the negative attitudes of family income for computer games. The size of the student administrative feature shows significant differences according to family income (p <.05). In other words, students varies according to family size, income level of property management for computer games, family income increases, the students said that the rise of the managerial personality dimensions**.**

Table 6. Computer Games Attitudes of Students, Personality Negative Attitudes and administrative Feature Attitudes "Where do you play computer games? "According to the variable ANOVA Results

Scales	Where do you play computer games?	N	$\overline{X}$	Ss	F	p
Computer Games Attitudes	At home	178	64,53	12,35	,616	,606
	Internet cafes	22	61,18	13,87		
	My friend	30	63,40	14,12		
	Other	25	65,72	12,25		
Personality Negative Attitudes	At home	178	39,62	10,08	2,48	,062
	Internet cafes	22	35,59	10,67		
	My friend	30	41,66	11,82		
	Other	25	43,20	9,36		
Administrative Feature Attitudes	At home	178	24,91	6,16	3,17	,025
	Internet cafes	22	25,59	7,31		
	My friend	30	21,73	5,45		
	Other	25	22,52	7,37		

Attitude of the student computer game "where you play the computer game" according to variables and negative personality dimension "Where you play the computer games?" By not show a significant difference (p> .05). In other words, negative attitudes towards students do not change according to where they were playing computer games. Property management shows a significant difference in the size of the place students play computer games (p <.05). Managerial personality dimensions of the students who play in Internet cafes in other words (= 25.59) is higher.

Table 7. Computer Games Attitudes of Students, Personality Negative Attitudes and administrative Feature Attitudes "How many hours you play a day for the average computer game? "According to the variable ANOVA Results

Scales	How many hours you play a day for the average computer game?	N	$\overline{X}$	Ss	F	p
Computer Games Attitudes	1-2 hours	209	64,27	12,86	,506	,603
	2-3 hours	32	65,28	11,33		
	Over 3 hours	14	61,21	12,95		
Personality Negative Attitudes	1-2 hours	209	40,14	10,31	1,04	,352
	2-3 hours	32	39,75	11,06		
	Over 3 hours	14	36,00	9,67		
Administrative Feature Attitudes	1-2 hours	209	24,12	6,33	0,79	,452
	2-3 hours	32	25,53	6,81		
	Over 3 hours	14	25,21	6,37		

Negative personality dimensions of the students "how many hours you play a day for the average computer game? "According does not show a significant difference (p> .05). In other words, students do not change according to the times of negative attitudes towards playing computer games. The size of the student administrative feature "How many hours you play a day for the average computer game? "According does not

 Copyright © International Conference on New Horizons in Education Conference (INTE)

show a significant difference (p> .05). In other words, students do not change according to the times of negative attitudes towards playing computer games.

DISCUSSION AND CONCLUSIONS

In this study, middle school fifth and sixth grade students of computer games attitudes to gender, grade levels, is to have their own computer status, family income level were examined and where they play computer games according to the variables.

Gender variable to the examination, the student computer game shows a significant difference to the negative attitude and personality attitudes gender. Girl students concluded that computer games and the negative attitude of the attitude of the people was higher than the male students were interviewed. Solak (2012) is the result of the work they are doing exactly the opposite situation arose and male students concluded that computer games and the negative attitude of the people was higher than the attitudes of female students has been reached.

Class levels are variable according to the investigation carried out computer game, attitude, negative attitude, and personality is not different managerial attitudes property. When analyzed according to whether the case is a computer to its own students; computer games is to show differences in attitude and negative attitude of people. Solak (2012) 's study the differences have emerged. In this case the age of the studied sample group said that due to the fact different. The administrative feature size varies depending on whether the student has a computer case. Said that a high managerial abilities of the students with their own computers.

Computer games olsuz attitude and personality dimensions of the students in the examination according to the family income variable does not show a significant difference .. Single family income increases, the students said that the rise of the computer game attitude. Property management varies according to the size of the student family income. Family income increases, students said that the rise of the managerial personality dimensions.

Attitude of the student computer game "where you play the computer game" with respect to variable, does not differ according to the size of the negative personality and managerial feature size. Single students who play in Internet cafes can be said that higher management feature size. When analyzed according to duration of use work computers variable attitude of the students of computer games, it does not differ significantly negative personality and managerial personality dimensions. This result Solak (2012) is consistent with the work that has been done.

In the study done at the computer 172 students have spent 1-2 hours per day, 255 students, 209 of the 255 students stated that the average 1-2 hours playing computer games a day. In their time, these data can be interpreted in line with the students during the day they played computer games. Fromme (2003) as a result of the majority of the people surveyed stated that the work that it has done regularly in play or at least a daily basis. Solak (2012) 's 293 students from 362 students in the study made by the average 1-2 hours a day is spent at the computer, 324 of the 362 students stated that they play computer games 1-2 hours per day. Surveyed 255 students from 170 families from time to time playing computer games that they had brought the ban. In this case we can say that they are not satisfied with the parents of their children's computer play.

RECOMMENDATIONS

- Students, parents and teachers can be informed about the negative effects of computer games and gaming addiction.
- Students play the game suggested that they should be under the control of parents and teachers.
- Gaming addiction in their social life of the students, their academic success and psychological effects can be described.
- Families about the effects of this game made an extensive study of computer games played by students, teachers, and students should be informed.

REFERENCES

Cesarone, B. (1994). Video Games and Children. ERIC Clearinghouse on Elementary and Early Childhood Education. It was accessed from http://eric.ed.gov/ERICDocs/data/ ericdocs2sql/content_storage_01/0000019b/80/15/ 2a/8c.pdf, 12.08.2009.

Chiu, S. I., Lee, J. Z., & Huang, D. H. (2004). Video game addiction in children and teenagers in Taiwan. *CyberPsychology & Behavior*, *7*(5), 571–581.

Fromme, J. (2003). Computer Games as a Part of Children's Culture, *Game Studies, The International Journal of Computer Game Research*, 3(1). It was accessed from

http://www.gamestudies.org/0301/fromme/ , 02.11.2015.

Griffiths, M.D. ve Hunt, N. (1995). Computer Game Playing in Adolescence: Prevalence and Demographic Indicators. Journal of Community & Applied Social Pyschology. 5. 189-193.

Gürcan A, Özhan S, Uslu R. Dijital oyunlar ve çocuklar üzerindeki etkileri. Başbakanlık Aile ve Sosyal Araştırmalar Genel Müdürlüğü, Ankara, 2008:1-50.

Hauge, M. R., & Gentile, D. A. (2003, April). *Video game addiction among adolescents: Associations with academic performance and aggression*. Poster presented at the 2003 Society for Research in Child Development Biennial Conference, Tampa, FL It was accessed from http://www.psychology.iastate.edu/ FACULTY/dgentile/SRCD%20Video%20Game%20Addiction.pdf, 19.05.2008.

Horzum, M.B. (2011). İlköğretim Öğrencilerinin Bilgisayar Oyunu Bağımlılık Düzeylerinin Çeşitli Değişkenlere Göre İncelenmesi. *Eğitim ve Bilim*, 36(159), s. 56-68.

İnal, Y. ve Çagıltay, K. (2005). _İlköğretim Öğrencilerinin Bilgisayar Oyunu Oynama Alıskanlıkları Ve Oyun Tercihlerini Etkileyen Faktörler. Ankara Özel Tevfik Fikret Okulları, Egitimde Yeni Yönelimler II. Eğitimde Oyun Sempozyumu, 14 Mayıs 2005.

Karasar, N. (2005). *Bilimsel Araştırma Yöntemi.* (14. Baskı). Nobel Yayın Dağıtım, Ankara.

Kirriemuir J. (2002). Video Gaming, Education and Digital Learning Technologies. D-Lib Magazine February 2002. 8(2). It was accessed from http://www.dlib.org/dlib/february02/kirriemuir/ 02kirriemuir.html, 09.05.2007.

Kirriemuir, J., & McFarlane, A. (2004). *Literature review in games and learning (Futurelab Series, Report 8)*. Bristol, UK:Futurelab.

Prensky, M. (2001a). Digital Game-Based Learning. New York: McGraw-Hill.

Setzer, V.W. & Duckett, G.E. 1994-07-02. "The Risks To Children Using Electronic Games". Paper presented at Asia Pacific Information Technology in Training and Education Conference and Exhibition, Brisbane, Australia. It was accessed from http://www.ime.usp.br/~vwsetzer/video-g-risks.html, 27.06.2007.

Shaffer, D.W., Squire, K.R., Halverson, R., & Gee, J. P. (2005). Video games and the future of learning. *Phi Delta Kappan*,*87*(2), 104-111

Sherry, J. L. ve Lucas, K. (2001). Video Game Uses And Gratifications As Predictors Of Use And Game Preference. Paper presented at the annual meeting of the International Communication Association, Marriott Hotel, San Diego, CA. It was accessed from. http://icdweb.cc.purdue.edu/%7Esherryj/videogames/VGUG.pdf, 09.11.2006.

Solak,M.Ş (2012). Ortaöğretim Öğrencilerinin Bilgisayar Oyunu Tutumlari ile Saldirganlik ve Yalnizlik Eğilimleri Arasindaki İlişkilerin İncelenmesi. Marmara Üniversitesi, Eğitim Bilimleri Enstitüsü, İstanbul.

Tapscott, D. (1997). *Growing up digital: The rise of the next generation*. New York: McGraw-Hill.

Wan, C.S. ve Chiou, W.B. (2006). Why Are Adolescents Addicted to Online Gaming? An Interview Study in Taiwan. *Cyberpsychology & Behavior*, *9*(6), 762-766.

INVESTIGATION OF BEING A CYBER BULLY AND VICTIM IN ADOLESCENTS ACCORDING TO DEMOGRAPHIC VARIABLES

Mehmet ŞAM
Department of Educational Sciences
Pamukkale University, Denizli, Turkey
mehmetsam23@gmail.com

Erdinç DURU
Department of Educational Sciences
Pamukkale University, Denizli, Turkey
eduru@pau.edu.tr

ABSTRACT
The purpose of this study is to investigate being a cyber bully and cyber victim in terms of demographic variables of gender, daily internet use, aim of internet usage, daily facebook, twitter and instagram usage, the level of mother, father and self internet competency, and parents' being together. The study group consisted of 176 female and 202 male students in a secondary school in Denizli. Findings indicated that there was a significant relationship between being a cyber bully and a cyber victim , and gender, daily internet usage, daily facebook, twitter and instagram usage and the level of self internet competency, however there is no in terms of parents' being together.

INTRODUCTION

Considering the speed pervasion of information and communication technologies, the fastest technology seems to be internet and mobile phone (International Telecommunication Union, 2016). According to the statistics of International Telecommunication Union in 2016, there are more than 7 billion people using mobile phones. In Turkey, the total number of mobile phone users is more than 71 million (International Telecommunication Union, 2016). The rate of internet usage from mobile phone in Turkey in 2014 was approximately 40% of the population (Institution of Information Technologies and Communication, 2016).

It is stated that adolescents make and maintain their friendships through information and communication technologies (Yaman, Eroğlu&Peker, 2011). The extreme usage of information and communication technologies among adolescents may lead to either positive or negative impacts on their development. For example, young's using technology more prevalently caused them to develop bullying behavior at school by using technology. A new type of bullying called cyber bullying has started to be observed among students at schools (Ayaş&Horzum, 2012). Cyberbullying is defined as the repetitive usage of information and communication technologies of one group in order to harm other individuals via mail, chat rooms, instant messages and mobile phones (Li, 2006). Many studies indicated that cyberbullying and victimization is a prevalent problem among students. For example, Schneider, O'Donnell, Stueve and Robert (2012) demonstrated that while 69% of the students are exposed to cyberbullying, 16% of them perpetrate cyberbullying. In a study of Walrave and Heirman (2011) which was conducted with 12-18 years of students, one third of students were found to be cyber victim and one fifth of them were cyber bully. Research in Turkey point out that cyberbullying has become an important issue among secondary school students. Erdur-Baker and Kaysut (2007) found that among the students with the ages of 14-19, the rate of cyber bullies were 28%, and cyber victims were 30%. In a study conducted with 413 primary and secondary school students, Ayaş and Horzum (2012) found that 18.6% of the participants were exposed to cyberbullying and 11.6% of them perpetrate cyberbullying.

Much research concluded that individuals who are cyber bullies and victims are affected negatively in many ways. That is to say; young perpetrating cyberbullying tend to have behavior problems such as disobedience and aggression, and have increasing rate of depression, drug addiction and commitment to a crime; young who are victims of cyberbullying feel more upset, anxiety and fear, and have behavior problems related to school such as absenteeism and bringing gun to school, moreover a decrease in their academic achievement are observed because of loss of concentration (Ybarra&Mitchell, 2007; Ybarra, Diener-West&Leaf, 2007; Mitchell, Ybarra &Finkelhor, 2007; Beran & Li, 2005). Patchin and Hinduja (2006) indicated that a plenty of cyber victims (nearly 60%) were affected from internet negatively and reflect these negative behaviors to their houses and friendships at school. Briefly, cyberbullying and victimization is a prevalent problem among adolescents and they are affected from it negatively.

A part of research on cyberbullying has focused on personal, environmental and conceptual factors while the other part has pointed out the relations of cyberbullying and demographic variables. Gündüz (2015) examined

 Copyright © International Conference on New Horizons in Education Conference (INTE)

the studies on the relations of cyberbullying and demographic variables and found that the independent variable which was used the most was gender with the rate of 33.9%, and then came class grade (13%) and age. Studies which were conducted to explain cyberbullying and victimization and determine the related variables, independent variables such as gender, psychiatric symptoms, age, time of internet usage, room where computer takes place in, academic achievement, level of internet competency, grade and socio economic level (Arıcak, 2009; Mishna, Khoury-Kassabri, Gadalla & Daciuk, 2012; Yılmaz, 2011; Dilmaç & Aydoğan, 2010; Kowalski & Limber, 2007) were used. Considering the literature review in Turkey and abroad, there seem not much research on parents related factors such as internet literacy of parents, parents' being together, economical status of family. Further research with demographic variables to understand cyberbullying and victimization might help obtain a more holistic picture of the issue and be a base for the psycho-educational programs. In this sense, the purpose of this study is to investigate being a cyber bully and a cyber victim in terms of demographic variables of gender, daily internet usage, purpose of internet usage, daily facebook, twitter and instagram usage, the level of mother, father and self internet competency, and parents' being together. In terms of this purpose, following research questions were examined:

1. Does adolescents' being a cyber bully and victim differ according to their gender and daily usage of internet?
2. Does adolescents' being a cyber bully and victim differ according to their purpose of internet usage and daily facebook, twitter and instagram usage?
3. Does adolescents' being a cyber bully and victim differ according to their parents' being together and the level of parents' internet competency?

METHOD

Study Group

The study group consists of 378 secondary school students selected by proper sampling method and attending a secondary school in Pamukkale district of Denizli. Of the participants, 176 (46.6%) were females and 202 (53.4%) were males. Students were at 6th grade (124-32.8%), 7th grade (100-26.5%) and 8th grade (154-40.7%).

Data Collection Tools

The Revised Cyber Bullying Inventory

Developed by Topçu and Erdur-Baker (2010) and having two forms named cyberbullying and cyber victimization, the inventory includes 28 items. Participants indicated the extent to which they agreed with each statement on a 4 point likert ranging from *1: Never* to *4: More than three*. Exploratory factor analyses indicated that cyberbullying form had one factor with factor loadings from .28 to .83.C confirmatory factor analysis showed good fit of indices (GFI= .93, AGFI =.89, CFI=.93, NFI=.89, TLI=.90 and RMSEA = .06). The cyber victimization form includes one factor having factor loadings from .21 to .78. The model was accepted as good fit considering the results of confirmatory factor analysis (GFI =.93, AGFI =.90, CFI=.89, NFI=.84, TLI=.86 and RMSEA = .06). There is a significant relationship between cyberbullying form and cyber victimization form ($r = .36$, $p<.001$). Getting high scores from the inventory indicates being a cyber bully and victim.

Personal Information Form

Demographics of the participants were collected by a personal information form developed by the researcher. This form includes questions about students' gender, grade, the purpose of internet usage, parents' being together, daily internet usage, the level of parents' and self internet competency, education level of parents, daily facebook, twitter and instagram usage.

Data Analysis

T-test and one way ANOVA were used to analyze the data. Tukey test was conducted in order to understand the source of difference if F value is significant. Assumptions were checked and parametric tests were used for the study. Analyses were conducted via SPSS 15.00 with the significance level of .05.

FINDINGS

Whether being a cyber bully and victim in adolescents differs according to gender, daily internet usage, the purpose of internet usage, daily facebook, twitter and instagram usage, parents' being together and education level of parents was examined. Table 1 displays results of t-test analysis whether cyberbullying and victimization differs according to gender.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 1. Independent samples t-test whether cyberbullying and victimization differs according to gender

	Gender	N	$\bar{x}$	Sd	df	t	p
Cyber Bully	Female Male	168 191	15,39 16,14	2,18 2,61	357	-2,920	,004*
Cyber Victim	Female Male	168 191	17,02 18,82	4,08 5,04	357	-3,668	,000*

* p < .05

As shown in Table 1, there is a significant difference between being a cyber bully (t (357) = - 2.920, p<.05) and a cyber victim (t (357) = -3.668, p<.05) for girls and boys. Boys are under risk of being a cyber bully and victim more than are girls.

Table 2 displays the mean scores and standard deviations of adolescents' being a cyber bully and victim according to their daily internet usage.

Table 2. Mean scores and standard deviations for adolescents' being a cyber bully and victim according to daily internet usage

		n	$\bar{x}$	sd
Being a Cyber Bully	30 min- 1hour	112	14.94	1.58
	1 hour - 2 hour	127	15.74	2.33
	2 hour - 4 hour	93	16.47	2.89
	4 hour and more	27	17.14	3.02
	TOTAL	359	15.79	2.44
Being a Cyber Victim	30 min - 1 hour	112	16.13	3.26
	1 hour - 2 hour	127	18.11	4.48
	2 hour - 4 hour	93	19.09	4.82
	4 hour and more	27	21.22	6.95
	TOTAL	359	17.98	4.69

In order to understand whether being a cyber bully and victim differs according to adolescents' daily internet usage, one way ANOVA was used. Findings indicated that there was a significant difference between adolescents' being a cyber bully [F(3, 355)=10.40, p< .05] and victim [F(3, 355)=10.40, p< .05] and their daily internet usage. To determine the source of this difference, Tukey test was conducted. According to the mean score of adolescents' being a cyber bully and victim, while the lowest score belongs to adolescents who use internet 30 min-1 hour in a day ($\bar{x}$=14.94; $\bar{x}$=16.13), the highest score does of adolescents' who use internet 4 hours and more ($\bar{x}$=17.14; $\bar{x}$=21.22) in a day.

Mean scores and standard deviations of adolescents' being a cyber bully and victim according to daily facebook, twitter and instagram usage were shown in Table 3.

Table 3. Mean scores and standard deviations for adolescents' being a cyber bully and victim according to daily facebook, twitter and instagram usage

		n	$\bar{x}$	sd
Being a Cyber Bully	0 - 30 min	26	14.65	1.32
	30 min- 1 hour	190	15.47	2.15
	1 hour - 2 hour	95	16.28	2.62
	2 hour and more	48	16.66	3.15
	TOTAL	359	15.79	2.44
Being a Cyber Victim	0 - 30 min	26	15.00	1.95
	30 min- 1 hour	190	17.17	3.89
	1 hour - 2 hour	95	20.06	5.55
	2 hour and more	48	18.66	5.15
	TOTAL	359	17.98	4.69

 Copyright © International Conference on New Horizons in Education Conference (INTE)

One way ANOVA was used to analyze whether being a cyber bully and victim differs according to adolescents' daily facebook, twitter and instagram usage. Analysis showed a significant relationship between adolescents' being a cyber bully [F(3,355)=6.514, p<0,05] and a cyber victim [F(3,355)=13.09, p<.05] and their daily facebook, twitter and instagram usage. In other words, adolescents' being a cyber bully and victim vary depending on their facebook, twitter and instagram usage in a day. In order to understand the source of difference, Tukey test was used. Findings indicated that, as for being a cyber bully, adolescents who use internet for 0-30 minutes a day have the lowest mean score ($\bar{x}$=14.65) and who use it for 2 hours and more a day have the highest mean score ($\bar{x}$=16.66). As for being a cyber victim, according to adoselcents' daily facebook, twitter and instagram usage, the lowest mean score is of 0-30 minutes users ($\bar{x}$=15.00), and the highest mean score is of 1 and 2 hours users ($\bar{x}$=20.06).

Table 4 displays mean scores and standard deviations for adolescents' being a cyber bully and victim according to the purpose of internet usage.

Table 4. Mean scores and standard deviations for adolescents' being a cyber bully and victim according to the purpose of internet usage

		n	$\bar{x}$	sd
Being a Cyber Bully	To Study	54	14.70	1.38
	To Make a Research	38	15.10	1.50
	To Play a Game	26	16.38	2.84
	To Use Facebook, Instagram, Twitter..etc	65	17.04	2.97
	All	168	15.72	2.42
	Other	8	15.75	1.48
	TOTAL	359	15.79	2.44
Being a Cyber Victim	To Study	54	16.18	3.32
	To Make a Research	38	17.26	4.08
	To Play a Game	26	19.00	5.60
	To Use Facebook, Instagram, Twitter..etc	65	20.03	5.50
	All	168	17.70	4.43
	Other	8	19.50	4.81
	TOTAL	359	17.98	4.69

One way ANOVA was used to analyze whether being a cyber bully and victim differs according to adolescents' purpose of internet usage. Analysis showed a significant relationship between adolescents' being a cyber bully [F(5,353)=7.017, p<0,05] and a cyber victim [F(5,353)=5.025, p<.05] and their purpose of internet usage. In this sense, adolescents' being a cyber bully and a cyber victim varies depending on what they use internet for. In order to understand the source of difference, Tukey test was used. According to the analysis, the lowest mean score is of adolescents who use internet for studying ($\bar{x}$=14.70; $\bar{x}$=16.18), and the highest mean score is of who use internet for facebook, twitter and instagram ($\bar{x}$=17.04; $\bar{x}$=20.03).

Table 5 shows the mean scores and standard deviations for adolescents' being a cyber bully and victim according to their level of internet competency

Table 5. Mean scores and standard deviations for adolescents' being cyber bully and victim according to their level of internet competency

		n	$\bar{x}$	sd
Being a Cyber Bully	No information	7	14.57	1.51
	Limited information	14	15.07	1.38
	Adequate information	159	15.45	2.17
	Advanced	179	16.19	2.69
	TOTAL	359	15.79	2.44
Being a Cyber Victim	No information	7	14.85	2.26
	Limited information	14	16.14	2.90
	Adequate information	159	17.12	4.29
	Advanced	179	19.01	4.99
	TOTAL	359	17.98	4.69

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Findings indicated a significant relationship between adolescents' being a cyber bully [F(3,355)=3.702, p<0,05] and a cyber victim [F(3,355)=6.670, p<.05] and their level of internet competency. However, there is no significant difference between being a cyber bully [F(3,355)=.862, p>.05] and a cyber victim [F(3,355)=.814, p>.05] and mother's level of internet competency, and also between being a cyber bully [F(3,355)=.577, p>.05] and a cyber victim [F(3,355)=.480, p>.05] and father's level of internet competency. According to the findings of Tukey test, adolescents who have no information have the lowest score ($\bar{x}$=14.57; $\bar{x}$=14.85), and who are advanced at using internet have the highest mean score ($\bar{x}$=16.19; $\bar{x}$=19.01).

Table 6 displays the mean scores and standard deviations for adolescents' being a cyber bully and victim according to their parents' being together

Table 6. Mean scores and standard deviations for adolescents' being a cyber bully and victim according to their parents' being together

		n	$\bar{x}$	sd
Being a Cyber Bully	Married	323	15.69	2.32
	Divorced	25	16.60	3.06
	Married but live apart	3	15.33	1.52
	Mother or father died	8	17.50	4.27
	TOTAL	359	15.79	2.44
Being a Cyber Victim	Married	323	17.80	4.46
	Divorced	25	18.88	6.37
	Married but live apart	3	20.66	3.51
	Mother or father died	8	21.37	7.11
	TOTAL	359	17.98	4.69

Findings showed that adolescents' being a cyber bully [F(3,355)=2.454, p>.05] and a cyber victim [F(3,355)=2.195, p>.05] do not differ according to their parents' being together.

DISCUSSION

In this study, adolescents' being a cyber bully and victim were invstigated in terms of demographic variables those were gender, daily internet usage, the purpose of interent usage, daily facebook, twitter and instagram usage, the level of parents' and self internet competency, parents' being together and the education levels of parents.

There found a significant relationship between being a cyber bully and victim and gender. Male students have higher possibility of being a cyber bully and victim than females. This finding is in line with some research (Erdur-Baker, 2010; Erdur-Baker ve Kavşut, 2007) while does not with some others which stated that female students are more likely to be exposed to cyberbullying (Kowalski ve Limber, 2007; Vandebosch ve VanCleemput, 2009). This can be explained by the level of internet based information technology usage of male and female students. For instance, according to the data of TUİK (Turkey Statistics Institution, 2014), males use computer and internet more in all age groups. Therefore, they are more likely under risk of being a cyber bully and victim. This finding is also in parallel with the findings of a study by Erdur-Bakır and Kavşut (2007) who stated that there is a positive relationship between the usages of internet based technology and being a cyber bully or victim.

Findings pointed out a significant relationship between being a cyber bully and victim and daily internet usage. Adolescents who use internet 4 hours and more in a day are more probably cyber bullies and victims. This finding is consistent with those of which indicated that as the level of interent usage increases, the rate of cyberbullying and victimization increases as well (Serin, 2012; Çiftçi, 2010).

Findings showed that adolescents whose purpose are to use facebook, twitter and instagram have the possibility of being a cyber bully and victim more than those whose purpose are to study and make a research. Moreover, there is a significant relationship with the adolescents whose purpose is to play games. Serin (2012) also found a significant relationship between the purpose of internet usage and being a cyber bully however he didn't found any with being a cyber victim. Adolescents are supposed to be under risk in terms of behaviors related to cyberbullying and victimization when they have more interaction with other people in social web sites such as facebook, twitter and instagram, when they communicate with strangers, and when they can see others' personal information, pictures and share them. This finding also showed that students are under risk of being a cyber bully and victim in virtual platforms where extensive and interactive relations take plce in rather than in platforms

 Copyright © International Conference on New Horizons in Education Conference (INTE)

where students interacted with little groups or some materials just for studying. Related literature stated that such risky internet behaviors lead to cyberbullying and victimization (Erdur-Baker ve Tanrıkulu, 2010; Ybarra, Diener-West v.d., 2008).

In this study, a significant relationship was found between being a cyber bully and victim and daily facebook, twitter and instagram usage. Adolescents, who use facebook, twitter and instagram for 2 hours and more a day are more likely to be a cyber bully and victim than those for 0-30 min and 30 min-1 hour. Adolescents are supposed to be under risk in terms of behaviors related to cyber bullying and victimization when they have more interaction with other people in social web sites such as facebook, twitter and instagram, when they communicate with strangers, and when they can see others' personal information, pictures and share them. Nevertheless, further studies are required to support this judgement.

Findings revealed a significant relationship between being a cyber bully and victim and adolescents' level of interent competency, while there was no relationship with their parents' level of interent competency. This finding may indicate a direct association between the internet literacy skills and cyberbullying and victimization. Kocatürk (2014) observed that as the skill of using internet and computer improves the tendency of cyberbullying increases as well. This finding indicates that, as the advanced level of interent usage increases the possibility of being a cyber bully, it also increases the possibility of being a cyber victim. So, adolescents who use interent and computer in an advanced level perpetrate bullying to eachother also. Therefore, in the cases of peer bullying, the factor of "power inbalance inbetween" in social environments (In Kocatürk, 2014) may turn into the competence of using computer and internet in virtual platforms. According to these findings, individuals who use technology more effectively are under risk more in terms of being a cyber bully and victim.

In the study, there was no relationship between being a cyber bully and victim and parents' being together. There seems to be no research on this issue in the literature. Examining the related research, Ybarra and Mitchell (2004) found that weak emotional attachment with parents predicts cyber bullying and victimization positively. Eroğlu and Güler (2005) stated that internal self-worth factors such as family support predict the behaviors related to cyberbullying negatively. Therefore, further studies are needed on the associations of cyberbullying and victimization with adolescents' relations with their parents and the quality of these relations.

In sum, findings of the current study indicated that, male students who spend much more time in using internet in a day; who can use computer technologies more effectively, use interent to interact other groups apart from styding and playing games are under risk of being a cyber bully and victim more. Group counseling and psycho-educational intervention studies at schools may contribute to prevent cyberbullying and victimization for these risk groups.

In this study, some demographic variables which can be related to being a cyber bully and victim were focused on. Further studies might be conducted with different school, district and age groups including different demographic variables. Thus, the relation of cyberbullying and demographic variables may be understood from a more broad perspective. Moreover, further longtidunal and qualitative studies might contribute to understand the experiences of cyberbullying and victimization more deeply.

REFERENCES

Arıcak, O.T. (2009). Psychiatric symptomatology as a predictor of cyberbullying among university students. *Eurasian Journal of Educational Research*, 34, 167-184.

Ayas T., Horzum, M.B. (2012). İlköğretim Öğrencilerinin Sanal Zorba ve Mağdur Olma Durumu. *Elementary Education Online*, 11(2), 369-380, 2012.

Beran, T., Li, Q. (2005). Cyber harassment: A study of new method for an old behavior. *Journal of Educational Computing Research*, 32(3), 265-277.

Bilgi Teknolojileri ve İletişim Kurumu (2016).Yıllık İl İstatistikleri. *http://www.btk.gov.tr/tr-TR/Sayfalar/Yillik-Il-Istatistikleri* Date accessed: 28.04.2016.

Çiftçi, S. (2010). *Dokuzuncu Sınıf Öğrencilerinin Sanal Zorbalık Düzeyleri ile Empatik Eğilim Düzeyleri Arasındaki İlişki.* Yüksek Lisans Tezi, Sosyal Bilimler Enstitüsü, Gaziosmanpaşa Üniversitesi.

Dilmaç, B. ve Aydoğan, D. (2010). Parental attidutes as a predictor of cyberbullying among primary school childen. *International Journal of Human and Social Sciences*, 79, 547-553.

Erdur, B.Ö. ve Kavsut, F. (2007). Akran Zorbalığının Yeni Yüzü:Siber Zorbalık, *Eurasian Journal Of Educational Research*, 27, 31-42.

Erdur-Baker, Ö. ve Tanrıkulu, İ. (2010). Psychological consequences of cyber bullying experiences among Turkish secondary school children. *Procedia Social and Behavioral Sciences*, 2, 2771–2776.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Erdur-Baker, Ö. (2010). Cyber bullying and its correlation to traditional bullying, gender and frequent and risky usage of internet mediated communication tools. New Media and Society, 12(1), 109-125

Eroğlu, Y. ve Güler, N. (2015). Koşullu Öz-Değer, Riskli İnternet Davranışları ve Siber Zorbalık/Mağduriyet Arasındaki İlişkinin İncelenmesi. *Sakarya University Journal of Education*, 5(3) ss. 118-129. *DOI:http://dx.doi.org/10.19126/suje.56594*.

Gündüz, A. (2015). *İnternet Güvenliği Üzerine 2000-2014 Yılları Arasındaki Çalışmaların Bir İçerik Analizi: Riskler, Risklere Etki Eden Faktörler Ve Metodolojik Yönelimler*. Yüksek Lisans Tezi. Atatürk Üniversitesi Eğitim Bilimleri Enstitüsü, Erzurum.

International Telecommunication Union (2016). International Telecommunication Union: Statistics. *http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx* adresinden 28.04.2016 tarihinde ulaşılmıştır.

Kocatürk, M. (2014). *Ortaokul Öğrencilerinde Akran Zorbalığı ile Siber Zorbalık Arasındaki İlişkinin İncelenmesi*. Yüksek lisans tezi, Eğitim Bilimleri Enstitüsü, İstanbul Üniversitesi.

Kowalski, R. M. & Limber, S. P. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health*, 41(6), 22-30.

Li, Q. (2006). Cyberbullying in schools: A research of gender differences. *School Psychology International*, 27, 157-170.

Mitchell, K.J., . Ybarra, M. Finkelhor, D. (2007). The Relative Importance of Online Victimization in Understanding Depression, Delinquency and Substance Use. *Chıld Maltreatment*, 12(4),314-324.

Mishna, F., Khoury-Kassabri, M., Gadalla, T., & Daciuk, J. (2012). Risk factors for involvement in cyber bullying: Victims, bullies and bully–victims. *Children and Youth Services Review*, 34(1), 63-70.

Patchin, J. W. & Hinduja, S. (2006). Bullies move beyond the schoolyard: A reliminary look at cyberbullying. *Youth Violence and Juvenile Justice*, 4(2): 148-169.

Serin, H. (2012). *Ergenlerde siber zorbalık / siber mağduriyet yaşantıları ve bu davranışlara ilişkin öğretmen ve eğitim yöneticilerinin görüşleri*. Doktora tezi, Sosyal Bilimler Enstitüsü, İstanbul Üniversitesi.

Schneider, S.K., O'Donnell, L., Stueve, A. & Coulter, R.W.S. (2012). Cyberbullying, School Bullying, and Psychological Distress: A Regional Census of High School Students. *American Journal of Public Health*, 102(1): 171-177.

Topçu, Ç. & Erdur-Baker, Ö. (2010). The revised cyber bullying ınventory (RCBI): validity and reliability studies. *Procedia Social and Behavioral Sciences*. 5, 660-664..

TÜİK. (2014). Hanehalkı bilişim teknolojileri kullanım araştırması. Date accessed: 29 July 2016, *http://www.tuik.gov.tr/PreHaberBultenleri.do?id=16198*.

Vandebosch, H., & Van Cleemput, K. (2009). Cyberbullying among youngsters: profiles of bullies and victims. *New Media & Society*, 11(8), 1349–1371.

Yaman, E., Eroğlu, Y., & Peker, A. (2011). *Okul zorbalığı ve siber zorbalık*. İstanbul: Kaknüs Yayınları

Yılmaz, H. (2011). Cyberbullying in Turkish middle schools: An Exploratory study. *School Psychology İnternational*.

Ybarra, M.L., Mitchell, K. J. (2007). Prevalence and frequency of internet harassment ınstigation: Implications for Adolescent Health. *Journal of Adolescent Health*, 41, 189 –195.

Ybarra, M., Diener-West, M., Leaf, P. (2007). Examining the overlap in Internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health*, 41(6), 42-52.

Ybarra, M., & Mitchell, K. (2004). Online aggressor/targets, aggressors, and targets: a comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry*, 45, 1308-1316.

Ybarra, M., Diener-West, M., Markow, D., Leaf, P. , Hamburger, M. ve Boxer, P. (2008). Linkages between ınternet and other media violence with seriously violent behavior by youth. *Pediatrics*, 122 (5), 929-937.

Walrave, M. & Heirman, W. (2011). Cyberbullying: Predicting Victimization and Perpetration. *Children & Society*, 25, 59-72.

INVESTIGATION OF GENERAL AND SCHOOL LIFE SATISFACTION OF ADOLESCENTS WITH DIFFERENT ACADEMIC SUCCESS LEVEL

Tuncay ORAL
Pamukkale Üniversitesi, Denizli, Turkey
toral@pau.edu.tr

ABSTRACT
The aim of the study is to classify students into three groups considering their success levels as low, medium and high and then investigate if there is a significant difference in general and school life satisfaction according to the academic success levels. In line with this aim, a total of 302 high school students consisting of 135 female and 167 male students were implemented The Satisfaction with Life Scale and Multidimensional Student's Life Satisfaction Scale. According to the results of one-way analysis of variance conducted (One-Way ANOVA), no significant difference was found in the scores of general life and school life satisfaction in terms of low, medium and high success levels.

INTRODUCTION

As a natural consequence of the transition from the clinic based counselling concept to the concept of guidance and counselling based on lifelong development, there has been an increase in issues such as processes contributing to an individual's development positively and well-being and happiness in recent years (Yeşilyaprak, 2012). However, the amount of information in the field related to psychological problems is much more compared to psychologically well-being. To illustrate, it can be observed that when the archive of thesis center belonging to Turkish Council of Higher Education is investigated, of all the graduate studies on psychology, psychological counselling and education conducted between 1984 and 2013, 649 are based on anxiety, 377 on depression, 181 on anger while only 86 of them focused on life satisfaction and 43 on subjective wellness and well-being. It can be easily inferred from these statistics that negative emotional states have been studied 10 times more than positive emotional states. However, in our age today, mental health has been started to be perceived as the state of having positive psychological functions such as being happy as well as not having any psychological problems (Özgüngör, Oral and Karababa, 2015). In the literature related to psychology, the term happiness is defined as subjective well-being (Diener, 2000). Subjective well-being reflects cognitive and affective reactions of an individual towards his own life, his judgements and considerations, and it is classified into three separate but related dimensions as positive emotion, negative emotion and life satisfaction (Yetim, 2001). Individuals who have a high level of subjective well-being are expected to have generally positive emotions, rarely negative emotions and high level of life satisfaction (Suldo and Huebner, 2006). Life satisfaction, described as the cognitive dimension of subjective well-being, is a an individual's general cognitive evaluation of whether he is satisfied with his own life as a whole or in terms of some specific areas of life such as family, friends, school experiences (Diener, Suh, Lucas and Smith, 1999). When studies focusing on life satisfaction are analysed, in spite of the increasing interest in literature, it is seen that the number of studies into adolescents' life satisfaction are less than the studies into adults' life satisfaction (Park, Huebner, Laughlin, Valois and Gilman, 2004). Adolescence, as a period in which a great number of changes in physical, emotional, social and cognitive areas are experienced simultaneously and swiftly (Yörükoğlu, 2004), is of critical importance since it includes changes that can affect all aspects of life (Tarhan, 2003). When studies into life satisfaction in adolescents are investigated, it is observed that there are some findings suggesting that this issue should be understood better. For instance, in a study conducted with adolescents by Proctor, Linley and Maltby (2009), it was found that adolescents with high level of life satisfaction have higher self-esteem and low depression levels compared to those with low level of life satisfaction, and it was reported that adolescents with high level of life satisfaction have positive peer and parent relationships. In another study carried out by Gilman in 2001, it was stated that adolescents with high level of life satisfaction have a higher level of social interest and participation in social events in comparison with those having low level of life satisfaction. In their study Suldo and Huebner (2006) reveal that adolescents with high level of life satisfaction have more social, emotional and academic self efficacy; get more support from their environments and have less emotional and behavioural problems than those with low levels of life satisfaction. In another study by Gilman and Huebner (2006), it was found that adolescents with high level of life satisfaction have lower levels of anxiety and depressions and higher self-esteem and hope than those with low level of life satisfaction. In the same study, it was observed that those with high level of life satisfaction have a more positive attitude towards school and teachers.

In the light of these studies presenting the relationship between life satisfaction of adolescents and numerous significant variables, recent studies have focused on the relationships between variables related to school where most adolescents spend a considerable part of their time and life satisfaction. Therefore, it was revealed that the variables of academic self efficacy, the level of perceived social support from teachers (Suldo and Huebner,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

2006), school atmosphere (Baker, 1998), perfectionism (Öngen, 2009) and participation in the lessons cognitively (Lewis, Huebner, Malone and Valois, 2011) are all related to life satisfaction in adolescents. On the other hand, in a comprehensive study in which a total of 16374 Norwegian, Finn, Slovakian and Lithuanian students participated, Samdal, Nutbeam, Wold and Kannas (1998) demonstrated that teachers' being supportive, feeling safe at school and being treated fairly are among the variables highly related with school life satisfaction. When the findings of these studies are reviewed, it is seen that both school life satisfaction and general life satisfaction increase to the extent that students perceive academic environment as supportive not threatening and the academic tasks as manageable. Previous studies conducted in the past also indicate that there has been some research into the relationship between life satisfaction and academic success. However, there exist a number of issues showing that this research topic should be dealt deeply. First of all, relationships between academic variables and life satisfaction show cultural differences (Suldo, Riley and Shaffer, 2006). To illustrate, while the relationship between academic success and life satisfaction in American college students were noteworthy (Powers, 2008), some studies conducted with secondary school students revealed that the sense of academic self efficacy (Huebner, Gillman and Laughlin, 1999), rather than the academic success itself (Huebner, 1991), is related to life satisfaction.

On the other hand, Chang, McBride-Chang, Stewart and Au (2003) stated that the relationship between academic success and life satisfaction of Chinese secondary school students is meaningful. In our country, however, due to the fact that the scores of academic success has a crucial potential affecting future directly with the exams such as the transition to higher education examination and undergraduate placement exam and academic success is perceived as vital as an important criterion for the student to be able to be approved by the family and other adults, academic success may be expected to be highly related with school and life satisfaction. Secondly, even though a limited number of studies dealing with this topic (Powers, 2008; Chang et al., 2003) presented information supporting the relationship between academic success and life satisfaction, in these studies, up to now, general life satisfaction mostly measured with one dimension has been investigated.

However, Huebner (1991, 1994) emphasises that life satisfaction is multi-dimensional and has subdimensions such as family, environment and school. Analysing life satisfaction related to academic success and school, where academic practices take place, at the same time are thought to contribute a great deal to literature. In short, the aim of this study is to classify students into three groups considering their success levels as low, medium and high and then investigate if there is a significant difference in general and school life satisfaction according to the academic success levels.

THE STUDY

The sample of the Study

The data of the study was gathered from a total of 302 high school students consisting of 135 female (44,7%) and 167 male (55,3%) students studying in Denizli city centre in 2014-2015 academic year and who are included in the study with simple random sampling. In the study sample, 93 student (30,8%) students study at 9th grade, 65 students (21,5%) in the 10th grade, 68 students (22,5%) in the 11th grade, 76 students (25,2%) in 12th grade.

Data Collection Tools

The Satisfaction with Life Scale: In this study, with the aim of determining life satisfaction level defined as the cognitive dimension of well being, The Satisfaction with Life Scale, originally developed by Diener, Emmons, Larsen and Griffin (1985) and adapted to Turkish by Köker (1991) was used. The scale is a 7-point Likert style with 5 items to measure an individual's perception of his life quality and satisfaction with life. Each item is given a point between 1 and 7. As the scores get higher in the scale, the satisfaction with life also increases. The test retest reliability of the scale was found to be .85. In this study, internal consistency reliability coefficient was calculated as .84.

The Multidimensional Students' Life Satisfaction Scale: This is a scale developed by Huebner (1994), originally consisting of a total of 40 items, 10 of which are negative. This scale is comprised of 5 subscales namely family, friends, school, living environment and self. The Multidimensional Students Life Satisfaction Scale (MSLSS) was adapted to Turkish by Çivitci (2007). In this study, the subscale of school life satisfaction was used. The Croanbach Alpha internal coefficient of consistence of the subscale of school life satisfaction was found to be .76. Within the framework of this study, The Croanbach Alpha internal coefficient of consistence of the subscale of school life satisfaction was calculated as .86.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Academic Success Level: Students participating in the study were asked to fill in "average academic score" part on the top of the scales. Students declaring that they are not so sure about their academic scores were given help to write their averages thanks to the list of the average academic scores obtained from school management.

Data Analysis

In accordance with the aim of the study, in order to divide students into three categories as low, medium and high according to their success levels, grade point averages of all the students and the standard deviation are calculated. As a result of the statistical analysis carried out, academic grade point averages of all the students participated in the study was found to be 73.66 and standard deviation was calculated as 9,10. Thus, scores below 64,56 are determined to be low, those between 64,57-82,76 are medium scores, and those above 82,77 are high. Following this classification, one-way analysis of variance (One-Way ANOVA) was carried out to find if there is a significant difference in general and school life satisfaction according to academic success level. Analyses were conducted in computer medium through the SPSS 16.0 program.

FINDINGS

Descriptive statistics related to the scores of general life and school life satisfaction according to the variable academic success level are presented in Table 1.

Table 1. Descriptive statistics related to the scores of general life and school life satisfaction according to the academic success level

	Academic Success Level	N	$\bar{X}$	Sd
Life Satisfaction	Low	50	22,76	6,76
	Medium	190	24,19	6,45
	High	62	23,29	6,16
	Total	302	23,77	6,45
School Life Satisfaction	Low	50	17,80	4,93
	Medium	190	18,68	5,20
	High	62	18,87	5,74
	Total	302	18,57	5,27

Findings of one-way analysis of variance carried out to find if there is a significant difference in general and school life satisfaction according to academic success level of adolescents are displayed in Table 2.

Table 2. Findings of one-way analysis of variance related to general and school life satisfaction according to academic success level

	Variance Source	S.d.	Sum of Squares	Mean of Squares	F	P
Life Satisfaction	Inter Groups	2	99,546	49,773	1,197	,303
	In-groups	299	12429,689	41,571		
	General	301	12529,235			
School Life Satisfaction	Inter Groups	2	37,514	18,757	,674	,510
	In-groups	299	8316,384	27,814		
	General	301	8353,897			

When the findings of one-way analysis in Table 2 are examined, no significant difference was found in the scores of general life satisfaction according to adolescents' academic success levels ($F= 1,197$, $p>.05$). In addition, there is no significant difference in the other dependent variable school life satisfaction according to adolescents' academic success levels ($F= ,674$, $p>.05$).

CONCLUSIONS

According to the results of this study, no significant difference was found in the scores of general life and school life satisfaction in terms of low, medium and high academic success levels. The most remarkable result of the study can be considered that although the score of academic success has a crucial potential affecting future directly with the exams such as the transition to higher education examination and undergraduate placement exam and in most cases academic success is perceived as vital as an important criterion for the student to be able to be approved by the family and other adults, it doesn't affect students' general and school life satisfaction. When studies conducted in the past are reviewed, it is seen that in some of them, some important relationships between academic success and life satisfaction are determined (Powers, 2008; Chang et al., 2003). While in

 Copyright © International Conference on New Horizons in Education Conference (INTE)

some others such relationships couldn't be found (Huebner, 1991). In respect to this, it can be stated that the findings of the present study is consistent with some studies and inconsistent with some others. According to many studies, both school life satisfaction and general life satisfaction increase to the extent that students perceive academic environment as supportive not threatening and the academic tasks as manageable (Samdal et al., 1998). In addition to these, some other studies indicate that variables such as academic self efficacy, perceived social support from teachers (Suldo and Huebner, 2006), school atmosphere (Baker, 1998) and participation in the lesson cognitively (Lewis et al., 2011) are all related to life satisfaction in adolescents. It can inferred that the variables other than academic grade points of the students in our study group may have affected their general and school life satisfaction. As mentioned above, these can be variables such as social support, self efficacy, school atmosphere and participation in the lesson. In order to learn the effect of these variables on the adolescents in study area, as well as the variable of academic success that can affect general and school life satisfaction, it can be advised that new studies including variables such as social support, self efficacy, school atmosphere should be conducted with adolescents of similar ages. Moreover, replicating the study in a city or region other than the one in the present study with a wider group of adolescents can increase the likelihood of the generalisation of the results.

REFERENCES

Baker, J. A. (1998). The social context of school satisfaction among urban, low-income, African-American students. *School Psychology Quarterly,* 13, 25–44.

Chang, L., McBride-Chang, C., Stewart, S. M. & Au, E. (2003). Life satisfaction, self-concept, and family relations in Chinese adolescents and children. *International Journal of Behavioral Development*, 27, 182-189.

Çivitci, A. (2007). Çokboyutlu öğrenci yaşam doyumu ölçeğinin Türkçeye uyarlanması: Geçerlik ve güvenirlik çalışmaları. *Eğitim Araştırmaları,* 26, 51-60.

Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55, 34-43.

Diener, E. D., Emmons, R.A., Larsen, R. J & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71-75.

Diener, E., Suh, E. M., Lucas, R. E. & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin,125,* 276-302.

Gilman, R. (2001). The relationship between life satisfaction, social interest, and frequency of extracurricular activities among adolescent students. *Journal of Youth and Adolescence,* 30(6), 749-767.

Gilman, R. & Huebner, E. S. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence*, 35, 293-301.

Huebner, E. S. (1991). Initial development of the students' life satisfaction scale. *School Psychology International,* 12, 231–240.

Huebner, E. S. (1994). Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychological Assessment*, 6, 149–158.

Huebner, E. S., Gilman, R. & Laughlin, J. E. (1999). A multimethod investigation of the multidimensionality of children's well-being reports: Discriminant validity of life satisfaction and self-esteem. *Social Indicators Research,* 46, 1–22.

Köker, S. (1991). *Normal ve sorunlu ergenlerin yaşam doyumu düzeylerinin karşılaştırılması.* Yayınlanmamış yüksek lisans tezi, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

Lewis, A. D., Huebner, E. S., Malone, P. S. & Valois, R. F. (2011). Life satisfaction and student engagement in adolescents. *Journal of Youth and Adolescence,* 40, 249–262.

Öngen, D. E. (2009). The relationship between perfectionism and multidimensional life satisfaction among high school adolescents in Turkey. *Journal of Multicultural Counseling and Development,* 37(1), 52–64.

Özgüngör, S., Oral, T. ve Karababa, A. (2015). Ergenlerde başarı amaç yönelimleri, cinsiyet ve öğrenim görülen sınıf düzeyinin yaşam doyumunu yordama gücü. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi*, *28*(1), 75-95.

Park, N., Huebner, E. S., Laughlin, J. E. Valois, R. F. & Gilman, R. (2004). A cross-cultural comparison of the dimensions of child and adolescent life satisfaction reports. *Social Indicators Research*, 66, 61-79.

Powers, C. L. (2008). Academic achievement and social involvement as predictors of life satisfaction among college students. *Psi Chi Journal of Undergraduate Research,* 13(3), 128-136.

Proctor, C., Linley, P. A. & Maltby, J. (2009). Very happy youths: Benefits of very high life satisfaction among adolescents. *Social Indicators Research.*

Samdal, O., Nutbeam, D., Wold, B., & Kannas, L. (1998). Achieving health and educational goals through schools. *Health Education Research,* 13(3), 383–397.

Suldo, S.M., & Huebner, E.S. (2006). Is extremely high life satisfaction during adolescence advantageous? *Social Indicators Research,* 78, 179–203.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Suldo, S. M., Riley, K., & Shaffer, E. (2006). Academic correlates of children and adolescents' life satisfaction. *School Psychology International,* 27, 567–582.
Tarhan, N. (2003). *Gençlikte kimlik bunalımı.* http://www.e-psikiyatri.com (02.03.2005).
Yeşilyaprak, B. (2012). *Eğitimde rehberlik hizmetleri*. Ankara: Nobel Yayın Dağıtım.
Yetim, Ü. (2001). *Toplumdan bireye mutluluk resimleri*. İstanbul: Bağlam Yayınları.
Yörükoğlu, A. (2004). *Gençlik çağı ruh sağlığı ve ruhsal sorunlar*. İstanbul: Özgür Yayınları.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INVESTIGATION OF RELATIONSHIP BETWEEN JUST WORLD PERCEPTIONS (BELIEF IN A JUST WORLD) AND DECISION MAKING PROCESS OF STUDENTS AT THE SCHOOL OF PHYSICAL EDUCATION AND SPORTS

Gokhan ACAR
Faculty of Sport Sciences
Usak University
Turkey
gokhnacar@gmail.com

Mihriay MUSA
Faculty of Sport Sciences
Usak University
Turkey

Ahmet SAHIN
Physical Education and Sports
Mehmet Akir Ersoy University
Turkey

Nuri KARABULUT
Faculty of Sport Sciences
Usak University
Turkey

Nigar YAMAN
Physical Education and Sports
Bartin University
Turkey

Muhammet OZER
Faculty of Sport Sciences
Usak University
Turkey

ABSTRACT
This study aims to reveal whether personal justice perceptions of students who study at the Faculty of Physical and Sports Sciences has influence over their decision making process. We are observing that just world perceptions, self-confidence at decision making, careful, aversive and panic decision making processes of students do not exhibit difference based on their sport activities. On the other hand, it is observed that there is significant difference with the dilatory decision making factor in regard to sport activities of students. There is significant difference between students at the Department of Coaching and the ones at the Department of Recreation in terms of dilatory decision making factor. Accordingly, mean score of students who study at the department of coaching concerning dilatory decision making is significantly higher than the mean score of students from the department of recreation. A positive but insignificant relationship is observed between students' personal just world perception their self-confidence in decision making process. Thus, it can be concluded that as students' just world perception enhances their self-confidence in decision making process increases slightly.

KEYWORDS: Students at the Physical and Sports Sciences Faculty, Personal Justice (belief in just world), Decision Making.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INTRODUCTION

Who developed the theory of belief in just world, individuals tend to believe in a Notion that the world is a place in which good people are rewarded while bad people are punished (Lerner, 1977). Justice is appropriate to the juridical responsibilities (Kant, 1993). A study supports this contention by emphasizing importance of humane need for believing in the world is a just environment (Bazerman et al, 1995). The belief in a just world is a protective function for individuals against undeserved adverse results psychologically (Dalbert, 1998; Lerner et al, 1978; Lerner, 1980; Mohiyeddini et al, 1998). Based on the belief in just world, individuals tend to believe that adverse consequences faced by persons are caused by themselves (Lipkus et al, 1993). Based on another point of view, belief in just world has an implicit characteristic and thus, individuals not only unaware of its consequences, but also they are unaware about existence of such a belief (Goldberg et al, 1999; Lerner, 2002). Some authors claimed that when there is no opportunity to offset the situation of individuals who suffers from deprivation of basic human needs, belief in just world is continued by insulting these disadvantaged poor people (Furnham, 1989). The understanding of belief in just world requires a perception that the world is a place where everybody gets what they deserve, goods take good, and bad people take bad (Lerner, 1965; Lerner et al, 1978). The high level of belief in just world observed among individuals who face misfortune facilitates process of becoming good people after these bad incidents and adjusting to the new circumstances arise (Dalbert, 2002). It is observed that individuals exhibit a tendency to perceive that their living conditions, social systems and arrangements are just consistent with their belief that the world is a just place; and thus, they rationalize status-quo as fare and legitimate, and support it (Jost et al, 1978). In order to comprehend importance of justice, perspectives of philosophers such as Aristotle would be useful such that they consider justice as total virtue; thus, he stated that "justice is not part of virtue, rather it constitute whole of it" (Aristoteles, 2007). Individuals with strong belief in just world feel more secure and are positive about their future life. Besides, they have higher self confidence regarding accomplishing their personal targets in the future (Otto et al, 1978). In another research, it is reported that people with strong belief in just world can explain the relationship between results and deserving through supernatural powers or divine interferences (Zuckerman, 1975). The belief in just world helps individuals to find different meanings in their life even if unjust circumstances they faced are at irreversible or reimbursable point (Dzuka et al, 2006). It was also reported that reactions against innocent victims such as insulting or embarrassing are result of motivations of individuals to protect their belief in just world from potential threats (Hafer et al, 2005). Especially, within persistent unjust conditions, persons with potential to help victims develop adverse attitudes against victims such as insulting and blaming (Reichle et al, 2002). In another study concerning the belief in just world, Catholic group members live under more disadvantaged life conditions compared to the Protestants. Although this group is more religious than the Protestants, they are of the opinion that the world was unjust due to their social conditions (Furnham et al, 1985).

Decision making is one of the most important life skills. Appropriate and accurate decisions cause positive changes in lives of individuals, mistaken decisions would affect life orientation negatively (Gucray, 1998). Decision making represents not only description of the alternatives during selection of these alternatives considered concerning several incidents, but also execution of the most appropriate one along with our targets, desires, life style, values ant etc. Decision making is defined as reducing suspects and uncertainties sufficiently while selecting the most appropriate option among alternatives (Balkis, 2006). About the information process of the decision making, there are two dimensions described: focal point and amount of the information utilized. The focal point has two poles. Whereas at one pole, decision makers perform single-sided evaluation in their perspective toward information for acting or solution, on the other pole, they see multiple solutions. The amount of information utilized during decision making process varies according to decision makers (Driver et al, 1975). There is view that acquiring detailed information about how a decision made would reveal how decisions could be taken most appropriately because it is seen that majority of individuals do not use this cognitive capacities fully and that they prefer shortcuts (Candangil, 2005). According to another point of view, when an individual faces with decision making process, it is not possible to evaluate all options, each characteristic of them, and their possible results simultaneously (Newell et al, 2004). On the other hand, it is first required that the problem must be defined in the decision making process. The following step to be followed is to collect required information. It would be appropriate to postpone decision making if there are missing critical information concerning our decision (Adair, 2000). Even individual make the decision by utilizing a rational decision strategy, this decision would lose its validity in the future because of the change occur within the society. Therefore, during the decision making process, uncertainty condition faced by the individuals is required to be taken into consideration. Along with the positive uncertainty concept, an individual should not consider this uncertainty as a negative process. This positive uncertainty should be taken as an existing, real, and a certain process (Avsaroglu, 2007). On the other hand, detention or detention fear cause anxiety and individuals experience difficulties in decision making process (Atkinson et al, 1999). People show tendency to high risk exhibit fast decision making process. They spend less time for information acquisition and evaluation of them during decision making process (Tasdelen, 2002).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

THE STUDY

In the present research, correlation and causal comparative methods were utilized. Correlation research examines the relationship between two variables without exhibiting effort to create an effect on them. Simply, correlation research which examines the relationship between two variables is capable of examine relationship among more variables as well. Besides examination of relationship among variables, another purpose of correlation researches is regression study. If there is significant relationship between two variables, from the known point of an independent variable called regressive variable, the point of a dependent variable called criterion variable can be estimated.

Causal comparative method aims to determine possible causes of a behavior pattern by comparing the ones having this pattern with the ones do not. There are at least two variables in relationship determination through comparison. Groups are formed based on independent variables and it is examined whether there is difference according to the dependent variable (Borg, 2007).

Research Questions

In the present research, answers for following questions were probed:

1. What is the level of students' personal perception regarding just world?
2. What is the level of students' self confidence during decision making process?
3. What is the characteristic of students' decision making process?
4. Do students' personal perception regarding just world, self confidence level in decision making, and their decision making process exhibit difference in terms of their demographic characteristics?
5. Is there significant relationship between students' personal perception regarding just world and their self confidence level in decision making process?

Data Collection and Data Analysis

The study group is consisted of 212 students from each grade (1st, 2nd, 3rd and 4th grades) at the Physical and Sport Science College of Mustafa Kemal University in the fall semester of 2014–2015 academic year. of these students, 43 were at the department of physical education and sport teaching, 84 were at the department of sport management, 33 were at the department of coaching and 53 were at the department of recreation; while 80 of them female and 132 were male students. The members of this sampling group were selected randomly.

Data acquired in the research was analyzed by means of the SPSS 13.0 statistical software and plot graphic obtained. Frequency (f) analysis was utilized to render demographic information of the participant students. The survey applied to determine decision making styles of students uses 3-scored scale. This survey is consisted of two sections; while six questions in the first section measure self confidence level in the decision making process. These questions are composed of three positive and 3 negative expressions. Concerning positive expressions, 3 of these points are correct, 2 of them are sometimes correct and 1 of them is not correct. Concerning negative expressions, 3 of these points are incorrect, 2 of them are sometimes correct and 1 of them is correct. In order to determine whether students' belief in just world and their decision making styles differ according to their demographic characteristics, *t test* and *one way Anova test* were conducted. A 7-scored scale was used in the survey conducted in order to determine students' personal belief in just world. One of points indicates Quite Wrong (Strongly Disagree), 4 points indicates Neutral Stance (Neutral), and 7 points indicates Quite Right (Strongly Agree). In order to determine whether there is significant relationship between students' personal belief in just world and their decision making styles, *correlation coefficient* between two groups was considered. Interpretation of Pearson Correlation coefficient is that "*R 0.00 – 0.25: the relationship is quite insignificant, R 0.26 – 0.49: the relationship is insignificant, R 0.50 – 0.69: the relationship is at medium level, R 0.70 – 0.89: the relationship is significant and R 0.90 – 1.00: the relationship is highly significant"*.

Instruments

One of the data collection method, scale for personal belief in just world (KADİÖ) was developed by (Dalbert, 1999). It was adapted into Turkish; and its validity and reliability studies were conducted by (Goregenli, 2004). Another data collection tool is Melbourne Decision Making Scale. Whereas the original scale was developed by (Mann et al, 1998). Adapted this into Turkish and conducted its validity and reliability studies (Deniz, 2004).

FINDINGS

According to table 1, it can be observed that students' perception of just world does not exhibit difference in terms of decision making styles of self confident, careful, aversive and in panic according to their grades ($p>0.05$). On the other hand, in terms of dilatory decision making style, there is significant difference among students according to their grades ($p<0.05$) [Table 1].

According to table 2, it can be observed that there is significant difference between 1st Grade students and 2nd

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Grade students. Accordingly, it was found that dilatory decision making means of the 2nd Grade students were significantly higher than the means of the 1st Grade students [Table 2].

According to the table 3, it was observed that perception of students regarding just world and their decision making styles of self confident, careful, aversive and panic do not exhibit difference according their sport practice levels ($p>0.05$). On the other hand, regarding dilatory decision making style, it was observed that there is significant difference according to students' sport practice levels ($p<0.05$) [Table 3].

Mean score of students regarding careful decision making style is 2.47, which indicates CORRECT. Thus, it is possible to conclude that students are usually careful while making their decision [Table 4].

It can be observed that there is significant difference between students who practice sports as an amateur and the ones who practice sports as a professional. Thus, it was found that mean scores of students who practice sports professionally regarding effective decision making style was significantly higher compared to the ones who practice sport activities amateurish [Table 5].

According to table 6, it can be seen that there is insignificant positive ($R=0.181$) relationship between students' personal perception regarding just world and their self confidence in their decision making style. Thus, it can be said that as students' personal perception regarding just world increases, their self confidence in decision making process increases even though it is insignificant amount [Table 6].

It can be observed that there is insignificant positive relationship between students' personal perception regarding just world and their self confidence in decision making process ($R=0.181$). Consequently, it can be concluded that as students' personal perception regarding just world increases, their self confidence in decision making process increases slightly [Table 7]

CONCLUSIONS

There was no significant difference found among students based on their decision making styles such as self confident, careful, aversive and dilatory according to their genders. However, there is significant difference found among levels of students' panic decision making style according to gender (Can, 2009). In another research, (Avsaroglu et al, 2007) reported that mean scores of university students regarding self confidence in decision making and decision making styles do not exhibit significant difference according to their gender. The mean score of students concerning their answers for dilatory decision making style is estimated as 1.92, which indicates SOMETIMES CORRECT level. Consequently, it can be said that students sometimes exhibit dilatory behavior. The mean score of students concerning their answers for panic decision making style is estimated as 2.06, which indicates SOMETIMES CORRECT level. Thus, it can be said that students sometimes act in panic while they are making their decisions. Motivation of human beings for viewing social systems and arrangements in which they live just and legitimate is the most important and frequently investigated area of social psychology (Jost et al, 2004; Kluegel et al, 1986; Major et al, 1994).

This study demonstrated when it is viewed from this angle, it can be seen that students' personal perception regarding just world does not present difference in terms of their self confident, careful, aversive and panic decision making styles according to their grade years ($p>0.05$). On the other hand, concerning dilatory decision making style, it is observed that students exhibit significant difference according to their grade years ($p<0.05$). The significant difference between students at the first grade and the ones at the second grade is remarkable. Hence, dilatory decision making mean scores of students at the second grade were found significantly higher compared to the students at the first grade. It is observed that students' personal perception regarding just world does not exhibit difference in terms of their self confident, careful, aversive and panic decision making styles according to their sport practicing levels ($p>0.05$). In terms of dilatory decision making style, it was notable that there is difference among students according to their sport practicing levels ($p<0.05$). There is significant difference between students practicing sport activities amateurish and the ones practicing professionally. Accordingly, it is found that mean scores of students who practice sport activities professionally regarding their effective decision making styles is significantly higher than the students who practice sport amateurish. It is observed that students' self confident, careful, aversive and panic decision making styles do not exhibit difference according to their department ($p>0.05$). Concerning perception regarding just world and dilatory decision making style, students exhibit significant difference according to their departments ($p<0.05$). Significant difference is observed between students at the sport management department and the students at the coaching department; and the students at the physical

 Copyright © International Conference on New Horizons in Education Conference (INTE)

education and sport teaching department and at the coaching department and the students at the recreation department concerning the students' just world perception. Consequently;

- Personal perception of students who study at the sport management regarding just world is significantly higher compared to the students at the coaching department;
- Personal perception of students who study at the recreation department is significantly higher compared to the students at the physical science and sport teaching department and coaching department.

There is significant difference between students at the coaching department and the ones at the department of recreation in terms of dilatory decision making style. Hence, mean scores of the students at the coaching department concerning dilatory decision making styles are significantly higher than the scores of students at the recreation department. There is insignificant positive relationship between students' personal perception regarding just world and their self confidence in decision making (R=0.181). Thus, it can be said that as students' personal perception regarding just world increases, their self confidence in decision making increases slightly. Conclusively, it can be seen that there is insignificant positive relationship between students' personal perception regarding just world and careful decision making style (R=0.186). Thus, it is possible to say that as students' personal perception regarding just world increases, their careful decision making styles increases slightly.

REFERENCES

Adair, J. (2000). *Karar verme ve problem cozme.* (Trans: N. Kalaycı. Edit: M.T. Atay), Ankara: Gazi Press.

Aristoteles (2007). *Nikomakhos'a Etik*, (Trans: Saffet Babur), Ankara: Bilge Su Press.

Atkinson, L.R., Atkinson C.R, Smith E.E., Bem J.S. (1999) *Psikolojiye Giris*. (Trans: Yavuz Alogan). Istanbul: Arkadas Press.

Avsaroglu, S. (2007). *Universite Ogrencilerinin Karar Vermede Ozsaygı, Karar Verme ve Stresle Basa Cıkma Stillerinin Benlik Saygısı ve Bazı Degiskenler Acısından Incelenmesi*, Ph. D. Thesis, Unpublished. Konya: Selcuk Univeristy.

Avsaroglu, S., & Ure, O. (2007). *Universite Ogrencilerinin Karar Vermede Ozsaygı, Karar Verme ve Stresle Basacıkma Stillerinin Benlik Saygısı ve Bazı Degişkenler Acısından Incelenmesi*. (pp.85-100). Sosyal Bilimler Enstitusu Dergisi, Selcuk Universitesi.

Balkis, M. (2006). *Ögretmen Adaylarının Davranıslarındaki Erteleme Egiliminin Dusunme ve Karar Verme Tarzları Ile Iliskisi*. Ph. D. Thesis, Unpublished. Izmir: Dokuz Eylul Univeristy.

Bazerman, M.H., White, S.B., & Lowenstein, G.F. (1995). *Perceptions of fairness in interpersonal and individual choice situations*. Current Directions in Psychological Science.(pp. 39-42).

Borg, W.R. (2007). Educational Research New York: David McKay Co; 1985. Catherine Soanes, Oxford English Dictionary. (pp. 22) New Delhi: , Oxford University Press.

Can, O. (2009). Universite *Ogrencilerinin Akilci Olmayan Inanclari ve Karar Verme Stillerinin Incelenmesi*. Master Thesis, Unpublished. Konya: Selcuk Univeristy.

Candangil, O.S. (2005). *Denetim odakları farklı lise öğrencilerinin bazı kisisel, sosyal ve Ailesel ozelliklerine gore karar vermede ozsaygı ve kaygı duzeylerinin incelenmesi*. Master Thesis, Unpublished. Eskisehir: Anadolu University.

Dalbert, C. (1998). Belief in a just world, well-being, and coping with an unjust fate. L. Montada & M.J. Lerner Eds. *Responses to victimizations and belief in a just world*. (pp. 87-105). New York: Plenum Press.

Dalbert, C. (1999*). The world is more just for me than generally: About the personal belief in a just world scale's validity*. (pp.79-98) Social Justice Research.

Dalbert, C. (2002). *Beliefs in a just world as a buffer against anger*. (123-145). Social Justice Research.

Deniz, M.E. (2004). *Investigation of the Relation Between Decision Making Self- Esteem, Decision Making Style and Problem Solving Skills of University Students*. (pp.23-35). Eurasian Journal of Educational Research.

Driver, M.J., & Mock, T.J. (1975). *Human Information Processing, Decision Style Theory, and Accounting Information Systems*. (pp.490-508). Accounting Review.

Dzuka, J., & Dalbert, C. (2006). *The blief in a just world and subjective well-being in old age*.(pp.439-444). Aging & Mental Health.

Furnham, A., & Karani, Y.A. (1985). *Cross-Cultural Study of Attitudes to Women, Just World and Locus of Control Beliefs*. (pp.11-20). Psychologia.

Furnham, A., & Proctor, E. (1989). *Belief in the just world: review and critique of the individual differences literature*.(pp.365-384). British Journal of Social Psychology.

Goldberg, J.H., Lerner, J.S., & Tetlock, P.E. (1999). *Rage and reason: The psychology of the intuitive prosecutor*. (pp.781-795). European Journal of Social Psychology.

Goregenli, M. (2003). Evaluations, Attitudes and experiences concerning violence, misbehavior, and torture; Lawyers' Role in prevention of torture Project Report, Izmir.

Gucray, S.S. (1998). *Bazı Kisisel Degiskenler Algilanan Sosyal Destek ve Atilganligin Karar Verme Stilleri Ile*

İliskisi. (pp. 7-16). Psikolojik Danisma ve Rehberlik Dergisi.
Hafer, C.L., & Bègue, L.(2005). *Experimental research on just-world theory: Problems, developments, and future challenges*. (pp.128-167). Psychological Bulletin.
Jost, J.T., Burgess, D., & Mosso, C. (2001). *Conflicts of legitimation among self, group, and system: The integrative potential of system justification theory*. J.T. Jost and B. Major Eds. *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations*. (pp.363-388). New York: Cambridge University Pres.
Jost, J.T., Banaji, M.R., & Nosek, B.A. (2004). *A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo*. (pp.881-919). Political Psychology.
Kant, I. (1993). Metaphysical foundations of morals (C. J. Friedrich, Trans.). In C. J. Friedrich (Ed.), *The philosophy of Kant: Immanuel Kant's moral and political writings.(*pp.154-229). New York: (Original work published 1785) Modern Library.
Kluegel, J.R., & Smith, E.R. (1986). *Beliefs About Inequality: Americans' View of What Is and What Ought to Be*. (pp.11-14). Aldine De Gruyter. New York.
Lerner, M.J. (1965). *Evaluation of performances as a function of performer's reward and attractiveness.* (pp.355-360). Journal of Personality and Social Psychology.
Lerner, M.J. (1977). The justice motive: Some hypotheses as to its origins and forms.(pp.1–52). Journal of Personality.
Lerner, M.J. (1980). *The Belief In A Just World: A Fundamental Delusion*. (pp.65-89). New York: Plenum Press.
Lerner, M.J. (2002). Pursuing the justice motive. M. Ross and Date T. Miller Eds. *The justice motive in everyday life*. (pp.109-126). New York: Cambridge University Press.
Lerner, M.J., & Miller, D.T. (1978). *Just world research and the attribution process: Looking back and ahead.* (pp.1030-1051). Psychological Bulletin.
Lipkus, I.M., & Siegler, I.C. (1993). *The belief in a just world and perceptions and discrimination.* (pp.465-474). Journal of Psychology.
Major, B. (1994). *From Social Inequality to Personal Entitlement: The Role of Social Comparisons, Legitimacy Appraisals, and Group Membership*. (pp. 26, 293-355). Advances In Experimental Social Psychology.
Mann, L., Radford, M., Burnett, P., Ford, S., Bond, M., Leung, K., Nakamura, H., Vaughan, G., & Yang, K.S. (1998). *Cross-Cultural Differences in Self-Reported Decision-Making Style and Confidence*. (pp. 33, 325-335). International Journal of Psychology.
Mohiyeddini, C., & Montada L. (1988). Belief in a just world and self-efficacy in coping with observed victimization: Results from a study about unemployment. L. Montada & M. J. Lerner Eds. *Responses to victimizations and belief in a just world*.(pp.41- 45). New York, NY: Plenum Press.
Newell, B.R., Rakow, T., Weston, N.T., & Shanks, D.R. (2004). S*earch strategies in decision making: The success of "success".*(pp.117-137). Journal of Behavioral Decision Making.
Otto, K., & Dalbert, C. (2005). *Belief in A Just World and Its Function for Young Prisoners*. (pp. 559-573). Journal of Research in Personality.
Reichle, B., & Schmitt, M. (2002). *Helping and rationalization as alternative strategies for restoring the belief in a just world: Evidence from longitudinal change analysis*. M. Ross & D. T. Miller Eds. The justice motive in everyday life. (pp.127-148). Cambridge: Cambridge University Press.
Tasdelen, A. (2002). *Ogretmen Adaylarının Farklı Psiko Sosyal Degiskenlere Gore Karar Verme Stilleri*. Ph. D. Thesis, Unpublished. Izmir: Dokuz Eylul Univeristy.
Zuckerman M. (1975). *Belief in a Just World and Altruistic Behavior*. (pp.972-976). Journal of Personality and Social Psychology.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

TABLES

Table 1 Comparison of students' personal perception of just world, their self confidence level in decision making process, and their decision making styles.

Variables		SUM OF SQUARES	MEAN SQUARE	**F**	**P**
Perception of just world	Between class levels	1.141	0.380	0.699	0.554
Self confidence in decision making	Between class levels	0.473	0.158	1.271	0.285
Carefully decision making	Between class levels	0.783	0.261	1.327	0.267
Aversive decision making	Between class levels	0.871	0.290	1.425	0.236
Dilatory Decision making	Between class levels	1.964	0.655	3.715	0.012*
Decision making in panic	Between class levels	0.126	0.042	0.157	0.925

*P<0.05

TABLES

Table 1 Comparison of students' personal perception of just world, their self confidence level in decision making process, and their decision making styles.

Table 2 Comparison of students' dilatory decision making styles according to their grades.

Variables	(I) Grades	(J) Grade Level	Differences between means (I-J)	Standard Error	P
DILATORY DECISION MAKING	1st Grade	2nd Grade	-0.172	0.066	0.048*
		3rd Grade	-0.226	0.093	0.072
		4th Grade	0.027	0.108	0.994
	2nd Grade	1st Grade	0.172	0.066	0.048*
		3rd Grade	-0.054	0.089	0.931
		4th Grade	0.200	0.106	0.235
	3rd Grade	1st Grade	0.226	0.093	0.072
		2nd Grade	0.054	0.089	0.931
		4th Grade	0.254	0.124	0.174
	4th Grade	1st Grade	-0.027	0.108	0.994
		2nd Grade	-0.200	0.106	0.235
		3rd Grade	-0.254	0.124	0.174

*P<0.05

Table 3 Comparison of students' personal perception regarding just world in terms of their self confidence level in decision making and their decision making styles according to their sport performance levels.

Variables		SUM OF SQUARES	MEAN SQUARE	F	P
Perception of Just World	Between Sport Levels	2.450	0.817	1.518	0.211
Self Confidence in Decision Making	Between Sport Levels	0.097	0.032	0.258	0.856
Careful Decision making	Between Sport Levels	0.238	0.079	0.399	0.754
Aversive Decision Making	Between Sport Levels	0.959	0.320	1.573	0.197
Dilatory Decision Making	Between Sport Levels	1.963	0.654	3.713	0.012*
Decision Making in Panic	Between Sport Levels	0.224	0.075	0.281	0.839

*P<0.05

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 4 Careful decision making levels of students participated into the research

	N	ORT	SS
8. I'd like to consider all options.	154	2.57	0.68
10. I try to unravel all disadvantages of options.	154	2.40	0.64
12. I think thoroughly how I would apply the decision.	154	2.56	0.60
14. While making decision, I'd like to gather information regarding the decision.	154	2.32	0.71
18. Before making my decision, I try to clarify my purposes	154	2.51	0.63
MEAN		2.47	0.65

Table 5. Comparison of amateur sportsman students with professional sportsman students.

Variables	(I) Sport Level	(J) Sport Level	Difference between means (I-J)	Standard Error	P
DILATORY DECISION MAKING	Amateur	Leisure activity	-0.155	0.068	0.109
		Professional	-0.259	0.093	0.031*
		National level	-0.186	0.153	0.618
	Leisure activity	Amateur	0.155	0.068	0.109
		Professional	-0.104	0.103	0.743
		National level	-0.031	0.159	0.997
	Professional	Amateur	0.259	0.093	0.031*
		Leisure activity	0.104	0.103	0.743
		National level	0.073	0.171	0.974
	National level	Amateur	0.186	0.153	0.618
		Leisure activity	0.031	0.159	0.997
		Professional	-0.073	0.171	0.974

*P<0.05

Table 6 Comparison of students' perception regarding just world in terms of their self confident and careful decision making styles.

CORRELATION TABLE EXHIBITING THE RELATIONSHIP BETWEEN STUDENTS' PERSONAL PERCEPTION REGARDING JUST WORLD AND THEIR SELF-CONFIDENT DECISION MAKING STYLE

		JUST WORLD PERCEPTION	SELF CONFIDENCE IN DECISION MAKING
JUST WORLD PERCEPTION	Pearson Correlation	1	0.181
	Sig. (2-tailed)		0.008 **
	N	212	212
SELF CONFIDENCE IN DECISION MAKING	Pearson Correlation	0.181	1
	Sig. (2-tailed)	0.008 **	
	N	212	212

** Two-way correlation significant at 0.01 level.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 7 Comparison of students' personal perception regarding just world in terms of their self confident and careful decision making styles.

CORRELATION TABLE EXHIBITING THE RELATIONSHIP BETWEEN STUDENTS' PERSONAL PERCEPTION REGARDING JUST WORLD AND THEIR SELF-CONFIDENT DECISION MAKING STYLE			
		JUST WORLD PERCEPTION	SELF CONFIDENCE IN DECISION MAKING
SELF CONFIDENCE IN DECISION MAKING	Pearson Correlation	1	0.181
	Sig. (2-tailed)		0.008 **
	N	212	212
	Pearson Correlation	0.181	1
	Sig. (2-tailed)	0.008 **	
	N	212	212
** Two-way correlation significant at 0.01 level.			

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INVESTIGATION OF TECHNO-STRESS LEVELS OF TEACHERS WHO WERE INCLUDED IN TECHNOLOGY INTEGRATION PROCESSES

Ahmet Naci ÇOKLAR
Necmettin Erbakan University, Ahmet Keleşoğlu Education Faculty,
Konya, Turkey
acoklar@konya.edu.tr

Erkan EFİLTİ
Necmettin Erbakan University, Ahmet Keleşoğlu Education Faculty
Konya, Turkey
eefilti@konya.edu.tr

Yusuf Levent ŞAHİN
Anadolu University, Education Faculty
Eskişehir, Turkey
levent81@hotmail.com

Arif AKÇAY
Kastamonu University, Education Faculty
Kastamonu, Turkey
arifakcay@yandex.com

ABSTRACT
Techno-stress is defined as a modern adaptation disorder resulting from the failure in coping with new technologies in a healthy way. Techno-stress affects many occupational groups, including teachers. FATIH project and many other previous studies conducted in Turkey in recent years have necessitated the use of technology for teachers. The present research investigates the techno-stress levels of teachers in these processes. Techno-stress scale for teachers was conducted on 370 teachers from different levels of education and branches in 2015-2016 school years. According to the findings obtained in the present research, general techno-stress levels of teachers were medium level, and in terms of sub-scales, teachers had medium level learning-teaching process oriented, technical issue oriented and social oriented techno-stress, and low level profession oriented and personal oriented techno-stress. In terms of demographic variables, general techno-stress levels of teachers didn't vary by gender and length of service, and varied by average Internet use time variable.

Keywords: Teachers, Techno-stress, FATIH Project, Technology Integration, ICTs.

INTRODUCTION

Information and Communication Technologies (ICTs) have removed the concepts of time and place in business life, labour decreased as the production increased, and accordingly productivity of work has increased. This type of technological developments provided benefits in terms of work force in business life, but created some negativity for the employees (Nelson, 1990; Nelson & Kletke, 1990). Technological advancements in business life have decreased the difficulty at a significant level while psycho-physical work load has increased due to increased work speed (Bayazıt Hayta, 2007). Additionally, computer operating systems and software change so fast that, before users can adapt to software, new editions of those software are released. Due to these technological changes, the users may experience lack of confidence, technological exhaustion and fear (Sami & Panganniah, 2006). The concept of techno-stress emerged as a negative result of this case (Ragu-Nathan, et al., 2008; Weil & Rosen, 1997).

Stress and Techno-Stress as A Type Of Stress

Selye (1956), who was one of the scientists who conducted pioneer studied on the subject of stress, defined stress as a reaction of the body to a volition loaded to the body and couldn't be special (Johnstone, 1989). On the other hand, according to a definition provided by Brod (1984), techno-stress is modern disease resulting from the sense of incompetence while trying to adapt to computer technologies.

With the constant advancement of technology, many employees are suffering from techno-stress (Ahmad, Amin & Ismail, 2009). Basically, techno-stress refers to negative feelings, ideas, behaviours and attitudes employees feel in their body, such as anxiety, during the time they should cope with new technologies (Kupersmith 1992; Weil & Rosen, 1997). In recent years, some scientists (Weil & Rosen, 1997; Brillhart, 2004) have focused on a new structure called techno-stress. Techno-stress refers to direct or indirect negative effects of the use of computer-based technologies on people's attitudes, thoughts, behaviours and psychologies (Tu, Wang & Shu,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

2005). Psychologies and behaviours that prevent the best use of computer-based ICTs, such as fear, anxiety and enmity take the form of resistance (Shu, Tu & Wang, 2011). On the other hand Salanova, Llorens, Cifre and Nogareda (2007) define the concept of techno-stress as anxiety, mental fatigue, scepticism and ineffectiveness resulting from the focusing on ICT use or its future use. Many company employees are exposed to expectations of more efficiency with more complicated systems in order to adapt to rapid changes as a requirement of information age, which requires them to increase their technological knowledge and skills. For this reason, techno-stress refers to the technology management problem that employees encounter in their work environment (Hung, Chen & Lin 2014). As can be understood from the above mentioned definitions, in the most basic sense, techno-stress is a stress phenomenon occurring before and after ICT use in work life.

Techno-Stress and Teaching Profession

This concept, which emerged from the development of technologies that is a necessity of modern life, was claimed to be very different for the previous generations (Shu, Tu & Wang, 2011). This case may be resulting from the maladaptation to new technologies arriving at the employees work environment. First of all, it can be claimed that these technologies have removed the wall between work life and out of work life, since they are independent of the concepts of time and place. Additionally, because ICTs have found a broad field of application in various sectors, especially the employees in management level try to enable high work efficiency. Finally, it can be claimed that ICT isn't developing at a huge and unprecedented pace for employees. For these reasons, it is more likely that techno-stress occurs at work places, and it is intertwined with the individuals' out of work life (Karuppan, 1997; Smith & Carayon, 1995).

According to Zuboff (1988) three factors are effective on the formation of techno-stress. Working environments of the employees are constantly equipped with the updated software and hardware of new and great technologies (personal computers, organization applications, production application, connection devices, etc.). Additionally, due to ICTs, there is a significant difference between existing knowledge and required knowledge for certain tasks among employees and managers. It can also be claimed that in modern life, the development of ICTs has changed the working environment and culture.

As is the case very every occupational group, techno-stress is as important problem for teaching profession. Because of the facilities it provides, ICTs have taken its place as a pedagogical tool in education as of 2000s (Peeraer & Van Petegem, 2015) and been integrated to educational systems rapidly (Trucano, 2005). Teachers, who have an important role in the integration process (Roblyer, 2006), are affected from various factors. Techno-stress is one of these factors. In additional to the changing sense of education, the nature of technology (technical support, inability to use, vision of the school, social pressure, etc.) is among the reasons for techno-stress among teachers. Teachers especially experience techno-stress in the process of integrating new technologies, which is a common condition encountered with digital technologies (Lei, 2010; Lei & Zhao, 2007; Zhao & Frank, 2003). Moreover, the continuation of the pressure for technology integration in education both from the institutions and the society, and the lack of knowledge and support result in techno-stress among teachers (Longman, 2013).

In Turkey, where the present research is conducted, there has been an intensive technology investment in education for the last two decades. Especially, technology use is no longer an option for teachers in recent years, with a national level investment in the integration of technology (FATIH Project – Movement to Increase Opportunities and Technology), and it has become a must. Many researches conducted after FATIH project indicate that teachers are experiencing techno-stress (Aktaş, Gökoğlu, Turgut & Karal; 2014; Banoğlu et al., 2014; Çetinkaya & Keser, Ozkan & Deniz, 2014; Çiftçi, Taşkaya & Dursun et al., 2013; Genç & Genç, 2013).

Purpose of The Research

The main purpose of the present research is defining techno-stress levels of teachers. Accordingly, the answers are sought for the following question;

1. What are techno-stress levels of teachers?
2. Do techno-stress levels of teachers vary by
   a. gender,
   b. length of service,
   c. Internet use time variables?

METHODOLOGY

Research Model

The present research, which was conducted to define techno-stress levels of teachers, was designed in survey model, with a quantitative approach. Researches in survey model describe the existing case of the variables of the

 Copyright © International Conference on New Horizons in Education Conference (INTE)

research one by one or in quantities, and investigate the relationships between two or more variables, related to the behaviours, attitudes, expectations, requirements and knowledge levels about the subject of the research (Gay, Mills & Airasian, 2006; Neuman, 2000).

Research Population and Sample

The population of the present research consists of all teachers who served in all central districts (Meram, Karatay and Selçuklu) of Konya province of Turkey in 2015-2016 school year. Due to size of the population, problems of time and access, the population was sampled with stratified sampling method. In accordance with the sub-purposes of the research, the type of schools (primary, secondary and high schools) teachers serve at was taken as a significant parameter for stratification, and the researchers tried to reach at least 90 teachers from each type of schools. In this context, the totals of 370 teachers were reached at, and the statistical data for the sample of the present research are presented in Table 1.

Table 1: Demographic Data of the Teachers who Participated in the Present Research

Variables		**f**	**%**
Type of School	Primary	109	29.5
	Secondary	171	46.2
	High	90	24.3
Gender	Female	191	51.6
	Male	179	48.4
Length of Service	Less than 5 years	83	22.4
	5 to10 years	64	17.3
	11 to 15 years	78	21.1
	16 and more	145	39.2
	Total	**370**	**100**

Data Collection Tools and Data Collection Process

In order to define techno-stress levels among teachers, "Techno-stress Scale for Teachers" developed by the researchers was employed. The scale, which consists of 5-point likert type items and was conducted on 395 teachers, consists of 28 items and five factors. Construct validity of the scale was tested with exploratory and confirmatory factor analyses, and the factors were named as "Learning-Teaching Process Oriented", "Profession Oriented", "Technical Issue Oriented", "Personal Oriented" and "Social Oriented" techno-stress. Internal consistency coefficient (Cronbach Alpha) of the scale was calculated as .917.

Data Analysis and Interpretation

Descriptive statistics were used to define teachers' techno-stress levels. In addition, in order to find out whether techno-stress levels of teachers varied by gender independent samples t-test, and in order to define the variation by length of service and Internet use time variable, which had more than two groups, one-way analysis of variance (ANOVA) were used. Additionally, a three level assessment range as low, medium and high, was used for the techno-stress levels obtained from the five point likert type items. Accordingly, based on (highest value-lowest value)/assessment range equation, ie. (5-1)/3, the assessment criteria presented in Table 2 was adopted.

Table 2: Assessment Ranges and Values for Techno-Stress Levels of Teachers

Assessment Range (Arithmetic Average)	**Assessment Criteria**
1,00 – 2,33	Low Level
2,34 – 3,67	Medium Level
3,68 – 5,00	High Level

For data analysis, significance level was taken as .05, and SPSS 21.0 (Statistical Package for the Social Sciences) program was used for analyses.

FINDINGS

Findings obtained in accordance with the sub-purposes of the present research, and their interpretations are presented below in sub-titles.

Techno-Stress Levels of Teachers

In order to define techno-stress levels of teachers, data collected from 370 teachers were analysed in accordance with descriptive statistics, and interpreted according to assessment ranges and criteria presented in Table 2. Obtained results from the analyses are presented in Table 3.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 3: Descriptive Statistics for Techno-Stress Levels of Teachers

Techno-stress Factors	$\overline{X}$	sd	Techno-stress Level
Learning-Teaching Process Oriented Techno-Stress	2,77	,776	Medium
Profession Oriented Techno-Stress	2,09	,762	Low
Technical Issue Oriented Techno-Stress	2,87	,906	Medium
Personal Oriented Techno-Stress	2,32	,903	Low
Social Oriented Techno-Stress	3,00	,934	Medium
TECHNO-STRESS AVERAGE	**2,60**	**,665**	**Medium**

According to Table 3, it can be reported that general techno-stress levels of teachers is medium ($\overline{X}$ =2.60). In other words, teachers experience medium level techno-stress from technology use. In terms of the dimensions, teachers experience medium level Learning-Teaching Process Oriented Techno-Stress ($\overline{X}$ =2.77), echnical-Issue Oriented Techno-Stress ($\overline{X}$ =2.60), and Social Oriented Techno-Stress ($\overline{X}$ =3.00). On the other hand, they experience low level Profession Oriented Techno-Stress ($\overline{X}$ =2.09) and Personal Oriented Techno-Stress ($\overline{X}$ =2.32). In terms of techno-stress dimensions, it can be stated that teachers suffer medium level techno-stress in terms of teaching process, and social and technical terms, however, teaching process and personal oriented techno-stress aren't considered as a problem, as these are low level.

Investigation of Techno-Stress Levels of Teachers in terms of Some Variables

In accordance with sub-purposes of the present research, techno-stress levels of teachers were investigated in terms of gender, professional length of service, and Internet use time variables.

Techno-Stress Levels of Teachers in terms of Gender

Table 4 presents the analysis results for the techno-stress levels of teachers in terms of gender.

Table 4: t-Test Results for Techno-Stress Levels of Teachers in terms of Gender

Gender	N	$\overline{X}$	Sd	sd	t	p
Female	191	2,63	,648	368	,750	,454
Male	179	2,57	,684			

According to Table 4, techno-stress levels of teachers aren't affected by gender variable [t(368)=0.454, p>.05]. In other words, female teachers ($\overline{X}$ =2,63), and male teachers ($\overline{X}$ =2,57) experience the same levels (medium level) of techno-stress, and the difference between is not significant at .05 significance level.

Techno-Stress Levels of Teachers in terms of Length of Service

Within the scope of the present research, it was investigated whether techno-stress levels of 370 teachers varied by professional length of service. Accordingly, descriptive statistics for teachers' techno-stress levels in terms of professional length of service, and one-way variance analysis results for the difference between groups were studied, and the obtained results are presented in Table 5.

Table 5: Comparison of Teachers' Techno-Stress Levels in terms of Professional Length of Service

Professional Length of Service	f	$\overline{X}$	sd	Source of Variance	Sum of Squares	df	Mean Square	F	p	Significant Difference
A- Less than 5 years	83	2,48	,612	**Within Group**	2,143	3	,714	1,620	,184	
B- 5 to 10 years	64	2,65	,571	**Between Groups**	161,380	366	,441			-
C- 11 to 15 years	78	2,57	,708	**Total**	163,524	369				
D- 16 and more	145	2,66	,704							

According to Table 5, general techno-stress levels of teachers aren't affected from their professional length of service (F(3-366)= 1.620, p>.05). In other words, techno-stress levels of teachers are at the same level regardless of their length of service.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Techno-Stress Levels of Teachers in terms of Internet Use Time

Assuming that, there is a significant relationship between Internet use, which has increased in recent years, and technology use skill, therefore techno-stress, the relationship between Internet use time and techno-stress level was analysed. All of the teachers, who participated in the present research, stated that they used Internet. Therefore, no findings related to teachers, who don't use Internet, were presented. Descriptive statistics on teachers' techno-stress levels in terms of Internet use time and variance analysis results on the differences between groups are presented in Table 6.

Table 6: Comparison of Teachers' Techno-Stress Levels in terms of Internet Use Time

Internet Use Time	f	$\overline{X}$	sd	Source of Variance	Sum of Squares	df	Mean Square	F	p	Significant Difference
A- A few hours a week	39	3,01	,572	Within Group	11,009	4	2,752	6,587	,000*	A-C, A-D, A-E
B- 5-10 hours a week	31	2,65	,668	Between Groups	152,514	365	,418			
C- 1-2 hours a day	171	2,62	,673	Total	163,524	369				
D- 3-4 hours a day	72	2,53	,625							
E- More than 4 hours a day	57	2,34	,622							

According to Table 6, Internet use time is a significant factor affecting techno-stress levels among teachers ($F(4\text{-}365)=6.587$, $p<.05$). According to the results of the analyses conducted to define between which groups the differences were, techno-stress levels of the teachers, who used Internet for a few hours a week ($\overline{X}$ =3.01) are higher than the teachers, who used Internet for 1-2 hours a day ($\overline{X}$ =2.62), 3-4 hours a day ($\overline{X}$ =2.53) and more than 4 hours a day ($\overline{X}$ =2.34). The differences between all other groups are not significant. In other words, the teachers, who use Internet for a few hours a week, experience more techno-stress than other teachers at a significant level.

CONCLUSIONS AND DISCUSSION

There are various models related to the integration of technology to educational environments and these models report that teachers have an important role for a successful integration process (Roblyer & Doering, 2013; Harris & Hoffer, 2011; Paraskeva, Bouta & Papagianna, 2008; Koehler & Mishra, 2005). In terms of the use of technology in integration process, teachers are in an important position with different visions, such as leadership, and guidance for students (Paraskeva, Bouta & Papagianna, 2008; Finger, Russell, Jamieson-Proctor & Russell, 2007). From this perspective, personal features of teachers (attitude, knowledge, anxiety, etc.) are considered among the important parameters of technology integration process (Roblyer & Doering, 2013; Imhof, Vollmeyer & Beierlein, 2007). Techno-stress is one of individuals' personal features related to technology use (Ahmad &Amin, 2012; Ayyagari, Grover& Purvis, 2011; Fudail & Mellar, 2008; Shepherd, 2004).

There has been an intensive ICT investment in the last two decades in Turkey. Especially with FATIH project, teachers are expected to use technology. From this perspective, teachers' techno-stress levels were investigated. In order to define teachers' techno-stress levels, data were collected from the total of 370 teachers of 24 different branches at primary, secondary and high school levels, from central districts of Konya province. According to the findings, teachers general techno-stress is at medium level, and in terms of sub-dimensions, they experience medium level Learning-Teaching Process Oriented, Technical Issue Oriented, and Social Oriented techno-stress. Another finding of the present research is that, teachers experience low level Profession Oriented Techno-Stress and Personal Oriented Techno-Stress. The review of the related literature, provided studies conducted in different work fields (Fuglseth & Sørebø, 2014; Shu, Tu & Wang, 2011; Suharti & Susanto, 2014; Şahin & Çoklar, 2009; Tarafdar et al., 2011). In different studies, sub-dimensions of techno-stress levels were named differently (Quinn, 2000; Suharti & Susanto, 2014). It was reported that, there were higher levels of techno-stress in computerized work environments (Kinman & Jones, 2005). Factors, such as over work load in work environments where information and communication technologies are used (Hind, 1998; Shu, Tu & Wang, 2011; Suharti & Susanto, 2014), irrepressible development of technology and the necessity to use it (Fuglseth & Sørebø, 2014; Karuppan, 1997; Smith & Carayon, 2005), imbalance between work and life (Shu, Tu & Wang, 2011; Tarafdar et al., 2011) and failure in time management (Wang, Shu & Tu, 2008) are the reasons increasing techno-stress levels. There are limited numbers of studies conducted to study techno-stress levels among teachers. In one of these studies conducted on 145 primary school teachers, Longman (2013) reported that primary school teachers had low levels

 Copyright © International Conference on New Horizons in Education Conference (INTE)

of techno-stress. It was also reported that teachers, who spend too much time on determining and planning technology sources in the classroom in learning-teaching processes, suffered from high-level techno-stress while teachers, who could highly integrate technology to their classroom, had low levels of techno-stress. Additionally, it was found that teachers, who took education on technology, had low levels of techno-stress, and teachers experienced higher techno-stress when they use technological devices they couldn't trust (Longman, 2013). Jena (2015), who conducted a research on Indian academicians, reported that academicians had medium level techno-stress. In another study conducted on nurse trainers, Burke (2009) reported that trainers had medium level techno-stress during hardware problems in the classroom, and low level techno-stress in Internet access.

The effect of gender on techno-stress level, which was studied in the present research, was also studied in many other researches (Ragu-Nathan et al., 2008; Venkatesh & Morris, 2000). Some of these studies (Shepherd, 2004; Tarafdar et al., 2011) reported that gender had a significant effect on techno-stress, while some others (Goddard, 2011; Wang, Shu & Tu, 2008) reported that it didn't. According to the findings obtained in the present research, general techno-stress levels of teachers didn't vary by gender, and female and male teacher had similar and medium level techno-stress. Ragu-Nathan et al. (2008) found that female experienced techno-stress more than male. However, with FATIH project conducted in Turkey by the Ministry of National Education, all teachers were provided with the same levels of technological opportunities, and the same in-service trainings, which may have prevented the variation in teachers' techno-stress levels.

On the other hand, another finding of the present research is that professional length of service didn't affect teachers' techno-stress levels at a significant level. In terms of sub-dimensions, teachers, who had 5 to 10 years of length of service, had higher level of technical oriented techno-stress than the teachers, whose length of services were less than 5 years. In many previous related studies, the ages of the participants were considered as a variable that was worth investigating (Evans, 2013; Ragu-Nathan et al., 2008; Rosen & Maguire, 1990). However, the number of researches, which studied length of service, is limited. In one of the studies in the related literature, Longman (2013) studied the techno-stress levels of teachers, who had less than 10 years and more than 10 years length of service, and reported that length of service didn't have a significant effect of techno-stress levels. In another study, Quinn (2000) stated that young learners had lower levels of techno-stress than older learners. On the other hand, Tarafdar et al. (2011) claimed that younger users were more familiar with technology in occupations related with information technologies, but experienced employees had lower levels of techno-stress because they were better at coping with stress. From this perspective, it can be claimed that technology use competence and teaching experience balance each other in techno-stress.

Another finding of the present research is that, techno-stress levels of teachers varied by the time spent on Internet, which is an important source of information and communication today. Teachers, who used Internet for a few hours a week, experienced higher techno-stress than the teachers, who used Internet everyday for 1-2, 3-4 and 4 and more hours, and accordingly Internet use time can be reported as a significant variable. The number of researches, which studied the effects of Internet use time of techno-stress levels, is limited. Similarly, these studies report that participants, who spend more time with technologies, such as computers and Internet and use computers more effectively, have lower levels of techno-stress (Jane, 2015; Shepherd, 2004; Tarafdar et al., 2011).

SUGGESTIONS

According to the findings of the present research, teachers experience medium-level general techno-stress and learning-teaching process oriented, technical issue oriented and social oriented techno-stresses. In order to decrease the levels of techno-stress, teachers experience in these dimensions, in-service trainings can be organized. Shepherd (2004) emphasized the relationship between computer using skills and techno-stress. Accordingly, experimental studies can be conducted on trainings on education planning and defining the efficiency of these trainings, to define and decrease techno-stress levels of teachers. Additionally, it was found that average Internet use time varied techno-stress levels at a significant level, so it is a significant predictor of techno-stress. Studies to develop structural equation modelling can be conducted in this direction.

ACKNOWLEDGEMENT

The present study was based on a part of a scientific research project funded by The Scientific and Technological Research Council of Turkey (TUBITAK) – number 114K032 – called 'Determination of Technostress Levels of Teachers Focusing on FATIH Project".

REFERENCES

Ahmad, U. N. U., Amin, S. M., & Ismail, W. K. W. (2009). The impact of technostress on organisational commitment among malaysian academic librarians. *Singapore Journal of Library & Information Management*, 38, 103-123.

Banoglu, K., Madenoğlu, C., Uysal, Ş., & Dede, A. (2014). An investigation of teachers' perceptions of the implementation of the FATIH Project (Eskisehir Province Case). *Journal of Educational Sciences Research, 4*(Sp. Ed. 1), 39-58.

Ozkan, A., & Deniz, D. (2014). Orta öğretimde görev yapan öğretmenlerin FATİH Projesi'ne ilişkin görüşleri (The views of secondary education teachers on FATİH Project). *Ege Eğitim Dergisi, 15*(1), 161-175.

Ahmad, U. N. U.,& Amin, S. M. (2012). The dimensions of technostress among academic librarians. *Procedia – Social and Behavioral Sciences*, 65, 266-271.

Aktas, I., Gokoglu, S., Turgut, Y.E., & Karal, H. (2014). Teachers' opinions about FATIH Project: Awareness, foresight and expectations. *Necatibey Faculty of Education Electronic Journal of Science and Mathematics Education, 8*(1), 257-286.

Ayyagari, R., Grover, V., & Purvis, R. (2011). Teknostress: Technological antecedents and implications. *MIS Quarterly, 35*(4), 831-858.

Bayazıt Hayta, A. (2007). Çalışma ortamı koşullarının işletme verimliliği üzerine etkisi. *Ticaret Turizm Eğitim Fakültesi Dergisi*, 1, 21-41.

Brillhart, P. E. (2004). Technostress in the workplace managing stress in the electronic workplace. *Journal of American Academy of Business*, 5, (1), 302–307.

Brod, C. (1984).Technostress: The human cost of the computer revolution. Reading, MA: Addison-Wesley.

Burke, M. S. (2009). The incidence of technological stress among baccalaureate nurse educators using technology during course preparation and delivery. *Nurse Education Today*, *29*(1), 57-64.

Çetinkaya, L. & Keser, H. (2014). Öğretmen ve öğrencilerin tablet bilgisayar kullanımında yaşadıkları sorunlar ve çözüm önerileri. *Anadolu Journal of Educational Sciences International, 4*(1), 13-34.

Çiftçi, S., Taşkaya, S.M. ve Alemdar, M. (2013). Sınıf öğretmenlerinin fatih projesine ilişkin görüşleri. *İlköğretim Online, 12(1),* 227-240.

Evans, E. M. W. (2013). *Understanding productivity and technostress for oncology nurses using an electronic health record (EHR) to increase safety, quality, and effectiveness of care for patients with cancer.* Doctoral Dissertation, Capella University.

Finger, G., Russell, G., Jamieson-Proctor, R., & Russell, N. (2007). *Transforming Learning with ICT: Making it Happen.* Pearson Education Australia.

Fuglseth, A. M., & Sørebø, Ø. (2014). The effects of technostress within the context of employee use of ICT. *Computers in Human Behavior*, *40*, 161-170.

Gay, L. R., Mills, G. E. & Airasian, P. (2006). *Educational research: competencies for analysis and applications* (8th ed). New Jersey: Pearson.

Genç, M. & Genç, T. (2013). Monitoring the Skills of Teachers' Vocational Development by Themselves; Fatih Project Sample. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi, 14*(2), 61-78.

Goddard, M. S. (2011). *Sleep quality, technostress, and maladaptive use of technology: Predictors of depression among college students*. Doctoral Dissertation, The University Of Memphis.

Harris, J.B. & Hofer, M.J. (2011). Technological pedagogical content knowledge (TPACK) in action: A descriptive study of secondary teachers' curriculum-based, technology-related instructional planning. *Journal of Research on Technology in Education*, 43(3), 211-229.

Hind, P. (1998). Captured by technology. *CIO magazine*, *9*, 22-23.

Hung, W. H., Chen, K., & Lin, C. P. (2014). Does the proactie personality mitigate the adverse effect of technostress on productivity in the mobile environment. *Telematics and Informatics*, 32 (1), 143-157.

Imhof, M., Vollmeyer, R., & Beierlein, C. (2007). Computer use and the gender gap: The issue of access, use, motivation, and performance. *Computers in Human Behavior*, 23, 2823-2837.

Jena, R.K. (2015). Technostress in ICT enabled collaborative learning environment: An empirical among Indian academician. *Computers in Human Behavior, 51*, 1116-1123.

Johnstone, M. (1989*). Stress in Teaching: An Overwiew of Research*.Edinburgh: SCRE.

Karuppan, C. M. (1997). Advanced manufacturing technology and stress: technology and management support policies. *International Journal of Technology Management*, *14*(2-4), 254-264.

Kinman, G., & Jones, F. (2005). Lay representations of workplace stress: What do people really mean when they say they are stressed?. *Work & Stress*, *19*(2), 101-120.

Koehler, M.J. ve Mishra, P. (2005). What happens when teachers design educational technology? The development of technological pedagogical content knowledge. *Journal of Educational Computing Research, 32(2),* 131-152.

Kupersmith, J. (1992). Technostress and the reference librarian. *Reference Services Review*, 20, 7-14.

Lei, J. (2010). Quantity versus quality: A new approach to examine the relationship between technology use and student outcomes. *British Journal of Educational Technology, 41*, 455-472.

Lei, J.,& Zhao, Y. (2007). Technology uses and student achievement: A longitudial study. *Computers & Education, 49*, 284-296.

Longman, S. M. D. (2013). *A comparison of the perceptions of technostress experienced by teachers versus technology used by teachers in elementary education in a southeastern school district*. Doctoral Dissertation, Southeastern Louisiana University.

Nelson, D.L. (1990). Individual adjustment to information-driven technologies: A critical review. *MIS Quarterly*, 14, (1): 79–98.

Nelson, D.L.,& Kletke, M.G. (1990). Individual adjustment during technological innovation: A research framework. *Behavior and Information Technology*, 9, (4): 257–271.

Neuman, W. L. (2000). *Social research methods: Qualitative and quantitative approaches* (4th ed.) Boston: Allyn & Bacon.

Paraskeva, F., Bouta, H., & Papagianna, A. (2008).Individual characteristics and computer self-efficacy in secondary education teachers to integrate technology in educational practice. *Computers& Education, 50(3),* 1084-1091.

Peeraer, J.,& Van Petegem, P. (2015). Integration or transformation? Looking in the future of information and communication technology in education in Vietnam. *Evaluation and Program Planning, 48*, 47-56.

Quinn, B. (2000). Overcoming technostress in reference services to adult learners. *The Reference Librarian*, *33*(69-70), 49-62.

Ragu-Nathan, T.S., Tarafdar, M., Ragu-Nathan, B., & Tu, Q. (2008). The consequences of technostress for end users in organizations: Conceptual development and empirical validation.*Information Systems Research*, 19, (4): 417–433.

Roblyer, M.D.,& Doering, A.H. (2013). *Integrating educational technology into teaching* (6th Ed.). Boston, MA: Pearson.

Rosen, L. D., & Maguire, P. (1990). Myths and realities of computerphobia: A meta-analysis. *Anxiety Research*, *3*(3), 175-191.

Salanova, M., Llorens, S., Cifre, E., & Nogareda, C. (2007). El tecnoestre´s: Concepto, medida y prevencio´n. *Nota Te´ cnica de Prevencio´ n*, 730. Madrid: INSHT.

Sami, L. K., & Pangannaiah, N. B. (2006). "Technostress" A literature survey on the effect of information technology on library users. Library review, 55(7), 429-439.

Selye, H. (1956). *The stress of life*. New York, NY: McGraw-Hill.

Shepherd, S.S.G. (2004). Relationship between computer skills and technostress: How does this affect me?.*Proceeding of the 2004 ASCUE Conference* (225-231). Myrtle Beach, South Caroline.

Shu, Q., Tu, Q. & Wang, K. (2011). The impact of computer self-efficacy and technology dependence on computer-related technostress: A Ssocial cognitive theory perspective. *International Journal of Human-Computer Interaction*, 27(10), 923–939.

Smith, M. J., & Carayon, P. (1995). New technology, automation, and work organization: stress problems and improved technology implementation strategies. *International Journal of Human Factors in Manufacturing*, *5*(1), 99-116.

Suharti, L., & Susanto, A. (2014). The impact of workload and technology competence on technostress and performance of employees. *Indian Journal of Commerce and Management Studies*,*5*(2), 1-7.

Şahin, Y. L., & Çoklar, A. N. (2009). Social networking users' views on technology and the determination of technostress levels. *Procedia-Social and Behavioral Sciences*, *1*(1), 1437-1442.

Tarafdar, M., Tu, Q., Ragu-Nathan, T. S., & Ragu-Nathan, B. S. (2011). Crossing to the dark side: Examining creators, outcomes and inhibitors of technostress. *Communications of the ACM*, 54(9), 113-120.

Trucano, M. (2005). *Knowledge maps: ICT in education*. Washington, DC: Infodev/World Bank.

Tu, Q., Wang, K. L., & Shu, Q. (2005). Computer-related technostress in China. *Communications of the ACM*, 48(4), 77–81.

Venkatesh, V., & Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS quarterly*, 115-139.

Wang, K. L., Shu, Q., & Tu, Q. (2008). Technostress under different organizational environments:An empirical investigation. *Computers in Human Behavior*, 24: 3002-3013.

Weil, M.,& Rosen, L. (1997). *TechnoStress: Coping with Technology @work @home @play*. New York, NY: J. Wiley.

Zhao, Y.,& Frank, K.A. (2003). Factors affecting technology uses in schools: An ecological perspective. *American Educational Reseacrh Journal, 40*, 807-840.

Zuboff, S. (1988). *In the age of the smart machine: The future of work and power*. New York, NY: Basic Books.

Roblyer, M. D. (2006). *Integrating Educational Technology Into Teaching.* (4th Edition). New Jersey: Merrill Prentice Hall.

INVESTIGATION OF THE ATTITUDES OF COLLEGE STUDENTS TOWARDS DATING VIOLENCE ACCORDING TO DEMOGRAPHIC VARIABLES

Ebubekir ÖZDEMİR
Pamukkale University, Department of Educational Sciences
Psychological Counseling and Guidance, Denizli, Turkey
ebubekiro@pau.edu.tr

Erdinç DURU
Department of Educational Sciences
Psychological Counseling and Guidance, Denizli, Turkey
eduru@pau.edu.tr

ABSTRACT
The purpose of this study is to investigate the relationship between the attitudes of college students towards dating violence and their gender, department, parents' education level and number of sibling. The study group consisted of 285 female and 132 male students attending different departments in faculty of education in Pamukkale University. Data was collected by the attitudes towards dating violence scales and demographic information sheet, and analyzed by SPSS 23.00. In order to examine the relation of attitudes and demographic variables, t-test and one way ANOVA were used. Analyses showed a significant relationship between attitudes and the variables of education level, number of sibling, department and gender. Findings have been discussed in term of related literature.
Key Words: Attitude towards dating violence, demographic variables

INTRODUCTION

World Health Organization (1996) defines violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation" (In Dahlberg&Krug, 1996: 279). According to Michaud (1991), violence is the behavior of one or more than one partner of relationships as directly or indirectly, collectively or separately injuring to the integrity or properties, or symbolic or cultural values of others or some of the others to whatever extent. Although the definition of violence varies according to researchers, the common point is that violence occurs when someone use force or pressure, do or make do something out of desire, attack, use brutal force, torture, hit and injure (Aktaş, 2006; Birimoğlu, 2012; Budak, 2000). Examining the definitions, in the concept of violence there underlies society, individuals and interpersonal relationships. One of the interpersonal relationships is dating. The problems arising in dating relations can be concluded as behaviors including psychological and physical violence.

Dating violence is one of the types of interpersonal violence which includes sexual, emotional and physical abuse (Aslan et al., 2008). While physical dating violence includes slapping, pushing, scratching, biting, choking, and beating up and assault with a weapon (Foshee et al., 2007); emotional dating violence is hurting someone psychologically through humiliating and insulting without a physical attempt (Offenhauer&Buchalter, 2011). Sexual dating violence can be seen as having a tendency to another women, forcing a sexual intercourse, raping or attempting to rape (Rickert, Wiemann, Vaughan & White, 2004; Miller et al., 2007). Much research has referred to dating violence among adolescents and adult intimate relationships (Ackarda&Neumark-Sztainer, 2002; Chen, 2012; Swart, Seedat, Stevens&Ricardo, 2002). In light of these studies, in romantic relationships of adolescents and adults, some dating violence can be expected to arise.
(Kılınçer&Dost, 2015). The base of adult relationships is constructed in this period (Saraç, Hamamcı&Güçray, 2015). Erikson (1968) had handled this issue, and according to his psycho-social development theory, this period includes having intimate relations against isolation. He stated that if individuals who pace towards adulthood in this period do not have deep personal attachments with others, they might live the feeling of isolation and focus on themselves. In order to get over this period successfully, more healthy relationships are required to have. In the context of Erikson's psycho-social development theory, the attitudes of young adults towards dating violence is supposed to be understood better in college years when intimate relations increase. In this sense, the theoretical framework of this study is based on Erikson's psycho-social development theory.

Dating violence is an important problem which affects the lives of college students negatively in their intimate relationships (Yumuşak, 2013). Students have various problems about their dating relations, moreover they demand psychological help. A study in abroad declared that 22 % of college students who had applied to a counseling center at a university had relation problems, and 7.4 % of them were harassed (Aluede, Imhonde&Eguavoen, 2006). Considering the related literature, there seems to be no research examining the relationship between the attitudes of college students towards dating violence and the demographic variables of this study those are department, gender, **grades**, parents' living together and parents' education level. The current study is supposed to contribute to the

 Copyright © International Conference on New Horizons in Education Conference (INTE)

literature in this sense. Furthermore, this research might contribute to and be a base for the organization of preventive psychological counseling services and psycho-educational programs. In this context, this research, in which 1st, 2nd, 3rd and 4th grades of students attending Faculty of Education in Pamukkale University, is aimed to answer the following questions:

1. Do the attitudes of college students towards dating violence significantly differentiate according to *gender*?
2. Do the attitudes of college students towards dating violence significantly differentiate according to *parents' education level*?
3. Do the attitudes of college students towards dating violence significantly differentiate according to *their department*?
4. Do the attitudes of college students towards dating violence significantly differentiate according to *their grades*?
5. Do the attitudes of college students towards dating violence significantly differentiate according to *number of sibling*?

METHOD

This research is a descriptive study which examines the relationships between the attitudes of college students towards dating violence and demographic variables.

Participants

A total of 417 college students of whom 285 were females (63.9%) and 132 were males (29.6%), and attending various departments of faculty of education in a state university in 2015-2016 academic years took part in the study. The age mean of the participants was 20.83 (Sd= 1.98).

Data Collection Tools

The Attitudes towards Dating Violence Scales

Adapted by Yumuşak and Şahin (2014), the attitudes towards dating violence scales include four subscales those are the Attitudes towards Male Psychological Dating Violence, the Attitudes towards Male Physical Dating Violence, the Attitudes towards Female Psychological Dating Violence, the Attitudes towards Female Physical Dating Violence. The Cronbach Alpha coefficients of the subscales were found to be .81, .87, .75 and .82 respectively.

Personal Information Form

Personal information form was prepared by the researchers in order to collect data about the independent variables of the research. Questions about students' department, gender, grades and parents' education level were posed in the form.

Procedure

Before data collection, researchers made an arrangement with the lecturers of faculty of education in the state university for an appropriate day and time. Personal information form and scales were implemented in the same session. Data collection took approximately 20-25 minutes and voluntariness was considered for the participants.

Data Analysis

In order to reveal the demographic structure of the study group, descriptive statistics and frequency/percentage analyses for the independent variables were used. According to the data type, t-test and one way ANOVA were chosen, and Tukey test was used in order to understand the source of significant difference iF value was significant. As the data was normally distributed, parametric tests were used for the analyses. Data was analyzed with SPSS 23.00 with significance value of .05.

FINDINGS

Whether the attitudes of college students towards dating violence differ according to socio-demographic variables which are gender, department, mother's education level, father's education level and number of sibling was examined.

Table 1 displays the result of t-test conducted to understand whether the attitudes of college students towards dating violence significantly differ.

Table 1

Independent samples t-test whether the attitudes towards male and female psychological and physical dating violence differ according to gender

	GENDER	N	$\bar{x}$	Sd	df	t	p
Attitudes towards Male Psychological Dating Violence	FEMALE MALE	285 132	27.91 38.09	7.65 8.73	415	-12.07	.000*
Attitudes towards Male Physical Dating Violence	FEMALE MALE	285 132	19.24 26.84	7.28 9.75	415	-8.86	.000*
Attitudes towards Female Psychological Dating Violence	FEMALE MALE	285 132	23.16 25.96	8.16 7.40	415	-3.34	.001*
Attitudes towards Female Physical Dating Violence	FEMALE MALE	285 132	24.57 27.51	9.16 9.00	415	-3.06	.002*

* $p < .05$

 Copyright © International Conference on New Horizons in Education Conference (INTE)

As shown in Table 1, there is a significant difference between the attitudes towards male psychological dating violence (t_{415}=-12.07; p<.05); the attitudes towards male physical dating violence (t_{415}=-8.86; p<.05); the attitudes towards female psychological dating (t_{415}=-3.34; p<.05), and the attitudes towards female physical dating violence according to gender. In this sense, examining the attitudes scores of male psychological and physical dating violence and female psychological and physical dating violence, boys got higher scores than girls.
Table 2 displays score means and standard deviations of college students' attitudes towards physical and psychological dating violence according to department.

Table 2
Mean scores and standard deviations of the level of attitudes towards male and female physical and psychological dating violence according to department

		n	$\bar{x}$	sd
Attitudes towards Male Psychological Dating Violence	Psychological Guidance and Counseling	90	28.60	8.85
	Turkish Language Teaching	62	32.33	8.86
	Classroom Teaching	61	30.31	8.52
	English Language Teaching	74	30.16	9.31
	Social Science Teaching	68	33.76	9.70
	Elementary Science Teaching	61	32.77	9.74
	TOTAL	416	31.13	9.30
Attitudes towards Male Physical Dating Violence	Psychological Guidance and Counseling	90	18.48	7.12
	Turkish Language Teaching	62	22.62	8.20
	Classroom Teaching	61	22.01	8.92
	English Language Teaching	74	19.92	7.65
	Social Science Teaching	68	24.61	9.46
	Elementary Science Teaching	61	23.75	10.76
	TOTAL	416	21.64	8.87
Attitudes towards Female Psychological Dating Violence	Psychological Guidance and Counseling	90	21.57	6.44
	Turkish Language Teaching	62	23.61	6.62
	Classroom Teaching	61	25.21	8.68
	English Language Teaching	74	23.48	7.69
	Social Science Teaching	68	26.11	9.00
	Elementary Science Teaching	61	25.39	9.15
	TOTAL	416	24.05	8.02
Attitudes towards Female Physical Dating Violence	Psychological Guidance and Counseling	90	21.03	6.66
	Turkish Language Teaching	62	26.00	7.80
	Classroom Teaching	61	29.67	10.09
	English Language Teaching	74	24.46	8.50
	Social Science Teaching	68	29.98	10.66
	Elementary Science Teaching	61	25.96	9.21
	TOTAL	416	25.50	9.20

One way ANOVA was used in order to understand whether there is a significant difference between the attitudes towards male physical and psychological dating violence and the attitudes towards female physical and psychological dating violence in terms of departments of the college students. Findings indicated a significant difference between the attitudes towards male physical and psychological dating violence (F(5-411 =5.519; p<.05 and F(5-411 =3,363; p<.05) and the attitudes towards female physical and psychological dating violence (F(5-411 = 8,737; p<.05 and F(5-411 =3.416; p<.05) according to the variable of department.
Tukey test was conducted due to understand the source of the difference. Findings showed that while the lowest mean score belongs to the students of Psychological Counseling and guidance Department ($\bar{x}$=28.60; $\bar{x}$=18.48; $\bar{x}$=21.57; $\bar{x}$=21.03), the highest mean score is the students' of Social Science Teaching Department ($\bar{x}$=33.76; $\bar{x}$=24.61; $\bar{x}$=26.11; $\bar{x}$=29.98). Put differently, as for the attitudes towards male and female physical and psychological dating violence, students from psychological counseling and guidance department have higher scores than the students' from social science teaching department ($\bar{x}$=28.60; $\bar{x}$=18.48; $\bar{x}$=21.57; $\bar{x}$=21.03 p<0.05).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Mean scores and standard deviations of college students' attitudes towards physical and psychological dating violence in terms of mother's education level are shown in Table 3.

Table 3

Mean scores and standard deviations of the attitudes towards male and female dating violence according to mother's education level

		n	$\bar{x}$	sd
Attitudes towards Male Psychological Dating Violence	Illiterate	32	38.25	9.48
	Primary School Graduate	217	31.68	8.97
	Secondary School Graduate	61	30.11	9.17
	High School Graduate	77	28.12	8.57
	University Graduate	29	29.23	9.43
	Total	416	31.13	9.30
Attitudes towards Male Physical Dating Violence	Illiterate	32	30.43	8.75
	Primary School Graduate	217	22.21	9.02
	Secondary School Graduate	61	19.19	6.58
	High School Graduate	77	18.93	7.84
	University Graduate	29	20.18	8.49
	Total	416	21.64	8.87
Attitudes towards Female Psychological Dating Violence	Illiterate	32	36.81	9.24
	Primary School Graduate	217	24.33	8.18
	Secondary School Graduate	61	24.37	7.33
	High School Graduate	77	21.93	7.62
	University Graduate	29	23.30	6.97
	Total	416	24.05	8.02
Attitudes towards Female Physical Dating Violence	Illiterate	32	29.37	7.23
	Primary School Graduate	217	25.88	9.31
	Secondary School Graduate	61	24.27	8.95
	High School Graduate	77	23.85	9.60
	University Graduate	29	26.15	8.78
	Total	416	25.50	9.20

Findings of one way ANOVA indicated that the attitudes towards male physical and psychological dating violence ($F_{(5\text{-}411)}$=10.096; p<.05 ve $F_{(5\text{-}411)}$=6,761; p<.05) and towards female physical dating violence ($F_{(5\text{-}411)}$= 2,274; p<.05) significantly differentiate according to mother's education level. There is no significant difference for the attitudes towards female psychological dating violence in terms of mother's education level.

In order to understand the source of this difference, Tukey test was used. Findings revealed that the levels of the attitudes of students whose mothers are illiterate towards male physical and psychological dating violence ($\bar{x}$=30,43; $\bar{x}$=38,25) is significantly higher than (p< .05) the students' whose mothers are primary school graduate ($\bar{x}$=31,68), secondary school graduate ($\bar{x}$=30,11), high school graduate ($\bar{x}$=28,12) and university graduate ($\bar{x}$=26,43). In other words, as the education level of mother increases, the level of the attitudes towards male date violence increases as well.

Examining the means of the attitudes towards female physical and psychological dating violence, the attitude levels of the students whose mothers are illiterate towards female physical dating violence ($\bar{x}$=29,37) significantly differ from the students' whose mothers are high school graduate ($\bar{x}$=23,85). There are no significant differences (p> .05) between illiterate mothers and primary school graduate ($\bar{x}$=25,88), secondary school graduate ($\bar{x}$=24,27) and university graduate ($\bar{x}$=26,43) mothers.

Mean scores and standard deviations of college students' attitudes towards physical and psychological dating violence in terms of father's education level are shown in Table 4.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 4
Mean scores and standard deviations of the attitudes towards male and female dating violence according to father's education level

		n	$\bar{x}$	sd
Attitudes towards Male Psychological Dating Violence	Illiterate	9	34.44	6.96
	Primary School Graduate	151	32.23	9.64
	Secondary School Graduate	75	31.26	9.35
	High School Graduate	101	30.20	9.09
	University Graduate	80	28.85	8.50
	Total	416	30.13	9.30
Attitudes towards Male Physical Dating Violence	Illiterate	9	26.44	10.18
	Primary School Graduate	151	23.56	9.62
	Secondary School Graduate	75	21.23	8.86
	High School Graduate	101	20.36	7.80
	University Graduate	80	18.60	6.86
	Total	416	21.64	8.87
Attitudes towards Female Psychological Dating Violence	Illiterate	9	22.33	8.67
	Primary School Graduate	151	24.51	7.96
	Secondary School Graduate	75	24.32	8.35
	High School Graduate	101	23.42	8.18
	University Graduate	80	24.76	8.27
	Total	416	24.05	8.02
Attitudes towards Female Physical Dating Violence	Illiterate	9	25.44	6.67
	Primary School Graduate	151	26.35	8.88
	Secondary School Graduate	75	24.88	9.15
	High School Graduate	101	24.69	9.54
	University Graduate	80	26.40	9.31
	Total	416	25.50	9.20

Findings of the one way ANOVA suggested that the attitudes towards male physical dating violence differ according to father's education level ($F_{(5\text{-}411}$ =3.478; p<.05). There are no significant differences in the attitudes towards male psychological dating violence ($F_{(5\text{-}411}$ =1,234; p>.05) and female physical ($F_{(5\text{-}411}$ =,508; p>.05) and psychological ($F_{(5\text{-}411}$ =,416; p>.05) dating violence in terms of father's education level.
In order to understand the source of the difference, Tukey test was conducted. Findings indicated that the means of the attitudes of students whose father is primary school graduate towards male physical dating violence ($\bar{x}$=23,56) is significantly higher than the students' whose father is high school graduate ($\bar{x}$=20,36). There is no significant difference according to illiterate father ($\bar{x}$=26,44), secondary school graduate ($\bar{x}$=21,26) and university graduate ($\bar{x}$=18,60) fathers. In other words, the attitudes towards male physical dating violence change according to father's education level, while the attitudes towards male psychological dating violence and towards female physical and psychological dating violence do not.

Mean scores and standard deviations of college students' attitudes towards physical and psychological dating violence in terms of number of sibling are shown in Table 4.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 5
Mean scores and standard deviations of the attitudes towards male and female dating violence according to number of sibling

	Number of Sibling	n	$\bar{x}$	sd
Attitudes towards Male Psychological Dating Violence	0	19	31.63	9.09
	1	40	28.87	8.60
	2	159	29.89	8.79
	3	114	30.47	8.99
	4	39	34.15	9.70
	5	45	36.40	10.08
	TOTAL	416	31.13	9.30
Attitudes towards Male Physical Dating Violence	0	19	20.78	6.99
	1	40	20.97	8.73
	2	159	19.92	7.67
	3	114	20.37	8.23
	4	39	25.97	11.17
	5	45	28.20	9.23
	TOTAL	416	21.64	8.87
Attitudes towards Female Psychological Dating Violence	0	19	23.84	7.49
	1	40	23.85	9.33
	2	159	23.29	7.68
	3	114	23.74	7.75
	4	39	26.66	7.49
	5	45	25.51	9.07
	TOTAL	416	24.05	8.02
Attitudes towards Female Physical Dating Violence	0	19	25.42	9.48
	1	40	26.67	10.12
	2	159	24.68	9.19
	3	114	24.57	9.09
	4	39	27.25	8.49
	5	45	28.28	8.76
	TOTAL	416	25.50	9.20

Findings from one way ANOVA showed that the attitudes towards male physical and psychological dating violence ($F_{(5\text{-}411)}$ =9.376; p<.05 and $F_{(5\text{-}411)}$ =5,106; p<.05) significantly differ according to number of siblings (p<.05). The attitudes towards male psychological dating violence significantly differ according to having 5 siblings ($\bar{x}$=36,40) and 1 sibling ($\bar{x}$=28,87), 2 siblings ($\bar{x}$=29,89) and 3 siblings ($\bar{x}$=30,47). Similarly the attitudes towards male physical dating violence significantly differ according to having 5 siblings ($\bar{x}$=28,20) and 1 sibling ($\bar{x}$=20,97), 2 siblings ($\bar{x}$=19,92) and 3 siblings ($\bar{x}$=20,37). In other words, increasing number of sibling affect the attitudes towards male physical and psychological dating violence. There is no significant difference in the attitudes towards female physical and psychological dating violence according to number of siblings (p> .05).

DISCUSSION

In this study the attitudes of college students towards dating violence were examined in terms of demographic variables. It was aimed to determine whether the attitudes of the students from faculty of education, where the study was conducted, towards male and female physical and psychological dating violence differ according to their gender, department, mother's education level, father's education level and number of sibling.

Findings suggested that male students have higher attitude scores towards dating violence. This finding is in line with those of previous studies (O'Keefe, 1997; Sezer, 2008). This finding might be related to gender role socialization. Considering the related literature, boys and girls have different process of socialization. The possible explanation of this finding might because of that boys are trained in a different way socially; their aggressive behaviors are supported since the childhood, and moreover, violent behavior is considered to be normal for boys. Apart from this, more adaptive behaviors are approved for girls in the society (Kaya Sarıkaya, 2013).

As for the variable of department, the attitude mean scores of the students, attending Psychological Counseling and Guidance (PCG) department, towards dating violence are low while students' of Social Science Teaching department is high. There seems to be no other research which can be compared with this finding. Nevertheless this

 Copyright © International Conference on New Horizons in Education Conference (INTE)

can be explained by high awareness of students attending PCG department about self-control, empathy and interpersonal relationship skills. Ekinci (2009) found that the emphatic inclination of PGC students is higher than those attending social science and the other departments of faculty of education. Similarly, Alper (2007) found that the emphatic skill scores of PGC students are higher than those of classroom teaching. Moreover, in their studies Duru (2002), Karagözoğlu, Kahve Koş and Adamışoğlu (2008) and Pala (2008) stated that the level of empathy varies according to the department. Taken together, it is meaningful that students' level of attitudes towards dating violence in PGC department is lower than those of Social Science teaching department.

Findings demonstrated that male's attitudes towards psychological violence differ according to mother's education level. Put differently, males' attitude scores, whose mothers are illiterate, towards psychological violence are low. This indicates as the education level of males' mother increases, the frequency of violence decreases. Increasing level of education may lead to increasing awareness, and in turn decreasing violence. The attitudes of males whose mothers are illiterate towards violence are high. Being a high school graduate is a significant point here. The attitude of males whose mothers are at least high school graduates towards violence are low. Mothers' being illiterate is important in terms of females' attitudes towards physical violence, and males' attitudes towards physical and psychological violence. There is no research compared with this finding directly however, considering the studies which examined the attitudes of dating adolescents towards the violence, the group which accepts violence more normally is the one whose mothers are illiterate while the group which accepts violence less is the one whose mothers are high school and its equivalent graduates (Yavuz, 2009; Kaya Sarıkaya, 2013). Therefore it can be concluded that mother's education level is important so as to lessen the attitudes towards violence. Moreover, individuals whose mothers are illiterate might be in risk groups in terms of dating violence.

As for father's education level, the attitude towards male physical dating violence differs in terms of father's being primary school graduate and university graduate. The attitude level of college students, whose fathers are primary school graduate, towards physical violence is higher. This finding is in line with those of which indicated that father's education level of the adolescents who have a tendency to violent behavior is lower than those of who have never perpetrated any violence (Yıldırım, 2007; Kaya-Sarıkaya, 2013). This finding might be associated with domestic violence and the process of role modeling. Supposing that, as the education level decreases, domestic violence and the tendency of violence increases as well; boys who witness male domestic violence in their family might model their fathers and through this modeling they reflect this tendency to their relationships in adulthood. Nevertheless, further studies are needed to support these judgments. Finally, attitudes towards male psychological dating violence and female physical and psychological dating violence do not significantly differentiate according o father's education level.

Findings showed that increasing number of sibling increases the level of attitudes towards male physical and psychological dating violence. There is a significant difference between having 1, 2, 3 siblings and 4 siblings. Put differently, the tendency of physical and psychological dating violence for males, who have 4 or more siblings, are supposed to increase. There seems to be no study which can be compared with this result. However, having illiterate parents and so many numbers of siblings might lead to a competition in family and this may affect the dating relations.

Taken all together, the attitude responses of students who are attending social science teaching department, have parents with low level of education and have 4 and more numbers of siblings towards dating violence are higher. As for females, while having an illiterate mother does not affect the attitudes towards physical violence, there is no difference in the attitudes of college students according to father's education level and number of sibling. Students attending social science teaching department have higher level of attitude scores towards dating violence.

In light of the findings, it seems to be important to develop psycho-education programs in psychological counseling and guidance centers at universities as a professional support to prevent dating violence among college students. Furthermore, considering that dating relations can be seen in high school, and even in secondary school periods, students are required to be informed about healthy dating relationships in school psychological counseling and guidance services. This study has focused on whether dating violence differs according to come demographic variables. Further studies might be conducted to understand the dynamics which leads to dating violence and the results of this violence in order to obtain a more holistic picture. Moreover, the study group consists of college students. Similar studies might be conducted in different age groups considering that dating relations can occur in all periods of life.

REFERENCES

Ackard, D. M., & Neumark-Sztainer, D. (2002). Date violence and date rape among adolescents: Associations with disordered eating behaviors and psychological health. *Child abuse & neglect*, *26*(5), 455-473.

Aktaş, A. (2006). *Aile içi şiddet* (1. Basım b.). İstanbul: Elma Yayınevi.

Alper, D. (2007). *Psikolojik danışmanlar ve sınıf öğretmenlerinin duygusal zekâ düzeyleri-iletişim ve empati becerilerinin karşılaştırılması.* (Yayınlanmamış yüksek lisans tezi). Dokuz Eylül Üniversitesi, İzmir.

Aluede, O., Imhonde, H., & Eguavoen, A. (2006). Academic, career and personal needs of Nigerian university students. *Journal of Instructional Psychology*, *33*(1), 50-58.

Aslan, D., Vefikuluçay, D., Zeyneloğlu, S., Erdost, T.& Temel, F. (2008). Ankara'da İki Hemşirelik Yüksekokulunun Birinci ve Dördüncü Sınıflarından Okuyan Öğrencilerinin Flört Şiddetine Maruz Kalma, Flört İlişkilerinde Şiddet Uygulama Durumlarının ve Bu Konudaki Görüşlerinin Saptanması Araştırması. *Kadın Sorunları Araştırma Merkezi, Hacettepe Üniversitesi*.

Birimoğlu, C. (2012). *Gaziantep üniversitesi eğitim fakültesi öğrencilerinin şiddete bakışları.* (Yayınlanmamış yüksek lisans tezi). Gaziantep Üniversitesi sağlık bilimleri enstitüsü, Gaziantep.

Budak, S. (2000). *Psikoloji sözlüğü.* Ankara: Bilim ve Sanat Yayınları.

Chen, J. (2012). *Romantic relationship patterns and quality across the first year of university*. (Unpublished Master Thesis). University of Alberta, Edmonton.

Dahlberg, L.& Krug, E. (1996). *Violence -A global public health problem.* Geneva: World Health Organization. WHO.

Duru, E. (2002). Öğretmen adaylarında empati-yardım etme eğilimi ilişkisi ve yardım etme eğiliminin bazı psikososyal değişkenler açısından incelenmesi. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi 12*, 21-36.

Ekinci, O. (2009). *Öğretmen adaylarının empatik ve eleştirel düşünme eğilimlerinin incelenmesi.* (Yayımlanmamış yüksek lisans tezi). Çukurova Üniversitesi, Sosyal Bilimler Enstitüsü, Adana.

Erikson, E. H.(1968). *Identity*: Youth and crisis. http://onlinelibrary. wiley.com/doi/10. 1002/bs.3830140209.

Foshee, V., Bauman, K., Linder, F., Rice, J.& Wilcher, R. (2007). Typologies of adolescent dating violence ıdent ifying typologies of adolescent dating violence perpetration. *Journal of Interpersonal Violence, 22*(5), 498-519.

Karagözoğlu, Ş., Kahve, E., Koç, Ö., & Adamişoğlu, D. (2008). Self esteem and assertiveness of final year Turkish university students. *Nurse Education Today*, *28*(5), 641-649.

Kaya-Sakarya, A. (2013). *Üniversitede öğrenim gören gençlerde flörtte şiddet*. (Yayınlanmamış yüksek lisans tezi). Necmettin Erbakan Üniversitesi, Eğitim Bilimleri Enstitüsü, Konya.

Kılınçer, A. S., & Dost, M. T. (2015). Üniversite Öğrencilerinin Romantik İlişkilerinde Algıladıkları İstismar. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, *5*(42).

Michaud, Y. (1991). *Şiddet*. (Cem Muhtaroğlu, Çev.). İstanbul: İletişim Yayınları.

Miller, E., Decker, M. R., Reed, E., Raj, A., Hathaway, J. E., & Silverman, J. G. (2007). Male partner pregnancy-promoting behaviors and adolescent partner violence: findings from a qualitative study with adolescent females. *Ambulatory Pediatrics*, *7*(5), 360-366.

O'Keefe, M. (1997). Predictors of dating violence among high school students. *Journal of Interpersonal Violence, 12(4)*, 546-568.

Offenhauer, P.& Buchalter, A. (2011). Teen dating violence: a literature review and annotated bibliography. United States: National Institute of Justice.

Pala, A. (2008). Öğretmen adaylarının empati kurma düzeyleri üzerine bir araştırma. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, *23*(23), 13-23.

Rickert, V. I., Wiemann, C. M., Vaughan, R. D., & White, J. W. (2004). Rates and risk factors for sexual violence among an ethnically diverse sample of adolescents. *Archives of Pediatrics & Adolescent Medicine*, *158*(12), 1132-1139.

Saraç, A., Hamamcı, Z., & Güçray, S. (2015). Üniversite öğrencilerinin romantik ilişki doyumunu yordaması. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, *5*(43), 69-81.

Sezer, Ö. (2008). The adaptation of acceptance of couple violence scale into Turkish: validity and reliability studies. *Journal of the Faculty of Education*, *9*(16), 1-15.

Swart, L., Seedat, M., Stevens, G. & Ricardo, I. (2002). Violence in adolescents' romantic relationships: findings from a survey amongst school-going youth in a South African community. *Journal of Adolescence, 25*, 385–395.

Yavuz, N. (2009). *İlköğretim 7 ve 8. sınıf öğrencilerinin şiddet eğilimlerinin çeşitli değişkenler açısından incelenmesi (Kocaeli ili Gebze ilçesi örneği).* (Yayınlanmamış yüksek lisans tezi). Yeditepe Üniversitesi Sosyal Bilimler Enstitüsü. İstanbul.

Yıldırım, M. (2007). *Şiddete başvuran ve başvurmayan ergenlerin yalnızlık düzeyleri ve akran baskısı düzeyleri açısından incelenmesi.* (Yayınlanmamış yüksek lisans tezi), Çukurova Üniversitesi, Adana.

Yumuşak, A. (2013). *Üniversite öğrencilerinin flört şiddetine yönelik tutumları, toplumsal cinsiyetçilik ve narsistik kişilik özellikleri arasındaki ilişki.* (Yayımlanmamış yüksek lisans tezi). Gaziosmanpaşa Üniversitesi, Tokat.

Yumuşak, A. ve Şahin, R. (2014). Flörtte şiddete yönelik tutum ölçeklerinin güvenirlik ve geçerlik çalışması. *Elektronik Sosyal Bilimler Dergisi*, *49*(49), 233-252.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

INVESTIGATION OF THE PERCEPTIONS OF SELF-EFFICACY OF SECONDARY SCHOOL STUDENTS WITH DIFFERENT LEVELS OF FRIEND, FAMILY AND TEACHER SOCIAL SUPPORT

Tuncay ORAL
Pamukkale Üniversitesi, Denizli, Turkey
toral@pau.edu.tr

ABSTRACT
The purpose of this study is to divide the students whose friend, family, and teacher support levels are determined into three groups as students with low, moderate, and high support level and then to investigate whether there is a significant difference in their self-efficacy scores based on their level of social support. For this purpose, Social Support Rating Scale and Perception of Self-Efficacy Scale for Children and Adolescents were applied to a total of 283 secondary school students, including 148 girls and 135 boys. According to the results of the one-way analysis of variance (One-Way ANOVA) carried out, the self-efficacy scores of the students with a high level of friend, family, and teacher social support were found to be significantly higher than those of the students who had moderate and low levels of friend, family, and teacher social support.

INTRODUCTION

Industrialization and requirements of modern life have affected social life in many aspects. Large families, relatives, close neighbourly relations, and intimacy, which were once among the powerful sources of social support, have been replaced by core families, poor family relations, relations of neighbours that do not know each other, and internet friendships (Bingöl, 2013). According to the widely accepted definition, social support is the perception that helps people believe that they are loved, valued, cared and that they are members of a social network where there are mutual obligations (Cobb, 1976). Social support is a very broad concept that includes providing emotional support besides giving information and advice (Duru, 2008). Kef (1997) divides social support into two, as provided social support and perceived social support. Perceived social support is the cognitive perception and subjective evaluation of an individual with respect to the fact that the individual has reliable bonds with other individuals and will be provided with the social support. Provided social support is defined as the amount of support obtained from the sources of social support in a particular process of time (Kef, 1997).

The interaction with other individuals and the support received from them since the first years of adolescence, a period which is challenging and requires struggle, can be quite effective in finding solutions for problems, establishing healthy relationships for the future, and being able to take appropriate decisions (Dülger, 2009). According to Yıldırım (1997), students' most important sources of support in the early adolescence include family, friends, and teachers. In a study by Robbins and Tanck (1995), which was conducted with adolescent students and which supported Yıldırım (1997), it was seen that in order to cope with difficulties, students primarily preferred their families for social support. The evaluations of mothers and fathers regarding their children shape children's perceptions of themselves and their relationship with their families. Love, balanced care, nutrition, and support provided by mother and father reinforce children's sense of basic trust (Kulaksızoğlu, 2008). It is observed that children growing up in families where positive communication whose interpersonal boundaries are well defined exists are more successful in dealing with problems and develop a positive attitude towards school; however children who grow up in unhappy families which have negative communication are observed to develop introvert and dependent personality characteristics (Erol, 1992). On the other hand, the fact that both mothers and fathers have been in the business world in recent years is reducing the impact of family on children. Although students' most effective source of social support is families, they spend a large portion of their time apart from them. In this case, sources of social support aside from family become important (Pavri and Monda-Amaya, 2001). Adolescents spending a large part of their time with their friends or teachers at school or at social and cultural places acquire new behaviours while playing together, studying, and listening to their teacher in the class and outside the classroom (Fidan, 1996). Social support received from a friend since the early adolescence is an important factor in an adolescent's interacting with friends and socializing through friend relations (Aydın, 2005). During this period, adolescents have independence attempts with their peers and make an effort to comply with the values of their peers. The values, behaviour patterns and habits of the peer group are very important for adolescents (Çakır, 1993). Although friend relationships and group members change over time, feeling a sense of belonging to the group is an important factor in reducing negative emotions and depression (Newman, Newman, Griffen, O'Connor and Spas, 2007). Schools, which give adolescents an opportunity to be with their friends and are acknowledged as a social environment, are also important elements of the educational process (Yavuzer, 1992). Teachers are the most important elements of the educational process. Students can learn the values and cultural characteristics of the society in which they live with the help of

 Copyright © International Conference on New Horizons in Education Conference (INTE)

teachers (Balkıs, 2006). Since the first years of adolescence, individuals may feel the need to be recognized and understood by the teacher. Therefore, the social support provided by teachers is important. In addition, teachers should always keep in mind that every student is a member of a family, and a social circle; and also they must try to provide the necessary social support by establishing positive communication with the students who they observed could not receive the necessary social support from these groups (Cırık, 2010). It is possible to encounter some difficulty as a result of adverse environmental conditions in the processes of personality development and socialization during the first years of adolescence. If adolescents cannot receive the necessary social support from their family, friends and teachers, which are the most important sources of support in this process (Yıldırım, 1997), they may not develop the skills necessary for adult life, may be insufficient to cope with stress, and may have low self-confidence (Geçtan, 2003). According to Bandura (1997), the concept of self-efficacy, which takes its source from verbal/social support, is a concept with clearer borders compared to self-confidence, and is defined as one's belief about the competences he/she has, is an important concept in childhood and adolescence. If individuals have not developed self-assessment skills, they are usually dependent on getting feedback about themselves from others. In this case, verbal/social support may increase self-efficacy or can mobilize the sources of self-efficacy (Britner and Pajares, 2006). Self-efficacy has three sources other than verbal/social support. These include past experiences, indirect observation and psychological state. Past experiences are defined as students' commenting on activities after they are involved in tasks and activities and using these comments to develop their beliefs about their capacity to take part in future activities. If the comments resulting from these experiences are positive, the perception of self-efficacy increases in positive way as well (Britner and Pajares, 2006). Indirect observation is described as individuals' gaining self-efficacy by observing others' actions and taking them as a model. Individuals can use the information they obtained from them to evaluate the probability of success for themselves in similar situations, and evaluate their performance in comparison with other students (Britner and Pajares, 2006; Usher and Pajares, 2008). Audio and aural models as well as live models can be used for indirect observations (Alderman, 2004). These models are especially effective when individuals cannot be sure about their abilities and do not have enough experience of the existing situation (Usher and Pajares, 2008). Individuals' being aware of their psychological or emotional states affect their perceptions of talent in various tasks indirectly, which is called the source of psychological state (Palmer, 2011).

Considering that verbal/social support is a concept which can enhance self-efficacy or mobilize other self-efficacy sources (Britner and Pajares, 2006), it is important to investigate whether there is a difference in self-efficacy levels of students with different social support levels. When the literature is examined, it can be seen that there are no scientific studies that investigate the self-efficacy levels of secondary school students with different levels of social support. In this respect, it is believed that the results obtained from this study will have significant contributions to the literature. The variables addressed in this study are extremely important concepts for the psychological and social lives of secondary school students that constitute a major part of the society. In this regard, it can be stated that the importance of the results obtained from the present research have increased more. To sum up, the purpose of this study is to divide the students whose friend, family, and teacher support levels are identified into three groups as students with low, moderate, and high support levels and then to investigate whether there is a significant difference in their perceptions of self-efficacy based on their level of social support.

THE STUDY

Study group

The data of the study was obtained from a total of 283 secondary school students, including 148 girls (52.3%) and 135 boys (47.7%) who were involved in the study through simple random sampling method in the 2014-2015 academic year in the province of Denizli. In the study group, a total of 97 students (34.3%) studied at the sixth grade, 103 students (36.4%) studied at the seventh grade, and 83 students (29.3%) were at the eighth grade.

Data Collection Tools

Social Support Rating Scale for Children and Adolescents

The scale developed by Dubow and Ullman (1989) measured how the child evaluates himself/herself as someone loved, cared, valued and accepted within his/her social network. In this context, children's perceptions of social support they received from their friends, family, and teachers were evaluated (cited in Gökler, 2007). The scale adapted to Turkish by Gökler (2007) was 5-point Likert-type and consisted of 41 items. The scale can be applied to all students, from the primary school third grade students to the secondary school eighth grade students. As a result of the factor analysis performed, it was determined that the scale had friend, family, and teacher sub-dimensions. The internal consistency coefficients obtained for the friend, family, and teacher sub-dimensions of the scale were calculated as .89, .86, and .88 respectively. The Cronbach Alpha internal consistency coefficient

for the whole scale was .93 (Gökler, 2007). As a result of the analysis conducted within the context of this research, the internal consistency coefficients obtained for the sub-dimensions of friend, family, and teacher were found to be 89, .86 and .88 respectively; and the internal consistency coefficient was found to be .93 for the whole scale.

Perception of Self-efficacy Scale

"Perception of Self-efficacy Scale" developed by Pintrinch and De Groot (1990) and adapted to Turkish by Üredi (2005) was implemented in the study in order to collect data about students' perceptions of self-efficacy. This scale consisted of nine items and was a one-dimensional scale. The scale was a 7-point likert type scale. The minimum score one could get from the scale was 9 and the maximum score was 63. Cronbach's alpha internal consistency reliability coefficient was .92. This result indicates that the reliability of the test was relatively high (Üredi, 2005). In the analysis conducted with the data collected within the scope of this study, the internal consistency was determined to be .91.

Data Analysis

In line with the purpose of the study, the mean scores and standard deviations for all students' friend, family, and teacher social support scores were calculated to be able to divide the students into three categories as low, moderate, and high based on their friend, family, and teacher support levels. According to the statistical analysis performed, the mean score for the friend social support level of all the students participating in the study was found to be 74.54 and its standard deviation was detected to be 12.73. In this case, the scores below 61.81 were called low level of friend social support, the scores between 61.81 and 87.27 were called moderate level of friend social support, and the scores above 87,27 were called high level of friend social support. According to another statistical analysis carried out, the mean score for the family social support level of all the participants in the study was found to be 51.39 and its standard deviation was determined to be 8.41. In this case, the scores below 42.98 were called low level of family social support, the scores between 43.98 and 59.80 were called moderate level of family social support, and the scores above the 59,80 were called high level of family social support. Finally, according to the statistical analysis conducted, the mean score for the teacher social support level of all the students participating in the study was found to be 39.07 and its standard deviation was identified to be 7,38. In this case, the scores below 31.69 were called low level of teacher social support, the scores between 31,69 and 46,45 were called moderate level of teacher social support, and the scores above the 46,45 were called high level of teacher social support. After that, one-way analysis of variance (One-Way ANOVA) technique was used in order to find out whether the perceived self-efficacy differed significantly based on friend, family and teacher social support level. The analyses were tested via computers by using SPSS 16.0 software package.

FINDINGS

Descriptive statistics for the secondary school students' perception of self-efficacy scores based on the friend social support level variable are presented in Table 1.

Table 1. Descriptive Statistics for the Perception of Self-Efficacy Scores based on the level of Friend Social Support

	Friend Social Support Levels	N	$\bar{X}$	Sd
Perception of Self-Efficacy	Low	49	45,65	10,71
	Moderate	185	51,28	8,80
	High	49	57,00	5,71
	Total	283	51,29	9,32

The findings of the one-way analysis of variance performed in order to determine whether the perception of self-efficacy scores of the secondary school students differed significantly based on the friend social support level variable are presented in Table 2.

Table 2. One-Way Analysis of Variance Results related to Secondary School Students' Perception of Self-Efficacy based on the Friend Social Support Level Variable

	Source of Variance	Sd.	Sum of Squares	Mean Square	F	p
Perception of Self-Efficacy	Between groups	2	3154,546	1577,307	20,717	,000
	Within groups	280	21318,043	76,136		
	Total	282	24472,235			

 Copyright © International Conference on New Horizons in Education Conference (INTE)

When the results of the one-way analysis of variance in Table 2 were analyzed, a significant difference was detected in secondary school students' perception of self-efficacy based on the level of friend social support (F = 20.717, p <.01). According to the results of the Tukey test performed to find out the source of the difference related to the perception of self-efficacy are given in Table 3.

Table 3. Tukey Test Results for the Secondary School Students' Perception of Self-Efficacy Scores based on the Friend Social Support Level

Friend Social Support Levels	Low	Moderate	High
Low	-	,000	,000
Moderate	,000	-	,000
High	,000	,000	-

According to Tukey test results, the mean scores of the perception of self-efficacy of the students with a high level of friend social support (X=57,00) were found to be significantly higher than the mean scores of the students who had moderate level (X=51,28) and low level (X=45,65) of friend social support. In addition, the mean scores of the perception of self-efficacy of the students with a moderate level of friend social support (X=51,28) were identified to be significantly higher in comparison with the mean scores of the students who had low level of friend social support (X=45,65) (p<.01).

Descriptive statistics for the secondary school students' perception of self-efficacy scores based on the family social support level variable are illustrated in Table 4.

Table 4. Descriptive Statistics for the Perception of Self-Efficacy Scores based on the level of Family Social Support

	Family Social Support Levels	N	$\bar{X}$	Sd
Perception of Self-Efficacy	Low	45	45,29	10,29
	Moderate	186	51,35	8,89
	High	52	56,27	6,69
	Total	283	51,29	9,32

The results of the one-way analysis of variance performed in order to determine whether the perception of self-efficacy scores of the secondary school students differed significantly based on the family social support level variable are presented in Table 5.

Table 5. One-Way Analysis of Variance Results related to Secondary School Students' Perception of Self-Efficacy based on the Family Social Support Level Variable

	Source of Variance	Sd.	Sum of Squares	Mean Square	F	p
Perception of Self-Efficacy	Between groups	2	2910,601	1455,301	18,898	,000
	Within groups	280	21562,056	77,007		
	Total	282	24472,657			

When the results of the one-way analysis of variance in Table 5 were examined, a significant difference was revealed in secondary school students' perception of self-efficacy based on the level of family social support (F = 18.898, p <.01). According to the results of the Tukey test performed to find out the source of the difference related to the perception of self-efficacy are demonstrated in Table 6.

Table 6. Tukey Test Results for the Secondary School Students' Perception of Self-efficacy Scores based on the Family Social Support Level

Family Social Support Levels	Low	Moderate	High
Low	-	,000	,000
Moderate	,000	-	,001
High	,000	,001	-

According to Tukey test results, the mean scores of the perception of self-efficacy of the students with a high level of family social support (X=56,27) were found to be significantly higher than the mean scores of the students who had moderate level (X=51,35) and low level (X=45,29) of family social support. In addition, the

 Copyright © International Conference on New Horizons in Education Conference (INTE)

mean scores of the perception of self-efficacy of the students with a moderate level of family social support (X=51,35) were found to be significantly higher compared to the mean scores of the students who had low level (X=45,29) of family social support (p <.01).

Descriptive statistics for the secondary school students' perception of self-efficacy scores based on the teacher social support level variable are demonstrated in Table 7.

Table 7. Descriptive Statistics for the Perception of Self-Efficacy Scores based on the level of Teacher Social Support

	Teacher Social Support Levels	N	$\bar{X}$	Sd
Perception of Self-Efficacy	Low	45	45,48	10,84
	Moderate	186	50,66	8,70
	High	54	58,32	4,75
	Total	283	51,29	9,32

The results of the one-way analysis of variance performed in order to determine whether the perception of self-efficacy scores of the secondary school students differed significantly based on the teacher social support level variable are presented in Table 8.

Table 8. One-Way Analysis of Variance Results related to Secondary School Students' Perception of Self-Efficacy based on the Teacher Social Support Level Variable

	Source of Variance	Sd.	Sum of Squares	Mean Square	F	p
Perception of Self-Efficacy	Between groups	2	4264,380	2132,190	29,543	,000
	Within groups	280	20208,277	72,172		
	Total	282	24472,657			

When the results of the one-way analysis of variance in Table 8 were examined, a significant difference was revealed in secondary school students' perception of self-efficacy based on the level of teacher social support (F= 18,898, p<.01). According to the results of the Tukey test performed to find out the source of the difference related to the perception of self-efficacy are given in Table 9.

Table 9. Tukey Test Results for the Secondary School Students' Perception of Self-Efficacy Scores based on the Teacher Social Support Level

Teacher Social Support Levels	Low	Moderate	High
Low	-	,001	,000
Moderate	,001	-	,000
High	,000	,000	-

According to Tukey test results, the mean scores of the perception of self-efficacy of the students with a high level of teacher social support (X=58,31) were found to be significantly higher than the mean scores of the students who had moderate level (X=50,66) and low level (X=45,47) of teacher social support. In addition, the mean scores of the perception of self-efficacy of the students with a moderate level of teacher social support (X=50,66) were identified to be significantly higher than the mean scores of the students who had low level (X=45,47) of teacher social support (p <.01).

CONCLUSIONS

According to the results of this study, it was revealed that the self-efficacy scores of the students with a high level of friend, family, and teacher social support were significantly higher than the self-efficacy scores of the students with moderate and low levels of friend, family, and teacher social support.

During the early adolescence, one can encounter with some difficulty in personality development and socialization processes due to the adverse environmental conditions. In this process, if adolescents cannot receive the necessary social support from family, friends and teachers which are the most important sources of support (Yıldırım, 1997), they may not develop the skills necessary for adult life, may be incompetent to cope with stress, and may have low self-confidence (Geçtan, 2003). According to Bandura (1997), the concept of self-efficacy taking its sources from verbal/social support and having clearer boundaries compared to self-confidence is also an important concept in childhood and adolescence (Bandura, 1997). If individuals have not developed

 Copyright © International Conference on New Horizons in Education Conference (INTE)

their own assessment skills, they are often dependent on others to get feedback about themselves. In this case, verbal/social support may increase self-efficacy or evoke other sources of self-efficacy such as indirect observation and psychological status (Britner and Pajares, 2006). Considering that verbal/social support is a concept that can enhance self-efficacy or mobilize other sources of self-efficacy (Britner and Pajares, 2006) as stated in the literature, it is seen that research results are consistent with the literature. In addition, according to research results it was revealed that the self-efficacy scores of the students with a moderate level of friend, family, and teacher social support were significantly higher than the self-efficacy scores of the students who had a low level of friend, family, and teacher social support. This result indicates that the more students are provided with social support by friends, family and teachers, the higher level of self-efficacy they have.

In conclusion, social support was found to be an important variable for self-efficacy in secondary school students. Therefore, it could be beneficial for friends, families and teachers, who are the ones to provide social support to students, to be informed by experts in the field about the importance of social support for self-efficacy. Also conducting this study in different cities or regions from the city or the region where this study was carried out may increase the possibility of generalizing the results.

REFERENCES

Alderman, M. K. (2004). *Motivation for achievement*. New Jersey: Lawrence Erlbaum Associates.

Aydın, B. (2005). *Çocuk ve ergen psikolojisi (2. Baskı).* Ankara: Nobel Yayınevi.

Balkıs, M. (2006). *Öğretmen Adaylarının Davranışlarındaki Erteleme Eğilimlerinin Düşünme ve Karar Verme Tarzları ile İlişkisinin İncelenmesi.* Yayımlanmamış doktora tezi, Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü, İzmir.

Bandura, A. (1997). *Self efficacy: The exercise of control*. New York: W.H. Freeman & Company.

Bingöl, N. (2013). *Lise öğrencilerinin siber zorba ve mağdur olma davranışları ile yakın sosyal çevrelerinden algıladıkları sosyal destek düzeyleri arasındaki ilişkinin incelenmesi.* Yayınlanmamış yüksek lisans tezi. Fatih Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.

Britner, S. L., & Pajares, F. (2006). Sources of science self- eficacy beliefs of middle school students. *Journal of Reserach in Science Teaching, 43*(5), 485-499.

Cırık, İ. (2010). *İlköğretim 5., 6., 7. ve 8. Sınıf Öğrencilerinin Algıladıkları Sosyal Destek Düzeylerinin İncelenmesi.* Yayımlanmamış doktora tezi, Marmara Üniversitesi, Eğitim Bilimleri Enstitüsü, İstanbul.

Cobb, S. (1976). Social Support as a Moderator of Life Stres. *Psychosomatic Medicine*, *38*, 300-314.

Çakır, Y. (1993). *12-22 Yaş Grubundaki Gençlerde Çok Yönlü Algılanan Sosyal Destek Ölçeğinin Güvenirlik Geçerlik Araştırması.* Yayımlanmamış yüksek lisans tezi, Ankara Üniversitesi, Ankara.

Duru, E. (2008). Üniversiteye uyum sürecinde yalnızlığı yordamada sosyal destek ve sosyal bağlılığın doğrudan ve dolaylı rolleri. *Türk Psikolojik Danışma ve Rehberlik Dergisi, 3(*29*),* 13-24.

Dülger, Ö. (2009). *Ergenlerde algılanan sosyal destek ile karar verme davranışları arasındaki ilişki.* Yayınlanmamış yüksek lisans tezi, Marmara Üniversitesi, Eğitim Bilimleri Enstitüsü, İstanbul.

Erol, M. (1992). *Geniş Aileden Çekirdek Aileye Geçiş Sürecinde Aile İçi İlişkilerde Meydana Gelen Değişmelerin Aile Üyeleri Üzerindeki Etkileri.* Yayınlanmamış doktora tezi, Hacettepe Üniversitesi, Ankara.

Fidan, N. (1996). *Eğitim psikolojisi: Okulda öğrenme ve öğretme.* Ankara: Alkım Yayınevi.

Geçtan, E. (2003). *Psikodinamik psikiyatri ve normaldışı davranışlar.* İstanbul: Metis Yayınları.

Gökler, I. (2007). Çocuk ve ergenler için sosyal destek değerlendirme ölçeği Türkçe formunun uyarlama çalışması: Faktör yapısı, geçerlik ve güvenirliği. *Çocuk ve Gençlik Ruh Sağlığı Dergisi, 14*(2), 90-99.

Kef, S. (1997). The personal networks and social supports of blind and visually impaired adolescents. *Journal of Visual Impairment and Blindness*, *91*(2), 236–244.

Kulaksızoğlu, A. (2008). *Ergenlik psikolojisi* (10. baskı). İstanbul: Remzi Kitabevi.

Newman, B., Newman, P., Griffen, S., O'Connor, K. & Spas, J. (2007). The relationship of social support to depressive symptoms during the transition to high school. *Adolescence,* 42, 441-460.

Palmer, D. (2011). Sources of efficacy information in an inservice program for elementary teachers. *Science Education*, *95*, 577–600.

Pavri, S. & Monda-Amaya, L. (2001). Social support in inclusive schools: Student and teacher perspectives. *Exceptional Children*, *67*(3), 391-411.

Pintrich, P. R., & De Groot, E. (1990). Motivational and self regulated learning components of classroom academic performance. *Journal of Educational Psychology*, *82*(1), 33-40.

Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of Educational Research*, *78*, 751-796.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Üredi, I. (2005). *Algılanan anne baba tutumlarının ilköğretim 8. sınıf* öğrencilerinin *öz-düzenleyici öğrenme stratejileri ve motivasyonel inançları üzerindeki etkisi*. Yayımlanmamış doktora tezi. İstanbul: Yıldız Teknik Üniversitesi, Sosyal Bilimler Enstitüsü.

Yavuzer, H. (1992). *Çocuk psikolojisi.* İstanbul: Remzi Kitabevi.

Yıldırım, İ. (1997). Algılanan sosyal destek ölçeğinin geliştirilmesi güvenirliği ve geçerliği. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 13,* 81-87.

INVESTIGATION OF THE READING HABITS AND INTERESTS OF THE ELT STUDENTS WHO STUDY AT ATATÜRK UNIVERSITY: A CASE STUDY

Furkan CANBAY
Ataturk University, Turkey
furkancanbay102325@gmail.com

ABSTRACT
Purpose: The purpose of the study is to investigate the reading habits and interests of the ELT students who study at Atatürk University.
Methodology: The research was a case study which was carried out qualitatively. The sample of the study was formed by 15 students who were willing to participate in the research. The data were gathered between January 29 and March 30, 2016 at Atatürk University ELT Department. In-depth interview method was used for data collection. The interviews took almost 30 minutes for each participant.
Findings: Most of the participants appreciate the importance of reading habit. They believe that reading is a habit which should be started at young ages. They mainly prefer the books they bought because they can draw or take notes on their own books. They like to read, however they cannot find enough time for reading. They notice the content of the reading material while choosing it.
Conclusion: These findings reveal that the participants have an interest in reading, but suffer from some troubles.
Key Words: reading, reading habit, teacher candidates, ELT students,

INTRODUCTION

Reading is a significant activity which influences intellectual development of people and has an impact on critical thinking, gaining different perspectives and comprehending oneself, other people and events which can be come across (Karadeniz and Can, 2015). Kırmızı et al. (2014) express that we are living in the information age which requires people to read, think, criticize, search, apply the knowledge and transfer it to others. They also say that reading is a skill which is benefitted from in both first and second language education. According to Odabaş et al. (2008), reading continually and regularly, which simply means reading habit, can be considered as the base of lifelong learning. Erdamar and Demirel (2009) define reading habit as the act of reading which emerges due to regarding reading as a requirement and is performed continually and regularly. According to Erdem (2015), gaining reading habit and maintaining it lifelong is an educational objective. Ilgar and Ilgar (2012) also put forward that reading habit is useful due to its contribution to reading comprehension, problem solving and critical thinking. They emphasize the significance of reading habit for the students of educational faculty since they will educate the upcoming generations. Yusof (2010) clarifies the importance of reading in a good way by approaching the issue from educational perspective. He says that people who have reading habit constitute a successful community. They may generate quality manpower which can be improved much in the future. Kırmızı et al. (2014) put forward that reading habit can be seen as an important subject in understanding the real condition of teacher training. Therefore, investigating the reading habits and interests of teacher candidates can make contribution to education of English language teachers.

The Purpose of Study

The aim of the study is to investigate the reading habits of the ELT students who study at Atatürk University.
In line with this purpose, answers were searched for the research questions below:

1. What are the views of the students towards reading habit and importance of gaining it?
2. How much time do the students spend time for reading?
3. What are the reading sources that the students usually use?
4. What are the factors that motive or impede students from reading?
5. What are the kinds of books or topics that the students especially like or dislike?

METHODOLOGY

The research was a case study which was carried out qualitatively. The sample of the study included 15 students who were willing to participate in the research. The data were gathered between January 29 and March 30, 2016 at Atatürk University ELT Department. In-depth interview method was used for data collection. The interviews took almost 30 minutes on average for each participant. The interviews were recorded by the researcher and they were turned into text for the evaluation of data. Before coding the data, an integrative point of view was tried to emerge by

 Copyright © International Conference on New Horizons in Education Conference (INTE)

reading every sentence. Content analysis method was used for the data analysis. In line with the purpose of the study, 5 themes were identified for the research and examined in the findings section.

FINDINGS

Theme 1. Views about reading habit and its importance

Most of the participants appreciate the importance of reading habit. They regard it as the basis of reaching information. They claim that it is beneficial for educational and developmental purposes as it facilitates learning, provides personal development, improves critical thinking, helps people gain different perspectives, presents a wide range of linguistic items, affects attitudes of people and is beneficial for teachers. It can even contribute to socialization of individuals by increasing their self-confidence. They believe that reading is a habit which should be started at young ages. Otherwise it may be too late for people to enjoy reading.

Student 1: *"I think reading habit should be gained at young ages. Because I believe formation of all habits in childhood is important. I think having reading habit is vital since in fact it is perhaps the easiest way of reaching information."*

Student 4: *"According to me, it is a habit which everybody should have at young ages. Because, a book we read may cause many changes for us. I think it mostly leads to positive changes. So, everybody should read book. It is important as people can develop themselves by reading."*

Student 9: *"In my opinion, reading habit is significant. Because I think it makes contributions to both learning and teaching of people. I think everybody should read books, journals and scientific publications. It broadens people's horizons and improves their vocabulary knowledge. It increases education levels and helps people change their points of views."*

Theme-2. The time spent for reading habit

It was found out that the students have the opportunity of reading almost 9 hours per week on average.

Student 1: *"I certainly try to read 1 hour a day at least. I can read 1 hour during school time. Thus, I can read 7 hours a week in school time and in my spare time it can increase to 10 hours a week."*

Student 12: *"As I am a senior student, I cannot spare much time for reading. But, in my leisure time I can devote 7 hours a week. I cannot allocate much time for reading due to heavy course load."*

Student 15: *"I spare 4 hours at least for reading. Because, the tasks and presentations which were given at school require that."*

Theme-3. The reading sources that the students usually use

The sources which they use for reading are the printed books which they bought or took from libraries and internet. They mainly choose the books they bought because they can draw or take notes on their own books. They also prefer books from libraries because there are a large number of options. The reason why they favor printed books over internet is that they want to feel the book and internet can harm their eyes and have deceptive information.

Student1: *"Generally I prefer buying book. In other words, I like printed materials. I prefer possessing the books rather than getting them from the library. Reading from a paper is easier just because in my opinion, reading from a screen on the internet is harder. I think both following the sentences and high quantity of light are tiring."*

Student 4: *"I benefit from the books from the library. I do not prefer reading on the internet as it does not give the sense of reading a book really. In my opinion, feeling the book is nicer. Internet does not make me feel as if I am reading a book actually."*

Student 7: *"I sometimes get books from the library, but usually buy my own books I dislike internet. Because printed books give more comfort. I can draw the pieces which I like on the book and take notes. However, the internet leads to eye strain. It does not arouse a reading desire, but printed books are better. I can draw and take notes I like."*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Theme-4. Motivating and demotivating factors
The participants like to read, however they have difficulty in finding enough time for reading. They state that they have heavy course load, places for reading are insufficient and book prices can be high. They also express that the attractiveness of reading material, the idea of self-development, their learning desire and advices of instructors motivate them. Spending time on the phone and internet, and insufficiency of the reading places prevent them from reading.

Student 7: *"If my favorite instructor advices, I think I should definitely read that book. If the book is important for me and I think it will be beneficial for me, this motivates me. The negative opinions about a book demotivate me. Noisy environments also impede me to read. Otherwise, I can read in suitable conditions."*

Student 12: "*Attractiveness of the material motivates me. Course loud and spending much time on the internet are the factors which prevent me from reading."*

Student 14: *"Demotivating factors are telephone, internet and computer. These factors constrain me from reading. Normally I read much, but I cannot read because of them. When it comes to the motivating factors, I read the book if it has a flowing content."*

Theme 5. The kinds of books or topics that the students especially like or dislike
They mostly dislike the books which deal with unreal events and have a boring content. They fancy the books which include adventurous and real-like events and academic materials which allows personal and critical development.

Student 1: "*I dislike science fiction and fantastic books. Because they do not attract me as they are away from reality. I like the books dealing with personal development. I show interest to the books which explain improvement of people."*

Student 7: *"I generally like reading novels. I do not like reading historical books. I find such kind of books boring. The events which are daily and possible to happen appeal me much."*

Student 11: *"There is not a specific kind of book which takes my interest. But if there is a topic which arouses my interest, I can read it. My condition at that time determines these topics."*

DISCUSSION
All of the participants have a positive attitude towards reading and admit the significance of reading habit. They regard it as a useful habit which needs to be started in childhood. They mostly emphasize its benefits by touching upon its educational, individual and social advantages. Considering their potential influence on their students, it is remarkable that the participants, who are the educators of the future, have awareness of reading habit. In line with the current study, Roca and Rius (2015) deal with the importance of reading in society and education. They also talk about reading socialization, which provides readers with the sense of being a part of a group, regarding the positive sides of reading. Karadeniz and Can (2015) claim that reading habit is a factor which increases critical thinking. Yusof (2010) mentions about the influence of parents on the formation of reading habit. In contrast with this study, Odabaş et al. (2008) say that reading habit can be formed later ages.

The study reveals that the participants can read nearly 9 hours a week on average. This may be acceptable, but as the participants are university students, it can be expected them to have a high intellectual capacity and read more. Generally, the participants put the blame on extreme use of internet and computer, their heavy course loads and school tasks given them regarding their average reading time. Similarly, Karadeniz and Can (2015) regard school tasks and internet as factors which decrease reading time. Odabaş et al. (2008) state that students read little as they waste their time by using technological devices unnecessarily. They also claim that work load and economic reasons prevent students from reading.

The participants prefer printed materials rather than technological items which they regard them as potentially harmful for their eyes and deceptive. They value feeling the book. They also tend to use the materials which they own instead of obtaining from libraries. They put forward such kinds of materials offer them comfort in use. It seems that they prefer being free while reading. Likewise, Erdem (2015) claims that students choose reading books by

 Copyright © International Conference on New Horizons in Education Conference (INTE)

buying them. Odabaş et al. (2008) express that students do not enjoy utilizing libraries. On the other hand, some of the participants appreciate the books of libraries as they provide them with a number of options. Yusof (2010) claims that many students depend on libraries for using reading materials. In contrast with this study, Zorba (2013) says that internet is a tool which facilitates reaching reading materials.

In the study, it was found out that the participants have a desire of reading. However, they suffer from several problems which impede them to read such as inappropriate reading places, noisy environments and wasting their time on technological devices. Thus, it is possible to say that they complain about the conditions which break their concentration. On the other hand, their developmental ideas, suggestions of their instructors and content of the reading material can motivate them to read. Odabaş et al. (2008) say that watching TV, using computer and listening to music impede students to read. Erdem (2015) puts forward that school tasks and use of electronic devices demotivate students regarding reading. According to Yusof (2010), parents can play a role in reading motivation.

The study shows that the participants' choice of reading material is determined by content of the material. It can also be inferred from the interviews that age level is an effective factor in their preferences. Yusof (2010) mentions about reading experience at home as the effective factor in reading selections. Pehlivan, Serin and Serin (2010) consider gender and socio-economic level in reading interests of students.

CONCLUSION

In this study it was seen that all of the participants appreciate the value of having reading habit and the importance of starting to form reading habit at young ages by showing a great awareness towards it. Considering the significance of reading, they focus on benefits of it in terms of educational, individual and social aspects. They also claim that their reading time is influenced by several factors such as spending much time on the internet or mobile phones, heavy course load and the school tasks which they must fulfill. The participants prefer printed materials rather than internet. They believe that reading on the screen may be unhealthy for their eyes. They also suffer from a feeling of insecurity towards the knowledge on the internet. They believe they can be misleading for them. They attribute more importance to possessing the reading materials than borrowing them from libraries. They are motivated to read with their ideas of self-development, content of a reading material and advices of their instructors. On the other hand, their motivation to read decreases with unsuitable reading places, the noise around them and technological devices. The content of the reading material is the most influential factor in choosing what they will read.

In line with the finding of this study, it is possible to make several suggestions. For instance, people should be encouraged to gain reading habit at young ages. The use of electronic devices inside and outside the classrooms should be regulated. Students should be provided sufficient and more comfortable reading places. Reading may be included more in courses and school tasks. The instructors may guide their students to reliable sites on the internet to protect them from deceptive sources.

REFERENCES

Erdamar, G. K. and Demirel, H. (2009). The library use habits of student teachers, *Procedia Social and Behavioral Sciences*, 1: (pp.2233–2240).

Erdem, A. (2015). A research on reading habits of university students: (Sample of Ankara University and Erciyes University), *Procedia - Social and Behavioral Sciences,* 174: (pp.3983–3990).

Ilgar, L. and Ilgar, S. (2012). An Investigation of the Relationship between the Teacher Candidates' Internet Usage and Their Habits of Reading, *Procedia - Social and Behavioral Sciences,* 46: (pp.3220–3224).

Karadeniz, A. and Can, R. (2015). A research on book reading habits and media literacy of students at the faculty of education, *Procedia - Social and Behavioral Sciences*. 174: (pp.4058–4067).

Kırmızı, F. S., Akkaya, N., Bıçak,E. and İşçi,C. (2014). Teacher Candidates' Attitudes Towards Reading Habit (Case of Dokuz Eylul and Pamukkale Universities), *Procedia - Social and Behavioral Sciences,* 116: (pp.127–131).

Odabaş, H., Odabaş, Z. Y. and Polat, C. (2008). Üniversite Öğrencilerinin Okuma Alışkanlığı: Ankara Üniversitesi Örneği, *Bilgi Dünyası*, 9 (2): (pp.431-465).

Pehlivan, A., Serin, O. and Serin, N. B. (2010). Determining reading interests and habits of candidate teachers (TRNC Sample), Procedia Social and Behavioral Sciences 9: (pp.869–873).

Roca, J. B. and Rius N. I. (2015). A qualitative study based on the reading-life histories of future Teachers, *Procedia - Social and Behavioral Sciences,* 178: (pp.15–19).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Yusof, N. M. (2010). Influence of family factors on reading habits and interest among level 2 pupils in national primary schools in Malaysia, *Procedia Social and Behavioral Sciences*, 5: (pp.1160–1165).
Zorba, M. G. (2013). Prospective English Language Teachers' Views on Literature- Oriented Courses at Akdeniz University's ELT Department, *Procedia - Social and Behavioral Sciences,* 70: (pp.1911 – 1918).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

IT COMPETITION FROM THE STUDENTS' PERSPECTIVE: THEIR MOTIVATION AND ATTITUDES TOWARD SUCCESS

Nikolina BUBICA
Mokosica Elementary School, Croatia
nikolina.bubica@du.t-com.hr

Ivica BOLJAT
Natural Science Faculty, Split, Croatia
boljat@pmfst.hr

ABSTRACT
In the Republic of Croatia primary and secondary schools students compete in IT categories such as solving problems in programming, knowing fundamental Computer Science concepts or individual software project development. This research aims to explore different student's motivation to participate in IT competition and to plan and organize self-preparation for it. Impact of some factors like competitor's gender, category of competition, preparing strategy, general feeling of satisfaction and so on achieving success in this IT competition was explored. Preliminary data, among other, suggests that students consider their mentors (teachers), the most important factor in preparing for competition. Also, students do not consider that this competition could bring them some prestige in school or society, but they have some intrinsic motivation to participate in competition and use all available resources, human or material, to achieve success.

INTRODUCTION
Computer science (Informatics) is one of the elective subjects in elementary schools in the Republic of Croatia, therefore it has a smaller number of students involved in the teaching process. In the curriculum of the elementary school elective subject Computer Science problem solving with programming is represented approximately with 10-15% of the total content, which is not enough to achieve the level of knowledge that is necessary for success in the IT competition, which is called Infokup in Croatia. Elementary and secondary school students can compete in IT categories such as:

- Solving problems with programming using programming languages like Python, Logo, C, C++, Pascal…(categories Algorithms, Logo)
- Knowing fundamental Computer Science concepts (category CS Fundamentals)
- Individual software project development (category Software development)

Programming competition is organized in three groups: Logo programming for students aged 11 to 14, Algorithms in Python/Pascal/C/C++/ for students aged 11 to 14 and Algorithms in Python/Pascal/C/C++/ for students aged 15 to 18. CS Fundamentals is a category dealing with knowledge of the fundamental computer science concepts such as computer hardware, data organization, storage, presentation and management, networks and so. Software development is a category for one student or group of students who design and develop their own software project. More information on this competition could be found on the competition's website (http://infokup.hr, http://hsin.hr).

The specific research questions were:

Is there a difference when preparing for competition between boys and girls?
Is there a difference between competition categories competitors?
How many students are satisfied with results of competition?
Do students intend to compete in same categories in which they have competed up to now?
Are there any relations between computer science competition categories and students' competition in other topics?
Is playing computer games on regular basis one of the important features of Infokup competitors?

RELATED WORK
Many research papers are dealing with the students' motivation for learning computer science courses in particular initial programming. The results of these studies have suggested different motivation of students but also that students are coming with different previous knowledge of programming in the initial courses in computer science. Generally, competition and other boots are often studied for their ability to motivate students (Vivek Khera, 1993; Widmer C., 1998). The biggest challenge for teachers of computer science lies precisely in teaching a broad, diverse group of students who come with a variety of knowledge. For teacher it is very difficult

 Copyright © International Conference on New Horizons in Education Conference (INTE)

to find an appropriate level of difficulty of teaching content for all students. If the level of presentation is too low some of the best students will be bored and will be demotivated to work.
Roberts (Roberts, 2000) conducted a very interesting study on strategies for encouraging individual achievement. In his research he used different strategies to maintain the enthusiasm of excellent students as well as provide additional/rewarding points for special invested effort. Other strategies included organizing volunteer programming contest. Research has shown that students who benefited from the existence of achievement awards, such as extra points on the course, often were able to accomplish amazing things. The existence of the competition had a positive impact on many students. Occupancy and energy of the competition influenced the students to the extent that all progressed faster. Here, as in any pedagogical technique, design of the contests and the prize as boost must also take into consideration the environment in which they are implemented. Some strategies are implemented better in smaller communities and schools, and some are better in major communities, but in both cases the implemented strategies have led to an increase in students' motivation for learning selected educational content.

Steele (Steele, 2010) examined the ability of voluntary programming competition to motivate students in adopting generally demanding content programming. At the very beginning, students showed great interest in the competition but a small number of students actually signed up for the competition. It precisely indicated the incompatibility of the lack of prizes in any form with the high demands of competition for students. From the teachers' perspective, the existence of competition during the course has become an extremely useful tool, especially for advanced students who often adopted learning materials before the end of the course. Voluntary programming competition, for such students proved to be a positive experience and became a regular thing.
Bowring (Bowring, 2008) suggests a new paradigm for high school programming competition that has changing and competitive philosophy but also the concept of the implementation of the competition. The new philosophy places emphasis on the quality of the process rather than the time limit for implementation. The quality of students' work is estimated in its technical and artistic quality. The technical quality answers to the question of how well made solution satisfies the request, and the artistic quality refers to the subjective evaluation of the code itself, its readability and documentation, and the readability of other parts such as the output file. The new paradigm of competition highlights the entertainment aspect of the competition through the creation of an infrastructure that promotes team competition.

The historical roots of the current paradigm of competition can be found in close association of computer science with mathematics. The existence of accurate and often unique solutions is characteristic for mathematics which pushes the contestants in the race to seek the correct answer. In contrast, software solution of a problem often isn't unique. Diversity of mathematical and software solutions embodies the record in the software life cycle. The life cycle software provides software solutions and implies that software solutions are an ongoing process. Students are taught how to meet the requirements, how to design a solution, and finally how to apply, test and troubleshoot, and eventually develop and maintain solutions.

Results of previous pilot study (Bubica, Mladenovic, & Boljat, 2014) showed that students with excellent school success invested more time to prepare for competition. Students with higher school success appreciated more working with their mentors than students with lower school success. Looking at the success from the gender perspective, girls are willing to invest more effort in preparation regardless of whether it is a stand-alone work or work with a mentor. Boys are more likely to participate in category Algorithms Basic next year (since 2014 this category has been changed to Algorithms Basic/Python/Pascal/C/C++, and since 2016 to Algorithms – Python/Pascal/C/C++). The research showed no other significant difference between genders. That study also dealt with the question of students' satisfaction of achieved success. Younger aged students expressed great satisfaction with the achieved success while final grade students expressed dissatisfaction with their accomplishment. It could be questioned if it was because younger students cultivated more collaborative learning style and older students cultivated more competitive model, according to Grasha Riechmann model (Hruska-Reichmann, S. & Grasha, A. F., 1982). Result showed that students valued the success in this competition. Although it was expected that the prize for achieved success, expressed through the getting bonus points upon enrollment in secondary school, should be significant factor for retaining interest for competition, results didn't confirm statistical relevance. Although it has been shown that students lost interest in the older grades, they were very confident in the selection of the competition category. If they decided to compete the next year, they would choose the same category. The claim proved to be statistically significant for both categories CS fundamentals and Algorithms.

THE STUDY

The basic idea of this study was to explore whether there is a correlation between success in this IT competition and factors such as competitor's gender, category of competition, different ways of preparing, general feeling of

 Copyright © International Conference on New Horizons in Education Conference (INTE)

satisfaction of achieved success, available human and material resources, playing games on regular basis and so on. The pilot study that was conducted earlier (Bubica, Mladenovic, & Boljat, 2014) on a sample of students who performed at the lowest (first) level of competition was a great help for planning this research.

RESEARCH METHOD

For the purpose of this research a two surveys were conducted among 85 elementary and 36 secondary school students (Figure 1, male=98, female=23) who participated in the regional or state IT competition during 2014. In order to gain their personal attitudes about the opinions, beliefs and behavior, students were given an online survey with the corresponding series of standardized questions. As a part of this study were collected data about attitudes and preparation modes of teachers who prepared students for the competition. These data were not subject of this investigation but will be the subject of future interest.

Research data were collected through online attitudes surveys which were created by one of the researchers, while data was collected by a student involved in this project. Each survey was composed of 21 questions and they differ in only two questions. Students filled questionnaire anonymously and voluntarily one month after the competition. This instrument was designed to investigate research questions. Chi-square test was used to compare groups of students. Chi-square test is non-parametric technique used for nominal data. All analyses were performed using PSPP 0.8.1.1.statistical software.

FINDINGS

Boys vs. girls

Previous studies of Computer Science Education (CSE), among other factors, often investigated the role of student's gender in achieving success at the end of computer-related courses and those studies haven't highlighted gender as a factor that is important for achieving it (Bubica & Boljat, 2014; Bubica N., 2014). However, the results of study indicated some differences between boys and girls who participated in this competition. The first difference is shown in the selection of competing categories, so boys are more likely than girls to compete in category Algorithms (programming with programming languages Python/C/C++/Pascal) then in category LOGO (Table 1, χ^2=7,128, df=1, p=.008).

Table 1: Distribution of students by gender and competing in category Algorithms – Python/Pascal/C/C++

			For the next competition (if I participate) I will …			total
			prepare the same way	not prepare at all	seek extra help / I will do more	
Preparations for the competition are held in school	No	Count	7	6	11	24
		Percentage	29,2%	25%	45,8%	
	Yes	Count	33	7	44	84
		Percentage	39,3%	8,3%	52,4%	

Also, boys are more likely to be involved in some other open competitions like Honi (http://www.hsin.hr) or some form of winter or summer IT preparation camps (χ^2=8,743, df=2, p=.013). Furthermore, it seems that boys were more ready than girls to individually explore additional web sites with demo examples and programming tasks (χ^2=8,049, df=2, p=.018). Very interesting aspect for us in this research was to explore whether playing games regularly (playing some game every week) had some influence on competitors or their attitudes and behaviors. Results showed that boys are more likely than girls to regularly play a game weekly (Table 6, χ^2=8,878, df=2, p=.012). More on playing games on regular basis will be discussed in later sections.

Preparing for competition

IT Infokup competition is very demanding and expects a lot of student's effort in order to achieve success. The knowledge material which is required for the competition CS Fundamentals mostly consists of regular learning material from the curriculum of elective subject in elementary schools (Informatics) and regular subjects in high schools (Informatics, CS). On the other hand, the competition categories which include programming are extremely demanding for students primarily because programming content accounts for only 10-15% of the school's curriculum so the level of knowledge and programming skills that are necessary for success in

 Copyright © International Conference on New Horizons in Education Conference (INTE)

programming categories away exceed these curriculums. Study objective was to find out how students prepared for this competition, which teaching materials they used, also whether they worked alone or with the help of mentors, parents or friends, whether they worked mostly in school, or some IT club or at home, and generally to learn more about any strategy implemented in preparation for this competition.

Although many competitors highlighted that working with their teachers was the most helpful that claim couldn't be extracted as a general significant conclusion in this research like it was previous pilot study (Bubica, Mladenovic, & Boljat, 2014). However, the importance of preparing with teachers at school could be seen from the following result: those students who had experience of previous competitions will probably prepare with their teachers at school for the next competition. Students who are preparing at school, mainly with the help of their teachers, were very satisfied with the way they worked and for further competition would probably prepare in the same way or would even seek assistance or prepare more (Table 2, χ^2=37,063, df=3, p=.000). Also, if students organized preparation in their schools they would be likely less interested in seeking other learning materials elsewhere (χ^2=14,646, df=2, p=.001).

Table 2: Distribution of students by the place of preparation and by organizing next year competition preparation

			For the next competition (if I participate) I will …			total
			prepare the same way	not prepare at all	seek extra help / I will do more	
Preparations for the competition are held in school	No	Count	7	6	11	24
		Percentage	29,2%	25%	45,8%	
	Yes	Count	33	7	44	84
		Percentage	39,3%	8,3%	52,4%	

Success in competition

It was already mentioned that this IT competition - Infokup, is very demanding for students, so it was interesting to see what motivates students to apply for it. The results showed that students mainly applied because it was their independent decision, but there are also students who participated on their teachers', friends' or even parents' recommendations. Student's intrinsic motivation to compete confirmed to be very important. Precisely, for the students who had some intrinsic motivation to participate in this competition results showed that they were more ready to look for and use any additional learning materials and solved examples ($\chi2$ = 14.646, df = 2, p = .001). They were also likely to invest extra time after school hours and even on weekends for preparation ($\chi2$ = 67,792, df = 4, p = .000), mostly in schools ($\chi2$ = 25,136, df = 2, p = .000).

Results indicated some differences in the way students prepared with respect to selected categories of competitions, especially category Algorithms – Python/Pascal/C/C++ and Algorithms Logo. Contestants of both categories were probably ready to invest considerable effort in preparation, namely to work extra with their teachers at school, after school hours or even on weekends. Contestants of Algorithms – Python/Pascal/C/C category would probably explore additional learning materials independently ($\chi2$ = 7,404, df = 2, p = .025) or use examples of solved programming tasks from competition web sites (Infokup, Honi) ($\chi2$ = 9,957, df = 2, p = .007). Also, they would probably take part in other open programming competitions (eg. COCI) or some winter/summer programming preparation camps. At the same time Algorithms – Logo contestants were very satisfied with their preparations and achieved success and they were likely not to change anything for the following competition ($\chi2$ = 8,189, df = 3, p = .042).

Since the students are willing to invest extra effort to prepare for competition, it is interesting to explore what the success in this competition means to them and how it could motivate them, if so. About 51,4 % of students believe that success in this competition may represent additional features for enrollment in secondary school (eg. extra points), while others (33,3 %) find it has some or no (15,3 %) importance. 50% of the students believe that success in this competition could build some reputation in the school and among their peers. Almost equally students believe that success in this competition has no importance (27,8 %), some importance (33,3 %) or great importance (38,9%) as a boost to think more about IT careers. Although, a more detailed analysis regarding

 Copyright © International Conference on New Horizons in Education Conference (INTE)

competition categories reveals that Algorithms – Python/Pascal/C/C++ contestants are likely to perceive this competition as a boost to reflect on his career in IT sector.

Competition categories

Research of this specific competition is particularly interesting as it includes different areas of computer science, so almost every student could find an area interesting for him. Students who do not show interest in programming usually choose to perform in the category CS Fundamentals. CS Fundamentals is a category which includes knowledge about all basic CS concepts like networks, computer hardware and applicative software, data storage, manipulation, edition and presentation and so. This category is relatively new as it is been held since 2011, while other categories have been held continuously for more than twenty years. In any case, CS Fundamentals category is more popular among students what could be seen through the number of registered participants. This school year (2016), in the first (lowest) level of competition, participated 2880 students of primary and secondary schools in the category CS Fundamentals, in the category Algorithms – Python/Pascal/C/C++ (elementary schools) participated 612 students, in category the Algorithms – Python/Pascal/C/C++ (secondary schools) participated 629 while 1,122 students participated in the category Logo (Infokup, 2016)**.**

It seems that the students take very seriously the differences between programming categories and category CS Fundamentals as it is very likely that CS Fundamentals competitor did not before, nor will in the future, participate in other competition categories ($\chi 2 = 32{,}658$, df = 4, p = .000). This is consistent with pilot research (Bubica, Mladenovic, & Boljat, 2014) which determined that contestants are very true to their primary category. Competitors of CS Fundamentals are very satisfied with the way in which they prepare for the state competition and generally very pleased with the success achieved. For them success in this competition doesn't represent some respect in school or among peers (Table 3) or could encourage them towards CS profession (Table 4) but only represents a slight possibility of getting extra points for enrollment in secondary school.

Table 3: Distribution of CS Fundamentals competitors by their feeling of success could bring them respect in school or among peers

		Success in this competition represents respect in school and among peers (3-level Likert scale)						
		Mean	N	Std. Dev.	Min.	Max.	Range	Median
CS fundamentals competitor	No	1,64	44	,750	1	3	2	1,00
	Yes	1,71	28	,763	1	3	2	2,00

Table 4: Distribution of CS Fundamentals competitors by their feeling of success could encourage them towards CS professions

		Success in this competition could encourage towards CS professions (3-level Likert scale)						
		Mean	N	Std. Dev.	Min.	Max.	Range	Median
CS fundamentals competitor	No	2,14	44	,795	1	3	2	2,00
	Yes	2,07	28	,858	1	3	2	2,00

Although a larger number of participants noted teachers as the greatest help in the preparations for the competition this claim showed statistical significance only for CS Fundamentals competitors ($\chi 2 = 8{,}223$, df = 3, p = .042).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Competitors of Algorithms – Python/Pascal/C/C++ category very likely did not before participated in other competition categories. They consider success in this competition primarily as a way to achieve extra points for secondary school enrollment but also as a very important factor which could interest them in IT professions (Table 5). As expressed earlier competitors in this category are extremely motivated to make additional effort in preparing for competition.
Competitors in Logo category are, like other competitors, very consistent in their competition category selection, so they very likely didn't participated in other competition categories before. They don't consider success in this competition as a way to achieve extra points for secondary school enrollment or as a way to achieve some prestige in school and especially not as a way to interest them towards IT professions. Maybe more than others, Logo competitors express satisfaction with their preparations and achieved success in this competition.

Table 5: Distribution of Algorithms – Python/Pascal/C/C++ competitors by experiencing competition a boost to IT professions

		Success on this competition could encourage towards CS profession (3-level Likert scale)						
		Mean	N	Std. Dev.	Min.	Max.	Range	Median
Algorithms – Python/Pascal/C/C++ competitor	No	1,86	43	,774	1	3	2	2,00
	Yes	2,48	29	,738	1	3	2	3,00

Some specificity regarding student's geographical area with selection of certain categories and other subject competitions have been also noticed. Students from Central/Eastern Croatia and North Adriatic are more likely to participate in math ($\chi 2 = 9{,}829$, df = 2, p = .007) or physics ($\chi 2 = 8{,}186$, df = 2, p = .017) competition as well as IT competition than students from Central and Southern Adriatic. In Central and Southern Adriatic there are more first time competitors than in other regions what could be explained by higher withdrawal from the competition in this region compared to other regions in Croatia. Experience in the competing also proved to be significant in this study. It showed that students who participated for the first time were more inclined to work only within regular school hours while those who had some competing experience realized that this competition was very demanding and they were likely to regularly attend school preparation workshops and work hard after school hours or even on weekends.

Playing computer games regularly
Probably it is natural to expect that every child with computer access spends at least some time in playing computer games. In this study, it was investigated whether there was connection between regular playing computer games and factors like specific competition categories, gender and so.
In order to explore which are the games that attract most competitors informal discussion with students aged 11 to 14 during school hours singled out several categories of games which were used to explore whether there was a link between the competitors of Infokup competition and specific game category . Students where offered to choose between Strategy games (eg. Age of Empires, Stronghold, Chess) First Person Shooter games (eg, Call of Duty, Battlefield), Sports games (eg. FIFA, PES) and Racing games (eg Need for Speed) or something else. From the collected data (Figure 2) it could be concluded that there was a number of competitors who played other games which weren't offered here as 44 of them pleaded that they had played something else and only 18 of all students said that they did not play computer games regularly at all.

From the remaining results it looks like that Infokup competitors were likely not to play Racing games. Somehow it was expected that Strategy games like Age of Empires, Stronghold, Chess and so, may prevail in students' choice but Sports games were the most interesting from all offered games categories. Distribution of (week) hours of playing computer games regularly by competitors is shown in Figure 3. Considering that competitors of this competition are expected not only to have multitude of computer skills and knowledge but also more specific computer fluidity in working with computers the age in which contestants started playing

 Copyright © International Conference on New Horizons in Education Conference (INTE)

selected games was investigated. Average beginning age was 10,6 years but further exploration of differences among computing categories showed that Algorithms – Python/Pascal/C/C++ competitors would probably start regularly playing computer games at the age of 10 while CS Fundamentals category competitors will likely start little later at the age of 12.

Results showed that boys are more likely than girls to regularly play a game weekly (Table 6, χ^2=8,878, df=2, p=.012).

Table 6: Distribution of students by gender and playing computer games regularly

		Playing computer games regularly (regularly = playing some game every week)		Total
		Yes	No	
Girls	Count	10	12	22
	Percentage	45,5%	54,5%	
Boys	Count	70	21	91
	Percentage	76,9%	23,1%	

It could also be interesting to explore whether there is a connection between the success on this competition and specific games categories as well as the number of (week) hours spent in regular playing computer games. Unfortunately, number of valid answers wasn't sufficient to carry out some conclusion about it.

CONCLUSIONS

Although the research showed some differences between boys and girls some overly significant claims about it couldn't derive, perhaps because girls participated in the competition in smaller number. While many competitors pointed out that their work with teachers was the most helpful during their preparations research has not shown strong evidence to confirm significance of this statement. Compared to pilot research great intrinsic student's motivation to participate and prepare hard for the competition especially in some programming categories was confirmed. Very interesting results were found regarding playing computer games which could be a good start for further research.

The results of this study should help teachers to be better prepared for work with talented students but also to better motivate students for this type of competition. One of the major recommendations from this work is that students appreciate competition preparatory work with their teachers very much. They are ready to take part in preparatory workshops held in some extracurricular time in schools even on weekends because they consider such work high-quality and useful. Due to the strong intrinsic motivation shown by competitors especially of some programming category, as well as their desire to independently investigate other teaching materials, teachers might use training strategy which includes working and helping students but also finding specific ways to make additional learning materials more accessible to all of them. An example of such strategy could be the use of safe communication networks (eg. Edmodo) for quick and easy communication and exchange of teaching materials between teachers and students but also between students themselves, encourage cooperative learning and discussion about interesting tasks and problems related to the competition through such tools. Although, some differences in achieving success between girls and boys shouldn't be expected, it is could be concluded from this research that something could be done to better motivate girls to become involved in such competitions as well to engage them to participate in extracurricular activities and workshops related to the competition.

Given the everyday raising need for IT professionals and general intention of IT sectors to raise interest among students towards these professions it is important to point out that the results in this research showed that success in some programming categories could point students towards IT professions.

In the future, attitudes and opinions of teachers who prepare students for this competition would be explored in order to get more insights on this issue.

BIBLIOGRAPHY

Bowring, J. F. (2008). A New Paradigm for Programming Competitions. Portland, Oregon, USA: SIGCSE '08.

Bubica, N. (2014, May 5). *Prirodoslovno-matematički fakultet u Splitu.* Retrieved August 16, 2016, from http://www.pmfst.unist.hr/wp-content/uploads/2014/06/Istraziva--ki-seminar1-Bubica.pdf

Bubica, N., & Boljat, I. (2014). Predictors of Novices Programmers' Performance. *ICERI2014 Proceedings*, (pp. 1536-1545).

Bubica, N., Mladenovic, M., & Boljat, I. (2014). Students Motivation for Computer Science Competition. *INTED2014 Proceedings*, (pp. 288-295.).

Hruska-Reichmann, S. & Grasha, A. F. (1982). The Grasha-Reichmann student learning style scales. *J. Keefe (Ed.) Student learning style and brain behavior, Reston, VA: National Association of Secundary School Principals*, pp. 81-86.

Infokup. (2016). Retrieved August 15, 2016, from https://www.infokup.hr/natjecanje/dogadjaj/355/rezultati

Roberts, E. (2000). Strategies for Encouraging Individual Achievement in introductory Computer Science Courses. Austin TX, USA: SIGCSE.

Steele, A. (2010). First Year Programming: Using Competition for Motivation. Dunedin, New Zealand: 23rd Annual Conference of the National Advisory Committee on Computing Qualifications.

Vivek Khera, O. A. (1993). The internet programming contest: a report and philosophy. SIGCSE Bulletin, pages 48-52.

Widmer C., P. J. (1998, Spring). Programming contests: what can they tell us?

 Copyright © International Conference on New Horizons in Education Conference (INTE)

İLKOKUL 3. SINIF ÖĞRENCİLERİNİN ÇEVRE ve ÇEVRE SORUNU ALGILARI İLE ÇÖZÜM ÖNERİLERİ

Prof. Dr. Salih CEYLAN
Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi, Sınıf Öğretmenliği Bölümü
Burdur, Türkiye
sc221965@gmail.com
Ramazan PEKER
Mehmet Akif Ersoy Üniversitesi Eğitim Bilimleri Enstitüsü,
Sınıf Öğretmenliği Doktora Programı
Burdur, Türkiye
rzpeker@gmail.com

ÖZET
Bu çalışmada ilkokul üçüncü sınıf öğrencilerinin çevreye ilişkin algıları ve çözüm önerilerinin belirlenmesi amaçlanmıştır. Araştırmanın çalışma grubunu 2015-2016 eğitim öğretim yılı ikinci döneminde Kocaeli İli Dilovası İlçesi Zeki Obdan İlkokulu, İzmit İlçesi Saraybahçe İlkokulu ve Kandıra İlçesi Akçakoca İlkokulu'nda öğrenim görmekte olan 63 öğrenci oluşturmaktadır. Araştırma verileri araştırmacılar tarafında geliştirilen ve uzman görüşü alınmış 4 yarı yapılandırılmış sorudan oluşan görüşme formu ve her bir öğrencinin yapmış olduğu resimler kullanılarak toplanmıştır. Elde edilen veriler nitel analiz yöntemlerinden betimsel analiz ve içerik analizi ile değerlendirilmiştir. Araştırma sonucunda; öğrencilerin çevre kavramına daha çok "Canlı Çevre" anlamı yükledikleri, çoğunluğunun çevre sorunu kavramına "Atıklar" anlamı yükledikleri, yaşadıkları çevrede çevre sorunu olarak en çok "Atıklar"ı gördükleri, Çevre ile ilgili sorunları öncelikli olarak Belediye'nin çözebileceğine inandıkları, çevre sorunlarına karşı kendi sorumluluklarında ise en çok "Kirlenmeyi Önleme ve Korumayı" düşündükleri görülmüştür.

Anahtar Sözcükler:İlkokul Öğrencileri, Çevre Algısı, Çevre Sorunu.

ABSTRACT
Inthisstudy, it is aimedto set 3thgrades primary school students environmental perceptions and their proposals for the solution. Study group in this research are consist of 63 3th grade primary school students who are attending three primary school in the second term of 2015-2016 academic year in Zeki Obdan Primary School in Dilovası, Saraybahçe Primary School in İzmit and Akçakoca Primary School in Kandıra, Kocaeli. Research Data developed by researchers the interview forms were collected using a questionnaire form consisting of fouropen-ended questions and children drawings. Data from the qualitative data analysis methods were evaluated by descriptive analysis and content analysis. According to the survey results, the majority of students look on as the environment concept 'Living environment' meaning that they install, the majority of students look on as the environmental problem concept "waste" meaning that they install, they live around environmental issues most as "waste" factorstated, environment related problems as the primary 'municipal borough' can solve what they believe, environmental problems against what their responsibilities are most 'contamination topreventand conservation' thought it was detected.

Keywords: Primary school students, Environmental perception, Environmental issues.

GİRİŞ

Örgün eğitim sistemimiz içerisinde bulunan her düzeydeki okulların öğretim programlarında değinilen sosyal ve doğal bilimler, insan ve çevre ilişkileri, doğal kaynaklar ve kullanımı ile ilgili konularla varılmak istenen hedef; çevre bilinci kazanmış ve bu konuda sadece bilgiyle donatılmaktan ziyade, çevreye duyarlı ve olumlu davranışlar edinmiş yurttaşlar yetiştirmektir (Demirkaya, 2006). Çevre sorunlarının çözümünde uygulanan yaklaşımlardan en etkili ve en ekonomik olanı sorunların oluşmadan kaynağında önlemin alınmasıdır. Bu önlem, insanın doğaya olan davranışının olumlu yönde değiştirilmesidir. Bireylerin eğitimiyle bu tür istendik davranışların kazandırılması sürecinde bireyin çevreyi tanıması, çevresinde oluşan değişimleri gözlemleyip bu sonuçları değerlendirebilmesi, ortaya çıkan veya çıkabilecek sorunlara çözüm üretebilmesi ve bu çözümleri hayata geçirebilecek becerilere sahip olması gerekmektedir (Şimşekli, 2005).

Çevre eğitimi dersi örgün eğitim yapılan bazı ülkelerde müstakil bir ders olarak okutulurken, diğer bazı ülkelerde konuyla ilgili dersler içerisindeki konulara serpiştirilerek verilmektedir (Demirkaya, 2006).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Fen Bilimleri Dersi Öğretim Programının vizyonunu tüm öğrencileri fen okuryazarı bireyler olarak yetiştirmek oluşturmaktadır. Fen okuryazarı olan bireyin sahip olacağı 'Fen bilimlerine ilişkin temel bilgilere (Biyoloji, Fizik, Kimya, Yer, Gök ve Çevre Bilimleri, Sağlık ve Doğal Afetler) ve doğal çevrenin keşfedilmesine yönelik bilimsel süreç becerilerine sahiptir', 'Sosyal ve teknolojik değişim ve dönüşümlerin fen ve doğal çevreyle olan ilişkisini kavrar' gibi beceriler ve bu vizyon ışığında Fen Bilimleri dersinin amaçlarından 'Günlük yaşam sorunlarına ilişkin sorumluluk alınmasını ve bu sorunları çözmede fen bilimlerine ilişkin bilgi, bilimsel süreç becerileri ve diğer yaşam becerilerinin kullanılmasını sağlamak', 'Birey, çevre ve toplum arasındaki karşılıklı etkileşimi fark etmek ve toplum, ekonomi, doğal kaynaklara ilişkin sürdürülebilir kalkınma bilincini geliştirmek', 'Doğanın keşfedilmesi ve insan-çevre arasındaki ilişkinin anlaşılması sürecinde, bilimsel süreç becerilerini ve bilimsel araştırma yaklaşımını benimseyip karşılaşılan sorunlara çözüm üretmek' beceri ve davranışlarının çevreyle ilgili olduğu söylenebilir.

Hayat Bilgisi 1., 2. ve 3. sınıf ders programında çevre ile ilgili kazanımlar 1. Sınıf Okul Heyecanım Temasında "Duyu organlarının çevreyi tanımadaki rolünü fark eder" ve Dün Bugün Yarın temasında "Doğal afetlerin çevreyi nasıl değiştirdiğini araştırır", 2. Sınıf Benim Eşsiz Yuvam temasında "Yaşadığı yerleşim biriminin ve vatanının kendisi için özel bir yer olduğunu fark ederek ülkesini de bir *yuva* olarak görür" ve Dün Bugün Yarın temasında "Yaşadığı çevreyi temiz tutmasının kendisinin ve başkalarının sağlığı ve gelişimiyle ilişkili olduğunu kavrar" olarak verilmiştir

.

Fen Bilimleri 3 ders programında çevre ile ilgili kazanımlar Canlılar Dünyasına Yolculuk Ünitesi *Çevremizdeki Varlıkları Tanıyalım* başlığında "Çevresindeki örnekleri kullanarak varlıkları canlı ve cansız olarak sınıflandırır", *Ben ve Çevrem* başlığında "Yaşadığı çevreyi tanır ve bu ortamların temizliğinde aktif görev alır" ve *Doğal ve Yapay Çevre* başlığında "Doğal ve yapay çevre arasındaki farkları açıklar", "Doğal çevrenin canlılar için önemini kavrar ve doğal çevreyi korumak için tedbirler alır". *Bilinçli Tüketici* Başlığında "Elektrik ve su gibi kaynakların tasarruflu kullanılmasının önemini kavrar ve bu kaynakların kullanımında tasarruflu davranır", Yaşamımızdaki Elektrikli Araçlar Ünitesi *Elektrik Kaynakları* başlığında "Pil atıklarının çevreye vereceği zararları ve bu konuda yapılması gerekenleri tartışır" olarak verilmiştir (MEB, 2013).

Çocuklarda çevreye yönelik zihinsel duyarlılık daha çok 9-10 yaşlarında gelişme göstermekte (Demirkaya, 2006) ve Hayat Bilgisi Ders Programı içeriğinin Fen Bilimleri dersi ve Sosyal bilgiler derslerine temel oluşturduğu göz önünde bulundurularak öğrencilerde çevre ve çevre sorunu kavramı algılarının belirlenmesi önem arz etmektedir. Dolayısıyla bu çalışmanın amacını İlkokul 3. Sınıfa devam etmekte olan öğrencilerin "Çevre ve Çevre sorunu" kavramına ilişkin algılarını ve çevre sorunlarının çözümüne ilişkin düşüncelerini belirlemek oluşturmaktadır. Bu amaca yönelik olarak araştırmanın problemini "İlkokul 3. Sınıfa devam eden öğrencilerin çevre ve çevre sorunu algıları ile çözüm önerileri nelerdir?" sorusu oluşturmaktadır. Bu amaca bağlı olarak aşağıdaki sorulara yanıt aranmıştır:

1. İlkokul 3. Sınıf öğrencilerinin çevre kavramına yükledikleri anlamlar nelerdir?
2. İlkokul 3. Sınıf öğrencileri resimlerinde çevre sorununu kavramına yükledikleri anlamlar nelerdir?
3. İlkokul 3. Sınıf öğrencileri yaşadıkları çevrede çevre sorunu olarak neleri görmektedirler?
4. İlkokul 3. Sınıf öğrencileri çevre sorunlarını kimin/kimlerin çözebileceğine ilişkin görüşleri nelerdir?
5. Öğrencilerin çevre sorunlarına karşı sorumluluklarına yönelik düşünceleri nelerdir?

Bu çalışma 2015-2016 eğitim-öğretim yılı ikinci döneminde İzmit ilçesinde devlet okulu Saraybahçe İlkokulu, Dilovası İlçesinde devlet okulu Mehmet Zeki Obdan İlkokulu ve Kandıra ilçesinde devlet okulu Akçakoca İlkokulu'nda öğrenim görmekte olan altmış üç üçüncü sınıf öğrencileriyle sınırlıdır.

YÖNTEM

Araştırmanın Modeli

Bu araştırmada nitel araştırma desenlerinden olgubilim deseni kullanılmıştır. Olgubilim çalışmaları farkında olduğumuz ancak derinlemesine ve ayrıntılı bir anlayışa sahip olmadığımız olgulara odaklanmaktadır. Olgularla günlük yaşantımızdaki olaylar, deneyimler, algılar, yönelimler, kavramlar ve durumlar gibi çeşitli şekillerde karşılaşılabilmektedir. Ancak bu durum olguları tam olarak anladığımız anlamına gelmeyebilir. Bize tümüyle yabancı olmayan aynı zamanda da tam anlamını kavrayamadığımız olguları araştırmayı amaçlayan çalışmalar için olgubilim (fenomenoloji) uygun bir araştırma zemini oluşturmaktadır (Şimşek ve Yıldırım, 2011).

Verilerin toplanmasında ise görüşme tekniği ve görüşme tekniğinden elde edilen verilerin çeşitlendirilebilmesi amacıyla doküman inceleme tekniği kullanılmıştır. Görüşme tekniği ve doküman inceleme tekniği elde edilen nitel veriler sayısallaştırılarak frekans ve yüzde ile ifade edilmiştir.

Çalışma Grubu

Araştırmanın çalışma grubu Amaçlı örnekleme yöntemlerinden aykırı durum örneklemesi ve olasılığa dayalı örnekleme yöntemlerinden küme örnekleme ile belirlenmiştir. Buna göre, Kocaeli ilinde sanayileşmenin en yoğun olduğu ilçe Dilovası, Kocaeli il Merkezi İzmit ve sanayileşmenin en az olduğu Kandıra ilçeleri aykırı durum örneklemesine göre çalışma grubuna alınmıştır. Bu ilçelerdeki yer alan okullardan küme örnekleme ile Dilovası – Mehmet Zeki Obdan İlkokulu, İzmit – Saraybahçe İlkokulu, Kandıra – Akçakoca İlkokulu çalışmaya dahil edilmiştir. Okulların üçü de şehir merkezlerinde yer almaktadır. Bu üç ilkokulun üçüncü sınıf şubelerinden birer şube random yolla seçilerek çalışmaya dahil edilmiştir. Buna göre araştırmanın çalışma grubunu bu üç ilkokulda random yolla seçilen üç şubede öğrenim görmekte olan üçüncü sınıfa devam eden altmış üç ilkokul öğrencisi oluşturmaktadır. Okulların kayıt bölgesinde yaşamakta olan ve araştırmaya katılan öğrencilerin 34'ü kız, 29'u erkektir. Araştırmanın yapıldığı grup 4+4+4 sistemi uygulamasının ikinci yılında eğitim öğretime alınmış ve en büyüğü 9, en küçüğü 8 yaş grubunda bulunmaktadır.

Tablo 1'de araştırmanın uygulandığı okullar ve öğrenci sayıları sunulmuştur.

Tablo 1. Öğrencilerin Öğrenim Gördükleri Okullara ve Cinsiyetlerine Göre Dağılımı

Okul	Öğrenci	
	f	%
Akçakoca İlkokulu	31	49,20
Mehmet Zeki Obdan İlkokulu	22	34,92
Saraybahçe İlkokulu	10	15,87
	Cinsiyet	
Kız	34	53,96
Erkek	29	46,03
TOPLAM	63	100

Tablo 1'de görüldüğü gibi araştırmanın uygulandığı öğrencilerin %49,20'si Akçakoca İlkokulu'nda, %34,92'si Zeki Obdan İlkokulu'nda, %15,87'si ise Saraybahçe İlkokulu'nda öğrenim görmektedir.

Veri Toplama Araçları

Veri toplama aracı olarak demografik bilgiler ile uzman görüşü alınmış üç yarı yapılandırılmış sorunun bulunduğu görüşme formu ve 30X23 resim kağıdı kullanılmıştır. Araştırmanın uygulanmasında önce öğrencilere 'Çevre nedir, Çevre denince aklına ne geliyor?' sorusuyla çevreye yönelik algılarını ifade etmeleri sağlanmış ve kayıt altına alınmıştır. Sonrasında öğrencilerin çevre sorunlarına ilişkin algılarını belirlemek için bir ders saati süresinde 30X23 ölçülerindeki resim kâğıtlarına pastel veya kuru boya ile çevre sorunları konulu resim yapmaları istenmiştir. Resim çalışmasını bitirdikten sonra öğrencilerden resim kâğıdının arkasına yaptıkları resmi kısaca anlatmaları istenmiştir. Bu çalışmanın sonrasında öğrencilere görüşme formu verilerek 'Yaşadığın çevrede çevre sorunu olarak gördüğün şeyler nelerdir?', 'Yaşadığın çevredeki sorunları kimin/kimlerin çözebileceğine inanıyorsun?', 'Çevre sorunları için sen ne yapabilirsin?' sorularını yanıtlamaları istenmiştir.

Verilerin Analizi

Uygulama sonucunda elde edilen veriler bilgisayar ortamına aktarılmış ve her bir soru maddesi için veri seti oluşturulmuştur. Veriler betimsel analiz ve içerik analizi ile değerlendirilmiş, değerlendirme sürecinde elde edilen nitel veriler kelime, cümle birimlerine ayrılarak incelenmiştir (Yıldırım ve Şimşek, 2011). Verilerin analizi öncesinde literatürde yer alan çevre sorunları incelenerek çevre sorunları tema ve kod listesi oluşturulmuştur. Analiz sürecinde ise resimlerde yer alan çizimlerin incelenmesi ile görüşme formunda yer alan ifadelerin incelenmesi olarak iki aşamalı bir yol izlenmiştir.

Resimlerde yer alan çizimlerin incelenmesinde öncelikle öğrenci resimleri ve resimlerine yönelik ifadelerinde elde edilen veriler kodlanarak temalara ayrılmıştır. Bu işlemin sonrasında alanında uzman bir resim öğretmeni ile tekrar çalışma gerçekleştirilmiştir. Öğrencilerin resimde ne anlatmak istediğine ilişkin yazdıklarından ve resimlerinde yer alan objelerle kavramlar kodlanmış, elde edilen kodlar alanında uzman bir sosyal bilgiler öğretmeni ile ilişkili olduğu temalara atanmıştır. Yapılan karşılaştırma sonucunda (Görüş Birliği/Görüş Birliği+Görüş AyrılığıX100) %80 oranında uzlaşma sağlanmıştır.

İkinci aşamada ise öğrencilerin yazılı ifadelerine ilişkin elde edilen verilerle kavramlar kodlanarak temalara ayrılmıştır. Bu işlem sonrasında alanında uzman bir sosyal bilgiler öğretmeni ile tekrar yazılı ifadeler kodlanarak temalara ayrılmış ve ilk kodlama ile yapılan karşılaştırma sonucunda Öğrencilerin çevre kavramı

 Copyright © International Conference on New Horizons in Education Conference (INTE)

algıları için %70 oranında, yaşadıkları çevrede çevre sorunları için %78oranında, yaşadıkları çevrede çevre sorunlarını kim çözebilir için %93 oranında, çevreye karşı sorumlulukları için %93 oranında uzlaşma sağlanmıştır.

BULGULAR

Öğrencilere Göre "Çevre"

Öğrencilerin çevre kavramı hakkındaki düşündüklerine ilişkin ifadeler analiz edilmiş, buna göre 'Canlı Çevre ve Cansız Çevre'' olarak iki tema oluşmuştur. Temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklı Tablo 2'de gösterilmiştir.

Tablo 2. Öğrencilerin "Çevre" Kavramı Algılarına İlişkin Bulgular

Temalar	
Canlı Çevre (f:44)	Cansız Çevre (f:28)
-Hayvanlar (f:28) - Bitkiler (f:25) - Toplum ve insan (f:22) -Yeşillik, Çimenler (f:17) -Orman (f:10) -Doğa (f:9)	Ev, bina(f:17) Araba, taşıtlar (f:10) Parklar(f:8) Akarsular (f:4)

Cevap yok 12

Tablo2'de görüldüğü gibi öğrencilerin "Çevre" kavramına ilişkin verdikleri yanıtların incelenmesi sonucunda öğrenciler ifadelerinin kırk dördünde canlı öğelerden yararlanarak çevreyi tanımlamış, yirmi yedisinde ise cansız öğelerden yararlanarak çevreyi tanımlamışlardır. Öğrenci ifadeleri incelendiğinde on bir öğrenci tanımlarında çevreyi doğal ve yapay çevre olarak ayırmıştır. Çevre tanımı yapan öğrencilerin on ikisi çevreyi yaşam alanı olarak tanımlamıştır.

Canlı çevreye ilişkin ifadeler incelendiğinde öğrencilerin yirmi beşi sadece canlı öğelerle çevreyi tanımlamış, bir öğrenci yapay ve doğal çevre ayrımı yapmış, on iki öğrenci canlı çevre temasına insanı dahil etmiştir.Cansız öğelerden yararlanarak çevreyi tanımlayan öğrenci ifadeleri incelendiğinde sekiz öğrenci sadece cansız öğelerden yararlanarak çevreyi tanımlamıştır. Yirmi öğrenci ise çevreyi tanımlarken hem canlı hem de cansız öğelere yer vermiş ve bu öğrencilerin onu tanımlamalarında insanı kullanmıştır. Öğrencilerin canlı çevre temasında kullandıkları canlı çevre öğelerinde en yüksek frekansın hayvanlar, bitkiler ile toplum ve insan kavramlarına ait olduğu görülmektedir. Öğrencilerin cansız çevre temasında kullandıkları cansız çevre öğelerinde en yüksek frekansın ev bina, araba ve taşıtlar olduğu görülmektedir.

Öğrencilerin çevre kavramı hakkındaki düşündüklerine ilişkin ifadeler öğrenim gördükleri okullara göre analiz edilmiş; temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklığı Tablo 3'te gösterilmiştir.

Tablo 3. Okul Bazında Öğrencilerin "Çevre"' Kavramı Algılarına İlişkin Bulgular

Okullar	Temalar	
	Canlı Çevre (f:22)	Cansız Çevre (f:16)
Mehmet Zeki Obdan İlkokulu (Dilovası)	-Hayvanlar (f:14) - Bitkiler (f:12) - Toplum ve insan (f:10) -Yeşillik, Çimenler (f:8) -Orman (f:3) -Doğa (f:5)	Ev, bina(f:8) Araba, taşıtlar (f:8) Akarsular, göller deniz(f:4) Parklar(f:3)
	Canlı Çevre (f:13)	Cansız Çevre (f:6)
Akçakoca İlkokulu (Kandıra)	-Bitkiler (f:7) - Toplum ve insan (f:7) -Yeşillik, Çimenler (f:7) -Hayvanlar (f:6) -Orman (f:5) -Doğa (f:5)	Ev, bina(f:4) Parklar(f:3) Araba, taşıtlar (f:2)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	Canlı Çevre (f:9)	Cansız Çevre (f:6)
Saraybahçe İlkokulu (İzmit)	-Hayvanlar (f:8) - Bitkiler (f:6) - Toplum ve insan (f:4) -Orman (f:2) -Yeşillik, Çimenler (f:2)	Ev, bina(f:5) Parklar(f:2)

Cevap yok :14

Tablo 3'e göre Dilovası Zeki Obdan İlkokulu'nda öğrenim görmekte olan öğrencilerin "Çevre" kavramına ilişkin verdikleri yanıtların incelenmesi sonucunda öğrenciler ifadelerinin yirmi ikisinde canlı öğelerden yararlanarak çevreyi tanımlamış, on beşinde ise cansız öğelerden yararlanarak çevreyi tanımlamışlardır. Öğrencilerin on biri sadece canlı öğelerden yararlanarak çevreyi tanımlamış, dördü sadece cansız öğelerden yararlanarak çevreyi tanımlamış ve on bir tanesi ise hem canlı hem de cansız öğelerden yararlanarak çevreyi tanımlamıştır. Öğrenci ifadeleri incelendiğinde yedi öğrenci tanımlarında çevreyi doğal ve yapay çevre olarak ayırmıştır. Yedi öğrenci çevreyi yaşam alanı olarak tanımlamıştır. Üç öğrenci ise çevreyi tanım olarak vermiştir. Öğrencilerin onu insanı çevreye dahil etmiştir. Öğrencilerin canlı çevre temasında kullandıkları canlı çevre öğelerinde en yüksek frekansın hayvanlar, bitkiler ile toplum ve insan kavramlarına ait olduğu görülmektedir. Öğrencilerin cansız çevre temasında kullandıkları cansız çevre öğelerinde en yüksek frekansın ev bina, araba ve taşıtlar olduğu görülmektedir.

Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrencilerin "Çevre" kavramına ilişkin verdikleri yanıtların incelenmesi sonucunda öğrenciler ifadelerinin on üçünde canlı öğelerden yararlanarak çevreyi tanımlamış, dördünde ise cansız öğelerden yararlanarak çevreyi tanımlamışlardır. Öğrencilerin on ikisi sadece canlı öğelerden yararlanarak çevreyi tanımlamış, dördünde ise hem canlı hem de cansız öğelerden yararlanarak, ikisi ise sadece cansız öğelerden yararlanarak çevreyi tanımlamıştır. Öğrenci ifadeleri incelendiğinde beş öğrenci çevreyi yaşam alanı olarak tanımlamıştır. Bir öğrenci ise çevreyi tanım olarak vermiştir. Öğrencilerin yedisi insanı çevreye dahil etmiştir. Öğrencilerin canlı çevre temasında kullandıkları canlı çevre öğelerinde en yüksek frekansın bitkiler, toplum ve insan, yeşillik ve çimenler kavramlarına ait olduğu görülmektedir. Öğrencilerin cansız çevre temasında kullandıkları cansız çevre öğelerinde en yüksek frekansın ev bina ve parklar olduğu görülmektedir.

İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrencilerin "Çevre" kavramına ilişkin verdikleri yanıtların incelenmesi sonucunda öğrenciler ifadelerinin dokuzunda canlı öğelerden yararlanarak çevreyi tanımlamış, altısında cansız öğelerden yararlanarak çevreyi tanımlamışlardır. Bu öğrencilerin üçü sadece canlı, beşi hem canlı hem cansız, ikisi ise sadece cansız öğelerden yararlanarak çevreyi tanımlamıştır. Öğrenci ifadeleri incelendiğinde dört öğrenci çevreyi doğal ve yapay olarak ayırmıştır. Öğrencilerin dördü insanı çevreye dahil etmiştir. Öğrencilerin canlı çevre temasında kullandıkları canlı çevre öğelerinde en yüksek frekansın hayvanlar, bitkiler, toplum ve insankavramlarına ait olduğu görülmektedir. Öğrencilerin cansız çevre temasında kullandıkları cansız çevre öğelerinde en yüksek frekansın ev bina ve parklar olduğu görülmektedir.

Çevre kavramı hakkındaki düşüncelerinde sadece canlı öğelere yer veren çocukların ifadelerinden örnekler aşağıdaki gibidir:
K18. Çevre denilince aklıma doğal temiz bir orman geliyor ve orada piknik yapılıyor.
S5. Çevremizde hayvanlar vardır, insanlar vardır, ağaçlar vardır.
Z27. Çevre denilince benim aklıma hayvanlar çiçekler ve yeşillikler gelir. Günümüzde maalesef çevreyi kirleten insanlar vardır. Çevre, bizim yaşam alanımızdır bu insanları uyarmalıyız

Çevre kavramı hakkındaki düşüncelerinde hem canlı hem cansız öğelere yer veren çocukların ifadelerinden örnekler aşağıdaki gibidir:
K14. Çevre, doğal bir yerdir. Çevre denilince aklıma insanlar, yeşillik, evler, hayvanlar ve ağaçlar geliyor.
Z19. Çevre denilince aklıma doğa ve doğallık geliyor. Yani çiçekler, ağaçlar, uğur böcekleri, kelebekler, karıncalar, şelaleler ırmaklar, akarsular çimenler ve denizler geliyor.
Z16. Çevre denilince aklıma çevremizdeki canlı ve cansız varlıklar geliyor. Canlı varlıklara örnek olarak hayvanlar ve bitkiler. Cansız varlıklar da binalar.

"Çevre" kavramı hakkındaki düşüncelerinde çevreyi doğal ve yapay çevre olarak ayıran çocukların ifadelerinden örnekler aşağıdaki gibidir:
Z10. "Çevre" denince aklıma doğal ve yapay çevre geliyor. Doğal çevre insanların hiç yapmadığı çevredir mesela bitkiler ve hayvanlar gibi. Yapay çevre de insanların yaptıkları şeylerdir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Z29. Doğal ve yapay çevre canlı ve cansız varlıkların bulunduğu bir çevre. İnsanların yaptığı yapay çevre, insan eli değmemiş kendiliğinden oluşmuş çevre de doğal çevredir. Burada bitkiler kendiliğinden oluşur.
S4. Doğal çevre, insanlar tarafından yapılmayan, bu bitkiler, hayvanlar, ağaçlar çiçekler hepsi kendiliğinden olan maddelerdir. Yapay çevre ise insanlar tarafından yapılan maddelerdir.

"Çevre" kavramı hakkındaki düşüncelerinde çevreyi yaşam alanı olarak ifade eden çocukların ifadelerinden örnekler aşağıdaki gibidir.
K19. Çevre denilince aklıma insanların yaşadığı yer geliyor, temiz bir çevre geliyor. Çevrede çocuklar var, insanlar var.
Z20. Çevre, insanların ve hayvanların yaşam alanıdır. Çevre denilince aklıma ağaçlar, çiçekler, yeşillikler, kentler, binalar vb. şeyler geliyor. Aklıma kelebekler, kuşlar yani çevremizde yaşayan canlılar geliyor.
K16. Çevre, dışarıdaki canlıların yaşadığı yere verilen addır. Çevre denilince dışarıdaki doğallıklar aklıma geliyor.
S9. Yaşadığımız yere çevre diyoruz. Çevrede birçok canlı bulunur. Sadece insanlar değil bitkiler, hayvanlar da yaşar. Biz insanlar yapay çevrelerde yaşıyoruz.

Öğrencilere Göre "Çevre Sorunu"
Öğrencilerin resimlerinden elde edilen "Çevre sorunu" kavramına ilişkin yükledikleri anlamlar analiz edilmiş, buna göre; "Atıklar, Hava Kirliliği, Doğaya Verilen Zarar ve Su Kirliliği'' olmak üzere dört tema oluşmuştur. Temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklığı Tablo 4'te gösterilmiştir.

Tablo 4. Öğrenci Resimlerinde "Çevre Sorunu" Kavramına Yüklenen Anlamlar

Temalar			
Atıklar (f:44)	Hava Kirliliği (f:21)	Doğaya Verilen Zarar (f:22)	Su kirliliği (f:8)
-Çöp (f:40) - Meşrubat Şişeleri (f:21) -Ambalaj Atıkları (f:17) -Atık pil (f:7) -Poşetler (f: 2) -Sigara izmariti (f:5)	- Fabrika dumanı (f:9) -Egzoz Gazı(f:8) -Baca Dumanı(f:4) -Kirli hava (f:4)	- Orman Yangını (f:13) -Ağaçların Kesilmesi (f:7) -Hayvanlara verilen zarar (f:2)	-Deniz kirliliği (f:8) -içme suyu kirliliği (f:1)

Öğrencilerin 63'ü resim çizme etkinliğine katılmıştır. Öğrenciler resimlerinde çevre sorunu kavramını en çok atıklar teması altında tanımlamıştır. Atık sorununun ardından öğrenciler çevre sorunu kavramını doğaya verilen zarar ve hava kirliliği olarak görmektedirler. Atıklar temasında en çok çöpler ve meşrubat şişeleri göze çarpmaktadır. Doğaya verilen zarar temasında öğrenciler çevre sorununu en çok orman yangını olarak görmektedirler. Öğrencilere göre hava kirliliğine sebep en çok fabrika bacalarından çıkan dumandır. Son olarak öğrenciler çevre sorunu kavramını su kirliliği olarak resimlerinde yer vermişlerdir.
Öğrenci resimlerinin kırk dördünde insan figürüne yer verilmiştir. Resimler incelendiğinde otuz iki resimde insan çevreye çöp atan, ateş yakan, ağaç kesen olarak çevreye zarar verir şekilde resmedilmiştir.On resimde insan çevreden çöp toplayan, pil toplayan, uyaran olarak resmedilmiştir. İki resimde ise insan hem çevreye zarar veren hem de çevreyi koruyan şekilde resmedilmiştir. Öğrencilerden on beşi yaptığı resimlerde fabrika ve ev bacalarından çıkan dumanları göstermiş ve yedi öğrenci hava kirliliğini gökyüzünde siyah duman olarak resmetmiştir.

Öğrencilerin resimlerinde "Çevre sorunu" kavramına ilişkin yükledikleri anlamlar okul bazında analiz edilmiş, buna göre temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklığı Tablo 5'te gösterilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 5. Okul Bazında Öğrencilerin "Çevre Sorunu" Kavramı Algılarına İlişkin Bulgular

Okullar	Temalar			
	Atıklar (f:22)	Doğaya Verilen Zarar (f:15)	Hava Kirliliği (f:12)	Su kirliliği (f:3)
Mehmet Zeki Obdan İlkokulu (Dilovası)	-Çöp (f:21) - Meşrubat Şişeleri (f:8) -Ambalaj Atıkları (f:6) -Poşetler (f: 1) -Sigara izmariti (f:3)	-Orman Yangını(f:9) -Ağaçların Kesilmesi (f:5) -Hayvanlara verilen zarar (f:1)	- Fabrika duman (f:7) -Egzoz Gazı(f:2) -Baca Dumanı(f:3) -Kirli hava (f:4)	-Deniz kirliliği (f:3)
	Atıklar (f:13)	Hava Kirliliği (f:6)	Doğaya Verilen Zarar (f:4)	Su kirliliği (f:1)
Akçakoca İlkokulu (Kandıra)	-Çöp (f:12) - Meşrubat Şişeleri (f:10) -Ambalaj Atıkları (f:8) -Poşetler (f: 1) -Sigara izmariti (f:1)	-Egzoz Gazı (f:4) - Fabrika duman (f:2)	- Orman Yangını (f:4)	-Deniz kirliliği (f:1)
	Atıklar (f:9)	Hava Kirliliği (f:3)	Doğaya Verilen Zarar (f:3)	Su kirliliği (f:4)
Saraybahçe İlkokulu (İzmit)	-Çöp (f:7) -Atık pil (f:7) Meşrubat Şişeleri (f:3) -Ambalaj Atıkları (f:3) -Sigara izmariti (f:1)	-Egzoz Gazı(f:2) -Baca Dumanı(f:1)	-Ağaçların Kesilmesi (f:2) -Hayvanlara verilen zarar (f:1)	-Deniz kirliliği (f:3) -içme suyu kirliliği (f:1)

Tablo 5'e göre Dilovası Zeki Obdan İlkokulu'nda öğrenim görmekte olan öğrenciler resimlerinde çevre sorunu kavramını en çok atıklar teması altında tanımlamıştır. Atık sorununun ardından öğrenciler çevre sorunu kavramını doğaya verilen zarar ve hava kirliliği olarak görmektedirler. Son olarak öğrenciler çevre sorununu su kirliliği olarak görmektedirler. Atıklar temasında en çok çöpler ve meşrubat şişeleri göze çarpmaktadır. Doğaya verilen zarar temasında öğrenciler çevre sorununu en çok orman yangını olarak görmektedirler. Öğrencilere göre hava kirliliğine sebep en çok fabrika bacalarından çıkan dumandır. Son olarak öğrenciler su kirliliği olarak resimlerinde denizde olan kirliliğe yer vermişlerdir.

Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrenciler resimlerinde çevre sorunu kavramını en çok atıklar teması altında tanımlamıştır. Atık sorununun ardından öğrenciler çevre sorunu kavramını hava kirliliği ve doğaya verilen zarar olarak görmektedirler. Son olarak öğrenciler çevre sorununu su kirliliği olarak görmektedirler. Atıklar temasında en çok çöpler ve meşrubat şişeleri göze çarpmaktadır. Doğaya verilen zarar temasında öğrenciler çevre sorununu en çok orman yangını olarak görmektedirler. Öğrencilere göre hava kirliliğine sebep en çok egzoz gazlarıdır. Son olarak öğrenciler su kirliliği olarak resimlerinde denizde olan kirliliğe yer vermişlerdir.

İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrenciler resimlerinde çevre sorunu kavramını en çok atıklar teması altında tanımlamıştır. Atık sorununun ardından öğrenciler çevre sorunu kavramını hava kirliliği ve doğaya verilen zarar olarak görmektedirler. Son olarak öğrenciler çevre sorununu su kirliliği olarak görmektedirler. Atıklar temasında en çok çöpler ve atık piller göze çarpmaktadır. Hava kirliliği temasında öğrenciler çevre sorununu en çok egzoz gazı olarak görmektedirler. Öğrencilere göre doğaya verilen zarar en çok ağaçların kesilmesidir. Son olarak öğrenciler su kirliliği olarak resimlerinde denizde olan kirliliğe yer vermişlerdir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Resim 1. Öğrenci İfadesi:Yerlere cam şişe, sigara atarsak yangına sebep olabiliriz. Yerlere çöp atmayalım. (K4)



Resim 2. Öğrenci İfadesi:Yerlere çöp atınca çevre kirleniyor.(K17)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

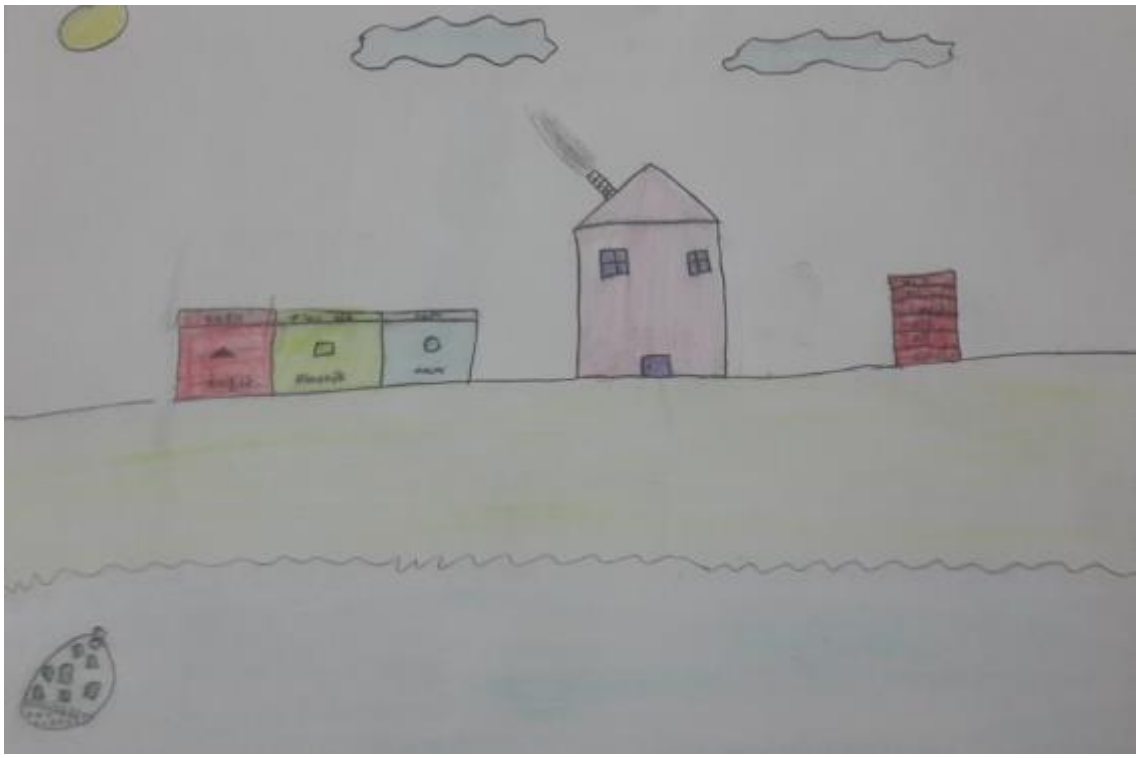


Resim 3. Öğrenci İfadesi:Ateş yakıp giden birisi yangına sebep oldu.(K5)



Resim 4. Öğrenci İfadesi: İnsanlar doğal çevreye pikniğe gitmişler, sonra pislik içinde bırakıp dönmüşler. (K16)

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Resim 5. Öğrenci İfadesi: Ben çevre kirliliğini sevmiyorum. Bu yüzden çarşılarda 'kağıt, Cam, Plastik' kutuları var. Bu yüzden pilleri atık pil kutusuna atmalıyız. Çöplerimizi yerlere atmamalıyız. (S9)



Resim 6. Öğrenci İfadesi: Fabrikalı pis havalı çevre istemiyorum. (Zo12)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Öğrencilerin Yaşadıkları Çevrede Çevre Sorunları

Öğrencilerin yaşadıkları çevrede çevre sorunu olarak düşündüklerine ilişkin ifadeler analiz edilmiş, buna göre; "Hava Kirliliği, Atıklar ve Doğaya Verilen Zarar" olmak üzere üç tema oluşmuştur. Temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklığı Tablo 6'da verilmiştir.

Tablo 6. Öğrencilerin Yaşadıkları Çevrede Çevre Sorunu Olarak Gördükleri

Atıklar (f: 41	Hava Kirliliği (f: 18)	Doğaya Verilen Zarar (f:7
-Çöpler (f:37) - Ambalaj Atıkları(f:19) - Meşrubat Şişeleri(f:11) - Sigara izmariti (f:6) -Atık pil (f: 4) -Mangal kömürü (f:2) -Poşetler (f: 1)	-Fabrika dumanı (f:16) -Egzoz Gazı (f:8) -Baca Dumanı (f:6) -Kötü koku (f:5) -Kirli hava (f:2) -Sigara dumanı (f:1)	-Orman Yangını (f: 4) -Ağaçların Kesilmesi(f: 2) -Avlanma1)

Cevap yok: 11

Öğrencilerin 52'si yaşadıkları çevrede çevre sorunlarına ilişkin soruya yanıt vermiştir. Öğrenciler yaşadıkları çevrede çevre sorunu olarak en çok atıkları görmektedirler. Hava kirliliği ise ikinci sırada görülen çevre sorunudur. Öğrencilere göre en çok fabrika dumanı çevreyi kirletmektedir. Atıklar ise çöpler, ambalaj atıkları ve meşrubat şişelerdir. Çocuklar çevrelerinde doğal yaşama verilen zarar olarak çevre sorunu boyutunda ağaçların kesilmesini görmektedirler.

Öğrencilerin yaşadıkları çevrede çevre sorunu olarak düşündüklerine ilişkin ifadeler okul bazında analiz edilmiş, buna göre temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklığı Tablo 7'de gösterilmiştir

Tablo 7. Okul Bazında Öğrencilerin Yaşadıkları Çevrede Çevre sorunu Olarak Gördükleri

Okullar	Temalar		
	Atıklar (f: 15)	Hava Kirliliği (f: 11)	Doğaya Verilen Zarar (f: 5)
Mehmet Zeki Obdan İlkokulu (Dilovası)	- Çöpler (f:14) - Ambalaj Atıkları (f:8) - Meşrubat Şişeleri (f:5) - Sigara izmariti (f:1)	-Fabrika dumanı (f:10) -Kötü koku (f:5) -kirli hava (f:2) -Egzoz Gazı (f:1) -Baca Dumanı (f:1)	-Ağaçların Kesilmesi(f: 3) -Orman Yangını (f: 3) -Avlanma (f:1)
	Atıklar (f:18)	Hava Kirliliği (f:-)	Doğaya Verilen Zarar (f: 2)
Akçakoca İlkokulu (Kandıra)	- Çöpler (f:16) - Ambalaj Atıkları (f:8) - Meşrubat Şişeleri (f:3) - Sigara izmariti (f:2) -Mangal kömürü (f:2)		-Ağaçların Kesilmesi (f: 1) -Orman Yangını (f: 1)
	Atıklar (f: 8)	Hava Kirliliği (f: 7)	Doğaya Verilen Zarar (f: -)
Saraybahçe İlkokulu (İzmit)	-Çöpler (f:7) -Atık pil (f: 4) - Ambalaj Atıkları (f:3) - Sigara izmariti (f:3) - Meşrubat Şişeleri (f: 3) -Poşetler (f: 1)	-Egzoz Gazı (f:7) -Fabrika dumanı (f:6) -Baca Dumanı (f:5) -sigara dumanı (f:1)	

Tablo 7'ye göre, Dilovası Mehmet Zeki Obdan İlkokulu'nda öğrenim görmekte olan öğrenciler yaşadıkları çevrede çevre sorunu olarak en çok "Atıklar"ı görmektedirler. Atıklar temasının ardından öğrenciler en çok "Hava kirliliği"ni, son olarak ise "Doğaya verilen zararı" çevre sorunu olarak görmektedirler. Öğrenciler atık

 Copyright © International Conference on New Horizons in Education Conference (INTE)

sorunu olarak en çok çöpleri ve ambalaj atıklarını çevre sorunu olarak görmektedirler. Fabrika dumanları ve kötü koku hava kirliliğine sebep olan etmenlerdir. Ağaçların kesilmesi ve orman yangını öğrencilere göre çevrelerindeki doğaya verilen zararlardandır.

Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrenciler yaşadıkları çevrede çevre sorunu olarak en çok Atıkları görmektedirler. Atıklar temasının ardından öğrenciler en çok doğaya verilen zararı çevre sorunu olarak görmektedirler. Öğrenciler atık sorunu olarak en çok çöpleri ve ambalaj atıklarını çevre sorunu olarak görmektedirler. Ağaçların kesilmesi ve orman yangını öğrencilere göre çevrelerindeki doğaya verilen zararlardandır. Öğrenciler çevrelerinde hava kirliliğine dair bir sorun görmemişlerdir.

İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrenciler yaşadıkları çevrede çevre sorunu olarak en çok Atıkları görmektedirler. Atıklar temasının ardından öğrenciler en çok hava kirliliğini çevre sorunu olarak görmektedirler. Öğrenciler atık sorunu olarak en çok çöpleri ve atık pilleri çevre sorunu olarak görmektedirler. Egzoz gazı, fabrika dumanı ve baca dumanı öğrencilerin çevrelerinde gördükleri havayı kirleten en büyük etmenlerdendir. Öğrenciler çevrelerinde doğaya verilen zarara dair bir sorun görmemişlerdir.

Öğrencilerin yaşadıkları çevredeki çevre sorunlarına ilişkin ifadeleri incelendiğinde atık temasına giren öğrenci ifadelerinden örnekler aşağıda verilmiştir
K19. Bizim evimizin yanında bi büfe var onlar ortalığı çok kirletiyor. Annem oraları temizliyor ama onlar hala kirletiyor. Sigara içip atıyorlar.
K14. Okulda öğretmen dediği halde bazı öğrenciler yediği içtiği şeyleri yere atıyorlar.
S10. İnsanların yerlere izmarit atmaları, kola şişelerini atmaları, cips poşetlerini yerlere atmaları
K4. yerlere çöp atılması, okulda çok insan yerlere çöp atıyor, sınıfa da atıyorlar. Pikniğe gittiğimizde, denizde balık tutmaya gittiğimizde hep çöp oluyor.
K9. Denize gittiğimizde oralar hep çöp doluydu. Bizde annem ve babamla birlikte onları topladık sonra pikniğimize devam ettik.
Z25. Bizim sokağımıza dört gündür çöp arabası gelmiyor. Çöp doluyor ve çöpler yere dökülüyor. Sinekler geliyor

Öğrencilerin yaşadıkları çevredeki çevre sorunlarına ilişkin ifadeleri incelendiğinde hava kirliliği temasına giren öğrenci ifadelerinden örnekler aşağıda verilmiştir
S5. Soba dumanı, fabrikadan çıkan dumanlar, arabalardan çıkan egzoz gazları.
Z7. Fabrikalardan duman çıkması beni rahatsız ediyor.
Z8. Ben Dilovası'ndaki sorunu fabrikalarla ilgili diyorum. Oradaki bacasından ateş saçıyor. Ateş ve duman her yeri kaplıyor. Bu yüzden her yer pisleniyor ve bu yüzden her yer ateş ve duman kokuyor.

Öğrencilerin yaşadıkları çevredeki çevre sorunlarına ilişkin ifadeleri incelendiğinde birden fazla temaya giren öğrenci ifadelerinden örnekler aşağıda verilmiştir
Z19. Ben Dilovası'nda çöp kokusu ve duman kokusu almak zorunda mıyım? Yerlerde hep çöp görmek zorunda mıyım?
Z5. Dilovası'nda fabrikalardan duman çıktığı için çevreyi ve havayı kirletiyor. Çöpleri çöp kutusuna atmayan insanlar var. Çünkü insanlar çevreyi önemsemiyor.
S9. Yaşadığım çevreye çöp atılmasını istemiyorum. Arabalardan çıkan egzoz dumanı çevreye zarar veriyor ve dışarıdaki insanlar zehirli hava soluyor. Ayrıca çevrede atık pil görürseniz hemen alın.
K19. Bizim evin oradaki büfe ortalığı çok kirletiyor. Annem onları temizliyor ama onlar hala temizlemiyor. Sigara içip yerlere atıyorlar, çöplerini de çöp kovasının yanına döküyorlar.

Öğrencilere Göre Çevre Sorunlarını Kim Çözebilir?
Öğrencilerin Çevre ile ilgili sorunları kimin/kimlerin çözebileceğine ilişkin görüşleri analiz edilmiş, buna göre; "Belediye, Sivil Toplum, Kaymakam, Muhtar ve Okul" olmak üzere beş tema oluşmuştur. Temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklığı Tablo 8'de gösterilmiştir.
Tablo 8. Öğrencilerin Yaşadıkları Çevrede Çevre Sorunlarını Kimin Çözebileceğine Yönelik Düşünceleri

Temalar				
Belediye (f:39)	Sivil Toplum (f:23)	Muhtar (f:6)	Kaymakam (f:4)	Okul (f:4)
-Temizlik Görevlileri (f:26) -Belediye Başkanı (f:23)	- Toplum(f:16) - Aile(f:10) -Çevre derneği(f:2)	-Muhtar (f:6)	- Kaymakam (f:4)	-Öğretmenler (f:4)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Cevap yok:10

Öğrencilerin 53'ü yaşadığı çevrede çevre sorunlarını kimin çözebileceğine ilişkin soruya yanıt vermiştir. Öğrenciler çevre sorunlarını öncelikli olarak belediyenin çözebileceğini ifade etmişlerdir. Öğrenciler ikinci olarak sivil toplumun çevre sorunlarını çözebileceği görüşüne sahiptir. Okul boyutunda ise öğrenciler öğretmenlerin çevre sorunlarını çözebileceği görüşüne sahiptirler. Son olarak öğrenciler çevre sorunlarının çözümünü kaymakamlık olarak görmüşlerdir.

Öğrencilerin yaşadıkları çevrede çevre sorunlarını kimin çözebileceğine ilişkin ifadeler okul bazında analiz edilmiş, buna göre temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklığı Tablo 9'de gösterilmiştir.

Tablo 9. Okul Bazında Öğrencilerin Yaşadıkları Çevrede Çevre Sorunlarını Kimin Çözebileceğine Yönelik Düşünceleri

Okullar	Temalar				
	Belediye (f:18)	Sivil Toplum (f:12)	Kaymakam (f:-)	Muhtar (f:1)	Okul (f:2)
Mehmet Zeki Obdan İlkokulu	-Temizlik Görevlileri (f:13) -Belediye Başkanı (f:10)	- Toplum(f: 8) -Aile(f:6) -Çevre derneği(f:1)	-	- Muhtar (f:1)	-Öğretmenler (f:2)
	Belediye (f:16)	Sivil Toplum (f:9)	Kaymakam (f:-)	Muhtar (f:-)	Okul (f:2)
Akçakoca İlkokulu (Kandıra)	-Temizlik Görevlileri (f:10) -Belediye Başkanı (f:9)	- Toplum(f: 8) -Aile(f:3)	-	-	-Öğretmenler (f:2)
	Belediye (f:5)	Sivil Toplum (f:2)	Kaymakam (f:4)	Muhtar (f:5)	Okul (f:-)
Saraybahçe İlkokulu (İzmit)	-Belediye Başkanı (f:4) -Temizlik Görevlileri (f:3)	-Aile(f:1) -Çevre derneği(f:1)	-Kaymakam (f:4)	- Muhtar (f: 5)	-

Tablo 9'a göre, Dilovası Mehmet Zeki Obdan İlkokulu'nda öğrenim görmekte olan öğrenciler yaşadıkları çevrede çevre sorunlarını daha çok belediyenin çözebileceğini belirtmişlerdir. Bunun ardından öğrenciler sivil toplumun ve son olarak ise okul faktörünün çevre sorunlarının çözümünde rol oynayabileceğini belirtmişlerdir. Öğrenciler belediye temasında temizlik görevlilerinin ve belediye başkanının çevre sorunlarını çözebileceği görüşüne sahiptirler. Sivil toplumda ise öğrenciler öncelikle toplumun ve ardından ailenin çevre sorunlarını çözebileceği görüşüne sahiptirler. Bununla birlikte öğrencilere göre muhtar da çevre sorunlarını çözebilir. Son olarak öğrenciler öğretmenlerin çevre sorunlarını çözebileceğini belirtmişlerdir.

Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrenciler yaşadıkları çevrede çevre sorunlarını daha çok belediyenin çözebileceğini belirtmişlerdir. Bunun ardından öğrenciler sivil toplumun ve son olarak ise okul faktörünün çevre sorunlarının çözümünde rol oynayabileceğini belirtmişlerdir. Öğrenciler belediye temasında temizlik görevlilerinin ve belediye başkanının çevre sorunlarını çözebileceği görüşüne sahiptirler. Sivil toplumda ise öğrenciler öncelikle toplumun ve ardından ailenin çevre sorunlarını çözebileceği görüşüne sahiptirler. Son olarak öğrenciler öğretmenlerin çevre sorunlarını çözebileceğini belirtmişlerdir.

İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrenciler yaşadıkları çevrede çevre sorunlarını daha çok belediyenin çözebileceğini belirtmişlerdir. Bunun ardından öğrenciler sırasıyla sivil toplumun, muhtarlığın ve son olarak da kaymakamın çevre sorunlarının çözümünde rol oynayabileceğini belirtmişlerdir. Öğrenciler belediye temasında belediye başkanının ve temizlik görevlilerinin çevre sorunlarını çözebileceği görüşüne sahiptirler. Sivil toplumda ise öğrenciler ailenin ve çevre derneklerinin çevre sorunlarını çözebileceği görüşüne sahiptirler.

Öğrencilerin yaşadıkları çevredeki çevre sorunlarını kimin çözebileceğine ilişkin ifadeleri incelendiğinde belediyeyi çözüm olarak gören öğrenci ifadelerinden örnekler aşağıda verilmiştir
K8 belediye ve belediye temizlikçileri çözebilir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

K2 Çöpçülerin çözebileceğine inanıyorum.
S10. Belediye başkanı çözer.

Öğrencilerin yaşadıkları çevredeki çevre sorunlarını kimin çözebileceğine ilişkin ifadeleri incelendiğinde sivil toplumu çözüm olarak gören öğrenci ifadelerinden örnekler aşağıda verilmiştir
Z4. Çevre sorununu annelerimiz, babalarımız ve halalarımız çözebilir.
Z7.Bazı insanların artık sigarayı bırakmaları gerekiyor, bazı insanların artık az ağaç kesmeleri gerekiyor, bazı insanların artık yerlere çöp atmamaları gerekiyor.
K6. Pikniğe giden insanlar artık çevreyi temizleyebilir, bütün insanlar yapabilir.

Öğrencilerin Çevre Sorunlarına Karşı Sorumlulukları
Öğrencilerin Çevre sorunlarına karşı sorumluluklarına yönelik düşünceleri analiz edilmiş, buna göre; "Kirlenmeyi Önleme ve Koruma ve Sosyal Girişim" olmak üzere iki tema oluşmuştur. Temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklığı Tablo 10'da gösterilmiştir.

Tablo 10. Öğrencilerin Çevre Sorunlarına Karşı Sorumluluklarına Yönelik Düşünceleri

Temalar	
Kirlenmeyi Önleme - Koruma (f:37)	Sosyal Girişim (f:33)
-Çöpleri temizlerim(f:29) -Çöp atmam(f:17) -Ağaçlandırma (f:7) - Çiçeklendirme (f:3) - Geri dönüşüm (f:1) -Atık pil toplama (f:1)	- Uyarı (f:29) -Temizlikçiye yardım(f:10)

Cevap yok:3

Öğrencilerin 60'ı çevre sorunlarına karşı sorumluluklarına yönelik düşüncelerine ilişkin soruya yanıt vermiştir. Öğrencilerin ifadeleri incelendiğinde daha çok kirlenmeyi önleme-koruma düşüncesine sahip oldukları ve bu tema altında öğrenciler daha çok çöpleri temizleyerek kirlenmeyi önleyebileceği ve çevreyi koruyabileceğini düşünmektedirler. Öğrenciler çevre sorunlarına yönelik sorumluluklarında sosyal girişimi de görmektedirler. Buna göre öğrenciler çevreye zarar verenlerin uyarılmasıyla çevreye karşı sorumlu bir davranış gösterebileceğini ifade etmiştir.

Öğrencilerin çevre sorunlarına karşı sorumluluklarına ilişkin ifadeler okul bazında analiz edilmiş, buna göre temalar, temalar altında yapılan kavramsal kodlamalar ve temaların kullanım sıklığı Tablo 11'de gösterilmiştir

Tablo 11. Okul Bazında Öğrencilerin Çevre Sorunlarına Karşı Sorumluluklarına Yönelik Düşünceleri

Okullar	Temalar	
	Kirlenmeyi Önleme – Koruma (f:13)	Sosyal Girişim (f:14)
Mehmet Zeki Obdan İlkokulu (Dilovası)	-Çöpleri temizlerim(f:10) -Çöp atmam(f:11) -Ağaçlandırma (f:1) -Geri dönüşüm (f:1) -Atık pil toplama (f:1)	- Uyarı (f:12) -Temizlikçiye yardım(f:5)
	Kirlenmeyi Önleme – Koruma (f:15)	Sosyal Girişim (f:12)
Akçakoca İlkokulu(Kandıra)	-Çöpleri temizlerim(f:14) -Çöp atmam(f:4)	- Uyarı (f:10) -Temizlikçiye yardım(f:2)
	Kirlenmeyi Önleme – Koruma (f:9)	Sosyal Girişim (f:7)
Saraybahçe İlkokulu (İzmit)	-Ağaçlandırma (f:6) -Çöpleri temizlerim(f:5) -Çöp atmam(f:2) -Çiçeklendirme(f:2)	- Uyarı (f:7) -Temizlikçiye yardım(f:3)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 11'e göre Dilovası Mehmet Zeki Obdan İlkokulu'nda öğrenim görmekte olan öğrenciler daha çok Sosyal Girişim düşüncesine sahip oldukları ve bu tema altında öğrenciler daha çok çöp atanları uyararak ve temizlikçiye yardım ederek çevre sorunlarını çözebileceklerini düşünmektedirler. Bunun ardından öğrenciler kirlenmeyi önleme ve koruma olarak daha çok çöp atmayarak ve çöpleri temizleyerek çevre sorunlarını çözebileceklerini belirtmişlerdir.

Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrenciler daha çok Kirlenmeyi Önleme ve Koruma düşüncesine sahip oldukları ve bu tema altında öğrenciler daha çok çöpleri temizleyerek ve çöp atmayarak çevre sorunlarını çözebileceklerini düşünmektedirler. Bunun ardından öğrenciler Sosyal Girişim olarak daha çok çöp atanları uyararak ve temizlikçiye yardım ederek çevre sorunlarını çözebileceklerini belirtmişlerdir.

İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrenciler daha çok Kirlenmeyi Önleme ve Koruma düşüncesine sahip oldukları ve bu tema altında öğrenciler daha çok ağaçlandırma yaparak ve çöpleri temizleyerek çevre sorunlarını çözebileceklerini düşünmektedirler. Bunun ardından öğrencilerSosyal Girişim olarak daha çok çöp atanları uyararak ve temizlikçiye yardım ederek çevre sorunlarını çözebileceklerini belirtmişlerdir.

Çevre sorunlarını önlemek için kirlenmeyi önlemeyi ve korumayı sorumluluk olarak gören çocukların ifadelerinden örnekler aşağıdaki gibidir:
Z1. Yerdeki çöpleri toplarım denize atılan atıkları toplarım ve iyi bir iş yaparım.
Z25. Eldiven alıp yerdeki çöpleri çöp kutusuna atabilirim.
K3. Çöpleri toplarım, yerlere çöp atmam.
K21.çevreyi temizlerim ateş yanıyorsa söndürürüm.
S9.Eldiven alıp atık pilleri toplayabilirim. Ağaç dikebilirim.

Çevre sorunlarını önlemek için sosyal girişimi sorumluluk olarak gören çocukların ifadelerinden örnekler aşağıdaki gibidir:
K2.Yere çöp atanları uyarırım.
S4. Doğayı kirletmemeleri için, çöpleri yere atmamaları için onları uyarırım.

TARTIŞMA VE SONUÇ

Araştırmaya katılan öğrencilerin çevre kavramına ait ifadelerine ilişkin bulgular incelendiğinde çevreyi çoğunlukla hayvanlar, orman, bitkiler ve yeşilliklerin olduğu bir yer olarak tanımlamışlardır. Bu sonuçtan öğrencilerin çoğunlukla Loughland, Reid, &Petocz, (2002)'in çalışmasındaki Nesne odaklı 2. Kavram'a sahip oldukları söylenebilir. Öğrencilerin 25'İ çevre kavramını tanımlarken sadece canlı öğeleri kullanmış, 20'si hem canlı ve hem cansız öğelerden yararlanarak çevreyi tanımlamış ve bu öğrencilerin 22'si tanımlamalarına insanı eklemiştir. Bu veriler ışığında öğrencilerin çoğunluğu Shepardson, Wee, Priddy ve Harbor (2007)'un araştırmasındaki gibi daha çok Birinci Model çevre algısına sahip oldukları söylenebilir. Öğrenci ifadeleri incelendiğinde öğrencilerin hemen hemen tamamı çevreye karşı olumlu ifadeler kullanmıştır. Dolayısıyla bu bulgudan araştırmaya katılan öğrencilerin Alerby (2002)'ın araştırmasındaki çevreye karşı iyi dünyaya odaklanmış düşüncelere sahip oldukları söylenebilir.

Araştırmaya katılan öğrencilerin ifadeleri incelendiğinde 28 öğrenci çevre kavramını daha çok çevreyle ilgili ve çevrede bulunan varlıkların isim listesini yazarak ifade etmiştir. Dolayısıyla bu bulgu Loughland vd (2002)'nin çocukların sınırlı veya gelişmiş bir çevre anlayışının olabileceğini ve ilkokul çocuklarının çevre kavramını daha çok isimler ve nesneler listesiyle tanımladıkları bulgusunu desteklemektedir.

Köşker (2013) 4. Sınıf öğrencileriyle yaptığı çalışmada öğrencilerin doğa hakkındaki tanımları en fazla bitkisel unsurlar çerçevesinde değerlendirdikleri bulgusuna ulaşmıştır. Bu çalışmada ise öğrencilerin canlı çevre teması altında çevre algıları incelendiğinde öğrencilerin çevre algısı yoğunlukla bitkiler, ormanlar, yeşillik ve çimenler olarak ortaya çıkmıştır. Bu durum Köşker (2013)'in elde ettiği bulgularla örtüşmektedir.

Dilovası Zeki Obdan İlkokulu'nda öğrenim görmekte olan ve soruya yanıt veren 25 öğrencinin çevre kavramına ait ifadelerine ilişkin bulgular incelendiğinde ifadelerinin 22'sinde canlı öğelerden yararlanarak, on sekizi ise cansız öğelerden yararlanarak çevreyi tanımlamıştır. Öğrenciler çevreyi çoğunlukla çevreyi hayvanların ve bitkilerin olduğu bir yer olarak tanımlamışlardır. Bu sonuçtan öğrencilerin çoğunlukla Loughland, Reid, &Petocz, (2002)'in çalışmasındaki Nesne odaklı 2. Kavram'a sahip oldukları söylenebilir. Öğrencilerin 11'i çevre kavramını tanımlarken sadece canlı öğeleri kullanmış, 1'i sadece cansız öğeleri kullanmış ve 13'ü ise hem canlı ve hem cansız öğelerden yararlanarak çevreyi tanımlamış ve bu öğrencilerin 11'i tanımlamalarına insanı eklemiştir. Bu veriler ışığında öğrencilerin çoğunluğu Shepardson, Wee, Priddy ve Harbor (2007)'un

 Copyright © International Conference on New Horizons in Education Conference (INTE)

araştırmasındaki gibi daha çok Birinci Model çevre algısına sahip oldukları söylenebilir. Ayrıca öğrenci ifadeleri incelendiğinde öğrencilerin hemen hemen tamamı çevreye karşı olumlu ifadeler kullanmıştır. Dolayısıyla bu bulgudan araştırmaya katılan öğrencilerin Alerby (2002)'ın araştırmasındaki çevreye karşı iyi dünyaya odaklanmış düşüncelere sahip oldukları söylenebilir.

Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan ve soruya yanıt veren 14 öğrencinin çevre kavramına ait ifadelerine ilişkin bulgular incelendiğinde ifadelerinin 13'nde canlı öğelerden yararlanarak, 4'nde ise cansız öğelerden yararlanarak çevreyi tanımlamıştır. Öğrenciler çevreyi çoğunlukla bitkilerin, insanların ve yeşillik çimenlerin olduğu bir yer olarak tanımlamışlardır. Bu sonuçtan öğrencilerin çoğunlukla Loughland, Reid, &Petocz, (2002)'in çalışmasındaki Nesne odaklı 3. Kavram'a sahip oldukları söylenebilir.Öğrencilerin 12'si çevre kavramını tanımlarken sadece canlı öğeleri kullanmış ve 4'üü ise hem canlı ve hem cansız öğelerden yararlanarak çevreyi tanımlamış ve bu öğrencilerin 7'si tanımlamalarına insanı eklemiştir. Bu veriler ışığında öğrencilerin çoğunluğu Shepardson, Wee, Priddy ve Harbor (2007)'un araştırmasındaki gibi daha çok İkinci Model çevre algısına sahip oldukları söylenebilir. Ayrıca öğrenci ifadeleri incelendiğinde öğrencilerin hemen hemen tamamı çevreye karşı olumlu ifadeler kullanmıştır. Dolayısıyla bu bulgudan araştırmaya katılan öğrencilerin Alerby (2002)'ın araştırmasındaki çevreye karşı iyi dünyaya odaklanmış düşüncelere sahip oldukları söylenebilir.

İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan ve soruya yanıt veren 10 öğrencinin çevre kavramına ait ifadelerine ilişkin bulgular incelendiğinde ifadelerinin 9'nda canlı öğelerden yararlanarak, 6'nda ise cansız öğelerden yararlanarak çevreyi tanımlamıştır. Öğrenciler çevreyi çoğunlukla hayvanların, bitkilerin olduğu bir yer olarak tanımlamışlardır. Bu sonuçtan öğrencilerin çoğunlukla Loughland, Reid, &Petocz, (2002)'in çalışmasındaki Nesne odaklı 2. Kavram'a sahip oldukları söylenebilir. Öğrencilerin 3'ü çevre kavramını tanımlarken sadece canlı öğeleri kullanmış, 2'si sadece cansız öğelerden yararlanarak çevreyi tanımlamış ve 5'i ise hem canlı ve hem cansız öğelerden yararlanarak çevreyi tanımlamıştır. Bu öğrencilerin 4'ü tanımlamalarına insanı eklemiştir. Bu veriler ışığında öğrencilerin çoğunluğu Shepardson, Wee, Priddy ve Harbor (2007)'un araştırmasındaki gibi daha çok birinci Model çevre algısına sahip oldukları söylenebilir. Ayrıca öğrenci ifadeleri incelendiğinde öğrencilerin hemen hemen tamamı çevreye karşı olumlu ifadeler kullanmıştır. Dolayısıyla bu bulgudan araştırmaya katılan öğrencilerin Alerby (2002)'ın araştırmasındaki çevreye karşı iyi dünyaya odaklanmış düşüncelere sahip oldukları söylenebilir.

Dilovası Zeki Obdan İlkokulu'nda öğrenim görmekte olan öğrencilerin 7'si çevreyi doğal ve yapay çevre olarak ayırmış, İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrencilerin 4'ü çevreyi doğal ve yapay çevre olarak ayırmıştır. Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrenciler ise böyle bir ayrım yapmamıştır. Ayrıca Dilovası Zeki Obdan İlkokulu'nda öğrenim görmekte olan öğrencilerin 7'si, Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrencilerin 5'i çevreyi yaşam alanı olarak ifade etmiştir. İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrenciler ise böyle bir ayrım yapmamıştır. Dolayısıyla bu sonuçtan öğrencilerin Fen bilimleri 3. Sınıf ders programında yer alan "Doğal ve Yapay Çevre" başlığında "Doğal ve yapay çevre arasındaki farkları açıklar" kazanımının gerçekleşmediği söylenebilir.

Öğrencilerin çevre algılarına yönelik ifadeleri karşılaştırıldığında Dilovası Zeki Obdan İlkokulu'nda öğrenim görmekte olan öğrenciler ile İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrenciler çevreyi çoğunlukla hayvanların, bitkilerin olduğu bir yer olarak tanımlamışlardır ve Loughland, Reid, &Petocz, (2002)'in çalışmasındaki "Çevre canlıları içeren bir yerdir" olan Nesne odaklı 2. Kavram'a sahiptirler. Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrenciler ise diğer iki okulda öğrenim görmekte olan öğrencilerden farklı olarak çevreyi çoğunlukla bitkilerin, insanların ve yeşillik çimenlerin olduğu bir yer olarak tanımlamışlardır. Bu sonuçtan öğrencilerin çoğunlukla Loughland, Reid, &Petocz, (2002)'in çalışmasındaki "Çevre canlıları ve insanları içeren bir yerdir" olan Nesne odaklı 3. Kavram'a sahip oldukları ortaya çıkmıştır. Aynı şekilde Dilovası Zeki Obdan İlkokulu'nda öğrenim görmekte olan öğrencilerle İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrencilerin çoğunluğu Shepardson, Wee, Priddy ve Harbor (2007)'un çevreyi "Hayvan ve bitkilerin yaşadığı" Birinci Model çevre algısına sahipken, Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrencilerin çoğunluğu insanın da yer aldığı "Yaşamı destekleyen yer" İkinci Model çevre algısına sahiptir. Kandıra'da öğrenim görmekte olan öğrencilerin çoğunluğu çevreyi insanın da dâhil olduğu bir yer olarak görmektedirler.

Öğrencilerin resimlerinde 'Çevre Sorunu' kavramı görüşlerine ilişkin bulgular incelendiğinde öğrenciler çevre sorununu çoğunlukla "Atıklar" olarak ifade etmişlerdir. Bu sonuç Littledyke (2004)'ın araştırmasında elde ettiği çocukların çevre sonunu daha çok çöpler olarak görmeleriyle paralellik göstermektedir. Atıkların ardından doğaya verilen zarar, hava kirliliği ve su kirliliği öğrenciler tarafından çevre sorunu olarak görülmektedir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Öğrencilerin çevre kavramı algıları incelendiğinde yirmi öğrenci toplum ve insandan bahsetmiştir. Yaptıkları resimlerin kırk dördünde ise insan figürüne yer vermişlerdir. Yolcu (2004) şematik dönemdeki çocukların insan figürü çizimlerinde geliştirdikleri insan resmini sık sık tekrar ettiklerini ve bu resimlerin yetişkinler tarafından pekiştirilmesiyle daha fazla tekrar edileceğini bunun sonucunda da insan figürünün resimlerde temel figürlerden biri olacağını belirtmiştir. Dolayısıyla bu çalışmada da öğrencilerin çevre algılarına kıyasla resimlerinde insan figürüne sıkça yer vermeleri onların insan figürünü resimlerinde şema haline getirmeleriyle de ifade edilebilir. Öğrenciler resimlerinin otuz ikisinde insan çevreye zarar verir olarak, on resimde çevreye yararlı davranarak, iki resimde ise hem yarlı hem de zararlı davranış yapan olarak resmetmişlerdir. Dolayısıyla öğrencilerin insan figürünü şemalaştırmalarının yanında insanın çevreye olan etkisinin de farkında oldukları söylenebilir.

Öğrencilerin çizimlerinden de çevreyle olan etkileşimlerine, onların çevreyle olan ilişkilerine dair çıkarımlarda bulunmak mümkündür. Yavuzer (1992)'e göre yer çizgisi çocuğun kendisi ve çevresi arasındaki ilişkiyi anladığının bir belirtisi olarak ortaya çıkmaktadır. Lowenfeld'e (1978) göre şematik dönem olarak adlandırılan 7-9 yaş arası çocukların %96'sı yer çizgisini göstermektedir. Yer çizgisini çizen çocukların çevresiyle bilinçli bir ilişki kurabildiğini göstermektedir (Akt:Çankırılı, 2011). Buna göre öğrencilerden kırkı yer çizgisini göstermiş, yirmi üç öğrenci ise yer çizgisini göstermemiştir. Bu öğrencilerden Dilovası'nda öğrenim görmekte olan öğrencilerin on dördü yer çizgisini göstermiş, on yedisi yer çizgisini göstermemiştir. İzmit'te öğrenim görmekte olan öğrencilerin beşi yer çizgisini göstermiş beşi göstermemiştir. Kandıra'da yaşayan öğrencilerin ise yirmi biri yer çizgisini göstermiş biri göstermemiştir. Bu bulgulardan hareketle Kandıra'da öğrenim görmekte olan öğrencilerin diğer gruplara göre kendisi ve çevresi ile arasındaki ilişkiyi anlamlandırabildikleri, çevreleriyle daha bilinçli ilişki kurabildikleri söylenebilir.

Öğrenci resimleri incelendiğinde her üç ilçedeki öğrenciler öncelikli olarak "Atıklar"a çevre sorunu olarak resimlerinde yer vermiştir. Her üç okulda da atık olarak çöpler resmedilmiştir. Ancak diğer okullardan farklı olarak İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrenciler atık pillere de resimlerinde yer vermiştir.Hava kirliliğine ise daha çok Dilovası'nda öğrenim görmekte olan öğrenciler resimlerinde yer vermiş ve bu kirlilik daha çok fabrika dumanı, kirli hava olarak resmedilmiştir. Kandıra Akçakoca İlkokulu'nda öğrenim görmekte olan öğrenciler fabrika dumanı ve egzoz gazına yer verirken, İzmit Saraybahçe İlkokulu'nda öğrenim görmekte olan öğrenciler fabrika faktörüne yer vermemiştir. Resimlerinde hava kirliliğini en az gösterenler ise Kandıra'da yaşayan öğrencilerdir. Dolayısıyla Dilovası'nda yaşayan öğrenciler çevrelerinde yer alan fabrikaların kirliliğe etkisinin farkında oldukları söylenebilir. Kandıra ise sanayileşmenin olmadığı bir ilçedir, bu durum öğrenci resimlerinde de kendini göstermiştir. Ancak İzmit'te yaşayan öğrencilerin resimlerinde fabrikalara yer vermemeleri ise oldukça ilginçtir. Doğaya verilen zarar olarak Dilovası ve Kandıra'da yaşayan öğrenciler orman yangınlarına yer verirken, İzmit'te yaşayan öğrenciler buna yer vermemiştir. Kandıra da yaşayan öğrenciler ise diğer ilçelerde yaşayan öğrencilere göre ağaçların kesilmesine ve hayvanlara zarar verilmesine resimlerinde yer vermemiştir. Son olarak her üç okulda da resimlerde en az yer verilen kirlilik deniz kirliliğidir.

Öğrencilerin yaşadıkları çevredeki çevre sorunlarına yönelik bulgular incelendiğinde, çevre sorununu daha çok atıklar olarak görmektedirler. İkinci sırada ise öğrenciler hava kirliliğini çevre sorunu olarak görmektedirler. Fabrika dumanını daha çok hava kirliliği olarak gören öğrenciler sırasıyla egzoz gazını ve baca dumanını hava kirliliği olarak görmektedirler. Öğrenciler çevrelerinde doğaya verilen zararları da çevre sorunu olarak görmüş, buna göre yangınlar ve ağaçların kesilmesi çevrelerinde yer alan çevre sorunları olarak görülmektedir. Diğer yandan öğrencilerin çevre sorunu kavramına yönelik ifadelerinde su kirliliğine ait çizimler bulunmaktayken, yaşadıkları çevrede yer alan çevre sorunlarında bu kirlikten bahsetmemişlerdir.

Hava kirliliği temasına verilen yanıtlar daha çok Dilovası'nda yaşayan öğrencilere aittir ve on öğrenci fabrikaların havayı kirlettiğinden bahsetmiştir. Dilovası yoğun sanayi bölgesi olması sebebiyle fabrikaların çevreye olan etkisi öğrencilerin dikkatinden kaçmamıştır. Hava kirliliğinden bahseden diğer öğrenciler ise İzmit'te yaşayan öğrencilerdir. İzmit'te yaşayan öğrenciler havayı kirleten etmenleri daha çok egzoz gazı, fabrika dumanı ve baca dumanı olarak görmektedirler. Kandıra'da yaşayan öğrenciler ise bulundukları çevrede kirlilik olarak hava kirliliğine yer vermemiştir. Dilovası'nda yaşayan öğrenciler ile Kandıra'da yaşayan öğrenciler ağaçların kesilmesini ve orman yangınlarını çevrelerinde doğaya verilen zarar olarak çevre sorunu görmekteyken, İzmit'te yaşayan öğrenciler çevre sorunu olarak doğaya verilen zarardan bahsetmemişlerdir.

Öğrencilerin çevre sorunlarını kimin-kimlerin çözebileceğine ilişkin bulgular incelendiğinde öğrenciler çevre sorunlarının çözümünü öncelikli olarak belediyede görmektedirler. Öğrenciler büyük şehir sınırları içinde ve şehirlerde yaşamaktadırlar. Dolayısıyla çevre ile ilgili sorunların çözümünü öncelikli olarak belediye başkanın ve belediyenin temizlik görevlilerinin yapabileceğini düşündükleri söylenebilir. Öğrenciler çevre sorunlarının çözümünde ikinci olarak sivil toplumu görmektedirler. Öğrenciler ailelerin bu sorunu çözebileceğini

 Copyright © International Conference on New Horizons in Education Conference (INTE)

düşünmektedirler. Ancak sivil toplum örgütlerinin çevre ile ilgili sorunları çözebileceğinden iki öğrenci bahsetmiştir. Bu sonuçtan öğrencilerin çevre ve çevre sorunlarıyla ilgilenen sivil toplum kuruluşları konusunda yeterli bilgiye sahip olmadıkları söylenebilir.

Her üç ilçede yaşayan öğrenciler belediyenin çevre sorunlarının çözümünde öncelikli sorumlu olduğunu görmektedir. Çevre sorunlarının çözümünü sivil toplum olarak ve bunda da aile ve toplum olarak gören öğrenciler Dilovası ve Kandıra'da yaşayan öğrenciler çoğunlukta olmakla birlikte öğrencilerin çevreyle ilgilenen sivil toplum örgütleri konusunda yeterli bilgiye sahip olmadıkları görülmektedir.

Öğrencilerin çevre sorunlarına karşı sorumluluklarına ilişkin bulgular incelendiğinde öğrenciler daha çok kirlenmeyi önleme ve koruma konusunda çöpleri temizleyerek ve çöp atmayıp çevre sorunlarının çözümüne katkı sağlayabileceklerini düşünmektedirler. Bununla birlikte öğrenciler çöp atanları uyarmayla ve temizlik görevlilerine yardım ederek sosyal girişimde bulunabileceklerini ifade etmişlerdir. Öğrenci ifadeleri incelendiğinde, öğrencilerin çevreyi koruma sorumluluğuna sahip oldukları görülmektedir. Bu bulgu Köşker'in(2013) çalışmasında elde ettiği öğrencilerin koruma sorumluluğuyla da paralellik göstermektedir.

Kirlenmeyi önleme ve koruma düşüncelerinde öğrencilerden yedisi çevreyi ağaçlandırmayı ve ikisi çiçeklendirmeyi sorumluluk olarak ifade etmiştir. Bir öğrenci ise geri dönüşümü çevre sorunlarına karşı sorumluluk olarak görmektedir. Bu durum araştırma yapılan grup için oldukça düşük bir orandır. Bu sonuçtan öğrencilerin gerek geri dönüşüm gerek çevrenin yeşillendirilmesi konusunda yeterli bilgiye sahip olmadıkları sonucu çıkarılabilir.

Dilovası'nda yaşayan öğrencilerin çoğunluğu çevre sorunları çözebilmek için sosyal girişimde bulunup çevreyi kirletenleri uyararak sorumluluk göstereceğini belirtirken, Kandıra'da yaşayan öğrenciler kirlenmeyi önleme ve koruma düşüncesiyle çöpleri temizleyerek sorumluluk göstereceğini belirtmiştir. İzmit'te yaşayan öğrenciler ise kirlenmeyi önleme ve koruma olarak daha çok ağaçlandırma yaparak çevre sorunlarına karşı sorumluluk göstereceğini belirtmiştir. Burgess ve Mayer-Smith (2011) çalışmalarında çocukların çevre ve doğa algılarının çeşitliliği ve sınırının onların önceki deneyimlerine bağlı olduğu bulgusuna ulaşmıştır.Ballantyne ve Packer (2002) ise, çalışmalarında yapılan çevre gezileriyle öğrencilerin insanların çevreye etkileriyle ve çevreyle nasıl ilgilenebilecekleriyle ilgili yeni bilgiler öğrendikleri ve çevreyle doğaya karşı olumlu tutum ve davranış geliştirdikleri bulgusuna ulaşmıştır. Dolayısıyla öğrencilerin çevreye karşı olumlu tutum geliştirebilmeleri, onlara doğa sevgisini ve ağaç sevgisini aşılamak için çevre gezilerinin, ağaçlandırma çalışmalarının yapılması yararlı olacaktır.

Öneriler

- Çalışma ilkokul 3 sınıf öğrencileriyle yapılmıştır. Bir başka çalışma ilkokulun daha alt sınıflarında ve daha geniş çalışma grubuyla yapılabilir.
- Öğrenciler çevre kavramını daha çok nesne ve isimlerle ifade etmektedirler. Çevre sorunlarının doğaya etkileri hakkında daha çok kazanım elde edebilmeleri ve çevreye karşı sorumluluklarını artırabilmek için çevre gezileri, ağaçlandırma çalışmaları gibi öğrenme ortamları oluşturulabilir.
- Öğrenciler çevre konusuyla ilgilenen sivil toplum kuruluşları hakkında yeterli bilgiye sahip değildir. Dolayısıyla öğretim sürecinde sivil toplum kuruluşlarına daha çok yer verilebilir.
- Öğrenciler Fen Bilimleri 3 dersi çevre ile ilgili kazanımlara yeterli düzeyde sahip değildir, öğretim etkinliklerinde bu konuyla ilgili ek çalışmalar yapılabilir.

KAYNAKÇA

Alerby, E., (2000). A way of visualizingchildren'sandyoungpeople'sthoughtsabouttheenvironment: a study of drawings, *Environmental Education Research*, 6(3), 205–222.http://www.tandfonline.com/doi/abs/10.1080/13504620050076713 adresinden 03.12.2015tarihinde erişilmiştir.

Ballantyne, R.,Packer, J., (2002). Nature-basedExcursions: School Students' Perceptions of Learning in Natural Environments, *International Research in Geographical and Environmental Education*, 11:3, pp: 218-236. http://www.tandfonline.com/doi/abs/10.1080/10382040208667488 adresinden 09.12.2015 tarihinde erişilmiştir.

Burgess, D.J. ve Mayer-Smith, J. (2011).Listening to children: Perceptions of nature, Journal of Natural History Educationand Experience, 5, 27-43. http://naturalhistorynetwork.org/wp-content/uploads/2011/10/Burgess-and-Mayer-Smith.v5.27-43.pdf adresinden 04.12.2015 tarihinde erişilmiştir.

Çankırılı, A (2011). *Çocuk Resimlerinin Dili*, Zafer Yayınları: İstanbul.

Demirkaya, H. (2006). Çevre Eğitiminin Türkiye'deki Coğrafya Programları İçerisindeki Yeri ve Çevre Eğitimine Yönelik Yeni Yaklaşımlar. *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 16, (1), 207-222.

Köşker, N. (2013). İlkokul öğrencileri ve Sınıf Öğretmeni Adaylarının Doğaya İlişkin Algıları ve Sorumluluklarına Yönelik Düşünceleri, *Turkish Studies- International Periodical For The Languages, Literature and History of Turkish or Turkic, Vol:8/3, pp:341-355*.

Littledyke, M. (2004). Primary chidren's views on science and environmental issues: example of environmental cognitive and moral development. *Environmental Education Research*, 10 (2), 217–235.

Loughland, T.,Reid, A., &Petocz, P. (2002).Young people's conceptions of environment: a phenomenographic analysis. *Environmental Education Research*, 8(2), 187-197.http://www.tandfonline.com/doi/pdf/10.1080/13504620220128248 adresinden 02.12.2015 tarihinde erişilmiştir.

MEB. (2013). İlköğretim Kurumları (İlkokullar ve Ortaokullar) Fen Bilimleri Dersi (1,2,3,4,5,6,7, ve 8. Sınıflar) Öğretim Programı. http://ttkb.meb.gov.tr/www/guncellenen-ogretim-programlari/icerik/151 adresinden 20.05.2016 tarihinde erişilmiştir.

Shepardson, D.P.,Wee, B., Priddy, M. &Harbor, J. (2007). Students' mental models of the environment. *Journal of Research in Science Teaching*, 44, 327–348. http://onlinelibrary.wiley.com/doi/10.1002/tea.20161/epdf adresinden 04.12.2015 tarihinde erişilmiştir.

Yavuzer, H. (1992).*Resimleriyle Çocuk*. İstanbul: Remzi Kitabevi.

Yıldırım, A., Şimşek, H. (2011). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*. Ankara: Seçkin Yayıncılık.

Yolcu, E. (2004). *Sanat Eğitimi Kuramları ve Yöntemleri*. Ankara: Nobel Yayıncılık.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

İNGİLİZCE ÖĞRETMENLERİNİN İLKOKUL 2. ve 3. SINIFLARDA İNGİLİZCE ÖĞRETİMİNE YÖNELİK GÖRÜŞLERİNİN İNCELENMESİ

Ahmet ESKİCUMALI
Sakarya Üniversitesi, Eğitim Fakültesi, Türkiye
ecumali@sakarya.edu.tr

Serhat ARSLAN
Sakarya Üniversitesi, Eğitim Fakültesi, Türkiye
serhatarslan@sakarya.edu.tr

Zeynep DEMİRTAŞ
Sakarya Üniversitesi, Eğitim Fakültesi, Türkiye
zeynept@sakarya.edu.tr

Yunus Emre DEMİR
Sakarya Üniversitesi, Eğitim Bilimleri Enstitüsü,
Yüksek Lisans Öğrencisi, Türkiye

ÖZET
Yabancı dil, küreselleşen dünyamızın gerektirdiği durumlar dikkate alındığında bir ihtiyaç olarak görülmektedir. Dolayısıyla bu ihtiyaca cevap olarak ülkeler çeşitli şekilde eğitim politikaları ve reformları gerçekleştirmektedir. Ülkemizde de eğitimde gerçekleştirilen bir yenilikle beraber 2013-2014 yılından itibaren ilkokul 2. sınıftan başlamak üzere İngilizce dersi okutulmaya başlamıştır. Nitel araştırma kapsamında yapılan bu araştırma, 2015-2016 öğretim yılında özel ve devlet ilkokullarında 2. ve 3. sınıf İngilizce derslerine giren İngilizce öğretmenlerinin İngilizce öğretimine yönelik görüşlerinin incelenmesini amaç edinmektedir. Araştırmada görüşme tekniği kullanılarak, 10 sorudan oluşan yarı yapılandırılmış görüşme formu hazırlanmıştır. Konu hakkında uzman kişilerin görüşleri dikkate alınarak görüşme formuna son hali verilmiştir. Araştırmada; İstanbul, Sakarya, Kocaeli illerinde özel ve devlet ilkokullarında görev yapan 16 bayan ve 9 erkek öğretmen olmak üzere 25 öğretmen görüş bildirmişlerdir. Öğretmenlere; öğrencilerin hazırbulunuşluk düzeyleri, ilgi ve dikkat seviyeleri, öğrenme-öğretme sürecinde uyguladıkları etkinlikler, İngilizce dersi öğretim programındaki kazanımların ve içeriğin uygunluğu, ölçme-değerlendirme çalışmalarını nasıl yaptıkları, derste kullandıkları materyaller, İngilizce ders kitabının yeterliliği ile bu derste karşılaşılan sorunların neler olduğu sorulmuştur. Araştırma sonuçlarına göre öğretmenler; öğrencilerin hazırbulunuşluk düzeylerinin yüksek olduğunu, ilgi ve dikkatlerinin yoğun ancak kısıtlı olduğunu, ders kitaplarının geliştirilmesi gerektiğini belirtmişlerdir. Ayrıca, derslerde çoğunlukla şarkı, oyun gibi etkinlikleri kullandıklarını belirtmişler ve ders saatlerinin artırılması yönünde öneri getirmişlerdir.

Anahtar Kelimeler: Yabancı dil, İngilizce öğretimi, ilkokul.

1.GİRİŞ

Dil, insanlar arasındaki iletişimin ve etkileşimin en etkili bir biçimde ortaya konmasını sağlar. İnsanlar bulundukları toplumda konuşulan dili dünyaya geldikleri andan itibaren öğrenme çabası içerisine girmektedirler (Bayyurt, 2012; Karakoç, 2007). Erken yaştaki bireylerin kendi ana dilini öğrenmesi sürecinin ardından ya da yine bu yaşlardaki ana dil ile aynı zaman diliminde öğrenilmeye çalışılan yabancı dil, bu bireylerin zihninde daha kalıcı bir şekilde yer almaktadır (Haznedar, 2003). Yabancı bir dili öğrenmeye çalışan bireylerin, öğreneceği dildeki cümle dizilişi ve dil bilgisi durumlarını ana dillerindeki durumlarla karşılaştırmaları gerekir. Ayrıca her dilin kendine ait bir yapısının ve dilbilgisi kurallarının olduğu bilinci bu dili öğrenmeye çalışan bireylere kazandırılması gerekmektedir. Bireyler kendi dillerindeki ve öğrenmeye çalıştığı yabancı dildeki benzer durumları ya da farklı durumları tespit edip öğrenme sürecinde bu durumları anlamlandırmaya çalışmalıdır (Tosun, 1983).

Özellikle teknolojik, bilimsel ve savunma alanlarında uluslararası etkileşimin giderek arttığı günümüzde yabancı dil bir ihtiyaç haline gelmiştir. Bir ülke, eğitim reformlarıyla birlikte yabancı dil öğretimi politikalarını bu alanlarda ileri olan ülkelerin dillerini dikkate alarak belirlemektedir. Ülkemizde de bu alanlarda ileri olan batı dilleri yabancı dil olarak okullarda okutulmaktadır (Özdemir, 2006). Yabancı dil öğrenen bireyler öğrendikleri yabancı dil ile kendi dilleri arasındaki kültürel farklılıkları tespit edip farklı bakış açıları geliştirerek karşılaştırma yapma ve kişilik gelişimi imkanına sahiptir (Sayın, 1993).Ülkemizde de ikinci bir dile ihtiyacın tüm zamanlarda hissedildiği ve eğitim reformlarıyla birlikte düzenlemelere başvurulduğu bir gerçektir. Ülkenin

 Copyright © International Conference on New Horizons in Education Conference (INTE)

sosyal-kültürel ve ekonomik olarak kalkınması için yabancı dil öğretimi bir gereksinim olmuştur (İlkhan, 1999). Dolayısıyla yabancı dil öğretiminin toplum açısından yararı bu şekilde değerlendirilirken, toplumu oluşturan bireylerin de yabancı dil eğitimi almaları son derece önemlidir. Yabancı dil eğitiminin erken yaşlarda verilmesinin bir sebebi olarak, erken yaş çocuklarının yetişkinlere oranla sabit fikir ve düşüncelerinin daha az olması, yabancı dil eğitimin daha kolay bir şekilde gerçekleştirildiği ve öğrenildiği gerçeğini ortaya çıkarmaktadır (Bozavlı, 2015). Dünyada ortaokul kademesinden başlayarak öğretilmeye başlanan yabancı dil, sonraki yıllarda bazı batı ülkelerin anaokulu programında yer almaya başlamıştır. Fransa'da 2007 yılında başlayan bir uygulama ile okula başlayan tüm öğrenciler için yabancı dil öğrenme yaşı 7 olarak belirlenmiştir. Bu duruma bir başka örnek olarak 2008 yılından beri İspanya'da öğrenciler yabancı bir dille üç yaşında tanışırken, Portekiz'de ise 2005 yılından beri öğrencilere, 3. sınıfta yabancı dil öğretimi yapılmaktadır (EURYDICE, 2008). Ülkemizde de 2013-2014 yılından itibaren dünya ülkelerine benzer bir şekilde eğitimde bir yenilikle beraber ilkokul 2. sınıftan başlanarak İngilizce dersi yabancı dil olarak programda yer almaya başlamıştır. Bu durumla ilgili olarak 2. ve 3. sınıflarda okutulmaya başlanan İngilizce dersinin öğretim sürecinde olumlu veya olumsuz boyutları ele alınarak araştırma kapsamında incelenmiştir. Nitel araştırma deseninde oluşturulan bu çalışmada, 2015-2016 öğretim yılında özel ve devlet ilkokullarında 2. ve 3. sınıf İngilizce derslerine giren İngilizce öğretmenlerinin İngilizce öğretimine yönelik görüşlerinin incelenmesi amaçlanmıştır.

2. YÖNTEM

Bu çalışma, nitel araştırma yöntemlerinden biri olan görüşme tekniği kullanılarak gerçekleştirilmiştir. Araştırmacılar tarafından on açık uçlu sorudan oluşan görüşme formu hazırlanarak, uzman görüşleri doğrultusunda forma son şekli verilmiştir. Görüşme formu ile öğretmenlere; öğrenme-öğretme sürecinde öğrencilerin hazırbulunuşluk düzeyleri, derse yönelik ilgileri, İngilizce dersi öğretim programı ve ders kitaplarının içeriği, sınıfta uyguladıkları etkinlikler ile ölçme-değerlendirme çalışmaları, fiziki ortam ve karşılaşılan problemler sorulmuştur. Araştırmada, kartopu veya zincir örnekleme yöntemi ile Sakarya, Kocaeli ve İstanbul illerindeki devlet ve özel ilkokullarda çalışan 25 öğretmene ulaşılmıştır. Bu örnekleme yöntemi, problem sorularıyla ilgili olarak geniş ölçüde bilgi alınması ve mevcut durumların tespitinde etkili olması açısından önemlidir. Katılımcıların önerileri ile konuyla ilgili geniş ölçüde bilgi sahibi olan çalışma grubuna ulaşılmaktadır (Yıldırım ve Şimşek, 2008). Araştırmaya katılan öğretmenlerin 16'sı bayan, 9'u erkek öğretmendir ve kıdem ortalaması 4.4.'tür. Araştırmadan elde edilen veriler, betimsel analiz yöntemiyle çözümlenmiştir. Bu yöntemde konuya ilişkin önceden belirlenen tema ve kodlamalar doğrultusunda veriler analiz edilir, bulgular açığa çıkarılır ve yorumlanır (Yıldırım ve Şimşek, 2008). Öğretmenlerin görüşlerinden elde edilen veriler, araştırmacılar tarafından incelenip, karşılaştırılarak, ortak tema ve kodlamalar altında ifade edilmiştir. Çalışma grubundaki öğretmenler, G1, G2 … şeklinde belirtilmiştir.

3. BULGULAR

İngilizce öğretmenlerinin ilkokul 2. ve 3. sınıflarda İngilizce öğretimine yönelik görüşleri aşağıda tablolar halinde sunulmuştur. Öğretmenlerin, öğrencilerin İngilizce dersine hazırbulunuşluk düzeyleri ile ilgili görüşleri tablo 1'de gösterilmiştir.

Tablo 1. Öğretmenlerin ilkokul 2. ve 3. sınıf öğrencilerinin İngilizce dersine hazırbulunuşluk düzeylerine yönelik görüşleri

Tema (Kategoriler)	Kodlar	n	%
Olumlu	Öğrencilerin hazırbulunuşluk düzeyleri uygun (G1, G2, G4, G10, G20, G23, G24)	7	28
	İlgi ve istekleri yüksek düzeyde (G3, G5, G6, G7, G11, G15)	6	24
	Okul öncesinde İngilizce dersi görenlerin hazırbulunuşlukları yüksek düzeyde (G13, G14, G21)	3	12
Olumsuz	Çocukların hazırbulunuşlukları yeterli değil (G9, G12, G17, G22)	4	16
	Okul öncesinde İngilizce dersi görmeyenlerin hazırbulunuşlukları düşük seviyede (G13, G14)	2	8
	Öğrenciler, derse materyallerini getirmediği için derse hazır değiller (G8)	1	4
	Öğrencilerin sınav kaygısı ile İngilizceyi kullanma ortamını bulamamaları, öğrencilerin ilgi ve isteğini düşürüyor (G15)	1	4
	Sosyal çevresi iyi olmayan, ekonomik durumu ve aile eğitim düzeyi düşük olan öğrencilerin hazırbulunuşlukları düşük (G16)	1	4
Öneriler	İlgi ve isteği artırıcı etkinlikler yapılmalı (G3, G12)	2	8

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	Gramer öğretimi yerine günlük hayatta kullanılan kalıp cümlelerin öğretimi olmalı (G2)	1	4
	İngilizce öğretiminin 3. sınıftan itibaren başlaması daha uygun olur (G24)	1	4
	Sık sık ders tekrarı yapılmalı (G3)	1	4

Tablo 1 incelendiğinde, ilkokul 2. ve 3. sınıf öğrencilerinin hazırbulunuşluk düzeylerine ilişkin öğretmen görüşleri "olumlu", "olumsuz" ve "öneriler" kategorilerinde incelenmiştir. Olumlu kategorisinde; öğrencilerin hazırbulunuşluk düzeylerinin uygun olduğu ve derse karşı ilgi ve isteklerinin yüksek düzeyde olduğu, olumsuz kategorisinde; çocukların hazırbulunuşluk düzeylerinin yeterli olmadığı ve okul öncesinde İngilizce dersi görmeyen öğrencilerin hazırbulunuşluk düzeylerinin düşük seviyede olduğu, öneriler kategorisinde ise öğrencilerin ilgi ve isteğini arttırıcı etkinliklerin yapılması gerektiği görüşleri ön plana çıkmıştır. Öğretmenlerin görüşlerinden bazıları şu şekildedir.

"Öğrencilerin hazırbulunuşlukları İngilizce öğrenmeye başlamak için gayet uygun." (G1)
"Derse karşı daha meraklı ve öğrenmeye açık olduklarını düşünüyorum." (G11)
"Çocuklar kreş ve anaokulu temelli iseler hazırbulunuşluk düzeyleri yüksek oluyor." (G21)
"Hazırbulunuşluk düzeylerinin ailenin sosyal çevresi, yaşadığı yer, ekonomik durumu ve özellikle eğitim düzeyiyle ilgili olduğunu düşünüyorum. Ekonomik durumu ve eğitim seviyesi yüksek ailelerin öğrencilerinin hazırbulunuşluğu, ailenin yönlendirmesi ve yabancı dile önem vermesi ile oldukça iyidir. Diğer öğrencilerimiz ise aile desteği az olduğu için okula geldiklerinde hazırbulunuşluk düzeyleri düşüktür." (G16)
"2. ve 3. sınıf öğrencilerinin hazırbulunuşluk düzeyleriyle ilgili olarak dil öğretim başlama yaşının ne kadar erken o kadar iyi ilkesine dayanarak uygun bir yaş olduğunu düşünüyorum. Gramer yapısı yerine 'chunks' dediğimiz parçalar halinde kalıp öğretimlerinin uygun olacağını düşünüyorum. "(G2)
"Genel olarak hazırbulunuşluğun kitabın içeriği ile paralel olmadığını düşünüyorum. Çocuklar duyduklarını hemen kapıyorlar. Ancak 2. sınıfın çok erken olduğunu düşünüyorum. 3.sınıftan başlaması daha mantıklı olur. "(G24)

Öğretmenlerin ilkokul 2. ve 3. sınıf öğrencilerinin İngilizce dersine olan ilgi ve dikkatlerine ilişkin görüşleri tablo 2'de sunulmuştur.

Tablo 2. Öğrencilerin derse olan ilgi ve dikkatlerine yönelik öğretmen görüşleri

Tema/Kategori	Kodlar	n	%
Olumlu	Öğrencilerin ilgisi yüksek (G1, G4, G7, G8, G13, G14, G16, G18, G19, G20, G21, G23, G24, G25)	14	56
	Derse katılım yüksek düzeyde (G4, G6, G7, G13, G14, G19, G25)	7	28
Olumsuz	İlgi ve istekleri yoğun değil (G9, G17)	2	8
	Motivasyon süreleri kısıtlı (G3, G10)	2	8
	Dikkatleri çabuk dağılıyor (G11)	1	4
	Korkuları olabiliyor (G2)	1	4
Öneriler	Görsel ve bedensel etkinliklerle ders işlenmeli (G1, G11)	2	8
	Bağlam çerçevesinde dil öğretimi yapılmalı (G2)	1	4
	Ders tekrarı yapılmalı (G3)	1	4
İlgi ve dikkati arttırmak için yapılan etkinlikler	Şarkı ve oyun kullanımı (G2, G5, G11, G12, G15, G21, G22, G23, G24, G25)	10	40
	Görsel ve işitsel materyal kullanımı (G5, G8, G12, G13, G16, G23, G24, G25)	8	32
	Eğlenceli aktivite (G3, G6, G7, G10, G15, G17, G22)	7	28
	Pekiştireç kullanımı (G4, G12, G16)	3	12

Tablo 2'ye göre, öğretmenlerin öğrencilerin derse olan ilgi ve dikkatleri hakkında görüşleri; olumlu, olumsuz, öneriler ile ilgi ve dikkati arttırmak için yapılan etkinlikler kategorilerinde incelenmiştir. Olumlu kategorisinde; öğrencilerin ilgili olduğu ve derse katılımlarının yüksek düzeyde olduğu, olumsuz kategorisinde; ilgi ve isteklerinin fazla olmadığı ve motivasyon sürelerinin az olduğu, öneriler kategorisinde; görsel ve bedensel etkinliklerle derslerin işlenmesi gerektiği, ilgi ve dikkati arttırmak için yapılan etkinlikler kategorisinde ise şarkı ve oyunlar ile görsel ve işitsel materyallerin kullanımı görüşleri ön plana çıkmıştır. Öğretmenlerin görüşlerinden bazıları şu şekildedir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

"*İngilizce dersi öğrencilerin ilgi odağında olan bir ders. İstekli öğrenciler çoğunlukta. Öğrencilerin ilgisini kazanımları pekiştirici oyunlar oynatarak çekiyorum. Diyalog yaparak ve akıllı tahtayı kullanarak da öğrencilerin ilgisini çekmeye çalışıyorum." (G25)*
"Müzik, oyun gibi aktiviteleri sıkça kullanıyoruz. Dersi oyun gibi gördüklerinde istekleri artıyor." (G21)
"Dikkatleri çok kolay dağılabiliyor; fakat oyunlar ve görsellerle dersin şekillendirilmesi halinde katılım ve öğrenme düzeyi daha yüksek olacaktır." (G11)
"İlgi ve istekleri yoğun değil." (G9)
"Öğrenciler ilk etapta dil öğrenimine korkuyla yaklaşabiliyorlar; fakat öğretimi şarkı ve oyunlarla renkli hale getirince ve en önemlisi bağlam çerçevesinde dil kullanımı öğretildiğinde öğrenci motivasyonunun arttığını düşünüyorum."(G2)

Öğretmenlerin programdaki kazanımların öğrenci seviyesine uygunluğu hakkındaki görüşleri tablo 3'de sunulmuştur.

Tablo 3. Öğretmenlerin programda yer alan kazanımlara ilişkin görüşleri

Tema (Kategoriler)	Kodlar	n	%
Uygunluk Düzeyi	Kazanımlar öğrencilerin seviyesine uygun. (G1, G4, G6, G7, G8, G9, G10, G11, G12, G13, G14, G16, G18, G19, G20, G21, G22, G23, G25)	19	76
	Gramer yapısı içeren bazı kazanımların bu kademe için uygun olmadığını düşünüyorum. (G2, G3, G17)	3	12
	Kazanımlar genel olarak bir derece daha yüksek. (G24)	1	4
	Production stage kısmında eksiklikler var. (G15)	1	4
Öneriler	Haftalık ders saati artırılmalı. (G18, G25)	2	8
	Çocukların konuşma ve yazma kısmındaki etkinliklere dair programın düzenlenmesi gerekir. (G15)	1	4
	Kitaplardaki aktiviteler daha iyi olabilir. (G12)	1	4
	Kelime öğretimine ağırlık veren 'picture dictionary'tarzı kitaplar kullanılmalıdır. (G3)	1	4
	Kazanımlar uygun ama etkileşimli bir ders işlenmeli.(G14)	1	4

Tablo 3'e göre, öğretmenlerin programda yer alan kazanımlar hakkındaki görüşleri uygunluk düzeyi ve öneriler kategorilerinde incelenmiştir. Uygunluk düzeyi kategorisinde kazanımların öğrenci seviyesine uygun olduğu, öneriler kategorisinde kazanımların öğrencilere kazandırılmasında haftalık ders saatlerinin arttırılması gerektiği görüşleri ön plana çıkmıştır. Öğretmenlerin görüşlerinden bazıları şu şekildedir.
"Dil bilgisi ile alakalı kazanımların hedeflerine ulaşmadığını düşünüyorum. Ama diğer konuşma, yazma, dinleme, okuma becerilerinin çeşitli düzenlemelerle amacına ulaştığını düşünüyorum. Düzeylerine de uygun ama dil bilgisi kısmının fazla olduğunu düşünüyorum."(G2)
"Kazanımlar uygun; fakat öğrencilerin pratik yapmasına fırsat vererek haftalık ders saati artırılmalı."(G25)
"Ben kazanımların genel olarak bir derece daha yüksek olduğunu düşünüyorum." (G24)
"Bu kazanımların öğrenci tarafından kazanıldığını düşünüyorum. Programda yer alan kazanımlar genel olarak öğrenci düzeyine uygundur."(G4)
"Programda yer alan kazanımların bazıları öğrenciler için ağır ve öğretilmesi erken. Kelime öğretimine ağırlık veren 'picture dictionary' tarzı kitaplar kullanılmalıdır."(G3)

Öğretmenlerin İngilizce dersi öğretim programının içeriği ile ilgili görüşleri tablo 4'te gösterilmiştir.

Tablo 4. Öğretmenlerin öğretim programlarının içeriğine ilişkin görüşleri

Temalar (Kategoriler)	Kodlar	n	%
Olumlu yönler	Programdaki içerik/konular yeterli ve uygun (G1, G4, G6, G7, G10, G11, G13, G15, G16, G17, G19, G24)	12	48
	İçerikler/konular ilgi çekici.(G4, G16, G22, G25)	4	16
	Konuşma ağırlıklı konuların olması güzel. (G20)	1	4
	Etkinliklerde eksiklikler var. (G10, G11, G15)	3	12
	Konular bütünsellikten uzak (G2)	1	4

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Olumsuz yönler	Ders kitapları yeterince ilgi çekici değil.(G1)	1	4
	Ders kitaplarının dinleme ağırlıklı olup diğer alanlara az yer verilmesi. (G14)	1	4
	İçerikler/konular yetersiz. (G21)	1	4
Öneriler	Konular etkinliklerle desteklenmelidir (G12, G14, G25)	3	12
	İçerik ve konular daha az ve kolay olabilir. (G3)	1	4
	Yazma etkinliği artırılmalı. (G5)	1	4
	Programda yer alan konular kültürümüzü yansıtmalı. (G9)	1	4
	Konuların bir takım halinde sunulması daha iyi olur. (G2)	1	4
	Ünite sayıları artırılıp konular zenginleştirilmeli. (G23)	1	4

Tablo 4 incelendiğinde, öğretmenlerin öğretim programıyla ilgili görüşleri olumlu yönler, olumsuz yönler ve öneriler kategorilerinde ele alınmıştır. Olumlu yönler kategorisinde programdaki içeriğin yeterli ve uygun olduğu, olumsuz yönler kategorisinde etkinliklerin eksik olduğu ve öneriler kategorisinde ise konuların etkinliklerle desteklenmesi gerektiği görüşleri ön plana çıkmıştır. Öğretmenlerin görüşlerinden bazıları şu şekildedir.

"Programdaki konuların ilgi çekici ve eğlenceli olduğunu düşünüyorum." (G16)
"Programdaki içerikler çocukların düzeyine uygun ama yetersiz." (G21)
"Programda yer alan içerik ve konular güzel; fakat ders kitapları yeterince ilgi çekici değil ve communicative method içeren kısımları az"(G1)
"Daha fazla yazma etkinliği olması gerektiği düşüncesindeyim. Sene sonu geldiğinde çocuklar kelimelerin İngilizcelerini söyleyebiliyor; fakat yazmakta güçlük çekiyor." (G5)

Öğretmenlerin öğretim programında yer alan etkinlikler hakkındaki görüşleri incelendiğinde %36 oranında etkinliklerin yeterli olmadığı ve %8 oranında ise yeterli olduğu ifade edilmiştir. Öğretmenlerin görüşlerinden bazıları şu şekildedir.

"Programda yer alan etkinlikler yetersiz olduğu için ekstra etkinlikler yapıyorum (Oyun, şarkı, bulmaca, çalışma kağıtları vb.)"(G15)
"Etkinlikleri uyguluyorum ancak ders kitaplarında öğrenciyi bedensel olarak da meşgul edecek art-craft aktivitelerine daha çok yer verilmeli." (G17)
"Derste daha çok mimikler ve fiziksel etkinlikler kullanarak çocukların anlayabileceği şekilde kelimeleri anlatıyorum. Etkinlikler daha çok oyun ve rol yapma üzerine. Programda yer alan etkinlikler yeterli değil; ama öğretmen yaratıcılığını kullanarak artırabilir" (G19)
"Programda yer alan etkinlikler ile birlikte bazı video ve görsellerden yararlanarak dersin daha akıcı olmasını sağlıyorum. Etkinlikler yetersiz değil." (G22)

Öğretmenlerin sınıfta yaptıkları ölçme ve değerlendirme çalışmalarına ilişkin görüşleri tablo 5'de sunulmuştur.

Tablo 5. Öğretmenlerin sınıfta yaptıkları ölçme ve değerlendirme çalışmalarına ilişkin görüşleri

Tema (Kategoriler)	**Kodlar**	**n**	**%**
Ölçme ve Değerlendirme Çalışmaları	Öğrencilerin sınıf içi etkinliklere katılım oranlarını dikkate alıyorum. (G1, G2, G3, G4, G5, G6, G10, G11, G12, G13, G15, G17, G19, G24, G25)	15	60
	Quiz-sınav yapıyorum. (G7, G8, G9, G14, G16, G21, G23, G25)	8	32
	Ölçek formunu kullanarak her öğrencinin performansını ayrı olarak değerlendiriyorum. (G22)	1	4
	Konu ile ilgili testler ve sözlü etkinliklerle değerlendiriyorum. (G18)	1	4
	Portfolyo değerlendirme yapıyorum. (G16)	1	4

Tablo 5'e göre öğretmenler en çok öğrencilerin sınıf içi etkinliklere katılım oranlarını dikkate alarak ölçme ve değerlendirme yapmaktadırlar. İkinci sırada, öğretmenlerin ölçme ve değerlendirme için quiz ve sınav yaptıkları ifade edilmiştir. Öğretmenlerin görüşlerinden bazıları şu şekildedir.

"Öğrencilerin sınıf içi etkinliklere katılımlarını gözlemliyorum.'(G10)
'2. Sınıflarda yazılı olmadığı için genellikle quizler yapıp, öğrenci yeterliliklerini, ölçmeye çalışıyorum.'(G14)
'Farklı soru tarzlarıyla yapılan yazılı yoklama ile ölçme ve değerlendirme etkinliklerini gerçekleştiriyorum. Ayrıca 2. ve 3. sınıflarda portfolyo değerlendirme yapıyorum.'(G16)
'Ölçek formunu kullanarak her öğrencinin performansını ayrı ayrı işliyorum.'(G22)

Öğretmenlerin ilkokul 2. ve 3. sınıf İngilizce ders kitapları hakkındaki görüşleri tablo 6'da gösterilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 6. Öğretmenlerin 2. ve 3. sınıf İngilizce ders kitapları hakkındaki görüşleri

Temalar (Kategoriler)	Kodlar	n	%
Güçlü yönleri	İlkokul İngilizce kitapları eğlenceli ve renkli. (G7, G22)	2	8
	Görsel olarak uygun. (G2)	1	4
	Seviyeye uygun ve iyi düzeyde. (G15)	1	4
	2. sınıfın ders kitapları haftalık ders saati açısından yeterli. (G24)	1	4
Zayıf yönleri	İçerik olarak yeterli değil. (G1, G2, G5, G11, G14, G18, G19, G21)	8	32
	Etkinlikler zayıf kalıyor. (G13, G16)	2	8
	Öğrencilerde ilgi uyandırmıyor. (G4)	1	4
	Kitapla program uyuşmuyor. (G9)	1	4
	Öğrencilerin seviyesine uygun değil. (G10)	1	4
	3. sınıfların ders kitabı 2 ders için çok yoğun. (G24)	1	4
Öneriler	Daha renkli ve ilgi çekici aktiviteler olabilirdi. (G1, G6, G17, G25)	4	16
	Kitaptaki etkinlik sayıları artırılmalı. (G9, G12, G17)	3	12
	Daha fazla materyalle desteklenmeli. (G20)	1	4
	Kitap biraz daha ince olabilir. (G22)	1	4
	Müfredat daha da zenginleştirilmeli. (G23)	1	4

Tablo 6 incelendiğinde öğretmenlerin 2. ve 3. sınıf ders kitapları hakkındaki görüşleri güçlü yönler, zayıf yönler ve öneriler kategorilerinde ele alınmıştır. Güçlü yönler kategorisinde; kitapların eğlenceli ve renkli olduğu, zayıf yönler kategorisinde içeriğin yeterli olmadığı ve etkinliklerin zayıf kaldığı, öneriler kategorisinde ise kitaplarda daha renkli ve ilgi çekici aktivitelerin olması ve etkinlik sayılarının arttırılması gerektiği görüşleri ön plana çıkmıştır. Öğretmenlerin görüşlerinden bazıları şu şekildedir.

"İlk sene kullanılan Teddy Bear kitabı, bu sene kullanılan kitaptan daha eğlenceliydi.(2. sınıflar için)."(G3)

"İlkokul kitaplarını eğlenceli ve renkli buluyorum."(G7)

"2. Sınıf kitaplarından Fun with Teddy bu yılki Sunshine 2'den daha güzeldi.3'te ise etkinlikler biraz zayıf kalıyor."(G13)

"Eski kitaplarla mukayese edildiğinde çok daha iyi ve seviyeye uygun."(G15)

Öğretmenlerin öğrenme-öğretme sürecindeki fiziki ortam ve materyaller hakkındaki görüşleri tablo 7'de gösterilmiştir.

Tablo 7. Öğretmenlerin fiziki ortam ve materyallerle ilgili görüşleri

Tema (Kategoriler)	Kodlar	n	%
Olumlu	Okulumdaki akıllı tahta vb. materyallerden yararlanıyorum. (G6, G10, G19, G21, G22, G23, G24, G25)	8	32
	Teknolojik donanımın olması dersin etkililiğini arttırıyor. (G1, G2, G6, G7, G12, G19, G22, G24)	8	32
Olumsuz	Akıllı tahta vb. materyallerin eksikliği ve yetersizliği var. (G9, G12, G13, G14, G16)	5	20
	Akıllı tahta vb. materyallerdeki teknik problemlerle karşılaşıyorum. (G13, G20)	2	8
	Etkileşimli tahta kolaylık sağlasa da dil öğrenme sürecini yavaşlatıyor. (G18)	1	4

Tablo 7'de öğretmenlerin fiziki ortam ve materyallerle ilgili görüşleri olumlu ve olumsuz kategorilerinde incelenmiştir. Olumlu kategorisinde; okuldaki akıllı tahta vb. materyallerden yararlanarak derslerin işlendiği ve teknolojik donanım ile derslerin etkili işlendiği, olumsuz kategorisinde ise akıllı tahta vb. materyallerin yetersiz olduğu ve akıllı tahta vb. materyallerde teknik problemlerle karşılandığı görüşleri ön plana çıkmıştır. Öğretmenlerin görüşlerinden bazıları aşağıda belirtilmektedir.

"Bütün materyallerden yararlanarak ders işliyorum"(G10)

"Okulumda akıllı tahta olsa daha iyi olur. Her sınıfın da bilgisayarı olsa çok iyi olur. Bilgisayarımı ayarlamamla 5 dakikam gidiyor."(G12)

"Çok sıkıntı çekiyoruz, sürekli teknik hatalar çıkıyor. İnternet bağlantısı, bilgisayar ve akıllı tahta uyum problemleri yaşıyoruz ve bu problemleri kendi bütçemiz ile çözüyoruz."(G20)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Öğretmenlerin öğrenme-öğretme sürecinde yaptığı etkinlikler hakkındaki görüşleri tablo 8'de gösterilmiştir.

Tablo 8. Öğretmenlerin öğrenme-öğretme sürecinde yaptığı etkinlikler hakkındaki görüşleri

Tema (Kategoriler)	Kodlar	n	%
Sınıf içi etkinlikler	Oyun oynama ve şarkı söyleme. (G1, G2, G3, G5, G8, G9, G10, G1, G12, G13, G15, G20, G21, G22, G23, G25)	16	64
	Görsel etkinlikler ve kes –yapıştır etkinlikleri. (G6, G12, G14, G15, G16, G17, G22, G23)	8	32
	Akıllı tahta ve bilgisayar kullanımı. (G3, G5, G8, G10, G14, G24, G25)	7	28
	Bulmaca oyunları. (G8, G10, G15, G25)	4	16
	Yarışma etkinlikleri. (G4, G13, G16)	3	12
	Hikâye etkinlikleri. (G2)	1	4
	Fiziksel aktiviteler yapma. (G1, G17, G22)	3	12
	Boyama etkinlikleri. (G1, G5, G13)	3	12

Tablo 8'de öğretmenlerin öğrenme-öğretme sürecinde yaptığı sınıf içi etkinlikler çoğunlukla oyun oynama ve şarkı söyleme, görsel etkinlikler ve kes-yapıştır faaliyetleri ile akıllı tahta ve bilgisayar kullanımı ile yapılan çalışmalar olarak ifade edilmiştir. Öğretmenlerin görüşlerinden bazıları şu şekildedir.

"Daha rahat bir ortam sağlıyorum. Dans etme, şarkı söyleme, resim, boyama gibi aktiviteleri uyguluyorum."(G1)

"Oyunlar, yarışmalar, şarkılar ve boyama etkinlikleri daha aktif ve eğlenceli geçerken ilgi ve isteklerini de artırıyor."(G13)

"Bu yaşlarda fazlasıyla hareketli oldukları ve uzun süre dikkatlerini toplayamadıkları için kinestetik zekaya hitap eden el becerileriyle destekledikleri aktivitelere yer vermeye çalışıyorum."(G17)

"Onların hoşuna gidecek, ilgilerini çekecek materyaller kullanıyorum. Örneğin; kukla, top, oyuncak gibi."(G20)

"Şarkı ile konuyu öğretme, oyun ile kelime çalıştırma, kes yapıştır sanat etkinlikleriyle defterimize ve kartonlarımıza tablolar hazırlama yapıyoruz"(G23)

"Dersin sonunda kelime dağarcıklarını geliştirecek oyunlar oynama. Örneğin; adam asmaca gibi. Derste bol diyalog kurmaya özen gösteririm."(G25)

Öğretmenlerin ilkokul 2. ve 3. sınıf İngilizce öğretimi sürecinde karşılaştığı problemler ve çözüm önerileri tablo 9'da gösterilmiştir.

Tablo 9. İngilizce öğretmenlerinin karşılaştığı sorunlarla ilgili görüşleri

Tema (Kategoriler)	Kodlar	n	%
Problemler	Ders saatinin yetersiz olması. (G1, G4, G9, G12, G15, G25)	6	24
	Sınıfların kalabalık olması. (G1, G6, G14, G15, G17, G20)	6	24
	Öğrenci dikkat-motivasyonlarının kısıtlı ve düşük seviyede olması. (G3, G10, G11, G16, G21, G25)	6	24
	Öğrencilerin öğrendiklerini çabuk unutması. (G4, G8, G9)	3	12
	Okuma ve yazmada öğrencilerin zorlanmaları. (G5, G11, G24)	3	12
	Öğrencilerin genel olarak konuları anlamakta güçlük çekmeleri. (G19, G22)	1	4
	Gramer konularının seviyeye uygun olmaması (G2)	1	4
	Materyal eksikliğinin olması. (G3)	1	4
	Velilerin ilgisizliği. (G9)	1	4
Çözüm Önerileri	İngilizce sınıfı olmalı. (G3)	1	4
	Öğrencilere tekrar yaptırılmalı. (G8)	1	4
	Sınıf mevcutları azaltılmalı. (G17)	1	4

Tablo 9'da öğretmenlerin karşılaştığı problemler ve bu problemlere ilişkin kendi çözüm önerileri incelenmiştir. Buna göre öğretmenler tarafından İngilizce öğretiminde yaşanan problemlerin başında; ders saatlerinin yetersiz olması, sınıfların kalabalık olması, öğrencilerin ilgi ve dikkat düzeylerinin düşük seviyede olması gelmektedir. Çözüm önerileri olarak öğretmenler; İngilizce sınıflarının olması, ders saatlerini arttırılması ve sınıf mevcutlarının azaltılması gerektiği ifade etmişlerdir. Öğretmenlerin görüşlerinden bazıları şu şekildedir.

"İki saatin az olduğunu düşünüyorum. Evde uğraşmadıkları için bir şeyleri öğretmemiz uzun zaman alıyor."(G12)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

"En önemli problemin bu yaş grubuna yabancı dil öğretimi için sınıf mevcudunun çok fazla olduğunu düşünüyorum. Mevcutlar azaltılmalı."(G17)
"3'lerde genel olarak sıkıntı yaşamıyorum. Ancak 2'ler henüz okumaya geçmemiş olabiliyor. Ders her ne kadar dinlemeye yönelik olsa da öğrenci kendi dilini kullanmayı öğrenmeli."(G24)
"Ders saatlerinin az olması. İlgi ve dikkatlerinin çok kolay bir şekilde dağılması."(G25)

4. SONUÇ VE TARTIŞMA

Bu araştırmada İngilizce öğretmenlerinin ilkokul 2. ve 3. sınıfta İngilizce öğretimi ile ilgili görüşleri incelenmiştir. Araştırma sonuçlarına göre; öğretmenlerin büyük çoğunluğu öğrencilerin hazırbulunuşluk düzeylerinin uygun olduğunu düşünmektedir. Merter, Şekerci ve Bozkurt'un (2014) 2. sınıf İngilizce öğretmenleri üzerinde yaptıkları araştırmada da öğretmenler tarafından, öğrencilerin bilişsel hazırbulunuşluklarının öğrenme için uygun olduğunu ifade edilmiştir. Bir diğer sonuç ise; öğrencilerin bu derse olan ilgi ve merakının yüksek düzeyde olduğu belirtilmiştir. Ayrıca öğretmenler tarafından öğrencilerin ilgilerini arttırmak için derste bedensel aktivitelerin yapılması, şarkı ve oyunlarla desteklenmesi ve görsel işitsel materyallerin kullanılmasına ilişkin öneriler de sunulmuştur. Bozavlı (2015) tarafından yapılan araştırmada da İngilizceye karşı öğrencilerin öz güveninin ve merakının yüksek olduğu sonucuna ulaşılmıştır. Bununla birlikte derslerde materyal kullanımının önemi vurgulanmış, şarkı ve oyun aracılığı ile öğretimin yapılması gerektiği de önerilmiştir. Araştırmada, öğretmenlerin çoğunluğu tarafından öğretim programında yer alan kazanımların öğrenci seviyesine uygun olduğu, içeriğin yeterli olduğu ancak programdaki etkinliklerin yetersiz olduğu ifade edilmiştir. Yıldıran ve Tanrıseven (2015) ile Aybek (2015) tarafından yapılan çalışmalarda da, öğretmenlerin görüşlerine göre ilkokul 2. sınıf İngilizce dersi öğretim programının öğrenci seviyesine uygun olduğu sonucuna ulaşılmıştır. Araştırmada, öğretmenler, çoğunlukla ölçme değerlendirme etkinliklerini öğrencilerin sınıf içi performanslarını gözlemleyerek ve kısa sınav yaparak gerçekleştirdiklerini ifade etmişlerdir. Merter, Şekerci ve Bozkurt'un (2014) çalışmasında da İngilizce öğretmenlerinin, öğrencileri sınıf etkinliklerine katılımlarına ve sınıftaki durumlarına göre değerlendirdikleri sonucuna ulaşılmıştır. Araştırmada, ders kitaplarıyla ilgili olarak öğretmenlerin çoğu, ders kitaplarının içeriğinin zayıf kaldığını ve kitapta yer alan etkinliklerin yetersiz olduğunu ifade ederek olumsuz görüş belirtmişlerdir. Öğretmenlerin çok az bir kısmı; ders kitaplarının seviyeye uygun, eğlenceli ve renkli olduğunu düşünmektedir. Daha çekici aktivitelerin olması ve etkinlik sayılarının artırılması gerektiği yönünde de öneriler sunulmuştur. Ders kitaplarıyla ilgili olarak yapılan çalışmalarda da, (Yıldıran ve Tanrıseven, 2015; Merter, Şekerci ve Bozkurt, 2014) ders kitaplarının sıkıcı ve zorlayıcı olduğu, programın içeriğiyle örtüşmediği ve öğrencilerin seviyesine uygun olmadığı sonuçlarına ulaşılmıştır. Araştırmada öğretmenlerin çoğu tarafından, okullardaki fiziki ortamın ve materyal bakımından sınıf donanımın iyi olduğu yönünde olumlu görüş belirtirken; akıllı tahta ve projeksiyon gibi materyallerin eksik olduğu ve bu materyalleri kullanırken teknik problemlerle karşılaşılması yönünde olumsuz görüşler ifade edilmiştir. Merter, Şekerci ve Bozkurt (2014), yaptıkları çalışmada da öğretmenlerin materyal bakımından donanımlı olduğu okullarda İngilizce dersinin verimli olduğu, teknolojik alt yapının yetersiz olduğu okullarda ise ders veriminin düşük olduğu sonucuna ulaşmışlardır. Araştırmada, öğretmenler öğrenme-öğretme sürecinde fiziksel etkinlikler yaptırdıkları, oyun ve şarkıya yer vererek ders sürecini aktif kıldıklarını ifade etmişlerdir. Ayrıca, görsel-işitsel materyallerden, bulmaca, hikaye, kes-yapıştır ve boyama etkinliklerinden de yararlanmaktadırlar. Bununla ilgili olarak Çelen ve Vural (2009), İngilizce eğitiminde drama yönteminin de önemini vurgulayarak bu derste kullanılabilecek etkili bir yöntem olduğunu belirtmişlerdir. Arıbaş ve Tok (2004) tarafından ise; İngilizce derslerinde drama, rol yapma ve canlandırma etkinliklerinden faydalanılması gerektiği belirtilirken, bu derste görsel-işitsel materyallerin gerekliliği üzerine de vurgu yapılmıştır. Araştırmada, İngilizce öğretmenlerinin karşılaştığı sorunların başında kalabalık sınıflar, ders saatinin yetersiz olması ile öğrencilerin ilgi ve dikkat seviyelerinin düşük düzeyde olması gelmektedir. Buna ek olarak öğrencilerin bazı konuları anlamakta güçlük çektikleri, velilerin ilgisiz olduğu ve materyal eksikliğinin yaşandığı gibi problemler de ifade edilmiştir. Solak ve Semerci (2015), yaptıkları araştırmada ders saatinin artırılması üzerine öneride bulunmuşlardır. Bu konuyla ilgili olarak; Seçkin (2010) ve Dönmez'in (2010) çalışmalarında İngilizce ders saatlerinin az olması ve sınıf mevcutlarının kalabalık olmasından dolayı öğretmenlerin sorunlar yaşadıkları belirtilmiştir.

Araştırmada elde edilen sonuçlar doğrultusunda, İngilizce dersi öğretim programında öğrencilerin ilgi ve isteği artırıcı etkinliklere daha fazla yer verilmesi, ders kitaplarındaki içerik ve etkinliklerin yeterli düzeye getirilmesi, haftalık ders saatinin arttırılması, İngilizce dersine ait ayrı bir sınıfın oluşturulması, gerekli materyal desteğinin sağlanması ve sınıf mevcutlarının azaltılması yönünde öneriler sunulabilir.

KAYNAKÇA

Arıbaş, S. & Tok, H. (2004). İlköğretimin birinci kademesinde yabancı dil öğretiminde karşılaşılan sorunların değerlendirilmesi. XIII. Ulusal Eğitim Bilimleri Kurultayı, 6-9 Temmuz 2004, İnönü Üniversitesi Eğitim Fakültesi, Malatya.

Aybek, B. (20015). İlkokul ikinci sınıf İngilizce dersinin İngilizce öğretmenlerinin görüşlerine dayalı olarak değerlendirilmesi, *Turkish Studies,* 10(15), 67-84.

Bayyurt, H. (2012). 4+4+4 eğitim sisteminde erken yaşta yabancı dil eğitimi. Hacettepe Üniversitesi Eğitim Fakültesi İngiliz Dili Eğitimi Anabilim Dalı 1. Yabancı Dil Eğitimi Çalıştayı Bildirileri, 12-13 Kasım 2012, 117-126, Ankara: Hacettepe Üniversitesi Yayınları.

Bozavlı, E. (2015). İlkokul 2. sınıfta yabancı dil öğretiminin öğretmen görüşlerine göre değerlendirilmesi. *The Journal of International Education Science*, 2(2), 74-83.

Çelen, İ. & Vural, R. A. (2009). Eğitimde drama ve İngilizce öğretimi: ilköğretim dördüncü sınıf öğrencileri üzerine bir araştırma. *Elementary Education Online*, 8(2), 425-438.

Dönmez, Ö. (2010). Implementation of the new eight grade English language curriculum from the perspectives of teacher and students. Yayınlanmamış Yüksek Lisans Tezi. Ortadoğu Teknik Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

EURYDICE. (2008). Avrupa'da Okullarda Dil Öğretimi Hakkında Temel Veriler, Avrupa Komisyonu, http://www.eurydice.org adresinden 2 Nisan 2016 tarihinde indirilmiştir.

Haznedar, B. (2003). Neden erken yaşta yabancı dil eğitimi. İ. Erdoğan (Haz.), *Türk Eğitim Sisteminde Yabancı Dil Eğitimi ve Kalite Arayışları* içinde (s. 119-130). İstanbul: Özel Okullar Derneği Yayınları.

İlkhan, İ.(1999). Yabancı dil öğretiminin topluma yansımaları. *Selçuk Üniversitesi Sosyal Bilimler Dergisi,*5, 301-305.

Karakoç, C. (2007). Okul Öncesi Eğitimde Ana Sınıfları İngilizce Dersi İçin Bir Öğretim Program Önerisi. Yayınlanmamış Yüksek Lisans Tezi, İnönü Üniversitesi, Malatya.

Merter, F., Şekerci, H. & Bozkurt, E. (2014).İngilizce öğretmenlerinin ikinci sınıf İngilizce dersine ilişkin görüşlerinin değerlendirilmesi. *Akademik Sosyal Araştırmalar Dergisi,* 2 (5), 199-210.

Özdemir, E. A. (2006). Türkiye'de İngilizce öğreniminin yaygınlaşmasının nedenleri. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 2 (1), 28-35.

Sayın, Ş. (1993). Çağdaş eğitimde tek bir yabancı dil yeterli olabilir mi?. *Ankara Üniversitesi Türk Dili Dil Dergisi*, 13, 10-11.

Seçkin, H. (2010). İlköğretim 4. Sınıf İngilizce dersi öğretim programının değerlendirilmesi. Yayınlanmamış Doktora Tezi. Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

Solak, E. & Semerci, H. (2015). İkinci sınıfta İngilizce öğretimine yönelik öğretmen ve öğrenci görüşleri. *Dil ve Edebiyat Eğitimi Dergisi,*16, 1-23.

Tosun, C. (1983). Anadiliyle amaç dilini ilişkileri ve etkileşim alanları üzerine, *Türk Dili*, 222.

Yıldıran, Ç. & Tanrıseven, I. (2015). İngilizce öğretmenlerinin ilkokul 2. sınıf İngilizce dersi öğretim programı hakkındaki görüşleri. *International Journal of Language Academy,* 3(1), 210-223.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

İŞGÜCÜ PİYASALARINDA GENÇLER VE MESLEKİ YETERLİLİKLER SİSTEMİ

Verda CANBEY-ÖZGÜLER
Anadolu Üniversitesi
İktisadi ve İdari Bilimler Fakültesi
Çalışma Ekon. ve End. İlişk. Bölümü
vcanbey@anadolu.edu.tr

ÖZET
Günümüzün bilgiye dayalı ekonomisinde eğitim istihdam ilişkisinin güçlendirilmesi, ülkelerin büyümesi ve kalkınmasını belirleyen önemli bir kavramlardan biri olarak karşımıza çıkmaktadır. Eğitim istihdam uyumsuzluğunun birey, işletmeler ve ülke açısından önemli olumsuz sonuçları olmaktadır. İşsizlik, çalışılan işte memnuniyetsizlik, düşük verimlilik, çalışırken iş arıyor durumda olmak gibi bireyleri etkileyen faktörlerin aynı zamanda firma düzeyinde üretime yansıyan olumsuz sonuçları, ulusal düzeye kadar taşınabilmektedir.

Eğitim ve istihdam uyumsuzluğu çeşitli yönlerden ele alınabilir ve farklı göstergelerle izlenebilir. Bu göstergelerden en belirleyici olanı temel bilgi ve becerilerindeki yeterlilik düzeyidir. Yeterlilik, kişilerin sahip oldukları becerileri ne ölçüde icra edebildiklerinin göstergesidir. Temel becerilerdeki yeterlilik düzeyinin, işgücü piyasalarında işgücü piyasalarında ihtiyaç duyulan nitelikte işgücü yetiştirilmesi için yapılacak ilave beşeri sermaye yatırımları için temel oluşturduğu kabul edilmektedir. Temel bilgi ve becerileri destekleyen ve geliştiren eğitim, mesleki eğitim, staj vb. uygulamalar vasıflı meslek sahiplerinin yetiştirilmesinde izlenen yol olmakla birlikte asıl amaç kazanılan niteliklerin işgücü piyasası gereklilikleri ile örtüşmesi olmaktadır. Eğitim ve istihdam arasında doğru ilişkinin kurulması, bireylerin sahip olduğu niteliklerin gerek ulusal gerekse uluslararası düzeyde tanınır olması gerekmektedir. Bu noktada ulusal meslek standartları, sınav ve belgelendirme sisteminin oluşturulması ve etkin bir biçimde işletilmesi işgücü piyasalarının etkin bir biçimde işlemesinde en önemli unsurdur.

Bir mesleğin başarıyla icra edilmesi için yapılması gereken görev ve işlemler, sahip olunması gereken bilgi ve beceriler ile sergilenmesi gereken tutum ve davranışları gösteren asgari normlar olarak tanımlanan meslek standartları, Türkiye'de Mesleki Yeterlilik Kurumu'nun (MYK) tarafından geliştirilmektedir. Meslek standartlarının işgücü piyasasında işverenler, işçi sendikaları ve istihdam kurumları arasında bir anlaşmanın ürünü olarak ortaya çıkması ve uygulama aşamasında da tüm tarafların sistemi sürdürme konusunda kararlı olmaları gereklidir.

Avrupa Parlamentosu ve Avrupa Konseyi tarafından yayımlanan 23.04.2008 tarihli "Hayat Boyu Öğrenmede Avrupa Yeterlilikler Çerçevesi" kararı gereğince AB üyelerinin ve AB aday ülkelerin ulusal yeterlilik çerçevelerini oluşturmaları ve Avrupa Yeterlilikler Çerçevesi ile kıyaslamaları gerekmektedir. Avrupa Yeterlilikler Çerçevesi (AYÇ) Türkiye koordinasyon noktası olarak MYK görevlendirilmiştir.

Meslek standartları işverenler bakımından istihdam edecekleri kişilerin sahip olması gereken bilgi ve beceriler konusunda bilgi sahibi olacağından istihdam edecekleri kişinin seçiminden, ücretlerin belirlenmesine ve terfilere kadar birçok aşamada yararlı olacaktır. Çalışanlar da iş başvurusu sırasında sahip oldukları yeterlilikleri daha iyi sergileyebileceklerdir.

Anahtar Kelimeler: Genç İşgücü, Mesleki Eğitim, Mesleki Yeterlilikler Sistemi

 Copyright © International Conference on New Horizons in Education Conference (INTE)

THE YOUNG AND VOCATIONAL QUALIFICATIONS SYSTEM IN LABOR MARKETS

ABSTRACT

In today's knowledge-based economy, education is an important factor that determines employment success and the growth and development of a country. Employing someone whose education does not match the requirements of the job causes significant negative results for the individual, business, and country. Negative results of factors such as unemployment, dissatisfaction in the current job, low productivity, and the employee looking for another job while working that all affect individuals and reflect on the overall production of the company and can have a negative effect on the national labour market.

A mismatch between education and employment can be discussed from various aspects and can be monitored with different indicators. Among these indicators, the most determinant one is competence in basic knowledge and skills. Competence is an indicator that shows to what extent people can perform their skills. Competence in basic skills forms a base for the additional education and training needed to produce quality employees in the labour market. Although practices supporting and developing basic knowledge and skills such as education, vocational education, training courses, etc. are preferred to train qualified people having a profession, the primary objective is to match up the labour market requirements and the knowledge and skills gained through education. It is necessary to match up education and employment properly, and the qualities of individuals that make up the overall labour market should be known both nationally and internationally. At this point, establishing and actively enforcing national occupational standards and an examination and certification system is the most significant element of efficiently operating labour markets.

Occupational standards, which are defined as minimum norms displaying the required attitude and behaviours and possessing the knowledge and skills required to perform the duties and operations of a job, are developed by the Vocational Qualifications Institution in Turkey. These occupational standards should be agreed upon by employers, trade unions, and employment organizations in the labour market. Moreover, all parties should be determined to maintain the system during the implementation phase.

In accordance with the decision "The European Qualifications Framework (EQF)" dated 23.04.2008 and published by the European Parliament and the Council of Europe, EU members and EU candidate countries have to establish national qualification frameworks and compare these frameworks with the EQF. The Vocational Qualifications Institution is assigned to be a Turkish coordination point for the EQF.

Occupational standards will be beneficial in many stages of the labour market from hiring a person to negotiating wages and promotions because employers will be informed about the knowledge and skills that people to be employed should possess thanks to these standards. Employees can also display their qualifications better in a job application.

Key Words: Young Labour Force, Vocational Education, Vocational Qualification System

 Copyright © International Conference on New Horizons in Education Conference (INTE)

GİRİŞ

Çalışma ve işgücü piyasaları içinde olma, bireylere gelir sağlamanın ötesinde toplumsal yaşam içinde bir yer edinme imkânı da sağlamaktadır. İşgücü piyasalarına ilk kez girecek olan, nüfusun en canlı ve dinamik kısmını oluşturan gençler bakımından işgücü piyasalarında aldıkları eğitim ve sahip oldukları niteliklerle uyumlu istihdam imkânı yakalayabilmeleri oldukça önemlidir. İyi bir meslek sahibi olmanın önemsenmesi ilk olarak iyi bir eğitim alınmasını gerekli kılmaktadır. Alınan eğitimin işgücü piyasası gereksinimleri ile diğer bir ifadeyle işgücü talebi ile uyumlu olması beklenmektedir. Ancak gençlerin sahip oldukları bilgi ve becerilerin işgücü piyasası gereklilikleri ile buluşabilmesi her zaman kolay olmamaktadır. Okulda edinilen bilgilerin; çıraklık, işbaşında eğitim ve mesleki yeterlilik belgeleri gibi uygulamalarla görünür hale getirilmesi önemlidir. Gençler açısından eğitimlerini tamamladıktan, lise ya da üniversiteyi bitirdikten sonra, aldıkları diplomanın çalışma hayatına girmelerinde ilk adım olmakla birlikte tek adım olmadığı, arada bir geçiş sürecinin yaşandığı bilinmektedir. Teorik olarak okuldan çalışma yaşamına geçiş olarak da adlandırılan bu dönem ülkeden ülkeye eğitim sistemlerine ve işgücü piyasası gerekliliklerine göre farklılaşmaktadır (Canbey-Özgüler, 2012: 30).

Günümüzün rekabete dayalı ekonomik yapısı işgücü piyasalarında da önemli dönüşümlerin ortaya çıkmasına neden olmaktadır. Nitelikli işgücüne olan talep artışı aynı zamanda uluslararası anlamda da ortak standartlara sahip bir işgücü yapısı gerektirmektedir. Bu bağlamda çağın gereklerine uygun iyi eğitim almış gençler, genç işgücüne uygun düzgün işler ve becerilerin uygunluğunu ortaya koyan "yeterlilikler sistemi" genç işgücünün potansiyelini ortaya koyarak üretime katkısını arttıracaktır.

1. Genç İşgücü

Genel olarak gençlik dönemi belirli ve sınırlı bir yaş dilimi içinde duygu, düşünce, davranış ve tutum olarak bireyi sosyal olgunluğa hazırlayan bir dönem olarak tanımlanmaktadır. Birleşmiş Milletler Eğitim, Bilim ve Kültür Örgütü'ne (UNESCO) göre; genç, öğrenim yapan, hayatını kazanmak için çalışmayan ve kendine ait bir konutu bulunmayan kişi olarak tanımlanmaktadır. Uluslararası Çalışma Örgütü (ILO) tarafından yapılan tanımlamada ise 15-24 yaşları arasında çalışanlar "genç işçi" olarak kabul edilmektedir (ILO, 138 sayılı Asgari Yaş Sözleşmesi[1]). Ayrıca ILO 146 sayılı Asgari Yaş Tavsiye Kararı'yla da 15 olan taban yaşın 16'ya çıkarılmasını öngörmektedir.

Türkiye'de eğitim durumu itibarıyla işsizlik oranları incelendiğinde en yüksek işsizlik oranının yüksekokul ve fakülte mezunlarında olduğu görülmektedir. Bunu lise ve dengi meslek okulları mezunları izlemektedir.

Tablo 1. Türkiye'de Eğitim Düzeyine Göre İşgücü Durumu, 2014, (%)

	Toplam İşgücü	15-24 Yaş Grubu		
		Toplam	Erkek	Kadın
İşgücüne Katılma Oranı				
Okur-yazar değil	19.1	23.9	32.1	21.1
Lise altı eğitimliler	47.8	37.6	53.5	21.0
Lise ve dengi meslek	58.5	40.5	49.5	31.0
Yükseköğretim	79.2	72.7	77.0	69.2
İşsizlik Oranı				
Okur-yazar değil	6.3	12.1	19.1	8.6
Lise altı eğitimliler	9.4	14.8	15.5	12.8
Lise ve dengi meslek	11.3	19.8	16.8	24.9
Yükseköğretim	10.6	28.3	23.2	33.1
İşgücüne Dâhil Olmayan Oranı				
Okur-yazar değil	80.9	76.1	67.9	78.9
Lise altı eğitimliler	52.2	62.4	46.5	79.0
Lise ve dengi meslek	41.5	59.5	50.5	69.0
Yükseköğretim	20.8	27.3	23.0	30.8

Kaynak: TÜİK, 2014: 42.

Tablo 1'den de görüldüğü gibi 2014 yılı itibarıyla 15-24 yaş grubunda yükseköğretim mezunlarında işsizlik oranı % 28.3'tür. Aynı oran üniversite mezunu genç kadınlarda % 33.1'e çıkmaktadır. En düşük işsizlik oranı

[1] ILO Kabul Tarihi: 6 Haziran 1973 olan 138 sayılı Asgari Yaş Sözleşmesi 21 Haziran 1998 tarihinde 23379 sayılı Resmi Gazetede yayımlanmıştır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ise% 6.3 ile okur-yazar olmayanlarda görülmektedir. Yüksekokul mezunlarının aksine okur-yazar olmayan genç kadınlarda işsizlik oranı 15-24 yaş grubu ortalamasının da altında % 8.6 olarak gerçekleşmiştir. Belirli bir düzeyde eğitim almış ve belli bir donanıma sahip işgücü belli standartların altındaki işlerde çalışmamaktadır. BU bağlamda işsizlik oranı düşük olmakla birlikte çalışılan işlerin nitelikleri de göz önünde bulundurularak bir değerlendirme yapılması daha sağlıklı sonuçlara ulaşılmasını sağlayacaktır.

Tablo 2. OECD Üyesi Olan Ülkeler ve Diğer Bazı Ülkelerde İstihdamın Nüfus İçindeki Payı (%), 2015, (İlgili Yaş Grubu İçindeki Nüfusa Oranı)

Ülkeler	15-64 Yaş	15-24 Yaş	Ülkeler	15-64 Yaş	15-24 Yaş
Avustralya	72.2	58.5	Norveç	74.9	51.1
Avusturya	71.1	51.3	Polonya	62.9	26.0
Belçika	61.8	23.3	Portekiz	63.9	22.8
Kanada	72.5	55.8	Slovakya	62.7	23.3
Şili	62.4	30.2	Slovenya	65.2	29.6
Çek Cumhuriyeti[2]	70.2	28.4	İspanya	58.7	20.0
Danimarka	73.5	55.4	İsveç	75.5	43.7
Estonya	71.8	37.4	İsviçre	80.2	61.0
Finlandiya	68.7	42.4	Türkiye	50.2	34.2
Fransa	63.8	27.8	Birleşik Krallık	73.2	52.5
Almanya	74.0	45.3	ABD	68.7	48.6
Yunanistan	50.8	13.0	**OECD**	**66.3**	**40.5**
Macaristan	63.9	25.7	Brezilya	67.5	49.0
İzlanda	84.2	72.6	Çin	75.1	53.7
İrlanda	63.1	28.0	Kolombiya	67.6	45.0
İsrail	73.3	44.4	Kosta Rika	60.7	35.3
İtalya	57.1	17.3	Hindistan	53.3	30.7
Japonya	73.3	40.7	Endonezya	64.6	37.9
Kore	65.7	26.9	Letonya	68.1	34.5
Lüksemburg	66.1	29.1	Litvanya	67.2	28.3
Meksika	60.6	40.3	Rusya	69.3	31.8
Hollanda	74.1	60.8	Güney Afrika	43.7	13.3
Yeni Zelanda	74.3	53.1			

***** Brezilya, Çin, Hindistan ve Endonezya verileri 2014 yılıdır.
Kaynak: OECD, 2016: 215.

Tablo 2 incelendiğinde genç istihdamının nüfusa oranının en yüksek olduğu ülkeler; % 72.6 ile İzlanda, % 60.8 ile Hollanda ve % 61 ile İsviçre'dir. Genç istihdamının nüfus içindeki bakımından en düşük orana sahip ülkeler ise % 13 ile Yunanistan, % 13.1 ile Güney Afrika ve % 17.3 ile İtalya'dır. Türkiye'de 15-24 yaş grubu gençlerin istihdamının nüfus içindeki payı 2015 yılı itibarıyla % 34.2'dir. Ancak istihdam oranlarını incelemek tek başına yeterli değildir. Bunun yanı sıra işin mevsimlik olması, kiralık işgücü biçiminde çalışma ve belirli bir proje vb. çerçevesinde sözleşmeli çalışma gibi geçici istihdam türleri de gençler bakımından incelenmelidir.

Tablo 3. OECD Üyesi Olan Ülkeler ve Diğer Bazı Ülkelerde Geçici İstihdamın Nüfus İçindeki Payı (%), 2015, (Her Bir Yaş Grubunda Bağımlı İstihdam Düzeyi)

Ülkeler	15-64 Yaş	15-24 Yaş	Ülkeler	15-64 Yaş	15-24 Yaş
Avustralya	5.6	5.5	Norveç	8.0	24.1
Avusturya	9.1	35.8	Polonya	28.0	72.7
Belçika	9.0	36.6	Portekiz	22.0	67.5
Kanada	13.4	31.3	Slovakya	10.6	29.1
Şili	29.1	45.0	Slovenya	18.0	75.5
Çek Cumhuriyeti[3]	10.3	31.0	İspanya	25.1	70.4

[2] Çalışma hazırlandığı sırada Çek Cumhuriyeti'nin adının "Çekya" olarak değiştirilmesine yönelik yasa tasarısı resmiyet kazanmış ve ülkenin adı "Çekya" olarak değiştirilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Danimarka	8.6	22.7	İsveç	17.2	55.9
Estonya	3.5	11.4	İsviçre	13.6	52.3
Finlandiya	15.4	41.9	Türkiye	13.2	23.4
Fransa	16.7	59.6	Birleşik Krallık	6.2	15.0
Almanya	13.1	53.6	ABD	4.2	8.1
Yunanistan	12.0	38.3	**OECD**	**11.4**	**25.0**
Macaristan	11.4	24.1	Brezilya	-	-
İzlanda	12.8	33.3	Çin	-	-
İrlanda	8.7	32.7	Kolombiya	33.1	-
İsrail	-	-	Kosta Rika	8.8	10.9
İtalya	14.0	57.1	Hindistan	-	-
Japonya	7.5	14.3	Endonezya	-	-
Kore	22.3	27.0	Letonya	3.8	-
Lüksemburg	10.2	47.1	Litvanya	2.1	6.5
Meksika	20.3	26.1	Rusya	9.0	18.4
Hollanda	20.2	53.4	Güney Afrika	-	-
Yeni Zelanda	-	-			

Kaynak: OECD, 2016: 215.

Tablo 3 bize istihdam edilmiş olmakla birlikte istihdamın türü ve niteliği bakımından tam zamanlı istihdam türlerinden olmayan geçici çalışma türlerini göstermektedir. 15-24 yaş grubunda geçici çalışma türlerinin en yüksek olduğu ülkeler; % 75.5 ile Slovenya, % 72.7 ile Polonya ve % 67.5 ile Portekiz'dir. 15-24 yaş grubunda geçici çalışma türlerinin en düşük orada olduğu ülkeler ise % 5.5 ile Avustralya, % 6.5 ile Litvanya ve % 8.1 ile ABD olmuştur. Genç işsizliğinin düşük olması konusunda uyguladığı çıraklık sistemi ile genellikle örnek gösterilen ülke olan Almanya'da bu oran % 53.6 olmuştur. Türkiye'de 15-24 yaş grubunda geçici çalışma oranı % 23.4'tür.

Tablo 4. OECD Üyesi Olan Ülkeler ve Diğer Bazı Ülkelerde İşsizlik Oranları (%), 2015, (Toplam İşgücü İçinde Her Bir Yaş Grubunun Oranı)

Ülkeler	15-64 Yaş	15-24 Yaş	Ülkeler	15-64 Yaş	15-24 Yaş
Avustralya	6.2	13.1	Norveç	4.5	10.0
Avusturya	5.8	10.6	Polonya	7.6	20.8
Belçika	8.6	22.1	Portekiz	12.9	32.0
Kanada	7.0	13.2	Slovakya	11.5	26.4
Şili	6.5	15.5	Slovenya	9.1	16.3
Çek Cumhuriyeti	5.1	12.6	İspanya	22.2	48.3
Danimarka	6.3	10.8	İsveç	7.6	20.3
Estonya	6.3	12.6	İsviçre	4.7	8.6
Finlandiya	9.5	21.1	Türkiye	10.5	18.5
Fransa	10.4	24.7	Birleşik Krallık	5.7	15.4
Almanya	4.7	7.2	ABD	5.4	11.6
Yunanistan	25.1	49.8	**OECD**	**7.0**	**14.0**
Macaristan	6.8	17.3	Brezilya	7.1	17.0
İzlanda	4.2	8.7	Çin	2.9	6.4
İrlanda	10.0	22.4	Kolombiya	9.2	17.7
İsrail	5.3	9.3	Kosta Rika	9.8	23.0
İtalya	12.1	40.3	Hindistan	3.7	10.7
Japonya	3.5	5.5	Endonezya	6.4	21.6

[3] Çalışma hazırlandığı sırada Çek Cumhuriyeti'nin adının "Çekya" olarak değiştirilmesine yönelik yasa tasarısı resmiyet kazanmış ve ülkenin adı "Çekya" olarak değiştirilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Kore	3.7	10.5	Letonya	10.1	16.3
Lüksemburg	6.7	17.3	Litvanya	9.3	16.3
Meksika	4.5	9.0	Rusya Federasyonu	5.6	16.0
Hollanda	6.9	11.3	Güney Afrika	25.3	50.1
Yeni Zelanda	6.0	14.7			

***** Brezilya, Çin, Hindistan ve Endonezya verileri 2014 yılıdır.
Kaynak: OECD, 2016: 218.

Tablo 4 incelendiğinde 15-24 yaş grubunda işsizlik oranının en yüksek olduğu ülkeler; % 50.1 ile Güney Afrika, % 49.8 ile Yunanistan ve % 40.3 ile İtalya'dır. Genç işsizliğinin en düşük olduğu ülkeler ise; % 5.5 ile Japonya, % 6.4 ile Çin ve % 7.2 ile Almanya'dır.

Tablo 5. OECD Üyesi Olan Ülkeler ve Diğer Bazı Ülkelerde 12 Ay ve Daha Uzun Süreli İşsizlik Oranları (%), 2015, (Toplam İşgücü İçinde Her Bir Yaş Grubunun Oranı)

Ülkeler	15-64 Yaş	15-24 Yaş	Ülkeler	15-64 Yaş	15-24 Yaş
Avustralya	23.5	18.0	Norveç	11.7	3.1
Avusturya	29.2	15.8	Polonya	39.3	29.2
Belçika	51.7	35.7	Portekiz	57.4	30.9
Kanada	11.6	5.1	Slovakya	62.3	51.2
Şili	-	-	Slovenya	52.3	35.8
Çek Cumhuriyeti	48.3	30.9	İspanya	51.6	35.0
Danimarka	26.9	8.0	İsveç	17.6	4.4
Estonya	38.3	15.5	İsviçre	38.6	-
Finlandiya	25.1	8.0	Türkiye	21.2	13.8
Fransa	44.3	28.8	Birleşik Krallık	30.7	21.9
Almanya	44.0	22.5	ABD	18.7	11.4
Yunanistan	73.1	56.1	**OECD**	33.8	19.8
Macaristan	46.7	27.2	Brezilya	-	-
İzlanda	16.1	1.6	Çin	-	-
İrlanda	17.6	38.5	Kolombiya	7.7	5.0
İsrail	11.5	4.8	Kosta Rika	15.9	11.3
İtalya	58.9	55.7	Hindistan	-	-
Japonya	35.5	25.0	Endonezya	-	-
Kore	-	-	Letonya	45.5	27.1
Lüksemburg	28.4	8.5	Litvanya	42.9	16.4
Meksika	1.2	0.8	Rusya Federasyonu	27.3	17.2
Hollanda	43.6	18.7	Güney Afrika	57.0	35.7
Yeni Zelanda	13.2	6.9			

Kaynak: OECD, 2016: 221.

Tablo 5 incelendiğinde gençlerin 12 ay ve daha uzun süreli işsiz kalma oranlarının en yüksek olduğu ülkelerin; % 62.3 ile Slovakya, % 57.4 ile Portekiz ve % 56.1 ile Yunanistan olduğu görülmektedir. Bu oranın en düşük olduğu ülkeler ise; % 0.8 ile Meksika, % 1.6 ile İzlanda ve % 3.1 ile Norveç'tir.

Tablolar genel olarak değerlendirildiğinde gençlerin işgücü piyasalarında daha üretken olduğu ülkeler genel olarak genel anlamda istihdamın ve işgücüne katılma oranın da yüksek olduğu ülkelerdir.

İşgücü piyasalarında önemli bir yeri olan mesleki eğitim ve mesleki yeterlilikler konusu ile bağlantılı olarak düşünüldüğünde yukarıda sözü edilen gelişmiş ülkelerin aynı zamanda mesleki eğitime de önem verdikleri görülmektedir.

2. Mesleki Eğitim, Meslek Satndarları ve Mesleki Yeterlilikler Sistemi

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Meslek standartları ve sınav belgelendirme sistemi becerili işgücünün istihdamı, ülke içine ve dışında hareketliliğin sağlanması yoluyla çalışma hayatı ve insan kaynaklarını istenilen yönde geliştirmek için önemli bir sistemdir. Meslek standardı, bir mesleğin gereklerinin kabul edilebilir standartlarla yerine getirilebilmesi için ihtiyaç duyulan asgari bilgi, beceri, tutum ve davranışları gösteren normlardır.

Eğitim almış kişilerin niteliklerinin tanımlanmasında, eğitim programlarının hazırlanmasında ve eğitimin verilmesinde meslek standartları büyük önem taşımaktadır.

2.1. Mesleki Eğitim

Mesleki eğitimi le ilgili temel sorun eğiti programların eksikliği ve kalitesidir. Eğitimin kalitesi ne olursa olsun işgücü piyasası gereklilikleri ile örtüşmüyorsa kişinin istihdam edilme şansı bulunmamaktadır. Eğitim sisteminin kişilere kazandırdığı diploma işgücü piyasalarında yaratılmış olan emek talebi ile uyumlu olmadığında eğitim-istihdam uyumsuzluğuna dayalı yapısal işsizlik sorunu ortaya çıkmaktadır. Bu noktada işgücü piyasalarına ilişkin bilgi eksikliği ve alınan diplomaların sinyal etkisi göstermesi gibi konular da önem kazanmaktadır. İşe alacağı kişinin yetenek ve niteliklerini tam olarak bilemeyen işverenler ve sahip oldukları nitelikleri tam olarak ortaya koyamayan çalışanların bulunduğu bir işgücü piyasasının sağlıklı bir yapıda olduğu söylenemez.

2.2. Meslek Standartları ve Mesleki Yeterlilikler Sistemi

Bir mesleği ya da işi başarıyla icra etmek için kişinin sahip olması gereken asgari bilgi ve becerileri içeren meslek standartları işgücü piyasalarında işçi ve işverenler ile işçi sendikaları, istihdam kurumları arasında anlaşma sağlamaktadır.

Ulusal ve uluslararası mesleki yeterlilikler sistemi temel olarak teknik ve mesleki eğitim standartlarının ve yeterliliklerin geliştirilmesi, uygulanması ve bunlara ilişkin akreditasyon, yetkilendirme, denetim, ölçme ve değerlendirme ilgili kural ve faaliyetler "Ulusal Mesleki Yeterlilikler Sistemi" (UMYS) olarak adlandırılmaktadır (http://www.myk.gov.tr).

Bu sistem ile; eğitim istihdam ilişkisinin güçlendirilmesi, öğrenme çıktıları için ulusal ve uluslararası standartların oluşturulması, eğitim ve öğretimde kalite güvencesinin sağlanması, ulusal ve uluslararası karşılaştırılabilir bir yapıda yatay ve dikey geçişler için yeterliliklerin eşleştirilmesi, öğrenmeye ulaşma, öğrenmede ilerleme ve öğrenmenin tanınmasının sağlanması ve yaşamboyu öğrenmenin sağlanması UMYS'nin temel amaçları olarak sıralanmaktadır. UMYS'nin birinci aşaması meslek standartlarının oluşturulmasıdır. Ardından iş dünyası ile ilgili taraflarca hazırlanan taslak meslek standartları sektör komitesine sunulur ve yapılan inceleme ve değerlendirme sonucunda Mesleki Yeterlilikler Kurumu (MYK) Yönetim Kurulu onayıyla Resmi Gazete' de yayımlanmaktadır.

Bireylerin bir mesleğin yürütümü sırasında sahip olması gereken özellikler (bilgi, beceri ve yetkinlik) bakımından uygun olup olmadığı MYK tarafından yetkilendirilmiş (akredite) sınav ve belgelendirme kuruluşlarınca ortaya konulmaktadır.

3. Türkiye'de Mesleki Yeterlilikler Sistemi

Türkiye'de işsizliğin nitelikli işgücü ve verimli istihdam olmamasından kaynaklandığı çeşitli kaynaklarda ve raporlarda yer almaktadır. Sorun aslında yapısal bir nitelik arz etmektedir. Çeşitli eğitim kademelerinden mezun olan gençlerin işgücü piyasasının gereksinim duyduğu niteliklere sahip olmaması ciddi boyutta bir genç işsizliği sorunu yaratmaktadır (UİS, 2011: 15).

Milli Eğitim Bakanlığı "İstihdam ve Eğitim Projesi" nin öngördüğü meslek standartları, sınav ve belgelendirme sisteminin kurulması amacıyla nin17 Eylül 1992 tarihinde ilgili bakanlıklar ve sosyal taraflarca "Milli Protokol" imzalanmıştır. İmzalanan Meslek Standartları Ulusal Protokolünden, 2007 yılında Mesleki Yeterlilik Kurumu'nun (MYK) faaliyete geçmesine kadar olan süre içinde ulusal mesleki yeterlilikler çerçevesinin oluşturulması, meslek standartlarının geliştirilmesi, sınav ve belgelendirme aşaması ile ilgili çok sayıda çalışmanın yapılmış olduğu ve çeşitli kurumların da bu süreçte etkin rol aldığı dikkatlerden kaçmamalıdır. Günümüzde mesleki yeterlilikler alanında Çalışma ve Sosyal Güvenlik Bakanlığı'nın ilgili kuruluşu olan MYK; kamu tüzel kişiliğini haiz, idari ve mali özerkliğe sahip, özel bütçeli bir kamu kurumu olarak faaliyet göstermektedir. Ulusal mesleki yeterlilik sistemi ile ilgili yıllık gelişme planı hazırlama, geliştirme, uygulamasını

 Copyright © International Conference on New Horizons in Education Conference (INTE)

yapma veya yaptırma, denetleme; bunlara ilişkin düzenlemeleri yapma, standartları belirlenecek meslekleri belirleme ve bu standartları hazırlayacak kurum ve kuruluşları belirleme, konu ile ilgili kurumlarla işbirliği yapma, konusunda görev ve yetkileri olan bir kurumdur. Bu anlamda MYK, eğitim ve istihdam arasındaki bağlantıyı kurma konusunda önemli bir rol üstlenmiştir.

Avrupa Parlamentosu ve Avrupa Konseyi tarafından yayımlanan 23.04.2008 tarihli "Hayat Boyu Öğrenmede Avrupa Yeterlilikler Çerçevesi" kararı gereğince AB üyelerinin ve AB aday ülkelerin ulusal yeterlilik çerçevelerini oluşturmaları ve Avrupa Yeterlilikler Çerçevesi ile kıyaslamaları gerekmektedir. Avrupa Yeterlilikler Çerçevesi (AYÇ) Türkiye koordinasyon noktası olarak MYK görevlendirilmiştir (MYK, 2011: 19).

İşgücü piyasalarının etkin işlemesi, eğitim istihdam uyumsuzluğunun ortadan kaldırılabilmesi, işsizlikle mücadele edilebilmesi, işgücü piyasası ile ilgili eksik bilgilenmeden kaynaklanan sorunların ortadan kaldırılabilmesi gibi çalışma hayatını şekillendiren birçok alanda öneme sahip olan mesleki yeterlilikler sistemi Türkiye'de henüz mevcut tablodaki olumsuzlukları giderebilecek düzeye ulaşamamıştır. Sistemin yeterlilik ve standartların geliştirilmesi konusunda hızlı ilerlediği ancak sınav ve belgelendirme sistemi ayağının görece zayıf kaldığı gözlenmektedir. Sınav ve belgelendirme kısmında Türk Akreditasyon Kurumu (TÜRKAK) tarafından akredite olmuş kuruluşlar MYK tarafından da yetkilendirilmekte ve ilgili ulusal yeterlilik kapsamında her yeterlilik için belirlenen seviyede ve uluslararası geçerliliği olan "Mesleki Yeterlilik Belgesi" verilmektedir. Bu belgelerin ve dolaysıyla da sistemin işlerliği işverenlerin çalıştıracakları kişilerde bu belgeyi istemeleri koşuluna bağlıdır. Aksi takdirde belge sahibi olabilmek için katlanmış oldukları sınav stresi ve ek maliyetlere rağmen verdikleri emeğin ve niteliklerini gösteren belgenin işgücü piyasalarında karşılığını bulamayan belge sahibi işsizlerin artması, işsizlik sorununun diğer olumsuz sonuçlarına ek olarak psikolojik sorun olma yönünü daha da ağırlaştıracağını söylemek yanlış olmayacaktır. Eğitimli işsizlik sorunu gençlerde daha yaygın olduğundan konu; gençleri istihdam etme, işgücü piyasalarında niteliklerine uygun işlerde yar almalarını sağlayabilme bakımından da sıkıntılı bir hale gelmektedir.

Sonuç

Eğitim istihdam ilişkisinin güçlendirilmesi günümüzün bilgiye dayalı ekonomisinde, ülkelerin rekabet gücünü belirleyen önemli bir kavram olarak karşımıza çıkmaktadır. Eğitim istihdam uyumsuzluğunun birey, işletmeler ve ülke açısından önemli olumsuz sonuçları olmaktadır. İşsizlik, çalışılan işte memnuniyetsizlik, düşük verimlilik, çalışırken iş arıyor durumda olmak gibi bireyleri etkileyen faktörlerin aynı zamanda firma düzeyinde üretime yansıyan olumsuz sonuçları, ulusal düzeye kadar taşınabilmektedir.

Eğitim ve istihdam uyumsuzluğu çeşitli yönlerden ele alınabilir ve farklı göstergelerle izlenebilir. Bu göstergelerden en belirleyici olanı temel bilgi ve becerilerindeki yeterlilik düzeyidir. Yeterlilik, kişilerin sahip oldukları becerileri ne ölçüde icra edebildiklerinin göstergesidir. Temel becerilerdeki yeterlilik düzeyinin, işgücü piyasalarında işgücü piyasalarında ihtiyaç duyulan nitelikte işgücü yetiştirilmesi için yapılacak ilave beşeri sermaye yatırımları için temel oluşturduğu kabul edilmektedir. Temel bilgi ve becerileri destekleyen ve geliştiren eğitim, mesleki eğitim, staj vb. uygulamalar vasıflı meslek sahiplerinin yetiştirilmesinde izlenen yol olmakla birlikte asıl amaç kazanılan niteliklerin işgücü piyasası gereklilikleri ile örtüşmesi olmaktadır. Eğitim ve istihdam arasında doğru ilişkinin kurulması, bireylerin sahip olduğu niteliklerin gerek ulusal gerekse uluslararası düzeyde tanınır olması gerekmektedir. Bu noktada ulusal meslek standartları, sınav ve belgelendirme sisteminin oluşturulması ve etkin bir biçimde işletilmesi işgücü piyasalarının etkin bir biçimde işlemesinde en önemli unsurdur.

Bir mesleğin başarıyla icra edilmesi için yapılması gereken görev ve işlemler, sahip olunması gereken bilgi ve beceriler ile sergilenmesi gereken tutum ve davranışları gösteren asgari normlar olarak tanımlanan meslek standartları, Türkiye'de MYK tarafından geliştirilmektedir. Meslek standartlarının işgücü piyasasında işverenler, işçi sendikaları ve istihdam kurumları arasında bir anlaşmanın ürünü olarak ortaya çıkması ve uygulama aşamasında da tüm tarafların sistemi sürdürme konusunda kararlı olmaları gereklidir.

Meslek standartları işverenler bakımından istihdam edecekleri kişilerin sahip olması gereken bilgi ve beceriler konusunda bilgi sahibi olacağından istihdam edecekleri kişinin seçiminden, ücretlerin belirlenmesine ve terfilere kadar birçok aşamada yararlı olacaktır. Çalışanlar da iş başvurusu sırasında sahip oldukları yeterlilikleri daha iyi sergileyebileceklerdir (Arslan, 2012:1).

UMYS'nin güçlendirilmesi ve Türkiye ulusal yeterlilikler çerçevesi; istihdamı arttırmak, işsizliği azaltmak, ülkenin eğitim sistemi ile işgücü piyasalarının gereksinim duyduğu işgücünü yetiştirebilmek ve bu sayede rekabet için nitelikli insan gücünün doğru yönlendirilmesi mümkün olacaktır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

KAYNAKÇA

Canbey-Özgüler, Verda (2012). Ulusal Meslek Standartları ve Gençlerin İstihdamı, **Eskişehir Sanayi Odası Dergisi ESO Dergi**, 1 (13), 30-31.

OECD Employment Outlook, 2016, **http://www.oecd.org**, (Erişim Tarihi: 10.07.2016).

TÜİK (2014). İstatistiklerle Gençlik, **http://www.tuik.gov.tr** (Erişim Tarihi: 10.07.2016).

http://www.myk.gov.tr, (Erişim Tarihi: 12.04.2013).

2008/C 111/01, RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 April 2008 on the *Establishment of the European Qualifications Framework for Lifelong Learning*, http://eur-lex.europa.eu/legal content/EN/TXT/?uri=uriserv:OJ.C_.2008.111.01.0001.01.ENG&toc=OJ:C:2008:111:TOC, (Erişim Tarihi: 03.07.2016).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

JUST ASK!
WHAT PROMPTS ELEMANTARY SCHOOL STUDENTS TO ENGAGE IN CRITICAL THINKING IN READING AND MATHEMATICS CLASSES IN THE UNITED STATES?

Robert G. CRONINGER
University of Maryland, United States
croninge@umd.edu

Rachel M. V. CRONINGER
Pennsylvania State University, United States
rmc301@psu.edu

ABSTRACT
One of the challenges to ambitious school reform is prompting teachers and students to engage subject matter deeply and critically. One strategy for doing so involves teacher talk – challenging students to provide more complex responses to the interpretation of text or mathematical problems. In this study we use observation data about lessons to examine student and teacher talk during reading and mathematics instruction in fourth and fifth grade classes in the United States. Using multilevel modeling, we find that students are rarely challenged to provide additional commentary or justification for answers that they give during lessons. However, when they are challenged to do so, students are more likely to provide answers characterized by alternative justifications, extended responses, and critical reasoning. During reading lessons, teacher requests for greater engagement in content were more likely to be successful when teachers actively managed instruction; during mathematics lessons, teacher requests for greater engagement in content were more likely to be successful when teachers used small group and mixed forms of instruction. In general, traditionally disadvantaged students responded as positively to teacher requests for greater engagement as traditionally advantaged students, if they were in a classroom where teachers asked them to do so.

INTRODUCTION
One of the challenges to ambitious school reform is prompting students to engage subject matter more deeply and critically (Cohen, 2011). One strategy for doing so involves teacher talk – teachers challenging students to provide more complex responses to the interpretation of text or how to solve mathematical problems (Gall, 1970; Hiebert & Wearne, 1993; Morrow, Wamsley, Duhammel, & Fittipaldi, 2002). Doing so not only enhances student general knowledge it also helps students develop cognitive skills and problem-solving strategies that may be transferrable to other tasks (Knapp & Means, 1992). However, challenging students to think more deeply about text and problems is not common in most elementary and secondary classrooms (Applebee, Langer, Nystrand, & Gamoran, 2003; Boyd, 2015; Nystrand & Gamoran, 1991). First, many teachers are uncomfortable with or simply do not know how to elicit deeper engagement in topics from students; nor do many teachers know how to establish norms of discussion or talk that prompt expectations for more critical and thoughtful responses from students to their inquiries (Soter, Wilkinson, Murphy, Rudge, Reninger, & Edwards, 2008; Jadallah et al., 2011). Second, students themselves resist engaging topics more critically as part of classroom discourse (Palincsar & Brown, 1986; Mercer, Wegrif, & Dawes, 1999). Doing so involves departing from the script associated with traditional classroom discourse – simple factual requests and responses – and risks revealing misunderstanding or confusion to others. Nonetheless, engaging in challenging talk also provides one of the greatest opportunities for students to develop sharper cognitive skills and a critical understanding of subjects.

In this study we draw on data from classroom observations of fourth and fifth grade teachers to examine teacher and student talk during reading and mathematics lessons. We use multilevel modeling to examine student responses to teacher queries across 846 lessons, in roughly 66 classrooms in 18 elementary schools in the United States. We categorize teacher and student talk by what has been referred to as "cognitive load" or "cognitive demand" (Graeber, Jones, & Chambliss, 2012). When teachers ask for simple "yes-no" or factual responses, we categorize their requests as involving lower cognitive demand; when teachers ask

 Copyright © International Conference on New Horizons in Education Conference (INTE)

students to elaborate, consider alterative possibilities, or justify their responses, we categorize their requests as involving higher cognitive demand. We use the same coding scheme to categorize student talk – that is, we code simple responses as involving lower cognitive demand and more complex responses (i.e., when students elaborate on a response, consider an alternative explanation to their response, or provide a justification for their response) as involving higher cognitive demand. According to our conceptualization of teacher talk, talk that requests higher levels of cognitive demand from students is more likely to result in students engaging in critical thinking, while talk that requests lower levels of cognitive demand from students is less likely to do so.

We use this conceptualization and various characteristics of students, teacher practices, classes, and schools to answer the following research questions:

1. What is the likelihood that students engage in critical thinking, as measured by the occurrence of cognitively demanding responses to teacher questions? Does the occurrence of students' cognitively demanding responses vary across lessons, classes, and schools?
2. Are students more likely to engage in critical thinking, as measured by cognitively demanding responses to their teachers' requests, when teachers ask them to reflect more critically on texts and problems?
3. What characteristics of teachers, classes and schools are associated with a greater occurrence of critical thinking, as measured by students' cognitively demanding responses to teachers' questions?
4. What characteristics of classes and schools are associated with a greater effectiveness of teachers' request for students to think critically about texts and problems, as measured by the relationship between teacher requests for critical thinking and student responses?

METHODS

The High-Quality Teaching (HQT) Study, a multi-year, federally funded, interdisciplinary examination of teaching in fourth and fifth grade classes in the United States, was designed to provide a multifaceted examination of what constitutes quality teaching. The purpose of the study was to investigate what teachers do to help fourth and fifth grade students succeed in reading and mathematics, and to investigate how various educational policies and organizational factors influence the ability of teachers to scale up and sustain good or quality teaching over time. Using multiple methods, investigators followed teachers over time to compare teaching in reading and mathematics in classes comprised of different types of students, in elementary schools with different organizational structures, and in years with different policy pressures. Between 2001 and 2005, approximately 170 teachers and 4,300 students in 25 elementary schools participated in the study (see Croninger, Valli, & Chambliss, 2012 for more background on the study). The data for this study come from the classroom observations completed during the 2003-2004 school year.

Observation Protocols

The study used a time-sampling observation protocol for observing reading and mathematics instruction in the fourth and fifth grades. The protocol was based on the district's formal curriculum, instructional standards promoted by professional organizations (e.g., the National Council of Teachers of Mathematics, the International Reading Association, and National Council of Teachers of English), the research literature on teaching in each subject area, and lessons learned from teachers during the piloting of the instrument. Researchers observed fourth and fifth grade teachers deliver reading and mathematics lessons to their students during the year. During the observation, researchers responded to a set of questions presented to them by a software program running on a laptop computer. Every three minutes the program asked observers to select from a set of options about what the teacher was doing, what students were doing, current content and context for the lesson, classroom organization, type of technology used, types of materials used, and the extent of student attentiveness. All observers participated in pre-observation training to ensure inter-rater reliability; observers were also periodically paired with a second observer during the year to monitor potential drift in reliability.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Study Site

The schools in the HQT study come from one of the 20 largest school systems in the United States. The school district employs more than 19,000 individuals and enrolls nearly 140,000 students (K-12). Like many large, metropolitan school districts, the district faces a wide range of educational challenges associated with dramatic changes in the demographics of its student population and heightened expectations for student achievement. During the 2003-2004 school year 18 elementary schools participated in the study. Nearly two-thirds of the schools in the study had low-income enrollments of over 40%, and slightly over half of the students (58%) were either African American or Hispanic. A total of 66 teachers participated in the study that year. Of these teachers, 62 participated in a total of 412 reading observations and 66 participated in a total of 434 mathematics observations. We observed, on average, seven 60-minute lessons per teacher.

Analytic Strategy

Because of the nested nature of the data (observations of lessons nested in teachers' classrooms nested in schools), we developed a three-level multilevel model to examine the nature of student and teacher talk during lessons (Raudenbush & Bryk, 2002). For both the reading and mathematics lessons, we coded teacher requests and student responses as involving higher cognitive demand or lower cognitive demand (our indicators of requests and responses that involved critical thinking). We then calculated the proportion of the lesson associated with each (e.g., the proportion of three-minute episodes in which the observer recorded that the teacher solicited more thoughtful responses from students and the proportion of three-minute episodes in which a student provided a thoughtful response to a question or statement). In these analyses we use the quality of student talk as the dependent variable and the quality of teacher talk as the primary independent variable. We standardized each variable to have a mean of zero and a standard deviation of one.

At level 1 we model the proportion of a lesson in which students provide cognitively demanding responses as the function of the quality of teacher talk and an array of lesson characteristics – that is, we model the proportion of time in individual lesson i taught by teacher j in school k that students respond more thoughtfully as a function of the average proportion of time across all lessons that students did so in teacher j's classroom in school k; the proportion of time that teacher j in school k prompted students to engage a topic more thoughtfully; an array of lesson characteristics L (e.g., proportion of time teacher was actively engaged in instruction, the proportion of time that teachers organized students into small or mixed groups, or the proportion of time teachers covered topics that might require different levels of critical thinking); and unexplained variance in the outcome not accounted for by the model. We allow both the average student responses across lessons for a teacher (π_{0jk}) and the average effect of teacher prompts (π_{1jk}) to vary between teachers within schools at level 2. All variables are group-mean centered and fixed (i.e., we do not estimate the other variables' random effects).

Level 1

$$y_{ijk} = \pi_{0jk} + \pi_{1jk}a_{jk} + \pi_{pjk} L_{pjk} + e_{ijk}$$

At level 2 we model the average proportion of time that students responded more thoughtfully (β_{00k}) and the effect of teachers prompting students to do so (β_{01k}) by the averages across lessons for teacher j in school k; an array of teacher and classroom characteristics C (e.g., grade, proportion of time that teachers use small or mixed group instructional designs, and the proportion of students that are low-income, special education and English language learners); and unexplained variance at level 2. Again we allow the intercept and the slope for teachers' requests to vary at the next level of the model, level 3. All other variables are group-mean centered and fixed.

Level 2

$$\pi_{0jk} = \beta_{00k} + \beta_{pqk} C_{pqk+} r_{0jk}$$

$$\pi_{1jk} = \beta_{01k} + \beta_{pqk} C_{pqk+} r_{1jk}$$

At level 3 the model examines differences between schools in the average proportion of time that students provided more critical responses and the average effect of teacher prompts as a function of school

 Copyright © International Conference on New Horizons in Education Conference (INTE)

characteristics S. In these models, we consider possible contextual effects that might result from being in schools where teachers prompt more often for thoughtful responses, more complex content in reading and mathematics is taught more often, or where there are higher enrollments of students typically thought to be at risk of underachievement. All variables at level 3 are grand-mean centered.

Level 3

$$\beta_{00k} = \gamma_{000} + \gamma_{pqs} S_{pqs+} u_{0qk}$$

$$\beta_{01k} = \gamma_{100} + \gamma_{pqs} S_{pqs+} u_{1qk}$$

RESULTS

Critical thinking, or, as we have measured it here as cognitively demanding student talk, does not happen very often in fourth and fifth grade classrooms in the United States. While students engage in more demanding talk more often during reading lessons than during mathematics lessons, students are far more likely to provide simple yes-no or factual responses during both types of lessons. Across the observed lessons in the study, students provided more thoughtful responses only 11 percent of the time during reading lessons and six percent of the time during mathematics lessons. The proportion of time that students offered simple or uncritical responses was two to three times more often (22 percent and 18 percent, respectively) than the proportion of time that students offered more complex or challenging responses. Teachers also seldom prompted students to reconsider or provide thoughtful responses, which may explain why students infrequently did so. Teachers posed critically demanding questions 10 percent of the time in reading and 11 percent of the time in mathematics. Regardless of the subject, the majority of requests from teachers were for simple answers.

We provide the results of our multilevel models in two tables. Table 1 provides the results for the models that examine differences between lessons, teachers, and schools for the intercept – that is, the average proportion of lessons within teachers' classes and across teachers' classes within schools that students provided more challenging or demanding responses to student queries. The results of this table provide insights into the occurrence of critically demanding responses by students to questions or statements. Table 2 provides the results for the models that examine differences between teachers' classes and schools in the average effects of teacher talk on student talk. The results of this table provide insights into how effective teachers' requests for critical reflection are in different contexts – namely, when teachers rely on different practices and there are different student compositions in classes and schools. The top panel for both tables provides the coefficients for reading (column two) and mathematics (column three) lessons. The bottom panel provides conditional variance components at each level of the model. Although we present the results separately, both tables come from the same multilevel analysis of the data.

As displayed in Table 1, students are more likely to provide more cognitively demanding responses during reading lessons in schools where teachers focused on more demanding content, such as reading comprehension, explicit reading strategies, and writing. The difference between schools that emphasized these forms of content and schools that emphasized grammar or conventions was .13 of a standard deviation (SD). There was no effect associated with schools that had higher proportions of students thought to be at risk of failure (i.e., low-income students, special education students, and English language learners) for reading lessons, but there was an effect associated with mathematics lessons. In schools with higher proportions of these students, the proportion of lesson time in which students provided more complex responses was .19 SD lower than average.

At the class level, students in reading and mathematics provided more challenging or demanding responses when teachers prompted them to do so more often in their lessons. In classes where teachers engaged in more challenging or demanding talk, the proportion of lessons in which students did so increased by .18 SD in reading and .13 SD in mathematics. Nonetheless, during reading lessons this quality of student response was less likely to occur in classrooms with higher than average proportions of English language learners; and during mathematics lessons it was less likely to occur in classrooms with higher than average proportions of at-risk students. As the variance components indicate (the lower, random effects panel of the table), the model accounts for roughly one quarter to one third of the variance between lessons, between

 Copyright © International Conference on New Horizons in Education Conference (INTE)

one quarter and two fifths of the variance at the class level, and less than one fifth of the variance at the school level.

Table 1 Intercept models for demanding student talk in reading and mathematics lessons

Fixed Effects	*Reading*	*Mathematics*
Lesson intercept demanding student talk, π_{0ij}		
Class intercept demanding student talk, β_{00j}		
SCHOOL INTERCEPT, γ_{000}	-0.04	-0.02
MEAN HIGHER CONTENT, γ_{001}	0.14~	---
MEAN RISK, γ_{002}	-0.12	-0.19*
Class intercept demanding student talk, β_{01j}		
SCHOOL INTERCEPT, γ_{010}	0.18**	0.13*
Class intercept procedural content, β_{02j}		
SCHOOL INTERCEPT, γ_{020}	---	-0.21*
Class intercept English-language learner, β_{02j}		
SCHOOL INTERCEPT, γ_{020}	-0.24*	---
Class intercept at risk, β_{03j}		
SCHOOL INTERCEPT, γ_{030}	-0.01	-0.12~
Random Effects	*Reading*	*Mathematics*
Level-1 Variance		
Conditional variation between lessons in demanding student talk, e_{ijk}	0.60	0.57
Percent reduction in variance	28%	31%
Level-2 Variance		
Conditional variation between classes in demanding student talk, r_{0j}	0.04**	0.98**
Percent reduction in variance	43%	27%
Level-3 Variance		
Conditional variation between schools in demanding student talk, u_{00j}	0.08***	0.05***
Percent reduction in variance	13%	17%

*** $p < .000$; ** $p < .01$; * $p < .05$; ~ $p < .10$ All variables are standardized (M = 0, SD = 1). All class-level and lesson-level variables are group-mean centered.

As Table 2 demonstrates, the strongest predictor of the quality of a student's talk during a lesson is the quality of their teacher's talk. During lessons that teachers requested more complex responses from students, the proportion of the lesson characterized by higher-level student responses increased by .48 SD in reading and by .46 SD in mathematics. Moreover, the effectiveness of teachers' prompts or the relationship between student talk and teacher talk varied among teachers – that is, some teachers were more effective at getting students to engage in demanding talk than others, even when both teachers engaged in the same level of challenging talk or prompts during lessons. Estimate of the potential range in the effectiveness of teacher requests was as low as no effect (0) to nearly one standard deviation (.95 SD). Clearly, context may play a role in how successful teachers are at soliciting critical thinking from students, at least as measured by students verbal responses to questions or statements during reading and mathematics lessons.

Effectiveness increased during reading lessons the more teachers focused on managing instruction rather than behavior or administrative tasks (i.e., organizing instruction v dealing with student behavior or

 Copyright © International Conference on New Horizons in Education Conference (INTE)

spending time on recording attendance or grades); effectiveness increased during mathematics lessons the more teachers organized students into small or mixed groups. Importantly, the proportion of at-risk students had *no influence* on the effectiveness of teachers' requests at either the class or school levels. As indicated in the lower panel of Table 2, the model explained between one fifth and two thirds of the variance in the effectiveness of teacher requests at the class level, but virtually no variance at the school level.

Table 2 Slope models for average demanding teacher talk in reading and mathematics lessons

Fixed Effects	*Reading*	*Mathematics*
Lesson intercept demanding teacher talk, π_{1ij}		
Class intercept demanding teacher talk, β_{10j}		
SCHOOL INTERCEPT, γ_{100}	0.48***	0.46***
SCHOOL MEAN RISK, γ_{101}	0.01	-0.02
Class intercept instructional management, β_{11j}		
SCHOOL INTERCEPT, γ_{110}	0.13~	---
Class intercept small or mixed groups, β_{12j}		
SCHOOL INTERCEPT, γ_{120}	---	0.13~
Class intercept at-risk student, β_{13j}		
SCHOOL INTERCEPT, γ_{130}	0.10	-0.02
Random Effects	*Reading*	*Mathematics*
Level-2 Variance		
Conditional variation between classes in effect demanding teacher talk, r_{1j}	0.05**	0.04***
Percent reduction in variance	17%	33%
Level-3 Variance		
Conditional variation between schools in effect demanding teacher talk, u_{10j}	0.03*	0.01~
Percent reduction in variance	---	---

*** $p < .000$; ** $p < .01$; * $p < .05$; ~ $p < .10$ All variables are standardized (M = 0, SD = 1). All class-level and lesson-level variables are group-mean centered.

DISCUSSION

Although school reform efforts throughout the United States urge teachers to engage students more deeply in subject matter, it often does not occur in classrooms (Cohen, 2011). Although teachers challenging students' understanding by prompting further justification or alternative hypotheses is associated with higher levels of achievement (Croninger, Buese, & Larson, 2012; Graeber et al., 2012), as well as the development of more critical thinking skills (Knapp & Means, 1992; Palincsar & Brown, 1986), this form of teacher talk is rare, especially in classrooms and schools serving high proportions of disadvantaged students (Applebee et al., 2003; Boyd 2015; Knapp & Means, 1992; Nystrand & Gamoran, 1991). In this study, teachers requested more critical reflection on text or problems no more than 11 percent of the time.

Not surprisingly, the quality of student talk in the lessons that we observed was also low. We witnessed demanding student talk no more than 11 percent of the time during reading lessons and only six percent of the time during mathematics lessons. Moreover, the quality of student talk during mathematics lessons was about one fifth of a standard deviation lower in schools with higher proportions of at-risk students and one quarter of a standard deviation lower in classrooms with higher proportions of English language learners. If we measure the occurrence of critical thinking by the occurrence of quality student talk, it does not happen very often in fourth and fifth grade classes in the United States, especially in classes and schools that enroll larger proportions of disadvantaged or at-risk students (i.e., low-income students, minority students, and English language learners.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

More reassuringly, the strongest predictor of the quality of a student's talk was the quality of the teacher's talk during a lesson. The more challenging the teacher's request, the more challenging the student's response. Whether the lesson was about reading or mathematics, the associated effect of challenging students to provide more complex answers was nearly one half of a standard deviation. However, teachers varied in the effectiveness of their prompts, even when using prompts of comparable quality and frequency. In some classrooms, students responded more positively to teachers' requests for expanded answers or greater justifications for their answers; in other classrooms, students responded less favorably. There are clearly contextual factors that play a role in how well teachers' prompts elicit more cognitively demanding response from students.

Although we are not able to fully explain why some teachers are more effective than others at soliciting more thoughtful responses from students, our study does provide some insights. For example, during reading lessons, teacher prompts were more effective when teachers focused more time on managing instructional activities rather than dealing with student behaviors or administrative tasks. Promoting students' critical thinking requires more effort on the part teachers to keep students focused on instructional goals and to stay on topic; teachers that were more successful at doing so, were more effective in stimulating thoughtful student talk. During mathematics lessons, the organization of the classroom proved important. Teacher prompts were more effective when teachers organized students into small group or mixed group designs for larger proportions of a lesson. The use of these instructional designs may signal to students that discussion is expected, perhaps more so than what occurs in a typical mathematics lecture.

The most important finding from this study, however, is that while teachers varied in their effectiveness in prompting cognitively demanding responses from students there was no indication that effectiveness varied by the characteristics of students in the class. Teachers delivering lessons in classes with higher proportions of at-risk students were as effective in soliciting demanding talk as teachers delivering lessons in classes with lower proportions of at-risk students. Although lessons were less likely to be characterized as involving cognitively demanding talk by students in schools and classrooms with higher proportions of at-risk students and English language learners, this may be because teachers did not provide students with opportunities to engage in such interactions with them or other students – a finding consistent with the literature (Applebee et al., 2003; Nystrand & Gamoran, 1991). Nonetheless, if teachers challenge students to engage in this form of talk, there is no evidence that students are unable to do so, regardless of the proportion of disadvantaged students assigned to a teacher. On the contrary, the evidence provided by this study suggests that teachers who wish to stimulate critical thinking and deeper engagement in subjects should model demanding teacher talk, provide opportunities for students to engage in demanding talk, and have the courage to "just ask" students to reflect more deeply on their lessons.

REFERENCES

Applebee, A. N., Langer, J. A., Nystrand, M., & Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high school English. *American Educational Research Journal, 40*(3), 685-730.

Boyd, M. (2015). Relations between teacher questioning and student talk in one elementary ELL classroom. *Journal of Literacy Research*, *47*(3), 370-404.

Cohen, D. K. (2011). *Teaching and its predicaments*. Cambridge: Harvard University Press.

Croninger, R. G., Buese, D., & Larson, J. (2012). A mixed-methods look at teaching quality: Challenges *Teachers College Record, 114* (4), 1-36. (http://www.tcrecord.org. ID # 16649).

Croninger, R. G., Valli, L., & Chambliss, M. (2012). Researching quality in teaching: Enduring and emerging challenges. *Teachers College Record, Special Issue*, *114* (4), 1-15. (http://www.tcrecord.org. ID # 16652).

Gall, M. (1970). The use of questions in teaching. *Review of Educational Research*, *40* (5), 707-721.

Graeber, A., Jones, K., & Chambliss, M. (2012). Crossing the borders again. Challenges in comparing quality instruction in mathematics and reading. *Teachers College Record, Special Issue*, *114* (2), 1-36. (http://www.tcrecord.org. ID # 16650).

Hiebert, J., & Wearne, D. (1993). Instructional tasks, classroom discourse, and students' learning in second-grade arithmetic. *American Educational Research Journal*, *30*, 393-425.

Jadallah, M., Anderson, R. C., Nguyen-Jahiel, K., Miller, B. W., Kim, I. H., Kuo, L. J., ... & Wu, X. (2011). Influence of a teacher's scaffolding moves during child-led small-group discussions. *American Educational Research Journal*, *48*(1), 194-230.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Knapp, M., & Means, B. (1992). Cognitive approaches to teaching advanced skills to educationally disadvantaged students. *Phi Delta Kappan*, *73* (4), 282-289.

Mercer, N., Wegerif, R., & Dawes, L. (1999). Children's talk and the developing of reason in the classroom. *British Educational Research Journal*, *25* (1), 95-11.

Morrow, L. M., Wamsley, G., Duhammel, K., & Fittipaldi, N. (2002). A case study of exemplary practice in fourth grade. In B. M. Taylor & P. D. Pearson (Eds.), *Teaching reading: Effective schools, accomplished teachers* (pp. 289-307). Mahwah, NJ: Erlbaum.

Nystrand, M., & Gamoran, A. (1991). Instructional discourse, student engagement, and literature achievement. *Research in the Teaching of English*, *25*(3), 261-290.

Palincsar, A., & Brown, A., (1986). Interactive teaching to promote independent learning from text. *Reading Teacher*, *39* (8), 771-777.

Raudenbush, S., & Bryk, A. (2002). *Hierarchical linear modeling: Applications and data analysis methods* (2nd edition). Thousand Oaks, CA: SAGE.

Soter, A. O., Wilkinson, I. A., Murphy, P. K., Rudge, L., Reninger, K., & Edwards, M. (2008). What the discourse tells us: Talk and indicators of high-level comprehension. *International Journal of Educational Research*, *47*(6), 372-39

 Copyright © International Conference on New Horizons in Education Conference (INTE)

KLASİK İSLAM AHLAK KİTAPLARININ GÜNÜMÜZDE DİNİ VE AHLAKİ DEĞERİN EĞİTİMİNDEKİ YERİ VE ÖNEMİ

Ayşe Sıdıka OKTAY
İlahiyat Fakültesi
Süleyman Demirel Üniversitesi, Turkey
ayseoktay@sdu.edu.tr

ÖZET
İnsanın dünyadaki varlığını ve hayattaki amacını belirleyen dolayısıyla onun hayatına anlam katan en önemli şey değerleridir. Bunun için insanın sahip olduğu değerler ve bu değerlerin kazanılması, eğitim ve öğretimi güncel problemlerden birisidir. Günümüzde değer eğitimi toplumların, ailelerin ve okulların önemli sorumluluğu olarak görülmektedir.

İslam düşüncesinde dini ve ahlaki değerlerin oluşturulması, çocuk ve gençlere aktarılması önemli bir sorun olarak görülmüş ve bu konuda şu an klasik kabul edilen pek çok eser yazılmıştır. Dini ve ahlaki değerler dinin temel kaynakları kabul edilen Kur'an ve sünnete dayandırılsa da bu değerlerin akli / rasyonel olarak temellendirilmesi ve eğitim öğretim yöntemleri konusunda günümüze ışık tutacak çok önemli ilkeler benimseyen eserler daha ön plana çıkmaktadır. Bu bildiride klasik ahlak kitapları arasında daha çok bu yönleriyle öne çıkan İbn Miskeveyh'in *Tehzîbu'l-ahlâk ve tathîru'l-â'râk* ile Nasîruddîn et-Tûsî'nin *Ahlâk-ı Nâsırî* ve Kınalızâde Ali Efendi'nin *Ahlâk-ı Âlâî* adlı eserlerindeki dini ve ahlaki değerlerin öğretimi konusunda bilgiler verilip bunların günümüz eğitim sistemleri bakımından yeri ve önemi üzerine durulacak, klasik kaynakların nasıl kullanıldığına dair örnekler verilecektir.
Anahtar Kelimeler: Değer, ahlak, din, yöntem, klasik

THE PLACE AND SIGNIFICANCE OF CLASSICAL ISLAMIC ETHICS BOOKS IN THE EDUCATION OF RELIGIOUS AND ETHICS VALUES TODAY

ABSTRACT
The most important thing determining people's existence in the world and their purpose in life, thus giving meaning to their life, is their values. Therefore, values of people and gaining these values are one of the current problems of education. Today, value education is regarded as a crucial responsibility of societies, families and schools.

In Islamic sentiment, formation of religious and ethics values is seen as an important problem that needs to be passed on to children and youth and numerous books have been written on this issue that are accepted as classical today. Although the religious and ethics values are based on the Koran and sunnah, which are accepted as the fundamental resources of the religion, the books become prominent adopting crucial principles to enlighten today about founding these values as intellectual/rational and about the education methods. In this article, information will be presented on the teaching of religious and ethics values included in Ibn Miskawayh's *Tahdhîb al-akhlāḳ wa ṭahārat al-a'rāq* and Naṣīr al-Dīn al-Ṭūsī's *Akhlāḳ-ı Nāṣirī* and Ḳınalızāde Alī Efendī's *Akhlāḳ 'Alāī* books that become prominent with these aspects among the classical ethics books, and the place and significance of them for today's education systems, and examples will be provided about how the classical resources are used.
Key words: Value, ethics, religion, method, classicalş

GİRİŞ
İnsanın dünyadaki varlığını ve hayattaki amacını belirleyen dolayısıyla onun hayatına anlam katan en önemli şey değerleridir. Bunun için insanın sahip olduğu değerler ile bu değerlerin kazanılması, eğitim ve öğretimi güncel problemlerden birisidir. Günümüzde değer eğitimi toplumların, ailelerin ve okulların önemli sorumluluğu olarak görülmektedir. Özellikle ahlaki değerlerin öğretimi karakter eğitiminin bir parçası olarak ele alınmaktadır.

Öznenin olguya yüklediği nitelik olarak tanımlanan değer ile değerler arasında ayırım yapılır. Değer bir şeyin kendisiyle aynı şeyler arasındaki yerini ifade ederken değerler var olan şeyler, imkanlar olarak görülür. Onun için insanın değeri ile değerleri arasında fark vardır (Kuçuradi, 1998, ss. 40-41). Değerin ne olduğu, yapısı, nesnelliği veya öznelliği, kaynağı, değeri değerli kılan şeyin neliği, ontolojik olarak varlığı, bu varlığın öğretilip öğretilemeyeceği gibi daha çok felsefi içerikli sorunlar yanında hangi değerlerin nasıl ve ne tür metotlarla öğretileceği gibi daha çok eğitim yöntemlerini ilgilendiren tartışmalar mevcuttur. Değerler öyle bir konudur ki onu tartışmak için dahi bir takım değerlere sahip olmanız gerekir. Çünkü tartışmaların içeriğini sahip olduğumuz

 Copyright © International Conference on New Horizons in Education Conference (INTE)

bu değerler belirlemektedir (Oktay, 2007, s. 131-132). Bunun için değerler kadar değerleri belirleyen arkasındaki bakış açısı yani felsefi düşünce de önemlidir ve aksiyoloji de denilen değer felsefesinin konuları arasındadır.

Değer biçen ve değer koyan bir varlık olarak insan hayatının her boyutunu anlamlı hale getirmek için değerlendirmeler yapmaktadır. Bu sebeple ahlak, estetik, siyaset vb. pek çok alanda değerlerden söz edilebilir. Ancak özellikle ahlak değerlerden bağımsız olarak ele alınamaz. Çünkü değer felsefesi ile ilgili çeşitli sorunlar ve tartışmalar ahlak felsefesinin de problemleri arasındadır. Ayrıca "şahsiyeti oluşturan değer yargılarının değerlendirilmesinde öncelikle değer bilgisine yani etik'e sahip olmak gerekir" (Türer, 2012, s. 178). Ahlak iyi kötü gibi değer yargılarının konulduğu, belirlendiği bir alandır. Ahlakta beğenilen, istenilen ile beğenilmeyen istenmeyen eylem ve düşünceleri ifade etmek için esas olarak iyi ve kötü değerleri kullanılmakla beraber güzel-çirkin, doğru-yanlış, sevap-günah gibi diğer alanlara ait değerlerin de ortak olarak olumlu ve olumsuzu belirlemek için kullanıldığı görülmektedir. İyi kötü seçiminin ne şekilde yapılacağı, değerlendirmelerin nasıl olacağı ve bu değerlendirmelere uygun olarak hayata, insanlara ve diğer varlıklara bakışın ve davranışın niteliğiyle ilgili bilgiyi etik yani ahlak felsefesi verir. Bu açıdan eğitim ile ahlak felsefesinin farklı boyutlarda birleşmesi olarak değer eğitimi ile insanı anlamak ve kişiliğini meydana getiren değer hiyerarşisini kavratmak amaçlanır. Burada beklenilen insanın dünyayı okuması değil yorumlamasıdır ve bu son derece öznel bir uğraştır (Türer, 2012, s. 178). Bundan dolayı ahlak ile değerler arasında kaçınılmaz bir ilişki vardır.

Ahlak kavramı Arapçadan Türkçeye geçmiş yaratılış, karakter, tabiat, huy ve din anlamına gelen hulk kelimesinin çoğul halidir ve insanın huyları, karakterlerini yani manevi niteliklerini ifade etmek için kullanılan özel bir anlam kazanmıştır (Çağrıcı, 2006, s.16). Hulk veya huluk insanın doğuştan getirdiği fitri karakter özelliklerini ifade ederken ahlak sonradan kazandığı huyları niteleyen bir kavram haline dönüşmüştür. Buna göre ahlak insanın doğasındaki iyilik ve kötülüklerin bilinmesi, kötülüklerden arındırılıp iyilik yönünün güçlendirilmesi, insanın toplum içinde diğer bireyler ve varlıklara karşı sorumluluklarının bilincinde olarak, onlarla iyi ilişkiler kuracak ve faydasına olacak şekilde üzerine düşen görevleri yapması, kötü ve zarar veren işlerden kaçınması için Tanrı tarafından konulan veya insanın aklı ve deneyimleriyle ortaya konulan, bütün insanlığın önemini, değerini faydasını kabul ettiği duygu ve düşünceye dayanan huylar, faydalı davranışlar ve etkinlikler ile bunların meydana gelmesini sağlayan değerler ve bu değerlerin arkasında yer alan erdemler, ilkeler, kurallar, öğütler olarak tanımlanabilir. Ahlak daha çok yaşanan ve eylemleri içeren boyutuyla ilgiliyken bu eylem ve davranışların dayandığı tartışıldığı düşünsel, felsefi kısım ahlak felsefesi yani etik olarak anılır. Kendi içinde birbirine zıt farklı görüşler olsa da genel olarak insanın iyilik ve kötülük yapmaya yatkın fakat iyi ile kötü arasında seçim yapabilecek ve seçimine uygun eylemde bulunabilecek gücü olan özgür bir birey olduğu kabul edilir. Ancak insan ne mutlak anlamda özgür ne de tam anlamıyla Tanrı'nın kendisine çizdiği kadere mahkûm bir varlıktır. Bunun için ahlak, iyilik ve kötülüğe meyilli olup bu ikisi arasında seçim yapma özgürlüğü var kabul edilen insanın, asla dışında çıkamayacağı ve kayıtsız kalamayacağı bir değerler dünyası olarak görülür (Yaran, 2010, ss. 9-12). Ahlak kavramının adet, gelenek, görenekle ve örfle de alakası vardır ve çoğu zaman bunlar birbirleriyle karıştırılır. Ancak aralarında belirgin bir farklılık vardır. Örf, adet ve gelenekler zaman, mekan, kültür ve topluma göre değişim gösterebilirken ahlak değişmeyen kural, değer ve ilkeler için kullanılır. (Kılıç, 2014, s. 23) Ahlak bu yönüyle zaman, mekan vb. etkenlerle değişmeyen temel değerleri ve ilkeleri içermelidir.

İnsanın iyiye ve kötüye meyilli ancak ahlaken gelişmeye müsait yapısı, davranışlarını seçmede özgür olduğunun kabulü ve toplumsal bir hayatı paylaşma zorunluluğu ister istemez başta dinler, peygamberleri ve öğretileri ile alimler, öğretmenler ve filozofları öncelikle ahlak konusuyla ilgilenmeye yöneltmiş, ahlaka ve ahlak ilmine ihtiyacı ortaya çıkarmıştır. Günümüz toplumlarının içinde bulunduğu şartlar, teknolojinin kötü kullanımından doğan çevre, biyoetik vb. sorunlar, savaşlar ve bunların küreselleşme ile bütün insanlığı ilgilendirir hale dönüşmesi ahlaka olan ihtiyacı daha belirgin hale getirmiştir. Ancak içinde bulunduğumuz yüzyılda ahlak alanındaki farklı bakış açıları da ahlak konusunda bir takım bunalımlara ve arayışlara sebep olmuştur. Özellikle dini değerlere olan bağlılığın zayıflaması, temelini Kutsal kitaplardan alan ve dini inançla motive edilen ahlaki değerleri zayıflatmış ama yerine yeni böylesine güçlü değerler konulamamıştır (Yaran, 2010, ss.13-14). Aksine faydayı temel alan dolayısıyla bireyin çıkarlarını hedefleyen rölatif bir ahlak anlayışına doğru hızlı bir gidiş vardır. Ahlakın temellendirebileceği değerlerin yok edilmesi ve yeni değerlerin oluşturulamaması, bireyin arzularını ön plana çıkaran bakış acısı insanlığı bir ahlak buhranına sürüklemektedir. Oysa küresel boyutlarda devam eden ve günden güne artan problemlerin büyük bir kısmı ahlakla ilgilidir. Dolayısıyla ahlaki temele ihtiyacı vardır ve bireyci bakış acısıyla bunları çözebilmek mümkün değildir. Bu sebeple ahlak alanında küresel çapta ortaya çıkan sorunlarla baş edebilmek için bazı düşünürler, din adamları, filozoflar, aydınlar, siyasetçiler arayış içindedirler. Günümüzdeki bakış acıları farklı olsa ve rölativist ahlak anlayışları daha ön plana geçse de insan fıtratını, doğasını dikkate alması, ahlakın değişmez değerler ve ilkeler sistemine dayanması sebebiyle yüzyıllara dayanan geçmiş deneyimlerden faydalanma ve işe yarayanlarını kullanma ihtiyacı eski klasik tabir edilen eserlere tekrar dönme ve incelemeyi gerektirmektedir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

1- İSLAM DÜŞÜNCESİNDE KLASİK AHLAK KİTAPLARI

İslam düşüncesinde dini ve ahlakı değerlerin oluşturulması, çocuk ve gençlere aktarılması önemli bir problem olarak görülmüş ve bu konuda şu an klasik kabul edilen pek çok eser yazılmıştır.

İslam klasik kitaplarında ahlak "insan nefsinde yerleşen öyle bir melekedir ki, fiiller, hiçbir zorlama olmaksızın, düşünüp taşınmadan, bu melek sayesinde kolaylıkla ve rahatlıkla ortaya çıkar" olarak tanımlanır. Bu İbn Miskeveyh, İbn Sina gibi filozoflarda da yer alan ancak Gazali ile yaygınlaşan ve benimsenen bir tarif haline gelmiştir (Çağrıcı, 2006, s.16). Tanım gereği ahlaklılık sadece dışa yansıyan, eylemlerle kendisini gösteren bir davranış değildir. Aksine eylemin arkasındaki niyet ile eylem tamamlandığında o davranışa iyi veya kötü olarak hüküm verilmesini gerektiren sonucu belirlemeyi dolayısıyla ahlakın sadece iyi değil aynı zamanda kötü olarak değerlendirilmesini yani iyi ahlak gibi kötü ahlakı da içerir. Yine bir eylemin ahlaklı olması için zorlanmadan, düşünüp taşınmadan o eylemin meydana getirilmesini yani alışkanlık boyutunu da kapsar. Görüldüğü gibi tanım özü itibariyle ahlaklı olmak için irade ve karakter gelişimini içeren bir ahlak eğitimi ve ilmini zorunlu kılar.

İslam düşüncesinde dini ve ahlaki değerler dinin temel kaynakları kabul edilen Kur'an ve sünnete dayanır ve hemen hemen bütün ahlak kitapları bu iki kaynakta yer alan görüşler temel alınarak yazılır. İslam getirdiği tebliğ yani Kutsal Kitabı Kur'an'la insanlara bir hayat tarzı sunar. Bu hayat tarzının modeli Hz. Muhammed'dir. Çünkü o sadece gelen vahyi insanlara tebliğle yetinmemiş onun nasıl uygulanacağını da göstermiştir. Onun için Peygamberin ahlakı Kur'an ahlakı olarak gösterilir. Bu bakımdan Hz. Muhammed'in hayatı ve sünneti Kur'an'da yer alan ilke ve değerlerin nasıl hayata geçirileceği konusunda bütün insanlık için somut bir örnek kabul edilir.

Bundan dolayı ilk dönem İslam ahlak kitapları öncelikle Buhârî'nin *el-Edebü'l müfred*'i gibi ahlak hadislerinin toplanması, ahlakla ilgili ayet ve fıkhı meselelerin derlenmesi ve yorumlanmasına dayanır. Geleneksel dönem olarak adlandırılan bu süreçteki eserlerde iyi davranışların kazanılması kötü davranışlardan uzaklaşılması konusundaki dini hükümler, öğütler ve örneklerle sadece bilgi değil aynı zamanda ahlak eğitiminin verilmesi de amaçlanmıştır. İslam dünyasında ahlak hadislerinin toplanmasıyla başlayan geleneğin devam etmesiyle h. II. Yüzyılın başlarından itibaren ahlak konusunda zengin bir literatür oluşturulmuştur (Kılıç, 2014, s. 30). Bu literatür içinde en dikkati çekeni Müslüman filozofların çoğunlukla eski Yunan felsefesinden faydalanarak oluşturdukları eserlerdir. Bu eserler bazı istisnalar dışında Kur'an ve sünnetin temel düşüncesinden ayrılmadan nasihat ve vaaz türü eserlerden farklı olarak ahlak düşüncesini akılcı temeller üzerine kurmuşlar, İslam ahlakının teorik ve felsefi boyutunu meydana getirmişlerdir. Filozoflar dinin bildirdiği ile aklın bildiği arasında temelde bir farklılık görmedikleri için dindarın ahlakı ile filozofun ahlakı arasında bir zıtlık görmemişlerdir. Bu sebeple iyi ve kötü ahlakı bilme ve en yüksek iyiye ulaşma konusunda dini ahlakla felsefi ahlak aynı noktalarda birleşirler (Çağrıcı, 2006, s. 77-79). Ortak bir takım özelliklerine rağmen akılcılığa dayanan bakış açısı felsefi ahlak kitaplarını diğerlerinden ayırır. Bunun için felsefi ahlaka dair kitaplar değerlerin akli / rasyonel olarak temellendirilmesi ve eğitim öğretim yöntemleri konusunda günümüze ışık tutacak ilkeler geliştirmesiyle daha ön plana çıkmaktadır.

Filozoflar felsefeyi teorik ve pratik olarak ikiye ayırırlar. Teorik felsefe bilgi ve bilmeyi ele alırken pratik felsefe bilginin eyleme dönüştürülmesini yani yapmayı inceler. İbn Sina teorik felsefenin amacının hakikati bilme, pratik felsefenin ise iyiyi yapma olarak verir (İbn Sînâ, 1986, p. 83-84). Dolayısıyla felsefe sadece bilmeyi değil o bilginin gerektirdiği eylemlerin yerine getirilmesini de içerir. Esasında hakîm (hikmet sahibi) adı verilenler bilgi ile eylem dengesini sağlamış ilmiyle amil olmuş kimselerdir. Bu nedenle filozoflar insanın ahlakının değişebileceği, kötü yerine iyi ahlakı kazanabileceğine olan inançlarıyla irade ve ahlak eğitimine eserlerinde yer vermişler, özgün görüşler ortaya koymuşlardır. Ahlak eğitimini doktorun bedeni iyileştirmesi gibi bir tür ruh hekimliği olarak ele alıp tıbb-ı ruhani adını vermişler ve eserlerinde kötü ahlakın iyileştirilip iyi ahlaka dönüştürülmesi ve güzel ahlakın elde edilmesi konusunda reçeteler hazırlamışlardır. Bunun için felsefi olarak temellendiren klasik ahlak kitapları dini ve ahlaki değerlerin öğretilmesi konusunda ortaya koydukları bütüncül görüşleriyle ayrıcalıklı bir yere sahiptirler.

Bu çalışmada İslam klasik ahlak kitapları arasında daha çok felsefi / akli temellendirmeleri ile öne çıkan başka eserler olsa da özellikle İbn Miskeveyh'in *Tehzîbu'l-ahlâk ve tathîru'l-â'râk* ile Nasîruddîn et-Tûsî'nin *Ahlâk-ı Nâsırî* ve Kınalızâde Ali Efendi *Ahlâk-ı Âlâî* adlı eserleri incelenecek ve bunların dini ve ahlaki değerlerin öğretimi konusunda günümüz eğitim sistemindeki yeri ve önemi üzerine durulacaktır. Bunların seçilme sebebi farklı dönemde yazılmalarına rağmen İslam Ahlak düşüncesinde belli bir anlayışı temsil eden, bir geleneği oluşturan eserler olmalarıdır.

a) İBN MİSKEVEYH'İN *TEHZÎBU'L-AHLÂK VE TATHÎRU'L-Â'RÂK* ADLI ESERİ

İbn Miskeveyh (ö.421/1030) İslam Dünyasında ahlak konusuna öncelik verdiği ve ağırlıklı olarak bu alanda eserler yazdığı için diğer Müslüman filozoflardan ayrılır. Bir ahlak filozofu olarak kendisinden sonraki pek çok düşünüre öncülük etmiş, yön vermiş adeta bir ekol oluşturmuştur.

İbn Miskeveyh'in *et-Tahâra*, *Tertîbu's-sa'âde*, *es-Siyer*, *Edebu'l-Arab ve'l-Furs* adındaki kitapları da ahlak konusuyla ilgilidir (Çağrıcı, 2006, s. 83). Yine *Fevzü'l-asğar*, *Kitâbu'l-havâmil ve'ş-şevâmil, Cavidân-ı Hıred* adlı kitaplarıyla *fi Mâhiyeti'l-'adl* risalesi onun ahlak düşüncesi ve teorisini temellendirdiği eserler olarak bilinir (Fahri 1991, s. 107-108). Ancak kendisinden sonra örnek alınıp bir ahlak kitabı geleneği oluşturulmasına yol açan en önemli eseri *Tehzîbu'l-ahlâk ve tathîru'l-â'râk*'dır ve dili Arapçadır. Kısaca *Tehzîbu'l-ahlâk* olarak tanınan eseri hem tamamının ahlak konusuna ayrılması hem de ortaya koyduğu metodolojiyle İslam dünyasındaki ilk ahlak kitabı kabul edilir Bu eser Abdülkadir Şener, İsmet Kayaoğlu, Cihad Tunç tarafından *Ahlakı Olgunlaştırma* adıyla Türkçeye çevrilmiş ve 1983 yılında dönemin Kültür ve Turizm Bakanlığı tarafından basılmıştır. İkinci baskısı 2013 yılında Büyüyenay yayınevince yapılmıştır.

İbn Miskeveyh eserine insan nefsinin tanımını yaparak başlar ve buradan nefsin özellikleri, iyilik, mutluluğu kazanma, nefsin güçleri ve bunlardan doğan erdemler, erdemlerin orta oluşu, huy ve huyun değişime elverişli olması, nefsin ve çocukların, gençlerin terbiyesi, yeme içme gibi adab-ı muaşeret kuralları, varlıklar arasındaki mertebeler, dostluk, arkadaşlık, sevgi ile ahlaki hastalık görülen kötü huyların ortadan kaldırılması gibi konulara yer verir. Eserde insanın huyu, karakteri ile ahlakı arasındaki bağlantıya yer verilmiş, aralarındaki farklılık ve ilişkiler incelenmiştir. Yine bazı bölümleri gençlerin ve çocukların eğitimine ayrılmış, çocuk yetiştirme kuralları, yeme, giyinme, oturup kalkma gibi görgü kuralları, insanın varlıklar içindeki yeri ve değeri gibi konular burada işlenmiştir. Eserin özelliği dini konuları, değerleri felsefi alt yapısıyla açıklamaya çalışmasıdır. Mesela Platon ve Aristotelesci anlayışa bağlı olarak hikmet, iffet, yiğitlik ve adalet olarak dört temel erdemi kabul etmekle beraber iffetle beraber cömertlik, yiğitlikle beraber hilm erdemlerini de temel erdemler arasında saymıştır. Bunun cömertlik ve hilm erdemlerinin Kur'an ve peygamber ahlakındaki öneminden kaynaklandığı düşünülmektedir (Çağrıcı, 2006b, s. 233). Ayrıca Allah'ın nimetlerini ancak hayvanların tanımayacağını belirtirken sevgi konusunda ilahi sevgiye yani, Allah sevgisine yer vermekte, hac, Cuma namazı ve cemaatin öneminden bu ibadetlerin insanın sosyalleşmesi üzerindeki etkilerinden söz etmektedir. Dolayısıyla dini değerler ile ahlaki değerler kitapta bir bütün olarak ele alınmaktadır. Eserde kötü huylar ve kötü ahlak bir tür psikolojik hastalık olarak değerlendirilmekte ve tıpkı bedendeki hastalıklar gibi ahlaki hastalıkların da tedavi edilmesi gerektiği vurgulanıp bunun için belli reçeteler önerilmektedir.

İbn Miskeveyh *Tehzîb-i Ahlâk* eseriyle kendisinden sonraki ahlak kitaplarına muhteva ve bakış açısı kazandırmış, adeta bir yol çizmiştir. Kitap ahlakı insan hayatını bütün yönleriyle ele alacak şekilde düşünmesi, Eski Yunan filozoflarının görüşleriyle İslam'ın dini değerlerini birleştirmesi, felsefi ahlak konularının ve kavramlarının olgunlaştırılmasında belirleyici bir rol oynaması gibi özellikleriyle kendisinden sonra bu konuda yazılan pek çok esere modellik ve öncülük yapmıştır. Bu sebeple İslam ahlakı açısından son derece önemli bir eser kabul edilir.

b) NASÎRUDDÎN ET-TÛSÎ'NİN *AHLÂK-I NÂSIRÎ* ADLI ESERİ

Çok yönlü ve ansiklopedist bir düşünür olarak bilinen ve felsefeden astronomiye pek çok alanda eser veren Nasîruddîn et-Tûsî'nin (ö. 672/1273) ahlak alanında başka eserleri de vardır ancak en tanımışı *Ahlâk-ı Nâsırî* adlı kitabıdır. İbn Miskeveyh'in *Tehzîb-i Ahlâk* adlı eserinin kendisinden sonraki ahlak kitaplarına örnek olmasında Nasîruddîn et-Tûsî'nin *Ahlâk-ı Nâsırî*'yi onu örnek ve temel alarak yazmasının çok büyük etkisi vardır.

Kitabın yazılma gerekçesi Nasîruddîn et-Tûsî'nin *Ahlâk-ı Nâsırî*'nin başındaki ifadesine göre Kûhistân valisinin kendisini İbn Miskeveyh'in *Tehzîbu'l-ahlâk*'ını Arapça'dan Farsça'ya tercüme etmekle görevlendirmesidir. Bu eserin tercüme edilmesi halinde orijinalliğinin bozulacağını ve eleştiriye uğrayacağını düşünen Tûsî bu teklifi kabul etmemiş, bunun yerine Farsça yeni bir kitap yazmaya ve İbn Miskeveyh'in eksik bıraktığını düşündüğü yerleri tamamlamaya karar vermiştir. Ona göre İbn Miskeveyh kitabında *Tehzîbu'l-ahlâk* konusuna yer vermekle birlikte pratik felsefenin (amelî hikmetin) diğer iki bölümü olan ev yönetimi (hikmet-i menzil) ve devlet yönetimi (hikmet-i medeni) alanlarını ihmal etmiştir. Tûsî üç alanı içine alan bir kitap yazmak için *Ahlâk-ı Nâsırî*'yi üç ana bölüme ayırmıştır. Birinci Makale İbn Miskeveyh'in eseri gibi *Tehzîbu'l-ahlâk* adını taşır ve adeta bu eserin serbest bir tercümesi gibidir. Fakat filozof İbn Miskeveyh'in düzeninde değişikliler yapmış,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

çocuk eğitimi gibi aileyi ilgilendiren bazı konuları ev yönetimine, siyaset ve devlet idaresine bağlı konuları da devlet yönetimi ilgili bölüme aktarmıştır. Eser İslam dünyasında ilk sistematik ahlâk kitabı, Tûsî de akılcı yolla itikadi esasları uzlaştırmayı ve sistemleştirmeyi başaran ilk ahlâkçılardan sayılır (Oktay, 2005, s. 24-27). Eser bu özelliği ile çok beğenilmiş ve kendisinden sonraki birçok ahlâk kitabına şekil ve muhteva bakımından örnek olmuştur.
Bu eserin etkisiyle Adudiddîn el-Îcî (ö.756/1355), *Ahlâk-ı Adudî*, Celâleddîn Devvânî (ö. 918/1525) *Ahlâk-ı Celâlî* ve Kınalızâde Ali Efendi *Ahlâk-ı Âlâî*'yi yazmışlardır.

Eserin Türkçede iki ayrı çevirisi vardır. Rahim Sultanov tarafından Farsçadan Azerbaycan Türkçesine oradan da A. Vahap Taştan-Habil Nazlıgül tarafından Türkiye Türkçesine aktarılan ilk çeviri 2005 yılında Ankara'da Fecr yayınları tarafından yayınlanmıştır. Diğer ise Anar Gafarov, Zaur Şükürov tarafından çevrilmiş ve İstanbul'da 2007 yılında Litera yayıncılık tarafından basılmıştır.

c) KINALIZÂDE ALİ EFENDİ'NİN *AHLÂK-I ÂLÂÎ* ESERİ

Bir Osmanlı kadısı ve müderrisi olan Kınalızâde Ali Efendi (ö.979/1572) devrinin şartları gereği pek çok ilimle meşgul olmuş ve fıkıh, tefsir alanlarında eserler vermiş, şiirler yazmıştır. Ancak onu günümüze taşıyan en önemli eseri o dönemin Türkçesiyle yazdığı *Ahlâk-ı Alâî*'dir.

Ahlâk-ı Alâî ile ondan önce aynı çizgide yazılan *Ahlâk-ı Nâsırî* ve *Ahlâk-ı Celâli*'nin muhtevası karşılaştırıldığında büyük bir benzerlikler görülmektedir (Oktay, 2005, ss. 90-94). Kınalızâde bu iki temel kaynağın dışında Gazzâlî, Cürcânî, Sühreverdî gibi düşünürlerin adını anıp onların eserlerinden nakiller yapmıştır. Ayrıca onun İbn Sînâ, İbn Miskeveyh gibi düşünürlerin eserlerini de incelediğini ve kendi görüşlerini açıklarken bunlardan da doğrudan faydalandığını anlaşılır. Ek olarak Kur'an ve hadisler gibi dini kaynaklarla, edebî ve tarihî kaynaklara başvurmuş, çok zengin bir bilgi birikimini eserine aktarmıştır. Diğer eserlerde karşılaşmadığımız kadar çok sayıda kaynağa müracaat ederek muhtevayı zenginleştirmiş, bolca örnekler vermiş ve bir çok hikaye anlatmıştır. Bu açıdan *Ahlâk-ı Alâî* kendisinden önce yazılan kitaplarla kıyaslanmayacak kadar çok zengin bir içeriğe sahiptir. Ahlâk konusunda en son kitap yazmanın avantajıyla kendisine ulaşan geleneksel bilgiyi kendi dönemindeki ihtiyaçlara ve problemlere uygun olarak değerlendirmiş, bu felsefi birikimi dini ve edebi muhteva ile zenginleştirme, tavsiyelerini örneklendirme yoluna gitmiştir. Müellif böylelikle felsefi, dini, edebi ve tasavvufi bütün unsurları derleyerek döneminde yaygın olan uygulamanın aksine 16. yüzyılın şerh, haşiye geleneğini aşan ve kendisinden sonrakilere örnek olan zirve bir eser yazmıştır.

Eser sahip olduğu özelliklerinden dolayı Osmanlı medreselerinde son dönemlere kadar okutulan bütün ahlâk kitaplarına kaynaklık etmiştir. Medreselerde iddia edildiğinin aksine bu eserin ders kitabı olarak okutulduğuna dair bir kayıt yoktur ancak doğrudan *Ahlâk-ı Alâî* yerine onun kısaltılmışı olan *Bergüzâr-ı ahlâk* ve Abdurrahman Şeref Bey'in *İlmü'l-Ahlâk* kitaplarının idadilerde, *vezâifü'l-etfâl* türü kitaplar rüşdiyelerde ahlâk kitabı olarak okutulmuştur. (Oktay, 2005, s. 89)

Ahlâk-ı Alâî'de müellifin kitap adını verdiği her bir bölüm aynı çizgide olduğu diğer eserler gibi pratik felsefenin bir başlığını taşır. Birinci kitap eserinin en hacimli kısmı olup ahlâk ilmine (Tehzîbu'l-ahlâk) ayrılmıştır. Ahlakın ne olduğu, kaynağı, değişip değişmemesi, erdemler ve zıttı olan reziletler burada tartışılır. Yine kötü ahlak ve tedavisiyle ilgili tavsiyeler ve örnekler, nasihatler bu kısımda anlatılır. İkinci kitap ev yönetimi, üçüncü kitap ise devlet yönetimiyle ilgili konuları içerir. Ev yönetimi bölümünde Aristocu yaklaşımı yansıtır şekilde anne, baba, çocuklar, hizmetçiler ve evin geçimi için gerekli olan erzak ailenin unsurları arasında sayılmıştır. Çocuk yetiştirme ve eğitimi konusu hem geleneksel hem de felsefi alt yapısıyla da burada tartışılır ve pratik ahlaka yönelik görgü kuralları verilir. Ev yönetiminin altıncı bölümünden sonuna kadar ülkenin idaresi, idarecilik kuralları, ülke ve siyaset çeşitleri gibi devlet ahlâkını ilgilendiren konular işlenmektedir. Üçüncü kitap tamamen devlet ahlakıyla ilgili olup âdil devlet adamında bulunması gereken özellikler ve uyması gereken kurallar ile sultanlara hizmet edenlerin uyması gereken kurallar burada anlatılır. Ayrıca İbn Miskeveyh'den itibaren yer verilen dostluk konusu bölümün sonunda bütün insanlara muamele başlığı altında açıklanır.

Ahlâk-ı Alâî Latin harfleriyle ve sadeleştirilerek iki ayrı cilt halinde basılmıştır. *Ahlâk-ı Alâî*'nin birinci kitabı Ahlâk adıyla Hüseyin Algül, ikinci ve üçüncü kitabı tek cilt halinde Devlet ve Aile Ahlâkı adıyla Ahmet Kahraman tarafından sadeleştirilmiş olarak baskıya hazırlanıp Tercüman 1001 Temel Eser serisi içinde yayınlanmıştır. Ancak her iki kitap da birçok eksikleri bünyesinde barındırmaktadır. *Ahlâk-ı Alâî*'nin ahlâka dair birinci kısmı *İslâm Ahlâkı* adlı kitabın birinci bölümü olarak Hakîkat Ltd. Şti. Yayınları arasında İhlas Gazetecilik Holding tarafından İstanbul'da 1990'lı yıllarda defalarca basılmıştır (Elimde 1992 yılında basılan 14. baskısı var). Eser Mustafa Koç tarafından dili sadeleştirilmeden Latin harflerine göre düzenlenerek 2012 yılında Klasik yayınları arasında basılmıştır. Aynı eser 2014 yılında Türkiye Yazma Eserler Kurumu tarafından bir tarafı Osmanlıca yazma metin bir tarafı Latin harflerine çevrilmiş haliyle tekrar basılmıştır. Devlet ve Aile Ahlakı ile

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ilgili bölümün sadeleştirilmiş hali 2010 Yılında İlgi yayınları, 2013 yılında Tutku Yayınevi tarafından tekrar basılmıştır.

2- KLASİK KAYNAKLARI KULLANAN ESERLER

Değerler insanlar tarafından belirlendiği için insan olmanın şartı olarak görülürler. Çünkü bilinçli ve amaçlı eylem insana özgüdür ve insan bu tür eylemlerini değerleri doğrultusunda gerçekleştirir. Değerler insana yol gösteren ilkeler, ışıklar, bir anlamda pusulalar olduğu için değerlerin neyi gösterdiğinin, neyi aydınlattığının iyi bilinmesi gerekir. Bu da değer eğitimini gerektirir ki sadece değere sahip olmayı ve bilmeyi değil yaşamayı ve karakteri inşa etmeyi de içerir. "Bu manada değer bilgisine sahip olmak, varoluşun hakikatine nüfuz etmektir." (Türer, 2012, s. 181) Dolayısıyla değer eğitimi bir anlamda şahsiyet eğitimidir. Değerler ilke ve eylemlerle ilgili belli standartları içerdikleri için aynı zamanda toplumsal olarak iyiliğe, mükemmelliğe yönlendirici, sosyal hayatı düzenleyici işleve sahiptir. Değerler eğitimi bu sebeple toplumsal değerlerin gelecek nesillere aktarılması işini de üstlenir.

Değişen hayat şartları değerlerin de değişmesini getirmektedir. Ayrıca günümüzde ahlak anlayışında meydana gelen değişmeler ve farklı bakış açıları ister istemez değer algılarımızı da etkilemekte ve değiştirmektedir. Geleneksel değerler ile halen yaşanılan değerler arasında farklılıklar görülmekte bazen çatışmalar yaşanmakta, geleneksel değerler çağın ihtiyaçlarına cevap verememektedir. Ayrıca özellikle gençlerde ortaya çıkan şiddet ve saldırganlık, kontrolsüz cinsellik, alkol ve uyuşturucu kullanımıyla kendine zarar verme, ben merkezcilik ve sosyal sorumluluklardan kaçınma, aile yapısında meydana gelen bozulmalar, kitle iletişim araçlarının olumsuz etkisi gibi pek çok sorun toplumların geleceğini etkilemekte ve endişelendirmektedir. Bundan dolayı aileler ve eğitimciler bu sorunların aşılması için değer eğitimine ihtiyaç duymaktadırlar (Kaymakcan-Meydan, 2016, s. 34-35). Bu sebeple klasik ahlak kitaplarının günümüz ihtiyaçları doğrultusunda tekrar değerlendirilmesine gereklidir. "Değerlerimize sahip çıkmak" bir anlamda oluşturduğu kültürümüze, geleceğimize sahip çıkmak anlamına gelir. Ancak bunun nasıl gerçekleşeceği, günümüze nasıl aktarılacağı konusunda çalışmalara ihtiyaç vardır. İslam ahlak klasiklerini kullanarak bunların günümüz ahlak ve değer tartışmalarındaki yerini ve işlevini sorgulayan, onların görüşlerini ve deneyimlerini ortaya koyan çalışmalar yeni yeni yapılmaya başlanmıştır. Burada yukarıda verdiğimiz üç İslam ahlak klasiği kitabına yer veren üç eser incelenecektir. Söz konusu üç kitap şunlardır:

- *Sosyal Bilgiler Eğitimi Açısından Kınalızâde Ali Efendi'nin Ahlâk-ı Âlâî Üzerine Okumalar*, Ed. Bahri Ata, Pegem Akademi yay., Ankara, 2015.
- *Ahlak Felsefesinin Temel Problemleri- Seçme Metinler* haz. Hümeyra Özturan, Nobel yayınları, Ankara, Eylül 2015.
- Recep Kaymakcan, Hasan Meydan, *Ahlak Değerler ve Eğitimi*, Dem Yayınları, 2. Basım, İstanbul, Şubat, 2016.

a) ***Sosyal Bilgiler Eğitimi Açısından Kınalızâde Ali Efendi'nin Ahlâk-ı Âlâî Üzerine Okumalar*** Ed. Bahri Ata, Pegem Akademi yay., Ankara, 2015.

Eserde günümüz yöntemleri ile *Ahlâk-ı Âlâî*'deki anlatım yöntemleri ve içerikleri karşılaştırılarak Kınalızâde'nin üslubu günümüze taşınmaya, güncellenmeye çalışılmıştır. Eser Sosyal Bilgiler Dersi müfredatına yönelik hazırlandığı için oldukça sade bir dil kullanılmıştır. Kitap bütününde günümüz değer ihtiyaçlarına Ahlâk-ı Âlâî'den cevaplar bulmaya, kendi değerlerimizi canlandırmaya hizmet etmektedir.

Her bir bölümü ayrı bir yazar tarafından hazırlanan eserin başına Kınalızâde'nin hayatı hakkında kısa bir giriş eklenmiştir. Bölümlerin içeriğine gelince; Bölüm başlığıyla ilgili konu hakkında genel bilgi verilip *Ahlâk-ı Alâî*'deki bununla ilgili bilgi ve değerler kısaca anlatılmakta, daha sonra günümüz Sosyal Bilgiler Derslerinde anlatılan o değerle Kınalızâde de anlatılan değerler karşılaştırılmakta ve veriler her bölümün kendi sonuç kısmında değerlendirilmektedir. Kitabın bölümleri şunlardır:

1. bölüm Kınalızade Ali Efendi ve Vatandaşlık Eğitimi
2. Bölüm Kınalızade Ali Efendi ve Değerler ör. Burada adalet, aile olma, dostluk dürüstlük gibi değerler anlatılmıştır.
3. Bölüm Kınalızade Ali Efendi ve Eğitimin İçeriği
4. Bölüm Kınalızade Ali Efendi ve Öğretim Yöntemleri
5. Öğretim Kınalızade Ali Efendi ve Öğretmenlik Mesleği ve Disiplin
6. Bölüm Kınalızade Ali Efendi ve Mesleki Eğitim

Çalışmada günümüz sosyal bilgiler dersi müfredatıyla Kınalızâde'nin eseri arasında benzerlikler ve ortak noktalar tespit edilmiştir. Bu eserin günümüz ahlak ve değer eğimi açısından değerine işaret etmektedir. Ayrıca eser toplumda hala yaşayan değerlerin kaynağını tespit etmesi, halk kültürü olarak görülen değerlerin çok

 Copyright © International Conference on New Horizons in Education Conference (INTE)

eskilere dayandığını, belli bir kökü ve geçmişi olduğunu göstermesi açısından önemlidir. Bir anlamda 16. Yy'da yazılmış bir eser olan Ahlâk-ı Âlâî'de geçen değerlerin bütün değişimlere ve gelişmelere rağmen günümüzde hala canlı bir şekilde toplumda varlığının bir şekilde devam ettiğinin tesbiti (s. 19, 33), günümüz anlayış ve değerleriyle tutarlılık gösteren öğelerin varlığı (s. 49), onların evrensel dinamiklerine işaret ettiği gibi kültürel derinliğin boyutlarını, toplumsal bağların kodlarını da gösterir. Değerlerin böyle güçlü bir şekilde devamlılığı kültürel birlik, beraberliği sağlaması, toplumsal dayanışma ve iyilik üzerinde anlaşmanın altındaki felsefi alt yapının sağlamlığı hakkında bilgi verir. Ayrıca eğitimin içeriğinin belirlenmesi, değer eğitimi ve öğretim yöntemleri, öğretmenlik mesleği ve diğer meslek eğitim metotlarının karşılaştırılması ve benzerliklerin tespiti (s. 69, 87) değerlerin bu kadar uzun süre toplumsal hafızda nasıl yerleştiğini, bireysel ve toplumsal kimliğinin hangi yöntemlerle bir parçası haline geldiğini de gösterecektir. Dolayısıyla evrensel nitelikte değerlere sahip olma ve bunları gelecek nesillere aktarma ve öğretme konusunda yüzyılların birikimine dayanan denenmiş tecrübelerden faydalanılmış olunulacaktır.

b) ***Ahlak Felsefesinin Temel Problemleri- Seçme Metinler*** haz. Hümeyra Özturan, Nobel yayınları, Ankara, Eylül 2015.

Eserde Ahlak felsefesinin günümüzde tartışılan problemleri çeşitli başlıklar altında bölümler halinde incelenmekte, bölümün sonunda konu ile ilgili seçme metinlere yer verilmektedir. Kitapta Platon, Aristoteles, Galen, Kindî, Farabi, İhvân-ı Safâ, İbn Sînâ, Ragıb el-Isfahânî, Gazzâlî, İbn Arabî, Thomas Aquinas, Adudiddin el-îcî, İbn Haldun, Thomas Hobbes, David Hume, Kant, Nietzsche, Wittgenstein, G. E. Moore, A.J. Ayer gibi çeşitli dönemlerde yaşamış ve birbirlerinden çok farklı görüşlere sahip düşünürlerin eserlerinden alıntılar yapılmıştır. Bunlar arasında İbn Miskeveyh'in *Tehzîbu'l-ahlâk ve tathîru'l-â'râk* ile Nasîruddîn et-Tûsî'nin *Ahlâk-ı Nâsırî* adlı eserleri de vardır. Aşağıda kitabın bölümleri verilerek iki klasik eserin kaçıncı bölümde hangi konuyla ilgili olarak yer aldığı listelenmiştir.

1. Bölüm «Ahlak Ne İle Uğraşır? Alanı, Tanımları ve Kesinliği», burada yok
2. Bölüm «Ahlakın Değişmesi Problemi» başlığını taşıyan bölümde konu hakkında bilgi verildikten sonra konu ile ilgili seçme metinlere yer verilmiş ve Aristoteles'den çağdaş felsefeye uzanan çizgide farklı dönemlere filozofların bu konudaki görüşleri onların metinleri aracılığıyla doğrudan ele alınmıştır. Buradaki listede İbn Miskeveyh'in *Tehzîbu'l-ahlâk ve tathîru'l-â'râk* ile Nasîruddîn et-Tûsî'nin *Ahlâk-ı Nâsırî* adlı eserinden konu ile ilgili alıntılar yapılmıştır.
3. Bölüm «Ahlakın Kaynağı Problemi» burada yok.
4. Bölüm «İyi Nedir? Mahiyeti Nedir?» Başlığı altındaki metinlerde İbn Miskeveyh'in eserinden bölüm eklenmiştir.
5. Bölüm «Ahlak Eğitimi» de sadece İbn Miskeveyh
6. Bölüm «Ahlakın Mutlaklığı ve İzafiliği Meselesi» burada yok.
7. Bölüm «Ahlaki Yaptırım» İbn Miskeveyh ve Tûsî'nin eserilerinden alıntılar yapılmıştır.

Kitap başlıklardan anlaşılacağı gibi günümüz ahlak felsefesi anlayışına göre hazırlanmıştır. İçeriğinde her konuda felsefe tarihinde ilgili alana katkı sağlamış filozofların birbirlerinden farklı görüşlerine aynı kitapta doğrudan alıntılarla yer verilerek bir anlamda onlar tartıştırılmakta, karşılaştırma imkanı sağlanmaktadır. Şüphesiz filozofların eserlerini yazdıkları dönemlerde günümüzdeki bazı tartışmalar yoktu veya farklı boyutta ele alınıyordu. Burada çeşitli filozofların ve özellikle bizim adını anladığımız üç Müslüman filozofun yüzyıllar öncesinden günümüz ahlak problemlerine ne gibi yaklaşımlar getirebileceği ve nasıl çözümler sunabileceğinin görülebilmesi açısından bu çalışmanın önemli olduğunu düşünmekteyiz.

c) ***Ahlak Değerler ve Eğitimi,*** Recep Kaymakcan, Hasan Meydan, Dem Yayınları, 2. Basım, İstanbul, Şubat, 2016.

Bu kitabın ikinci bölümünün başlığı «Ahlak ve Değerler Eğitimine Dair Örnek Çalışmalar» adını taşımakta ve adını verdiğimiz üç eser Aristoteles'in *Nikomakhos'a Etik,* Gazali'nin *İhya* ve *Ey Oğul* kitaplarıyla birlikte klasikleşmiş kaynaklar arasında sayılmaktadır. Eserler hakkında kitapta doğrudan alıntı, içerik vb. bilgiler olmadığı gibi güncele nasıl taşınacağı ile ilgili ayrıntılı açıklama da yapılmamış, genel bilgi vermekle ve sadece klasikleşen kaynaklar olarak gösterilmekle yetinilmiştir. Ancak eserin bazı bölümlerinde konu anlatılırken İbn Miskeveyh ve Tusi'ye atıf yapılmaktadır (s. 28, 39, 43, 44). Bu da eserin bütünlüğünde kaynak olarak kullanıldığını gösterir. Gerek kitapta isim olarak zikredilmesi gerekse atıflarda kaynak olarak yer alması üç klasik eserin günümüz çalışmalarındaki değerini göstermesi açısından önemli olduğu kanaatindeyiz.

SONUÇ

Yeni olgu, eğitim, ahlak ve din anlayışları hayatımızı dolayısıyla değerlerimizi etkilemekte, değerlerimizle oluşturduğumuz kişiliğimizi dönüştürmektedir. Günümüzün problemleri ve değer anlayışları farklı olmakla beraber insanı fitratı, doğal yapısı ile insan olmanın getirdiği evrensel problemler ve sorunlar aynı kalmaktadır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Dolayısıyla klasik kaynaklarda yer alan evrensel sorunlara bakış ve çözüm üretme tarzı denenmiş ve başarılı olmuş, yüzyılların birikimini içeren yöntemler olarak günümüz değer eğitimine katkı sağlayacağını düşünmekteyiz. Özellikle benzerlik ve farklılıkların tespiti -değerlerin insanların dolayısıyla toplumların özünü ve kişiliğini oluşturduğu düşünüldüğünde-yaşatılması ve gelecek nesillere aktarılması sırasında hangi yöntemlerinin işe yarayacağını bilinmesi açısından önemlidir. Ayrıca bizi biz yapan değerlerin neler olduğunun görülmesi, kültürel kodlarımızın anlaşılması açısından da bu tarz çalışmalar anlam kazanır. Üç klasik kaynak gerek felsefi alt yapısı ve anlatım metodolojisi gerekse değer eğitiminde kullandıkları özel yöntemlerle günümüz değer eğitimi açısından hala önemlerini korumaktadırlar. Klasik kaynaklar bu özellikleriyle hem evrensel boyutu yakalamamıza hem de geçmiş kültür ve değerlerimizle günümüz arasında köprü kurmamıza hizmet edeceklerdir.

KAYNAKLAR

Çağrıcı, M., (2006). *Anahatlarıyla İslam Ahlakı*, İstanbul, Ensar Neşriyat.

Çağrıcı, M., (2006b). *İslam Düşüncesinde Ahlak*, İstanbul, DEM Değerler Eğitim Merkezi Yayınları.

Fahri, M., (2004). *İslam Ahlâk Teorileri*, çev. M. İskenderoğlu, A. Arkan, İstanbul, Litera Yayıncılık.

İbn Sînâ, (1986/1406). *Fî Aksâmi'l-'ulûmi'l-'akliyye, Tisu' risâil fi'l-hikme ve't-tabîi'yât,* tahkik, Hasan Âsî, y.y.., Dârü'l-Kabes,

Kaymakcan, R., Meydan, H. (2016). *Ahlak Değerler ve Eğitim*, İstanbul, Dem Yayınları, 2. Basım, 2016.

Kılıç R. (2014). Ahlakın Tanımı ve Kapsamı, M. Ş. Aydın- A.H. Adanalı (Ed.) *İslam Ahlakı Temel Konular Güncel Yorumlar*, içinde (ss.17-48).İstanbul, Diyanet İşleri Başkanlığı Yayınevi.

Kuçuradi, İ. (1998) *İnsan ve Değerleri*, Ankara, Türkiye Felsefe Kurumu.

Oktay, A. S. (2005). *Kınalızâde'nin Hayatı ve Ahlâk-ı Alâî Adlı Eseri*, İstanbul, İz Yayıncılık.

Oktay, A. S. (2007). "Değerler ve Eğitimi" Uluslararası Sempozyumu.. R. Kaymakcan ve diğerleri, (Ed). *İslam Düşüncesinde Ahlaki Değerler ve Bunların Global Ahlaka Etkileri*, içinde (ss. 131–144). İstanbul, DEM Yayınları.

Türer, C., (2012). Modern Dünyada Ahlak/Değerler Eğitimi, *Modern Çağda Ahlak* (Sempozyum Bildiriler Kitabı), (ss.171-185). Konya, Konya İlahiyat Derneği Yayınları.

Yaran, C. S. (2010). *Ahlak ve Etik*, İstanbul. Rağbet Yayınları.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

KULLANIMLAR VE DOYUMLAR YAKLAŞIMI TEMELİNDE ÜSTÜN YETENEKLİ ÖĞRENCİLERİN İNTERNET KULLANIMLARI VE İNTERNETE BAKIŞ AÇILARI ÜZERİNE BİR ARAŞTIRMA

Yrd. Doç. Dr. Fatma NİSAN
İnönü Üniversitesi İletişim Fakültesi Gazetecilik Bölümü
fatma.nisan@inonu.edu.tr

Doç. Dr. N. Tülay ŞEKER
Akdeniz Üniversitesi İletişim Fakültesi Radyo Televizyon ve Sinema
tulayseker@akdeniz.edu.tr

Özet
2000'li yıllardan sonra kullanılmaya başlanan 'yeni medya' kavramıyla birlikte yaygınlaşan internet kullanımı geleneksel medyayı daha geri plana itmiştir. İnternet, günümüzde her yaş grubu tarafından özellikle eğitim, eğlence, sosyalleşme, araştırma, iletişim kurma gibi amaçlar için kullanılmaktadır. İnternetin kullanım amaçları kişiden kişiye değişiklik göstermekle birlikte iletişim teknolojilerinin gelişimi ve internete daha kolay erişim ile birlikte internet kullanımını mekânsızlaştırmış ve zamansızlaştırmıştır. Öyle ki neredeyse çoğu kişi tarafından internetsiz bir yaşam düşünülememektedir. Bu noktada her tür kitle iletişim aracı gibi internetin de bireylerin üzerindeki etkileri tartışılan güncel bir konu olarak geçerliliğini sürdürmektedir. İnternetin daha çoğunlukla gençler tarafından kullanılıyor olması onların üzerinde ne türden etkilere sahip olduğu ve onların interneti kullanım amaçları çalışmanın problem çerçevesini oluşturmaktadır. Çalışmada ayrıca; öğrencilerin internette ne sıklıkta gezindikleri, internetin onlar için ne ifade ettiği, interneti hangi amaçlarla kullandıkları, en çok hangi arama motorunu tercih ettikleri, interneti eğitici bulup bulmadıkları, sosyal paylaşım sitelerine girip girmedikleri, giriyorlarsa hangi amaçlarla girdikleri ve bunları nasıl buldukları, interneti zararlı bulup bulmadıkları, internetin zararlarından korunmak için bir oto kontrolü ya da bilgilendirmeyi gerekli görüp görmedikleri gibi sorular üzerinde yoğunlaşılmıştır.

Çalışma Malatya İnönü Çocuk Üniversitesi Üstün Yetenekliler Araştırma ve Uygulama Merkezi'ndeki üstün yetenekli öğrenciler üzerinde uygulanmıştır. Çalışmanın spesifik bir gurup üzerinde uygulanıyor olması yöntem olarak *görüşme* yönteminin kullanılmasını gerekli kılmıştır. Dolayısıyla bu çalışmanın amacı, kullanımlar ve doyumlar yaklaşımı temel alınarak üstün yetenekli öğrencilerin yeni medya teknolojilerine bağlı olarak interneti kullanıp kullanmadıkları, hangi amaçla kullandıklarını ve internetin onlar üzerindeki etkilerini araştırmaktır. Çalışmanın spesifik bir grup üzerinde uygulanıyor olması çalışmayı önemli yapmaktadır.

Anahtar Sözcükler: İnternet, Üstün Yetenekli Öğrenciler, Görüşme, kullanımlar ve doyumlar

A STUDY OF GIFTED CHILDREN'S INTERNET USAGE AND OPINIONS THROUGH USES AND GRATIFICATIONS THEORY

Common use of Internet pushed the traditional media into the background with the concept of "new media" that has been used since 2000. Nowadays, different age groups use Internet for many reasons such as; education, fun, being socializing, research and communication. These reasons vary from one person to another. on the other hand, the development of communication technologies and easier Internet access make the usage of Internet spaceless and timeless. Furthermore, nearly most of people cannot think of a life without Internet. At this sense, the effects of Internet on the individuals are a trend discussion topic like each mass medium. Young people's use of Internet, its effects on them and their aims of Internet use set the framework of the study. In addition, the study focus on many research questions such as; how often students surf on the internet, what it means to them, why they use it, which internet search engine they mostly prefer, whether students find the internet educational or not, whether they use social networking websites or not and ıf they do, why they are using them and their opinions about them, whether students find the internet harmful or not and lastly whether they see self-controlling or being informed necessary against the harmful effects of internet use or not. The study takes place in İnönü University Gifted Children Research and Application Center with the gifted children. In the study, the focus-group study has been applied with the interview method. Hence, the purpose of this study is to investigate whether gifted children use internet as depending on new media technologies or not, why they are using it and what kinds of effects internet has on them in the framework of the uses and gratifications theory. Working with s specific group makes this study significant.

Keywords: *Internet, gifted students, interview, uses and gratifications*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Giriş

Özellikle internet teknolojisindeki gelişmeler geleneksel medya yerine 'yeni medya' kavramını ortaya çıkarmıştır. İnternetin kullanım amacı kişiden kişiye değişmekle birlikte, internet daha çoğunlukla eğitim, eğlence, sosyalleşme, araştırma, iletişim kurma gibi amaçlarla kullanılmaktadır. Dünyanın her tarafındaki bireylere haftanın yedi günü 24 saat boyunca ister görüntülü ister sesli isterse de yazılı olarak internet vasıtasıyla ulaşılabiliyor olması bireyler açısından mekansızlaştırma ve zamansızlaştırma olgusunun oluşmasını sağlamıştır. Sağladığı avantajlar dolayısıyla birçok kişi tarafından internetsiz bir yaşam düşünülmezken bazı kesimler, internetin bağımlılık yarattığı, insanları bağımlı duruma düşürdüğü ve bir takım zararlarının söz konusu olduğunu kabul etmektedir. Dolayısıyla her türlü kitle iletişim aracında olduğu gibi internetin de bireyler üzerindeki etkisi güncel bir konu olarak tartışılmaktadır. Her yaş gurubundan kullanıcısı olmakla birlikte internet daha çoğunlukla genç nüfus tarafından kullanılmaktadır. Çalışmanın problemini; internetin gençler ya da çocuklar tarafından kullanılıyor olması onların üzerinde ne türden etkilere sahip olduğu ve onların interneti kullanım amaçları oluşturmaktadır. Çalışma Malatya İnönü Çocuk Üniversitesi Üstün Yetenekliler Araştırma ve Uygulama Merkezi'ndeki 34 üstün yetenekli öğrenci üzerinde uygulanmıştır. Çalışmada *görüşme* yöntemi kullanılmış olsa da öğrencilerle olan görüşme yüz yüze değil önceden hazırlanan görüşme soru formu yoluyla gerçekleştirilmiştir. Bu çalışmanın amacı, kullanımlar ve doyumlar yaklaşımı temel alınarak üstün yetenekli öğrencilerin yeni medya teknolojilerine bağlı olarak interneti kullanıp kullanmadıkları, hangi amaçla kullandıkları ve internetin onlar üzerindeki etkilerini araştırmaktır. Çalışmanın spesifik bir grup üzerinde uygulanıyor olması ve bu grubun üstün yetenekli öğrencilerden oluşması çalışmayı önemli kılmaktadır.

1.Kullanımlar ve Doyumlar Yaklaşımı

Kullanımlar ve doyumlar yaklaşımı, "izler kitle üyelerinin kendileri için en doyurucu olan kitle iletişim içeriklerini şöyle ya da böyle etkin biçimde aradıkları varsayımına dayanan bir iletişim modeli" (Mutlu, 2008: 190) şeklinde tanımlanmaktadır. Bu yaklaşım, ilk önce 1959 yılında Katz tarafından yazılan bir makalede ifade edilmiş ve yaklaşım 'iletişim araştırmaları alanı ölmüş gözüküyor' şeklindeki düşünceye tepki göstermiştir (Severin ve Tankard, 1994: 474). Bu yaklaşımda izler kitle, iletişim araçlarını belli gereksinimleri doyurmak amacıyla kullanan bir kategori olarak formüle edilmektedir. Yaklaşım, gereksinimlerin doyumunu, iletişim araçlarının kullanım örüntülerini, iletişim araçlarından beklentilerin neler olduğunu ve bu beklentileri üreten gereksinimleri, toplumsal ve psikolojik kökenleriyle çözümlemeyi amaçlamaktadır (Mutlu, 2008: 191). İhtiyaçların toplumsal ve psikolojik kökenlerini, kitle medyası ve diğer kaynaklar hakkında beklentiler oluşturmakta, bunlar da medya izleme konusunda farklı kalıplar ortaya çıkarmakta, bu da sonuç olarak ihtiyaçların tatminine ve çoğu hesapta olmayan başka sonuçlara yol açmaktadır (Katz vd., 1974: 510). Bu yaklaşım bireyleri pasif değil aktif kabul eder. Erdoğan ve Alemdar (2005: 161-162), insanların basit bir şekilde davranma yerine çevrelerine etki yapan aktif ajanlar olarak kabul edildiklerini ve bu ajanların etkinlikleri seçme yolları arasında amaçlarına uygun tercihler yapma gücüne sahip olduklarını belirtirler. Kullanımlar ve doyumlar yaklaşımı, kitle iletişim araçlarının bireylerin özel gereksinimlerine yönelik hizmet ettiğini ve belirli düzeyde tatminler sağladığı için kullanıldığını kabul eder. Model aktif izler kitleyi medya mesajlarının alımı sırasında seçici, bilinçli bir araştırma içinde olan ve medya mesajlarını aktif süreç içinde kendilerine gerekli olan özel ihtiyaçları toplayanlar olarak görür (Kılıç, 2001: 182). Dolayısıyla medya içeriğiyle izleyici arasında işlevsel bir ilişki olduğu kabul edilmektedir (Yaylagül, 2008: 62).

2.İnternet Kullanımı

İçinde bulunulan yüzyılda 'yeni iletişim teknolojileri, yeni medya' gibi kavramlar çokça duyulmaktadır. Bu kavramlarla her ne kadar farklı iletişim teknolojileri kast ediliyor olsa da bunların başını, dünyayı küresel bir köye çeviren internet çekmektedir. "Dünya üzerindeki tüm bilgisayarları birbirine bağlayarak tüm bilgisayarların iletişimini sağlayan en büyük bilgisayar ağına 'internet'" (Fidancıoğlu, vd., 2009: 4) denilmektedir. 21. yüzyılda toplumlar bireylerin yaşam boyu öğrenme için gerekli olan bilgiye ulaşma, bilgiyi dağıtma ve bilgiyi paylaşma gibi temel becerilerle de donanımlı olmalarını istemektedirler. Bu becerilerin kazanılmasında internet (Çakır ve Yalçın, 2006: 101) temel rol oynamaktadır.'Bilgi otobanı' olarak tanımlanan internette her şeye ulaşmak gittikçe kolaylaşmaktadır (Küçükcankurtaran, 2008: 175). İnternet; ucuzlayan bir teknoloji haline gelmesi, sansür edilememesi, birleşik bir medyum olması, hem eş anda hem de başka anlarda kullanılabilmesi, insanoğlunun bildiği anlamdaki sahiplik kurumunu ortadan kaldırması ve bireylere alternatif kullanım olanakları sunmasıyla geleneksel medyaya oranla bir takım avantajları bünyesinde barındırmaktadır (Atabek, 2003: 71). Bu rolleriyle, internet özellikle televizyona oranla bireyi izleyici durumundan kullanıcı durumuna sokmakta ve dolayısıyla pasif durumdan aktif duruma dönüştürmektedir. "İnternetin temel ortaya çıkış amacı bilgiye kolay, ucuz, hızlı ve güvenli ulaşmak ve iletişimi kolaylaştırmak olmasına rağmen internetin tahmin edilenden de hızlı yaygınlaşması patolojik aşırı kullanıma ve yeni bir bağımlılık türü olarak nitelenebilecek internet bağımlılığına yol açmaya

 Copyright © International Conference on New Horizons in Education Conference (INTE)

başlamıştır" (Arısoy, 2009: 55). Bu durum da internet kullanımında bireylerin karşı karşıya kalabilecekleri temel risklerden birini teşkil etmektedir.

Erişkinler için olduğu kadar çocuklar için de büyük bir eğlence, iletişim ve eğitim kaynağı olan internete erişim ve kullanım her geçen gün hızla yaygınlaşmaktadır. İnternet, çocukların dünyayı keşfetmeleri, öğrenmeleri ve eğlenmeleri için mükemmel bir ortamdır (Çelen, Çelik ve Seferoğlu, 2011: 645). İnternet sohbet etmek, oyun oynamak, müzik dinlemek, araştırma yapmak gibi amaçlarla yaygın olarak kullanılan teknolojik bir araç olmakla birlikte günümüzde her çocuğun ve ergenin internet kullanma nedenleri birbirinden farklı (Tarı Cömert ve Kayıran, 2010: 166) olmaktadır. Öğrenciler interneti; belirlenmiş bir konu hakkında araştırma ve sunulan bilgileri seçme, doküman hazırlama, paylaşma, araştırdıkları konu üzerine verilen bilgiler üzerine tartışma, alıştırmalar yapma, diğer öğrencilerle haberleşme ve bilgi paylaşımı amaçlı kullanmaktadır (Küçükcankurtaran, 2008: 178). İnternet günümüzde alışverişten ticarete, bilimsel araştırmalardan eğlenceye, birçok grubun örgütlenme aracından, siyasi propagandaya kadar birçok alanda kullanılmaya başlanmıştır. İnternet kullanımı içindeki bu çeşitlilik günlük hayat içindeki birçok faaliyetin internet üzerinden yapılmasına olanak tanımış ve bu faaliyetlerin ekonomik kayıtlardan sağlık kayıtlarına kadar uzanan yelpazedeki kişisel bilgilerin internet üzerinde depolanmasına olanak sağlamıştır. İnternet üzerinden yapılan bu işlemler bir yandan bireylerin hayatını kolaylaştırırken diğer yandan da inanılmaz bir veri depolanmasına olanak sağlamıştır. Bu veri deposu enformasyon toplumundan gözetim toplumuna doğru evrilen dünyamız için önemli bir araç haline gelmiştir. İnternet sahip olduğu teknolojik özellikler sayesinde elde edilen her türlü verinin depolanması, biriktirilmesi, kategorize edilmesi ve dağıtılmasına olanak sağlamıştır (Kesim Güven, 2006: 5).

3.Kullanımlar ve Doyumlar Yaklaşımı Temelinde Üstün Yetenekli Öğrencilerin İnternet Kullanımları ve İnternete Bakış Açıları Üzerine Bir Uygulama

Üstün yetenekli öğrencilerin internete bakış açılarını ve internet kullanımlarını irdelemek amacıyla oluşturulmuş olan bu çalışmada hem nicel veriler hem de nitel veriler analiz edilmiştir.

3.1.Metodoloji

Çalışma Malatya İnönü Çocuk Üniversitesi Üstün Yetenekliler Araştırma ve Uygulama Merkezi'nde ki üstün yetenekli öğrenciler üzerinde uygulanmıştır. "Merkezin amacı, bölgemizdeki okul-öncesi ve ilköğretim okullarında üstün yetenek ve zekâya sahip olarak belirlenmiş çocukların bulundukları bu erken yaşlarda üniversite ortamına alınarak sağlıktan sanata kabiliyetli oldukları alanlarda kendilerini gerçekleştirecekleri bir ortam sağlamaktır. Bu bağlamda, bu bireylerin sahip oldukları olağanüstü merak, motivasyon ve yaratıcılıklarının daha da uyarılması için alanlarında tanınan bilim adamlarından bilgilendirme ve uygulamalar almalarının sağlanarak geleceğin bilim ve teknolojisini üreten bilim insanlarının yetiştirilmesi başlıca hedefler arasındadır" (http://uyem.inonu.edu.tr/x.asp?d=57, 05.05.2016). Rehberlik Araştırma Merkezi (RAM) tarafından IQ testi uygulanmış ve bunun sonucunda IQ seviyeleri yüksek çıkmış olan öğrenciler, yarıyıl ve yaz tatillerinde bir haftalığına bir araya getirilmekte ve üniversite öğretim elemanlarından ders almaları sağlanmaktadır. Bu çalışma aynı okulda eğitim görmekte olan öğrenciler üzerinde uygulanmıştır. Görüşme yönteminin kullanıldığı çalışmada yüz yüze görüşme yerine bir görüşme soru formu hazırlanarak öğrencilerin soruları cevaplamaları istenmiştir. Çalışmaya katılan katılımcıların adları ve soyadları sorulduğu halde çalışmada katılımcıların adları kullanılmamış ve katılımcılar, 'K1, K2, K3, K4, K5,….' şeklinde kodlanmıştır. Katılımcılara, kaç yaşında ve kaçıncı sınıfta olduklarının yanı sıra; interneti kullanıp kullanmadıkları, kullanıyorlarsa kullanma amaçları, en çok hangi siteleri kullandıkları, internette gün içerisinde ne sıklıkta gezindikleri, en çok hangi arama motorunu tercih ettikleri, interneti eğitici bulup bulmadıkları, internetin bağımlılık yarattığını düşünüp düşünmedikleri, sosyal paylaşım sitelerine girip girmedikleri ve hangi amaçlarla girdikleri, sosyal paylaşım sitelerini nasıl buldukları, internetin bireyler üzerinde zararlı olduğunu düşünüp düşünmedikleri, internetin zararlarından korunmak için bir oto kontrolü ya da bilgilendirmeyi gerekli ve yeterli bulup bulmadıkları, interneti diğer kitle iletişim araçları karşısında güçlü bulup bulmadıkları, internetin dünyayı bir evrensel köye dönüştürdüğünü düşünüp düşünmedikleri, internetsiz bir yaşam düşünüp düşünmedikleri ile internetin kendileri için neyi ifade ettiği şeklinde bir takım sorular yöneltilmiştir.

3.2.Bulgular

34 üstün yetenekli katılımcı ile gerçekleştirilen çalışmadaki katılımcılardan 2 kişi 7, 13 kişi 8, 1 kişi 9, 8 kişi 10 ve 10 kişi ise 11 yaşındadır. Görüşme yapılan katılımcılardan 16'sı ikinci sınıf, 18 kişi ise dördüncü sınıftır. Üstün yetenekli öğrencilerin internet kullanımları ve internete bakış açıları üzerine yapılan çalışmaya katılan öğrencilerin 33'ü interneti aktif olarak kullandıklarını belirtirken 1 kişi (K34) interneti kullanmadığı ifade etmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 1: İnterneti kullanma amacınız nedir?

	Eğitim	Eğlence	Sosyalleşme	Araştırma	İletişim kurma	Diğerleri
K1		X	X	X	X	
K2	X	X		X		
K3	X					
K4				X		
K5	X			X		
K6	X			X	X	X
K7	X	X		X	X	
K8	X	X	X	X	X	
K9	X	X	X	X	X	
K10	X			X		
K11	X	X		X		
K12	X	X	X	X		
K13	X	X	X	X		
K14	X	X		X	X	
K15	X	X	X	X	X	
K16	X			X	X	
K17	X	X		X	X	
K18	X	X		X		
K19	X	X		X	X	
K20		X		X		
K21		X				
K22		X		X		
K23	X	X				
K24			X		X	
K25	X			X		
K26		X		X		
K27	X	X				
K28	X	X		X	X	
K29	X	X		X	X	
K30	X			X		
K31	X	X		X		X
K32	X	X	X	X	X	
K33	X	X		X	X	
K34						X
TOPLAM	**26**	**24**	**8**	**28**	**15**	**3**

'İnterneti kullanma amacınız nedir?' sorusuna 'eğitim, eğlence, sosyalleşme, araştırma, iletişim kurma ve diğerleri' kategorileri verilmiş ve katılımcıların bu kategorilerden birden fazlasını işaretleyebilecekleri belirtilmiştir. Buna göre; internetin en çok 'araştırma' (28 katılımcı) amacıyla kullanıldığı görülürken bunu 26 katılımcıyla eğitim izlemiştir. 24 katılımcı interneti eğlence, 15 katılımcı iletişim kurma, 8 katılımcı sosyalleşme amacıyla kullanırken 3 katılımcı ise 'diğerleri' kategorisini işaretlemiştir. Dolayısıyla buradaki verilere göre, internet en çok araştırma, eğitim ve eğlence amacıyla kullanılmaktadır. K8, K9, K15 ve K32 interneti eğitim, eğlence, sosyalleşme, araştırma ve iletişim kurma, K3 sadece eğitim, K4 araştırma amacıyla kullandığını dile getirmiş, K34 ise 'diğerleri' kategorisini işaretleyerek interneti kullanmadığını belirtmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 2: En çok kullandığınız internet siteleri hangileridir?

	Twitter	Facebook	Youtube	E-Okul	Oyun siteleri	Haber siteleri	Diğerleri
K1			X				
K2			X				
K3					X		
K4	X						
K5				X			
K6				X		X	
K7				X			
K8		X	X	X	X	X	
K9		X		X	X		
K10				X			
K11		X		X			X
K12		X					
K13					X		
K14				X	X		
K15		X	X	X	X	X	
K16				X			
K17			X				
K18			X				
K19		X			X		
K20			X				
K21		X	X		X		
K22		X					
K23					X		
K24				X	X	X	
K25				X			
K26			X		X		
K27					X		
K28			X		X	X	
K29			X				
K30			X		X		
K31		X	X		X	X	
K32			X		X	X	
K33			X		X		
K34							X
TOPLAM	**1**	**9**	**15**	**12**	**17**	**7**	**2**

'Katılımcıların en çok kullandıkları internet siteleri nelerdir?' şeklindeki soruda, 'Twitter, Facebook, Youtube, E-okul, oyun siteleri, haber siteleri ve diğerleri' kategorileri verilmiş ve bu soruya da birden fazla kategori işaretleyebilecekleri belirtilmiştir. Sonuca bakıldığında en çok kullanılan sitelerin 17 ile oyun siteleri ve 15 ile Youtube'un olduğu görülürken en az kullanılan siteler ise 1 ile Twitter, 2 ile 'diğerleri' olmuştur. E-Okul'u 12, Facebook'u 9, haber sitlerini ise 7 katılımcı takip etmektedir. Birden fazla siteyi takip edenlere bakıldığında ise, K8 ve K15'in Facebook, Youtube, E-okul, oyun ve haber sitelerini kullandığı görülmüş, K1, K2, K3, K4, K5, K7, K10, K12, K13, K16, K17, K18, K20, K22, K23, K25, K27, K29 ve K34'ün internette tek bir siteyi takip ettiği bulgulanmıştır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 3: En çok hangi arama motorunu kullanıyorsunuz?

	Google	Yandex	Diğerleri
K1	**X**		
K2	**X**		
K3	**X**		
K4	**X**		
K5	**X**		
K6	**X**		
K7	**X**		
K8	**X**		
K9	**X**		
K10	**X**		
K11	**X**		
K12	**X**		
K13	**X**		
K14	**X**		
K15	**X**	**X**	
K16	**X**		
K17	**X**		
K18	**X**		
K19	**X**		
K20	**X**		
K21	**X**		
K22	**X**		
K23	**X**		
K24	**X**	**X**	
K25	**X**		
K26	**X**		
K27			**X**
K28	**X**	**X**	
K29			**X**
K30	**X**		**X**
K31	**X**		
K32	**X**		
K33	**X**	**X**	
K34			**X**
TOPLAM	**31**	**4**	**3**

'En çok hangi arama motorunu tercih ediyorsunuz?' şeklindeki soruya katılımcıların 31'i Google arama motorunu, 4'ü ise, Google'un yanı sıra Yandex'i işaretlerken 3 katılımcı 'diğerleri' demiştir. Bu durum katılımcıların çoğunluğu tarafından arama motoru olarak Google'un tercih edildiğini göstermektedir.

Tablo 4: Gün içerisinde internette zaman geçirme sıklıkları

	1 saatten az	2-3 saat arası	3-5 saat arası	5-10 saat arası	10 saatten fazla
K1		**X**			
K2	**X**				
K3	**X**				
K4	**X**				
K5			**X**		
K6	**X**				
K7	**X**				
K8		**X**			
K9			**X**		
K10	**X**				
K11		**X**			
K12		**X**			
K13	**X**				

 Copyright © International Conference on New Horizons in Education Conference (INTE)

K14	**X**				
K15		**X**			
K16	**X**				
K17	**X**				
K18		**X**			
K19		**X**			
K20		**X**			
K21		**X**			
K22		**X**			
K23			**X**		
K24		**X**			
K25	**X**				
K26	**X**				
K27	**X**				
K28			**X**		
K29			**X**		
K30	**X**				
K31		**X**			
K32		**X**			
K33	**X**				
K34					
TOPLAM	**15**	**13**	**5**		

'Gün içerisinde internette ne kadar zaman geçiriyorsunuz?' şeklindeki soru '1 saatten az, 2-3 saat arası, 3-5 saat arası, 5-10 saat arası ve 10 saatten fazla' kategorilerinden oluşturulmuştur. Buna göre 15 katılımcının 1 saatten az, 13 katılımcının 2-3 saat arası, 5 katılımcının ise 3-5 saat arası internette zaman geçirdiği görülürken katılımcılardan hiç biri '5-10 saat arası ve 10 saatten fazla' kategorilerini işaretlememiştir. K34, internete hiç girmediğini belirtmiştir. Dolayısıyla hiçbir kategoriyi işaretlememiştir.

Tablo 5: İnterneti eğitici buluyor musunuz ve bağımlılık yarattığını düşünüyor musunuz?

	Eğitici buluyor musunuz?				**Bağımlılık yaratıyor mu?**			
	Evet	**Hayır**	**Kısmen**	**Fikrim yok**	**Evet**	**Hayır**	**Kısmen**	**Fikrim yok**
K1	**X**				**X**			
K2			**X**		**X**			
K3			**X**		**X**			
K4				**X**	**X**			
K5			**X**		**X**			
K6	**X**				**X**			
K7			**X**		**X**			
K8			**X**		**X**			
K9	**X**				**X**			
K10			**X**		**X**			
K11			**X**		**X**			
K12	**X**						**X**	
K13			**X**		**X**			
K14			**X**		**X**			
K15	**X**						**X**	
K16			**X**		**X**			
K17	**X**							**X**
K18	**X**				**X**			
K19			**X**		**X**			
K20			**X**					**X**

 Copyright © International Conference on New Horizons in Education Conference (INTE)

K21	**X**					**X**		
K22		**X**				**X**		
K23	**X**					**X**		
K24	**X**						**X**	
K25				**X**	**X**			
K26	**X**							**X**
K27			**X**		**X**			
K28				**X**				**X**
K29				**X**	**X**			
K30			**X**					**X**
K31	**X**				**X**			
K32		**X**						**X**
K33		**X**			**X**			
K34			**X**		**X**			
TOPLAM	**12**	**3**	**15**	**4**	**22**	**3**	**3**	**6**

'İnterneti eğitici buluyor musunuz?' şeklindeki soruya katılımcıların 15'i 'kısmen', 12'si ise, 'evet' yanıtını vermiştir. 4 katılımcı 'fikrim yok' derken, 3 katılımcı ise, 'hayır' yanıtını vererek interneti eğitici bulmadığını ifade etmiştir. Bu sonuç çoğunluğun interneti eğitici bulduğunu göstermektedir. "İnternetin bağımlılık yarattığını düşünüyor musunuz?" sorusuna ise, 22 katılımcı 'evet', 6 katılımcı 'fikrim yok' yanıtını vermiş, 3'er katılımcı ise, 'hayır' ve 'kısmen' ifadesini kullanmıştır. Bu sonuca göre çoğunluğun bağımlılık yarattığını düşünmesi ve aynı şekilde çoğunluğun interneti kullanmaya devam etmesi değişik bir durumu ortaya çıkarmaktadır.

Tablo 6: Sosyal paylaşım sitelerine giriyor musunuz? Sosyal paylaşım sitelerini nasıl buluyorsunuz?

	Sosyal paylaşım sitelerine giriyor musunuz?		**Sosyal paylaşım sitelerini nasıl buluyorsunuz**				
	Evet	**Hayır**	**Faydalı**	**Zararlı**	**Gerekli**	**Gereksiz**	**Diğerleri**
K1	**X**				**X**		
K2	**X**				**X**		
K3		**X**				**X**	
K4	**X**						**X**
K5		**X**				**X**	
K6		**X**				**X**	
K7	**X**		**X**				
K8	**X**					**X**	
K9	**X**		**X**				
K10	**X**		**X**				
K11	**X**						**X**
K12	**X**					**X**	
K13	**X**		**X**				
K14	**X**				**X**		
K15	**X**				**X**		
K16	**X**		**X**				
K17		**X**			**X**		
K18	**X**				**X**		
K19	**X**		**X**				
K20		**X**				**X**	
K21	**X**				**X**		
K22		**X**			**X**		
K23		**X**				**X**	
K24	**X**				**X**		
K25		**X**	**X**				
K26	**X**		**X**				
K27		**X**				**X**	
K28		**X**				**X**	

 Copyright © International Conference on New Horizons in Education Conference (INTE)

K29	**X**				**X**		
K30		**X**			**X**		
K31		**X**			**X**		
K32		**X**	**X**				
K33		**X**			**X**		
K34		**X**		**X**			
TOPLAM	**19**	**15**	**9**	**1**	**13**	**9**	**2**

19 kişi sosyal paylaşım sitelerine girdiğini belirtirken 15 kişi ise, girmediğini ifade etmiştir. "Sosyal paylaşım sitelerini nasıl buluyorsunuz?" şeklindeki soruya 13 katılımcı sosyal paylaşım sitelerini 'gerekli', 9 katılımcı 'gereksiz', 9 katılımcı 'faydalı', 1 katılımcı 'zararlı', 2 katılımcı ise, 'diğerleri' kategorisini işaretlemiştir.

Tablo 7: Sosyal paylaşım sitelerine hangi amaçlarla giriyorsunuz?

	İletişim	**Paylaşım**	**Bilgi edinmek**	**Arkadaşları takip**	**Eğitim**	**Video/ fotoğraf paylaşmak**	**Zaman geçirmek**	**Haber almak**	**Diğerleri**
K1			X				X	X	
K2							X		
K3					X				X
K4							X		
K5		X	X		X		X		
K6	X		X		X			X	
K7	X	X					X	X	
K8	X	X	X	X	X		X	X	
K9	X	X	X	X	X		X		
K10			X		X				
K11	X		X		X			X	
K12			X	X			X		
K13	X	X		X		X	X		
K14					X		X		
K15	X	X	X	X	X	X	X	X	
K16	X		X		X				
K17	X						X		
K18			X		X		X	X	
K19	X	X		X	X	X		X	
K20			X						
K21	X	X	X	X		X	X		
K22						X		X	
K23			X		X		X		X
K24								X	
K25					X				
K26	X	X	X	X	X	X	X	X	
K27							X		
K28	X	X	X	X	X	X		X	
K29	X	X				X	X		
K30		X	X	X	X		X	X	X
K31	X	X	X	X	X	X	X	X	
K32									
K33			X		X		X	X	
K34									X
TOPLAM	**15**	**13**	**19**	**11**	**19**	**9**	**21**	**15**	**4**

Katılımcılar, sosyal paylaşım sitelerine girme amaçlarına ise; 21 katılımcı 'zaman geçirmek', 19 katılımcı 'bilgi edinme', 19 katılımcı 'eğitim', 15 katılımcı 'iletişim kurma', 15 katılımcı 'haber alma', 13 katılımcı 'paylaşımda bulunma', 11 katılımcı 'arkadaşları takip etme', 9 katılımcı video ve fotoğraf paylaşma, 9

 Copyright © International Conference on New Horizons in Education Conference (INTE)

katılımcı ise 'diğerleri' kategorisini işaretlemiştir. Buna göre, katılımcıların çoğu sosyal paylaşım sitelerini zaman geçirme, bilgi edinme ve eğitim amacıyla kullanmaktadır.

Tablo 8: İnternetin bireyler üzerinde zararlı olduğunu düşünüyor musunuz?

	Evet	Hayır	Kısmen	Fikrim yok
K1			X	
K2			X	
K3			X	
K4			X	
K5	X			
K6	X			
K7	X			
K8				X
K9			X	
K10	X			
K11			X	
K12				X
K13			X	
K14			X	
K15			X	
K16	X			
K17			X	
K18			X	
K19	X			
K20				X
K21		X		
K22	X			
K23				X
K24			X	
K25	X			
K26				X
K27	X			
K28				X
K29				X
K30				X
K31				X
K32		X		
K33				X
K34				X
TOPLAM	9	2	12	11

'İnternetin bireyler üzerinde zararlı olduğunu düşünüyor musunuz?' şeklindeki soruya, 12 katılımcı interneti 'kısmen' zararlı bulduğunu belirtirken 11 katılımcı 'fikrim yok' demiştir. 9 katılımcı interneti zararlı bulduğunu, 2 katılımcı ise, zararlı bulmadığını ifade etmiştir. Genel anlamda bakıldığında katılımcıların interneti zararlı buldukları görülebilmektedir.

Tablo 9: İnternetin zararlarından korunmak için bir oto kontrolü ya da bilgilendirmeyi gerekli buluyor musunuz?

	Evet	Hayır	Kısmen	Fikrim yok
K1		X		
K2		X		
K3	X			
K4			X	
K5	X			
K6	X			
K7	X			
K8	X			
K9	X			
K10	X			

 Copyright © International Conference on New Horizons in Education Conference (INTE)

K11	**X**			
K12	**X**			
K13				**X**
K14	**X**			
K15			**X**	
K16	**X**			
K17				**X**
K18		**X**		
K19	**X**			
K20	**X**			
K21		**X**		
K22	**X**			
K23				**X**
K24		**X**		
K25	**X**			
K26	**X**			
K27				**X**
K28				**X**
K29				**X**
K30			**X**	
K31			**X**	
K32	**X**			
K33				**X**
K34	**X**			
TOPLAM	**18**	**5**	**4**	**7**

'İnternetin zararlarından korunmak için bir oto kontrolü ya da bilgilendirmeyi gerekli buluyor musunuz?' şeklindeki soruya, 18 katılımcı gerekli bulduğunu belirtmiştir. 7 katılımcı 'fikrim yok', 5 katılımcı 'hayır', 4 katılımcı ise, 'kısmen' demiştir. Dolayısıyla çoğunluk böyle bir uygulamayı gerekli gördüğünü ifade etmiştir.

Tablo 10: İnternetin zararlarından korunmak için bir otokontrolü ya da bilgilendirmeyi yeterli buluyor musunuz?

	Evet	**Hayır**	**Kısmen**	**Fikrim yok**
K1				**X**
K2			**X**	
K3		**X**		
K4				**X**
K5		**X**		
K6		**X**		
K7	**X**			
K8			**X**	
K9		**X**		
K10	**X**			
K11		**X**		
K12	**X**			
K13			**X**	
K14			**X**	
K15	**X**			
K16	**X**			
K17				**X**
K18			**X**	
K19				**X**
K20			**X**	
K21	**X**			
K22				**X**
K23			**X**	
K24		**X**		
K25				**X**

 Copyright © International Conference on New Horizons in Education Conference (INTE)

K26			**X**	
K27				**X**
K28			**X**	
K29				**X**
K30				**X**
K31				**X**
K32	**X**			
K33				**X**
K34	**X**			
TOPLAM	**8**	**6**	**9**	**11**

'İnternetin zararlarından korunmak için bir otokontrolü ya da bilgilendirmeyi yeterli buluyor musunuz?' şeklindeki soruya ise, 11 katılımcı fikri olmadığını ifade ederken 9 katılımcı 'kısmen', 8 katılımcı 'evet', 6 katılımcı ise, 'hayır' yanıtını vermiştir.

Tablo 11: İnterneti televizyon, gazete, radyo gibi diğer kitle iletişim araçları karşısında güçlü buluyor musunuz?

	Evet	**Hayır**	**Kısmen**	**Fikrim yok**
K1			**X**	
K2	**X**			
K3		**X**		
K4	**X**			
K5		**X**		
K6	**X**			
K7	**X**			
K8				**X**
K9	**X**			
K10	**X**			
K11	**X**			
K12				**X**
K13	**X**			
K14	**X**			
K15	**X**			
K16		**X**		
K17	**X**			
K18			**X**	
K19	**X**			
K20				**X**
K21	**X**			
K22	**X**			
K23	**X**			
K24	**X**			
K25				**X**
K26				**X**
K27			**X**	
K28		**X**		
K29	**X**			
K30	**X**			
K31				**X**
K32	**X**			
K33				**X**
K34		**X**		
TOPLAM	**19**	**5**	**3**	**7**

'İnterneti televizyon, gazete, radyo gibi diğer kitle iletişim araçları karşısında güçlü buluyor musunuz?' şeklindeki soruya katılımcıların 19'u 'evet', 7'si 'fikrim yok', 5'i 'hayır', 3'ü ise, 'kısmen' kategorisini işaretlemiştir. Çoğunluğun interneti güçlü bulması aynı zamanda interneti kullanma isteklerini ve internete yönelik olan güveni de göstermektedir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

'İnternetin dünyayı küresel bir köye dönüştürdüğünü düşünüyor musunuz?' şeklindeki soruya 13 katılımcı internetin dünyayı küresel bir köye dönüştürdüğünü belirtirken, 7 katılımcı dönüştürmediğini, 3 katılımcı kısmen dönüştürdüğünü, 2 katılımcı bu konuda fikirlerinin olmadığını kaydetmiştir. K12, K17, K19, K22, K24, K26, K31, K32 ve K33 ise bu soruya yanıt vermemiştir. İnternetin dünyayı küresel bir köye dönüştürdüğünü düşünenler ile düşünmeyenlerin birkaç görüşü şu şekildedir:

- ***K1:****"Evet, internet çok kullanıldığında dünya internete bağımlı olabilir."*
- ***K3:****"Düşünüyorum, çünkü herkes internet kullanmaya başladı."*
- ***K6:****"Evet, çünkü orada her şeyi görebiliyoruz."*
- ***K11:****"Evet. Çünkü bağımlılık insan hayatının en kötü şeyidir. İllaki bağımlı olmalıysan kitaba bağımlı olurum daha iyi."*
- ***K13:****"Evet çünkü internet sayesinde Türkiye'deyken Çin'i görebilirim."*
- ***K14:****"Evet. Çünkü dünyanın her yerinden insanlar internete giriyor ve birbirleriyle haberleşiyorlar."*
- ***K34:****"Evet. Çünkü neredeyse her evde internet var, herkes interneti kullanıyor. Kullandıkları sürece ona bağımlı oluyorlar."*
- ***K5:****"Tam tersine internet kullanmak herkesi içine kapatıyor."*
- ***K7:****"Hayır, çünkü internet her yeri teknolojik yere dönüştürüyor."*
- ***K15:****"Hayır. Dünyayı daha modern bir dünyaya dönüştürdüğünü düşünüyorum."*

"İnternet sizin için neyi ifade ediyor?" şeklindeki soruya K1: "Sosyalleşmeyi, eğlenceyi ve araştırmayı", K2: "Her şeyi", K3: "Bilgiyi", K4: "Eğlence, haberleşme ve eğitimi", K6: "Eğitimi, araştırmayı ve bağımlılığı" ifade ediyor cevabı vermiştir. K7: "Bilimi, eğlenceyi, gülmeyi ve aynı zamanda da ağlamayı", K8: "Sosyalleşme, haberleşme, eğitim, oyunu", K9: "Arkadaş ve akrabalarla görüşmeyi", K10: "Eğitim, öğretim, okul, bilim ve sanat ile ilgili konuları", K11: "Eğitim, eğlence, sosyal medya, haber ve alışverişi", K12: "Eğlenceyi, eğitimi, daha çok arkadaş edinmeyi" ifade ettiğini belirtmiştir.K14: "Bilgi bayrağı, oyun siteleri ve sosyal paylaşım sitelerini", K15: "Video, film, oyun, eğitim, eğlence sosyalleşmeyi", K18: "eğitimi", K19: "Bilgiyi", K20: "Eğitim, eğlence, bilgiyi", K21: "Oyunu", K 22: "Çalışmayı", K27: "Araştırma, eğlence, eğitimi", K28: "Oyun, eğlenceyi", K29: "Eğlenmeyi, öğrenmeyi ve mutlu olmayı", K30: "bilgi edinmeyi", K31: "aramayı, bulmayı" K34: "Oyun, haber, bilgi ve iletişim kurmayı" şeklinde yanıt vermiştir. K26, K32 ve K33 bu soruya yanıt vermemiş,K26'nın yazısı okunamamıştır. K5:"İnternet yeri geldiğinde çok önemli bir kaynak ama zararlarından korunmak için gerekli bilinçlendirme yapılmalıdır" ifadelerine yer vererek internet konusunda bilinçlendirmenin önemine dikkat çekmiştir. K23, internetin kendisi için hiçbir şey ifade etmediğini dile getirirken K16 internetin kendisi için"bağımlılık, boşa zaman geçirme, baş ağrısı" olduğunu kaydetmiştir. K25, bu konuyla ilgili fikri olmadığını belirtmiş, K17, "uzaktan telefondakinden değişik", K24, "bazen oyun oynuyorum" yanıtını vermiştir. K13 ise "önce yararlı işler için kurulmuş. Ama sonra zararlı işlerde kullanılmıştır" ifadeleriyle internetin zararlı işlerde de kullanıldığının altını çizmiştir.

"İnternetsiz bir yaşam düşünüyor musunuz? Neden?" şeklindeki soruya 15 katılımcı internetin olmadığı bir yaşamı düşünemediklerini belirtirken, 10 katılımcı düşündüklerini, 3 katılımcı kısmen düşündüklerini kaydetmiş, 2 katılımcı fikri olmadığını belirtmiş 3 katılımcı ise, bu soruya cevap vermemiştir. Soruya 'kısmen' cevabını veren K3, gerekçe olarak şunu söylemiştir: "Çünkü interneti kullanmazsak bilgi edinemeyiz. Kullanırsak bağımlısı oluruz." İnternetsiz bir dünya düşünemediklerini belirten katılımcılar buna neden olarak, internetsiz bir dünya halinde araştırma yapamayacakları, zorluklarla karşılaşacakları, insanların internete bağımlı olduğu, internetin yaşamda birçok ihtiyacı karşıladığını, işlerin yavaşlayacağını, bilgi sahibi olamayacakları ve mutsuz olacaklarını belirtmiştir. Bu görüşte olanların bir takım görüşleri şu şekildedir:

- ***K1:****"İnternetsiz bir dünya olsaydı araştırma yapamaz veya internet tarafından anlamını bilmediğimiz kelimelerin anlamına bakamazdık. İşimize yarayan birçok şey gider. Zorluklarla karşılaşırdık"*
- ***K4:*** *"Düşünemiyorum. Çünkü insanların çoğu internete bağımlı olarak yaşıyor."*
- ***K7:****"Hayır çünkü yaşamda birçok ihtiyacımızı karşılıyor."*
- ***K10:****"Hayır. Çünkü insanlar hiçbir konu üzerinde fikir sahibi olamaz ama çok da kullanılmamalıdır."*
- ***K13:****"Hayır, çünkü şu anda internet günümüz dünyasının gözdesi durumunda."*
- ***K15:****"Zor olurdu, işlerimiz yavaşlardı."*
- ***K18:****"İnternetsiz bir yaşam hakkında fikrimiz olmadığı konularda bilgi sahibi olamazdık."*
- ***K19:****"Düşünemiyorum. Çünkü bazen ihtiyacım oluyor."*
- ***K29:****"Hayır. Herkes çok mutsuz olur."*
- ***K30:****"Hayır. O zaman soruları çözemeyiz, araştırma yapamayız."*

İnternetsiz bir dünyayı düşündüklerini belirten katılımcılar ise buna neden olarak; internetsiz bir yaşamda, çocukların bilgisayar yerine sokaklarda, gerçek hayatta oynayabilecekleri, bilgisayara bağımlı olmayacakları,

insanların daha hareketli olacağı, kitap, dergi, gazetenin daha çok okunup dışarıda daha hoş aktivitelerin geçirilebileceği gösterilmiştir.

- ***K5:****"Evet çünkü internet olmadan önce herkes sokağa çıkıp birlikte oyunlar oynarlarmış. Fakat internet yüzünden herkes içine kapanmıştır."*
- ***K6:****"Evet düşünüyorum. Çünkü insanlara bağımlılık olmuyor ve çok fazla başında kalınmıyor. Böylece insanlar daha hareketli oluyorlar."*
- ***K8:****"Çünkü çocuklar bilgisayarda değil gerçek hayatta oynamalıdır."*
- ***K11:****"Evet, düşünüyorum. Çünkü internet olmadan kitap, dergi, gazete okumak, arkadaşlarınla dışarı çıkmak gibi hoş aktiviteler yapılabilir."*
- ***K14:****"Evet. Mesela eski zamanlarda internet, televizyon, bilgisayar vs. yoktu. Ama o zamanlar yaşam hala sürüyordu. Fakat günümüzde artık bir ihtiyaca dönüştü."*
- ***K16:****"Evet, çünkü insanlar internetin bağımlısı olmuşlar. Bağımlı olmamak için evet düşünüyorum."*

SONUÇ

Kullanımlar ve doyumlar yaklaşımı temel alınarak üstün yetenekli öğrencilerin yeni medya teknolojilerine bağlı olarak interneti kullanıp kullanmadıkları, kullanıyorlarsa hangi amaçlarla kullandıkları ve internetin onlar üzerindeki etkilerini araştırmak amacıyla hazırlanan bu çalışma, 34 üstün yetenekli öğrenci üzerinde uygulanmıştır. Çalışmada, bir görüşme formu hazırlanarak katılımcıların soruları yanıtlamaları istenmiştir. Analiz sonucunda çıkan genel bulgular şu şekildedir:

Katılımcıların gün içerisinde internette ne kadar zaman geçirdikleriyle ilgili soruda, katılımcıların internette en çok 1 saatten az ve 2-3 saat arası zaman geçirdikleri görülmüştür. Katılımcılar; interneti en çok araştırma yapma, eğitim ve eğlence amacıyla kullanmaktadır. Katılımcıların daha çoğunlukla interneti, araştırma yapma ve eğitim amacıyla kullanmalarının temel nedeni öğrencilerin okul çağında olmalarından kaynaklandığı belirtilebilmektedir. Katılımcıların en çok kullandıkları internet sitelerine bakıldığında, oyun siteleri ve Youtube'un başı çektiği görülmüştür. Bu durum ise, öğrencilerin eğitim ve araştırma yapma amacıyla interneti daha çoğunlukla kullanmaları noktasında bir çelişkiyi ortaya çıkarmaktadır. Bu da internetin kullanımında eğlence faktörünün daha önemli olduğunu göstermektedir. En az kullanılan site sosyal paylaşım sitesi olan Twitter'dır. Katılımcıların en çok kullandıkları arama motoru Google olmuştur. Katılımcıların çoğunluğu interneti eğitici buluyorken aynı zamanda internetin bağımlılık yarattığını da düşünmektedir. Katılımcıların yarısından çoğu sosyal paylaşım sitelerine girdiğini ifade ederken sosyal paylaşım sitelerinin gerekli ve faydalı bulmuştur. Sosyal paylaşım sitelerine girme amaçları sorulduğunda, katılımcıların çoğu zaman geçirme, bilgi edinme ve eğitim amacıyla kullandıklarını belirtmiştir. İnterneti zararlı bulup bulmadıklarıyla ilgili soruda katılımcıların interneti çoğunlukla zararlı buldukları görülmektedir. Katılımcıların internetin zararlarından korunmak için bir oto kontrolün gerekli ve yeterli bulup bulmadıkları sorulduğunda, 18 katılımcı gerekli olduğunu, yeterlilik konusunda ise, 'fikrim yok, kısmen, evet ve hayır' kategorilerinin oranlarının birbirine yakın çıktığı görülmüştür. Katılımcıların çoğunluğu interneti geleneksel medya araçları karşısında güçlü bulduklarını ifade etmiştir. İnternetin dünyayı küresel bir köye dönüştürdüğü noktasında soruya yanıt veren çoğu katılımcı dönüştürdüğünü belirtmiştir. Çalışmada bu soruya yanıt vermeyen öğrencilerden bazılarının soruyu anlamadıklarını söylemeleri, katılımcılara araştırmacı tarafından 'küresel köy' kavramı için gerekli açıklamanın gerekliliğini ortaya koymaktadır. Ancak çalışmanın bir form üzerinden yürütülmüş olması ve sorulara verilen yanıtlara daha sonra inceleme aşamasında bakılmış olması gerekli açıklamanın yapılmasını engellemiştir. Çoğu katılımcı internetsiz bir yaşam düşünmediğini kaydederken çoğu yarışmacı ise, internetsiz bir yaşamın olabileceğini ifade etmiştir. İnternetsiz bir dünya düşünemediklerini belirten katılımcılar buna neden olarak, internetsiz bir dünya halinde araştırma yapamayacakları, zorluklarla karşılaşacakları, insanların internete bağımlı olduğu, internetin yaşamda birçok ihtiyacı karşıladığını, işlerin yavaşlayacağını, bilgi sahibi olamayacakları ve mutsuz olacaklarını belirtmiştir. İnternetsiz bir dünyayı düşündüklerini belirten katılımcılar ise buna neden olarak; internetsiz bir yaşamda, çocukların bilgisayar yerine sokaklarda, gerçek hayatta oynayabilecekleri, bilgisayara bağımlı olmayacakları, insanların daha hareketli olacağı, kitap, dergi, gazetenin daha çok okunup dışarıda daha hoş aktivitelerin geçirilebileceği gösterilmiştir.

Sonuç olarak; katılımcıların çoğunun internetin bağımlılık yarattığı ve zararlı etkileri olduğunu düşündükleri halde hala interneti kullanmaya devam etmeleri ve internetsiz bir dünya düşünememelerini ifade etmeleri anlamlı bulunmakla birlikte internetin sundukları avantajların görülebilirliği açısından oldukça önemlidir. Bu noktada öneri niteliğinde olabilecek ifade şu olmaktadır: İnternet insanın hayatının kolaylaştırması açısından çok önemli bir araçtır. Ancak önemli olan, bireyin internetin onu yönlendirmesine ve hayatının en önemli noktası, merkezi haline gelmesine izin vermemektir. Sonuçta her araç gerektiği kadar ve gerekliliği ölçüsünde kullanıldığında bireye vereceği zarar miktarının azalabileceğini ifade etmek yerinde olmaktadır. Gerekli bilincin oluşturulması noktasında ise, eğitim kurumlarına olduğu kadar medya dünyasındaki aktörlere ve kanaat önderlerine de önemli görevler düşmektedir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

KAYNAKÇA

Arısoy, Özden (2009). "İnternet Bağımlılığı ve Tedavisi", Psikiyatride Güncel Yaklaşımlar; 1: 55-67.

Atabek Ümit (2003). İletişim Teknolojileri ve Yerel Medya İçin Olanaklar", (Ed.: S. Alankuş), **Yeni İletişim Teknolojileri ve Medya**, Habercinin El Kitabı Dizisi: 3, İstanbul: IPS İletişim Vakfı Yayınları, 55-84.

Çakır, Hüseyin ve Yalçın, Nursel (2006). "İnternet ve İntranet'e Dayalı Sanal Dershane Sistemi", **Kastamonu Eğitim Dergisi,** Mart 2006 Cilt:14 No:1, 101-112.

Çelen, Fatma Kübra, Çelik, Aygül ve Seferoğlu, Süleyman Sadi (2011). "Çocukların İnternet Kullanımları ve Onları Bekleyen Çevrim-İçi Riskler", **Akademik Bilişim'11 - XIII. Akademik Bilişim Konferansı Bildirileri,** 2 - 4 Şubat 2011 İnönü Üniversitesi, Malatya, 645-652.

Erdoğan, İrfan ve Alemdar, Korkmaz (2005). **Öteki Kuram (Kitle İletişim Kuram ve Araştırmalarının Tarihsel ve Eleştirel Bir Değerlendirmesi),** 2. Baskı, Ankara: Erk Yayınları.

Fidancıoğlu, Hamza, vd. (2009). "Sağlık Yüksekokulu Öğrencilerinin İnternet Kullanımına Yönelik Görüşleri", **Maltepe Üniversitesi Hemşirelik Bilim ve Sanatı Dergisi**, Cilt:2, Sayı:1, 3-9.

Katz, Elihu, vd. (1974). "Uses and Gratifications Research", **The Public Opinion Quarterly,** Winter.

Kılıç, Deniz (2001). "Abdullah Öcalan'ın Yargılanması Sürecinde Cumhuriyet Gazetesi'nde Yayınlanan Haberlerin Kullanım ve Tatminler Modeli Açısından İncelenmesi", **İstanbul Üniversitesi İletişim Fakültesi Dergisi,** Sayı: 10, 181-204, İstanbul.

Kesim Güven, Sevgi (2006). "Elektronik Gözetim Aracı Olarak İnternet", **inet-tr'06 - XI. "Türkiye'de İnternet" Konferansı Bildirileri,**21 - 23 Aralık 2006 TOBB Ekonomi ve Teknoloji Üniversitesi, Ankara, 5-14.

Küçükcankurtaran, Evren (2008). "Çevre Eğitiminde İnternetin Kullanımı: Çevreye Karşı Olan Sorumluluklarımızın Farkına Varmamızda İnternet Nasıl Etkili Olabilir?", **inet-tr'08 - XIII. Türkiye'de İnternet Konferansı Bildirileri,** 22-23 Aralık 2008 Orta Doğu Teknik Üniversitesi, Ankara, 175-182.

Mutlu, Erol (2008). **İletişim Sözlüğü,**5. Basın, Ankara: Ayraç Kitap Evi.

Severin, Werner, J. Ve Tankard, James Wr. (1994). **İletişim Kuramları (Kökenleri, Yöntemleri ve Kitle İletişim Araçlarında Kullanımları),** Çev: Ali Atıf Bir ve Serdar Sever, Eskişehir: Kibela Sanat Merkezi.

Tarı Cömert, Itır ve Kayıran, Sinan Mahir (2010). " Çocuk ve Ergenlerde İnternet Kullanımı", Çocuk Dergisi, 10(4):166-170.

Yaylagül, Levent (2008). **Kitle İletişim Kuramları (Egemen ve Eleştirel Yaklaşımlar),** 2. Baskı, Ankara: Dipnot Yayınları.

http://uyem.inonu.edu.tr/x.asp?d=57, Erişim Tarihi: 05.05.2016.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LANGUAGE DEVELOPMENT OF CHILDREN AGED 18 TO 36 MONTHS ACCORDING TO BUTZKAMM

Mihriban CAF
Institute of Education Science
Vienna University, Austria
mihribancaf@gmx.at

ABSTRACT
Since language has a great relevance to every human being and serving other people to contact, and to express his own thoughts, it is necessary to understand how the process of the development of language in children runs.
What should be considered in the phases of language learning, so that the language in later life can be used adequately in appropriate situations?
The aim of this work is to show how the language development occurs in children aged 18 months to 36 months, and to give recommendations how parents should behave in this phase her child over.
Throughout this paper it was demonstrated that the process of language development is not irrelevant for the subsequent language use, but crucial for future life and should not be neglected. Parents should observe how their child's language develops in order for him/her to be able to apply and use it adequately in respective situations, both with parents and the environment.
It needs to be emphasised that "the" correct language acquisition does not exist, because it always evolves differently. Parents can at the best try to monitor the child's language development, express themselves adequately and, in certain cases, put a pedagogue as support at the side of their child.

INTRODUCTION
As Wilhelm von Humboldt said „Language is the building organ of the thought." Language plays an important role in the life of every human being, as it serves as means of communication and information. It enables us to communicate with each other and to express our thoughts and feelings.
Butzkamm describes language as the most significant achievement in the life of a human child (Butzkamm, 1999, p.1). It is our most important organ for capturing the world. It is used to regulate coexistence (Butzkamm, 1999, p.1). "It forms the bridge of interpersonal relations. It is the most important medium for coming in contact with other people, expressing thoughts and feelings, uttering wishes, processing experiences, planning actions, conceiving contexts and exchanging experiences" (Butzkamm, 1999, p.66). Language serves as means of communication and is a concrete activity of human beings. Speaking is always a certain way of acting, as speaking is preparation, support and proceeding of action with other means (Richter, Brügge, Mohs, 2001, p.11). Therefore, Richter considers language itself an action, in contrast to Butzkamm, who considers it only a means of planning actions.
Language takes up an important position in our life. It is the key to communication for exchanging with other human beings. Therefore, it is necessary to understand how language acquisition evolves with children and what role parents can take up in order to influence it in a positive way, so language can be used adequately in the future.
The aim of this work is to show how the language development occurs in children aged 18 months to 36 months, and to give recommendations how parents should behave in this phase her child over.

THE STUDY
Language serves as means of communication and information. It enables human beings to communicate with each other. Therefore, it is an important component of our life and it plays a crucial role for every human being. In order for language to be applied in a useful and comprehensible way proper language development is required. Therefore, it is necessary to gain understanding of how exactly children's language develops. As far as the learning process is concerned, various theories can be found. Moreover, the stages of language development differ for every child. In this respect, some behavioural patterns of the immediate environment as well as of parents play a crucial role. What needs to be considered during the various stages of language acquisition in order for language to be applied adequately in respective situations of later life?
Therefore, my research question for this paper is as follows: "According to Butzkamm, how does language of children aged 18 to 36 months develop?"
The aim of this paper is to describe the process of language development of children aged 18 to 36 months and to provide recommendations on how parents should behave towards their child during its various stages.
The paper is structured as follows: In the beginning the term language will be explained in more detail. Subsequently, the process of language development of children will be described: how it evolves, when and how children speak their first words, and why the period between 18 and 36 months is important and what happens

 Copyright © International Conference on New Horizons in Education Conference (INTE)

during this period. Furthermore, it will be shown what role parents' behaviour plays during this period and what they need to take into consideration for their children to undergo a proper language development.

FINDINGS

The course of language development

Every child acquires language in a different way. Therefore, it is impossible make generalised statements on how exactly children learn how to speak. In the course of language acquisition every child experiences different stages, which cannot be influenced by the environment but need to be accepted. During these stages certain conditions for language acquisition need to be given. These include for example the ability to hear, physical prerequisites, motor skills and perception (Richter, Brügge, Mohs, 2001, p.12). So, when does "real" language emerge and what do infants begin with once the parameters listed above are given? Infants start by producing single sounds, followed by words and, eventually, sentences (Szagun, 2007, p.29).

There is a certain theory on how infants learn initial sounds, which was advocated for a long time – the theory of imitation. Learning by imitation, also called model learning, is a theory by Albert Bandura, who seeked to explore whether or not it is possible to learn things which one has not experienced oneself but observed with other people. Following extensive research, he concluded that learning by imitation (model learning) is an important form of learning for human beings (Wagner, Hinz, Rausch, Becker, 2009, p.33).

Imitation is most effective when the following conditions are given: imitation is considered something positive; the observer (the infant) notices similarities between himself/herself and the person imitated; the observer is encouraged to pay attention to the person imitated; the observer's competences suffice to imitate behaviour (Wagner, Hinz, Rausch, Becker, 2009, p.34).

Researchers advocating this theory assumed that infants acquire first sounds through imitation and adjust their own sound production to the language they hear around them. Thus, language is acquired through imitation. A child tries to copy his/her parents, with who he/she spends most of the time, and imitates their language. A child builds his/her vocabulary from the words of adults and other children. The entire vocabulary used by a child is acquired this way. Also, ways of composing and combining single words correctly are learned through imitation. A child can imitate a sentence heard before and produce it in respective situations. Thus, the theory of imitation is an adequate explanation for the language acquisition of children (Wilkinson, 1975, p.57). Throughout the past 20 years, however, new methods of perception research were tested on infants. It was observed that infants are capable of differentiating between numerous single sounds already a long time before they produce them themselves. This implies that imitation is no longer considered the only way of language acquisition (Szagun, 2007, p.29). According to Butzkamm, one can differentiate between two stages of sound formation at the beginning of a child's language development: the pre-syllable age of so-called cooing (0-5 months) and the syllable age of babbling of syllables (6-12 months) (Butzkamm, 1999, p.56). First occurrences of regular syllables, however, varies between 5 and 11 months. This irregularity is related to a different cerebral maturation which in return effects language development (Butzkamm, 1999, p.56).

The period determining language development are the first three years of a child's life, meaning the time between the 9th and the 36th month. It is called the "sensitive phase for language development" (Richter, Brügge, Mohs, 2001, p.19). This period is of great significance regarding further language development, as important information is perceived and stored, which is used in adequate situations of later life (Richter, Brügge, Mohs, 2001, p.21).

"According to a study by Morris, 3% of the infants spoke their first words at the age of 9 months. 90% of all infants started speaking at the age of 18 months" (Morris 1991 quoted by Butzkamm, 1999, p.74). However, language development differs from child to child. There are children with "normal" language development, who utter their first word when they are one year old or younger, others do so only at the end of the second year of their life (Butzkamm, 1999, p.74).

The first word spoken is frequently that of a person from the child's immediate environment, such as mummy or daddy. This is followed by more words referring to things, persons and the environment. Small children name things which they experiences themselves.

Behind words there is our perception of the world. This also applies to children, as their world view is that of their immediate environment (Szagun, 2007, p.45).

During the first months during which children start speaking, their vocabulary grows only steadily. For months it contains only a few words, occasionally taking up a new one. There are often breaks of several months during which no new words are added and children only use one word. Eventually, a new word is added to the first one

 Copyright © International Conference on New Horizons in Education Conference (INTE)

and thus, further one-word sentences are uttered. The phase of one-word sentences lasts for half a year on average. However, its length varies from child to child between four months and one year. Some one and a half years old children already possess a vocabulary of about 50 words which they use actively. However, they can already understand 200 to 300 words. Children who have not yet reached the "magical 50 words limit" at the age of two are referred to as stragglers regarding language development. This is sometimes referred to as a disorder in the development of language skills (Butzkamm 1999, p.75).

Therefore, language develops differently with every child. There are various stages which every child goes through during their development, but they vary in length and starting point. A child's environment, such as parents, are a crucial factor in their development, as parents influence their child, because the child tries, for example, to copy them through imitation and, in this way, acquires language. This will be discussed in more detail in the next chapter.

PARENTS' ROLE IN A CHILD'S LANGUAGE ACQUISITION

The behaviour of a child's environment plays a crucial role in language acquisition. Most important is the parents' behaviour, as they are the persons to whom a child relates most closely and therefore, they function as linguistic role models. It is his/her parents' language a child hears first and most frequently during the "sensitive phase". In other words, language development is influenced by the parent-child relationship as well as linguistic role models (Richter, Erwin, Brügge, 2001, p.19).

As language development is also a process of learning by imitation, a child finds his/her way into a speech community through stimuli and his/her own trial. Also parents should give their child the chance make his/her own experiences which in succession lead to new words and an extension of the vocabulary. In the beginning playing is initiated by the mother or father. They obtain the role of the game master and keep the game running. Only after some time the child is able to control the game himself/herself. However, a child takes up this role only when he/she begins to acquire, use and understand grammatical rules at the age three (Butzkamm, 1999, p.73).

In her book "How children learn to speak properly" Steiniger provides some recommendations on how parents should act during the various stages of language development. These recommendations cannot be applied to every child and in every situation. However, they can be useful for parents. Parents should never reproach their child for his/her mistakes, no matter, if on a pronunciational, terminological or grammatical level. Otherwise the child would be exposed to unnecessary pressure. Parents should repeat what was said without mistakes. This is called "corrective feedback" (Steiniger, 2004, p.42). This way the parents can try to give their child the feeling that they take it seriously and, especially, that they focus on the content rather than the form. If the child has difficulties finding words it takes some time for them to finish a sentence. Nonetheless, parents should let their child finish speaking. If they are in the middle of doing something they should pause in order to listen to what their child wants to say (Steiniger, 2004, p.43).

Therefore, the parents' behaviour influences the various stages of their children's language development. They should pay attention to how their child develops and what behaviour encourages this process and has a positive impact on it. As every child expriences the process of language development in a different way it is often difficult for parents to adjust to it and support the development in a positive way. In such cases pedagogues can help the child by practicing and correcting certain things, expressions and utterances.

CONCLUSIONS

As language is of great relevance to every human being and serves to contact each other as well as to express one's thoughts, it is necessary to understand the process of children's language development. This process is different with every child. However, every child is always in certain developmental stages at which syllables and words are acquired. According to studies, most children learn to speak at the age of one year. The time span crucial for language development is the "sensitive phase", i.e. the time at the age of 9 to 36 months. It is decisive for further language development. Parents also contribute to the process of language development by acting in a certain way, paying attention to their child and correcting potential mistakes, but also accepting them.

Throughout this paper it was demonstrated that the process of language development is not irrelevant for the subsequent language use, but crucial for future life and should not be neglected. Parents should observe how their child's language develops in order for him/her to be able to apply and use it adequately in respective situations, both with parents and the environment.

It needs to be emphasised that "the" correct language acquisition does not exist, because it always evolves differently. It is possible that delays and deficits occur, which cannot be avoided, even with parental support.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Parents can at the best try to monitor the child's language development, express themselves adequately and, in certain cases, put a pedagogue as support at the side of their child.

REFERENCES

Butzkamm, W. & Butzkamm, J. (1999). Wie Kinder sprechen lernen. Kindliche Entwicklung und die Sprachlichkeit des Menschen. Tübingen und Basel: Francke Publishers.

Richter, E., Brügge, W. & Mohs, K. (2001). So lernen Kinder sprechen. Die normale und die gestörte Sprachentwicklung. München: Ernst Reinhardt Publishers.

Steiniger, R. (2004). Wie Kinder richtig sprechen lernen. Sprachförderung-ein Wegweiser für Eltern. Stuttgart: Klett-Cotta Publishers.

Szagun, G. (2007). Das Wunder des Spracherwerbs. So lernt Ihr Kind sprechen. Weinheim und Basel: Beltz Publishers.

Wagner, R. F., Hinz, A., Rausch, A. & Becker, B. (2009). Modul pädagogische Psychlologie, Regensburg: Julius Klinkhardt Publishers.

Wilkinson, A. (1975). Sprache und Spracherwerb. Wie Kinder sprechen und lesen lernen. München: Kösel Publishers.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LEARNING AND TEACHING ENVIRONMENTS BY USING VIRTUAL REALITY TECHNOLOGY

Paitoon SRIFA
Department of Educational Technology, Faculty of Education
Kasetsart University, Bangkok Thailand
feduptsf@ku.ac.th

ABSTRACT
This research study aims to study the environment of learning and teaching by using Virtual Reality (VR) technology in higher education, to inquire on an appropriate type of VR technology for learning and teaching and to study the appropriateness of using VR technology with other media. The research methodology is a qualitative research study by using participant observation, interview and documents. A sampling frame is the group of 35 undergraduate students enrolled in the course Introduction to Technology at Kasetsart University, Bangkok Thailand. The results of studies have found that students learning environments must have a basic knowledge of computers, applications and can use smart devices and other accessories about VR so well. The teachers must have a good attitude towards the use of new technologies and the ability to use VR technology as well, Most of the students were enjoyable to learning in the virtual world with Headset VR, fun and interactive learning with Kinect X Box, easy to use with mobile phone and tablet with Augmented Reality and online in 3D virtual world with Second Life. VR technology can be applied to many types of media in the classroom, such as Books, Magazines, Documents, Brochure, Poster, Catalog, Brand Logos, Billboard and Exhibition.

KEYWORD: Learning and Teaching Environments, Virtual Reality, Technology

INTRODUCTION
Virtual reality is creating the need for new types of input devices beyond the keyboard and mouse, including game controllers and hand and body tracking sensors that can recognize motion and gestures. This includes the computer hardware, operating systems, software to interface to the devices, frameworks and engines that run applications, and software tools for building them (Tony Parisi, 2016). Virtual Learning Environments considers how VLEs can be successfully deployed and used for effective teaching in universities and colleges. It sets out a model for effective use and seeks to provide a bridge between pedagogical approaches and the tools educators have at their disposal. Considering e-learning in its broadest context, including blended and distance learning, Virtual Leaning Environments covers the following key issues: the context within which VLEs is operating how they can be used to support different teaching open content Illustrated by case studies which highlight the different requirements and approaches of diverse institutions, Virtual Learning Environments provides advice for those choosing a VLE and encourages all those involved in the deployment of VLEs to use them more productively in order to create engaging learning experiences. It is essential reading for policy and decision makers, e-learning champions and support staff, technical developers and educators (Martin Weller, 2007, p.2). Virtual Reality technology appears to be the most dominant learning tool due to its distinctive scientific nature which can be used to model real or non-real situations by using artificial, extremely interactive 3 dimensional (3D) worlds. Virtual Reality learning environment is more useful than traditional blackboard teaching methodology where knowledge acquisition takes place due to the exchange of technical interactions with others people or systems. The use of VR in education is great techniques with different forms such as virtual teaching. One of the most critical of the limited use of VR in school education is the higher cost (Inam Ur Tehman, and others. 2014). The virtual learning environments are increasingly being seen in the education of today's world, but useless in higher education in Thailand (2010 – 2016), but in the fact of learning and teaching environments have some more problems to use virtual reality technology so we wanted to find the suitable ways for learning and teaching in higher education.

STUDY
This research study aims to study the environment of learning and teaching by using Virtual Reality (VR) technology in higher education, to inquire on an appropriate type of VR technology for learning and teaching and to study the appropriateness of using VR technology with other media.
The research methodology is a qualitative research study by using participant observation, questionnaire, and documents. A sampling frame is the group of 35 undergraduate students enrolled in the course Introduction to Technology at Kasetsart University, Bangkok Thailand. This research focused more on exploring the virtual reality learning and teaching environments defined as one in which can take the form of a computer, smart

 Copyright © International Conference on New Horizons in Education Conference (INTE)

phone, tablet, involve the students wearing virtual reality glasses or some other form of head mounted display (HMD) and input devices. This enables them to interact with events in that environment. Virtual Reality types learning and teaching each with their own level of immersion and features of this research are: Augmented Reality (AR), Headset VR, Second Life, and Kinect X Box.
The devices used for interacting with learning and teaching with augmented reality (AR) is smartphone or tablet (see Fig. 1) and when tracking with book cover (the marker) it will show 3D Model.



Fig. 1 Augmented Reality (AR)

As Samsung Gear VR (Headset VR) continues its expansion into virtual reality which has its software developed by Oculus VR. To use the Headset VR and Galaxy Note4, S5 or S6 phones are needed. Several of the apps available on these phones include Google Street View, and YouTube VR for 360 videos Orlando. (Gene Turner, 2015, P.32)



Fig. 2 Headset VR

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Second Life is a new world, accessible only through the internet and don't need to buy anything to participate, It's free to join. Second Life is not a game of winners and losers or of heroic quests. It is practical without boundaries and just like real life (Brian A. White, 2007). The second Life platform is an internet-based, multiuser, construction set that emphasizes creativity, collaboration, socializing, and self-government. Second Life is a 3D world where everyone you see is a real person and every place you visit is built by people just like you. Travel with friends to thousands of beautiful and exciting places. Millions of people have already joined Second Life. Chat for free using voice or text with folks from around the world who share your passions and interests. Dress up and design a new 3D. There are thousands of designer items to explore in Marketplace where the selection is as endless as your imagination. (Ebbe Altberg, 2016)



Fig.3 Second Life

Kinect for the Xbox brings games and entertainment to life in extraordinary new ways with no controller required. Simply step in front of the sensor and Kinect recognizes you and responds to your gestures. Best of all, it works with every Xbox 360 console.



Fig. 4 Kinect X Box

 Copyright © International Conference on New Horizons in Education Conference (INTE)

FINDINGS

The research study by observation, interview and documents about the question "Why did you choose to study with *Augmented Reality*?" The conclusion answers found that

- Easy to use, low cost
- Compatible with mobile phones or tablets.
- Display as 3D model, image, animation, audio, links.
- Interactive control over the phone screen.
- The learning environment in the classroom and outside.

Headset VR

- A virtual world.
- Realistic simulation.
- Learning interesting interactions.
- Compact, portable, available at all locations.
- Visibility around the virtual into the real event.

Second Life

- Online virtual world.
- The Largest 3D Virtual World.
- Create virtual representations called avatars.
- Users can communicate with others through chat and other text media.
- Avatars can teleport to any location in Second Life and navigate by walking or flying around the space.

Kinect X Box

- Fun, interactive learning.
- Virtual into the real event.
- Participate in several activities.
- Convenient for practicing sports, entertainment, education, medical, music. etc.
- Controlled by body movements without using a keyboard or mouse. (Motion Controller)

The environments of virtual reality technology selected

- Headset VR (34.62%)
- Kinect X Box (30.77%)
- Augmented Reality (19.23%)
- Second Life (15.38%)

VR suitability for other media

- Books / Magazines / Documents (77%)
- Brochure / Poster / Catalog (15%)
- Brand Logo / Billboard / Exhibition (8%)

The problem of virtual reality learning and teaching environments

- Teachers' lack of knowledge experience (54%)
- The learning environment by using less VLE in classroom (35%)
- Lack of equipment for teaching and learning in VLE (11%)

CONCLUSIONS

Virtual learning and teaching environments are widely spread in higher education, but quite low in Thailand (2016). The survey is to only 34.62% had attended a VR before, the problem comes mainly from the lack of teachers experience and teaching. Students learning environments must have a basic knowledge of computers, applications and can use smart devices and other accessories about VR so well. The teachers must have a good attitude towards the use of new technologies and the ability to use VR technology as well and changed from traditional learning into the new ways by enjoyable to learning in the virtual world with Headset VR, fun and interactive learning with Kinect X Box, easy to use with mobile phone and tablet with Augmented Reality and online in 3D virtual world with Second Life. VR technology can be applied to many types of media as well such as Books / Magazines / Documents / Brochure / Poster / Catalog and Brand logo / Billboard / Exhibition. The implication is that need to support the teachers are competent in the use of new technology in advanced tricks in a virtual reality environments and provide opportunities for learners.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

REFFERENCES

Brian A. White. (2007). *Second Life: A Guide to Your Virtual World*. Printed in the United Stated of America. First printing: August 2007.

Ebbe Altberg. 2016). *What is Second Life?* Retrieved from http://secondlife.com/whatis/

Inam Ur Tehman and others. (2014). *Measuring the Student's Success Rate Using a Constraint Based Multi-Modal Virtual Assembly Environment.* Department of Computer Science and IT, University of Malokand, Chakdara, Pakistan.

Martin Weller. (2007). *Virtual Learning Environments: Using, Choosing and Developing your VLE.* First Published 2007 by Routledge 2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN.

Orlando Gene Turner. (2015). *Virtual Reality and Entertaining Space*. Published by Orlando Gene Turner.

Tony Parisi (2016). *Learning Virtual Reality.* Published by O'Reilly Media, Inc, 1005 Gravenstein Highway North, Sebastopol, CA 95472.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LEARNING DATABASE THROUGH INTERACTIVE MOBILE ASSISTED INSTRUCTION

Ömür AKDEMİR
omurakdemir@gmail.com
Yıldırım Beyazıt University, TURKEY

Tunç D. MEDENİ
tuncmedeni@gmail.com
Yıldırım Beyazıt University, TURKEY

İ. Tolga MEDENİ
tolgamedeni@gmail.com
Yıldırım Beyazıt University, TURKEY

ABSTRACT
Interactive mobile devices including smartphones and tablets PCs are used widely around the globe. Although using the mobile devices to support teaching and learning is not a novel concept, there are limited number of applications available to support computer programing courses. This study is designed to reveal the students' acceptance of the mobile assisted instruction, their interest of using the mobile assisted instruction and usefulness of the mobile assisted instruction in the database management course. Quantitative and qualitative data were collected from the undergraduate students participating the database management course offered through interactive mobile assisted instruction. Results revealed that students have found using the interactive mobile assisted instruction useful to support their learning.

Keywords: mobile-learning; student perception; database management course; interactive mobile devices

INTRODUCTION

Utilizing space and time to explain and utilize social phenomena has been one of the major concerns in history. Computers and mobile devices, among others, have led society to utilize space and time in a condensed and efficient manner as a process of what Cooper (1998) calls "a case of reterritorializing space and retemporalizing time" (p. 113), the double function of space and time. At the same time, this dual function carries ontological characteristics. Although spatiality and temporality are different from each other, neither can be conceptualized in the absence of the other (Medeni, Iwatsuki, & Cook, 2008).

At the foundation of Nonaka & Takeuchi's (1995) knowledge creation and management modeling, which utilizes the continuous and dynamic interaction between tacit and explicit knowledge occuring at different societal levels, lies the Japanese philosophical concept ba (場): the context that knowledge needs in order to exist, in which it is shared, created, and utilized. This shared space / context for relationship building and knowledge creation, which could be real, virtual or mental, with physical, relational, and spiritual dimensions. Moreover, depending on their definitions, these real, virtual, mental aspects of space-time have both variations and overlaps, as virtual also have connotations related not only with technological (in the sense of information-communication technology) but also mental, imaginative, metaphorical, projective and fantasy aspects; as well as virtual and mental aspects are also part of the real life after all.

Meanwhile, the function of combination and separation of time and space is conceptualized as ma (間) in Japanese culture. Ma is the in-between-ness, or 'interval' conveying both time and space as a conceptual and perceptual unity. It is a tension between things allowing for different patterns of interpretation, a constant flow of possibilities, awaiting or undergoing transformation by the availability of physical components and potential uses. Ma conceptualizes and perceives the interval and in-between-ness that emerges with the unity of time and space, thus capturing also the spatial emphasis of ba, standing at the foundation of learning and knowledge management (Medeni, 2008). In other words, ba can be conceptualized as a creative and collaborative space for learning, which could be Real/Physical, Digital/Virtual or Mental/Intellectual; and ma as a spatio-temporal interval, in-between-ness for creative and collaborative interaction, separating and connecting as a permeable membrane and acting as a seam for interface interactions.

Mobile learning as a subset of distance and electronic learning has generated "an environment of anywhere, anytime learning" (Williams, 2009, p.4). While mobile learning is not a novel concept, and there are numerous

 Copyright © International Conference on New Horizons in Education Conference (INTE)

studies on cases for specific areas such as education of language around the globe (for instance Basoglu & Akdemir, 2010; Lu, 2008; Muhammed, 2014; Shih, Lee, Cheng, 2015; Teodorescu, 2015; Azar and Nasirib, 2014; Wu, 2014) or health (for example Chittaro and Sioni, 2014; Lin and Lin, 2016), there are limited number of studies and applications available for mobile devices to support computer courses.

In general, measuring user/student acceptance and impact of the mobile learning applications is a significant topic in the recent and current literature. For instance, Al-Fahad (2009) reports the results from a survey conducted on 186 undergraduate female students at King Saud University with respect to the attitude and perception towards the use of m-learning. It is concluded that m-learning can be applied anywhere, anytime and adopt in order to improve communication and enrich students' experiences with possible positive outcomes for student retention. Chiu et. Al. (2016) also describe an embedded mixed-method research evaluation of an m-learning training for 39 older adults from a low Internet usage area in southern Taiwan, identifying their attitudes and learning needs. Chiu et. Al. (2016) found that participants' depressive symptom scores decreased after the training. The results of the study also revealed participants' learning needs related to extended practice, usefulness, and compatibility in adopting touch-screen apps.

Furhermore, Gikas and Grant (2013)'s qualitative research study focuses on students from three universities across the US and identifies not only benefits and advantages but also frustrations and challenges with respect to m-learning. Gikas and Grant (2013) emphasized that mobile devices provide immediate feedback about course content and allow users to interact with the course content. On the other side "technical challenges, such as small keyboards, preferences for using mobile devices and computers, such as when responding to discussion board posts, and instructors' reluctance to use mobile devices" (p. 24) were highlighted by students in Gikas and Grant (2013)' study.

Meanwhile, certain studies underline more specific aspects of m-learning such as collaboration opportunities of students and multimodal content that include video in addition to text (Looi et al., 2014), perspectives of teachers as other users (Reychava and Wu, 2015), formative feedback and assessment (Hwang and Chang, 2011), and cloud-based systems for learning reflection (Lin, et. Al., 2014), among others.

Interactive mobile devices including smartphones and tablets PCs are used widely around the globe in education. Although using the mobile devices to support teaching and learning is not a novel concept, there are limited number of applications available for mobile devices to support computer courses. Accordingly, this study is designed to reveal the following research questions:

- What is the perception of students about the acceptance of the interactive mobile assisted instruction in the database management course?
- What is the perception of students' interest in using the interactive mobile assisted instruction in the database management course?
- What is the perception of students about the usefulness of the interactive mobile assisted instruction in the database management course?
- What are the advantages and disadvantages of using the interactive mobile assisted instruction in the database management course?

The Figure 1 illustrates the conceptual perspective and shapes the framework for the research on m-learning.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

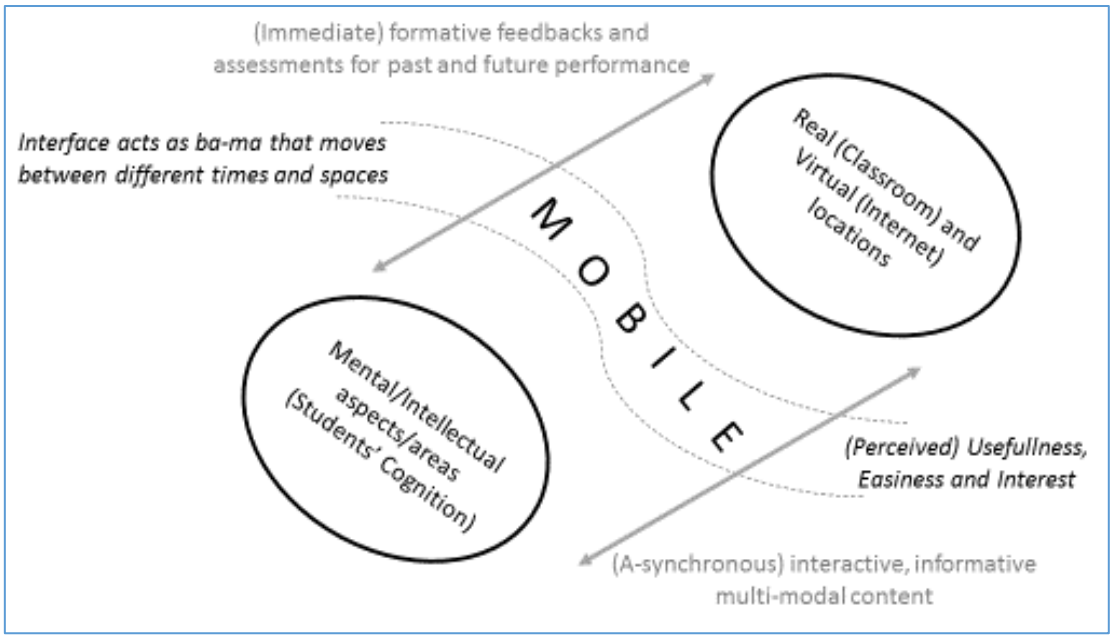


Figure 1: Conceptual Perspective and Framework on this M-Learning Research

METHOD

Instructional Context and Study Participants

The study was conducted with undergraduate students participating in the database management course of the Management Information System department in a state university located in the capital city of Turkey in the spring semester of 2016. Undergraduate students are selected to the Management Information System department based on their scores on the nationwide university entrance exam and based on their preferences. All students have to pass the English Proficiency Exam in order to pursue their education in the department since the education language of the department is English. Although 43 students registered in the database management course, only 30 sophomore students enrolling the course participated in the study voluntarily.

Research Design

The case study design is used to conduct the study. Being one of the compulsory course of the Management Information System department, the database management course was taught through interactive mobile assisted instruction. All students taking the database management course were directed to install and use the SOLOLearn (SQL), the interactive mobile assisted instruction (Figure-2) on their smart phones and other touch screen mobile devices such as Tablet PCs. Besides attending the course taught in a face-to face manner, students were asked to complete instructional modules on their interactive mobile devices. Mini computers like mobile devices are used in education for many purposes including (but not limited to) presenting the course contents and assessing student learning. The interactive mobile assisted instruction has course content presented in a text format with pictures and in a video format (Figure-3). The modules have interactive exercises which provides informative feedback in addition to the course content and they have to be completed correctly in order to proceed. The modules have to be completed consecutively in order to complete the instruction. Module quizzes (Figure-4,5) containing multiple choice questions, multiple selection questions, fill-in-the-blank questions, drag and drop questions, and sequencing questions are also available at the end of each module. All the questions in the test module have to be answered correctly in order to complete the test module.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

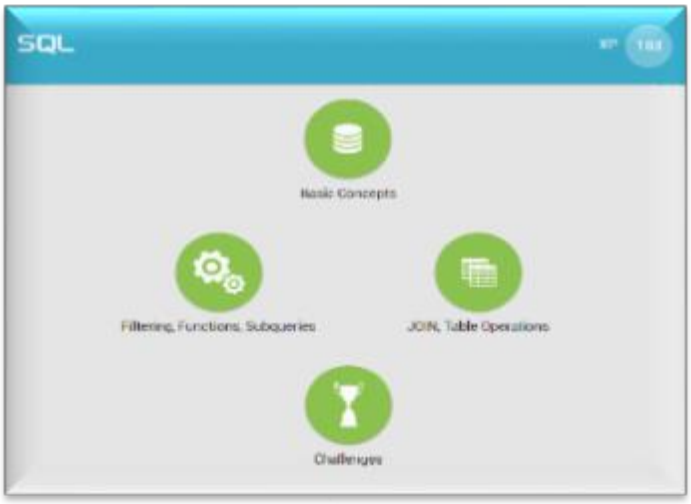


Figure 2: The Interactive Mobile Assisted Instruction



Figure 3: The Course Content Presented in a Text, Picture and Video Format

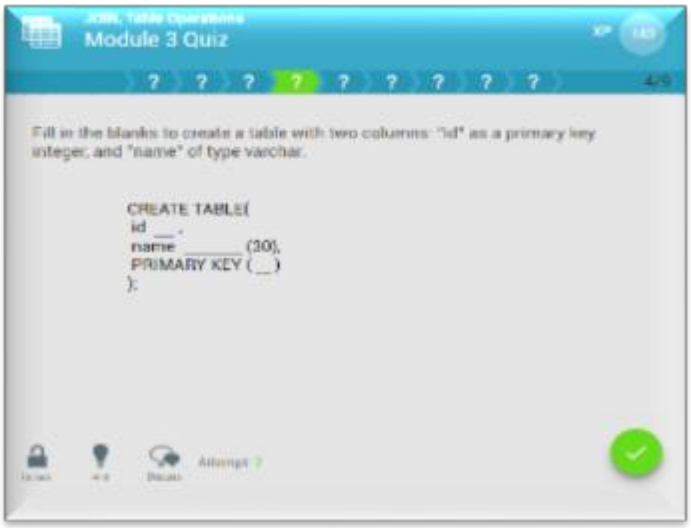


Figure 4: The Module Quiz (Fill-in-the-Blanks)

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Figure 5: The Module Quiz (Drag and drop)

Data Collection Instruments

Quantitative and qualitative data were collected to investigate the research questions. The data were collected at the end of the course through the online survey. The online survey was used to collect the quantitative data to measure the usefulness of the mobile assisted instruction, (Hwang, Wu, Ke (2011)), the students' interest in using the mobile assisted instruction, (Hwang, Wu, Ke (2011) and the acceptance of the mobile assisted instruction, (Lin & Lin (2016). The Cronbach's alpha values of the three dimensions are 0.87, 0.85 and 0.71 respectively. The survey questions were adopted from the Lin and Lin (2016) and Hwang, Wu and Ke (2011)'s studies. The participants of the study responded survey questions on a 6-point Likert-type scale ranging from strongly disagree (1) to strongly agree (6). The open-ended questions integrated into the online survey were used to collect qualitative data to learn about the advantages and disadvantages of using the interactive mobile assisted instruction. Besides data obtained from open-ended questions in the survey, field notes and pictures are used to illuminate the case.

Data Analysis

Quantitative and qualitative data were collected in the study. The descriptive statistic was used for the analysis of the collected quantitative data. Response frequencies for each question in the survey were calculated and presented in tables. The qualitative data were also analyzed descriptively. Participants' responses showing similarities in the open-ended questions were grouped and presented in an organized manner. Pictures were obtained from the interactive mobile assisted instruction interface and from the use of students were also used in qualitative analysis.

RESULTS

The Perception of Students About the Acceptance of the Mobile Assisted Instruction in The Database Management Course

The first research question investigated the perception of students about the acceptance of the mobile assisted instruction in the database management course. The results of the study revealed that perception of students about the acceptance of the mobile assisted instruction in the database management course is above the average (Table 1). However, it is important to point out that students' response to the item measuring students' perception about the feedback provided by the learning system to assist them in correcting some misconceptions is not as high as other responses to the items measuring students' perception about the acceptance of the mobile assisted instruction.

Table 1: The Perception of Students About the Acceptance of the Mobile Assisted Instruction

Questions	%					
	1	2	3	4	5	6

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Using the feedback provided by the learning system enables me to concentrate on learning	3	3	3	17	37	37
I have a deeper understanding of the learning content via the feedback provided by the learning system.	3	0	10	17	47	23
Using this system in learning enables me to think differently about the learning content.	3	10	3	17	43	23
This way of learning helps me discover my personal learning problems.	3	3	13	13	40	27
The feedback provided by the learning system can assist me in correcting some misconceptions.	3	3	0	37	30	27
The feedback offered by this learning system enables me to understand the parts I have not learned well.	7	7	13	20	27	27
The functions provided by the system are beneficial to my learning achievement	3	3	3	20	40	30

The Perception of Students' Interest in Using the Interactive Mobile Assisted Instruction in The Database Management Course

The second research question investigated the perception of students' interest in using the interactive mobile assisted instruction in the database management course. The finding of the study indicated that students' interest in using the mobile application in the database management course is positive (Table 2). It is important to point out that half of the students selected the strongly agree option for the item asking if they would like to learn in this way for other courses.

Table 2: The Perception of Students' Interest in Using the Interactive Mobile Assisted Instruction

Questions	**%**					
	1	**2**	**3**	**4**	**5**	**6**
During the learning activity, I have carefully browsed the learning materials provided by the system and engaged myself in the learning tasks.	7	0	10	13	40	30
The way of learning is interesting and challenging.	10	0	7	20	40	23
I like this learning activity.	10	0	3	17	27	43
I hope to learn in this way for other courses.	3	3	10	20	13	50
I would like to use this learning system in the future.	10	3	7	13	33	33
I would like to recommend the learning system to peers.	7	3	10	23	23	33

The Perception of Students About the Usefulness of the Interactive Mobile Assisted Instruction in The Database Management Course

The third research question investigated the perception of students about the usefulness of the interactive mobile assisted instruction in the database management course. Identical to the responses of students to the previous questions, results of the study showed that students' perception about the usefulness of the interactive mobile assisted instruction in the database management course is positive (Table 3). students selected strongly agree option for more than half of the questions about the usefulness of the interactive mobile assisted instruction.

Table 3: The Perception of Students About the Usefulness of the Interactive Mobile Assisted Instruction

Questions	**%**					
	1	**2**	**3**	**4**	**5**	**6**
It is easy to operate the smartphone interfaces of the mobile learning system	3	0	3	33	20	40
It is easy to read information on the smartphone screens of the mobile learning system	3	0	7	30	23	37
The response speed of the mobile learning system is well-matched with the learning progress on the site	3	3	10	27	27	30
I think that smartphone operation of the personal learning system is easy	3	0	7	13	43	33
The learning functions provided by the mobile learning system can benefit my learning achievement	3	0	7	20	33	37

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The diagnosis of the mobile learning system is quite clear and effectively assists me to understand the learning results	3	0	7	23	37	30
Combining the mobile learning system and the real-world contexts is helpful to learning	3	3	7	10	43	33

The Advantages and Disadvantages of Using the Interactive Mobile Assisted Instruction in The Database Management Course

The last research question investigated the advantages and disadvantages of using the interactive mobile assisted instruction in the database management course. The major advantages of using the mobile assisted instruction in the database management course are listed as the time and distance flexibility of the mobile assisted instruction. One student indicated that

"Mobile devices are always with us and we can use SoloLearn when we want."

Many participating students emphasized the usefulness and benefits using of the mobile assisted instruction. One student said that "It is very benefical." It is also important to note that many students would like to use similar interactive mobile assisted instructions in other computer programing courses.

On the other hand, the vast majority of the students did not indicate any disadvantage of using of the mobile assisted instruction. Only two students mentioned about the disadvantages. One student found the questions in the instruction easy and recommended that questions in the mobile assisted instruction should be more difficult. Another student complained about the small screen size of the mobile devices to follow the instruction.

DISCUSSION, CONCLUSION AND FUTURE WORK

Although limited in scale, this study provides information on the students' acceptance of and interest in the mobile assisted instruction, and its usefulness in the database management course. Accordingly, information on the study context, results from the conducted survey, and suggestions for further work is provided.

In accordance with the original works from which the survey questions were derived (Hwang, Wu, Ke (2011) and Lin and Lin (2016)), the descriptive results are generally positive for the acceptance, usefulness and students' interest in using the interactive mobile assisted instruction. The findings also specifically confirm other contributions from the existing literature such as the ubiquity advantages (Al-Fahad (2009), Gikas and Grant (2013), among others).

One student mentioned about the small screen size of the mobile devices as a disadvantage of the interactive mobile assisted instruction which could be related to the devices owned by the student. As the findings on disadvantages show, for instance, the device screens could be too small to read effectively, which might be considered a significant impediment, which is also in accordance with Gikas and Grant (2013) findings in terms of possible technical challenges. It is also intriguing to find that course questions' being very easy is considered as a disadvantage. Accordingly, it could also be possible that certain students might have found the instruction very effective to learn the course content.

It became a reality that interactive mobile devices are independent part of young generation. Especially accessing the World Wide Web from different location using the mobile devices have opened a broad avenue for educators. This study investigated the students' acceptance of the mobile assisted instruction, their interest of using the mobile assisted instruction and usefulness of the mobile assisted instruction in the database management course that many learners usually require extra study time and opportunity to learn concepts. Although limited in scale, this study demonstrated that students found the interactive mobile assisted instruction useful and beneficial for their learning in the database management course. It appears that the number of interactive mobile assisted instruction will increase as the demand continues to grow in interactive mobile assisted instruction for computer courses.

In accordance with the proposed conceptual perspective and framework, this research could be furthered with a focus on getting a deeper understanding of feedback mechanisms. Specific questions can be prepared in order to distinguish feedbacks of formative and summative nature, as well as feedbacks on not only past but also future performance. Further work could also be useful to identify and address some of the disadvantages to improve the system.

ACKNOWLEDGMENT
This project is supported by the Yıldırım Beyazıt University (Project Code: 3424)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

REFERENCES

Akdemir, O., & Oguz, A. (2008). Computer-based testing: An alternative for the assessment of Turkish undergraduate students. Computers & Education, 51(3), 1198-1204.

Al-Fahad, F. N. (2009). Students' attitudes and perceptions towards the effectiveness of mobile learning in King Saud University, Saudi Arabia. TOJET: The Turkish Online Journal of Educational Technology, 8(2).

Azar, A. S., & Nasiri, H. (2014). Learners' attitudes toward the effectiveness of mobile assisted language learning (mall) in L2 listening comprehension. Procedia-Social and Behavioral Sciences, 98, 1836-1843.

Basoglu, E. B., & Akdemir, Ö. (2010). A comparison of undergraduate students' English vocabulary learning: Using mobile phones and flash cards. TOJET: The Turkish Online Journal of Educational Technology, 9(3).

Chiu, C. J., Hu, Y. H., Lin, D. C., Chang, F. Y., Chang, C. S., & Lai, C. F. (2016). The attitudes, impact, and learning needs of older adults using apps on touchscreen mobile devices: Results from a pilot study. Computers in Human Behavior, 63, 189-197.

Chittaro, L., & Sioni, R. (2014). Evaluating mobile apps for breathing training: The effectiveness of visualization. Computers in Human Behavior, 40, 56-63.

Cooper, R. (1998). Assemblage Notes. In Chia, R. C. H. (Ed.), Organization Worlds: Exploring in Technology and Organization with Robert Cooper (pp. 108–129). London: Routledge.

Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. The Internet and Higher Education, 19, 18-26.

Hwang, G. J., Wu, P. H., & Ke, H. R. (2011). An interactive concept map approach to supporting mobile learning activities for natural science courses. Computers & Education, 57(4), 2272-2280.

Hwang, G. J., & Chang, H. F. (2011). A formative assessment-based mobile learning approach to improving the learning attitudes and achievements of students. Computers & Education, 56(4), 1023-1031.

Lin, Y. T., & Lin, Y. C. (2016). Effects of mental process integrated nursing training using mobile device on students' cognitive load, learning attitudes, acceptance, and achievements. Computers in Human Behavior, 55, 1213-1221.

Lin, Y. T., Wen, M. L., Jou, M., & Wu, D. W. (2014). A cloud-based learning environment for developing student reflection abilities. Computers in Human Behavior, 32, 244-252.

Looi, C. K., Sun, D., Wu, L., Seow, P., Chia, G., Wong, L. H., ... & Norris, C. (2014). Implementing mobile learning curricula in a grade level: Empirical study of learning effectiveness at scale. Computers & Education, 77, 101-115.

Lu, M. (2008). Effectiveness of vocabulary learning via mobile phone. Journal of computer assisted learning, 24(6), 515-525.

Medeni, T. (2008) Educating Knowledge Managers for Global Knowledge Economy: An Action Research into IMPM. Dissertion (Doctoral Thesis) JAIST, Japan.

Medeni, T., Iwatsuki, S., & Cook, S. (2008). Reflective Ba and Refractive Ma in Cross-Cultural Learning. Eds. Putnik, GD and Cunha, MM Encyclopedia of Networked and Virtual Organizations, Idea Group References.

Muhammed, A. A. (2014). The impact of mobiles on language learning on the part of English Foreign Language (EFL) university students. Procedia-Social and Behavioral Sciences, 136, 104-108.

Nonaka, I., & Takeuchi, H. (1995). The knowledge-creating company: How Japanese companies create the dynamics of innovation. Oxford university press.

Reychav, I., & Wu, D. (2015). Mobile collaborative learning: the role of individual learning in groups through text and video content delivery in tablets. Computers in Human Behavior, 50, 520-534.

Shih, R. C., Lee, C., & Cheng, T. F. (2015). Effects of English spelling learning experience through a mobile LINE App for college students. Procedia-Social and Behavioral Sciences, 174, 2634-2638.

Teodorescu, A. (2015). Mobile Learning and its Impact on Business English Learning. Procedia-Social and Behavioral Sciences, 180, 1535-1540.

Williams, P.W. (2009) Assessing Mobile Learning Effectiveness and Acceptance. A dissertation submitted to The Faculty of The School of Business of the George Washington University in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Wu, Q. (2014). Learning ESL vocabulary with smartphones. Procedia-Social and Behavioral Sciences, 143, 302-307.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LEARNING LEADERSHIP OF THAI SCHOOL PRINCIPALS: A GROUNDED THEORY STUDY

Kanokorn, SOMPRACH
Khon Kaen University, Faculty of Education, Thailand
kanoklin@kku.ac.th

Keow Ngang TANG
International College, Khon Kaen University, Thailand
tangng@ kku.ac.th

ABSTRACT
Researchers aimed to utilize grounded theory as a systematic methodology involving the construction of learning leadership theory through the analysis of data. This study is going to begin with the collection of qualitative data. A total of six outstanding principals from three of each educational level namely primary and secondary school respectively were selected as respondents. As interview data collected from these six respondents and being interviewed, repeated ideas, concepts or attributes become apparent, researchers coded the data into concepts and then into attributes of learning leadership. Findings of this study revealed that learning leadership of school principals consist of 10 attributes. These attributes including i) creativity and courage, ii) powerful environment for learning, iii) flexibility, iv) integration, v) technologies application, vi) team learning, vii) self-directed learning, viii) transformation process and tailor made, ix) sufficiency economy philosophy, and x) research. These learning leadership attributes of principals would contribute to improve the efficiency of management, teaching, and learning of school community thus develop a learning community. This expected outcome is congruent with the National Education Plan of Thailand (2009-2016).
Keywords: Learning leadership, grounded theory, learning leadership characteristics

INTRODUCTION

According to Louis and Leithwood (2010), education is widely held to be crucial for the survival and success of individuals and countries in the emerging global environment. They further justified that although leadership is widely thought to be a powerful force for school effectiveness and student learning, this popular belief needs to be justified by empirical evidence. As a result a school principal not only needs to be competent, knowledgeable, creative to develop learning innovations and extending learning potential of organizational members but also must possess good occupational ethics (Runjaroen, 2014). Therefore successful leadership and adaptation feed on the opportunity to learn. A good leader must be learner who use the environment around them to learn and are self-directed and reflective learners. This is further supported by Somprach (2012). Somprach indicated that leadership is a vital factor in job reform for organizational effective and is an important mechanism affecting the process, organizational structure, patterns, social interactions, beliefs, values, attitudes, and working behaviors.

Learning leadership is so influential of direction and outcomes whether at the micro level of schools and learning environments, or of extensive systems. As it is influential, and because of the crucial importance of education, the nature and formation of leadership spontaneously is also fundamental for anyone concerned with shaping practice and policy (CERI Board Report, 2013). Learning is the core business of education and so this is the dominant form and business of leadership. Learning leadership is focused on creating and sustaining environment that are conducive to good learning. Innovation is an essential part of the exercise of learning leadership in setting new directions and designing learning environment.

In addition, learning leadership is about engaging in the design, implementation and sustainability of powerful innovative learning environments. Besides, learning leadership puts creating the conditions for 21st century learning and teaching at the core of leadership practice. Learning leadership also establishes creativity and often courage. Finally learning leadership models will cultivate 21st century professionalism. Through professional learning, inquiry and self-evaluation, learning leaders are themselves high-level knowledge personnel. By engaging in appropriate professional learning and creating conditions for others to do the same, they demonstrate and extent a similar professionalism throughout their broader communities. Professional learning merges theory and practice, with opportunities for practical experimentation in teaching and organization, and learning from these experiences and through feedback (CERI Board Report, 2013). On this line of reasoning, researchers are interested in the future of education and learning as well as leadership on its enhancement and failures by utilizing grounded theory to blend the theory and practice.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

STATEMENT OF PROBLEM

Kouzes and Posner (2016) suggested five fundamental steps to becoming an exemplary leader namely 'believe you can', 'aspire to excel', 'challenge yourself', 'engage support' and 'practice deliberately'. Kouzes and Posner further argued that good leadership is a habit, which must be reinforced every day. They also emphasized the need for leaders to be constantly learning. Additionally good leaders are really the product of a never-ending process of skill and character development (Seijts, 2013). Seijts further clarified that there is no question that some remarkable leaders enter the school organization with the confidence it takes to make difficult decisions along with a desire to lead and the natural ability to attract followers. On the other hand, other leaders are nurtured, including many that succeed despite being thrust, often reluctantly, into leadership roles. Leaders from both camps have been known to excel of fail to live up to their potential. It can be concluded that good leaders have to develop through constant learning about their personalities is the major concern. School organizations with a culture of leadership are fanatical about making learning a priority and providing a variety of systematic opportunities for learning is a necessity (Kouzes & Posner, 2016). However to what extent this learning attributes are possessed by school principals is urgently needed to be investigated.

Results from the first TALIS survey (OECD, 2009) showed that majority of the surveyed countries were either above the international average on measures of both administrative and instructional leadership (Bulgaria, Turkey, Brazil, Mexico, Italy and Hungary) or below the international average on both measures (Austria, Lithuania, Korea, Flemish Belgium, Spain, Australia, Estonia, Iceland and Denmark). Few were high on the TALIS instructional leadership measure but low on administrative leadership (Malta and Poland) or high on administrative and low on instruction (Malaysia, Ireland and Norway). This shows that there were weak or no clear associations between such orientations to leadership and a variety of measures of teacher beliefs, teaching practices, and classroom climate.

LITERATURE REVIEWS

In this section, researchers review the concepts of learning leadership, qualitative research concept for construction of the grounded theory, data analysis. Rather than providing an extensive discussion of each study on specific concepts, researchers will identify the major findings and the gaps researchers see that characterize research on particular learning leadership attributes. Consequently, researchers present a conceptual framework at the end of this section.

Concepts of learning leadership

According to Kohlreiser (2013), one of the most important aspects of shifting to the paradigm of learning leadership is intentionally using soft, interpersonal skills to build a culture of performance, trust and collaboration. Successful leaders pay attention to developing leaders in the soft skills needed to effectively lead employees in a changing environment which encompasses the following characteristics namely team learning, communication, technology, innovative learning, and flexibility. Antonacopoulou and Bento (2003) originally conceptualized these components namely attentiveness to learning; shared learning; integration; flexibility, and higher order thinking as a mode of leadership. They proposed the idea of learning leadership and sought to promote the intimate interrelationship between learning and leadership. They further encouraged through this perspective, recognition of judgments made as central to learning leadership particularly because they guide action.

Learning leadership as a term is not commonly used but it emphasizes how important leading and designing for learning is, yet to distinguish it from related concepts such as team learning, technology, innovative learning, environment, evaluation, collaboration, research, creativity, and vision (Tubin, 2013). Salavert's (2013) findings on learning leadership behaviors are comprised of shared learning, team learning, innovative learning, and instructional development that are directly connected to improved student outcomes underscore the importance of promoting, supporting, and participating in professional learning by setting strategies for instruction and designing learning models. In addition, Halbert and Kaser (2013) included a full description of this learning leadership approach with examples British Columbia schools, made conclusion of key characteristics on 21st century learning leaders is the relentless focus on the experiences of the learners to frame and inform the process.

Based on the findings of past researches above, researchers conclude that the characteristics or attributes of learning leadership are comprised of creativity, powerful environment, integration, use of technologies for action and instruction, self-directed learning, team learning, and research. On this line of reasoning, effective learning leadership depends on these factors such as leadership characteristics, leader behaviors, direct and indirect related situations, efficient and effective communication, and characteristics or attributes of organizational members (Somprach, 2012).

Qualitative research concept for construction of the grounded theory

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Grounded theory is comprised of a set of concepts of real phenomena. The concepts are connected in the form of presentations that show relationships in different patterns. Strauss and Corbin (1998) stated that theory is constructed by considering the relationships that should exist or should be between the concepts or a set of concepts if using this research method. The constructed theory is classified as a middle range theory which is used to explain the purposive phenomenon. In short, it is a theory used to explain a phenomenon in a limited scope (Charmaz, 2006).

Grounded theory is a systematic methodology in the social sciences involving the construction of theory through the analysis of data (Faggiolani, 2011). Grounded theory is a general methodology, a way of thinking about and conceptualizing data. As researchers review the data collected, repeated ideas, concepts or elements become apparent, and are tagged with codes, which have been extracted from the data. As more data are collected and as data are re-reviewed, codes can be grouped into concepts, and then into categories. These categories may become the basis for new theory. Rationale of the theory to be grounded is that this theory helps close the gap between theory and empirical research.

Data analysis and conceptual framework

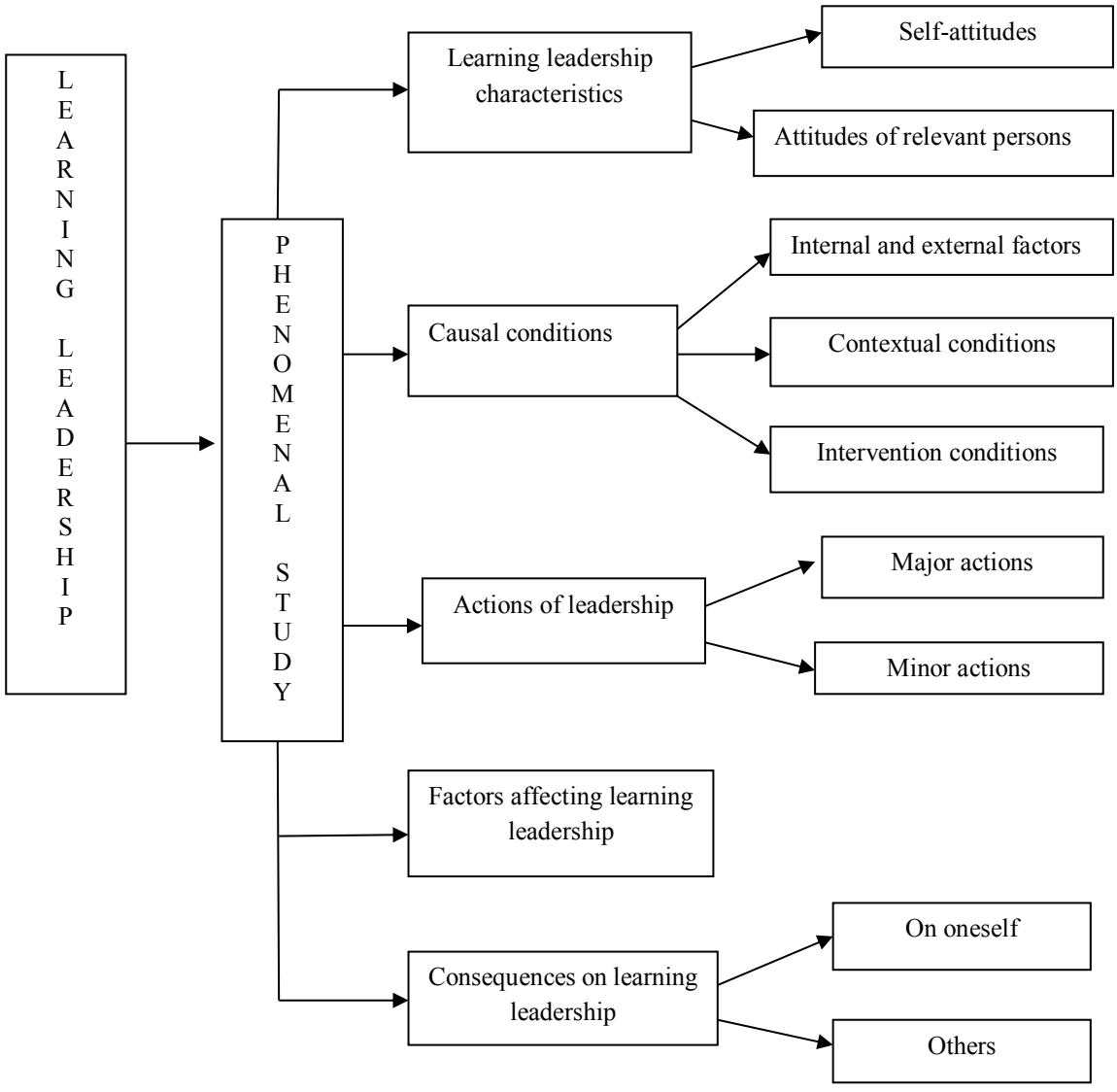


Figure 1: Research Conceptual Framework

According to Glaser (1992), the strategy of grounded theory is to take the interpretation of meaning in social interaction on board and study the interrelationship between meaning in the perception of the subjects and their action. Therefore, through the meaning of symbols, human beings interpret their world and the actors who interact with them, while grounded theory translates and discovers new understandings of human beings' behaviors that

 Copyright © International Conference on New Horizons in Education Conference (INTE)

are generated from the meaning of symbols. Symbolic interactionism is considered to be one of the most important theories to have influenced grounded theory, according to its understanding the world by interpreting human interaction, which occurs through the use of symbols, such as language (Aldiabat & Navenec, 2011). Researchers' task is to gain knowledge about the socially-shared meaning that forms the behaviors and the reality of the participants being studied. The variables in this study and stages of analysis are elucidated in Figure 1.

OBJECTIVES AND SCOPE OF RESEARCH

This phenomenal study is aimed to construct a grounded theory and determine the learning leadership which consists of the following issues namely characteristics and attributes of learning leadership; causal conditions behind learning leadership; actions and factors affecting actions of learning leadership, and consequences of learning leadership. The conclusion which is drawn from the phenomenal study will lead to theoretical conclusion. Finally researchers aimed to determine the theoretical conclusion that explaining the phenomenon related to learning leadership of school principals according to qualitative method which would lead to the grounded theory construction. The views, perspectives, and definitions of relevant informants towards the phenomena are investigated and the concept is constructed by data analysis before the vision and conceptual framework are drawn and connections among those concepts are identified. Result of this research will be theoretical generalization based on grounded theory research method (Strauss & Corbin, 2011).

METHODOLOGY

Participants

The method used to facilitate this research is grounded theory. Participants involved in this study comprised of 60 informants. The group of informants included 10 school principals, eight school administrative committees, eight heads of learning subjects, seven school committees, 12 parents, six educational supervisor, and nine school trip groups to six research schools, giving a total of 60 informants. The selection of these persons was based on their experiences in learning leadership situations, and who could be assumed to be willing and capable of relating their experiences. Following the methodological recommendations of grounded theory tradition, researchers wanted to select participants with varying experiences. The group selected therefore represents the entire spectrum, ranging school principal to parent. All suggested individuals accepted participation in the study.

Data collection devices

The collection of data consisted of in-depth interviews with each of the study participants. In an attempt to stimulate participants to come up with additional points of views, follow-up focus group interviews were also conducted at the six research schools. All interviews were conducted by the researchers in 2015, and they were based on the themes provided. In addition, participative observation was carried out for data compilation attentively and cautiously. Participative observation includes schools, environment that facilitating learning, curricular and extra-curricular activities, administration and actions of leadership, school society and organizational cultures. A checklist was used to collect the observation data. Documentary analysis was utilized which would provide images of the studied phenomenon, the environment or context, including other evidences both as the primary and secondary data such as standard evaluation reports, external quality assurance reports, action plans, and minutes of meetings, etc.

Data analysis

The interviews were transcribed verbatim and consecutively analyzed according to the constant comparative method (Starrin, Dahlgren, & Styrborn, 1997). Following these guidelines, the first step of the analysis was open coding. Data were examined line by line in order to identify the participants' descriptions of thought patterns, feelings, and actions related to the themes mentioned in the interviews. The codes derived were formulated in words closely resembling those used by the participants. This was an attempt to maintain the semantics of the data. Codes were compared to verify their descriptive content and to confirm that they were grounded in the data. As a second step, the codes were sorted into categories. This was done by constant comparisons between categories; and between categories, codes, and interview protocols. The third step consisted of fitting together the categories using the constant comparative method. This resulted in a model of learning leadership and the underlying circumstances.

Data collected at later stages in the study such as participative observation and documentary analysis were used to add, elaborate, and saturate codes and categories. In practice, the steps of analysis were not strictly sequential. Rather, researchers moved forward and backward constantly reexamining data, codes, categories, and the whole model. In the following section, the whole model will be described first, followed by a presentation of its parts. The reason for this order is that the parts receive their meaning when understood in relation to the whole model.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

FINDINGS

A model of learning leadership

Learning leadership can be understood against the background of a number of interacting factors. Interplay between the characteristic and attributes of leader and the organization shape everyday leadership. These circumstances in combination affect the adaptation that is to take place to meet the demands of a learning situation and the leadership in such a situation (fig. 2).

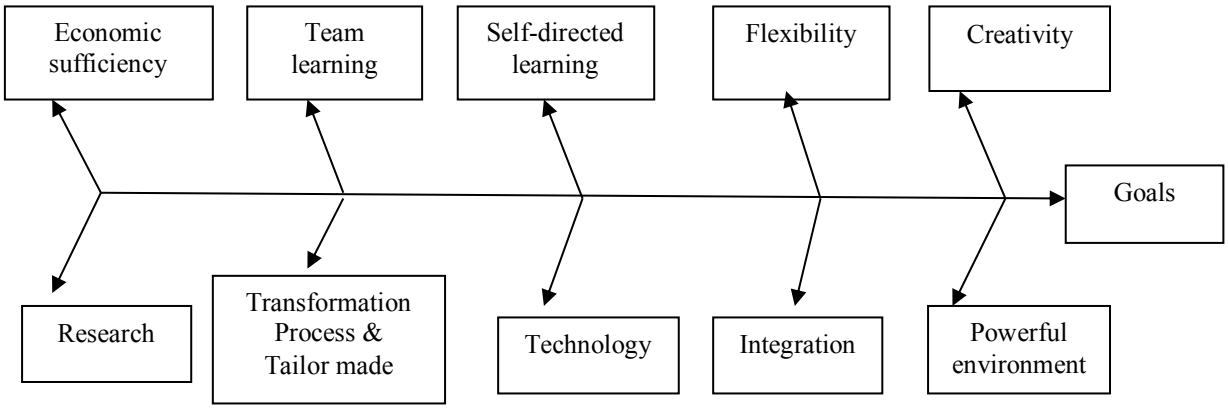


Figure 2: Model of learning leadership and the underlying circumstances

They were 10 characteristics of learning leaders could be noticed in the interview responses. The characteristics include methods, processes, practices, and work plans with reference to administration and management of school principals. This begins with high order thinking or creativity as the first priority, followed by provision of the environment that supports learning and innovation. Other characteristics which are common among the principals are self-directed learning, research and development, application of technology in implementation and instruction, team learning, integration of various sciences, strategies that lead to success, flexibility, quick response to changes of the organizations and personnel. In addition the six school principals possess the characteristics of sufficiency, patience, ethics, leadership in changes, transformational process that suit themselves and the context (tailor made) through designing the school learning model and traits of graduated students.

Causal conditions behind learning leadership

In order to find the causal conditions behind learning leadership, researchers directed the study towards the background, the route towards this position, and creation of administrative identities that resulting from experiences and learning. Firstly, personal backgrounds could contribute to learning leadership. Generally personal background would be started from their family and could lead towards infinite learning until completing their highest academic achievement like a doctoral degree. Secondly, inspiration was the internal force resulting in the principal's acquiring the self-leadership and authentic traits. Hence principals who acquired competencies would become their own identities that correlate to the means of organizational achievement. In addition, principals who have faith in teaching profession and strong determination to search knowledge regularly, critical and synthetic thinking, and futuristic thinking would find means for their occupational development. This condition would provide experiment and courage of risk taking as other inspirations of principals which in turns enable them to take challenges by exercising their own competencies.

This is followed by creation of knowledge which enables principals to create innovations. School principals need to think differently because traditional thinking neither solve problems nor lead to effective development. School principals need to possess knowledge, skills and good attitudes that enable them to integrate relevant sciences to create work, knowledge, and school innovations. Finally, social drive that is social expectation would bring the quality of education towards progress and raise the students' potentialities.

Actions and factors affecting actions of learning leadership

Rapid changes of economy, social, and technology would lead to complexity and problems in school which in turn require school principals with visions, creative competencies, and capacity in integration, and use of modern technology. As a result, school principals should be flexible, encourage team learning in order to develop the learning community. In this era, educational crisis covers the following aspects namely educational quality, equity of rights in education, and impartiality in receiving education, competitive competency, development of information technology and communication to access to learning resources. School principals need to possess

 Copyright © International Conference on New Horizons in Education Conference (INTE)

learning leadership characteristics, profound knowledge, cooperate with professional organizations to strengthen the school administration in order to overcome the problems. High quality instruction, development of multiple and modern learning resources, curricular that correlate to real situations, teachers' professional development are a few solutions that principals need to integrate and utilize in an appropriate changing process of the school context. In short school principals should possess their identities, design learning models, implement strategies that directing to goal achievement.

The 21st century knowledge and skills with the following attributes like information and truths are searchable, accessible, free of charge or at low cost, rapid and continuous social and knowledge changes, and complex and unstable society was the factor that affecting actions of learning leadership. Therefore school principals have to be flexible and responsive to changes effectively. The change of instructions and effective and efficient teaching and learning methods are required in this new era. Other than that, the expectation from the national policy of primary and secondary education board in constructing and developing the schools to become learning schools in the society which needs appropriate leadership that supports students' potentiality development in this era.

Findings revealed that school principals have to perform these 11 actions of learning leadership as follows: i) Build common visions and emphasize learning of everyone; ii) Search factors that lead to success of each target; iii) Build and develop relationship with, and trust among people inside and outside school; iv) Determine methods by utilizing high order thinking, creative, critical and strategic thinking in order to work for goals; v) Design learning by backward mapping the school and the required traits of graduated students; vi) Use tailor-made process for changing towards the target appropriate to the school context; vii) Build more networking; viii) Turn the library into a learning center; ix) Build identity and good example; x) Perform research for development of work, and xi) Apply good values and try to build organizational cultures such as emphasis on achievement, administration on true and present databases, team working and sufficiency, self-development, development of members and students to become a learning person. Finally, school principals should use these five new techniques in their administration as follow: i) Systematic and conceptual theory; ii) Malcolm Baldridge National Quality Award (MBNQA); iii) Balance Score Card (BSC); iv) Supply Chain, and v) Strategic management.

Consequences from learning leadership of school principals

Consequences from learning leadership were divided into five aspects namely consequences on school principals, school, learners and education qualities, perception of community and society, and construction of new academic and professional bodies of knowledge. Consequences on school principals cover reputation and honor, self-pride, and professional administrator. On the other hand, consequences on school cover efficiency of administration and management as well as efficiency of teachers' instructions and learning of school members.

DISCUSSION AND CONCLUSION

From the ideas of relevant informants, it can be concluded that learning leadership is part of innovation learning creation. The school principals should understand the strengths and weaknesses of his team, and be flexible in building new methods that challenging learning abilities. Communication for learning among the team should take place on everyday basis. Conflicts among team members must be managed and they should be trained to develop their potentialities as well. This correlates to the concept of OECD and Owen studied learning leadership in South Australia (2012). They suggested that the present learning leadership will truly enhance the learning skills of learners in the 21st century.

This study shows that learning leadership can be understood against the characteristic of school principals, causal condition behind learning leadership, actions of learning leadership, and the consequences occurred in the form of efficiency in administration and instruction of teachers which lead to educational qualities while new bodies of knowledge are created academically and professionally. Since the purpose was to obtain in-depth knowledge and understanding of learning leadership, the information obtained has not been gathered with the intention to permit a complete analysis of these underlying circumstances per se. The significance of building learning leadership on an everyday basis for the outcome of command during learning situation however was not predicted.

The main value of this study should lie in the data-based map of learning leadership, with the codes and categories that make up learning leadership characteristics as well as the codes and categories in the characteristics in actions and consequences. Benefits could also lie in the opportunity to connect the study to existing theoretical formulations, which our model construction gives. In our proposed model, learning leadership on an everyday basis is regarded as a product of interaction between school principal and organizational characteristics. It should be mentioned that there will probably be an effect also in the reverse direction; In other words, ordinary, day-to-day learning leadership will have repercussions on school principals as individuals and on organizations.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

On essential findings of this research is that additional research needs to be carried out to differentiate the concept of learning leadership. This additional research will enable us to provide more precise descriptions of learning leadership for different types of particular learning situations. In constructing our current model researchers were limited to data obtained from a selected group of principals, educational administrators, parents and so on. It should also be emphasized that the concepts derived from the data may be of a sensitizing rather than of a definite character. In the general terms of Glaser and Strauss (1967), partial testing of theory, when necessary is left to more rigorous approaches.

REFERENCES

Aldiabat, Khaldoun., & Navenec, Carole-Lynne. (2011). Philosophical roots of classical grounded theory: Its foundations in symbolic interactionism. *The Qualitative Report* 16: 1063-1080. Retrieved 26 June 2016.

Antonacopoulou, E., & Bento, R. (2003). *Methods of learning leadership taught and experiential*. Manchester, UK: Research Graduate, University of Manchester.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: SAGE.

CERI Board Report. (2013). *The innovative learning environments: Learning leadership*. Centre for Educational Research and Innovation (CERI) Governing Board.

Faggiolani, C. (2011). Perceived identity: Applying grounded theory in libraries. *JLIS.it (University of Florence)* 2(1). Doi: 10.4403/ijlis.it-4592. Retrieved 26 June 2016.

Glaser, B. (1992). The constant comparative method of qualitative analysis. *Social problems*, 12(4), 445, 436.

Glaser, B., & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York, US: Aldine Publishing Company.

Halbert, J., & Kaser, L. (2013). *Innovative learning environment: Developing leadership in British Columbia*. In Leadership for 21st Century Learning: OECD.

Kohlreiser, G. (2013). *Learning leadership*. IMD Real World Real Learning.

Kouzes, J.M., & Posner, B.Z. (2016). *Learning leadership: The five fundamental of becoming an exemplary leader*. New Jersey: Wiley

Louis, K.S., & Leithwood, K. (2010). Learning from leadership project: Investigating the links to improved student learning. *Final report of research findings*. Minnesota, US: University of Minnesota.

OECD (2009). *Creating effective teaching and learning environments: First results from TALIS*. Paris, French: OECD Publishing.

Owen, S. (2012). 'Fertile questions', 'multi-age groupings', 'campfires' and 'master classes' for specialist skill-building: Innovative Learning Environment and support professional learning or 'teacher engagers' within South Australian and international contexts. Peer-reviewed paper presented at World Education Research Association (WERA) Focal meeting within Australian Association for Research in Education (AARE) conference, 2-6 December: University of Sydney, Australia.

Runchareon, T. (2014). *Professional practice on educational administration in the reform era* (7th ed.). Bangkok: Kaofang.

Salavert, R. (2013). *Approaches to learning leadership development in different school system*. In Leadership for 21st Century Learning: OECD.

Seijts, G. (2013). Good leaders never stop learning. *Ivey Business Journal* (July/August). Retrieved from http://iveybusinessjournal.com/publication/good-leaders-never-stop-learning/

Somprach, K. (2012). *Leadership: Theory, approaches and practice*. Khon Kaen, Thailand: Khon Kaen Univeristy.

Starrin, B., Dahlgren, L., & Styrborn, S. (1997). Along the path of discovery: Qualitative methods and grounded theory. Lund, Sweden: Studentlitteratur.

Strauss, A., & Corbin, J. (2011). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). CA: SAGE.

Tubin, D. (2013). *Learning leadership for innovation at the system level: Israel*. In Leadership for 21st Century Learning: OECD.

ACKNOWLEDGEMENTS

This research has been supported by the Khon Kaen University.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LEARNING OUTCOMES OF GROUP TASKS IN AN ENGINEERING TECHNOLOGY COURSE: LEARNING VS. LEARNED

Chee-Ming CHAN
Universiti Tun Hussein Onn Malaysia, Malaysia
chan@uthm.edu.my

Alina SHAMSUDDIN
Universiti Tun Hussein Onn Malaysia, Malaysia
alina@uthm.edu.my

Azeanita SURATKON
Universiti Tun Hussein Onn Malaysia, Malaysia
azeanita@uthm.edu.my

ABSTRACT

The paper describes an examination of the learning outcomes attainment among undergraduate students in the Soil Mechanics and Foundations course, one of the core courses in the Civil Engineering Technology programme. The course was designed with emphasis on hands-on and practical skills, where half the assessment was based on group tasks (i.e. 40 % final examination, 10 % individual written test and 50 % group activities). Taking the course and programme learning outcomes as predetermined indicators of what students have learned, these could be measured from individual assessment of the tasks assigned in class. On the other hand, feedback from the students at the end of the semester provides insight of their perceived learning outcomes of the course. As the progressive assessment was mainly based on group work with assignment, labwork and project, a collective assessment and comparison study was conducted to gauge the group achievement as a whole. The course learning outcomes (CLOs) encompassed cognitive domain level 5 of 'synthesis' (CLO1), psychomotor domain level 5 of 'complex overt response' (CLO2) and affective domain level 3 of 'valuing' (CLO3). The CLOs contributed to the programme learning outcomes (PLOs) of communication skills and leadership qualities, practical skills as well as lifelong learning awareness and professional development respectively. Nonetheless note that the attainment of CLO 1 was measured against individual written test and final examination. Hence it is excluded from the present discourse which focuses on group activities only. The 30 students in the class were divided into 6 groups of 5 members each, and the same group formation was maintained for all the tasks. Interestingly, high students' perception rating did not always corroborate with good scores in the assigned group tasks, and vice versa. Delivery of the relevant course materials and demonstration in lab sessions clearly influenced students' understanding, engagement and retention of knowledge. For the affective domain or CLO3, all groups showed compatible self-awareness of the intended learning outcome attainment while scoring between 78 to 88 % for the task (i.e. assignments). On the contrary, practical assessment of labwork for CLO2 showed the perception of low significance level for the particular learning outcome reflected in the score of the lowest ranked group. Overall the study derived meaningful insights on the students' learning behaviour, which serve as a useful reference for continuous improvement of the course delivery, especially in terms of group activities and assessment.

INTRODUCTION

Defined as an activity required for accomplishment of a goal, a task encompasses cognitive and physical actions on the part of the learner. Assignments, as part of a list of tasks in a course, are dispensed to students where the goal of each assignment is related to certain topical contents and learning outcomes (Limberg, 2007). Performance of assignments and other group-based tasks constituting the formative assessment enables students to cultivate an important 21st century skill expected of a graduate, i.e. collaborative problem solving skills (Ras et al., 2014). In other words, the participation in group activities does not only allow gradual acquisition of knowledge in accordance to the course syllabus, it also helps foster other skills not usually taught in a lecture session but inherently vital to a graduate for tomorrow's job market. Referring to Mitchell et al. (2008), collaborative learning can effectively enhance learning, notwithstanding the fact that the desired outcomes are very much influenced by the group organization and management itself (Huber & Huber, 2008).

Collaborative setups in learning, such as in group activities, provide an effective platform for students to join effort in completing the given task. This encourages an active exchange and generation of ideas, as well as engagement in the search for new information and data via internet-based resources among the group members. Students undergoing peer learning are also reportedly better adept at information technology and management

 Copyright © International Conference on New Horizons in Education Conference (INTE)

(Chu et al., 2011). The team working environment involves communication and negotiation rolled into a dynamic discourse, helping students to gain better understanding and insights which would be difficult for them to acquire on their own (Stahl, 2006). The peer learning approach also contributes to the development of critical thinking skills as students strive to convince the other group members of their proposal, leading to more in-depth learning as well as retention of knowledge (Mills, 2012). In addition, such group activities are perceived by students to be more 'fun' as opposed to the 'dull' lectures, stimulating greater interest and enthusiasm on the subject matter (Deslauriers et al., 2011) and instilling positive affective motivation among the students (Meyer, 2011).

Parmelee et al. (2012) recommended team-based learning to be characterized by small, self-regulated groups working on professionally relevant questions or problems, where pre-lesson preparation is made compulsory to facilitate independence and accountability among the students. These active peer discussions are expedient to improve topical understanding, where none of the group members may have the correct answer initially (Smith et al., 2009). The positive interdependence of participative learning in a team effort coupled with individual accountability as a group member ensure the advantages of peer learning to be optimized (Johnson et al., 1991). This corroborates with claims by Hancock (2004) that students in favour of collaborative learning approach do not necessarily learn well in a group setting which involves active interaction and cooperation among the members. Apparently individual effort and the extent of participation would determine a student's learning outcome, irrespective of the overall group performance. As cooperative learning in group tasks requires students to adopt labour division, subtasks are assigned to individual members to formulate the component answers for compilation into the final answer or report (Saleh & Large, 2011). Nonetheless the efficacy of group learning may be hampered by the lack of cohesion among the group members, where students strive to cope as a team player as well as a leader if necessary (van Aalst et al., 2007). Indeed, the absence of leadership can lead to poor performance of a group, as reported by Pauli et al. (2008).

This paper describes the group tasks conducted by a class of civil engineering technology students registered for the cores course of Soil Mechanics and Foundations. The 31 students were divided into 6 groups and assigned groups activities as part of the formative assessment: Assignments, Labwork and Project. The tasks were designed to meet the learning outcomes in the affective and psychomotor domains respectively.

THE COURSE AND LEARNING OUTCOMES

The Soil Mechanics and Foundation course (BNP20903) is a compulsory core course in the civil engineering technology programme offered at the University. With an approximately equal mix of both genders, the 31 students enrolled were the third batchin the programme, with entry qualifications of either diploma, matriculation certificate or Malaysian Higher School Certificate (STPM). The course consists of 5 topics, namely (1) site characterization and earthwork operations, (2) soil's response to loading, (3) design considerations of geo-structures, (4) problematic soils: pre-treatment, (5) geo-environmental concerns and technology. Each topic was delivered in 2-3 weeks, with 2 hours of lecture and 3 hours of labwork per week over the 14-week semester.

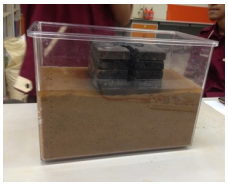
For formative assessment, the students were required to conduct a number of tasks by group, i.e. Assignments, Labwork and Project. The Project was a problem-based semester-long task, together with the Labwork were meant to fulfill the course learning outcome (CLO2) of 'organizing comprehensive design and execution procedures for geotechnical as well as geo-environmental solutions with practical considerations'. Both the Project and Labwork fell under the category of psychomotor learning domain with much emphasis on hands-on and practical sessions for complex overt response (P5). On the other hand, the Assignments were topical and intended to train the students for the learning outcome (CLO3) of 'adopting relevant resources on the fundamental mechanisms of geotechnics and geo-environment to facilitate in-depth understanding'. This component was related with the affective learning domain, where at the end of the course, students were supposed to be adequately trained for the preliminary level of valuing (A3). Both CLOs were aligned with the Programme Learning Outcomes (PLOs) of Practical Skills: to demonstrate comprehensive technical expertise in civil engineering technology (PLO2), and Lifelong Learning &Professional Development: to engage in life-long learning and professional development (PLO6) respectively. In summary, CLO2 corresponded with PLO2, while CLO3 was lined up with PLO6 for the expected learning outcomes of the course in conjunction with the targeted outcomes for the programme as a whole.

For the Project, each group was assigned the challenge for innovation on a geotechnical solution to construction on soft ground, i.e. installation of stone columns (Figure 1). The innovation included cementation, skirting, encasement, layered and random reinforcement within the column. The task required students to examine the

 Copyright © International Conference on New Horizons in Education Conference (INTE)

load-bearing and settlement control mechanism of the modified stone column, validated with simple model load tests and explained with simulations or animations in the final presentation. The Project engaged students in the collection of relevant information and data on the topic, followed by the pursuit of in-depth analysis and comparisons to formulate feasible solutions on site especially backed by sound technical explanations. The assessment was based on the Project outputs of a written technical report, model or visual aids and presentation in a mini exhibition at the end of the semester.

As mentioned earlier, to complement the psychomotor element of the Project, students were also involved in a number of geotechnical laboratory tests. The Labwork included conventional geotechnical tests commonly adopted in the industry, namely soil characterization tests, undrained shear and unconfined compressive strength tests, compaction tests, field density measurements, soil's permeability via constant and falling head tests, and 1-dimensional compressibility study with oedometers. The experiments were closely related with the topics in the course, and were performed by each group in a rotational manner throughout the semester. For each experiment, students were instructed to prepare individual lab reports to illustrate the test procedures, results and conclusions. Upon completion of all experiments, each group was interviewed by the lab instructor to ascertain the students' understanding of the test procedures as well as relevance to the related topics at an individual basis.



Loading of column with the settlement measured.



Mixing the soil in a mixer.



Column installation using a thin-walled tube.



Weighing of soil bed in model box.



Reinforcement element in column.

Figure 1: Tasks organization for the Project.

As for the Assignments, each group was required to answer a number of topical calculation problems followed by a brief case study of related geotechnical failures. The topical case study covered various geotechnical failures, such as slope stability issues, under-performing foundations and inadequately designed retaining structures. The brief report included 5 key elements: (1) WHAT happened, (2) WHERE did it happen, (3) WHEN did it happen, (4) HOW did it happen, and (5) HOW best to solve or mitigate the problem. Assessment of the Assignments were structured to be objective, encompassing clarity of the explanations, originality and soundness of the proposed solution with extra points given to organization, format and references included in the report. These were intended as pre-training for the students in conducting small-scale literature review and technical writing for their Final Year Project later on.

At the end of the semester, a survey was conducted among the students to gauge their perception on the attainment of the learning outcomes as well as soft skills development via the group tasks given. An analysis was then carried out to identify the correspondence between the students' performance, intended and perceived learning outcomes.

THE STUDY: RESULTS AND DISCUSSIONS

Group Performance

Figure 2 shows the students' performance in the Project and Labwork per group, with the scores ranging between 81 and 86 %. This gives an average of approximately 83 %, where the level of performance for all groups is considered satisfactory. As both tasks were related with the psychomotor learning domain highlighted in CLO2 and PLO2, it is suggestive of the students' preference in the learning activities assigned. It is also an indicator of the inclination for hands-on activities among the technical students, a good sign indeed for a class of engineering technologists in the making. As with the Labwork, each session involved briefing and demonstration by the instructor, followed by the students conducting the experiments as per the procedure given in the labsheet. This enabled students to learn in a semi-independent environment: reading and adhering to test procedures given in the labsheets with occasional guidance from the instructor. The group task also required students in each group to subdivide the tasks at hand in anorganized manner in order to complete the experiment on time. This was followed by the report-writing where each group member was to submit an individual report. This ensued coordination and sharing of information as well as data, but presented in individual style and understanding as per the group discussions. The individual report enabled the performance measurement of every student often overshadowed in group-based assessments. This is perhaps a key element in the Labwork component of the

 Copyright © International Conference on New Horizons in Education Conference (INTE)

group tasks: a blended peer- and self-learning approach with a single activity.

Similarly with the Project, students engaged in a mini work plan and execution of the task, spanning across the 14-week semester. While the assessment was primarily dependent on the ultimate output of each group, progressive monitoring was also conducted via weekly meetings with the instructor. Students reporting the work progress and problems encountered, seeking opinions on their ideas and proposed solutions with the instructor provided an ideal platform to gauge not only the group's performance, but also the students' gradual mastering of the subject matter. This gives a unique perspective of the students' learning process, both on an individual and group basis, with relevance to the Project requirements, without having to wait till the semester end to sum up the students' performance. Moreover, the progressive monitoring approach made remedial measures possible on the part of the instructor, to steer students towards the Project goals and to avoid continuous accumulation of errors or less favourable habits among the students. One such example is the indulgence on large numbers of reference materials with stretched relation to the task at hand, procrastinating the initiation of the main body of work and tests.

Records of the students' performance in the Assignments are given in Figure 3, where the marks ranged between 78 and 88 %, with a more significant variation among the respective groups. Comparing the data presented in Figures 2 and 3, it is apparent that the consistent high flyers for both group tasks were Groups 2 and 6. Group 1 did fairly well in the psychomotor-based tasks but slumped in the Assignments, while Group 4 seemed to be performed equally dismally in both group tasks. Taking into account the topical nature of the particular group task, students were encouraged to perform literature search on both written and online resources to complement the course materials given. The exercise exposed students to various repositories of knowledge related to the topics, leading them to explore important areas not covered in the lecture but of strong relevance to the topic concerned. This helps in the cultivation of the ability to search and locate useful information in the quest for answers to questions and problems encountered in their line of duty upon graduation, fulfilling the expected learning outcome of lifelong learning capacity. On the other hand, the variation of marks captured in Figure 3 is a reflection of the level of understanding among the students in each group on the correlation between questions posted in the Assignments, the information gathered and more importantly, the topical theoretical framework outlined in the lecture. It also follows that the group task required students to present their findings in a coherent and organized written format, further honing their technical writing skills in preparing short reports.

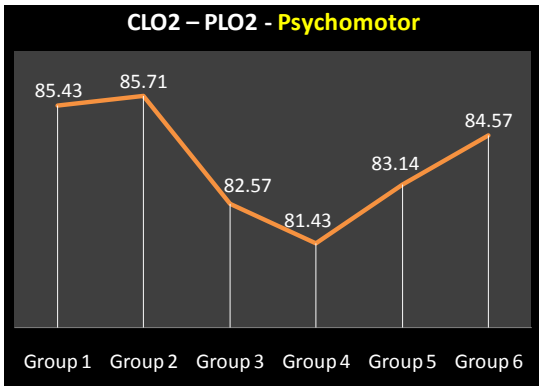


Figure 2: Performance in Project and Labwork.

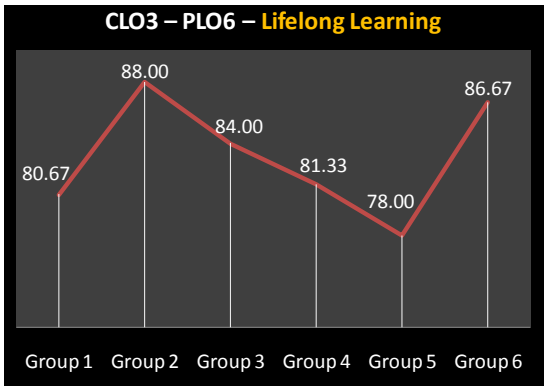


Figure 3: Performance in Assignments.

Group Perception

The attainment of CLOs and PLOs per group is summarized in Figures 4 and 5 respectively. Note that both the CLOs and PLOs are inter-related, where the former are expectations on completion of the course, and the latter upon graduation of the students. The plots show the average scores recorded by the students in the end-of-course survey pertaining to all the learning outcomes. It is immediately apparent that very few students rated their attainment of the learning outcomes as being low, a positive sign that the groups tasks were taken seriously by the students with conscious effort to perform the best they could. In addition, the perceived attainment of learning outcomes in both figures gives an overview of the students' confidence level of what they have learned by performing the tasks. Intuitively, positive outlook of one's learning development would be associated with good performance, and vice versa. As such, it is perhaps not surprising that majority of the Group 4 members scored moderate level of attainment for the learning outcomes, corresponding with the group's subpar performance in both group tasks (see Figures 2 and 3).

Comparatively, the best performing group, i.e. Group 2, showed remarkably positive perception of their learning

 Copyright © International Conference on New Horizons in Education Conference (INTE)

outcomes, with more than 50 % scoring significant attainment level. On an interesting note, Group 6 who also performed well in both tasks did not rate themselves particularly high in meeting the learning expectations (average 47 %), but recorded rather high moderate level of attainment in both cases, i.e. average 54 %. These observations point to the importance of students' active participation in the tasks assigned, building their in-depth understanding of the subject via the hands-on and supplementary activities. The engagement is driven by a conscious effort to learn well, not only for good grades, but for the noble intention of acquiring knowledge and mastering the subject matter. This can be deduced from the students' self-review and scoring in the learning outcome attainment survey discussed above. The students' overall response on the attainment of the learning outcomes gives a general profile of learning for the course in all the learning domains, i.e. cognitive, psychomotor and affective. It signals the effectiveness of teaching, both on delivery and methods, as well the expediency of the approach on the students' learning experience. After all teaching is as good as nil if the learning engagement is ineffective, resulting in inattentiveness in class, sluggishness in execution of the tasks and worst of all, loss of interest in the learning of the other courses in the programme.

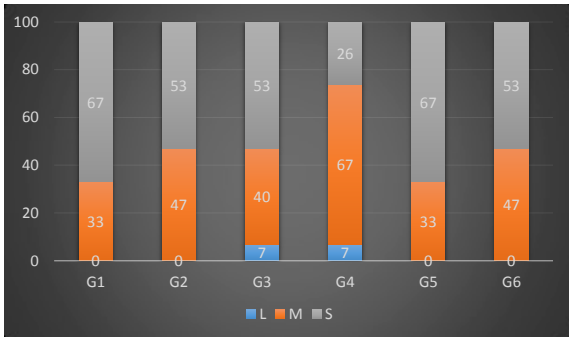


Figure 4: Perceived attainment of CLOs.

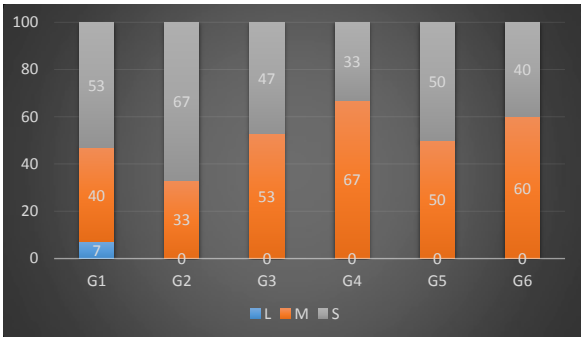


Figure 5: Perceived attainment of PLOs.

The students' perceived attainment of the learning outcomes according to the group tasks assigned is shown in Figure 6. This graphical analysis provides details on how the students rate their performance with relation to targeted learning outcomes. From both plots, all groups scored moderate to significant levels of learning outcomes attainment except for Group 4 who showed less than satisfactory attainment of CLO2. Read in tandem with the performance (Figure 2), this self-review is revealing of poor organization and coordination within the team members, and probably of an onerous endeavor for the group as a whole in time management, task distribution as well as leadership. Considering that the group tasks, especially the Project, required early planning and strict adherence to the work schedule for timely completion of the work, a predominantly lackadaisical attitude is understandably detrimental to the group performance. A similar analogy is applicable to the Labwork which spanned over a shorter 1-week period, where students were to hand in the lab report a week after completion of the experiments. The time frame given was to encourage active group interaction in the cooperative effort to do a good job of the task assigned, while individual student had adequate time to complete the report at a personal level.

Figure 6 also sheds light on the students' readiness to learn the ropes of civil engineering technology while still at early stage of their study. For CLO2-PLO2 in Figure 6(a), students' engagement in the Project and Labwork was designed to contribute to their accumulative specialized technical expertise via construction of procedural work execution in solving technical problems. The soft skills notwithstanding, students were trained to think in a structured manner to formulate step-by-step technical solutions, which take into account practical considerations for feasibility in field implementation. The proposed solutions were also verified against the relevant theories and principles, while complying with stipulated standards and regulations commonly found in the construction industry. All these were embodied in the learning outcomes and translated into the students' outputs in the assigned group tasks of Project and Labwork. Summarily, the high moderate and significant levels of perceived attainment scored by the students for CLO2-PLO2 showed a heartening progressive development of their technical competencies in a very much self-aware and self-monitoring condition.

As for CLO3-PLO6 in conjunction with the topical Assignments, the scores for significant level of attainment is even more apparent, Figure 6(b). The week-long group task was intended to cultivate the students' independence and aptitude in acquiring useful information to solve a given question. The process involves first understanding of the problem given, followed by building an outline of the solution framework where possible sources of the required data are identified and explored. The exercise enables students to identify and utilize the various resources or help at hand in search for the answers, simultaneously developing their professional ability and instincts through an organized intellectual approach. On a shorter term basis of a more direct impact, such

 Copyright © International Conference on New Horizons in Education Conference (INTE)

endeavours encourages critical thinking in sieving through the information gathered, leading the students to enhance their topical understanding of the course with supplementary materials acquired from the exercise. Clearly the students were very much aware of the purpose of the task, as captured in the self-review analysis of the particular learning outcome attainment.

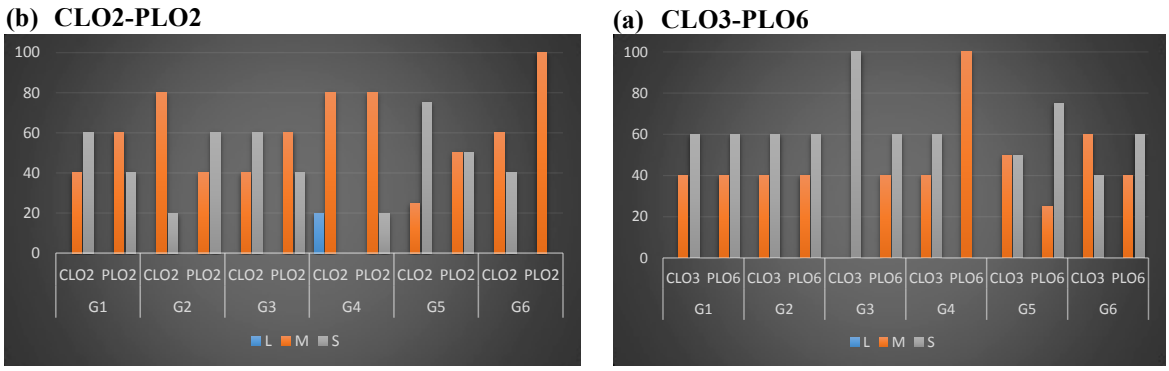


Figure 6: Relating the perceived attainment of learning outcomes (PLO-CLO).

Performance vs. Perception

Relating the students' performance and their respective perception of the learning outcome attainment, the discourse above have highlighted the cause-and-effect scenario. In Figure 7, further analysis is presented in terms of the percentage of significant attainment perception only with relation to the respective task performance. This was to narrow down the scoring tendency of the students in gauging their self-evaluation of the tasks' impact on their learning process and effectiveness. For the Project and Labwork as shown in Figure 7(a), students appeared to perceive the tasks to be more impactful on their learning in terms of CLO2 than PLO2, except for Group 4 who recorded zero scores at significant attainment level. Corroborating with earlier discussion on the performance of Group 4, the low perception level on CLO2 could be suggesting ignorance of the purpose of the tasks and poor understanding of the instructions given for the tasks, leading to the eventual downhill turn of the group's performance. On the other hand, groups who performed well showed fairly high percentage of perceived significant attainment level of the learning outcomes, further strengthening the notion of conscious learning efforts propelling enthusiastic undertaking of the group tasks.

As for the Assignments and significant attainment of CLO3-PLO6 depicted in Figure 7(b), the scoring pattern was more uniform with a repeated 'missing' significant level attainment in PLO6 for Group 4. This underlines the negative effect of unsubstantial grasp on the tasks' targeted purposes in terms of learning outcomes on the actual learning initiatives and efforts, eventually leading to subpar performance due to the absence of commitment and interest associated with conscious self-learning in a collaborative working environment. Considering that the CLO and PLO were established on a continuous and cumulative basis, the domino effect of one has one the other cannot be more obvious. On the other end of the spectrum, it would seem that good performance is founded on the students' clear vision of what the tasks require, the outputs expected and the specific competencies to be honed in the process, as demonstrated in the relatively high percentage of significant level attainment perceived and scored by the better performing groups.

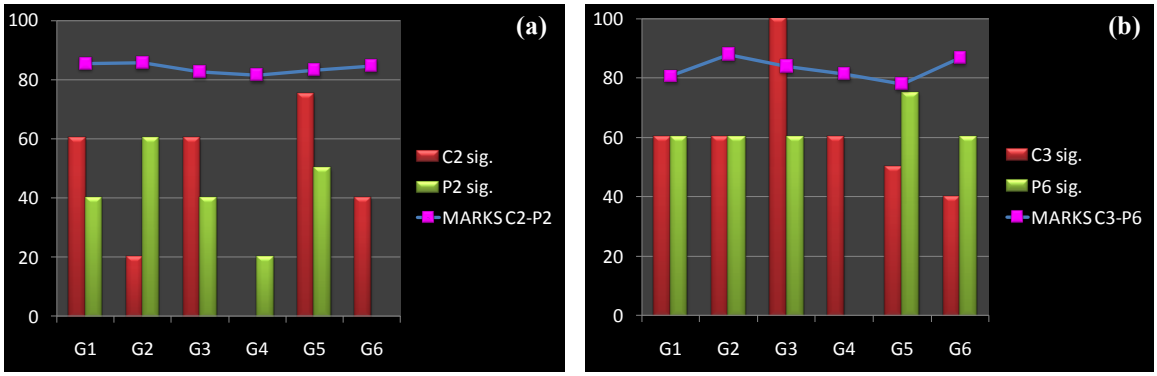


Figure 7: Performance and perceived learning outcomes attainment.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Soft Skills Cultivation

The soft skills which constituted employability attributes desirable in the future graduates were embodied in the following 7 main skill components:

SS1 Communication skills
SS2 Critical thinking and problem-solving skills
SS3 Teamworking skills
SS4 Continuous learning and information management skills [correspond with CLO3-PLO 6]
SS5 Entrepreneurship skills
SS6 Ethics and professionalism
SS7 Leadership

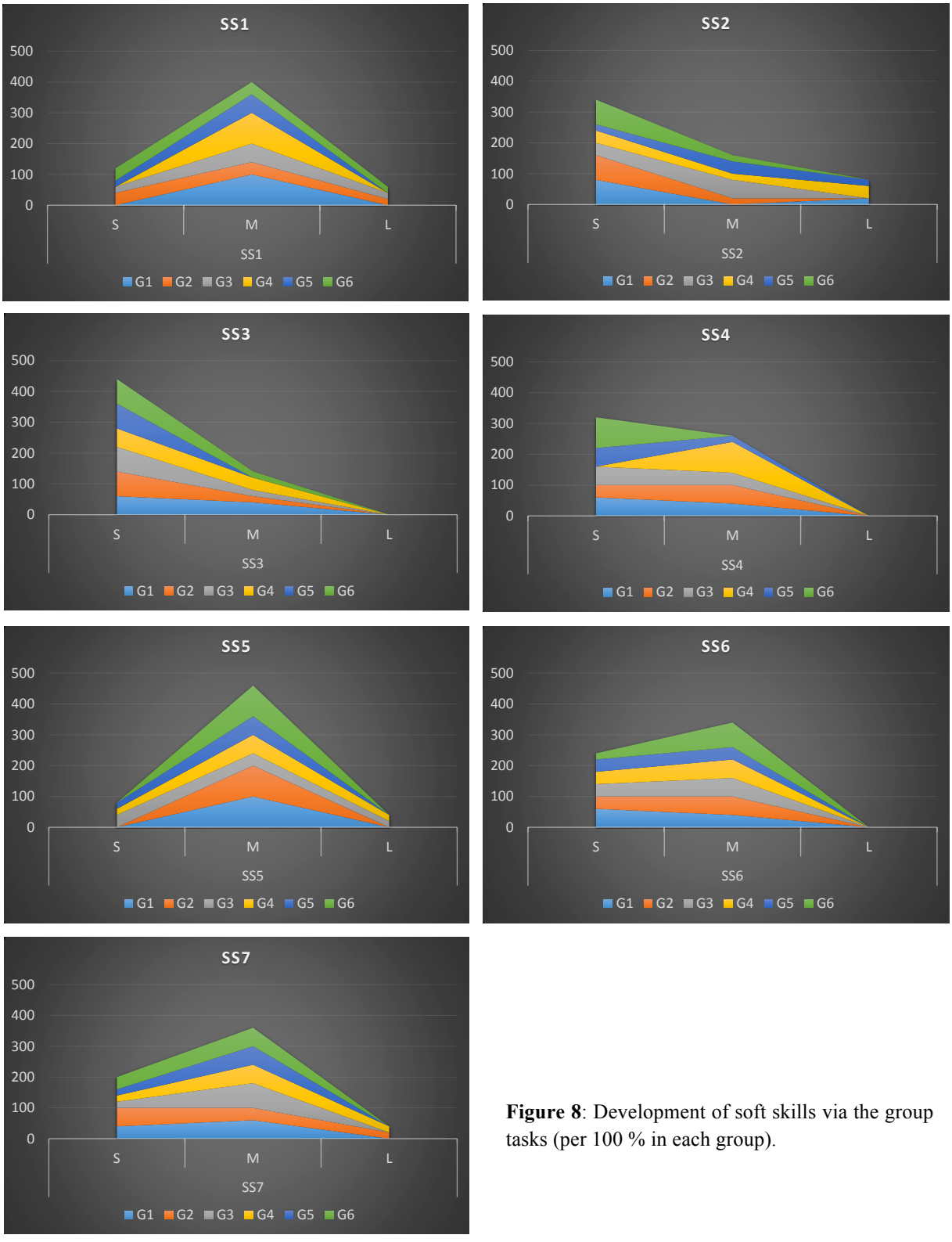


Figure 8: Development of soft skills via the group tasks (per 100 % in each group).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Looking at the students' self-review in Figure 8, SS2, SS3 and SS4 were considered to be the most markedly improved, followed by soft skills perceived to be moderately developed for SS1, SS5, SS6 and SS7 via the group tasks in the course. Interestingly, SS4 which corresponded directly with CLO3-PLO6, with emphasis on information management skills and lifelong learning, was scored rather positively as with the learning outcomes (Figures 6b and 7b). This reflects the congruence of the students' learning process with the targeted outcomes, even with less academic skill components such as organizing information in the course of solving a specific problem. The good scores in SS2 was underlain by the close tie between the tasks assigned and the course syllabus and contents, with students exercising their critical thinking capacity in an organized process of formulating solutions for the problem given. The ability to identify the hierarchical importance and relevance of information collected is especially useful in this age of information overloading, both for the effective consumption of resources as well as avoiding unnecessary time and energy on redundant or irrelevant data. Seeking the correlation between the information gathered and problem to be solved at hand is a crucial stage in pinpointing the solution pathway in any problem-solving procedure, where the lack of astute thinking and keen judgement would often lead to a roundabout way of reaching meaningful solutions. It is therefore obvious that the group tasks enabled students to gain exposure and training in the area from the positive response to this particular soft skill component. Besides, the students' acknowledgement of the cultivation of teamworking skills in these group tasks was not surprising either, as good work coordination within each group ensured timely completion of the tasks in a satisfactory manner. These were discussed earlier with regards to the students' performance and learning outcomes attainment.

The seemingly more moderate scores recorded for communication, entrepreneurship, ethics and professionalism as well as leadership soft skill components are attributed to the students' burgeoning seniority and maturity in the programme as a whole. It is self-evident that similar task-based approach is necessary in the coming formative years of the students to build up their confidence in these non-academic competencies desirable in an adept technical graduate. The group tasks required students to learn to communicate effectively among the team members, instructor and other students in written as well as oral forms. Students were also cultivating their sense of accountability and responsibilities as a professional technologist when designing solutions to the problems assigned in the group tasks. On the other hand, leadership being an essential part of any teamwork was certainly developed with the rotational group leader system adopted in the Project. An exception can probably be found in SS5 (entrepreneurship), where the basic costing and business sense incorporated in the proposed solutions by the students were barely adequate to boost their entrepreneurial capacity. Nonetheless entrepreneurship is not all about making profitable ventures. It is indeed more apt to cultivate the positive traits associated with an entrepreneur to initiate a mental shift among the students, transforming them from being mere users of technology to innovators with the readiness to adopt and adapt accordingly for drawing up effective solutions. In other words, it is the entrepreneurial mindset which ought to be augmented among the students, and not the focus on entrepreneurial undertakings in the business sense.

CONCLUSIONS

In general, the 'learning' intended for the students in this course corresponded well with what the students 'learned'. It was found that the students did fairly well in the Labwork with small variation in the marks attained by group, though the experiments were carried out as a team, but the lab report was prepared individually. This ensured fairer assessment of every student, avoiding the overshadowing of individual performance as common in a group assessment. As for the Project, progressive monitoring allowed valuable insights of the students' learning development of the subject matter, giving the instructor ample opportunity to guide and coach the students towards more effective learning by performing the group task. Also, the Assignments had students engage in extensive information search and literature review, to prepare written short report as a way to complement their topical understanding of aspects not covered in the lecture. The task helped to inculcate lifelong learning skills and aptitude in the students for continuous professional development in future. In addition, results of the students' self-review of the learning outcome attainment corresponded well with the respective group performance in both tasks, where high self-esteem and positive outlook were reflected inthe good scores of the high flyers, and vice versa. It is also indicative of the students' conscious learning efforts via the specialized tasks assigned. Soft skills-wise, the students appeared to be aware of the group tasks aiding in their non-academic skills cultivation, further highlighting the expediency of such collaborative learning activities

 Copyright © International Conference on New Horizons in Education Conference (INTE)

in the technical course.

ACKNOWLEDGEMENT

Special thanks to Suzana Ojudah for the preliminary data compilation and analysis. Funds for the work presented were provided by ORICC, UTHM.

REFERENCES

Chu, S.K.W., Tse, S.K. & Chow, K. (2011). *Using collaborative teaching and inquiry project-based learning to help primary school students develop information literacy and information skills.* Library and Information Sc. Res., 33(2), 132-143.

Deslauriers, L., Schelew, E. & Wiemen, C. (2011). *Improved learning in a large-enrolment physics class.* Science, 332(6031), 862-864.

Hancock, D. (2004). Cooperative learning and peer orientation effects on motivation and achievement. J. of Edu. Res., 97(3), 159-167.

Huber, G.L. & Huber, A.A. (2008). *Structuring group interaction to promote thinking and learning during small group learning in high school settings.* In the Teacher's Roles in Implementing Cooperative Learning in the Classroom (Gillies, Ashman & Terwel ed.), 110-131, New York: Springer.

Johnson, D.W., Johnson, R.T. & Smith, K.A. Active learning: *Cooperation in the college classroom.* Interaction Book Company Edina, MN.

Limberg, L. (2007). *Conceptions learning assignment as task in information seeking research.* Information res., 12(4), paper 28.

Meyers, E.M. (2011). *The nature and impact of group information problem-solving in the middle school classroom.* GROUP '10, 07-12 Nov 2010, Florida, USA.

Mitchell, M., Montgomery, H. Holder, M. & Stuart, D. (2008). *Group investigation as a cooperative learning strategy: An integrated analysis of the literature.* Alberta J. Edu. Res., 54(4), 388-395.

Parmelee, D.X., Michaelsen, L.K., Cook, S. & Hudes, P.D. (2012). *Team-based learning: A practical guide.* AMEE Guide No. 65, Med. Teach., 34, 275-287.

Pauli, R., Mohiyeddini, C. Bray, D., Michie, D. & Street, B. (2008). Individual differences in negative group work experiences in collaborative student leaning. Edu. Psychology, 28, 47-58.

Ras, E., Krkovic, K., Greiff, S., Tobias, E. & Maquil, V. (2014). *Moving towards the assessment of collaborative problem solving skills with a tangible user interface.* Turkish Online Journal of Educational Technology, 13(4), 95-104.

Saleh, N. & Large, A. (2011). *Collaborative information behavior in undergraduate group projects: A study of engineering students.* Proc. ASIST Annual Conference, 09-13 Oct 2011, New Orleans, USA.

Smith, M.K., Wood, D.B., Adams, W.K., Wieman, C., Knight, J.K., Guild, N. & Su, T.T. (2009). *Why peer discussion improves student performance on in-class concept questions?*Science, 323(5910), 122-124.

Stahl, G. (2006). *Group cognition: Computer support for building collaborative knowledge,* p. 500. MIT Press, USA.

van Aalst, J., Hing, F., May, L. & Yan, W. (2007). *Exploring information literacy in secondary schools in Hong Kong: A case study.* Library & Information Sc. Research, 29(4), 533-552.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LEARNING STYLE DIFFERENCES IN THE PERCEIVED EFFECTIVENESS OF INCORPORATING SOCIAL NETWORKING SITES INTO FORMAL LEARNING

Tugba Orten Tugrul
Izmir University of Economics
Turkey
tugba.tugrul@ieu.edu.tr

ABSTRACT
Although previous studies demonstrate that social media has a great potential to create an environment that integrates and enriches formal and informal learning, there is need for additional research to understand the different practical uses, and the effectiveness of social media platforms as learning tools. Learning style theory posits that learning achievement increases when learning styles are accommodated by instructional strategy, design and learning context. Therefore, the aims of this study are twofold: to examine student perceptions of informal and overall learning effectiveness of a Course Facebook Page incorporated into an instructor-based formal education setting, and secondly, to investigate the relationship between learning styles and perceived learning benefits from such a page. One hundred twenty one undergraduate students enrolled in a marketing course participated in the study for extra course credit. Results show that students favorably evaluated overall and informal learning effectiveness of a Course Facebook Page, but perceived learning effectiveness varies according to student learning styles. The research findings also have implications for the effective use of social technologies to enhance student learning, through incorporating a range of learning tools to address different learning styles.

INTRODUCTION

Advances in information technology create new paradigms for education, where Web-based instructions and resources both support and enrich traditional learning environment (Khan, 1997). Specifically, the usage intensity and user commitment strength of social media platforms, such as Facebook, Twitter, Myspace, Youtube, SlideShare and blogs are ever growing, highlighting their potential as a pedagogical approach for integrating formal and informal learning. Recently, the use of social media applications in teaching and learning has received a great interest among educators (Cain & Policastri, 2011). Research conducted by Pearson Learning Solutions indicates that, in U.S higher education, nearly two-thirds of faculty use social media in class, and approximately one-thirds post content for students to view or read outside class (Moran et al., 2011). According to the Education Foundation, Facebook is already being widely used as a tool for teaching and learning in and outside the classroom in universities across the globe (Fordham and Goodard, 2013). This report suggests that Facebook can be used as a tool to support subject teaching across the curriculum, support out of school hours learning, encourage informal social learning, and facilitate communication between students, teachers and parents. However, little empirical research has investigated the role of social networking sites in educational practice (Hemmi et al., 2009; Madge et al., 2009; Towner & Leog Munoz, 2011). Specifically, how students perceive and experience the educational role of social technologies, such as weblogs, wikis, Facebook and Second Life is still largely unexplored (Hemmi et al., 2009). In addition, as Grasha and Yangarber-Hicks (2000: 3) highlight, "there is no question that learning styles should be taken into account when teaching with technology". However, previous studies exploring learning style effect on learning effectiveness in Web technologies and computer-mediated learning environments have led to contradictory findings. Therefore, the aims of this study are twofold: to examine student perceptions of informal and overall learning effectiveness of a Course Facebook Page incorporated into an instructor-based formal education setting, and secondly, to investigate the relationship between learning styles and perceived learning benefits from such a page.

LITERATURE REVIEW

Web 2.0 Technology, including blogs, wikis, social networking sites, allow students to combine information gathered in formal and informal learning environments (Best et al., 2013). In the case of formal learning, Facebook allows students interact with other students to collaborate on a course project, to ask questions about a class assignment, project or examination, and offer and receive help on such required coursework (Towner & Leog Munoz, 2011). However, Facebook provides an informal learning environment in which some university students benefit more than others and thus, there is need for additional research to understand the individual differences that might affect the tendency to engage with Facebook and other SNS for educational purposes (Madge et al., 2009). In addition to the purposes mentioned, student interaction on Facebook can serve informal learning purposes, such as to catch up on missed course content, to discuss non-required course-related matters, talk about a class lecture, and obtain class notes (Towner & Leog Munoz, 2011).
An ideal learning environment supports student achievement of self-paced, collaborative and interactive learning

 Copyright © International Conference on New Horizons in Education Conference (INTE)

experiences out of school (Sherry & Wilson, 1997). Social media has been inherently employed to develop and enhance informal learning experiences (Dabbagh & Kitsantas, 2012). Such experiences are becoming a vital aspect of education for learners regardless of age (Selwyn, 2007). Livingstone (2006: 206) defines informal learning as "any activity involving the pursuit of understanding, knowledge, or skill that occurs without the presence of externally imposed curricular criteria". Informal learning experiences occur outside the context of the formal education environment, leading to engagement in academic content free from the constraints of institutionally sponsored or highly structured learning settings (Bull et al., 2008; Selwyn, 2007). For instance, participation in a blog discussion promotes informal learning by thinking about class topics beyond the weekly class meetings and extending communication with peers outside class hours (Harrison, 2011). Although previous studies demonstrate that social media has great potential to create an environment that integrates and enriches formal and informal learning (Dabbagh & Kitsantas, 2012; Mallia, 2013), there is need for additional research to understand the full potential of social media platforms as practical and effective learning tools (Buzzetto-More, 2012; Duffy & Ney, 2015; Neier & Zayer, 2015; Selwyn, 2007).

Recently, Neier and Zayer (2015) explored students' perceptions on the educational use of social media in the classroom, and reported that there was some doubt over the potential of social media to enhance learning in higher education context. However, the authors acknowledged that this research did not take into account student learning styles. This was despite warnings in previous studies that integrating digital technologies, such as Wiki and blogs in educational contexts which do not sufficiently consider student needs, expectations and behaviors may result in poorly designed and supported educational practice and student engagement (Cole, 2009; Duffy & Ney, 2015; Halic et al., 2010). In education, it is important that the selection and usage of social networking applications are compatible with learner preferences (Best et al., 2013; Suat et al., 2015). The education field therefore should embrace technological advancement and innovation in ways that accommodate contemporary learning styles (Suat et al., 2015).

The individual differences in cognitive styles and their impacts on learning has long been one of the central focuses in education literature (Liu & Reed, 1994). In the context of web technologies, Liu and Reed (1994) argued that learning styles determines the learning preferences of students in a hypermedia-assisted instructional setting (e.g., preferred media, tools, aids), but also highlighted that hypermedia technology can provide an effective and supportive environment for a wide range of learning needs and styles. Confirming these arguments, using Felder- Soloman's learning style inventory, Saeed, Yang and Sinnappan (2009) found that learning styles impact student preferences for particular tools among the various emerging web technologies incorporated in course delivery. For instance, intuitive learners attracted to discovery and experimentation prefer blogs over other traditional technologies such as email or Blackboard. More recently, Li (2015) reported that active learners who prefer group work and tasks which require discussion and brainstorming favored wikis as a learning tool, while reflective learners preferred to learn by introspection or working with a single familiar partner. In addition, when allowed to use their preferred technologies, no significant differences were found between students with different learning styles in terms of academic performance, which is consistent with the findings of earlier studies (e.g., Akkoyunlu & Soylu, 2008; Liu & Reed, 1994). In a similar vein, Butler and Pinto-Zipp (2006) revealed that there is a relationship between learning style and preferred method of online instruction. For example, abstract-sequential learners, characterized as being logical, analytical, conceptual and studious, rated computer simulations as the most beneficial instructional method, and multimedia as the least. In addition, Karuppan (2001) showed a relationship between student learning style and their frequency of use of a course Web site; assimilators were the heaviest, and accommodators were the lightest users. Moreover, previous studies posit that learning achievement increases when student learning styles match instructional strategy, design and learning context (Ford & Chan, 2001).

On the other hand, Young, Klemz and Murphy (2003) demonstrated that preference for instructional technologies was not dependent on learning style. In another study, Hong (2002) proposed that there is no relation between learning styles and satisfaction with and learning from a Web-based course. Similarly, Lu, Yu and Liu (2003) claimed that students' learning styles had no significant impact on learning performance in a Web-based course. Sun, Lin, and Yu (2008) also found that learning styles had no impact on grade achievements of students in web-based learning environments. Moreover, Wang, Hinn and Kanfer (2001) argued that students from different learning style groups do not differ in their achievement and satisfaction with a computer-supported collaborative learning environment. Such findings about learning style effect that seem to completely contradict the above mentioned studies emphasize the need for additional research.

Learning styles refer to "personal qualities that influence a student's ability to acquire information, to interact with peers and the teacher, and otherwise to participate in learning experiences" (Grasha, 1996: 41). However, not all inventories assess learning styles in the same way. In particular, Montgomery and Groat (1998) argue that

 Copyright © International Conference on New Horizons in Education Conference (INTE)

the Grasha-Riechmann Student Learning Style Scales Inventory is substantially different from models focused on a more general assessment of personality or cognitive traits, such as Myers-Briggs Type Indicator, Kolb/McCarthy Learning Cycle and Felder-Silverman Learning Styles Model. According to Grasha-Riechmann learning model, learning style is determined by students' attitudes towards learning, their views of their teachers and peers, and their reactions to classroom procedures (Grasha, 1996). This model proposes six learning styles; independent (prefers to work and define the task alone), avoidant (withdrawn and uninvolved in learning situations), collaborative (favors mutual help and cooperation), dependent (prefer clear structures and guidelines provided by instructor), competitive (motivated by greater achievement compared to others), and participant (highly involved in all course activities). This typology can be used as a guide for educators in selecting teaching techniques and supporting class activities which can accommodate different student learning needs, abilities and preferences. Table 1 provides a brief description of each learning style and general student preferences in classroom.

Table 1. Description of Grasha-Riechmann Learning Styles and Classroom Preferences

Learning Style	Characteristics	Classroom Preferences
Competitive	Learn content to perform better than others in the class Compete with others in a course to get the rewards offered Make efforts to be center of attention and receive recognition for their accomplishments in class.	Teacher-centered course designs Competitive class activities Desire to take lead in a group discussions Attempt to dominate discussions
Collaborative	Learn by sharing their ideas and talents Cooperate with teacher and peers Prefer to work with others	Student-centered course designs Group rather than individual class activities Small group seminars Lectures incorporating small group discussions
Avoidant	Not enthusiastic about learning content or attending class Avoid communication with students and teachers in the classroom Uninterested in and overwhelmed by class activities	No tests Pass-fail grading systems Teacher who are not enthusiastic
Participant	Enjoy going to class Take responsibility for maximizing benefit from a course Participate as much as possible in course activities Eager to do as much of the required and optional course requirements as possible	Lectures with discussion Opportunities to discuss material Class reading assignments Teachers who are able to analyze and synthesize information
Dependent	Show little intellectual curiosity Learn only what is required Perceive teacher and peers as sources of structure and support Seek authority figures for specific guidelines on what to do and how to do it	Teacher-centered course designs Outlines or notes on the board Clear deadlines and instructions for assignments
Independent	Favor thinking for themselves Prefer to work alone but listen to the ideas of others in the classroom Learn the content that is important to them Confident in their learning abilities	Student-centered course designs Self-paced instructions Class activities that allow independence, assignments or projects conducted by students themselves

Source: Adapted from *Teaching with Style* by A. Grasha, 1996.

When considering the learning effectiveness of social networking sites in relation to the learning style model, three learning styles, collaborative, participant and independent, are expected to lead to more favorable evaluations. According to Grasha-Riechmann typology, collaborative and independent students prefer student-centered course designs (Grasha, 1996) and Web 2.0 tools offer significant opportunities in achieving a truly such a learner-centered environment (McLoughlin & Lee, 2008). Previous research also reveals that

 Copyright © International Conference on New Horizons in Education Conference (INTE)

students on online courses show more independence than their on-campus counterparts (Diaz & Cartnal, 1999). In addition, participant learners tend to participate in both required and optional class activities (Grasha, 1996), and thus, students favoring this learning style are more likely to engage in various learning activities conducted on an educational social networking site. Therefore, this study examines student learning styles effect on perceived learning effectiveness of a Course Facebook Page incorporated into traditional classroom setting.

METHODOLOGY

One hundred thirty seven undergraduate students enrolled in a marketing course participated in the study for extra course credit. Students were asked to complete two separate tasks. Firstly, they read a description of a Course Facebook Page, with an illustration of a fictitious page as an example, and five different ways of using this page as a learning tool (online discussions, student-designed teaching activities, week's most popular post competitions, contents shared by the instructor and students). It was explained that students would use the Course Facebook Page to interact with other students about both required and non-required course-related matters. For example, for formal learning purposes, to gain course credits, students would be expected to participate in online discussions and share ideas about key course-related issues in popular media, or a reading assignment, and also comment on their peers' posts. For informal learning purposes, for example, students would be able to voluntarily post and share news, ideas, links, videos or visuals about interesting real life examples of course-related topics, and also respond to peers' posts using like or comment options. Next, students were asked to rate perceived overall and informal learning effectiveness of integrating a Course Facebook Page into a face-to-face lecturing course. Perceived overall learning effectiveness was measured by a single-item scale adopted from Halic et al (2010); "I believe that incorporating a Course Facebook Page with traditional classroom education can enhance my learning experience in general". In addition, students were asked to evaluate learning effectiveness of each of the six five different learning tools built in Classroom Facebook Page on a single item; "Overall, … will help me learn" (Halic et al., 2010). Responses were given on a 7-point Likert-type scale ranging from strongly disagree (1) to strongly disagree (7). Based on the generic nominal definition of informal learning provided by Livingstone (2006), perceived informal learning effectiveness was measured by a three-item 7-point Likert scale ranging from "1=strongly disagree" to "7=strongly agree"; "A Course Facebook Page will make me voluntarily think about self-determined course-related concepts", "A Course Facebook Page will make me understand self-determined course-related concepts on my own", and "A Course Facebook Page will make me voluntarily acquire knowledge about self-determined course-related concepts on my own". Then, students rated their learning styles on a 60-item Learning Style scale developed by Grasha and Riechmann (Grasha, 1996). Each item asks participants to respond using a 5-point Likert scale ranging from "1=strongly disagree" to "5=strongly agree".

FINDINGS

First, mean scores were computed for the ten responses associated with each of six learning styles (independent, avoidant, collaborative, dependent, competitive, and participant). Then, each student was assigned to one of six learning style groups according to whether they scored high, moderate and low scores for each learning styles, as suggested by Grasha (1996). However, students who had a high score for more than one learning style were excluded in the further analyses, and thus sample size was reduced to one hundred twenty one. As presented in Table 2, 30.6% of the students were identified as collaborative, 28.9% as independent, 21.5% as dependent, 10.7% as participant and 8.3% as avoidant. The result indicates that most students had strong preferences for collaborative and independent learning styles, and none had a dominant competitive style of learning.

Table 2. Student Learning Styles Frequencies

Learning Style	Frequency	Percentage
Collaborative	37	30.6
Independent	35	28.9
Dependent	26	21.5
Participant	13	10.7
Avoidant	10	8.3
Competitive	-	-
Total	121	100

Students perceived the integration of a Course Facebook Page into a face-to-face traditional lecturing course as effective in enhancing overall learning (M = 5.34, SD = 1.44). With regard to informal learning effectiveness, student evaluations toward the Course Facebook Page was also positive (M =5.38, SD = 1.29, cronbach alpha = .88). These results provide support for the argument that social technologies provide an educational space that allows the integration of formal and informal learning (e.g., Best et al., 2013; Dabbagh & Kitsantas, 2012;

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Mallia, 2013; Towner & Leog Munoz, 2011).

To examine the effects of learning styles on perceived overall and informal learning effectiveness, a one-way ANOVA test was conducted. As shown in Table 3, results reveal a significant difference in group means at the p < 0.05 level in overall perceived learning effectiveness scores (F (4,116) = 4.831, p = .001). A Tukey-Kramer post-hoc test show that avoidant students (M = 4.10, SD = 2.18) had lower evaluations of learning effectiveness of Course Facebook Page than independent (M =5.54, SD = 1.20, p = .029), collaborative (M = 5.77, SD = 1.01, p = .007), and participant learners (M = 5.77, SD = .93, p = .032). However, there was no statistically significant difference between avoidant and dependent student learners (M = 4.74, SD = 1.71, p = .719). In addition, dependent students have only statistically significant lower perception of overall learning effectiveness compared to collaborative students (p = .029). Results also indicate that there was a statistically significant difference between learning style groups in terms of perceived informal learning effectiveness (F (4,116) = 4.000, p = .004). A Tukey-Kramer post-hoc test reveal that informal learning effectiveness of Course Facebook Page was statistically significantly lower for dependent students (M = 4.69, SD = 1.59) compared to the independent (M = 5.74, SD = 1.15, p = .011) and participant students (M = 6.00, SD = .91, p = .019). There were no statistically significant differences between other learning style groups.

Table 3. Learning Styles Effect on Perceived Learning Effectiveness Course Facebook Page

	Learning styles										
	Collaborative		Independent		Dependent		Participant		Avoidant		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	*F*-value
Overall Learning Effectiveness	5.77	1.01	5.54	1.20	4.74	1.71	5.77	.93	4.10	2.18	4.831*
Informal Learning Effectiveness	5.43	1.04	5.74	1.15	4.69	1.59	6.00	.91	4.90	1.45	4.000*

* $p < .005$, $n = 121$

In general, research results, also depicted in Figure 1 and 2, indicate that avoidant students are unlikely to have a positive view of the overall learning effectiveness of Course Facebook page, possibly due to the general tendency of avoidant students to be uninterested in, and unwilling to participate in course activities (Grasha, 1996). On the other hand, dependent students are less willing to engage in a learning activity without direct teacher supervision, and are therefore likely to have less favorable evaluations of informal learning effectiveness of Course Facebook page. This is also consisted with the teacher-centered learning predispositions of dependent students (Grasha, 1996). However, it should be noted that avoidant students tend to have favorable evaluations of a Course Facebook page in terms of supporting informal learning (M=4.90, SD=1.45).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Figure 1. Mean Plot for Learning Styles Effect on Perceived Overall Learning Effectiveness

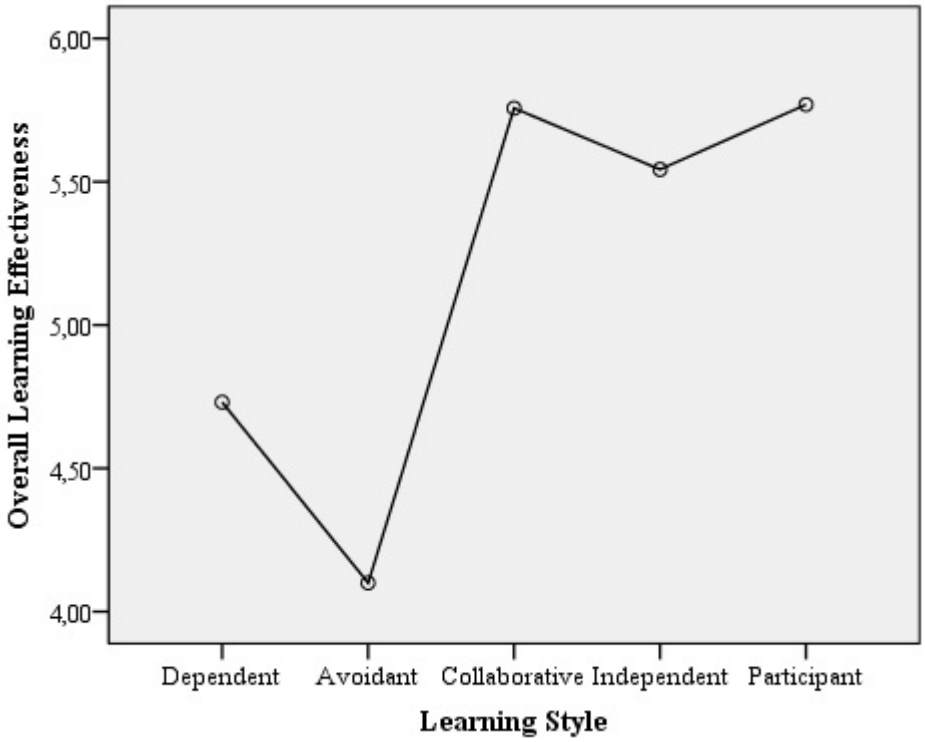
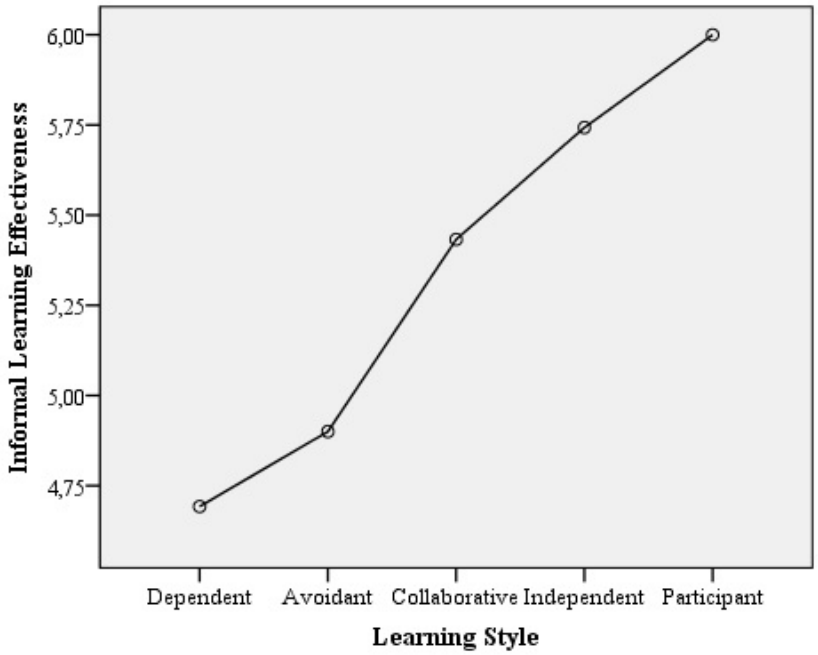


Figure 2. Mean Plot for Learning Styles Effect on Perceived Informal Learning Effectiveness



To further investigate learning style differences in the perceived effectiveness of the use of different learning tools on a Course Facebook Page, a one-way ANOVA test was conducted. As shown in Table 4, Welch's

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ANOVA result indicate a significant difference in group means at the $p < 0.05$ level in the scores of perceived effectiveness of contents shared by instructor such as news, ideas, links, videos or visuals about interesting real life examples related with topics covered in the classroom and project, assignment and exam announcements or reminders ($F (4, 35.949) = 3.656$, $p = .013$). A Games-Howell post-hoc test show that dependent students ($M = 5.74$, $SD = 1.04$) were more positive about the educational value of Facebook Page contents posted by an instructor compared to independent students ($M = 4.89$, $SD = .68$, $p = .007$). There were no statistically significant differences between other learning style groups. However, learning style differences did not significantly account for variation in the perceived effectiveness of contents shared by the students themselves, such as news, ideas, links, videos or visuals about interesting real life examples related with topics covered in the classroom ($F (4, 37.903) = 1.309$, $p = .284$). Regarding perceived effectiveness of online discussions, Games-Howell post-hoc test demonstrated that participant students had the highest evaluations ($M = 6.08$, $SD = .64$), while avoidant students ($M = 3.40$, $SD = .97$) had lower evaluations than all other groups except dependent students ($M = 4.39$, $SD = 1.47$, $p = .165$). It also showed that collaborative ($M = 65.08$, $SD = .80$), independent ($M = 5.03$, $SD = .94$) and dependent students did not statistically significant differ in their evaluations ($F (4, 38.321) = 16.053$, $p = .000$). Results also reveal that, in terms of perceived effectiveness of student-designed activities, such as preparing written summaries or slideshows to introduce a new, previously undiscussed course-related topic, independent students have higher evaluations ($M = 6.11$, $SD = .87$) than all other groups except participant students ($M = 5.62$, $SD = 1.20$, $p = .648$) ($F (4, 116) = 6.901$, $p = .000$). There were no statistically significant differences between the other learning style groups on this issue. On the other hand, there were no differences among learning style groups regarding the perceived learning effectiveness of most popular post competition scores, such as the week's most popular student-posted content, determined by the number of likes and comments ($F (4, 116) = .697$, $p = .595$).

Research results support previous studies that argue that learning styles affect student preferences in instructional and social technologies (e.g., Butler & Pinto-Zipp, 2006; Liu & Reed, 1994; Saeed et al., 2009). In addition, the findings are consisted with the characteristics and general classroom preferences of each learning style provided by Grasha (1996). For example, it is expected that a social networking site learning tool created and shared by an instructor is regarded as much more effective by dependent students who perceive teacher as a source of structure and support and prefer teacher-centered instructional methods compared to independent students, who prefer student-centered course designs. In addition, independent students are likely to rate more highly the learning effectiveness of student-designed teaching activities compared to their more dependent, collaborative and avoidant counterparts. Moreover, compared to students with other learning styles, participant students, who prefer time for discussion within lectures, tend to evaluate the course-required social network discussions as highly effective in enhancing learning, while avoidant students, who are uninterested in, and overwhelmed by, class activities, tend to have unfavorable evaluations. Furthermore, all students, regardless of learning styles, are likely to have favorable evaluations of educational tools such as student-shared content and the competition for the week's most popular post. This might be because such tools suit the general characteristics of independent, participant and collaborative students, while the non-required, non-graded and voluntary nature of these tools pose no threat for avoidant and dependent students.

CONCLUSIONS

Despite recent research efforts in the area, there is still need for empirical research aimed at understanding the role of social networking sites in education context (Madge et al., 2009; Towner & Leog Munoz, 2011). The general findings of this study regarding student perceptions of a Course Facebook Page incorporated into an instructor-based formal education setting imply that social networking sites and other Web 2.0 technologies can enhance overall and informal learning. However, as Madge, Meek, Wellens and Hooley (2009) indicated, there is also need to examine the motivations, aims and approaches of students to Facebook use in the context of higher education. In this regard, this study investigated the effect of student learning styles on perceived learning effectiveness of a Course Page integrated into a traditional course. Findings revealed difference in perceptions about the effectiveness of incorporating social networking sites into formal learning, according to learning styles. In the case of overall learning experience, avoidant students tend to be more neutral and have lower evaluations of learning effectiveness compared to independent, collaborative and participant students, and dependent students also tend to have lower perceptions than collaborative students. Regarding informal learning effectiveness, dependent students tend to have lower perceptions than independent and participant students. According to Grasha (1996), avoidant students are typically uninterested in, and are sometimes overwhelmed by class activities; nevertheless, present data show that even this student group favorably evaluates informal learning effectiveness of a course Facebook Page. Therefore, it can be concluded that a Course Facebook Page provides an informal learning space that can benefit all students, although the effectiveness varies according to learning style.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

This study also suggests an approach to maximizing the benefits of using social technologies to enhance student learning (Buzzetto-More, 2012; Duffy & Ney, 2015; Neier & Zayer, 2015; Selwyn, 2007); this approach focuses on accommodating individual learning style. The findings suggest that to enhance student learning in general, the following activities can be given for specific learning styles: contents shared by an instructor can appeal to students who are more dependent; online discussions can be provided when dealing with students who tend towards participation; and student-designed activities can be focused on to encourage independent students. However, features such as student shared content and most popular post competitions will appeal to all learning styles. It can be concluded that students can benefit most from a pedagogical use of social technologies when course designs address different learning styles by incorporating various learning tools.

One of the limitations of this study was the lack of students with competitive learning style. A replication of this research using larger samples, which can compare all six different learning styles can provide greater insight pertaining to learning style effect in the context of the use of social networking sites for educational purposes. Another limitation is that this study measured learning effectiveness by student self-report evaluations. A better understanding of learning style effect could be obtained by including a learning performance or course academic achievement variable, measured by such as course grade or student engagement factor. In addition, future research should examine ways to improve students' ability and competencies in understanding, using and producing different forms of knowledge in the context of pedagogical use of social technologies (Hemmi et al., 2009).

REFERENCES

Akkoyunlu, B., & Soylu, M. Y. (2008). A study of student's perceptions in a blended learning environment based on different learning styles. Educational Technology & Society, 11 (1), 183-193.

Best, L. A., Buhay, D. N., McGuire, K., Gurholt, S., & Foley, S. (2013). The use of web 2.0 technologies in formal and informal learning settings. In Mallia, G. (Ed.), *The social classroom: Integrating social network use in education* (pp. 1-22). Hershey PA, USA: IGI Global.

Bull, G., Thompson, A., Searson, M., Garofalo, J., Park, J., Young, C., & Lee, J. (2008). Connecting informal and formal learning experiences in the age of participatory media. Contemporary Issues in Technology and Teacher Education, 8(2). 100-107.

Butler, T. J., & Pinto-Zipp, G. (2005). Students' learning styles and their preferences for online instructional methods. Journal of Educational Technology Systems, 34(2), 199-221.

Buzzetto-More, N. A. (2012). Social networking in undergraduate education. Interdisciplinary Journal of Information, Knowledge, and Management, 7(1), 63-90.

Cain, J., & Policastri, A. (2011). Using Facebook as an informal learning environment. American Journal of Pharmaceutical Education, 75(10), 1-8.

Cole, M. (2009). Using Wiki technology to support student engagement: Lessons from the trenches. Computers & education, 52(1), 141-146.

Dabbagh, N., & Kitsantas, A. (2012). Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. The Internet and Higher Education, 15(1), 3-8.

Diaz, D. P., & Cartnal, R. B. (1999). Students' learning styles in two classes: Online distance learning and equivalent on-campus. College teaching, 47(4), 130-135.

Duffy, K., & Ney, J. (2015). Exploring the divides among students, educators, and practitioners in the use of digital media as a pedagogical tool. Journal of Marketing Education, 37(2), 104-113.

Ford, N., & Chen, S. Y. (2001). Matching/mismatching revisited: an empirical study of learning and teaching styles. British Journal of Educational Technology, 32(1), 5-22.

Fordham I. & Goddard, T. (2013). Facebook guide for educators. Retrieved from http://www.ednfoundation.org/wp-content/uploads/Facebookguideforeducators.pdf

Grasha, A. F., & Yangarber-Hicks, N. (2000). Integrating teaching styles and learning styles with instructional technology. College Teaching, 48(1), 2-10.

Halic, O., Lee, D., Paulus, T., & Spence, M. (2010). To blog or not to blog: Student perceptions of blog effectiveness for learning in a college-level course. The Internet and higher education, 13(4), 206-213.

Harrison, D. (2011). Can blogging make a difference: Campus Technology. Retrieved from http://campustechnology.com/articles/2011/01/12/can-blogging-make-a-difference.aspx

Hemmi, A., Bayne, S., & Land, R. (2009). The appropriation and repurposing of social technologies in higher education. Journal of computer assisted learning, 25(1), 19-30.

Hong, K. S. (2002). Relationships between students' and instructional variables with satisfaction and learning from a Web-based course. The Internet and Higher Education, 5(3), 267-281.

Karuppan, C. M. (2001). Web-based teaching materials: A user's profile. Internet Research, 11(2), 138-149.

Khan, B. H. (Ed.). (1997). *Web-based instruction*. New Jersey, USA: Educational Technology Publications.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Li, K. M. (2015). Learning styles and perceptions of student teachers of computer-supported collaborative learning strategy using wikis. Australasian Journal of Educational Technology, 31(1), 32-50.
Liu, M., & Reed, W. M. (1995). The relationship between the learning strategies and learning styles in a hypermedia environment. Computers in Human Behavior, 10(4), 419-434.
Livingstone, D. W. (2006). Informal learning: Conceptual distinctions and preliminary findings. Counterpoints, 249, 203-227.
Lu, J., Yu, C. S., & Liu, C. (2003). Learning style, learning patterns, and learning performance in a WebCT-based MIS course. Information & Management, 40(6), 497-507.
Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university:'It is more for socialising and talking to friends about work than for actually doing work'. Learning, Media and Technology, 34(2), 141-155.
Mallia, G. (Ed.). (2013). *The Social Classroom: Integrating Social Network Use in Education: Integrating Social Network Use in Education*. Hershey PA, USA: IGI Global.
McLoughlin, C., & Lee, M. J. (2008). Future learning landscapes: Transforming pedagogy through social software. Innovate: Journal of Online Education, 4(5), 1.
Montgomery, S. M., & Groat, L. N. (1998). Student learning styles and their implication for teaching (Vol. 10). Centre for Research on Learning and Teaching, University of Michigan.
Moran, M., Seaman, J., & Tinti-Kane, H. (2011). Teaching, learning, and sharing: How today's higher education faculty use social media. Retrieved from http://www.pearsonlearningsolutions.com/blog/2011/05/09/teaching-learning-and-haring-how-todays-higher-education-facutly-use-social-media.
Neier, S., & Zayer, L. T. (2015). Students' perceptions and experiences of social media in higher education. Journal of Marketing Education, 37(3), 133-143.
Saeed, N., Yang, Y., & Sinnappan, S. (2009). Emerging Web Technologies in Higher Education: A Case of Incorporating Blogs, Podcasts and Social Bookmarks in a Web Programming Course based on Students' Learning Styles and Technology Preferences. Educational Technology & Society, 12(4), 98-109.
Selwyn, N. (2007). Web 2.0 applications as alternative environments for informal learning-a critical review. In Paper for CERI-KERIS International Expert Meeting on ICT and Educational Performance, 16-17.
Sherry, L., & Wilson, B. (1997). Transformative communication as a stimulus to Web innovations. In Khan, B. H. (Ed.), *Web-based instruction* (pp. 67-73), New Jersey, USA: Educational Technology Publications.
Suat, M. L., Naimie, Z., & Asmawi, A. (2015). Factors Educators Should Consider When Integrating Facebook in Education. International Journal of Multidisciplinary Education and Research, 2(1), 32-37.
Sun, K. T., Lin, Y. C., & Yu, C. J. (2008). A study on learning effect among different learning styles in a Web-based lab of science for elementary school students. Computers & Education, 50(4), 1411-1422.
Towner, T., & Lego Muñoz, C. (2011). Facebook and education: A classroom connection. InC. Wankel (Ed.), *Educating educators with social media* (pp. 33-57). Bingley, UK: Emerald Group Publishing.
Wang, X. C., Hinn, D. M., & Kanfer, A. G. (2001). Potential of computer-supported collaborative learning for learners with different learning styles. Journal of Research on Technology in Education, 34(1), 75-85.
Young, M. R., Klemz, B. R., & Murphy, J. W. (2003). Enhancing learning outcomes: The effects of instructional technology, learning styles, instructional methods, and student behavior. Journal of Marketing Education, 25(2), 130-142.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LEARNING TRADITIONAL MALAY FOLK SONG AND TEMPO CONTROL BY USING AN M-LEARNING MODEL DESIGNED FOR BEGINNER PIANISTS

Fung Ying LOO
Department of Music
University of Malaya
Malaysia
loofy@um.edu.my

Fung Chiat LOO
Department of Music
Universiti Putra Malaysia
Malaysia

Khai Ern CHAI
Department of Music
University of Malaya
Malaysia

ABSTRACT
Through observation and literature review, it is gathered that using conventional approaches in teaching traditional and folk music to the globalized and modernized society is a huge challenge. Nonetheless, the preservation of culture and traditional art forms is consistently encouraged by government and in the realm of education. This research developed a mobile-orchestra model in an M-learning approach with an attempt to bring forward an edutainment concept in generating interest in local folk songs. An M-learning music model using Malay folk song *Dondang Sayang* was designed, where the test focused on learning rhythmic subdivision and tempo stability. An experiment was carried out to test the learning outcome among respondents who are adult beginner piano students. The result shows that ability and interest to perform the designated set of rhythmic pattern was significantly higher using the M-learning model. In addition, the test shows that the model is a potential tool to develop awareness of traditional Malay folk song.

INTRODUCTION

The study of folk music reveals challenges and changes resulting from a few factors such as institutionalization, classicization, westernization, popularization, harmonization and so forth (Bohlman, 1988). For example, some scholars such as Ramnarine (2003) and Briggs (2015) describe how local folk songs went through changes in this globalized era. Musical homogeneity or musical glocalization appear to increase at rapid rate with foreign cultural influx at an almost borderless global entity, very much traversing through the various -scapes as described by Appadurai (1996): ethnoscapes, mediascapes, technoscapes, financescapes, and ideoscapes. For example, Ramnarine (2003) describes how Finnish music went through changes in a globalized context while Briggs (2015) discussed how folk songs and pop fused in a realm of popular culture, commodity and globalization in the French community.

Past literature examined the challenges in teaching traditional and folk music where it is no longer a new issue in the context of education and ethnomusicological concern, and scholars now delve into various ways in terms of sustainability, institutionalization and pedagogical approach. In this research, a M-learning model was proposed in this pilot study as a mean of teaching Malay folk song and in this experiment of using the model as an intervention, the local Malaysian folk song *Dondang Sayang* was selected. The M-learning model designed in this research consists of a new musical programming that includes the process of song arrangement using an orchestration not limited to the original authentic *Dondang Sayang*. The model reveals an audio mobile orchestra recording that accompanies the practice of the song *Dondang Sayang* and at the same time, tempo stability training was carried out. Being mobile, students can practise the task at anytime and anywhere.

M-learning, where learning relies on a mobile device and can occur anywhere a learner may be, began in the mid-90s (Pachler, Bachmair, & Cook 2009). Compared to e-learning, Bajpai (2011) explains that m-learning relies on modern mobile devices that may be smaller in size and lightweight and learning space is no longer restricted such as if a desktop pc is used. There are many definitions given to M-learning by various scholars.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Mirski and Abfalter (2004) explain that m-learning is also distance learning when a handheld mobile device is used for interaction and learning. Adriana Reveiu (2009) explains that mobile means movable or portable; and in the case of m-learning, Georgieva et al. (2005) define two categories of learning material and learning administrative services. Although Yan (2015) states that there has yet to be a concrete definition of m-learning, a more precise one from Crompton (2013) added another level to the four elements (technological devices, pedagogy, social interactions and context) of m-learning while Sharples et al. (2007) define m-learning as "learning across multiple contexts, through social and content interactions, using personal electronic devices" (p.4). The authors give an overview of the various learner pedagogies and theories from the 70s to the present where learner-centred based pedagogy and advancement of technologies allow the m-learning approach that combines both learning and technology as both inseparable and equal entities. Most scholars such as Agnes Kukulska-Hulme (2005), Alzaza and Abdul (2007), Adriana Reveiu (2009) and McQuiggan, McQuiggan, Sabourin, and Kosturko (2015) agree that m-learning is less time-consuming when it comes to teaching with instructions.

Kim, Rueckert, Kim and Seo (2013) found that in a study of language learning, 84% students preferred to access learning on a mobile computer compared to smartphone and other devices. However, when it comes to watching videos on YouTube, a larger response from participants who used smaller mobile devices such as smartphone and tablets were gathered compared to mobile computer. The authors stated that an understanding of students' preference on mobile devices and user habit helps educators to design their teaching method. In Malaysia, scholars such as Song, Murphy and Farley (2013) surveyed the use of mobile devices and found a drastic change between the years 2008 and 2013, with an increase in students who own mobile devices and use in learning. Development in research on e-learning and m-learning models in other teaching subjects is growing. However, in music education, there is a lack of research looking into m-learning and music teaching. Early research such as Shoemaker and van Stam tested on teaching piano playing via e-learning by linking a digital keyboard to a computer (2010). The scholars found that after testing on real-time and time-shifted learning, both approaches should be combined to achieve better results in teaching and learning. On the other hand, Zhou, Percival, Wang et al. (2011) studied music learning without a musical instrument, by designing a MOGCLASS interface that enabled students to play different instruments' sound samples in real-time available from the system via a mobile device. The researchers found that this is less time-consuming teaching model considering the period of time required in mastering the skills to play an instrument. However, when it comes to examining interest level between learning music via MOGCLASS and using an instrument such as a recorder, the respondents in the latter has a higher rating. On the other hand, Riley (2013) looked into the use of Ipad in music learning and suggested different apps in the device such as metronome, score reader and tuner as useful tools in music teaching and learning. Chen (2015) in a more recent study gathered positive results in using m-learning in teaching aural skills while Albert (2015) stressed the importance of social media where music education takes place in the students' online community.

Thus, based on the information gathered from past literature, the authors aim to look into m-learning in instrumental playing and traditional music learning. The researchers selected piano as the musical instrument and Ipad as the mobile device in this study. The m-learning model is tested in two ways, teaching beginner adult piano learners a traditional Malay folk song, and at the same time, training on tempo stability with subdivision of note value. The following section on methodology explains the approaches employed in this research.

METHODOLOGY

Similar to how Bohlman (1988), Ramnarine (2003), and Briggs (2015) described the fusion of folk and modernity, the researchers in this study arranged the selected song *Dondang Sayang* considering the adaptation to modernity in its musical style. In the west, arrangement of folk music using conservatory compositional method is not new and discussion between the modernized version and village practice gain attention from scholars such as in Yugoslavia, as mentioned by Rasmussen (2013). However in this research, a more popularized version was adapted, and a new orchestral accompaniment to the song was programmed using Logic Pro8. Hence, the programmed accompaniment acted as a mobile-orchestra (m-orchestra) to accompany the learners' piano playing. In a way, this is similar to the long history of karaoke as a tool in education, mentioned in the literature such as Warner and Brick (1993), Gupta (2006) and Cristofaro (2014). Warner and Brick (1993) and Gupta (2006) have similar results in their studies using karaoke in teaching and learning. Warner and Brick (1993) found that children enjoyed more and learned faster when karaoke was used in classroom singing lesson. Gupta (2006) reveals the same when a reading class was conducted. Due to the nature of karaoke as a popular leisure activity, Rengifo (2009) in another study on teaching pronunciation also states that karaoke increased motivation among her respondents as fear or inhibition due to the lack of self-assurance were reduced. Thus in this research, a mobile orchestra was created as a 'minus one' or karaoke accompaniment based on the folk song *Dondang Sayang* with the aim of interesting beginner piano learners more in learning to play at a controlled

 Copyright © International Conference on New Horizons in Education Conference (INTE)

tempo.

Participants

A total of 15 adult beginner piano learners with an experience of 1-3 months piano learning were recruited as participants in this study. Frequency of learning month 26.7% (1 month); 53.3% (2 months); 20% (3 months) (Table 1). All respondents were aged 20 to 22 and were undergraduate non-major music students from tertiary institutions.

Table 1: Percentage of learning experience.

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1 month	4	26.7	26.7	26.7
2 months	8	53.3	53.3	80.0
3 months	3	20.0	20.0	100
Total	15	100	100	

Design

The folk song *Dondang Sayang* was arranged and programmed using Logic Pro8 as an instrumental music. The arrangement of programming considered a lively rhythmic accompaniment using flute as lead instrument playing the *Dondang Sayang* theme, with harmonic fillers from guitar, bongo, conga and drum set that moved away from the authentic version of the song and adapted it to the homogeneity of the modern popularization of song preference. Then, three isochronous melodies were created for the participants that progress from a simple to a more complicated task: a) a score using only minims according to the harmony of the folk song; b) a score using only crotchets according to the harmony of the folk song; and c) a score using only quavers according to the folk song. Baker-Jordan (2004) and Jacobson, Lancaster and Mendoza (2015) mentioned pre-counting in tempo control for students in piano learning. In the M-learning design for *Dondang Sayang*, pre-counting was embedded in the audio mobile orchestra recording. The tempo was set at 65 beats per minute and despite the common tempo indication by a metronome, the participants took a tempo cue from the mobile orchestra programming where the glockenspiel and rhythmic section took the role as temporal cue. In addition, a pre-recorded video was filmed that revealed a visual demo playing the isochronous melody as an aid to the asynchronous learning. As Shoemaker and van Stam (2010) explained, the benefit of asynchronous learning or time-shifted learning is that it is not dependent on internet strength or connection. Three demo videos were created where display of fingers moving according to the three rhythms along with the minus one was visual to the participants.

Procedure

Each participant in the experiment was first asked to fill in demographic questions and declare that they had not any prior piano lessons of more than 3 months to begin the test with. The purpose of the experiment was explained to the respondents and each was given a 30-minute session to perform the given tasks. The participants were taught note values of minim, crotchet and quaver, and then watched the demo video designed in this experiment. Finally, once loaded the programmed *Dondang Sayang* on a tablet using Apple's Ipad, the participants were asked to play together with the accompaniment of the mobile orchestra. The same performance task was repeated for all three types of note values minim, crotchet and quaver. After task completion, the participants answered a designated survey regarding their learning experience.

FINDINGS

Although the Malay folk song *Dondang Sayang* is a famous piece, in terms of familiarity with the given folk music *Dondang Sayang* only one out of the fifteen participants recognised it as a folk song, but could not identify the title of the song (see Table 2). The song was introduced to the participants by the researchers.

Table 2: Percentage of song recognition.

	Frequency	Percent
Yes	1	6.7
No	14	93.3
Total	15	100.0

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 3 reveals most participants were able to complete the first two tasks at their first attempt: playing the isochronous melodies composed using minim and crotchet at the designated tempo. However, when it came to completing the task of playing the isochronous melody that comprises of quavers, most of the participants succeeded only at their second attempt and four participants were able to succeed only after the third attempt.

Table 3: Number of attempts in task completion.

		Frequency	Percent	Valid Percent	Cumulative Percent
Minim	1st attempt	14	93.3	93.3	93.3
	2nd attempt	1	6.7	6.7	100.0
Crotchet	1st attempt	12	80.0	80.0	80.0
	2nd attempt	3	20.0	20.0	100.0
Quaver	1st attempt	1	6.7	6.7	6.7
	2nd attempt	10	66.7	66.7	73.3
	3rd attempt	4	26.7	26.7	100.0
	Total	15	100.0	100.0	

After the experiment, the participants were asked to rate the level of difficulty in completing the three tasks using the mobile orchestra accompaniment of *Dondang Sayang* (see Table 4). The respondents were given a choice of rating from 1 – 5 (1 = most difficult and 5 = very easy). Results reveal that the mean value gathered for each task was rather high with a) minim (M = 4.93, SD = .258), b) crotchet (M = 4.73, SD = .458) and c) quaver (M = 4.2, SD = .561). In terms of the confidence level of playing while learning these notes value and completing them at the given tempo, the mean was also high with a) minim (M = 4.87, SD = .352), b) crotchet (M = 4.67, SD = .488) and c) quaver (M = 4.13, SD = .352). This indicates that overall the participants feel that learning using this approach was considered easy and they obtained a high confidence level in playing them.

Table 4: Level of difficulty in task completion.

		Minimum	Maximum	*M*	*SD*
Level of Difficulty	Minim	4	5	4.93	.258
	Crotchet	4	5	4.73	.458
	Quaver	3	5	4.20	.561
Confidence Level	Minim	4	5	4.87	.352
	Crotchet	4	5	4.67	.488
	Quaver	4	5	4.13	.352

Table 5: Perception of participants towards the M-learning model.

	M	*SD*
a) How likely are you to use this method for rhythmic practice and tempo control?	5.00	.000
b) Do you feel that this method encourages independent learning?	5.00	.000
c) Level of ease practising with minus one	4.47	.640
d) Level of excitement	4.80	.414
e) Level of ease provided by the visual fingering	4.07	.884
f) Level of ease provided by the audio material	4.60	.632

Finally, a survey was carried out where the participants rated their feedback over the M-learning model using the folk song *Dondang Sayang* for beginner piano class alongside capturing a controlled stable tempo when playing (see Table 5). All respondents agreed that it was likely that they would use this approach for rhythm practice and tempo control. The participants felt that this method encourages independent learning. A question on the ease of practising rhythm using a minus one M-learning method also achieved a higher mean level (*M* = 4.47, *SD* = .640; see Table 5c). The results signified that the respondents felt that the approach of practising with minus one is easy. In addition, the level of excitement using this approach was also high with a mean level at (*M* = 4.80, *SD* = .414; see Table 5d). In terms of the use of audio-visual approach in this experiment, it was gathered that all

 Copyright © International Conference on New Horizons in Education Conference (INTE)

respondents perceived that both video and audio support (minus one) contributed to the ease of learning these rhythms (Table 5e and 5f) although the audio achieved a higher mean at (M = 4.6, SD = .632).

DISCUSSION

Unfamiliarity of the folk song as evidenced in Table 2 shows that although the respondents selected were native to the folk song's country of origin, there was a lack of awareness and familiarity with the song. Frith (2007) mentioned that the piano became more popular than the record player back in the 1920s. To the present it remains a popular instrument and thus, in this study, incorporating Malaysian folk song as a minus 1 mobile orchestra accompaniment for beginner pianist provided a chance to both practise and learn in rhythm and tempo control, and at the same time to introduce a folk song to the users.

The results show that the m-learning approach in an asynchronous form was favourable to the participants as they felt excited during the learning and practice when accompanied by a mobile orchestra. Compared to conventional practice for rhythmic learning and tempo control on the piano, a beginner pianist would need to train probably by sub-division counting or with a metronome. When the mobile orchestra of *Dondang Sayang* was used as a m-learning method, the programmed music substituted that of the metronome and led the participants with the recorded music and video as cue and the presence of a piano tutor can be exempted. At the same time, practising using the *Dondang Sayang* programmed music allowed the participants a chance to learn a new Malaysian folk song. In addition, repetition in practising using the model may enhance familiarity with the folk songs in a subconscious state.

CONCLUSIONS

This article reveals the findings from an early pilot study over testing the M-learning model that is based on a folk song with mobile orchestra accompaniment for a beginner piano lesson focusing on rhythmic and tempo control learning. In its methodological design the study considered findings from Zhou, Percival, Wang *et al*. (2011) and Riley (2013) where a musical instrument is still perceived as more favourable in raising interest in music learning, and the capability of a handheld mobile device such as that of an Ipad.

The positive outcome from this study shows the designed m-learning model's potential for further study, for example, testing it with different teaching and learning approaches whereby other folk songs could be incorporated into the model. Thus, learning and practising using this model could not only train the users in piano playing, but at the same time, incorporate the learning of local folk music where the latter genre faces problems of sustainability. As a summary, the mobile orchestra accompaniment used in this m-learning model is believed to enhance interest in learning comparable to the already proven popularity of karaoke in society. Thus, this m-learning design is perceived by the authors as a new approach that takes into consideration the synthesis of two learning contents: piano playing and local folk song.

ACKNOWLEDGEMENT

This study is supported by the Fundamental Research Grant Scheme FRGS (FP035-2014B).

REFERENCES

Albert, D. J. (2015). Social Media in Music Education: Extending Learning to Where Students "Live." *Music Educators Journal*, 102(2), 31-38.

Appadurai, A. (1996). *Modernity al large: cultural dimensions of globalization* (Vol. 1). Minneapolis and London: University of Minnesota Press.

Bajpai, M. B. (2011). M-learning & Mobile Knowledge Management: Emerging New Stages of e-Learning & Knowledge Management. *International Journal of Innovation, Management and Technology*, 65-68.

Baker-Jordan, M. (2004). *Practical piano pedagogy: The definitive text for piano teachers and pedagogy students*. Los Angeles: Alfred Music Publishing.

Bohlman, P. V. (1988). *The study of folk music in the modern world*. Bloomington: Indiana University Press.

Briggs, J. (2015). *Sounds French: Globalization, Cultural Communities and Pop Music, 1958-1980*. New York: Oxford University Press.

Chen, C. W. J. (2015). Mobile learning: Using application Auralbook to learn aural skills. *International Journal of Music Education*, *33*(2), 244-259.

Crompton, H. (2013). A historical overview of mobile learning: Toward learner-centered education. *Handbook of mobile learning*, 3-14.

de Cristofaro, G. (2014). Languages Learning through Songs, Karaoke and Internet. In *Conference proceedings. ICT for language learning* (p. 271). libreriauniversitaria. it Edizioni.

Frith, S. (2007). *Taking popular music seriously: selected essays*. Hampshire: Ashgate Publishing, Ltd.

Gupta, A. (2006). Karaoke: A tool for promoting reading. *The Reading Matrix.* 6(2), 80-89. Retrieved Dec 5,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

2011, from http://www.readingmatrix.com/articles/gupta/article.pdf.

Jeanine M. Jacobson, E. L. Lancaster, Albert Mendoza. (2015). *Professional Piano Teaching, Volume 1 - Elementary Levels: A Comprehensive Piano Pedagogy Textbook* (2nd Ed.). Los Angeles: Alfred Music.

Kim, D., Rueckert, D., Kim, D. J., & Seo, D. (2013). Students' Perceptions and Experiences of Mobile Learning. *Language Learning & Technology*, *17*(3), 52-73.

Liu, M., Navarrete, C. C., Maradiegue, E., & Wivagg, J. (2014). Mobile learning and English language learners: A case study of using iPod touch as a teaching and learning tool. *Journal of Interactive Learning Research*, *25*(3), 373-403.

McQuiggan, S., McQuiggan, J., Sabourin, J., & Kosturko, L. (2015). *Mobile Learning: A Handbook for Developers, Educators, and Learners*. New Jersey: John Wiley & Sons.

Pachler, N., Bachmair, B., & Cook, J. (2009). *Mobile learning: structures, agency, practices*. New York: Springer Science & Business Media.

Ramnarine, T. K. (2003). *Ilmatar's inspirations: nationalism, globalization, and the changing soundscapes of Finnish folk music*. Chicago: University of Chicago Press.

Rasmussen, L. V. (2013). *Newly composed folk music of Yugoslavia*. London: Routledge.

Rengifo, A. R. (2009). Improving pronunciation through the use of karaoke in an adult English class. *Profile Issues in TeachersProfessional Development*, (11), 91-106.

Riley, P. (2013). Teaching, learning, and living with iPads. *Music Educators Journal*, *100*(1), 81-86.

Shoemaker, K., & van Stam, G. (2010). *E-Piano, a case of music education via e-learning in rural Zambia*. Raleigh: Web Science Conference.

Song, H. S., Murphy, A., & Farley, H. (2013). Mobile devices for learning in Malaysia: then and now. In *Proceedings of the 30th Australasian Society for Computers in Learning in Tertiary Education Conference (ASCILITE 2013)* (pp. 830-834). Macquarie University.

Wagner, M. J., & Brick, J. S. (1993). Using karaoke in the classroom. *Music Educators Journal*, *79*(7), 44-46.

Yan, Z. (Ed.). (2015). *Encyclopedia of Mobile Phone Behavior*. Hershey, PA: IGI Global.

Zhou, Y., Percival, G., Wang, X., Wang, Y., & Zhao, S. (2011, May). MOGCLASS: evaluation of a collaborative system of mobile devices for classroom music education of young children. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 523-532). ACM.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LEARNING VIRTUAL REALITY TOUR OF SUAN SUNANDHA PALACE

Kunyanuth Kularbphettong
Suan Sunanadha Rajabhat University , Thailand
kunyanuth.kul@ssru.ac.th
Itsarapong Rodchom
Suan Sunanadha Rajabhat University, Thailand
itsarapong.ro@gmail.com

ABSTRACT
This research aims to implement the Virtual Reality Navigation System of Suan Sunandha Palace in during the Reign of King Rama the Fifth. 3D models of historic buildings were created for learning and providing information of historical sites located at Suan Sunandha Rajabhat University to enrich cultural historical tourism with interactive application. User can navigate through the virtual reality palace and this system presents graphic simulation in the form of game. To evaluate the system performance and user's satisfaction, questionnaires and Black Box Testing were used to measure experts and students. Experimental results show that our design is feasible and effective and this application can offer the feeling of fun and reality to explore the historical building.

INTRODUCTION
The development of virtual reality technologies has inevitably impacted on more scientific and educational experience. Virtual Reality is a significant medium that is used to create and transport an experience as close to visiting the actual location as possible. Virtual Reality (VR) provides the way to use 3D visualizations with which the user can interact and feel similarity like his/her immersive experience. Virtual reality was first used in training and assessment of aircraft pilots in a flight simulator. Recently, VR has changed the face of educational learning by becoming a supplement tool to enhance traditional learning methods. There are much of research works that has been developed a virtual classroom and situations. According to a lot of research, literature review indicated the lack of an interactive 3D environment as a reality virtual tour. Virtual tours supply information via multimedia, giving users the impression they are navigating locations and experiencing them in real time (Bessey, 2013).
Nowadays, the methods of digitalization are increasingly used to preserve cultural heritage because the representation of the digitalized material becomes easily available to the scrutiny of the public. Suan Sunandha Rajabhat University was once a part of Dusit Palace, the Royal Compound of King Rama V. the King planned this place as a forest garden and 32 royal residences. There are many historical buildings and places to attract and learn for students and visitors. To raise and educate the awareness and learning of the cultural historical palace, this project purposes to study the effectiveness of the panorama virtual reality in Suan Sunandha Palace for freshmen and to compare the learning achievements of students' perception before and after learning this application. The rest of this paper is organized as follows. Section 2 reviews the related works. Section 3 presents the proposed methodologies. The results of the proposed application were evaluated and discussed in section 4. Finally, the conclusion and future works issue in the lase section.

RELATE WORKS
Empirical findings showed that Kaufmann and Meyer (2008) presented an augmented reality application that observed 3D objects in their textbooks and interacted to improve student's spatial abilities. The SMILE project is a fantasy 3D virtual environment game to engage deaf and hearing children in math and science-based educational tasks that shows the key elements of successful computer games, emotionally appealing graphics, and realistic real-time 3D signing, with goal-oriented, standards-based learning activities that are grounded in research on effective pedagogy (Adamo-Villani and Wright, 2007). A virtual reality classroom was to create for a controlled clinical comparison of attention performance in children with ADHD (Parsons et al, 2007). The real-time interactive visualization/simulation of realistic virtual heritage scenarios is recreated by using modern games technologies (Chalmers and Debattista 2009, Magnenat-Thalmann and Papagiannakis, 2005). The Rome Reborn project is the world's largest digitization project to produce a high-resolution version of Rome at 320 AD (Frischer, 2008) and there are a lot of models created for a specific cultural heritage entity (Ibrahim et al, 2011, Carrozzino and Bergamasco, 2010, Jacobsen and Holden, 2007). Furthermore, human computer interaction (HCI) research is the important approach employed for this project (Tamura et al 2001, Thomas et al 2000, Nuanmeesri et al, 2015). Wobbrock et al (2011) presented ability-based design as a refinement to, and refocusing of, prior approaches to accessible design for disability to ability. This project exploits the above related works

 Copyright © International Conference on New Horizons in Education Conference (INTE)

and principles to reach suitable approaches for interactive user interface presentation of the Suan Sunandha palace application.

THE PURPOSED METHOLODOGIES

To develop this VR project, interactive Multimedia System Design and Development: IMSDD (Dastbaz, 2003) was applied by the following steps:

1) System requirements: this study will cover the possibilities in target users to compliance with the system and supplied suitable hardware and software required for development this media application.
2) Design Consideration: this stage will clearly draw up guidelines of this project including: design metaphor, design information, storyboard and design navigator.
3) Implementation: this phase consists of prototyping and beta testing and also this prototype was tested by using black-box testing approach to make sure there are no practical errors.
4) Evaluation: this stage is evaluated by 5 experts to assess in content analysis issue, language issue and user interface issue.

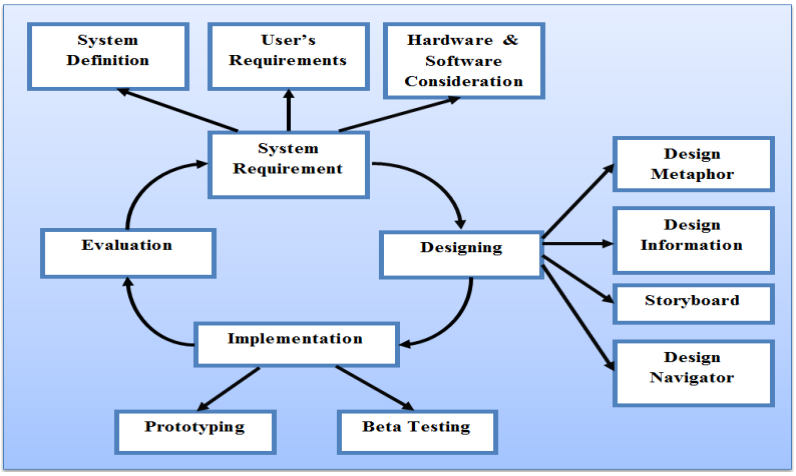


Fig.1 IMSDD (Dastbaz, 2003)

This study was a quasi-experimental research and participating students were from 30 freshmen of Suan Sunandha Rajabhat University. The instruments used to collect data were: 1) a questionnaire and interview forms (pre-survey and post-survey) inquiring about information of Suan Sunandha palace 2) a questionnaires inquiring the opinion of experts and students for this application based on black-box testing approach. The collected data were analyzed by the statistical means, standard deviation (S.D.) and t-test. Prior to participating for this project, students were asked to complete a pre-survey questionnaire that asked about prior information of Suan Sunandha palace history and then they learned an introduction module to help them become familiar with the user interface of this application. A post-survey asked students about their ability learning through this system when completing this application.

THE RESULTS OF THE PURPOSED APPLICATION

In this section, experimental results were separated to 2 parts: assessing students' learning achievements; and evaluating the performance and satisfaction of the application.

To develop the VR application, Figure 2 and 3 were shown the results of application. In the experiment of this study, users learned and played this application and when finished they will be asked for to take the test and completed a questionnaire for analyzing their knowledge.



Fig.2 Example of the VR application

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Fig.3 Example of the VR application

To assess students' learning achievements with the same score test, 30 freshmen were required to complete the pre-test to determine student's knowledge about the information of Suan Sunandha palace before studying the VR application. After completing achievement their study, the sample group were completed the post-test and the scores were calculated and analyzed to find progress. Table 1 presented the results of the scores of the pre-test and post-test. The results of the study showed that students achieved higher learning with the statistically significant difference at .01 and the post-test (means= 86.35, SD = 2.33) were higher than the pre-test (means= 62.10, SD = 8.09). It indicated that the VR application is appropriated to learn and use for students.

Table 1 the results of the scores of the pre-test and post-test

Learning Achievement Test	X	S.D.	t-test	Sig.
Pre-test	62.10	8.09	12.18	0.00
Post-test	86.35	2.38		

To evaluate the performance and satisfaction of the application, black box testing and questionnaires by experts and students were used to assess and evaluate the performance of this project. Black Box testing was used to determine the error of the project as following: functional requirement test, Function test, Usability test, Performance test and Security test.

Table 2 the results of Black box testing

	Experts		**Users**	
	$\bar{x}$	**SD**	$\bar{x}$	**SD**
1.Function Requirement Test	4.47	0.57	4.83	0.38
2. Functional Test	4.63	0.49	4.57	0.50
3. Usability Test	4.73	0.48	4.93	0.25
4. Performance Test	4.60	0.50	4.83	0.46
5. Security Test	4.67	0.53	4.73	0.45

Functional requirement test was evaluated the ability of the system in users' requirements and Functional test was assessed to evaluate the accuracy of the system. The suitability of the system was tested by usability test function. Performance test was used the processing speed of the system. Finally, security test was evaluated the security of the system Table 2 was shown the results of black box testing. The results of this VR application showed a high level quality both experts and students in the overall aspects as well.

CONCLUSIONS AND FUTURE WORKS

In this paper, we present the results of developing virtual reality application to learn and provide information of historical sites located at Suan Sunandha Rajabhat University with interactive application. User can navigate through the virtual reality palace and this system presents graphic simulation in the form of game. Experimental results show that our design is feasible and effective and this application can offer the feeling of fun and reality to explore the historical building. However, this project is still at the early stages of using immersive virtual reality systems and we are looking forward to improve the system by using other technology and techniques to conduct a more thorough investigation into their impact on student learning.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ACKNOWLEDGMENT

The authors gratefully acknowledge the financial subsidy provided by the Research and Development Institute, Suan Sunandha Rajabhat University.

REFERENCES

Adamo-Villani, N., and Wright, K. (2007). Smile: an immersive learning game for deaf and hearing children. *In ACM Proceedings of SIGGRAPH 2007 Educators Program*, ACM Publications, San Diego, USA.

Bessey, S. (2013). *Virtual 3D Environments: Implementations of 3D Environments for Virtual Tours and Online Communication*, Thesis. Rochester Institute of Technology., Accessed from http://scholarworks.rit.edu/theses/6299.

Chalmers A, Debattista K. (2009). Level of realism for serious games. *In: VS-Games 2009: Proceedings of the IEEE virtual worlds for serious applications first international conference* (pp. 225–232).

Dastbaz, Mohammad. (2003). *Designing Interactive Multimedia Systems*. McGrawHill,New York.

Frischer B. (2008). *The Rome reborn project. How technology is helping us to study history*. OpEd, November 10, University of Virginia.

Ibrahim, N. et al. (2011) Cultural Learning in Virtual Heritage: An Overview. *IVIC'11 Proceedings of the Second international conference on Visual informatics: sustaining research and innovations*. (pp. 273-283). Accessed from: http://dl.acm.org/citation.cfm?id=2074698.

Jacobsen, J. and Holden, L. (2007) *Virtual Heritage: Living in the Past. Techné*. Research in Philosophy and Technology (pp.55-61) Accessed from: http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.103.8833.

Jacob O. Wobbrock, Shaun K. Kane, Krzysztof Z. Gajos, Susumu Harada, and Jon Froehlich. (2011). *Ability-Based Design: Concept, Principles and Examples*. ACM Transactions on Accessible Computing, Vol.3, No.3 (pp.1-27).

Kaufmann, H., & Meyer, B. (2008). Simulating educational physical experiments in augmented reality. *In Siggraph asia '08: Acm siggraph asia 2008 educators programme* (pp. 1–8). New York, NY, USA: ACM.

Carrozzino M., Bergamasco M. (2010). *Beyond virtual museums: experiencing immersive virtual reality in real museums*. Journal Cultural. Heritage. Vol. 11.(pp.452–458).

Magnenat-Thalmann N., Papagiannakis G.. (2005). Virtual worlds and augmented reality in Cultural Heritage applications, *International Workshop on Recording, Modeling and Visualization of Cultural Heritage*, Ascona, Switzerland.

Nuanmeesri S., Kadmateekarun P.and Poomhiran L. (2015). *The Development of Augment Realization for Thai Phra Ratcha Niyom*, Science and Technology RMUTT Journal,Vol.5 No.2 (pp.74-84).

Parsons, T.D., Bowerly, T., Buckwalter, J.G., Rizzo, A.A.(2007). A controlled clinical comparison of attention performance in children with ADHD in a virtual reality classroom compared to standard neuropsychological methods. *Child Neuropsychology*.

Tamura, H., Yamamoto, H., Katayama, A. (2001). Mixed reality: Future dreams seen at the border between real and virtual worlds, *Computer Graphics and Applications*, vol.21, no.6, (pp.64-70)

Thomas, G.A., Jin, J., Niblett, T., Urquhart, C., 1997, A Versatile Camera Position Measurement System for Virtual Reality TV Production., *International Broadcasting Convention*, Amsterdam, (pp.284-289).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LEVEL OF THE INFORMATION SECURITY AWARENESS OF THE NURSERY SCHOOL STUDENTS

Gabor Kiss
Department Mathematics and Computer Science
Komarno,Slovakia
kissga@ujs.sk

Zuzanna Arki
Department Mathematics and Computer Science
Komarno,Slovakia
arkiz@ujs.sk

Antonia Szasz
Institute of Basic and Technical Sciences
Budapest, Hungary
szasza@gdf.hu

ABSTRACT
In this paper we have analyzed the kindergarten teacher-education students' awareness of information security in J. Selye University in Slovakia. Because there are sensitive data about children stored in the kindergarten (e.g. home address, parents' details, medical records, etc.), it deeply matters how careful is the data stored. Thorough data protection is important in order to avoid the digitally stored information to be viewable by other persons, who can use them for malicious purposes (e.g. social engineering, kidnapping, murder) (Keszthelyi, 2013). This requires appropriate care and protection of storage and handling. In our research we wanted to know what level of information security awareness characterizes the kindergarten teacher-education students, whether they are aware of the basic data protection aspects. The study assesses what kind of online services they use and what level of protection they use in these services for their own data. At the end of our analysis we concluded that many of them are not aware of the essential data and information protection. The data they have stored can be very easily obtained. These facts are foreshadowing what level of data protection we can expect in their nursery work. Based on the results and considering the serious consequences of the misuse of the sensitive data could have, an additional training in information protection is very much required among the kindergarten teacher-education students.

INTRODUCTION

The sensitive information related to young children is getting particularly more and more important since the daily news coverage is referring about missing and abducted children. Kindergarten teachers take records about the child's home address, medical information, personal information of parents, etc. If these data get to untrained hands it is possible to use them to bad purpose through social engineering (Mitnick and Simon, 2003). In addition it is possible to disguise a child's murder to accident, based on obtained severe food allergy information, or using conflicts between parents' in order to child abduction etc. The listed examples might seem too be extravagant, but they show how serious consequences may have if sensitive data relating to children does not come into the right hands.

Our research aims to examine the information security awareness of graduate teachers, assessing whether they will be able to use the right level of data protection in their work. We have analyzed of the IT knowledge level of Slovakian students before the final exam (Kiss, 2011), (Kiss, 2012), (Kiss, Godó, 2014). In this case want we measure the information security awareness at the end of the higher education. For the analysis, the students filled out a questionnaire, which asked what kind of online services they use, about the importance of used online services and the students' user password habits.

With this information we can get a notion about the level of information security awareness they have, which will affect the protection of sensitive data they will manage in the future.

THE STUDY

In the questionnaire apart from the personal data questions we have asked about the ICT tools they own; the time spent using Internet; their web service use and its importance; and their user password habits. The importance of services was measured using a 5-point Likert scale (1 - I do not use at all, 5 - very important)

Our questionnaire was filled out by 25 of the 37 graduating students (future kindergarten teachers) in Slovakia who are coming from different cities and villages in Slovakia. To our questions we've got answers from all male

 Copyright © International Conference on New Horizons in Education Conference (INTE)

student and 64% of female students.

The questionnaire had a wide range of variables (nominal measurement level).
Some of these (characterized by sequence of interest) we coded as higher ordinal measurement level variables (e.g. education, village size etc.). In case of password usage we gave higher score (rank number) for more cautious and safer passwords and lower score for the risky ones. (E.g. The passwords dissimilarity indicator variable was given one point for the identical passwords, 2 points for partially same passwords (with identical area), 3 points for a completely different passwords).
The analysis of ordinal measurement level variables we performed by using non-parametric tests based on use of rank numbers (e.g. Spearman correlation in relationship testing, in case of independent sub-sample the Mann-Whitney, respectively Kruskal-Wallis test in deviation/dissimilarity testing).
We treated these variables as range variables where the comparisons of the different categories (dissimilarity tests) were performed.

THE RESULTS OF DESCRIPTIVE STATISTICAL ANALYSIS OF PERSONAL DATA

The questionnaire was filled out by 25 kindergarten teacher-education students, 21 were female (84%), and 4 male (16%).
In the statistical sample no one was living in big city, 14 out of 25 (56%) live in village, 3 (12%) in a small town, and 8 (32%) in city. The urban residents altogether were 11 students (44%). Slightly more than half of the respondents are living in village, while the others live in city.
For the majority of the respondents is the secondary school the level of education of their parents. The student's father have a high school education in case of 22 students of all 25 (88%), two fathers (8%) have education of primary school, one father (4%) of college. In case of 20 students of all 25 (80%) is the mother's level of education the high school, three mothers (12%) of college, one (4%) of university, and one (4%) of primary school.
One of all students does not have own PC/laptop, and another one does not have a smart device (portable with internet connection).

The majority of students spend several hours with Internet activity on school days. Nearly half of the respondents spend with Internet activity 1-2 hours, more than third of them 2-5 hours. Less than 1 hour with internet activity spend 3 out of 25 (12%), 1-2 hours spend 11 (44%), 2-5 hours spend 9 (36%), more than 5 spend 2 (8%). / Note: these two respondents were 20 and 21 years old women. /
They spend several hours with Internet activity on their free days (weekends, vacations), just the rates are reverse: nearly half of respondents 2-5 hours, nearly a third of them about 1-2 hours. Only 4 respondents out of 25 (16%) less than 1 hour, 8 respondents (32%) 1-2 hours, 11 respondents (44%) 2-5 hours, and finally 2 respondents (8%) more than 5 hours. / Note: these two respondents are 20 and 21 years old women. The 21 year-old woman is the same, who also spend in Internet activity more than 5 hours on school days. /

To perform inferential statistical analysis of Internet usage time we coded the time-variables into ordinal scaled variables. The correlation between the time spent in online activities on school days and on free days is more than medium, it is positive ($r = 0.610$), and is significant (sig. = 0.001) at 1% level. In other words, who spends more time in Internet use on school days, typically can spend more time on days off.

The respondents consider themselves to the same degree to be human and natural oriented, 12 respondents human and 13 respondents natural minded. (Note: among of the four male respondents two consider themselves human, and two natural minded.)

From all 25 respondents only 1 person has ECDL exam.

ONLINE SERVICE USAGE ANALYSES

The kindergarten teacher-education students could evaluate the usage and importance of various Internet services as part of the survery.
The spatial average values show that the use of private e-mail account is the most common (average = 4.4, median = 5.0) not surprisingly. This is followed by the school informational system (average = 3.48, median = 4.00) and Youtube (average = 3.80, median = 4.00). Then comes the use of Facebook (average = 3.04, median = 3.00), and Google Drive (average = 2.36, median = 2.00).
All other services are on the median one (that means, that the majority of respondents do not use the feature), the average values are below 2. All respondents gave 1 point to the Meetup, Miutcánk, Foursqaure usage. To the Waze one person gave 2 points, the others gave 1 point. The Twitter, Vimeo, Ustream not received more than

 Copyright © International Conference on New Horizons in Education Conference (INTE)

three points. To use the Hotdog and Snap Chat main use one student gave point 4 (not the same students), the others gave 1 point.
A wider usage indicates the higher scores (4 and 5). This includes the private e-mail account, school information system, the use of Youtube (these are respectively identified with score 4 or 5 by 21 respondents, and 15-15 respondents, that means 84% of respondents, and 60-60% out of the total). Finally 9 respondents gave high score to Facebook (more than a third of respondents 36%).
From the lower usage services received 3 high score values: Google Drive, Indavideo and Pinterest, and 2 high score values received iTunes.
The use of private e-mail account is typical and very generic (did not received less than score 3).
Using the school system is required for the studies, its use is generic, 1 respondent gave 1 point, 1 respondent 2 points, and eight gave 3 points (nearly one third of respondents, 32%). Finally 7 respondents gave 4 points, 8 respondents gave 5 points. High score was given by 21 respondents out of all the 25 respondents (84% of respondents).
Using Facebook is generic, but seems to be a typical medium, because one respondent gave 1 point, 7 respondents gave two points, 8 respondents 3 points (that is nearly one-third of all respondents, 32% of the total), eight respondents (32%) gave 4 points, 1 respondents gave 5 points. High score gave 9 respondents (36% of respondents, more than a third).

To the multidimensional scaling we included measurement variables with the median scores at least 2:
- own e-mail account
- School learning system (LMS)
- Youtube
- Facebook
- Google Drive

The following layout use the one-dimensional space (figure 1):

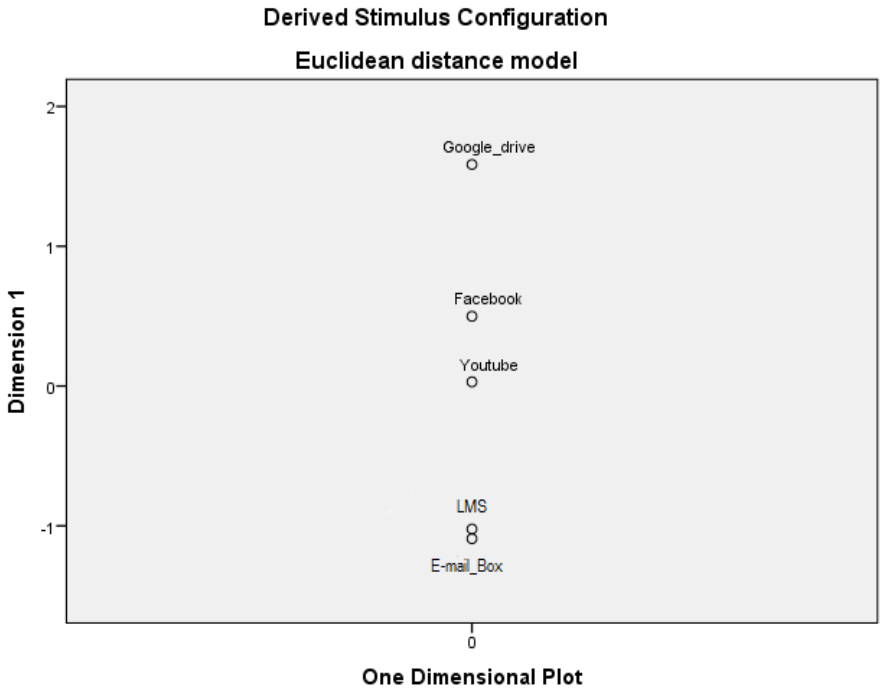


figure 1. The important services arranged in a one-dimensional space

It is evident that the more generic and important the service is rated the smaller is its coordinate value and vice versa.
Our model fits into one-dimensional space very smoothly. The horizontal axis represents the location in the original space, the vertical axis in the reduced, we are measuring the one-dimensional space distance. If the figure is well approximated by a straight line, it means that the dimensions decrease has not been substantial distortion, there is no information loss.
The value of the model-fit indicators: Stress = 0.06045; RSQ = 0.98586.
The Stress-value indicates the distance structure preservation. The value between 0 and 0.05 is very good, the

 Copyright © International Conference on New Horizons in Education Conference (INTE)

value between 0.05-0.10 is considered to be good. In our case, the Stress = 0.06045 value shows a good fit, all relevant information remain by the dimensions decrease. The RSQ shows a very good fit. The following figure (illustrate the original structure and the reduced distance correlation) can be good approximated by a straight line (figure 2).

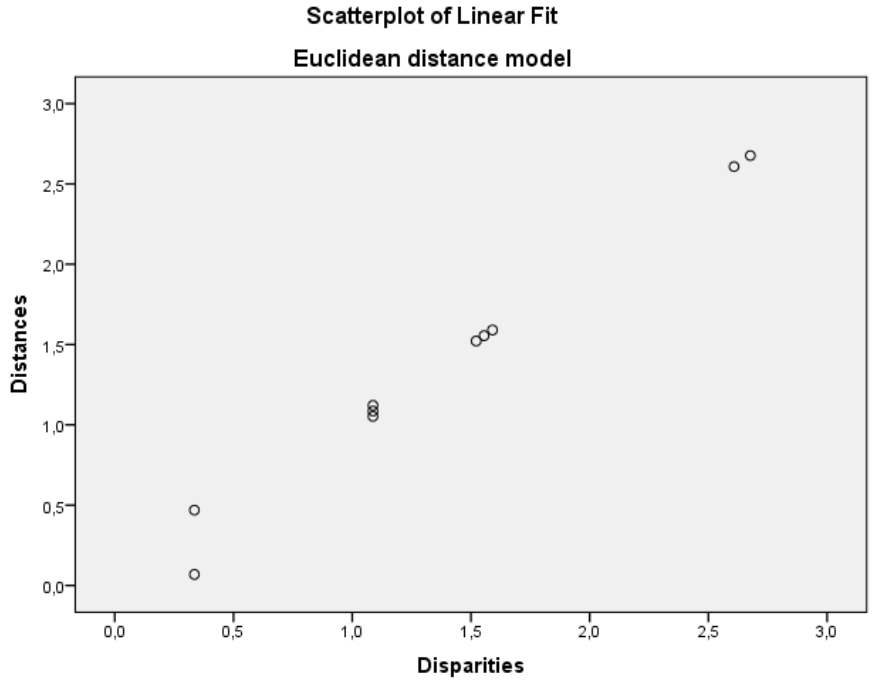


figure 2. The model fit in a one-dimensional space

We examined the arrangement in two-dimensional space and obtained the following arrangement (figure 3):

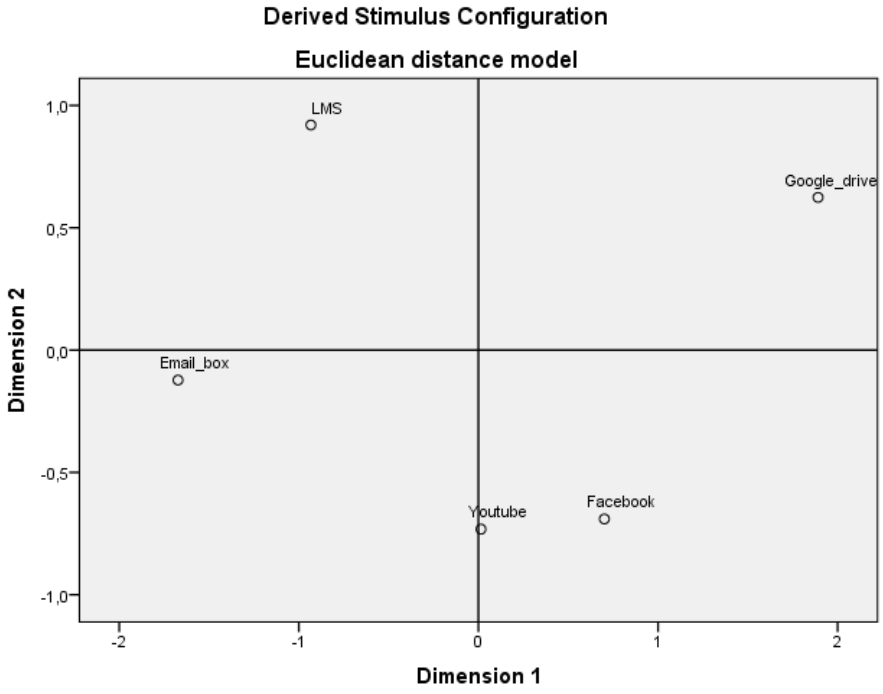


figure3. The arrangement of important services in two-dimensional space

The reduced two-dimensional model shows a very good fit: Stress = 0.00209; RSQ = 0.99996.
The Stress value is close to 0 (much smaller than 0.05), which shows an excellent fit of the model, it retains the relevant information. The low Stress value (<0.05) shows that the multi-dimensional space and the reduced

 Copyright © International Conference on New Horizons in Education Conference (INTE)

distances correspond to each other. The RSQ is close to 1, which shows that the original and the reduced structure are in close correlation. The Euclidean distance model diagram shows an almost perfect straight line. (Figure 4).

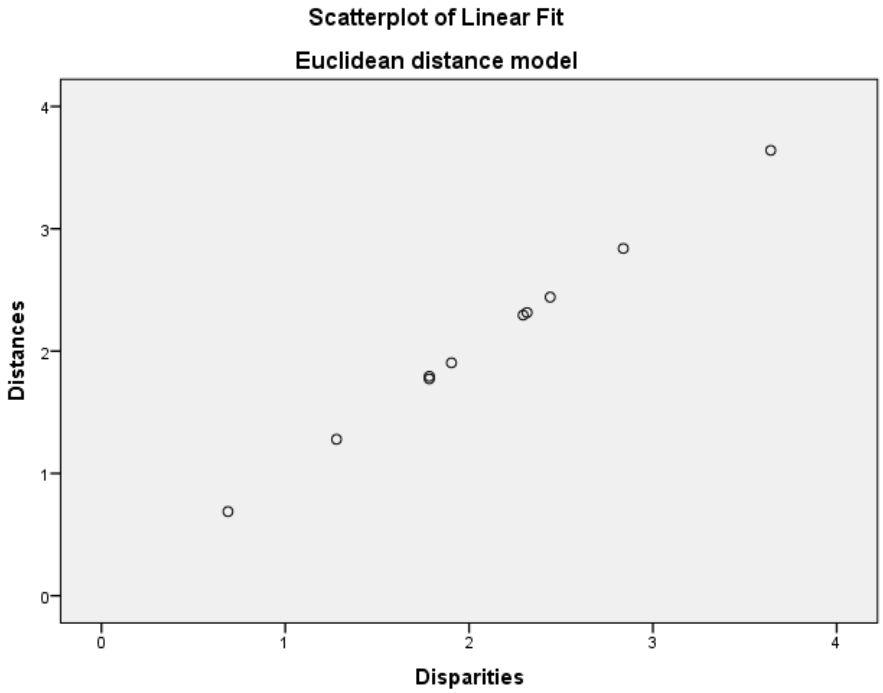


figure4. The model fit in two-dimensional space

Interpreting the two dimensions we found that the horizontal axis measures the importance of services: the more generic and more important rated the service is, the smaller is the first coordinate value. The lower valued service the higher is the first coordinate value (figure 3).
The vertical axis measures the formal/informal (or learning/entertainment, formal or public/private) usage. The academic information school system received the highest coordinate score and in fact is clearly dominant in the formal use. Google Drive is used in the informal sector, but it is typical for students learning to use it in conjunction with the document storage and sharing (e.g. with a group).
Youtube and Facebook received the lowest points of coordinates. This indicates informal use of the feature.
The private e-mail account get only slightly to the informal halves. It supports both formal and informal usage, but it is considered more informal (private means of communication).

We also analyzed the association between those services which the majority used and considered as important.
The measure-level of usage level measuring variables is ordinal (higher scores received the more significant services to the respondents). The pair-wise correlations between them we measured by Spearman's rank correlation. The Spearman correlation coefficient's value 1 shows full identity, its positive value shows a similar judgment; the value (-1) is a reverse judgment, the negative value shows the opposite direction of judgment.
The use of Facebook shows a significant correlation only with one service (this is because the usage is (medium) characteristic and independent on other service usage).

- Using Youtube: medium strong, positive (r = 0.490), significant (sig = 0.013.) at 1% level.

Google Drive usage does not show significant association with other services.
The use of private e-mail account is very generic, did not show a significant correlation with other services (its usage is typical regardless of the usage of the others).
Usage of the school academic information system shows no significant correlation with other services. Its usage is typical for a large part of the pattern and regardless on usage of other services.
Only the usage of Youtube shows the significant correlation (r = 0.490, sig. = 0.013) with usage of Facebook.

We have analyzed the service usage in regards to the age of the respondents in the case of Google Drive: at 5% level significant (sig = 0.017) medium strong, negative correlation was found (r = -0.472). It means the older the respondent is the lower point of specific usage of Google Drive have indicated. The cloud usage is more typical for young people in the statistical sample.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The service usage was also compared between range and binary variables with Mann-Whitney test and Kruskal-Wallis test. As a conclusion for the statistical sample we can state, that the gender, living place (with parents), or real human preferences, the educational level of parents does not significantly affect the usage of Internet services.

ANALYSIS OF PASSWORDS USED IN ONLINE SERVICES

The used passwords for internet services marked as important (4 or 5 points rated) are for all services identical by 4 people of all 25 members (16%), in their case it is enough to steal the password from one of the services and have already access to all other internet service used by them and also all sensitive information which those might contain.

Eleven respondents (44%) use different passwords, it is somewhat very positive as password obtained in one place cannot be used to access another service. Ten respondents (40%) have a joint permanent part of passwords, from which one can gain easier approach to generate the appropriate amendments to other services' passwords. E.g. if someone's Facebook password is „passwordfb", you can easily make „passwordgm" in Gmail. The majority (84%) is cautious not to use identical passwords.

4 respondents (16%) does not change their password even they suspect that someone found it out. 9 respondents (36%) change the password only if they think someone found it out; 7 respondents (28%) change the password annually or less frequently, 3 respondents (12%) change it every 3-6 months, 2 respondents (8 %) every 1-2 months.

Only the 20% of respondents can be considered to be cautious, they are the ones who more than half a year change their password, really careful is 8% of them, they change their passwords every 1-2 months. More than a third of the respondents will only change the password if they suspect that someone found it out. Half of the respondents (52%) typically does not change password (not at all or only in case of suspicion).

We estimated the number of characters in passwords given by the respondents based on class means (assuming equal class-lengths we gave the lower and upper class values).

The minimum number of password characters is 6, the longest 18. The average (estimated) number of characters is 10.32, the median is 9 (it means the half of the respondents have shorter, the other half have longer password).

A gender comparison of male and female shows in both the six-character minimum password.

The longest male's password is 15; female's password is 18 character long. The estimate average of the length of male's passwords is 10.50 (the median is also 10.50), 10.29 for female (median 9).

The 64% of respondents do not use passwords longer than 10 characters, while some services require at least 8 character passwords.

The number of characters in passwords in 20% of participants is less than 8, in case of 44% of respondents is 8-10 characters, for 16% is this number 11-13, for 12% is between 14 and 16, for 8% is longer than 16 characters. Thus, the fifth of survey participants use 8 characters or shorter passwords, which is by today's computing capacity not considered as safe, even if it contains letters, the numbers and other punctuation marks. Only slightly more than third (36%) of respondents use passwords longer than 10 characters, which mean better security in today's conditions.

We examined also the relationship between the password change habits and the number of characters in passwords with chi-squared test and Spearman test to the transcoded variables. The chi-squared test shows the medium (Cramer (V) = 0.466, CC = 0.551), but not significant (sig. = 0.209) correlation between the usage of different passwords and password changing habits.

The Spearman rank correlation also does not show a significant correlation. The correlation ($r = 0.323$) is below the average and not significant (sig. = 0.115).

Thus, no test have indicated a significant correlation.

We also have analyzed the characters used in the selection of passwords.

From the participants in the survey 2 respondents (8%) used only lowercase letters in passwords, other 2 respondents (8%) used combination of upper and lowercase letters, 17 respondents (68%) used combination of uppercase, lowercase letters and numbers, which is required by some services; 4 respondents (16%) used uppercase letters, lowercase letters, numbers and other characters too. It can be seen that only 16% used other characters in their password and similarly 16% of them used on lowercase letters. In a brute-force attack when every combination of letters, numbers, and punctuation marks is covered over other password deciphering process the number of cases to be tried before finding the real password is getting significantly lower.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

We investigated also the quality and the strength of password. From 25 respondents 16 (64%) remembers their passwords without writing it down; 5 respondents (20%) writes their password down, and 1 of them notes saves his passwords to the browser's cache. It could give us reason for confidence that the majority of all people remember their passwords, so do not write it down and glue to the monitor which would make it easy to enter the system for anyone. Previously we found that 16% of respondents had used the same password everywhere and 40% of them have passwords with a common part, so that the login ID previously acquired by shoulder surfing (when someone notices the password over the men's shoulder) can be tried out in several places acquiring sensitive data. No one uses Password Manager Program. One fifth of respondents write down their password or some of passwords is saved by the browser, which means that if one of these notes are available, or the browser give it away, then the system could be easily entered and caused damage.

We found a significant (sig. = 0.047), moderate strong, negative (r = -0.401) correlation between the usage of different passwords and password management quality (strength) at 5% level. In other words the more a person takes care of the strength of the password management (e.g. notes or uses password vault, rather than prescribing somewhere) the less typical is the usage of different passwords. The more someone uses different passwords for different services the harder it can be noted (thus prescribes the password or saves it by browser), and if the person uses the same or nearly the same passwords, then he can remember them (the comment itself is not a risk of information security).
We have seen that the majority of the population uses the same or nearly the same passwords and memorize them. Therefore it becomes a risk factor, because if in one of the services the password is lost by a keylogger software or shoulder surfing, with a small effort the rest of the systems can be entered after few attempts.

We analyzed the password usage by using multidimensional scaling applying ordinal-level measuring variables, and defining the distances in the sense of Euclidean. We have measured the password usage with different scales (the max value was 4. or 5 point) in this case we have to use the standardized variables by analyzing.
The password usage patterns are arranged in a one-dimensional space (figure 5):

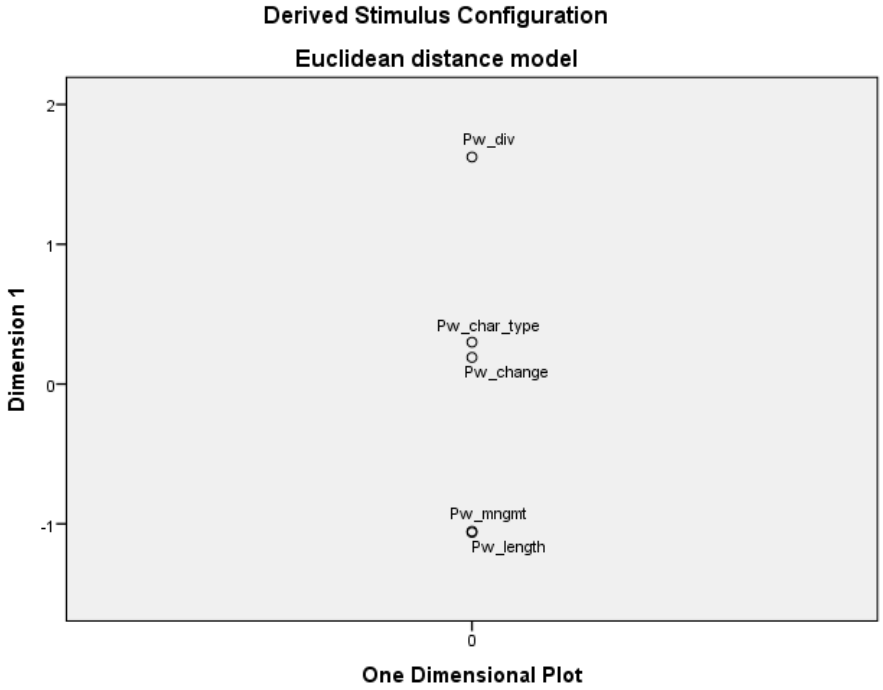


figure 5. The password usage patterns arranged in a one-dimensional space

The one-dimensional reduction lists the user password habits based on the riskiness of a password. (The majority rarely or never change the password, and 56% use partially or completely identical passwords, which is risky. On contrary, the majority of password management is relatively safe, two thirds of them memorize their passwords.)
The value of indicators measuring the correctness of the model: Stress = 0.28965; RSQ = 0.71559.
The Stress-value is not within the range of 0.10 to 0.20, it means the orthogonal projection had have too low dimensional number, there was a great loss of distance structure information, so we need to increase the number of dimensions. RSQ values based on the original one-dimensional structure and the reduced model fit medium

 Copyright © International Conference on New Horizons in Education Conference (INTE)

slightly better, but still not good enough.

The password usage patterns arranged in two-dimensional space (figure 6):

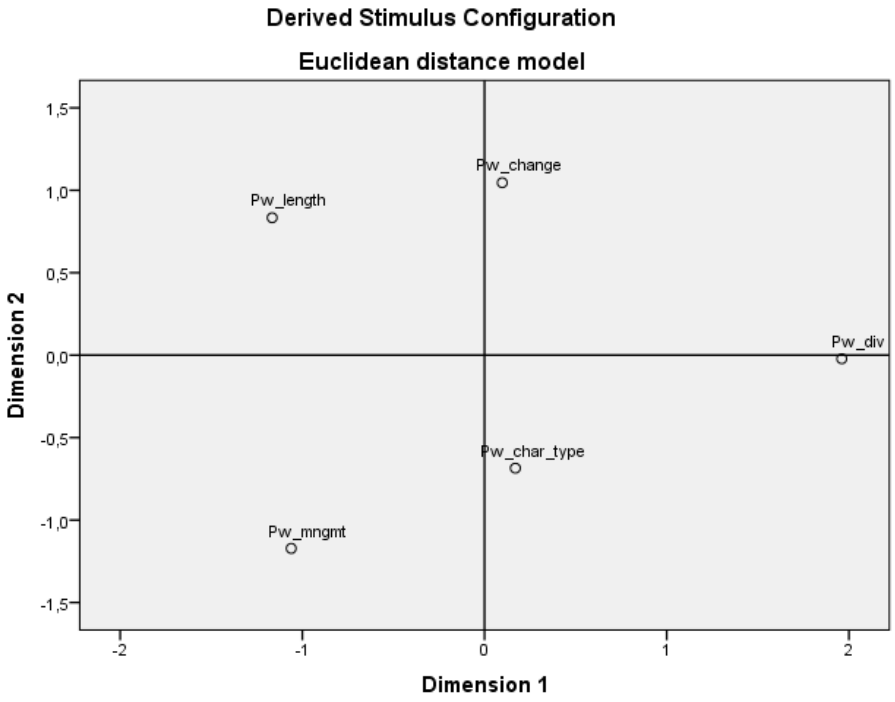


Figure 6. The password usage patterns arranged in two-dimensional space

The horizontal axis shows the riskiness of a password: the larger the coordinate point the greater is the risk.
The vertical axis shows the consciousness, the number of characters in a password is formed by individual idea, name, etc. (it received the lowest score coordinate) while the password change exhibits conscious behavior (received the highest score). The usage of characters is conscious even though not so markedly (some systems even require various characters), the password management is also intertwined with caution and awareness. Using different passwords is rare, negative coordinate point, and is not independent from other factors (if it can be memorized etc.).
The value of indicators measuring the reduced model correctness: Stress = 0.00431; RSQ = 0.99978.
Stress-value is less than 0.05, which is excellent. The multi-dimensional and reduced spatial distances correspond to each other. The dimension reduction has preserved the essential information. The RSQ high value shows a very good fit between original and reduced structure.
The majority of respondents rarely or never change the password. More than half of the respondents use identical passwords or passwords with common (equal) parts. Therefore in the multi-dimensional scaled space are so close these two variables along one dimension (Dim 2: horizontal axis).
The two thirds of respondents use uppercase, lowercase letters and numbers in their password. Therefore this dimension is considered less risky, coordinate points are lower. Nearly two thirds of respondents memorizes their passwords (if they do not write it down or do not use carelessly the horizontal axis coordinate is in this case with the lowest score).
On the vertical axis the password change received the largest number and the number of characters used in the password the lowest value. The majority of respondents do not use very long passwords, but few are characterized by a short password (only 5 respondents). Also very few (5 respondents) change the password every other month (1-2 times per month 2, 3-6 times per month 3 respondents).

A closer look to the security of the passwords:
Most of the respondents (40%) use 8-10 character passwords. Together with the uppercase letter and lowercase letter usage also spread the usage of numbers is widely spread (72%), which means 80 characters in case of Hungarian alphabet, in the case of English alphabet 62 characters. It is not typical to use accented characters as either a foreign machine or abroad would be problematic to type in, thus the English alphabet is used, so they themselves reduce the time required for brute-force based password attack potentially launched against them.
In case of brute-force method, using an appropriate tool which can try 10^{12} up to 8-character password per second, in case of Hungarian accents password is required 28 minutes, while using only the English alphabet it

 Copyright © International Conference on New Horizons in Education Conference (INTE)

takes 4 minutes. If the access code is 10 characters long then in case of Hungarian alphabet 124 days, in case of English alphabet 10 days are needed to find the correct password. In place of brute-force method applying faster password breaking performance, which are testing the most commonly used passwords (e.g. 123456, password, ILOVEYOU, etc.), which is in many cases successful (Keszthelyi 2015a), (Keszthelyi, 2015b). On the social networking sites you can also get a basis of shared information, what words are worth to try may be supplemented with numbers (e.g. respective name, child's name, the name of your favorite pets, etc.). Dictionary-based attack tests meaningful words complemented with numbers, punctuation marks for faster access. Since many of the same or particularly same passwords are used, this can be a viable way of the damage suffered. Experience shows that in case of masking (after analyzing the Internet dropped passwords) the password can be guessed, in which part of the password it is worth to try the capital letter, where may be included numbers, punctuation, thus further reducing the number of tested passwords and the time needed to find the solution (Keszthelyi, Kaden, 2016).

Using open networks:
6 respondents of all 25 (24%) without any reservation and any time connect their mobile device to any stranger, open Wi-Fi, 14 respondents (56%) sometimes use an open network access, but it is mostly connected to a protected network, 5 respondents (20%) do not join any open network. This shows that there is only one-fifth of respondents aware of the fact that it is easy to steal the data and passwords through an open Wi-Fi network, 80% of them are using a network with no password protection, 24% of them under any circumstances. They are the most vulnerable, because they use any foreign network without reservation and their traffic data could be easily accessed.
By comparison the open-end hotspot access variable there is a significant difference between the median of the following variables:
- own e-mail account (sig = 0.040),
- number of password characters (sig = 0.024),
- type of characters used in passwords (sig = 0.022).

Consequently, who enter at any time an open Wi-Fi hotspot typically uses short passwords is not careful. Those who never enter or enter only to protected network typically use longer passwords, so differences in the information security awareness has been reflected here as well.

20 respondents of all 25 (80%) does not log in using unknown devices, 5 respondents (20%) logs in with no issues.
The survey does not tell us, whether those who do not log in on unknown devices uses always their own ones, or they do not use the computers available at marked locations (internet cafe, library) because they consciously avoid the unknown device to log in.
From the fact that 80% of respondents connects to a foreign hotspot can be concluded that their use their own devices in different places. This is validated by the fact, that apart from 1-1 exceptions, everyone has their own computer/laptop or mobile device or a smart tool so that usually do not need to use a computer at foreign places.

CONCLUSIONS

We analyzed the information security awareness of the kindergarten teacher-education students of Selye University as in their work they will get access to sensitive data, which in not the right hands could have serious consequences. In addition to the personal data questionnaire, we asked about the management of Internet services they use and their associated passwords.
After completing the analysis we saw, that one cloud-based data storage service they use for both formal and informal purposes.
The cloud-based data storage security even more depends on the chosen and not issued password, since the storage happens no longer just on own device, so the password allows unauthorized persons anywhere access the data without the acquisition of the device. It is a particular source of danger, that more than half of the survey participants does not change their passwords, even if there is a suspicion that unauthorized persons have stolen it.
Additionally, only slightly more than a third of respondents use passwords longer than 10 characters, which means better security in today's conditions. It can be seen that only 16% use other characters in their password and similarly 16% of them contain only letters, not even digits. In a brute-force attack in their case is reduced the number of cases to be tried before finding the real password.
A fifth of respondents prescribe the password, or save it to browser, which is another source of danger.
We have seen that the majority of the population uses the same or nearly the same passwords and memorize them. Therefore it becomes a risk factor, because if one of the services cracks the password, or take it with a key logger software, or shoulder-surfing, the rest of the systems get also been able to access after few attempts.
Other source of danger for them is that 80% of them connects to a network with no password protection, 24% of

 Copyright © International Conference on New Horizons in Education Conference (INTE)

them under any circumstances. In this case the login information are available for other participants connected to the network.
In regards to the sensitive data used by the kindergarten teachers at work and the lack of information security awareness which we see as a result of this survey, it would be worthwhile to hold a training for them in the mentioned topic of protection of data, also demonstrating the cases, when relevant information has been taken to wrong hands, because of insufficient information security skills (Kiss, 2005) (Kiss, 2010).

AKNOWLEDGEMENT
Supported by Grant KEGA 002UJS-4/2014: Interactive electronic learning materials to support implementation of modern technology in teaching mathematics and informatics.

REFERENCES

Keszthelyi, A. (2008). *About passwords*, Acta Polytechnica Hungarica, Volume 10., pp: 99-118., 2013, ISSN: 1785-8860.
Keszthelyi, A. (2013). *Netháborúk kora*, Zborník medzinárodnej vedeckej konferencie Univerzity J. Selyeho, Komarno, 2013 , pp. 149-170, ISBN:978-80-8122-074-6
Keszthelyi, A. (2015a). *Life is Short. Have another Affair – Password Security*, Symposium for Young Researchers: Celebration of Hungarian Science, Budapest, pp: 121-130., 2015, ISBN: 9786155460586
Keszthelyi, A. (2015b). *Jelszavakról – iparági legrosszabb gyakorlatok*, Gazdálkodás- és Szervezéstudományi Folyóirat: A Virtuális Intézet Közép-Európa Kutatására Közleményei, Volume 7:(3-4), pp. 261-268.
Keszthelyi, A, Kaden, E. (2016) *Misunderstanding how Passwords Work*, Management, Enterprise and Benchmarking in the 21st Century III., Budapest, pp. 83-91., ISBN:9786155460777
Kiss, G. (2005). *Wie kann man die Steganographie und Kryptographie bekannt machen?*, Informatik und Schule, Infos 2005, Dresden, 2005, Technische Berichte, pp: 31-35, ISSN: 1430-211x
Kiss, G. (2010). *Experiences in teaching data concealment and data encryption to engineering undergraduates*, 9th IEEE International Conference on Information Technology Based Higher Education and Training (ITHET 2010), Cappadokia, ISBN 978-1-4244-4811-1, pp:419-423, IEEE Catalog Number: CFP10587-CDR, IEEE Xplore digital library Digital Object Identifier: 10.1109/ITHET.2010.5480011
Kiss, G (2011). *A comparison of informatics skills of Hungarian and Slovakian students*, 14. GI-Fachtagung Informatik und Schule, Praxisbeiträge zur INFOS 2011, Münster, ISBN: 978-2-86877-009-4, pp. 142-154
Kiss, G. (2012). *Measuring Hungarian and Slovakian Students' IT Skills and Programming Knowledge*, Acta Polytechnica Hungarica, Volume 9., No. 6, ISSN: 1785-8860, pp. 195-210
Kiss, G. Godó, A. (2014). *A Comparison of Information Technology Literacy of Students of Slovakian Secondary Schools and Romanian Students of Humanities (Profil Uman)*, Procedia of Social and Behavioral Science Journal, Volume 152, ISSN: 1877-0428, pp.1293-1299, doi:10.1016/j.sbspro.2014.09.366
Mitnick, D.K. & Simon, W.L. (2003). *The Art of Deception: Controlling the Human Element of Security,* Wiley Press, ISBN: 978-0-7645-4280-0

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LIFELONG LEARNING IN EUROPE

Bahar BERBEROĞLU
Open Education Faculty
Anadolu University Turkey
bdirem@anadolu.edu.tr

ABSTRACT
In this study, we examined the status of the European Union and Turkey on the basis of the variables within the scope of Lifelong Learning. We used the k-means cluster analysis and the discriminant analysis, which are multivariate statistical techniques, in our study. When we separated our dataset into 4 clusters, we found our success of correct clustering as 97.0%. We saw in our analysis that Denmark, the Netherlands, Iceland and Switzerland had the best positions and constituted the top cluster. While the second best cluster contained countries such as Germany, France, Sweden and Norway, Turkey ranked in the cluster right above the lowest one together with 9 European Countries. The lowest cluster was comprised by 12 European countries.

1. INTRODUCTION

Lifelong learning appears as a significant concept at our age, when information and technology are advancing rapidly. Individuals need to continuously develop themselves in order to get used to the changing and improving conditions of the world and especially the business world. Individual and social welfare can be achieved only in this way. Lifelong learning is an important factor in the social integration, active citizenship and equality of opportunities. It is a sign of development for countries and societies.
The concept of lifelong learning includes the concepts like adult education and continuous education. Candy (2003) defined it as a supportive process which increases and strengthens the information, values, understanding and skills gained by the individuals during their life course and enables them to use these achievements in the real life.

In our study, we tried to evaluate 33 countries including the European Union (EU) countries and Turkey from the perspective of lifelong learning and in light of the data from 2014. First of all, we touched upon the significance of the lifelong learning in Europe and the European Union. And then, we selected the k-means technique of the cluster analysis as the method and carried on our study using 7 variables we determined. We started the number of the clusters at 2 and repeated our analysis until 5 clusters. However, we determined the number of clusters as 4 considering our number of samples. According to this analysis, Iceland, Denmark, Switzerland and Netherlands constituted the countries with the best positions according to the examined lifelong learning variables. These four countries were followed by Germany, France, Austria, Slovenia, Finland, Sweden and Norway. Turkey could rank in the next cluster with 9 other European countries. And 12 European countries formed the lowest cluster. From this aspect, we concluded that Turkey had a middle position among the European Countries according to the lifelong learning variables.

1.1. Lifelong Learning in Europe

As known, Western Germany, France, Belgium, Netherlands, Italy and Luxembourg founded the European Coal and Steel Community after the Second World War to form a single economic union in Europe. This community continuously made economic, social, cultural and political progress and formed today's European Union. During this developmental process, member countries popularized the idea of developing the European Culture besides the changes in their cultural structures and the protection of the differences between them (Fontaine, 2007; Sağlam, Özüdoğru & Çıray, 2011).

The European Union (EU) defines the lifelong learning as "All the educational activities performed for a certain period to develop the knowledge, skills and competences" (Turan, 2005; Berberoğlu, 2010). Charlier and Croché (2005) state the lifelong learning as "a life step for the educational integration in Europe" and Tuschling and Engeman (2006) see the lifelong learning as a fundamental educational policy which was developed by the EU that had to integrate 25 different societies as a new community and focuses on changing and combining the frame of the whole union.

Although the EU is seen primarily as an economic structure, the Declaration of Open Distance Education in the European Community was firstly published in 1973. The first text related to Lifelong Learning is the green bulletin prepared in 1993. In this bulletin, the professional educational system's adoption of a systematic structure was foreseen to enable the unemployed people to find a job in the labor market again. Another report is

 Copyright © International Conference on New Horizons in Education Conference (INTE)

the White Bulletin, which is the decision of the Community Commission. This bulletin was prepared in 1995 and stated the objectives of the union for lifelong learning and what must be done (Akbaş & Özdemir, 2002).
The aforementioned year was accepted as the "European Lifelong Learning Year" pursuant to the decision of the European Parliament and the Council of Europe numbered 2493/95 in 1996. In that year, a process was initiated for making a common decision on Lifelong Learning in the EU (Berberoğlu, 2011). Common decisions had three main objectives. These were:

1. To promote for the concept of lifelong learning,
2. To explain its meaning and characteristics,
3. To review the likelihood of lifelong learning for all the European citizens.

These decisions acknowledge that lifelong learning must include all the formal and informal types. On the other hand, educational and social changes in Europe caused the development of new strategies for an agreement on education. Fast technological progress caused a perpetual transformation in the business world as well. As a result of the information explosion, companies started to demand highly qualified labor force that renews itself through continuous learning besides the personal capacity.

There is a strong relationship between the labor force and educational level in Europe. Individuals with less competencies and less qualification are at bigger unemployment risk, moreover, unqualified young people, women with family responsibility, individuals above the age of 45 and migrant families constitute the human groups who are at risk within the European Labor Market.

After these developments, the Declaration of Lifelong Learning in the EU was published in 2000. This declaration had two significant objectives:

1. To introduce and establish the Active European Citizenship,
2. To provide the professional skills which are necessary to comply with the new information-based community and fully attend the social and economic life.

Following the publication of this declaration, the EU initiated negotiations between the Candidate EU members and the Countries of the European Economic Region within the scope of lifelong learning. Lifelong learning was designed to bring up European citizens who can develop themselves, have sufficient abilities in the new technological areas and take an active role in the modern and developing world (Akbaş & Özdemir, 2002).

When it briefly comes to the education and teaching programs of the EU on Lifelong Learning, the Union initiated a range of teaching development programs such as Socrates, Leonardo da Vinci and Youth between 1995 and 2000, and initiated the program named as the Lisbon strategy in the Council of Europe March 2000 in March 2000. From 2002 until 2010, the goal was the world leadership of Europe and economic growth was aimed together with more extensive social adaptation. After the evaluation of the success achieved until the academic year 2006, agreement was reached on a new 2007-2013 Integrated Action Plan in the field of Lifelong Learning (Göksan, et al., 2009).

The following four matters stand out in the study programs of the European Commission titled "Education and Teaching 2010" and "Education and Teaching 2020", where the long-term strategic objectives of the EU are stated in relation to education (European Commission (EC), 2000; EC, 2009):

1. Promoting lifelong learning and mobility,
2. Increasing the quality and efficiency of the education and learning,
3. Supporting equality, social adaptation and active citizenship,
4. Strengthening creativity, innovativeness and entrepreneurship at every stage of education.

2. METHOD

In our study, cluster analysis was used, which is one of the statistical analysis methods. This analysis is a guiding research method that is used for the summarization and identification of large and complicated data in the multidimensional space. The primary objective of the cluster analysis is to divide the units into groups in line with their similarities between each other considering their basic characteristics (Kalaycı, 2008). Therefore, we grouped 33 countries including 5 European countries and Turkey, which are not the members of the Union, besides 27 EU countries that were analyzed by separating into clusters according to their similarities in terms of their economic signs during the cluster analysis in our study.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

2.1 Cluster Analysis

The main purpose of the cluster analysis is to group the ungrouped data according to their similarities and to present information summarizing the subject for the researcher. Besides, cluster analysis is also used for purposes like determination of the real types, pre-estimation for the groups, hypothesis test, evaluation of clusters instead of the data and finding the contradictory values (Romesbourg, 1984).

Cluster analysis gathers the units pretty similar to each other in the same cluster according to the predefined selection criteria. As a result of the analysis, units that form a cluster resemble each other but don't resemble the units of the other clusters. Each cluster is homogenous within itself but there will be a heterogeneous attribute between the clusters (Kalaycı, 2005). When the created clusters are shown in the multidimensional space: if the clustering is successful, units in the same cluster are quite close to each other, and the units in the different clusters will be found substantially far from each other (Turanlı et al, 2006).

Distance measurements or similarity measurements differ from the measurement units of the variables in the data matrix. If the variables are formed of values obtained with proportional or interval scales, distance or relation typed measurements are used. If the measurements are comprised of variables obtained by counting, chi-square or phi-square distance measurement is used. Moreover, in case of usage of the data obtained with dual observations, similarity or difference measurements such as Euclid, square Euclid, size difference and pattern difference are used (Özdamar, 2004).

In the cluster analysis, assumptions like having normality, linearity and covariance, which are significant in other methods, aren't taken into account so much. In case of a multiple correlation problem in some other multivariate statistical methods, discrimination of the real effects of the variables which have multiple linear correlations between each other generally emerges as an important problem. However, this problem isn't significant in the cluster analysis, because variables with multiple linear correlations are further weighed implicitly and this problem is solved in the cluster analysis (Hair et al, 1998).

On the other hand, number of the clusters isn't known beforehand in the cluster analysis. Clusters are obtained only through the present status of the data. Therefore, the emerging results cannot be used for the prediction of the future (Tatlıdil, 2002).

Cluster analysis can also be combined with the other multivariate statistical methods. Cluster analysis can be combined with the discriminant analysis for the assessment of the statistical reliability of the clusters that emerge as a result of the analysis. Thus, results of the cluster analysis can be tested with the discriminant analysis (Yıldız, 1989).

Discriminant Analysis is a method used for finding an expression of the observations, membership of which is known for one of the k number of clusters beforehand, and accordingly the explicitly discriminated k number of clusters at the first stage. At the second stage, it is a method used for the appointment of the observations whose clustering information isn't known beforehand to one of the k number of clusters focusing on the correct classification (Gnanadesikan & Kettenring, 1989).

In our study, we used the cluster analysis, which is one of the multivariate statistical methods, to reveal the similarities between the EU members and Turkey and find out the clusters they formed before the global crisis and in 2008, when the global crisis was intensely effective. In this analysis, we applied the k-means technique, which is not a hierarchical clustering method.

In non-hierarchical clustering methods, separation of units into homogeneous (within themselves) and heterogeneous (between each other) clusters is aimed. That is, units are gathered in the appropriate clusters and n units are divided into k clusters. The k-means technique divides the continuous p-variate data, which are obtained from many units, into k clusters minimizing the sums of the intracluster squares. Placement of the units in a low number of clusters is conducted with an iterative procedure. Units are appointed to different clusters at every iteration and the most appropriate solution is applied permutationally (Özdamar, 2004).

In recent years, extensive studies have been conducted on the determination of the number of clusters, but the techniques which aren't reliable and were developed in 1970s are used currently. As the most practical method, the number of clusters (k) is found $k \cong (n / 2)^{1/2}$ (Turanlı et al, 2006). However, this method doesn't produce good results as the number of samples increases.

2.1. Countries Included in the Analysis

32 European countries, 27 of which were EU members, and Turkey were included in our analyses. Hence, countries that were included in the analysis were put in order as follows: Belgium (B), Bulgaria (BG), Czech

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Republic (CZ), Denmark (DK), Germany (D), Estonia (EST), Ireland (IRL), Greece (GR), Spain (E), France (F), Italy (I), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (L), Hungary (H), Malta (MT), Netherlands (NL), Austria (A), Poland (PL), Portugal (P), Romania (RO), Slovenia (SLO), Slovakia (SK), Finland (FIN), Sweden (S), United Kingdom (GB), Croatia (CR), Iceland (IC), Norway (N), Switzerland (CH), Former Yugoslav Republic (FRY) and Turkey (TR).

2.2. Variables Used in the Analysis

Variables and their definitions, which are explained below and we considered in the analysis, were obtained from the Eurostat database, which is the official site of the European Union on the internet. Due to the normal distribution of the distances in the cluster analysis of 2014, assumptions carried by the sample such as the power of representing the main mass and discovery of the F test results in the Anova tables as statistically significant, it was seen necessary and adequate to use 7 variables in this study. These variables:

1. lfse01: Participation rate in education and training (last 4 weeks) by sex and age
2. LLL: Lifelong Learning (%) total
3. lfs03: Participation rate in education and training (last 4 weeks) by sex, age and labour status
4. lfs04: Participation rate in education and training (last 4 weeks) by sex, age and occupation
5. lfs06: Participation rate in education and training (last 4 weeks) by sex, age and full-time/part-time employment
6. lfs07: Participation rate in education and training (last 4 weeks) by sex, age and size of the local unit
7. lfs14: Participation rate in education and training (last 4 weeks) by sex, age and degree of urbanization

3. FINDINGS

3.1. Examination of the European Countries with the Cluster Analysis in 2014

The cluster analysis table which we obtained considering the European Countries according to 7 economic variables used in our study from 2014 is given in Table 2. We completed the analysis with k=2, 3, 4, 5 by increasing the number of clusters at each time. As we mentioned before, we found $k = 4.06$ through the formula $k \cong (n / 2)^{1/2}$, which is one of the most practical methods used to find the k cluster number. Accordingly, the appropriate k number of clusters would be 4 or 5. But it is seen that $k \cong 4$ is more appropriate here.

Table 1. Table for the Cluster Analysis Results from 2014

Cluster Numbers	Cluster's Group	Countries
K=2	**1. Cluster**	DK, D,F,L,NL, A,SLO, FIN,S,GB,IC,N,CH
	2. Cluster	B, BG, CZ, EST, IRL, GR, E, I, CR, CY, LV, LT, H, MT, PL, P, RO, SK, FRY, TR
K=3	**1. Cluster**	D, EST, IRL, E, F, LT, L, A, PL, SLO, S, GB, N
	2. Cluster	B, BG, CZ, GR, CR, I, CY, LV, H, MT, P, RO, SK, FRY, TR
	3. Cluster	DK, NL, FIN, IC, CH
K=4	**1. Cluster**	EST, IRL, E, LV, LT, L, MT, PL, GB, TR
	2. Cluster	B, BG, CZ, GR, CR, I, CY, H, P, RO, SK, FRY
	3. Cluster	D, F, A, SLO, FIN, S, N
	4. Cluster	DK, NL, IC, CH
K=5	**1. Cluster**	B, BG, CZ, GR, CR, I, CY, H, P, RO, SK, FRY
	2. Cluster	EST, IRL, E, LV, LT, L, MT, PL, GB, TR
	3. Cluster	F, A, FIN, S, IC
	4. Cluster	DK, NL, CH
	5. Cluster	D, SLO, N

 Copyright © International Conference on New Horizons in Education Conference (INTE)

It is possible to make the following explanations for k=4 in Table 1 above. Countries which have the best positions in terms of lifelong learning variables in the EU are Denmark, Switzerland, Netherlands and Iceland. Selck and Kuipers (2005) stated as a result of the analysis conducted in their study that positions of the Nordics in the EU resembled each other a lot and these countries were very successful. While the Nordic countries Denmark and Iceland are in the best cluster, the Nordic countries Finland, Sweden and Norway are in the second best cluster. These countries are trying to make use of the EU memberships at the best level in order to improve their political adaptations in their own national positions and increase the net international financial transfers. For this, those countries can play a role in the decisions that will be made through intensive political discussions before the negotiations (Elgström, et al. 2001; Mattila & Lane 2001).

Elgström et al. (2001) assert in their study that the strong coordination between Denmark, Sweden and Finland is effective in procedures requiring only the qualified majority within the decision-making mechanism of the EU. These countries formed the list of commission suggestions touching upon many topics to play a powerful role in the decision-making mechanism of the EU. This list contains especially the suggestions related to education as COD/1998/0195, Socrates and COD/1999/0275 MEDIA-Training. Moreover, legal compliance suggestions with regard to the information society are also included in this list mainly besides COD/1998/0325, e-trade legal approaches and COD/1997/0359 copyright laws (Selck & Kuipers, 2005).

Plus, Green (2006) discovered in his study "Lifelong Learning Models and Information Society" which focuses on the OECD countries that the Nordics had the highest mean when the mean values of the research on adult literacy were compared. The concept of literacy in this research is approached on the basis of reading and comprehending the proses and documents and understanding the quantitative techniques. Likewise, the Nordics surpassed the Core Europe, Anglo-Saxon countries and the USA substantially in terms of the percentage of the labor that requires high-level specialization (Green, 2006).

Table 2. 2014 Cluster Analysis Anova Table

ANOVA

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
lfse01	844.256	3	45.391	29	18.600	.000
LLL	615.488	3	24.457	29	25.166	.000
lfs03	541.610	3	35.195	29	15.389	.000
lfs04	3330.288	3	21.377	29	155.786	.000
lfs06	3307.792	3	21.793	29	151.785	.000
lfs07	3263.759	3	22.959	29	142.157	.000
lfs14	546.591	3	17.870	29	30.587	.000

When we evaluated the position of the European Countries with the cluster analysis in 2014, all X variables of the research were found significant by 5% considering k=4. The Anova table of k=4 situation is seen in Table 2.

First of all, we need to establish the hypotheses while interpreting Table 2.
H_0: No significant difference exists between the clusters according to the variables.
H_1: Significant difference exists between the clusters according to the variables.

Because the significance level of p values is less than 0.05 in Table 3, H_0 is rejected and the alternative hypothesis H_1 is accepted. Thus, significant difference exists between the clusters according to these variables. Moreover, 0.000 among the probability values in the last column of Table 3 isn't 0 (zero); in fact, probability is a value less than 0.001 here. The packaged software SPSS generally specifies the probabilities in 3 digits after the comma.

Table 3. Cluster Distances

Distances between Final Cluster Centers

Cluster	1	2	3	4
1		30.996	34.786	68.512
2	30.996		64.620	98.085
3	34.786	64.620		33.920
4	68.512	98.085	33.920	

 Copyright © International Conference on New Horizons in Education Conference (INTE)

When the distances of the clusters above are considered, the best cluster is the 4th cluster. This cluster is followed by the 3rd cluster. The lowest cluster is the 2nd cluster and the 1st cluster including Turkey is the one above the lowest cluster. Accordingly, position of Turkey can be seen at the middle level within Europe in respect of the lifelong learning signs.

Table 4. Discrimination
Classification Results[a]

Cluster Number of Case			Predicted Group Membership				
			1	2	3	4	Total
Original	Count	1	9	0	1	0	10
		2	0	12	0	0	12
		3	0	0	7	0	7
		4	0	0	0	4	4
	%	1	90.0	.0	10.0	.0	100.0
		2	.0	100.0	.0	.0	100.0
		3	.0	.0	100.0	.0	100.0
		4	.0	.0	.0	100.0	100.0

So the clusters were classified correctly by 97.0%. In the discriminant analysis, success of the analysis is the correct classification percentage. Here, classes or groups express the clusters in the cluster analysis. In Table 4, countries were classified correctly by 97% as a result of the analysis based on the data from 2014.

4. CONCLUSION

In this study we tried to examine the case of lifelong learning in Europe in 2014 and determined the positions of the European countries in lifelong learning. As the result of our analysis, we saw that, Netherlands, Switzerland, Denmark and Iceland were in the best location. In particular, the Nordic countries such as Finland, Sweden and Norway took place in a subset cluster, and thus they were appearing in leading positions in Europe in lifelong learning. Austria, France, Germany and Slovenia were also in quite a good location. Even the position of Turkey in Europe also seemed to be moderate by leaving 12 European countries behind.

While the world globalizes and the EU makes new moves for the sake of information society and information economy, Turkey must orient to lifelong learning, try to increase the expenditures for information and communication technology and take the dimension of information and communication technologies into account while increasing the quality of the human capital. To be successful at it, it must give importance to open and distant educational system, because both the quality of the human capital is increased and the progress is made on becoming an information society by popularizing the information literacy and lifelong learning through the open and distant educational system. Our efforts in becoming an information society will enhance our adaptation to the EU countries.

REFERENCES

Akbaş, O., Özdemir, S. M. (2002). Avrupa Birliğinde Yaşam Boyu Öğrenme [Lifelong Learning in the European Union], *Milli Eğitim Dergisi*, Sayı:155–156, Yaz - Güz.

Berberoğlu, B. , (2010). Bilgi Toplumu ve Bilgi Ekonomisi Oluşturma Yolunda Türkiye ve Avrupa Birliği, *Marmara Üniversitesi, İktisadi ve İdari Bilimler Fakültesi,* Cilt XXIX, Sayı 2, (pp. 111-131).

Candy, P.C. (2003). Lifelong Learning and Information Literacy, Report for U.S. National Commission on Libraries and Information Science and National Forum on Information Literacy

Charlier, J.E. & Croché, S. (2005). How European integration is eroding national control over education planning and policy. *European Education*, 37 (4), (pp. 7–21).

European Commission (EC). (2000). Lisbon European Council Presidency Conclusions.

EC. (2009). Council Conclusions on an strategic framework for European cooperation in education and training (ET 2020. *EU Official Journal*, (p. 119).

Elgström, O., Bjurulf, B., Johansson, J. & Sannerstedt, A. (2001) 'Coalitions in European Union negotiations', *Scandinavian Political Studies* 24(2): (pp. 111–28).

Fontaine, P. (2007). *AB nedir?* Türkiye: Avrupa Birliği Bilgi ve İletişim Destek Programı [*What is EU?* Turkey: European Union Information and Communication Support Program]

Gnanadesikan, R., Kettenring, J.R. (1989). Discriminant Analysis and Clustering: Panel on Discriminant Analysis, Classification, and Clustering, *Statistical Science,* Vol. 4, Iss. 1, (pp. 34–69).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Göksan, T. S., Uzundurukan, S. & Keskin, S. N. (2009). Yaşam BoyuÖğrenme ve Avrupa Birliği'nin Yaşam Boyu Öğrenme Programları [Lifelong Learning and Lifelong Learning programs of the European Union], 1. İnşaat Mühendisliği Eğitimi Sempozyumu, Antalya, (pp.143–151).

Green, A. (2006). Models of Lifelong Learning and the 'Knowledge Society', *Compare: A Journal of Comparative and International Education,* 36:3, (pp. 307–325).

Hair, J. F., Anderson, R. E. & Tatham, R. L. (1998). *Multivariate Data Analysis,* New Jersey: Prentice Hall Inc., (pp. 490-491).

Kalaycı, Ş. (2008). *SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri [SPSS-Applied Multivariate Statistical Techniques],* Asil Yayın Dağıtım LTD.ŞTİ. 3. Baskı, ISBN 975–9091–14–3, (pp. 350–369).

Mattila, M. & Lane, J.E. (2001) 'Voting in the EU Council of Ministers: will enlargement change the unanimity pattern?', *European Union Politics* 2(1): (pp. 31–52).

Özdamar, K. (2004). *Paket Programlar İle İstatistiksel Veri Analizi (Çok Değişkenli Analizler) 2 [Statistical Data Analysis with Packaged Softwares (Multivariate Analyses) 2],*Yenilenmiş 5. Baskı, Kaan Kitabevi, ISBN: 975–6787–11–2, (pp. 279–351)

Romesbourg, C. (1984). *Cluster Analysis for Researchers,* Belmont: Lifetime Learning Publications.

Sağlam, M., Özüdoğru, F. & Çıray, F. (2011). Avrupa Birliği Eğitim Politikaları ve Türk Eğitim Sistemine Etkileri [European Union Educational Policies and Their Effects on the Turkish Educational System], *Yüzüncü Yıl Üniversitesi, Eğitim Fakültesi Dergisi*, Aralık, Cilt: VIII, Sayı: I, (pp. 87-109), http://efdergi.yyu.edu.tr

Selck, T. J. & Kuipers, S. (2005). Shared Hesitance, Joint Success: Denmark, Finland, and Sweden in the European Union Policy Process, *Journal of the European Public Policy,* 12: 1, (pp. 157–176).

Turanlı, M., Özden, Ü.H. & Türedi, S. (2006). Avrupa Birliği'ne Aday ve Üye Ülkelerin Ekonomik Benzerliklerinin Kümeleme Analiziyle İncelenmesi [Examination of the Economic Similarities of the European Union's Candidate and Member Countries with Cluster Analysis], *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi,* Yıl:5, Sayı:9, Bahar 2006/1, (pp. 95–108).

Tatlıdil, H. (2002). *Uygulamalı Çok Değişkenli İstatistiksel Analiz [Applied Multivariate Statistical Analysis],* Ankara, Akademi Matbaası, (p. 329)

Turan, S. (2005). Öğrenen Toplumlara Doğru Avrupa Birliği Eğitim Politikalarında Yaşam Boyu Öğrenme [Lifelong Learning in European Union Educational Policies towards Learning Societies], *Ankara Avrupa Çalışmaları Dergisi,* Cilt:5, No:1, Güz 2005, (pp. 87–98).

Tuschling, A. & Engemann, C. (2006). From education to lifelong learning: the emerging regime of learning in the European Union. *Educational Philosophy and Theory*, 38 (4), (pp. 451–469).

Yıldız, Z. (1989). *Banka Müşterilerinin Demografik ve Sosyo-Ekonomik Özellikler Bakımından Gruplandırılmasında Kümeleme Çözümlemesi ve Bir Uygulama [Cluster Analysis on Grouping the Bank Customers in terms of Demographic and Socio-Economic Attributes and an Implementation],* Anadolu Üniversitesi Fen Bilimleri Enstitüsü, İstatistik Anabilim Dalı, Uygulamalı İstatistik Bilim Dalında Yüksek Lisans Tezi, Danışman: Yrd.Doç.Dr. Ahmet Özmen, Şubat 1989, (p.39).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LINGUISTIC STEREOTYPING IN MASS MEDIA

Kalbike ESENOVA
Abai Kazakh National Pedagogical University, Kazakhistan
kalbike_65@mail.ru

Guldana SEIDALIYEVA
Abai Kazakh National Pedagogical University, Kazakhistan
guldanaseida@mail.ru

Bakhyt SMAGULOVA
Almaty Academy of Economics and Statistics,Kazakhstan
bakyt28@mail.ru

ABSTRACT
This paper introduces a significant role of mass media in the world which manipulates people's attitude and opinions and one of the most important types of schemes used for orientation in the social environment, the stereotypes. Stereotyping is very common in mass media. People everywhere practice it, knowingly and unknowingly. It is an all-pervasive phenomenon that affects class, race, religion, gender, language, and, nationality. We have tried to define the nature of stereotypes as well as their cause.

INTRODUCTION

The fundamental function of language is communication. Communication includes all methods of disseminating information, knowledge, thought, attitudes, and beliefs. Mass communication, mass media and the culture that shapes us are inseparable. In this article we try to define mass communication, mass media and the culture, and explore the formation of stereotypes in mass media.

To understand mass communication in the digital environment, first it is important to understand the process of communication. Communication is the act of sending messages, ideas and opinions from one person to another. Writing and talking to each other are only two ways human beings communicate. We also communicate when we gesture, move our bodies or roll our eyes. Mass communication is communication from one person or group of persons through a transmitting device to large audiences. To describe the process of mass communication, scholars use a communication model. This includes six key terms: sender, message, receiver, channel, feedback and noise. In mass communication, the *sender* puts the *message* on a *channel*. The sender could be a local cable provider or satellite company. The channel delivers the message to the *receiver*. The *receiver* is the place where the message arrives, such as our TV set. *Noise* is any distortion that interferes with clear communication. Feedback occurs when the receiver processes the message and sends a response back to the sender.

Using a general definition, mass communication today shares three characteristics:
1. A message is sent out on some form of mass communication system (such as the Internet, print or broadcast).
2. The message is delivered rapidly.
3. The message reaches large groups of different kinds of people simultaneously or within a short period of time.

The differences between the individual elements of interpersonal and mass communication change the very nature of the communication process. For example, the immediacy and directness of feedback in interpersonal communication free communicators to gamble, to experiment with different approaches. Their knowledge of one another enables them to tailor their messages as narrowly as they wish. As a result, interpersonal communication is often personally relevant and possibly even adventurous and challenging. In contrast, the distance between participants in the mass communication process, imposed by the technology, creates a sort of 'communication conservatism'. Feedback comes too late to enable corrections or alternations in communication that fails. The sheer number of people in many mass communication audiences makes personalization and specificity difficult. As a result, mass communication tends to be more constrained, less free. This does not mean, however, that it is less potent than interpersonal communication in shaping our understanding of ourselves and our world.

To understand mass communication theory, we need to recognize these important ideas:
1. As we've just seen, there is no one mass communication theory. There is a theory, for example, that describes something as grand as how we give meaning to cultural symbols and how these symbols influence our behavior (symbolic interaction), and there is a theory that explains something as individual as how media influence people in times of change or crisis (dependency theory). Mass communication theorists have produced a number of middle-range theories that explain or predict specific, limited aspects of mass communication process.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

2. Mass communication theories are often borrowed from other fields of science. Attitude change theory, for example, comes from psychology. Mass communication theorists adapt these borrowed theories to questions and issues in communication. People's behavior with regard to issues more important than the size of a dime – democracy, government, and gender roles, for example – is influenced by the attitudes and perceptions presented by our mass media.

3. Mass communication theories are human constructions. People create them, and therefore their creation is influenced by human biases – the times in which we live, the position we occupy in the mass communication process, and a host of other factors. Broadcast industry researchers, for example, have developed somewhat different theories to explain how violence is learned from television than have university researchers.

4. Because theories are human constructions ant the environments in which they are created constantly change, mass communication theories are dynamic; they undergo frequent recasting, acceptance, and rejection. For example, theories that were developed before television and computer networks became mass media outlets have to be reexamined and sometimes in the face of these new media.

THE STUDY

Mass communication is decidedly different from mediated communication. Mediated communication includes all messages in which there is a device, third party, or electronic mechanism that facilitates communication between the sender and receiver. By contrast, mass communication 'is a process in which professional communicators use technology to share messages over great distances to influence large audiences'.

Most media discourse takes place, almost by definition, in events that differ significantly from the model of the canonical speech situation. 'Mediated' communication involves specialized adaptations of the resources of face-to-face verbal interaction.

Communicative events in the media take many forms. At one end of a scale, they can still be 'dyadic communication' (two-way conversation between two interact ants in a phone conversation). At the other end of the scale is what people traditionally think of as 'mass communication' (e.g. radio or television broadcasting). In his many books on the subject, the communication theorist Denis McQuail has distilled characteristics of mass communication into seven major features, which might be summarized as follows:

1 They normally require complex formal organizations.
2 They are directed towards large audiences.
3 They are public – content is open to all.
4 Audiences contain many different kinds of people.
5 Mass media can establish contact simultaneously with very large numbers of people at a distance from the source, and widely separated from one another.
6 Relationships between communicator and audience are managed by people who are known only in their public role, as communicators.
7 The audience for mass communications involves people coming together because of some common interest, even though the individuals involved do not know each other, have only a restricted amount of interaction, do not orient their actions to each other, and are either not at all or only loosely organized as a group.

Media theorist James W.Carey (1977) offered cultural definition of communication that has had a profound impact on the way communication scientists have viewed the relationship between communication and culture. Carey wrote, "Communication is a symbolic process whereby reality is produced, maintained, repaired and transformed". Carey's definition asserts that communication and reality are linked. Communication is a process embedded in our everyday lives that informs the way we perceive, understand, and construct our view of reality and the world. Communication is the foundation of our culture. Its truest purpose is to maintain ever-evolving, "fragile" cultures; communication is that "sacred ceremony that draws persons together in fellowship and commonality".

Culture is the learned behavior of members of a given social group. Many writers have offered interesting definitions to culture. These definitions highlight not only what culture is but also what culture does:
Culture is the learned, socially acquired traditions and lifestyles of the members of a society, including their patterned, repetitive ways of thinking, feeling, and acting. (Harris, 1983, p5)

Culture lends significance to human experience by selecting from and organizing it. It refers broadly to the forms through which people make sense of their lives, rather than more narrowly to the opera on art of museums. (Rosaldo, 1989, p26)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Culture is the medium evolved by humans to survive. Nothing is free from cultural influences. It is the keystone in civilization's arch and is the medium through which all of life's events must flow. We are culture. (Hall, 1976, p14) Culture is a historically transmitted pattern of meanings embodied in symbolic forms by means of which people communicate, perpetuate, and develop their knowledge about and attitudes toward life.

Creation and maintenance of a more or less common culture occurs through communication, including mass communication and mass media. When we talk to our friends, when politicians campaign, when media professionals produce content that we read, listen to watch, meaning is being shared and culture is being constructed and maintained. Culture serves a purpose. It helps us categorize and classify our experiences; it helps define us, our world, and our place in it. A culture's learned traditions and values can be seen as patterned, repetitive ways of thinking, feeling, and acting. Culture limits our options and provides useful guidelines for behavior. Culture provides information that helps us make meaningful distinctions about right and wrong, appropriate and inappropriate, good and bad, attractive and unattractive, and so on. How does it do this?

Obviously, through communication. Through a lifetime of communication we have learned just what our culture expects of us. Culture can divide us, but culture also unites us. Our culture represents our collective experience. We converse easily with strangers because we share the same culture. We speak the same language, automatically understand how far apart to stand, know how much to say, and know how much to leave unsaid. Through communication with people in our culture, we internalize cultural norms and value those things that bind our many diverse bounded cultures into a functioning, cohesive society.

The media of mass communication or mass media for short refers to the print media, such as newspapers and magazines, to the electronic media, such as radio and television, and to the online media on the internet.

In broad definition, mass media also includes all sorts of printed material such as pamphlets, books, magazines, manuals, leaflets, billboard advertisements, and so on, mostly nonverbal information channels, such as street signs or icons; electronic media. These are all forms and channels of communication that convey messages to very large audiences which are to a large extent unknown to the originators of the messages.

Traditionally there has been a fairly clear opposition between mass communication, characterized by mass audiences, and interpersonal communication, characterized by very small groups of interactants.

The mass media in narrow sense are a popular research area for many diverse disciplines, such as sociology, semiotics, sociolinguistics, communication studies and pragmatics.

The communicative situation of mass media is characterized by (1) multiple originators who produce the media messages; (2) the periodicity and general accessibility of these messages to the public; (3) a dispersed mass audience, which receives the media messages simultaneously; (4) the unequal distribution of speaking and writing rights, which also imply a lack of feedback.

Traditionally mass media messages are produced by very large production teams. This is certainly true for entire newspapers, or the output of television channels, but it is also true for individual texts or reports in newspapers, on television or on the radio. Moreover, we would like to concentrate on the importance of mass media in influencing our view of the world and formation of stereotypes in newspapers.

Each person has a mental picture of what the world out there is like. For centuries, this picture was shaped by personal experience and education. These two factors are still present in shaping mental pictures, but is a third force that assumes an ever increasing importance. Today, mass media play an important role in teaching people what the world is like.

By pushing aside the limitations of experience and schooling, mass media have created a nation of people who have opinions on just about every subject. News and entertainment media distribute so much information about the world that many educators claim schools are no longer the main source of learning for most people. Mass media have taken over the role of forming our mental image of the world.

Our mental map or picture of the world is in some areas quite detailed and well developed. But sometimes our picture of the world out there is only a rough sketch with few details. Human psychology seems to demand that the sketch be filled in with details. Once the outline is formed, we use what we are taught by our parents, schools, and mass media to fill in the details. Often what we are taught, though is stereotype? The media gives ways of imagining particular groups, identities and situations. When these relate to people or characters they are called stereotypes. Stereotyping has been a key concept in media studies. Stereotypes are widely circulated ideas or assumptions about particular groups.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

A stereotype is an oversimplified idea of something, based on limited experience. Stereotypes have the following characteristics:

1. They involve both a categorizing and an evaluation of the group being stereotyped.
2. They usually emphasize some easily grasped feature of the group in question and suggest that these are the cause of the group's position.
3. The evaluation of the group is often, though not always, a negative one.
4. Stereotypes often try to insist on absolute differences and boundaries where the idea of a spectrum of difference is more appropriate.

Stereotyping is a process of categorization. This is necessary to make sense of the world, and the flood of information and impressions we receive minute by minute. We make mental maps of our worlds to navigate our way through them, and maps only ever represent parts of the real world, in particular ways.

- We all employ typifications in certain situations.
- We all belong to groups that can be typified, and stereotyped in this way – as students, lecturers, teenagers, wealthy persons, intellectuals, overweight people, housewives, etc. we often make sense of people we meet on the basis of gestures, dress, voice and so on, very much as we construct a sense of characters in the media.

FINDINGS

Stereotypes work by taking some easily grasped features presumed to belong to a group. They put these at the centre of the figure, and then imply that all members of the group always have those features. They then take the final step of suggesting that these characteristics are themselves the cause of the group's position. One of the seductions of stereotypes is that they can point to features that apparently have 'a grain of truth'. But they then repeat, across a whole range of media, jokes, etc., that this characteristic is and has always been the central truth about that group. Many stereotypes are strengthened by the mass media, although at other times those same media replace a commonly held stereotype with a fuller picture. Because of the power of mass media, some stereotypes are rather commonly accepted as the full truth.

Stereotyping is the application of a standardized image or concept to members of certain groups, usually based on limited information. Because media cannot show all realities of all things, the choices media practitioners make when presenting specific people and groups may well facilitate or encourage stereotyping. Media effects research over that is same period has consistently demonstrated the impact of this underrepresentation:

Media use has been determined to play a meaningful role in the development of racial/ethnic cognitions and intergroup behaviors. Indeed, research has consistently revealed modest but significant associations between viewing media portrayals of race/ethnicity and outcomes concerning out group members' competence…..socio-economic status….group status….judgments regarding a variety of race based attributions and stereotypes. (Mastro, 2009, p 235)

Though historically oppressed groups have been heavily stereotyped, this usually happens through more than one stereotype. Each stereotype itself changes over time, and relates to broader historical discourses.

We can also see stereotyping in jokes about nationalities, races, occupations and religions. Stereotypes are beliefs people have about members of groups that can be positive, neutral, or negative. Some examples of positive and neutral stereotyping:

- **Spanish** people are always dancing flamenco.
- The **Italian** eats pasta every day.
- In **Morocco** people have little hygiene.
- In **Portugal** people drive crazy.
- All **Americans** agree on death penalty.
- The best machines come from **Germany**

In jokes about stereotypes, the content of the jokes tends to be negative. A good deal of stereotyped humor is much nastier. Stereotyping jokes and riddles play an important part in spreading stereotypes.

A stereotype then is a fixed, frozen, and often false image we retain about an individual or a group of individuals. It ranges from harmless caricatures (``The English are very serious, they don't use body language``) to harmful characterizations (``Muslims who wears urban are danger``). It transcends such differences as nationality (Japanese are hard working), religion (Hindus are vegetarians), and profession (Lawyers are greedy), gender (All women are desperate to get married), age (Young people are reckless), etc.

A stereotype is socially constructed and is generally passed on from one generation to another. It is a simple and simplistic description of people about whom we have very little personal knowledge. Most of us implicitly accept it without clear understanding or critical definition. As the celebrated American journalist Walter Lippmann (1922, pp

 Copyright © International Conference on New Horizons in Education Conference (INTE)

54-55) rightly observed “For most part we do not first see, and then define, we define first and then see. In the great blooming, buzzing confusion of the outer world we pick out what our culture has already defined for us, and we tend to perceive that which we have picked out in the form stereotyped for us by our culture”. He also stated “An exaggerated image of the characteristics of a particular group. Incorrect pictures in our head are defined as stereotypes”.

What do stereotypes do? Stereotypes reduce an unmanageable reality to a manageable label. They exaggerate a grain of truth out of proportion until the reality is distorted into a simple image that makes us feel safe and superior. Once we accept stereotypes about people, we don’t have to make a serious effort to understand them in all their complexity. Stereotypes represent the outward expressions of hidden beliefs and values of the members of a particular society, or a community within a society. In their extreme form, they can lead to prejudice and discrimination, even to hatred and violence. Stereotyping is a virus that replicates itself in one unquestioning mind and rapidly infects other unquestioning minds. The influential factors of causing stereotypes might be: the media, comedy, other people, and society.

CONCLUSION

Let’s conclude what we have mentioned above. The application to an entire group of the qualities of a limited sample of that group is a stereotype. In themselves, stereotypes are a convenient mental device. They help us deal with the vast amount of reality that can never be known in detail. The problem is that most stereotypes contain only a kernel of truth an so are dangerous if taken to be the whole truth.

Stereotypes give people a feeling of security, a feeling that something complex is understood. They provide the illusion that we know our way around in what otherwise would be unknown territory. When the stereotypes we hold are attacked or challenged, we view this as a personal attack and often actively defend our stereotypes.

Media however, not only entertains and offers news to people, but according to a Canadian theorist Marshall McLuhan, it also affects people’s lives by shaping their opinions, attitudes and beliefs. By manipulating the message, media can create a certain image of reality, which is consistent with the policy of the dominant group. As a result, the reflection of a real world is incomplete and distorted. Although people are aware of the unequal representation of certain social groups in mass media, it is hard to remain objective and insensitive to its influence. Sometimes mass media do replace stereotypes with a fuller picture of a group of people. Stereotypes are easy and familiar, however, and the media will continue to use them as long as audiences accept them.

Why stereotypes?

- We like to simplify things.
- It is simple to make, easy to remember, funny to say, etc.
- We think we are the only ones who are correct.
- We think what is different is usually bad.

REFERENCES

James W. Carey (1997) Mass communication and society Londres: Edward Arnold,
p. 409-425.
Harris, M. (1983). Cultural anthropology New York: Harper & Row
Rosaldo R (1989) Culture and truth Beacon Press
Hall E (1976) Beyond Culture An Anchor Books/Doubleday
Mastro, D. (2009). Effects of racial and ethnic stereotyping, Media effects: Advances in theory and research (pp. 325–341) New York, NY: Taylor and Francis
Walter Lippmann, 1922 Public Opinion. New York: The Free Press.

LİSE ÖĞRENCİLERİNİN DENETİM ODAKLARINA GÖRE KARİYER KARAR VERME GÜÇLÜKLERİNİN İNCELENMESİ

Oğuzhan KIRDÖK
Çukurova Üniversitesi, Eğitim Fakültesi, Adana, Türkiye
okirdok@cu.edu.tr

Esranur HARMAN
Çukurova Üniversitesi, Sosyal Bilimler Enstitüsü, Adana, Türkiye
esranur.harman@hotmail.com

ÖZET
Bu araştırmanın amacı, lise öğrencilerinin kariyer kararlarını verirken yaşadığı güçlükleri ve kontrol odaklarına göre kariyer kararı vermede yaşadıkları güçlüklerin farklılaşıp farklılaşmadığını incelemektir. Ayrıca güçlüğün cinsiyet ve sınıf düzeyine göre farklılaşıp farklılaşmadığını incelemek amaçlanmaktadır. Araştırmaya Adana il merkezinde 9., 10., 11. ve 12.sınıflarda öğrenim gören 165 (% 55) kız, 135 (% 45) erkek olmak üzere toplam 300 öğrenci katılmıştır. Araştırmaya katılan öğrencilerin yaşları 14-19 arasında değişmekte olup yaş ortalamaları 16.2'dir.

Araştırmada veri toplamak için Gati ve Saka (2001) tarafından geliştirilen, Bacanlı (2008) tarafından Türkçeye uyarlanan Kariyer Karar Verme Güçlükleri Ölçeği (KKVGÖ) ve Rotter (1966) tarafından geliştirilen ve Türkçeye uyarlaması Dağ (1991; 2002) tarafından yapılan İç-Dış Kontrol Odağı Ölçeği (RİDKOÖ) kullanılmıştır. Veriler SPSS 22 paket programı yardımıyla analiz edilmiştir. Öğrencilerin cinsiyetlerine göre kariyer karar verme güçlükleri ve denetim odağı puanlarının karşılaştırılmasında t testi kullanılmıştır. Öğrencilerin sınıf düzeyine ve denetim odaklarına göre kariyer karar verme güçlüklerinin karşılaştırılmasında tek yönlü varyans analizi kullanılmıştır. Farkın kaynağını belirlemek amacıyla ise Scheffe analizinden yararlanılmıştır.

Elde edilen bulgulara göre öğrencilerin cinsiyetine göre kariyer karar verme güçlüğü ölçeğinden alınan toplam puanlar arasında anlamlı fark bulunamamıştır. Ayrıca kız öğrencilerin erkek öğrencilere göre daha dıştan denetimli olduğu bulunmuştur. 9. sınıf lise öğrencilerinin kariyer karar verme güçlüğünden aldıkları toplam puanlar ve ölçeğin alt boyutlarından aldıkları puanların aritmetik ortalaması 10., 11. ve 12. sınıf düzeylerine göre daha yüksek bulunmuştur. Dıştan denetimli öğrencilerin kariyer karar verme güçlüğünden aldıkları toplam puanlar daha yüksektir.
Anahtar Kelimeler: Kariyer Karar Verme Güçlükleri, Denetim Odağı, Lise Öğrencileri

HIGH SCHOOL STUDENTS CAREER DECISION-MAKING DIFFICULTIES EXAMINING ACCORDING TO FOCUS OF CONTROL

ABSTRACT
The aim of this study is to describe the difficulties experienced by high school students in making career decisions and whether it differs their difficulties in making career decisions based on their focus of control. Also, according to gender and grade level of difficulty in making career decisions it is intended to examine whether it differs. 165 (55%) female and 135 (45%) male of a total of 300 students studying at 9th, 10th , 11th and 12th grade in the city of Adana were participated in this study. The ages of the students who participated in the study ranged from 14-19 and average age is 16.2 .
To collect data, Career Decision-Making Difficulties Questionnaire (CDMQ) developed by Gati and Saka (2001) adapted to Turkish by Bacanlı (2008), and Internal - External Focus of Control Scale (RIELCS) developed by Rotter (1966) and adapted to Turkish by Dağ (1991, 2002) were used. Data were analyzed by using SPSS 22 software package. In study, t test was used in comparing of career decision-making difficulties and focus of control level according to the gender of the students. According to focus of control and the grade level and of the students in the comparison of career decision-making difficulty scores are used one-way analysis of variance. To determine the source of Differences Scheffe analysis was used.

According to the findings, no significant difference was observed by gender in career decision-making difficulties. In addition, female students were found to be more externally controlled then male student. The arithmetic average of total scores of 9th grade high school students obtained from their career decision-making difficulties were higher than dimensions of the scale 10, 11 and 12 grade students. Total scores of External control focused students' career decision-making difficulties scores are higher than the internal focused students.
Key words: Career Decision-Making Difficulties, Focus Of Control, High School Students

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LİSE ÖĞRENCİLERİNİN SOSYAL MEDYA YOLUYLA GELİŞTİRDİĞİ TUTUMLAR (SAKARYA/KAYNARCA ÖRNEĞİ)

Kadir KORKUT
Sakarya Üniversitesi, Eğitim Bilimleri Enstitüsü, Türkiye
korkutkadir89@hotmail.com

Ahmet ESKICUMALI
Sakarya Üniversitesi, İletişim Fakültesi, Türkiye
ecumali@sakarya.edu.tr

ÖZET
Bu araştırma 15-18 yaş gurubu lise öğrencilerinin aktif şekilde kullandığı sosyal medya sitelerinin gençlerin toplumsal yaşama, ailesine, arkadaşlarına ve öğretmenlerine karşı geliştirdiği tutumları ne düzeyde etkilediğini ölçmek ve çeşitli değişkenlere göre bu tutumlar arasında ne gibi farklılıklar olduğunu saptamak amacıyla yapılmıştır. Araştırma evrenini 2015-2016 eğitim öğretim yılı içerisinde Sakarya ili Kaynarca ilçesindeki 1029 (416 kız, 613 erkek) lise öğrencisi, örneklem grubunu ise Kaynarca Anadolu Lisesi'nde okuyan 342 lise (205 kız, 137 erkek) öğrencisi oluşturmaktadır. Veri toplama araçları olarak kişisel bilgi formu ve Argın (2013) tarafından geliştirilmiş sosyal medya tutum ölçeği kullanılmıştır. Araştırma sonuçlarına göre sosyal medyadan dolayı lise gençlerinin ailesine ve arkadaşlarına yeteri kadar vakit ayırmadığına ilişkin görüşleri içeren maddelerin daha yüksek puanlar aldığı, sosyal medyanın derslere ve sosyal etkinliklere ayrılan zamanın daha az olmasına neden olduğu tespit edilmiştir. Sosyal medya uygulamalarının grubun gençlerini özellikle aile ortamlarından, arkadaş gruplarından ayırmakta ve onları yalnızlaştırmakta olduğu saptanmıştır. Bir diğer sonuç ise gençler, gerçek yaşam etkinlikleri yansıra sosyal medyada, sanal bir dünyanın içinde beğenilmek, taltif edilmek ve yüceltilmek isteği içerisindedir. Araştırmada baz alınan cinsiyet, kullanım süreleri, kullandığı sosyal medya sitesi açısından öğrencilerin görüşleri arasında herhangi bir farklılığa rastlanmazken; yaş, bölüm, sosyal medya üyeliği, kullanım sıklığı, harcadığı süre, bağlanılan ortam değişkenleri açısından öğrencilerin görüşleri arasında anlamlı farklılıklar tespit edilmiştir. Bağlanma aracı değişkeni açısından sadece öğretmenlerle ilişki alt boyutunda farklılıklar mevcutken gelir değişkeni açısından sadece paylaşım ihtiyacı alt boyutunda farklılıklar gözlenmiştir.
Anahtar Kelimeler: Sosyal Medya, Tutumlar, Davranışlar, Sosyal İlişkiler, Lise Öğrencileri

ABSTRACT
The purpose of this research is to decide and evaluate the social media based attitudes of high school students, aged between 15 and 18. It is also a goal to learn how these high school students' views and relationships with their family, friends and teachers change while they use or don't use social media. This study's another target is to learn whether all these social media based attitudes of high school students are changeable according to some variables such as sex, age, academic field, economic conditions and so on. The universe of research is composed of 1029 High School Students (416 female, 613 male) in Kaynarca. The sample of the study consists of 342 students (205 female, 137 male) at Kaynarca Anatolia High School. According to results of research it is found out that the students mostly chose options stating they can't spend time with their families and friends while they use social media. It is also obvious that students tend to select choices expressing they can't concentrate on lessons and homework because of social media. Students also clarify that they can't join some of social activities due to social media. It is appointed that social media implications disassociate the high school students especially from their families and friends. It can be concluded from research that these implications can isolate young people from their social environment. It is clear from tables in this research that these tools can distract students. Another result we have got from the study is that high school students tend to be appreciated in an imaginary world rather than to be praised in real world. While there are no differences between students according to some variables such as sex, usage period of social media, social media preference; there are differences between students according to some other variables such as academic field, membership of social media, usage frequency, period of spending time at social media, and places where students use social media.

Keywords: Social Media, Attitudes, Behaviours, Relationships, High School Students

 Copyright © International Conference on New Horizons in Education Conference (INTE)

GİRİŞ

Birçok unsurda olduğu gibi internet tabanlı gelişmeler de bir toplumun içerisine yerleşirken buna en açık kesim o toplumun gençliğidir. Bu noktada toplum sosyolojisi ile sosyal medya arasındaki bağa bakarken en fazla dikkat edilmesi gereken yer toplumun en dinamik kitlesini oluşturan lise gençliğidir. Türkiye'de gençlerin sosyal medyayı kullanma istekleri, kendilerini onunla ifade etme çabaları kendini uzun süredir belli etmektedir. Sanal ortamların getirdiği yeni arkadaşlıklar, farklı başlıklarda açılan sohbet ortamları, paylaşılan etkinlik, resim, videolar; bunların üzerinden gelişen benlik algısı ve toplumsal ilişkiler kendine süregelen hayatın içerisinde yeni bir pencere açmış durumdadır. Öyle ki gençler, tasvip edilsin ya da edilmesin, kendilerine yeni bir sosyal medya dili edinmiş ve iletişimini bununla sağlamıştır. Lise gençlerinin eğitim süreçlerine, öğretmenlerine, ailesine ve arkadaşlarına karşı sosyal medya yoluyla geliştirdiği tutumları ölçmek, yeni nesli tanımak için bir gereklilik olmuştur. Tutumlarla ilgili yapılan tanımlar genelde aynı yöndedir. Kişinin bir olay, bir cisim ya da başka bir kişi karşısında hem bilişsel hem de duyuşsal süreçlerle geldiği nokta olarak da tanımlayabileceğimiz tutum kavramı insanın deneyimlerini gösteren, hayatın içerisinde bir meseleye bakış açısını ele alabilmemiz için somutlaştırıcı bir yardımcıdır. Bu bağlamda gençlerle sosyal medya arasında gelişen yeni kullanım alışkanlıkları ve bunun lise gencinin toplumsal yaşamına yansımalarına dair bir tablo oluşturmak için onlara tutumları aracılığıyla yaklaşmak bir kolaylık sağlayacaktır.

ARAŞTIRMANIN AMACI

Bu araştırma 15-18 yaş gurubu lise öğrencilerinin aktif şekilde kullandığı sosyal medya sitelerinden kaynaklı davranışlarını; gençlerin toplumsal yaşama, ailesi, arkadaşları ve öğretmenleri ile olan ilişkilerine karşı geliştirdiği tutumları ölçmek ve bu tutumlar arasında ne gibi farklılıklar olduğunu saptamak amacıyla yapılmıştır.

ARAŞTIRMANIN ÖNEMİ

Sosyal medya kavramı özellikle iki binli yıllardan sonra hayatımıza girmiştir. Etkisini kısa sürede artırmış olan bu siteler özellikle gençler üzerinde büyük bir tesire sahiptir. Türkiye dünya ülkeleri arasında sosyal medya sitelerine üye olmak bakımından en yüksek orana sahip ülkelerden biri durumundadır. Bu noktada Türk toplumunda bireylerin benlik algıları ve kişiler arası gelişen sosyal ilişkiler üzerinde sosyal medya sitelerinin bir etkisi olduğu yadsınamaz bir gerçektir. Bu doğrultuda, bilakis lise gençlerinin sosyal medya ile kurdukları ilişkiyi ve onların yaşamında sosyal medyanın yansımalarını ele almanın elzem olduğu bir dönemin içerisinden geçtiğimiz herkesin kabul ettiği bir süreçtir. Bundan dolayı böyle bir araştırmanın yapılması ve sonuçlarının akademik çevreyle paylaşılması önem arz etmektedir. Bu araştırma günümüzde gençlerin aktif şekilde kullandığı sosyal medya sitelerinden kaynaklı davranışlarını; toplumsal yaşamına, ailesi, arkadaşları ve öğretmenleri ile olan ilişkilerine karşı geliştirdiği tutumları ölçmek ve çeşitli değişkenlere göre bu tutumlar arasında ne gibi farklılıklar olduğunu saptamak amacıyla yapılmıştır. Araştırmanın yapıldığı Sakarya'nın Kaynarca ilçesi kendine has dokusuyla, büyükşehir sosyal yaşantısından uzak, içe kapanık ve yıllara varan geleneğini koruyan bir toplumu barındırmaktadır. Ulaşım açısından da Kaynarca, Sakarya şehrinin kuzeyinde, İstanbul ve Ankara gibi büyük merkezlere giden yolların uzağında bir konumda yer almaktadır. Bu bağlamda böyle bir doku içerisinde sosyal medya gibi yenilikçi ve çabuk değişim, hızlı bir akış, çoklu imgeler altyapısıyla oluşturulmuş; büyük kitlelere aynı anda hitap eden sitelerin bunun tam zıt karakterdeki bir ilçe merkezindeki lise gençlerine nasıl etki edeceğini saptamak hatırı sayılır veriler vaat etmektedir.

ARAŞTIRMANIN MODELİ

Bu araştırmada lise öğrencilerinin sosyal medya üzerinden geliştirdiği tutumların çeşitli değişkenlere göre farklılık gösterip göstermediğini tespit etmek hedeflendiğinden betimsel tarama modeli kullanılmıştır. Tarama modeli, geçmişte ya da halen var olan bir durumu var olduğu şekliyle betimlemeyi amaçlayan araştırma yaklaşımıdır. Araştırmaya konu olan olay, birey ya da nesne, kendi koşulları içinde ve olduğu gibi tanımlamaya çalışır. Onları, herhangi bir şekilde değiştirme, etkileme çabası göstermez (Karasar, 2007).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

BULGULAR

Araştırmada elde edilen bulgular, araştırmanın alt amaçlarını açıklayacak şekilde aşağıda tablolar halinde sunulmuş ve daha sonra da açıklaması yapılmıştır. Araştırmaya katılan öğrencilere ait kişisel özellikler Tablo 1'de gösterilmiştir.

Tablo 1. Araştırma Grubuna Ait Kişisel Özellikler

Değişkenler	Gruplar	n	%	Değişkenler	Gruplar	n	%
Cinsiyet	Kız	205	59.9	Üyelik	Evet	306	89.5
	Erkek	137	40.1		Hayır	36	10.5
Yaş	15 yaş	151	44.2	Ne kadar süredir	1 Yıldan Az	43	12.6
	16 yaş	36	10.5		1-2 Yıl	70	20.5
	17 yaş	100	29.2		2-3 Yıl	103	30.1
	18 yaş	55	16.1		4 Yıl Ve Daha Fazla	126	36.8
Bölüm	Henüz Bölümüm Yok	187	54.7	Kullanım Sıklığı	Her Gün Bir Kereden Fazla	175	51.2
	Sayısal	53	15.5		Her Gün Bir Kere	80	23.4
	Sözel	42	12.3		Haftada Bir Kereden Fazla	33	9.6
	Eşit Ağırlık	53	15.5		Haftada Bir Kere	27	7.9
	Yabancı Dil	7	2.0		Ayda Birkaç Kere	27	7.9
Gelir	Düşük	19	5.6	Araç	Masaüstü Bilgisayar	25	7.3
	Orta	300	87.7		Mobil Cihazlar	303	88.6
	Yüksek	23	6.7		Dizüstü Bilgisayar	14	4.1
Ortam	Ev	190	55.6	Harcanan süre	5-10 Dk	82	24.0
	İnternet Kafe	12	3.5		11-30 Dk	124	36.3
	Kablosuz Ağ Bulunan Herhangi Bir Yer	85	24.9		31-60 Dk	78	22.8
	Diğer	55	16.1		61-120 Dk	39	11.4
					121 Dk Ve Daha Fazla	19	5.6

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Hangi medya	Facebook	194	56.7
	Twitter	41	12.0
	Youtube	76	22.2
	Flickr	1	.3
	Blogger	2	.6
	Tumblr	2	.6
	Diğer	26	7.6

Ölçeğe 205 kız 137 erkek olmak üzere toplam 342 lise öğrencisi cevap vermiştir. Öğrencilerin üçte birden fazla bölümü on beş yaş gurubundayken bunu sırasıyla on yedi yaş, on sekiz yaş ve on altı yaş grubu izlemiştir. Öğrencilerin büyük bir çoğunluğu orta düzey gelir durumuna sahip olduğunu ifade etmişken diğerleri az ya da yüksek gelire sahip olduğunu söylemiştir. Kullanım alışkanlıkları açısından öğrencilerin en çok mobil cihazlar üzerinden sosyal medyayı kullandığı tespit edilmiştir.

Sosyal Medya Tutum Ölçeği (Argın, 2013)'nden öğrencilerin elde ettiği puanlar aşağıda Tablo 2'de gösterilmiştir.

Tablo 2. Ölçek Maddelerine İlişkin Elde Edilen Ortalamaların Dağılımı

Madde No	İfadeler	n	Ort.	ss.
23	Sosyal medya siteleri yüzünden arkadaşlarıma yeterince vakit ayıramıyorum.	342	3.87	1.295
7	Sosyal medya sitelerinin beni ailemden kopardığını düşünüyorum.	342	3.87	1.266
3	Sosyal medya sitelerinin beni arkadaşlarımdan uzaklaştırdığını düşünüyorum.	342	3.80	1.216
11	Sosyal medya siteleri yüzünden aileme yeterince vakit ayıramıyorum.	342	3.77	1.291
22	Sosyal medya siteleri yüzünden derslerime yeterli özeni gösteremiyorum.	342	3.62	1.305
14	Sosyal medya siteleri yüzünden diğer sosyal aktivitelere yeterince vakit ayıramıyorum.	342	3.56	1.238
12	Paylaşımlarımın arkadaşlarım tarafından beğenilmesinden hoşlanıyorum.	342	3.45	1.285
17	Sosyal medya siteleri sayesinde düzenlenen etkinliklerden haberim olması hoşuma gidiyor.	342	3.40	1.216
15	Sosyal medya sitelerinde zaman geçirmekten mutlu oluyorum.	342	3.29	1.191
4	Sosyal medya sitelerinde gördüğüm paylaşımları arkadaşlarımla sohbet konusu yapmak hoşuma gidiyor.	342	3.12	1.199

 Copyright © International Conference on New Horizons in Education Conference (INTE)

13	Sosyal medya siteleri sayesinde ortak ilgi ve amaçlara sahip olduğum kişilere ulaşabileceğimi düşünüyorum.	341	3.09	1.177
16	Özel ilgi duyduğum arkadaşıma sosyal medya siteleri aracılığıyla duygularımı daha rahat ifade edebiliyorum.	342	2.98	1.327
6	Sosyal medya sitelerinde yazı, video, müzik vb. paylaşımlarda bulunmaktan hoşlanıyorum.	342	2.97	1.278
21	Arkadaşlarımın paylaşımlarım hakkında yorum yapmaları beni mutlu ediyor.	341	2.94	1.253
18	Sosyal medya siteleri sayesinde daha fazla arkadaşımın olacağını düşünürüm.	342	2.85	1.255
5	Sosyal medya sitelerindeki içerikler hakkında yorum yapmak hoşuma gidiyor.	342	2.72	1.168
9	Sosyal medya sitelerinde öğretmenlerimi takip etmeyi seviyorum.	342	2.58	1.269
10	Öğretmenlerimin yazdıklarımı takip etmesi hoşuma gidiyor.	342	2.50	1.288
1	Sosyal medya siteleri sayesinde arkadaşlarımın beni fark etmesini isterim.	342	2.50	1.269
2	Sosyal medya siteleri sayesinde yeni bir kişilik kazandığımı hissediyorum.	342	2.30	1.196
19	Öğretmenlerimin sosyal medya sitelerinde beni takip etmesi kendimi değerli hissetmemi sağlıyor.	342	2.45	1.305
8	Sosyal medya siteleri sayesinde yalnızlıktan kurtulduğumu düşünüyorum.	342	2.41	1.233
20	Sosyal medya siteleri sayesinde saygınlık ihtiyacımın karşılandığını düşünüyorum.	342	2.34	1.153

Tablo 2'de ölçek maddelerine verilen cevapların ortalama puanları verilmiştir. Yapılan tanımlayıcı istatistik sonrasında aile ve arkadaşlara yeteri kadar vakit ayrılamadığına ilişkin görüşleri içeren maddelerin daha yüksek puanlar aldığı, sosyal medyanın derslere ve sosyal etkinliklere ayrılan zamanın daha az olmasına neden olduğu yönünde görüşler tespit edilmiştir. Tablo 2'den de anlaşılacağı üzere sosyal medya uygulamaları gençleri özellikle aile ortamlarından, arkadaş gruplarından ayırmakta ve onları yalnızlaştırmaktadır. Ayrıca gençlerin bu araçlarla geçirdiği zaman, onların ders çalışmak, ödev yapmak eğilimlerini kırmakta ve enerjilerini başka yönlere çekmektedir. Tablodan elde edilen bir diğer bulgu ise gençlerin yarısına yakını gerçek yaşam etkinlikleri bir yana, sosyal medyada, sanal bir dünyanın içinde beğenilmek, taltif edilmek isteği içerisindedir.

SONUÇ

Sosyal Medya kavramı özellikle iki binli yıllardan sonra hayatımıza girmiştir. Etkisini kısa sürede artırmış olan bu siteler özellikle gençler üzerinde büyük bir tesire sahiptir. Türkiye'nin dünya ülkeleri arasında sosyal medyalara üye olmak bakımından en yüksek orana sahip ülkelerden biri durumundadır. Bu noktada Türk toplumunda bireylerin benlik tutumları ve kişiler arası gelişen sosyal ilişkiler üzerinde sosyal medya sitelerinin önemli bir etkisi olduğu düşünülebilir. Bu doğrultuda, bilakis lise gençlerinin sosyal medya ile kurdukları ilişkiyi ve onların yaşamında sosyal medyanın yansımalarını ele almanın elzem olduğu bir dönemin içerisinden geçtiğimiz herkesin kabul ettiği bir süreçtir. Bundan dolayı böyle bir araştırmanın yapılması ve sonuçlarının akademik çevreyle paylaşılması önem arz etmektedir.

Yapılan araştırmanın sonuçlarına göre ölçeğin uygulandığı Kaynarca Anadolu Lisesi öğrencilerinin 306'sı bir sosyal medya sitesine üye iken 36'sı herhangi bir siteye üye değildir. Sosyal medya sitelerine üye olan bu

öğrencilerden 126'sı 4 yıl ve daha uzun süredir sosyal medyayı kullanmaktadır. Lise öğrencilerinin 175'i sosyal medyayı her gün bir kereden fazla kullanmaktadır. 303 öğrenci sosyal medya sitelerine mobil cihazlar üzerinden girmektedir. Lise öğrencilerinin en çok kullandığı sosyal medya sitesi Facebook (194 kişi) olarak dikkat çekmektedir, bunu takiben YouTube (76 kişi) ve Twitter (41 kişi) gelmektedir. Yapılan araştırmanın sonuçlarına göre gençler sosyal etkinliklere katılım gösterirken sosyal medya aracılığıyla haberdar edilmekten hoşlanmaktadır. Lise öğrencileri arasında gelişen bu tutum sayesinde, toplumsallaşmanın sosyal medya merkezli, sanal bir süreci de içine alan yeni yüzüyle karşılaşmaktayız. Ayrıca lise gençleri sosyal medya sayesinde kendi ilgi ve alakalarına uygun yeni arkadaşlar edinebileceğine inanmaktadır. Gençler sosyal medyayı günlük hayattaki mahalle kavramına denk düşecek bir şema ile özdeşleştirip orada her yönüyle güvenilir insanları tanıma fırsatına sahip olabileceğine inanmaktadır. Buna sebep olarak günlük yaşam yetersizliği ve dijitalleşen yaşam şartları gösterilebilir.

Araştırmadan çıkaracağımız bir başka sonuç ise gençlerin sosyal medyada gördüğü ya da okuduğu paylaşımları arkadaşlarıyla sohbet konusu yapmaktan hoşlanmakta olduğudur. Öğrenciler bu içerikleri gerçek hayatta sosyalleşme ya da arkadaşlarıyla daha sıcak bir bağ kurma aracı olarak kullanabilmektedir. Ölçeğin uygulandığı grup üyeleri ayrıca özel ilgi duydukları arkadaşlarına karşı duygu ve düşüncelerini daha rahat ifade ettiklerini söylemektedir. Bu noktada sosyal medyanın gençleri özel bir arkadaş edinirken cesaretlendirici bir etkiye sahip olduğunu söylemek mümkündür. Sosyal medya üzerinden tüm bu sosyalleşme ve paylaşma eğilimlerine karşı gençlerin yine de bu sitelerin onları yalnızlıktan kurtarmadığını ifade etmeleri dikkate değerdir. Öğrencilerin, bu sitelerin sanal bir çevre oluşturduğunun ve bu çevrenin onların tam anlamıyla ihtiyaç duyduğu sosyal çevreye denk düşmediğinin farkında oluşu önemli bir farkındalık örneğidir. Gençlerin öğretmenleri ile sosyal medya aracılığıyla kurduğu ilişkiye bakacak olursak öğrencilerin çoğunluğunun öğretmenlerini bu platformlarda takip etmekten hoşlandığını görebilmekteyiz. Öğrencilerin yarısı öğretmenlerinin kendi yazdıklarını takip etmesinden memnunken yarıdan biraz daha az kısmı ise öğretmenlerinin onu takip etmesi dolayısıyla kendini değerli hissetmektedir. Genel hatlarıyla öğrenciler sosyal medya siteleri üzerinden öğretmenleriyle iletişim kurmaya karşı olumlu bir tutum sergilemektedir.

Bununla beraber sosyal medya yoluyla aile ve arkadaşlara yeteri kadar vakit ayrılamadığına ilişkin görüşleri içeren maddelerin daha yüksek puanlar aldığı, sosyal medyanın derslere ve sosyal etkinliklere ayrılan zamanın daha az olmasına neden olduğu yönünde görüşler tespit edilmiştir. Sosyal medya uygulamalarının grubun gençlerini özellikle aile ortamlarından, arkadaş gruplarından ayırmakta ve onları yalnızlaştırmakta olduğu saptanmıştır. Araştırmadan çıkartabileceğimiz bir diğer belirgin sonuç ise gençler, gerçek yaşam etkinlikleri bir yana, sosyal medyada, sanal bir dünyanın içinde beğenilmek, taltif edilmek isteği içerisindedir.
Sosyal medyanın gençler üzerinde toplumdan haberdar olma, çevresine karşı duyarlı olma gibi kimi olumlu etkileri olmakla birlikte genel hatlarıyla gençlerin gerçek yaşamdaki etkinlik alanını daralttığını, onlara günlük yaşantısını bir mobil cihaz ekranına sığdırma eğilimi taşıttığını söylemek mümkün. Bu noktada bu süreci ortak yönetmek adına önce gençlerin ailesinin sorumluk almasına ve gençlerin öğretmenlerinin bu sürece bir rehber olarak katılmasına ihtiyaç duyulduğu ortadadır. Aksi takdirde gençlerin kalabalık gibi görünen bir platformun içerisinde yalnızlık duygusunu yaşamaya devam ederken, zihinleri karmaşık görüntülerle yorulmuş, derslerine, ailesine ve gerçek arkadaşlarına ayıracak zamanı ve enerjisi kalmamış bir şekilde yaşamak durumunda kalacaktır.

KAYNAKÇA

Allport, G. W. (1935). *Attitudes In Handbook of social psychology*. Worcester: Clark University Press.

Argın, F. S. (2013). *Ortaokul ve Lise Öğrencilerinin Sosyal Medyaya İlişkin Tutumlarının İncelenmesi.* Yüksek Lisans Tezi. Yeditepe Üniversitesi Sosyal Bilimler Enstitüsü.

Dağıtmaç, M. (2015). *Sosyal Medya Bizi Neden Kullanır***.** İstanbul: Okur Akademi Yayınları.

Dilmen, N. E. (2007). Yeni medya kavramı çerçevesinde internet günlükleri-bloglar ve gazeteciliğe yansımaları. *Marmara İletişim Dergisi*, *12*(12), 113-122.

Robbins, S. (1994) *Örgütsel Davranışın Temelleri* (Çev: Sevgi Ayşe Öztürk) Eskişehir: ETAM Basım Yayın.

Tezbaşaran, A. (2008) Likert Tipi Ölçek Hazırlama Kılavuzu e-kitap 3. Sürüm

Tavşancıl, E**.** (2010). *Tutumların Ölçülmesi ve SPSS ile Veri Analizi*. Ankara: Nobel Yayın Dağıtım

Uraltaş, N. T., & Bahadırlı, L. S. (2012). Sosyal Medya/İletişim. *Sosyal Medya/Akademi*, 21-56.

MAKING SENSE OF PUBLIC RELATIONS AS CULTURE POLICY

Prof. Dr. Seda MENGÜ
Department of Public Relations and Publicty, Faculty of Communication
Istanbul University, Turkey

Assist. Prof. Dr. Murat MENGÜ
Department of Media and Communication Systems, Faculty of Communication
Istanbul Arel University, Turkey

ABSTRACT
Culture is a process in which meaning is produced, distributed, consumed, materialised, re-produced infinitely and discussed with society. As meanings generally disperse extensively in different social groups through different associations, they display certain changes in time depending on their usage. Meanwhile, it is hard to define the public relations concept, because it may refer to different meanings even in the same culture. According to the assumptions pertaining to the public relations practices shaping the dominant discourse of the USA, language which produces certain cultural meanings also shapes the way we think and act. Thus, due to its ideological and discursive nature, public relations functions as a culture policy. Being an integral communication management configuring and directing the social sphere and the practices related to it, public relations refers to the concept of habitus introduced by Bourdieu inasmuch as habitus resides in the situations formed by actions that individuals learn throughout their lives. Culture policy; on the other hand, purports the effective participation of people in cultural life, their development in social, economic and cultural areas as well as the creation of convenient conditions to sustain it, which can be achieved with public relations practices. Public relations determines the culture policies in a society with regard to the structured discourses and actions and also acts as the mouthpiece of these policies. The purpose of public communication that is necessary for development and sustainability is to inform the public objectively in cultural, social, political and economic senses by obtaining feedback form them. For the purpose of administering sound public communication strategies in a society, public relations should direct the forms of public discourse. The purpose of this study is to put forth a critical evaluation based on the idea that for the realisation of effective and sensible communication policies in a society, the perception and practice public relations in that society should be regarded as a culture policy. According, this study focuses on whether or not public relations as culture policy serve the development of democracy and public sphere.

Public Relations Profession
Practising the public relations profession with a functionalist and integrative approach puts forth the culture of this profession as well as its perspective towards target groups. Why and for whom are we practising public relations and with which means are we realizing it? Through the implementation process of the profession, usually answers are not sought to these questions. During the execution of daily routine tasks, it is not usually questioned which approach is held. This way of thinking can be obtained during the education process pertaining to public relations profession. In other words, a corporate logic related to the profession is developed.

Generally speaking, public relations is a way of discourse and an ideology. It is the generator needs as it is aimed at needs. The factors influencing the Formation of public relations culture as well as why and how the profession is practiced are as follows: socio-economic conditions of a society, political situation and social values, being mass or public society, the way of using the media, culture of public relations practitioners, the roles and models adopted in public relations practices.

According to Vos (2011), corporate logic advises individuals to act according to the given routines or similar behavioural patterns. On the other hand, logical evaluations of individuals are limited to their corporate positions. In addition, corporate approach emphasizes that the asymmetry of power is related to the development and operations of corporations. It should also be noted that corporations transform power relations. Public relations practitioners could take the culturally legitimised practices and employ them for the benefit of their stakeholders. For the formulation of public relations, a definition can be made in narrow sense within the context of cultural behaviour or tradition. According to the logic of cultural explication, the founders of public relations used the meaning systems that they adapted from their cultures. Incorporating cultural values, attitudes and ideas, these meaning systems and instruments have offered both the opportunities and the limitations to public relations practitioners. In this sense, culture is a means

 Copyright © International Conference on New Horizons in Education Conference (INTE)

for individuals to interpret reality as well as a way of perception. Therefore, the working styles of public relations practitioners differ according to their ways of perception (ibid. p. 132).

Generally speaking, the concept of profession gets abstracted of its previous meaning and begins to display a new denotation focused on consumption and personal interest. The most important requisite for a practice to be considered as a profession is public service. It is thought that such an approach, which is supposed to form the cultural basis of all professions, has gradually been diminishing. "With respect to new capitalism culture, the concept of 'profession' gets more and more instrumental. The relationship between individuals and professions are now determined by the benefits of these professions. The fact that profits have become the principal link between individuals and professions leads to considering professions with regard to what they offer only, which in turn erode the reputation of professions. Although the system of socio-cultural values and the social functionality of a profession had priority in the past for specifying its social reputation, today it is observed that particularly economic benefits, generally individual functionality of a profession has gained importance. Professional prestige is gained not on the basis of filling vital social needs, but meeting individual expectations. Hence, a profession is now meaningful as long as it satisfies individual requirements, not social" (İlhan, 2008: 324-325).

Public relations is a way of discourse and an ideology. It is the generator needs as it is aimed at needs. The factors influencing the Formation of public relations culture as well as why and how the profession is practiced are as follows: socio-economic conditions of a society, political situation and social values, being mass or public society, the way of using the media, culture of public relations practitioners, the roles and models adopted in public relations practices

Public Relations Culture

Culture is a style and a way of approaching the issues and activities. With regard to various social, cultural, political and economic structures, public relations has different cultural characteristics depending on the way it is perceived and practiced.

Public relations culture changes according to the way the functions and objectives of public relations is perceived and practiced. Due to being a profession, public relations is responsible for introducing different ideas to each other, emancipating individuals and societies and putting forward the real needs. Thus, the perspective towards public relations should be redefined. Public relations culture not only shapes the society it is practised along with certain rules and values, attributes various meanings to them and develops discourses, but also it is influenced by them and transformed accordingly.

For practising consistent public communication strategies in a society, public relations should direct the forms of public discourse. The purpose of this study is to introduce a critical evaluation based on the idea that in order to launch effective and rational communication policies in a society, the ways that public relations is perceived and practised in that society should be considered as a culture policy.

Therefore, this study centres upon whether or not public relations as a culture policy may contribute to the development of democracy and the public sphere. It is seen that in developed countries the indicators of the respective issue are defined according to economic, social and cultural development of a country and public relations is regarded as a cultural policy. However, in underdeveloped and developing countries, this profession is not considered as a culture policy. It should be noted that the level of development is measured according to the welfare level of individuals as well as democratic factors. In fact, public relations can be used as a means of manipulation and consumption in some developed countries.

While public relations is exercised to meet the needs of societies, it is also practised.to create these needs. Therefore, the needs are defined more realistically to provide welfare in developed countries, which in turn shapes the perspective of a society towards politics, economy, culture and the life itself. Hence, we can utilize public relations within context of the culture policies of a society according to the kind of society we want to create.

The role of public relations is to provide corporate service, increase mutual understanding between a corporation and its target group(s) and enable dialogue and discussion. According to Vercic and Van Ruler, there is a difference between the US and Europe oriented definitions along with the dimensions of public relations. In fact, the difference between culture and language has a considerable influence on it. In this sense, there has already been an attempt to form a common basis determining the public relations concept in literature. The terminological differences between

 Copyright © International Conference on New Horizons in Education Conference (INTE)

two continents influence how 'public' is perceived, the meanings of 'communication and 'relation', the way of practising public relations as well as the roles assumed. Oeckle and Van der Meiden assert that
While the relationship between corporations and their target groups is understood in the USA, the conception in Europe consists of the relations with the public and for the public in 'public sphere.' Thus, 'public opinion' does not indicate the combination of individual votes. Here, public opinion denotes a kind of political authority providing a standard for public relations (Vercic, Van Ruler, Bütschi & Flodin, 2001: 376). Is public relations a democratic function maintaining the free circulation of information and the development of public sphere or just representing a corporation for a fee? Erdogan (2006) discusses that in the definition of public in public relations, human factor is taken away from the centre and it is replaced with a structure representing organized subjective interests. The 'public' in public relations can be grouped in different ways according to its function and position, such as internal and external, active and passive, high and low participatory. However, in each case, 'public' for public relations is the body that can be known, recognized, important and reachable for an organization. In her article, *Changing Business and Public Relations Paradigms,* Steyn (2011) states that a few of the public relations practitioners in Turkey perform the strategist role and this situation provide no contribution to the development of social (enterprise) strategy and the realization of the objectives.

Different Approaches to Public Relations

Public relations activities of corporations are determined by activist groups and the differentiating expectations as well as values of stakeholders. The changes in the social and economic structures of corporations also bring about some differences in practices. As a result, the cultural structure of public relations undergoes a transformation. Different approaches that corporations adopt are as follows:

In functional, semantic and postmodern approaches, the aim and objective of public relations is re-defined. These approaches have different views towards internal and external target groups from either mass or public perspectives. The reflections of corporate approach are seen in the function and quality of public relations practices. Thus, the role that a business or an institution has assumed in a society is reflected in public relation role and culture.

In social enterprise strategy, the relationship that a corporation has established with the public is in the foreground. This strategy asserts the social responsibility of that corporation, its stakeholders and communicative approach towards them as well as the values and standards pertaining to actions. Moreover, it comes into prominence through corporate mission, vision, behaviour, ethical rules, value and public orientations. Another corporate approach is sustainability. Here, nature, society and business are inter-related by decision makers. For this purpose, not only the financial performances, but also how environment together with national and international communities are influenced should be taken into consideration. According to this approach, ecological and social capital should be managed together. In addition to all these, corporate governance and reputation management approaches should also be mentioned in this context. In King 2 Report (IOD, 2002), Steyn has defined corporate governance as maintaining the balance between economic and social purposes in order to bring the interest of individuals, institutions and the public closer to each other.

For some authors; on the other hand, public relations has increasingly been a means of structuring the public and encouraging public discussion. Therefore, it is playing an active role in shaping societies and cultures. During communication processes public relations suggests the targets groups being a part of social world in a particular context as a cultural action. Hence, public relations is cultural as it strengthens existence and shapes the beliefs related to public communication. Some studies on international public relations have emphasized that public relations should encourage organization to take more active role in social transformation (Molleda et al., 2003; Molleda and Ferguson, 2004; Holtshausen, 2000, 2002; Signitzer and Coombs, 1992 qtd. in Hodges). According to this perspective, public relations contributes a great deal to the development of civil society (Hodges, 2006: 83). Some studies; on the other hand, present perspectives that public relations practitioners are agents in the cultures they function. According to Hodges (ibid.), public relations industry should be regenerated and the role of public relations in the development of culture should not be neglected.

As social actors, public relations practitioners are susceptible to influences in socio-cultural and global sense. In their communication with the public, they operate within the context of meanings, values, principles and norms that are an indispensable part of their professional culture. In addition, Hodges (ibid.) has pointed out that regarding the understanding professional culture, the culture of public relations practitioners can make a great contribution to the development of national culture.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The culture of public relations practitioners consists of their lifeworld as a whole including their thoughts, concepts, values and assumptions pertaining to their profession, which collectively refer to the concept of *habitus*. Moreover, the identities guiding their professional experiences and performances are also incorporated into the scope of culture. These elements will spread with broader social and cultural effects through professional socialization.

Motion and Leitch (2007) have inferred that public relations professionals pave the way to socio-cultural objectives and thus, change the socio-cultural practices through the transformation of discourse. Likewise, they have also employed a Foucauldian perspective for the purpose of criticizing the attempts of governments to transform the national economic discourse and the public relations activities to include the stakeholders into the processes, the results of which are already known. Thus, he has concluded that "the attempts to minimize uncertain results are just a new and more superficial way of domination" (ibid. p. 8).

Public relations shapes the way that power relations are balanced and regulate the proper medium and means accordingly. "The words denoting power depend on the logic of a society or relationship. In this context, such explanatory terms can be used: institutions (government institutions and other types framed with socio-political and socio-economic terminology), culture, religion, businesses, trade, public policy, competition, co-operation, avoidance, reconciliation, truce, agreement (formal, semi-formal, legal or social), association, structures and functions, nature of relationship, symmetry/asymmetry, dialogue/monologue, service, education, production, origin, public health, walls and bridges (symbolic or real), hierarchy, infrastructures, confidence (organization, within the frame of a legal instrument or relationship), corporate social responsibility, public health/security, community, partnership, isolated, reaction to an emergency, health system, agriculture industry, an effective commercial market, legislation, regulation, adjudication, capitalism, free market, local, national, independent, dependent, mutual dependency, trade restrictions, destructive competition, socialism, financial fundamentalism, improvability, taxation, representation, subvention, stimulating power, regressive, mutual efficiency and benefit" (ibid.). Being both intellectual and application-oriented, the view of Habermas about corporate responsibility; on the other hand, is totally instrumental rather than emancipating and streamlining public discussions or the expressions of public sphere. The implementation of positivist methods to measure public opinion strengthens not the publics, but customers. As believed by Habermas, public relations expedites the relationship between the business and media worlds; thus, contributes to the erosion of the public sphere. Although public relations itself cannot be held responsible for that, it has hidden the contributions to the dominant and determinative market powers.

In fact, public relations should contribute to the re-creation of the public sphere devoid of commercial concerns. Execution of public communication practices and the adoption of the due culture accordingly would be an effective method at this point. "From a critical perspective, examining the 'definite' conception of public raises such questions: How local publics are conceptualized by global organizations? How do certain conceptualizations related to publics serve the interests of dominant social actors? How do the strategies and tactics of global public relations help maintain the dominance and control over the local actors? The efforts of local actors to secure local identities probably serve the role of public relations to justify the communicative control of elite actors" (ibid. p. 174). Therefore, it should be asked if the factors that are predicated upon in public relations activities are national or international, and what kind of culture policy is adopted.

"Culture policy is the creation of the appropriate conditions in order to enable people to participate in cultural life. The steps taken, the organizations established and the conveniences provided to encourage individuals in a society to put forth their creativity is within the context of cultural policy…Maheu states that 'one day human beings will understand that real democratic policies depend on culture and culture has superiority in development (Topuz, 1998: 8-10).

Culture democracy is vital for everyone to have an access to culture and freedom of communication. Noteworthy, it can be achieved through the democratization of a society. According to Topuz (ibid.), cultural democracy is to empower people to participate into the generation process of cultural products as well as enable them to benefit from those products. Thus, the degree of meeting our needs also indicates how free we are. One of the five elements of universal ethics is democracy and civil society.

Although Williams thinks that participation of each individual into culture is impossible, diversity in a common culture is the result of the fact that it comprises so many agents. The sophisticated system of professionalized developments constitutes the culture as a whole; however this system can be comprehended totally by the individuals or groups in it. While discussing the meanings of community, Williams refers to the social institutions necessitating common beliefs,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

CONCLUSION

How the concepts are perceived determines how they are known and attributed meanings. Likewise, what is known about them determines how they are perceived. What we perceive and internalize engender our social practices. In Bourdieu's terms, power struggles waged for transforming or protecting the social world are carried out to protect the categories enabling the perception of this world. Such factors are spread through the media by being transferred into public discourses. The public sphere is the name of the struggle put up for this categorization. Hence, the process of making sense is also very important. Being one of the most effective categories in arranging and configuring societies, public communication should be examined with respect to culture, globalization and democracy. Whether or not public relations practices are for the benefit of the public again refers to a policy pertaining to public relations culture.

Defining public relations culture is incumbent upon the practitioners and academics. Such a responsibility entails ethical consciousness. "The important question about professionalization is that to what extent an occupation can solve the real problems and meet the demands of people. Traditionally, a profession purports to serve society" (Brien, 1998; Stevens, 1998; Fitzgerald and Teal 2003 qtd. in Hodges, 2006: 82).

21st century is a period in which popular culture has gone beyond national borders and multinationalism has come to fruition. Contrary to Huntington's view, fundamental assumptions about the human relations that hold societies together and the beliefs and values related to in different cultural contexts are also influenced by that. Hodges discusses that in order to understand the potential of public relations "to serve the society" in different parts of the world, the industry has to develop a theoretical frame to analyse the duality between public relations and culture.

When the democratic discourse of public relations is used for social benefit to protect, pursue observe the rights of individuals rather than the interests of the capital, its real meaning can be construed. The public relations practices aiming to build and develop a nation indicate that public relations and strategic communication is not in the domain of profit-oriented organizations only. On contrary, public relations can be executed by any groups or organizations that intend to establish relations with the target groups, to make changes in these relations and sustain them as well. Getting through the continuous interest shown to the structure of the profession, public relations should focus on who does what along with for whom and how.

Works Cited

Görpe, S. & Mengü, S. (2009). Dünden Bugüne Halkla İlişkiler, Dünyada ve Türkiye'de Halkla İlişkiler Eğitimine Kültürün Etkisi [Public Relations from the Past to the Present; the Influence on Culture on Public Relations Education], In Mustafa Akdağ (ed.), Eğitim Akademi Yayınları, s. 84.

Eagleton, T. (2005). Kültür Yorumları [Interpretations of Culture], İstanbul: Ayrıntı.

Hodges, C. (2006). "PRP Culture: A Framework for Exploring Public Relations Practitioners as Cultural Intermediaries". *Journal of Communication Management*, 10, 1. pp.81-85.

Ihlen, Ø., Van Ruler, B. Fredriksson, M. (2009), Public Relations and Social Theory: Key Figures and Concepts. NY: Routledge.

Motion, J. & Leitch, S. (2007). A toolbox for public relations: The oeuvre of Michel Foucault, Public Relations Review, 33(3), 263-268, http://ro.uow.edu.au/cgi, p. 14.

İlhan, S. (2008). Yeni Kapitalizm ve Meslek Olgusunun Değişen Anlamları Üzerine, *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 21, Ağustos, 324-325.

Steyn, B. (2011). Değişen İş ve Halkla İlişkiler Paradigmaları [Changing Business and Public Relations Paradigms]. In Ç. Karakaya Satir (ed.), *Halkla İlişkilerden Stratejik Halkla İlişkilere* [From Public Relatiosnto Strategic Public Relations] (pp. 1-31]. İstanbul: Nobel.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Topuz, H. (1998). Dünyada ve Türkiye'de Kültür Politikaları [Culture Policies in the World and in Turkey] İstanbul: Adam.

Touraine, A. (2000). Modernliğin Eleştirisi [Critique of Modernity] (H. Tufan, trans.). İstanbul: Yapı Kredi.

Vercic, D., Van Ruler, B., Bütschi, G., Flodin, B. (2001). "On the Definition of Public Relations: A European View", *Public Relations Review*. p. 376.

Vos, T. P. (2011). Explaining the Origins of Public Relations: Logics of Historical Explanation, *Journal of Public Relations Research*, 23:2, 119-140,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MATEMATİK DERSİ ALAN ÖĞRENCİLERİN MATEMATİK DERSİNE YÖNELİK ALGILARI VE ÖĞRETİM ELEMANLARINDAN BEKLENTİLERİ: BARTIN MESLEK YÜKSEKOKULU ÖRNEĞİ

Şaziye ALTINTAŞ
Bartın Üniversitesi
Bartın Meslek Yüksekokulu
altintassaziye@gmail.com

ÖZET

Bu çalışmanın amacı, meslek yüksekokulunda okuyan matematik dersi alan öğrencilerin matematik derslerinde yönelik algılarını ve öğretim elemanlarından beklentilerini tespit etmektir. Bu kapsamda öğrencilerin matematik dersine yönelik beklenti ve algıların ölçmeye yönelik bir anket çalışması yapılmıştır. Araştırmada yüz yüze anket yöntemi kullanılmıştır. Verilerin analizinde frekans ve yüzde yöntemi kullanılmıştır. Bu kapsamda Bartın Üniversitesi Bartın Meslek Yüksekokulu'nda okuyan ve bölümlerinde matematik dersi alan öğrencilere anket çalışması gerçekleştirilmiştir.

ABSRACT

The aim of this study is to identify the students' perception of mathematics courses who take Math lesson studying at Vacational High School and their expectations from lectures. In this context, a survey is made to measure perceptions and expectations of students to mathematics. In the research, face to face survey method was used. Within this context, a survey was conducted for students studying at Bartın University Bartın Vocational High School and taking Math courses at their departments.

1.GİRİŞ

Meslek yüksekokullarının asıl amacı ara kademe teknik elemanları yetiştirmektir. Elinde mesleği olan, iş gücü yaratan, ürettikleriyle de yaşam kalitemizi yükselten teknik elemanlar yetiştirmediğimiz sürece ülkemizin kalkınması mümkün değildir. İşte meslek liseleri ve meslek yüksekokulları bu amaçla kuruldu. Ülkemizde Milli Eğitim Bakanlığı ve Yüksek Öğretim Kurulu işbirliği ile 2002 yılında başlatılan bir projeyle (MEB-YÖK) Meslek Lisesi mezunu öğrencilerin sınavsız bir şekilde Meslek Yüksekokulları'na kabulü başlamıştır. Alan dışı, ya da meslek lisesi mezunu olmayan öğrencilerin bu okulları tercih edebilmeleri için ÖSS' de 150 ve üzeri puan almaları gerekmektedir. Bu projeyle birlikte meslek yüksekokullarına ciddi bir talep doğmuştur. Piyasada da eğitimli ara eleman ihtiyacı yüksek oranda mevcut olduğundan meslek yüksekokulları önem kazanmıştır. Yalnız yapılan incelemelerde, lisede matematik dersinde başarısız olan öğrencilerin hem yüksekokulda okurken hem de mesleği icra ederken zorlandıkları, çeşitli problemler yaşadıkları görülmüştür. Özellikle muhasebe ve vergi uygulamaları, işletme yönetimi gibi sayısal ve hesaba dayalı bölümlerde matematiğin önemi büyüktür. Bir dersi kavratmak, sevdirmek öğrencinin alt yapısı, yeteneği, ilgisine bağlı olduğu kadar öğretim elemanının tutum ve davranışlarına, ders anlatma şekline, derste kullandığı metodlara da büyük ölücü de bağlıdır.
Matematik insanlık tarihinin en eski bilimlerinden biridir. Çok eskiden matematik, sayıların ve şekillerin ilmi olarak tanımlanırdı. Matematik de diğer bilim dalları gibi geçen zaman içinde büyük bir gelişme gösterdi; artık onu birkaç cümleyle tanımlamak mümkün değil. Matematik bir yönüyle resim ve müzik gibi bir sanattır. Matematikçilerin büyük çoğunluğu onu bir sanat olarak icra ederler. Matematik, başka bir yönüyle bir dildir. Galileo Galilei tabiat matematik dilinde yazılmıştır der. Matematik başka bir yönüyle de satranç gibi entelektüel bir oyundur. Kimi matematikçiler de ona bir oyun gözüyle bakarlar.

Matematikte tek amaç yoktur. Ancak önemli amaçlardan birisi insandaki doğuştan var olan düşünebilme yeteneğini geliştirebilmektir. Matematik karşılaştığımız olayları ve problemleri inceleme ve araştırma yapmak suretiyle doğruyu bulmamızı sağlar. Matematiğin önemi tartışılmaz. Çoğu bilimlerden matematiği soyutladığımız (çıkardığımız) takdirde o bilimler bilim olma kimliğini kaybeder. Matematiğin dili akıldır. Diğer bilimler, gözlenen olayları nicel bir şekilde ifade etmeye başlayınca matematikten yardım alır. Onun için bütün bilimlerin geniş kapısı matematiktir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Matematik, doğru hüküm vermeyi sağlar. Bu sebeple öğretim elemanlarının matematik dersini en iyi şekilde vermeleri, öğrencilere sevdirerek benimsetmeleri, meslek hayatlarında büyük ölçüde önem taşır.

2.Matemati Kavramı

2.1 Matematiğin Tanımı

Matematik Terimleri Sözlüğünde matematiğin tanımı şöyle verilmektedir:

"Biçim sayı ve çoklukların yapılarını, özelliklerini ve aralarındaki ilişkileri us bilim yoluyla inceleyen ve sayı bilgisi, cebir, uzam bilgisi gibi dallara ayrılan bilim".

Yerli ve yabancı başka pek çok sözlük ve ansiklopedinin de benzer tanımı yaptıklarını görüyoruz. Ancak, konu matematik öğretiminin niteliğini saptamaya gelince, bu tanımların yetersiz kaldığı aşikardır. Matematiğin, bireyi ve toplumu hangi işlevleriyle nasıl etkilediğini bilmek gereklidir.

Matematik dil, ırk, din ve ülke tanımadan uygarlıklardan uygarlıklara zenginleşerek geçen sağlam, kullanışlı ve evrensel bir dil, bir ekindir. Birey için, toplum için, bilim için, teknoloji için vazgeçilmez değerdedir. Yayılma alanına ve derinliğine sınır konamayan bir bilimdir, bir sanattır.

Hiçbir din, hiçbir dil, böylesine kalıcı ve etkin olamamıştır.

Matematikte dikkate değer ilk bilgileri Babil, Mısır ve Çin uygarlıklarının kalıtlarında görüyoruz. Bu kalıtlara dayanırsak, eski uygarlıklardan beri bir geçmişi olduğunu söyleyebiliriz. Birçok uygarlıklardan bize ulaşan bu bilgiler, bugün de, ilk kez ortaya çıktıkları günkü kadar taze, doğru ve görkemlidir. Matematiği evrensel bir dil yapan nitelik budur. Bu nitelik başka hiçbir bilim dalında yoktur.

'Bir başka değişle matematik, günlük hayattaki problemleri çözmede başvurulan sayma, hesaplama, ölçme ve çizme, dünyayı anlamamızda ve yaşadığımız çevreyi geliştirmede başvurduğumuz bir yardımcıdır.' (Baykul, 1999:25).

2.2 Matematiğin Önemi

Matematik kendine özgü sembolleri ve terimleri kullanan bir dildir. Matematik bütün kültür ve uygarlıklar için evrensel ve sembolik bir dil olma özelliği göstermektedir. Matematik dili, bireylere öğeler ve miktarlar arasındaki ilişki hakkında düşünme, kayıt etme ve düşünceleri paylaşma olanağı sağlar(Janet,1997).Ayrıca semboller ve terimler insanların bilim, gerçek yaşam durumları ve matematiğin kendisi ile ilgili iletişim kurma yeteneklerini artırır (Reys ve diğerleri,1998). Dolayısıyla matematik bir iletişim biçimi olarak ele alınabilir. Matematikte iletişim; çeşitli yazılı, sözlü, görsel formlar içinden matematiksel olguları tanımlama, yorumlama ve bir kişinin matematiksel fikirleri anlamasını geliştirme, açıklama ve bu formları kullanma yeteneğidir (Cowley ve Reines,1996). İletişim NCTM (1989-1991) tarafından ileri derecede yöntemleri hazırlamanın en temeli olarak görülür. Çünkü iletişim, öğrencilere anlamlı bir usulde matematiği kullanmayı ve düşünmeyi sağlar (yorumlama, açıklama, kanıtlama ve ayrıntılı bir şekilde hazırlama gibi).

Temel matematik bilgi ve becerileri edinmemiş bireyin yaşantısını sürdürmede, özgürleşmekte ve yaşam boyu öğrenme sürecinde çeşitli sorunları olacaktır. Bu nedenle hayatın içinden gelen matematiği yine hayatımızı kolaylaştırmak için hayata katarız.

Günlük yaşantımızda, okulda ve iş dünyasında matematiğin önemi ve gerekliliği yadsınmamaktadır. Bunun kanıtı, ilköğretimin ilk yıllarından başlayarak zorunlu eğitim süresi içinde öğretim programlarında matematik derslerine zaman çizelgesinde yer verilir; bir üst okulların veya bir mesleğe giriş sınavlarında bir takım matematik soruları sorulur. Bunun, kuşkusuz, bir dizi önemli ve tartışmasız kabul edilen nedenleri vardır. Bunlardan biri, matematiğin güncel yaşamda, düşünme ve karar vermede vazgeçilmez zihinsel etkinlikler içermesi iken diğer bir nedeni de matematiğin bilimsel çalışmalarda ortak dil ve araç olmasıdır. Ancak, başta

 Copyright © International Conference on New Horizons in Education Conference (INTE)

matematikten ne anlaşıldığı olmak üzere okullarda neyin, niçin, ne ölçüde ve nasıl öğrenme-öğrenme konusu olacağı, sürekli tartışma konusu olmaktadır.

3.1. ARAŞTIRMANIN AMACI VE ÖNEMİ

Bu çalışmanın amacı, meslek yüksekokulunda okuyan muhasebe ve matematik dersi alan öğrencilerin matematik derslerinde yönelik algılarını ve öğretim elemanlarından beklentilerini tespit etmektir. Özellikle matematik mantığının anlaşılır ve akıcı bir şekilde aktarılması muhasebe derslerinin etkinliği bakımından önemlidir.

Schroeder (1986), Keff (1992), çalışmaları sonucunda muhasebe derslerindeki başarı ile öğrencilerin muhasebe ve matematik alanlarında sahip oldukları bilgi düzeyleri arasında anlamlı bir ilişki tespit edememişlerdir. Muhasebe, analitik düşünme yeteneği gerektiren bir ders olması nedeniyle öğrencilerin üniversite öncesinde sahip oldukları muhasebe ve matematik altyapısının üniversite seviyesinde almış oldukları muhasebe derslerindeki başarıları üzerindeki etkisi de ayrıca inceleme konusu yapılmıştır. Fakat bu ilişkiyi inceleyen çalışmaların sonuçları arasında da farklılıklar bulunmaktadır. Bu kapsamda; Volmer (1993), Tho(1994), Rohde ve Kavanagh (1996) öğrencilerin üniversite öncesinde edindikleri muhasebe bilgi düzeyi ve matematiksel altyapının üniversitede almış oldukları muhasebe derslerindeki başarıları üzerinde önemli bir etkisi olduğu sonucuna ulaşmışlardır.

3.2 ARAŞTIRMA YÖNTEMİ

Araştırmada kullanılan anketin hazırlanmasında daha önce yapılmış benzer çalışmalardan da (Tuğay 2014) faydalanılmıştır. Anket genel olarak 4 bölüm ve toplam 26 sorudan oluşmaktadır. Birinci bölümde araştırmaya katılan öğrencilerin kişisel özelliklerini tespit etmeye yönelik sosyo-demografik sorular, ikinci bölümde ankete katılan öğrencilerin matematik dersine tutumları ile ilgili bilgileri elde etmeyi amaçlayan sorular, üçüncü bölümde öğrencilerin matematik eğitiminde kullanılmasını tercih ettiği araçları bulmaya yönelik sorular, dördüncü bölümde ise ankete katılan öğrencilerin öğretim elemanlarından beklentilerini tespit etmeye yönelik sorular yer almaktadır. Analiz yüksekokuldaki muhasebe ve matematik derslerini alan öğrencilere uygulanmıştır.

3.2 EVREN VE ÖRNEKLEM

Araştırma evrenini Bartın Üniversitesi Bartın Meslek Yüksekokulu, İşletme Yönetimi ile Muhasebe ve Vergi Uygulamaları Bölümü'ndeki öğrenciler oluşturmaktadır. Bu öğrencilerin matematik dersine olan tutumlarının ve öğretim elemanlarından beklentilerinin saptanmasına yönelik bu araştırmada veriler anket yöntemiyle toplanmıştır.2015-2016 Eğitim – Öğretim bahar yarılı yılı itibariyle üniversitenin, Meslek Yüksekokulu Öğrenci İşleri bürosundan öğrenci sayılarına ilişkin kayıtları esas alınarak ana kütle 169 olarak belirlenmiştir. Bu kapsamda 169 öğrenci anketi cevaplamıştır. Bu araştırmanın sınırlılığı, araştırmanın sadece Bartın Üniversitesi'nde genel muhasebe ve matematik dersi alan öğrencilere uygulanmış olmasıdır. Diğer üniversitelerde de benzer çalışmaların yapılması durumunda karşılaştırma olanağı elde edilecektir.

3.3 BULGULAR

Araştırmaya katılan Bartın Meslek Yüksekokulu öğrencilerine ilişkin tanımlayıcı bilgiler Tablo 1'de verilmiştir..

Araştırmaya katılanların %21,3 Muhasebe ve Vergi Uygulamaları Bölümü, %78,7 si İşletme Yönetimi Bölümü öğrencisi , %61,5 i meslek lisesi,%22,6 sı düz lise, % 10,6 sı anadolu lisesi , %1,1 i fen lisesi, %4,2 si diğer liselerden mezun, okudukları bölüme %58 si sınavla %42 si sınavsız yerleşmiştir. Matematik dersine %17,1 i yeterince, %47,3 ü kısmen çalıştığını, %35,6 sı yeterince çalışmadığını belirtmiştir. Ankete katılan öğrencilerin %53ü birinci, %47 si ikinci sınıf , %67,5 i birinci öğretim, %32,5 i ikinci öğretim öğrencisidir. Öğrencilerin %50,3 ü bayan, %49,7 si erkeklerden oluşmaktadır. Öğrencilerin %56,8 i lisedeyken matematik dersinde zorlandığını belirtmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 1

ÖZELLİKLER	DAĞILIM	SAYI	%
Okunan Bölüm	Muhasebe ve Vergi Uygulamaları	36	21.3
	İşletme Yönetimi	133	78.7
Mezun Olunan Okul Türü	Meslek Lisesi	104	61.5
	Düz Lise	38	22.6
	Anadolu Lisesi	18	10.6
	Fen Lisesi	2	1.1
	Diğer	7	4.2
Okula Yerleşme Şekli	Sınavla	98	58
	Sınavsız	71	42
Matematik Dersine Yeterince Çalışma Durumu	Evet	29	17.1
	Kısmen	80	47.3
	Hayır	60	35.6
Okumakta Olunan Sınıf	1.Sınıf	89	53
	2.Sınıf	70	47
Öğrenim Türü	1.Öğretim	114	67.5
	2.Öğretim	55	32.5
Cinsiyet	Kadın	85	50.3
	Erkek	84	49.7
Lisede Matematik Dersinde Zorlanma Durumu	Evet	93	56.8
	Hayır	76	43.2

Araştırmaya katılan Bartın Meslek Yüksekokulu öğrencilerinin matematik dersine karşı tutumları Tablo 2'de verilmiştir.

Tablo 2 incelendiğinde matematik dersine ilgi duyan öğrenciler %36,2 ile sınırlıdır. Matematikle ilgili konuları tartışmaktan da sadece %33,7'si hoşlanmaktadır. Ankete katılan öğrencilerin %58 i matematiği günlük yaşamda kullanma konusunda hemfikir. Matematiği öğrenemeyeceğine inanan kesim ise %21,3 tür . %50,3 lük kısım çalışma zamanının çoğunu matematiğe ayırmak istemezken %61,5 lik bölüm matematik sınavlarında kafasının karıştığını belirtmiştir. %41,5 lık kısım matematikten korkmadığını belirtirken, %33,6 lık ciddi bir kesim de matematikten korktuğunu belirtmiştir. Yine %41,4 lük kısım matematiği sevdiğini belirtirken, %36,2 lik kısım sevmediğini belirtmiştir. %40,3 lük bölüm matematikten sıkılırken ,%40,2 de matematikten

 Copyright © International Conference on New Horizons in Education Conference (INTE)

sıkılmamaktadır.%66,8'i matematiğin gerçek yaşamda kullanıldığını savunurken, %56,1'i ileri düzeyde matematik bilgisi edinmek istiyor. %20,2 lik kısım matematikten rahatsız olduğunu belirtmiştir.

Tablo 2

Tutum İfadeleri	Tamamen Katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Hiç Katılmıyorum
1)Matematik ilgimi çekmez.	%19.5	%14.2	%30.1	%23.6	%12.6
2)Matematikle ilgili konuları tartışmaktan hoşlanırım.	%12.4	%21.3	%23.7	%21.3	%21.3
3)Matematiği günlük yaşamında kullanırım.	%20.7	%37.3	%23.7	%13	%5.3
4)Matematiği öğrenemem.	%8.3	%13	%21.9	%27.2	%29.6
5)Çalışma zamanımın çoğunu matematiğe ayırmak isterim.	%8.3	%15.4	%26	%24.9	%25.4
6)Matematik sınavlarında kafam karışıyor.	%34.3	%27.2	%11.8	%16	%10.7
7)Matematikten korkmam.	%17.2	%24.3	%24.9	%18.4	%15.2
8)Matematiği severim.	%20.1	%21.3	%22.4	%18.4	%17.8
9)Matematikten sıkılırım.	%17.2	%23.1	%19.5	%17.2	%23
10)Matematik gerçek yaşamda kullanılmaz.	%7.7	%8.3	%17.2	%27.2	%39.6
11)Matematikle ilgili ileri düzeyde bilgi edinmek isterim.	%31.2	%24.9	%24.9	%10.7	%8.3
12)Matematikten rahatsız olurum.	%8.9	%11.3	%23	%21.9	%34.9

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 3 Matematik Eğitiminde Kullanılan Eğitim Araçları

Eğitim Araçları	N	%
Kara tahta- tebeşir	11	6.5
Tahta kalemi	108	63.9
Tepegöz	7	4.1
Powerpoint Sunumu	28	16.6
Diğer	15	8.9
Toplam	169	100

Tablo 3 incelendiğinde matematik derslerinde en fazla tercih edilen aracın tahta kalemi (%63,9) olduğu, en az tercih edilenin ise(%4.1) tepegöz olduğu görülmektedir. Kutluk ve diğerleri (2011)'nin yaptıkları çalışmada derslerde en çok tercih edilen eğitim aracının tahta kalemi olduğunu belirtmişlerdir. Ayrıca Eleren ve Kayhan (2007)'nın yaptıkları çalışmada ise, öğrencilerin, öğretim metodu olarak sözlü ve yazılı anlatım metodunu tercih ettikleri, projeksiyon ve bilgisayar kullanımını tercih etmedikleri görülmüştür. Tuğay (2014) de yaptığı çalışmada en fazla tercih edilen aracın tahta kalemi, en az tercih edilen aracın tepegöz olduğu sonucuna ulaşmıştır. Araştırmaya katılanların %77.5'i matematik dersini en iyi anlama yönteminin tahtada açıklayarak çözmek olduğunu, %4.2'si ise tepegözle anlatma yönteminin en iyi yöntem olduğunu belirtmişlerdir.

Sonuçlar Tablo 4 teki sonuçlarla birlikte değerlendirildiğinde, öğretim elemanlarının matematik dersini anlatırken en çok tercih etikleri eğitim aracının tahta kalemi olduğu, öğrencilerin de matematik dersini en iyi anladıkları yöntemin de tahtada açıklayarak anlatma yöntemi olduğu görülmüştür. Bu durumda kullanılan eğitim aracının ve anlatma yönteminin genel anlamda öğrencilerin beklentileri doğrultusunda olduğu söylenebilir.

Tablo 4 Matematik Dersini Daha İyi Anlama Yöntemi

Anlama Yöntemleri	N	%
Tahtada açıklayarak	131	77,5
Tepegöz	7	4.2
Powerpoint Sunumu	19	11.2
Tahta ve tepegöz birlikte	11	6.5
Diğer	1	0.6
Toplam	169	100

Tablo 5'te araştırmaya katılanların matematik eğitim kalitesini etkileyen unsurlarla ilgili görüşlerini öğrenmek amacıyla bir soru yöneltilmiştir. Söz konusu soruya öğrencilerin % 60,3 ü eğitim-öğretim kalitesini etkileyen en önemli unsurun öğretim elemanının kalitesi olduğunu, %1,9'u ise yönetim anlayışının önemli olduğunu ifade etmişlerdir.

Şüphesiz ki, eğitim-öğretimde öğretim elemanın kalitesi en önemli unsurlardan birisidir. Ancak eğitim öğretimin kalitesine etki eden tek unsur değildir. Bunun yanında öğrencilerin kalitesi, fiziki ortam ve eğitim – öğretimle ilgili alt yapı gibi pek çok unsur da bulunmaktadır Tuğay(2014) .

Sonuç üzerinde söz konusu unsurlar birlikte etkili olmaktadır.

Tablo 5 Matematik Eğitimini Etkileyen En Önemli Unsur

Eğitim Kalitesini etkileyen Unsurlar	N	%
Öğrencilerin Kalitesi	22	13
Öğretim Elemanlarının Kalitesi	102	60.3
Fiziki Ortam ve Teknik Donanım Kalitesi	20	11.8
Akademik Faaliyetlerin Kalitesi	13	7.7

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Yönetim Kalitesi	3	1.9
Diğer	9	5.3
Toplam	169	100

Tablo 6 daki sonuçlar incelendiğinde öğretim elemanından beklentiler ölçeğine göre aşağıdaki sonuçlar bulunmuştur. Buna göre öğretim elemanının teknolojiyi kullanma becerisi ile ilgili sorulara verdikleri cevaplarda % 3.5 uygulamaları ve soruları projeksiyon ile işlenmesi, %12.5 u dersin projeksiyon ile işlenmesi, %84 ü uygulama ve soruları tahtada işleme konusunda cevap vermişlerdir.

İletişim becerileri ile ilgili sorulara verdikleri cevaplarda %20.7 si neşeli ve mizahi olması, %50.3 ü motive etme arzusu ve yeteneğini, % 2.4 ü bilimsel dergilerde bulunan yayınlar seçeneğini, %26.6 öğrencilerle iletişim seçeneğini söylemişlerdir.

Pekiştirme becerisi ve mesleki etik sorularına verdikleri cevaplarda %5.3 ü öğrenmeyi pekiştirici ödev vermesi, 23.7 si öğrencinin derste soru çözmesini sağlaması, 8.9 u not vermede dürüstlük, 62.1 i dersi tahtada açıklayarak anlatması olarak yanıtlamışlardır.

Tablo 6.1 Öğretim Elemanından Beklentiler

Öğretim Elemanının Teknolojiyi Kullanma Becerisi	**N**	**%**
Uygulama ve soruları projeksiyon ile işleme	6	3.5
Dersin Projeksiyon ile İşlenmesi	21	12.5
Uygulama ve soruları tahtada işleme	142	84
Toplam	169	100

Tablo 6.2

Öğretim Elemanın İletişim Becerisi	**N**	**%**
Neşeli ve Mizahi Olması	35	20.7
Öğrencileri motive etme arzusu ve yeteneği	85	50.3
Bilimsel dergilerde bulunan yayınlar	4	2.4
Öğrencilerle İletişim	45	26.6
Toplam	169	100

Tablo 6.3

Öğretim Elemanının Pekiştirme Becerisi ve Mesleki Etik	N	%
Öğrenmeyi pekiştirici ödev vermesi	9	5.3
Öğrencinin derste soru çözmesini sağlaması	40	23.7
Not vermede dürüstlük	15	8.9
Dersi tahtada açıklayarak anlatması	105	62.1
Toplam	169	100

 Copyright © International Conference on New Horizons in Education Conference (INTE)

4. SONUÇ

Matematik dersi alan farklı bölümlerdeki öğrencilerin, dersin verilme şekli ve öğretim elemanının özellikleriyle ilgili görüşlerini alarak matematik dersinin daha iyi anlaşılma koşullarını ve öğrenci bakış acısıyla öğretim elemanlarından beklentilerini araştıran bu çalışmanın sonuçlarına göre,

- Öğrencilerin büyük kısmının lisede matematik dersinde zorlandıklarını ve önlisans programında yine matematiğe yeterince zaman ayırmadıkları görülmüştür.
- MYO'daki öğrencilerin matematik derslerinde orta derecede zorlandıkları,
- Üçte birinin sınavlarda zorlandığını
- Öğrencilerin büyük çoğunluğuna göre matematik dersini ve sorularını en iyi anlama yönteminin Tahtada Açıklama Yöntemi olduğu tespit edilmiştir

KAYNAKLAR

Baykul,Y. (1999). İlköğretimde Matematik Öğretimi, Anı yayıncılık, Ankara

Eleren, A. ve Kayahan, C. (2007), "Muhasebe Eğitiminin Öğrenci Bakış Açısıyla Değerlendirilmesi ve Afyon Kocatepe Üniversitesi Meslek Yüksekokullarında Bir Araştırma", Muhasebe ve Denetime Bakış, Sayı 23 (Eylül),47-64.

https://tr.wikipedia.org/wiki/Portal

http://www.matematikvegeometri.com/matematik-ve-toplum/1.1.matematik-nedir.html

Keef, S. P. (1992), "The Effect of Prior Accounting Education: Some Evidence from New Zealand", Accounting Education: An International Journal, 1 (1), 63 – 68.

Kutluk, F. Angay, Dönmez, A., Terzioğlu, M., Ağyar, E. (2011),"Öğrencilerin Muhasebe Öğretim Elemanlarından Beklentileri Üzerine Bir Araştırma", Muhasebe Bilim Dünyası Dergisi, Cilt. 13, Sayı 2: 77-98.

Rohde, F. H.,andKavanagh, M.(1996), "Performance in First YearUniversity Accounting: Quantifyingthe Advantage of Secondary School Accounting", Accounting and Finance, 36 (2), 275 – 285.

Schroeder, N. W. (1986), "Previous Accounting Education and College-level Accounting Exam Performance", Issuesin Accounting Education, 4 (1),31 – 47.

Tho, L. M. (1994), "Some Evidence on the Determinants of Student Performance in the University of Malaya Introductory Accounting Course", Accounting Education: An International Journal, 3 (4),331 – 340.

Tuğay,O.(2014) Muhasebe Dersi Alan Öğrencilerin Muhasebe Dersine Yönelik Algıları ve Muhasebe Öğretim Elemanlarından Beklentileri Üzerine Mehmet Akif Ersoy Üniversitesinde Bir Araştırma

Volmer, F. G. (1993),Effect of Graphical Presentations on In sightsinto A Company's Financial Position - An Innovative Educational Approach to Communicating Financial Information in Financial Reporting: A Reply. Accounting Education(2(4), 311-312.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MATEMATİK UYGULAMALARI DERSİNİN AMAÇ, İÇERİK VE ÖLÇME DEĞERLENDİRME AÇISINDAN İNCELENMESİ[1]

Mustafa GÜÇLÜ
Erciyes Üniversitesi Eğitim Fakültesi Eğitim Bilimleri Bölümü Kayseri, Türkiye
mguclu@erciyes.edu.tr

Hilal BOYRAZ
Öğretmen, Milli Eğitim Bakanlığı Kayseri, Türkiye
guclu45@gmail.com

ÖZET

Bu araştırmanın amacı Matematik Uygulamaları Dersinin amaç, içerik ve ölçme-değerlendirme açısından genel bir değerlendirmesini yapmaktır. Bu amaç çerçevesinde konu ile ilgili yazılan makale, kitap gibi dokümanlar yanında dersin programı da incelenmiştir. Betimsel analizin kullanıldığı bu araştırmada elde edilen veriler amaç, içerik ve ölçme-değerlendirme başlıkları altında incelenmiştir. Araştırma sonunda dersin amacının matematik dersinde öğrenilen bilgilerin uygulamaya aktarabilmesi yanında öğrencilerin matematiğe karşı olumlu tutum geliştirmek olduğu da görülmektedir. Dersin içeriğinde ise kuramsal bilgilerden ziyade etkinlik temelli öğretim ön planda tutulmuştur. Yine araştırma sonucuna göre bu ders etkinlik temelli bir ders olduğu için geleneksel ölçme değerlendirme yerine çağdaş, süreç odaklı ölçme ve değerlendirme yöntemleri tercih edilmektedir.

Anahtar Kelimeler: Matematik, matematik uygulamaları, ortaokul, içerik, ölçme ve değerlendirme.

GİRİŞ

Bir kavram olarak matematiğin farklı kişilerce yapılmış değişik tanımları bulunmaktadır. Bu tanımlardan birisinde Altun (2005) matematiği insan zihninin çevreden aldığı ilk esin ve hareketle, soyutlama yapmak suretiyle ürettiği bir bilgi olarak tanımlarken, Alakoç'a (2003) göre ise matematik başlı başına bir sistem olan matematik, yapı ve bağıntılardan oluşmakta olup, bu yapı ve bağıntıların oluşturduğu ardışık soyutlamalar ve genelme süreçlerini içeren soyut bir kavramdır. Matematiği bir alet olarak ifade eden Pesen'e göre matematik, hayatın her alanında bireyin ihtiyaç duyduğu, herkesin soyut ve soyut olmayan günlük hayat problemlerinin çözümlerinde kullanabileceği vazgeçilmez bir alettir.

Baykul (2000) ve Gür (2006) matematiğin, ardışık soyutlama ve genellemeler süreci olarak geliştirilen fikirler ve bağıntılardan oluşan bir sistem olduğunu belirtmekte ve matematiğin dört önemli özelliği olduğunu vurgulamaktadır. Bu özellikler; günlük hayat problemlerini çözmede başvurulan sayma, hesaplama, ölçme ve çizmedir; bazı sembolleri kıllanan bir dildir; insanda mantıklı düşünmeyi geliştiren mantıklı bir sistemdir; dünyayı anlamamızda ve yaşadığımız çevreyi geliştirmede başvurduğumuz bir yardımcıdır biçiminde ifade edilmektedir.

Bir kavram olarak analiz edildiğinde matematik insan hayatının ayrılmaz bir parçası olarak görülmektedir. Bu nedenle matematik eğitiminin bireylerin hayatlarında ne kadar önemli olduğu bir yere sahip olduğu söylenebilir. Baykul (2004), matematik eğitiminin; bireylerin yaratıcı düşüncelerini geliştirmesi, fiziksel ve sosyal çevrelerini, dünyayı anlamada bireylere bilgi, beceri ve estetik duygular kazandırması gibi önemli yararlarına işaret etmektedir. Tüm bunlar matematik eğitiminin çocuğa bilgi yükleme değil, bilgi öğrenmesini de sağlayacak olan tahmin, zihinden işlem yapma, matematiksel bilgiyi çeşitli şekillerde temsil etme, problem

[1] Bu araştırma Erciyes Üniversitesi BAP Birimi tarafından desteklenen 6561 kodlu tez projesinden üretilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

çözme gibi bazı önemli becerileri kazandırması gerektiğini göstermektedir (Olkun ve Toluk, 2003). Tüm bunlar matematiğin okullarda etkili bir şekilde verilmesinin gerekliliğine işaret etmektedir.

Etkili matematik öğretiminin amacı; öğrencilerin bilgiye nasıl ulaşabileceklerini, elde ettikleri bilgi ve becerileri günlük hayatta, gerektiği yerde nasıl uygulayabileceklerini ve yeni durumlara nasıl uyarlayabileceklerini dikkate alarak bilgiyi aktarmaktır (Güneş, 2010). Matematik Uygulamaları Dersi de bu amaçları gerçekleştirmede önemli bir araç rolü oynamaktadır. Matematik Uygulamaları Dersi, 2012-2013 eğitim öğretim yılında değişen eğitim sistemi ile eklenen seçmeli derslerden biridir. Bu ders 2012-2013 eğitim öğretim yılında 5.sınıflar, 2013-2014 eğitim öğretim yılında 6.sınıflar, 2014-2015 eğitim öğretim yılında 7.sınıflar ve 2015-2016 eğitim öğretim yılından itibaren de 8.sınıflarda uygulanmaktadır.

Yapılan bu araştırmada öncelikle Matematik Uygulamaları Dersi tanıtılmaya çalışılmıştır. Bu çerçevede öncelikle dersin hedefine, daha sonra da içerik ve ölçme ve değerlendirme boyutlarına ilişkin bilgilere yer verilmiştir.

MATEMATİK UYGULAMALARI DERSİNİN AMAÇ YÖNÜNDEN İNCELENMESİ

Matematik öğretimi alanında yaşanan en önemli sorunların başında verilen bilgilerin teorik olması ve öğretilen bilgilerin hayata aktarılamamasıdır. Öğretmenlerin yetişme şartları, ders sürelerinin yeterli olmaması, derste yeterli araç-gereç kullanılmaması, öğrenci ilgi ve ihtiyaçları ile öğretilen konu arasında yeterli bağın kurulamaması, ders kitaplarının istenen düzeyde olmaması bu durumun başta gelen nedenleri arasında yer almaktadır. Matematik dersinin okullarda daha etkili olarak öğretilmesi ve hayatla bağın kurulması için okullarda bu dersin etkili bir şekilde öğretilmesi yanında, öğretilen bilgilerin uygulamaya aktarılmasını sağlayacak farklı derslere de ihtiyaç duyulmaktadır. Ortaokullara seçmeli olarak getirilen "Matematik Uygulamaları Dersi" bu eksikliğin giderilmesine yönelik bir ders olarak dikkat çekmektedir. Bu sebeplere dayanılarak matematik dersinin daha etkili, verimli ve günlük hayatla ilişkili hale getirmek için zorunlu matematik dersinin yeterli olmadığı anlaşılmaktadır. Bu yüzden öncelikle zorunlu matematik ders saati dört iken beş saate çıkarılmıştır ve zorunlu matematik dersine ek olarak "seçmeli matematik uygulamaları" dersi konulmuştur (hilal Tez).

Milli Eğitim Bakanlığı Matematik Uygulamaları Dersinin genel amacını "öğrencilere düzeylerine uygun matematiksel uygulamalar yapma fırsatı vererek matematik bilgi ve becerilerini geliştirirken matematiği sevdirmek ve matematiğe karşı olumlu tutum geliştirmek" olarak ifade etmiştir. Bu genel amacın üç bileşeni bulunmaktadır:

- Öğrencilerin aldığı zorunlu matematik dersinin genel amaçlarını desteklemek ve matematiksel deneyimlerini problem çözerek zenginleştirmek ve bu yolla matematiksel bilgilerini derinleştirmektir.

- Öğrencilerin problem çözme ve kurma, akıl yürütme, iletişim, matematiksel kavramlar arasında, matematik ve diğer disiplinler arasında ve matematik ve günlük hayat arasında ilişkilendirme ve matematiksel düşüncelerini çoklu gösterimlerle ifade etme becerilerini geliştirmektir.

- Öğrencilere matematiği sevdirmek, matematik hakkında doğru değerleri ve problem çözümünde gereken sabrı ve çabayı gösterecek tutumları kazandırmaktır (MEB, 2012).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MATEMATİK UYGULAMALARI DERSİNİN İÇERİK YÖNÜNDEN İNCELENMESİ

Matematik uygulamaları dersi, zorunlu matematik dersinden oldukça farklıdır. Bu derste kuramsal bilgi anlatılmaz. Öğrenilmiş olan kuramsal bilgiler çeşitli etkinlik ve oyunlarla içselleştirilmeye çalışılmaktadır. Yani matematik günlük hayatla ilişkilendirilerek etkinlikler yoluyla öğrencilere uygulamalı şekilde aktarılmaya çalışılmaktadır. MEB bu dersin içeriğinin, günlük hayattan matematiğin uygulanacağı gerçek ve kurmaca problemler, diğer bilim alanlarından matematiksel problemler veya soyut matematiksel oyunlar ve problemlerden oluştuğunu belirtmiştir (Hilal tez).

2012 öğretim programına göre Matematik Uygulamaları Dersinin içeriği günlük hayatla yakın ilişki içindedir. Dersin içeriğinde günlük hayattan matematiğin uygulanacağı gerçek ve kurmaca problemler, diğer bilim alanlarından matematiksel problemler veya soyut matematiksel oyunlar ve problemlerden oluşmaktadır. Bunun yanında ders, öğrencilerin etkinliklerinde de önemli yenilikler öngörmektedir. Dersin programı, öğrencilerin sınıftaki yaşantılarında bireysel çalışma yerine grup çalışması ve sınıf tartışmasını ve sunumlarını öngörmektedir. Öğrencilerin bu süreçte hedefleri, mantıklı olan ve akla yatkın yaklaşım ve çözümleri ortaya çıkarmaktır. Öğretmenin dersteki rolü doğru çözüme yönlendiren kişiden ziyade, öğrencilerin çözüm yollarını kendilerinin bulmalarına yardımcı olan orkestra şefine benzemektedir. Bu yaklaşımla derste hem öğrencilerin matematiksel bilgi ve becerileri derinleşecek, hem de sosyal becerileri ve iletişim becerileri desteklenecektir. Matematik uygulamalarında öğrenciler esas olarak problem çözecek ve problem kuracaktır. Problemler tamamen soyut matematiksel oyunlar olabileceği gibi sosyal bilgiler, fen bilimleri gibi diğer alanlardan veya günlük hayat bağlamlarından seçilmiş gerçekçi problemler de olabilir. Günlük hayattan seçilen problemler pratik uygulamaları olan problemler olacaktır, ancak uygulaması olmayan ama ilginç bir problem durumu sağlayan kurgusal problemler de kullanılacaktır. Günlük hayattan seçilen problemlerin bağlamı öğrencilerin anlayış ve yaşantıları için anlamlı olmalıdır, ancak bir problem örneğin öğrencilerin sevdiği kurmaca bir masal veya hikâye ile ilgili de olabilir (Erdem ve Genç, 2014).

Seçmeli bir ders olan Matematik Uygulamaları Dersinin 2012 öğretim programına göre; çözümde hangi işlem veya tekniğin kullanılacağının tam olarak belli olmaması, öğrencilere nitelikli matematiksel düşünme fırsatları sunacak problemler olmaları ders için seçilen problemlerin ortak özelliği olarak ifade edilebilir. Problemlerde çözüm için gereken her bilgi verilmemiş olacaktır ve çözüm için öğrencilerin bazı varsayımlarda bulunması gerekebilecektir. Hatta farklı öğrenciler farklı, fakat mantıklı varsayımlarla çözüme yaklaşabilir ve dolayısı ile farklı çözümlere ulaşabilirler. Derste çoğunlukla kullanılacak günlük hayattan seçilen problemler için problem durumları çözümde kullanılacak matematiksel kavram ve esaslara göre ön plandadır, diğer bir deyişle ikincil öneme sahip değildir. Problemlerde tasvir edilen durum veya olay problemin asıl odağıdır (Erdem ve Genç, 2014).

Ders etkinlik ve oyun temelli olduğu için derste hem öğrenci hem öğretmen aktif durumdadır. Çünkü "dersin programı öğrencilerin sınıftaki yaşantılarında esas olarak bireysel çalışma yerine grup çalışması ve sınıf tartışmasını ve sunumlarını öngörmektedir" (MEB, 2013). Öğrenciler bu şekilde derste aktif olarak bilgiyi zihninde yapılandırmaya çalışmaktadır. Grup tartışması, sınıf tartışması ve sunumlarla öğrenciler çeşitli çözüm yolları deneyerek bu yollardan en mantıklı olanına ulaşmaya çalışmaktadırlar. Bu derste öğretmenin rolü de değişmiştir. Öğretmenin dersteki rolü "doğru çözüme yönlendiren kişiden ziyade, öğrencilerin çözüm yollarını

 Copyright © International Conference on New Horizons in Education Conference (INTE)

kendilerinin bulmalarına yardımcı olan orkestra şefine benzemektedir" (MEB, 2013). Öğretmen artık yönlendiren kişi değil sadece öğrencilere yol gösterici konumundadır (hilal tez).

Matematik uygulamaları dersi etkinlik temelli bir derstir. Yapılandırmacı yaklaşımın etkili öğretim stratejilerinden biri olan etkinlik temelli öğretim, bireyin kendi etkinliklerine ve gözlemlerine dayalı olarak yargıya varmasını teşvik edici bir öğrenme yaklaşımıdır. Etkinlik temelli öğrenmede öğrenci beğenisine hitap eden etkinliklerle yönlendirilerek, akıl yürütme ve problem çözme becerilerinin geliştirilmesi özendirilir (Mert Cüce, 2012). Asan ve Güneş'e (2000) göre etkinlik temelli öğretimin en önemli özelliklerinden biri de öğrenci merkezli bir yaklaşım olmasıdır. Etkinlik temelli öğretimde öğrenciler tamamen aktif olup sorular sormakta, kendi deneylerini yapmakta ve yine kendi sonuçlarına varmaya özendirilmektedir. Böylelikle öğrenciler öğretim sürecinde öğrenme eylemini bizzat kendileri gerçekleştirmelerinden dolayı oldukça aktif bir şekilde öğrenmektedirler. Akın'a (2007) göre öğrencinin merak duygusunu uyandırması ve güdülenmişlik düzeyini cevapları buluncaya kadar sürdürebilmesi etkinlik temelli öğrenmenin en önemli üstünlüğü olarak gösterilmektedir. Yine ona göre etkinlik temelli öğretimin diğer bir üstünlüğü de öğrencileri bağımsız olarak problem çözmeye yönlendirmesidir. Yani öğrenciler bu süreç içerisinde bilgiyi alıp özümsemekten çok, bilgiyi analiz etmeye, uygulamaya ve sentez yapmaya zorlanmaktadır.

Çağdaş matematik öğretimi, geleneksel öğretimden oldukça farklılık göstermektedir. Tolluk ve Olkun'a (2004) göre günümüz matematik öğretiminde, matematik kavramlarının ele alınışı, içerikten ve somut deneyimlerden yoksun bir şekilde yürütülmekte ve öğrencilerin matematiksel kavramların ne anlama geldiğini bilmeden ve kavramlar arası ilişkileri oluşturmadan ezberlenmesine yol açmaktadır. Bunun yanında matematik öğrenme, bir problem çözme etkinliği olarak tanımlanmaktadır. Oysa Tolluk ve Olkun'a göre yapılandırmacı yaklaşımın önemli stratejilerinden birisi olan etkinlik temelli matematik öğretiminde öğrenme ortamını, öğrencileri problem çözme çabası içine koyacak etkinlikler oluşturmakta ve bu etkinliklerle kavramsal bilginin geliştirilmesi hedeflenmektedir.

Matematik Uygulamaları Dersinde kullanılan etkinlikler çağdaş yaklaşımlardan yapılandırmacı yaklaşıma göre hazırlanmıştır. Fakat etkinlikler oluşturulurken sadece yapılandırmacı öğrenme değil bu kurama destek olan işbirliğine dayalı öğrenme, probleme dayalı öğrenme, çoklu zekâ kuramı, örnek olay yöntemi gibi öğretim uygulamalarından da yararlanılmıştır. Kullanılan etkinlikler yoluyla öğrencilerde ilişkilendirme, anlamlandırma, keşfetme, yapılandırma, işbirliği, problem çözme gibi kavramlar etkili şekilde öğretilmiş olacaktır (Hilal tez).

MATEMATİK UYGULAMALARI DERSİNİN ÖLÇME VE DEĞERLENDİRME YÖNÜNDEN İNCELENMESİ

Eğitim, içinde girdi, çıktı ve kontrol öğelerini barındıran bir süreçtir. Bu süreçte bireyde kazanımların gerçekleyip gerçeklemediğini belirlemek için yapılan değerlendirmelerin gerçekçi olması ancak geçerli ve güvenilir ölçümler yoluyla meydana gelebilir (Atılgan, Kan ve Doğan, 2009). Program hedeflerin gerçekleşip gerçekleşmediğini belirlemek, eksiklikleri tespit etmek ve gidermek için iyi bir değerlendirme ve bunun için de sağlıklı bir ölçme işlemi gerekmektedir. Aksi halde öğrencilerin sahip olmaları gereken kazanımlardan hangilerini kazandıkları, öğretim sürecinin nitelikli bir şekilde işleyip işlemediği anlaşılamamadır.

Öğrenci merkezli yaklaşım, öğrenme ve değerlendirme süreçlerinde öğrencinin de aktif rol oynamasını savunan bir yaklaşımdır. Araştırmalar, öğrencilerin ölçme ve değerlendirme sürecine ilişkin görüşlerinin

alınmasının, onların bu süreçte söz sahibi kılınmalarının öğrenmenin sürdürülmesi ve etkililiğinin artırılması açılarından önemli olduğunu ortaya koymaktadır (Altan ve Seferoğlu, 2009).

Milli Eğitim Bakanlığı Matematik Uygulamaları Dersinin ölçme değerlendirilmesini şu şekilde belirtmiştir:

"Dersin doğası gereği ölçme ve değerlendirmenin çoktan seçmeli sorular, boşluk doldurma, eşleştirmeli sorular, vb. gibi yöntemleri bu derste yararlı olmayacaktır. Öğretmenler daha çok gözlem, performans ödevleri, öz değerlendirme ve grup değerlendirme yöntemleri, öğrenci ürün dosyaları (portfolyo), posterler, dereceli puanlama anahtarı (rubrik) vb. araçları kullanarak öğrencilerin yukarıda örnekleri de verilen bilgi, beceri ve tutumları ve dersin kazanımlarını gerçekleştirme derecelerini belirleyebilirler (MEB, 2012). Bakanlığın dersin amaçlarına ilişkin bu ifadeleri ölçme ve değerlendirmenin ürün odaklı olmaktan ziyade süreç odaklı olmasına vurgu yapmaktadır.

2012-2013 ve 2013-2014 eğitim öğretim yıllarında Seçmeli Dersler Yönetmeliğine göre Matematik Uygulamaları Dersinde gerçekleştirilen faaliyetler için not verilmezken, 2014-2015 eğitim öğretim yılından itibaren ders etkinliklerine not verilmeye başlanmıştır. Bunun en temel nedeni ise öğrencilerin derse olan motivasyon düzeylerini yüksek tutmak içindir.

SONUÇ

Matematik derslerinde en çok karşılaşılan sorunların başında derste öğrenilen bilgilerin günlük hayatla bağının kurulamaması ve dersin yeterince somut hale getirilememesidir. Matematik Uygulamaları Dersi dersin amaçları incelendiğinde bu sorunun aşılmasında önemli bir ders olduğu görülmektedir. Fakat dersin başarısı, öğrenci ilgi ve ihtiyaçlarının karşılanması, öğretmenlerin derste başarılı olmaları ile yakından ilgili görülmektedir.

Dersin yapısı, amacı ve ölçme değerlendirme çalışmaları incelendiğinde dersin başarısında öğretmenlerin katkısının çok yüksek olduğu görülmektedir. Bu nedenle Matematik Uygulamaları dersinde görev yapacak öğretmenlerin donanımlı olması, geleneksel ölçme ve değerlendirme yanında çağdaş ölçme ve değerlendirme açısından da yeterli olmaları gerekmektedir. Eğitim fakültelerinde öğretmen yetiştirmede dersin özellikleri dikkate alınmalı ve öğretmenlerin nitelikli bir şekilde yetiştirilmesine önem verilmelidir.

Dersin etkililiğinin geliştirilmesinde diğer bir önemli etken ise dersin geliştirilmesi, günün koşullarına uygun hale getirilmesidir. Matematik Uygulamaları Dersine ilişkin yapılacak lisansüstü tezler ve farklı araştırmalar son derece önelidir. Fakat yapılan literatür taramasında derse ilişkin fazla araştırmanın yapılmadığı görülmektedir. Gerçekleştirilecek farklı araştırmalarla dersin etkililiğinin arttırılması gerekmektedir.

KAYNAKLAR

Akın, M. F. (2007). *Özdeşlik Konusunun Öğretiminde Yapılandırmacı Öğrenme Yaklaşımının Öğrenme Ürünlerine Etkileri*, Yayınlanmamış Yüksek Lisans Tezi, Dicle Üniversitesi Fen Bilimleri Enstitüsü, Diyarbakır.

Alakoç, Z. (2003). Matematik Öğretiminde Teknolojik Modern Öğretim Yaklaşımları. *The Turkısh Online Journal of Educational Technology (TOJET)* ,(2) ,ss.1.

Altan, T. ve Seferoğlu, S. S. (2009). Uzaktan eğitimde değerlendirme süreci: Öğrenci görüşlerinin sistemin gelişimine katkıları. *3. Uluslararası Bilgisayar & Öğretim Teknolojileri Sempozyumu*'nda sunulan bildiri. Trabzon: Karadeniz Teknik Üniversitesi.

Atılgan, H., Kan, A. ve Doğan, N. (2009). *Eğitimde Ölçme ve Değerlendirme*. Ankara: Anı Yayıncılık.

Altun, M. (2005). *Eğitim Fakülteleri ve İlköğretim Öğretmenleri İçin Matematik Öğretimi.* Bursa: Aktüel Yayıncılık.

Asan, A. ve Güneş, G. (2000). Oluşturmacı Öğrenme Yaklaşımına Göre Hazırlanmış Örnek Bir Ünite Etkinliği. *Milli Eğitim*, (147), ss. 50-53.

Baykul, Y. (2000). *İlköğretimde Matematik Öğretimi*, Ankara: Pegem Yayıncılık.

Baykul, Y. (2004). *İlköğretimde Matematik Öğretimi: 1-5. sınıflar için.* Ankara: Anı Yayıncılık.

Erdem, A. R. ve Genç, G. (2014). Ortaokul Beşinci Sınıfta Seçmeli "Matematik Uygulamaları" Dersini Seçen Öğrencilerin Derse İlişkin Görüşleri, Eğitimde Nitel Araştırmalar Dergisi, 2(2), ss. 9-26.

Güneş, G. (2010). *İlköğretim İkinci Kademe Matematik Öğretiminde Oyun ve Etkinliklerin Kullanımına İlişkin Öğretmen Görüşleri (Kars İli Örneği),* Yayınlanmamış Yüksek Lisans Tezi, Kafkas Üniversitesi Sosyal Bilimler Enstitüsü, Kars.

Gür, H. (2006). *Matematik Öğretimi.* İstanbul: Lisans Yayıncılık.

MEB (2012). *Ortaokul Matematik Dersi Öğretim Programı (5, 6, 7 ve 8. Sınıflar)* Ankara.

Mert Cüce, A. P. (2012). *Etkinlik Temelli Matematik Öğretimi Yapılan Sınıf Ortamından Yansımalar: Aksiyon Araştırması,* Yayınlanmamış Yüksek Lisans Tezi, Karadeniz Teknik Üniversitesi Eğitim Bilimleri Enstitüsü, Trabzon.

Olkun, S. ve Toluk, Z. (2003). *İlköğretimde Etkinlik Temelli Matematik Öğretimi.* Ankara: Anı Yayıncılık.

Toluk, Z., Olkun, S., 2004. *Etkinlik Temelli Matematik Öğretimi: Kavrama İçin Öğretim,* Eğitimde İyi Örnekler Konferansı, Sabancı Üniversitesi, İstanbul.

Pesen, C. (2003). *Matematik Öğretimi*, Ankara, Nobel Yayın Dağıtım, 2003.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MATHEMATICAL MODEL OF FARADAYS´ LAW AND ITS EMBEDDED SIMULATION IN REMOTE EXPERIMENT

Petra ŠPILÁKOVÁ
Faculty of Applied Informatics
Tomas Bata University in Zlín
Zlín, Czech Republic
spilakova@fai.utb.cz

František SCHAUER
Faculty of Applied Informatics
Tomas Bata University in Zlín
Zlín, Czech Republic
fschauer@fai.utb.cz

Petr DOSTÁL
Faculty of Applied Informatics
Tomas Bata University in Zlín
Zlín, Czech Republic
dostalp@fai.utb.cz

ABSTRACT
In the Science courses, such as the physics, experiments are a necessary part of the educational process. Due to modern technologies, these experiments can be provided by remote laboratories such as remote laboratory based on the Internet School Experimental System (ISES) included in our remote laboratory management system RemLabNet. In the paper, the mathematical model of remote experiment Faradays´ law is constructed and presented. The Easy JavaScript Simulations environment (EjsS) was chosen for the visualization of the Faradays´ law mathematical model, using its mathematical solvers in connection with the Measureserver, the principal controlling module of the remote experiment. Embedded simulation with its variable parameters in connection with the real experiment is advantageous for students, as it enables to study the role of individual parameters on the final mathematical solution and thus the outcome of the real remote experiment.

INTRODUCTION
The education in physics is demanding both for teachers and also for students. One of the ways how to increment the interested and the intelligibility is active using of experiments not only in laboratory classes but also in the process of explaining and repeating knowledge and in students´ active work. Hence, there are efforts to create remote laboratories and remote experiments on the Internet provided by remote laboratory management systems (RLMS). Nowadays, there is a not large number of RLMS for physics experiments. The best known RLMSs are WebLab-Deusto, Galileo Group Remote Laboratory, Physil@b, RExLab and RemLabNet, some of which are on a higher level of progress than others and they provide development toolkits for creating new remote laboratories with the support of management tools (C. A. Matarrita & S. Beatriz Concari, 2016). Our RLMS – RemLabNet (www.remlabnet.eu) built since 2011, provides about 20 remote experiments covered by full diagnostics of their function. At present a new feature is added, namely inserting the simulations into a web page of the corresponding remote experiment. With this feature, physical processes can be simulated and plotted simultaneously with the data from real remote experiments. In the paper we describe the mathematical model of Faradays´ law and create a simulation replicating the real remote experiment "Faradays´ law" (http://www.remlabnet.eu/?page=exp-inf&id=15).

The aim of this project is to embed a model simulation in the real remote experiment described by the Faradays´ law. For this purpose, the Easy Javascript Simulations, also known as EjsS was chosen. It is a free authoring tool that helps non-programmers create interactive simulations in Javascript, mainly for teaching or learning purposes. EjsS has been created by Francisco Esquembre and is part of the Open Source Physics project (Francisco Esquembre).

PHYSICAL THEORY
In a general case, the magnetic flux Φ (weber (Wb) of the uniform magnetic field of the magnetic field strength $\boldsymbol{B}$ through a coil of the area $\boldsymbol{S}$ is defined as

$$\Phi = \boldsymbol{B} \cdot \boldsymbol{S} = BS\cos\alpha, \quad (1)$$

where α is the angle between both vectors $\boldsymbol{B}$ and $\boldsymbol{S}$.
The induced electromotive voltage (emf) ε is given by the Fradays´law

 Copyright © International Conference on New Horizons in Education Conference (INTE)

$$\varepsilon = -\frac{\mathrm{d}\Phi}{\mathrm{d}t} = -S\frac{\mathrm{d}B}{\mathrm{d}t} \quad (2)$$

The electromotive voltage ε can thus be changed by changing the magnetic field strength value B, the area value S and their mutual orientations. The negative sign in the formula of Faraday law shows that the direction of the induced emf and the resulting change in magnetic field oppose the change producing it.

For the Faradays´ law experiment, the moving permanent magnet through the coil was used (see Fig.1), moving in the direction of z axis, where are depicted three phases of the magnet passage through the coil, namely just before the magnet enters the coil (A), it is in the middle of the coil (B), and it exits the coil (C).

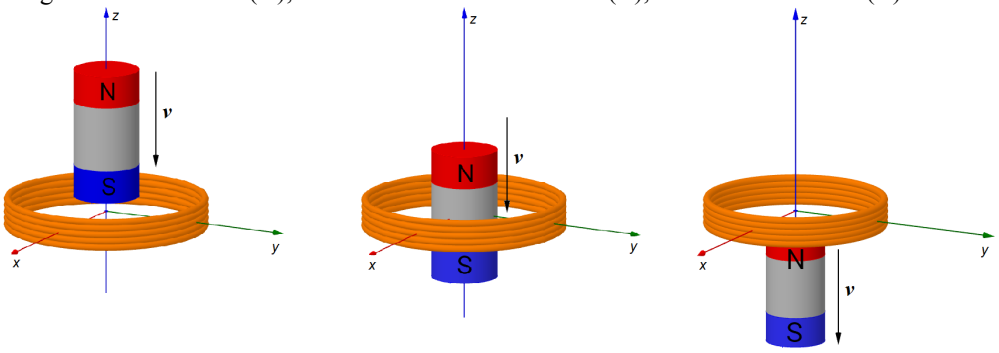


Figure 1 Moving permanent magnet through the coil; from the left to right: A - entering, B - in the middle, C – exiting the coil

Let us next describe qualitatively the time dependence of the quantity of the electromotive voltage $\varepsilon(t)$ during the magnet motion. When the moving magnet is far from the coil, there is no emf induced in the coil. When the magnet is approaching towards the coil (Figure 1A), the magnetic flux rises, so emf starts to rise in one direction depending on the orientation of the magnet. Then, when the magnet is in the middle of the coil (Figure 1B), the magnetic flux is at its maximum and constant, so emf is zero. Finally, when the magnet is moving away from the coil (Figure 1C), the magnetic flux is diminishing and emf is induced in the opposite direction. In Figure 2 is the plot of the time evolution of emf ($\varepsilon = \varepsilon(t)$) induced by a moving permanent magnet with a constant velocity through a thin coil.

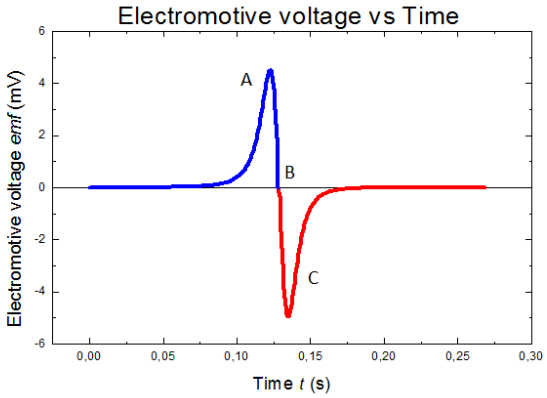


Figure 2 Time dependence of the electromotive voltage ε induced by a permanent magnet moving through the thin coil with a constant velocity

THEORETICAL MODEL

The magnetic field distribution produced by the bar permanent magnet is similar to the magnetic field of the solenoid with a current depicted in Figure 3. Next, we will use this similarity of both magnetic field distributions.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

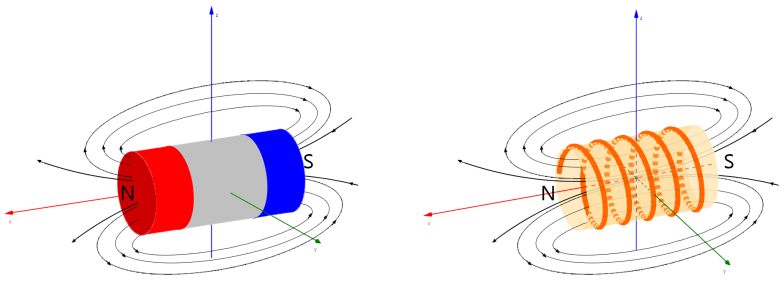


Figure 3 Magnetic field distribution of a bar magnet (left) and a solenoid coil (right)

The magnetic field of the thin solenoid with N windings on the z axis is

$$B_z = \frac{\mu_0 NIR^2}{2(R^2+z^2)^{3/2}}, \tag{3}$$

where the permeability of the vacuum is $\mu_0 = 4\pi.10^{-7}\mathrm{H/m}$.

For the magnetic field distribution along the z axis of the cylindrical permanent magnet with radius R (identical with the radius of the coil) we may have by analogy

$$B_z = \frac{\mu_0 m}{2\pi(R^2+z^2)^{3/2}}, \tag{4}$$

where m is the magnetic dipole moment m (Am^2) of the permanent magnet.
Then, for the induced emf ε from the single coil, being passed by the moving magnet with the constant velocity v we have, using eq. (2) and (4)

$$\varepsilon = -\frac{3\mu_0 mR^2 zv}{2(R^2+z^2)^{5/2}}. \tag{5}$$

The equation 5 describes the form of induced emf as a function of the distance z from the centre of the coil. In Figure 4 are depicted the functions $\varepsilon = \varepsilon(z)$ from eq. 5 for three constant velocities v as a parameter ($v_1 < v_2 < v_3$).

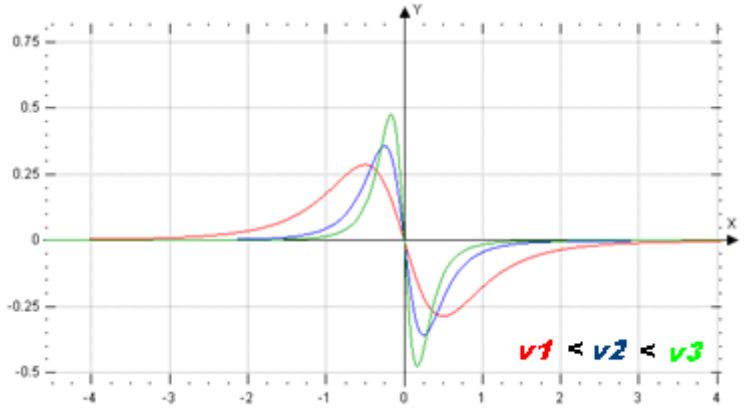


Figure 4 The plot of the dependence of electromotive voltage $\varepsilon = \varepsilon(z)$ from eq. 5 for three constant velocities v as a parameter ($v_1 < v_2 < v_3$)

In real experiment the time dependence of the instantaneous $z(t)$ coordinate and velocity $v(t)$ of the moving magnet is given by the acting forces on the magnet - the gravitational force and various dissipative forces depending on both the moving magnet dynamic parameters and its environment,

$$\frac{d^2z}{dt^2} = F_g + \Sigma_i F_{di}\,. \tag{6}$$

In the next part the free falling permanent magnet in a tube with multiple detection coils is solved using differential equations by Runge-Kutta solver by EjsS environment.

VISUALIZATION

The falling magnet through detection coils which is demonstrating Faraday law is realized in two ways. The first

 Copyright © International Conference on New Horizons in Education Conference (INTE)

is the real remote experiment based on ISES and second is the simulation created by using EjsS.

Remote experiment "Faradays´ law" by falling magnet in a tube (http://www.remlabnet.eu/)
The remote experiment "Faradays´ law" is based on a real hardware as a laboratory hands on experiment. The Internet School Experimental System (ISES) is used. ISES is a complex tool for remote data collection, data processing and control of experiments and other processes (Schauer, Lustig, Dvořák, & Ožvoldová, 2008).
For its remote version, the students are remotely connected to the experiment using controlling software ER – ISES (Schauer, Krbecek, & Ožvoldová, 2013), which allows to control and measure at any time and from any place via the Internet (Schauer et al., 2014). All of these processes are managed by the Measureserver module, functioning as the finite state machine and is controlled by the .psc script file (Gerža, Schauer, & Jašek, 2014).
The remote experiment "Faradays´ law" (Figure 5) consists of glass tube with ten, regularly wound coils, connected in series, and measured by the ISES V-Meter. Inside the tube is moving a permanent magnet, which is dropped from the top of the tube. The rise of the permanent magnet to its starting position is ensured by a magnetic vessel. The falling magnet in the glass tube induces in the pickup coils voltage that may be evaluated for the instantaneous position along the tube, its velocity and dissipative forces, acting on the moving magnet, etc.

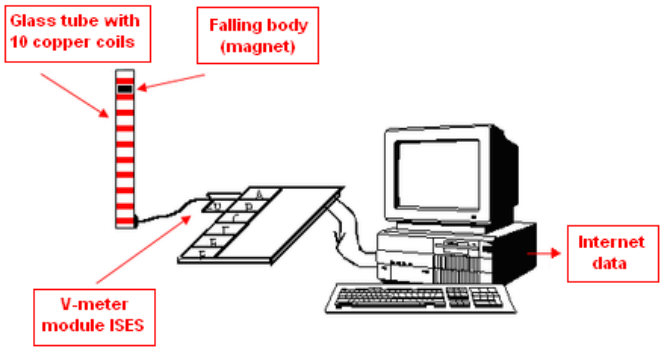


Figure 5 Schematical arrangement of the experiment „Faradays´ law" (Consortium of TBU in Zlín, TU in Trnava and Charles University in Prague,)

In Figure 6 is the control web page of the remote experiment "Faradays´ law", consisting of four widgets buttons, two of them serve for controlling a lifting of the magnet and the other two are for data exporting. Furthermore, there is the plot of the temporal dependence of induced voltage during the magnet motion. The view of the life stream is provided by the web-camera. The data in Figure 6 represent the accelerated motion of the falling magnet with increasing constant velocity (compare to Fig. 2).

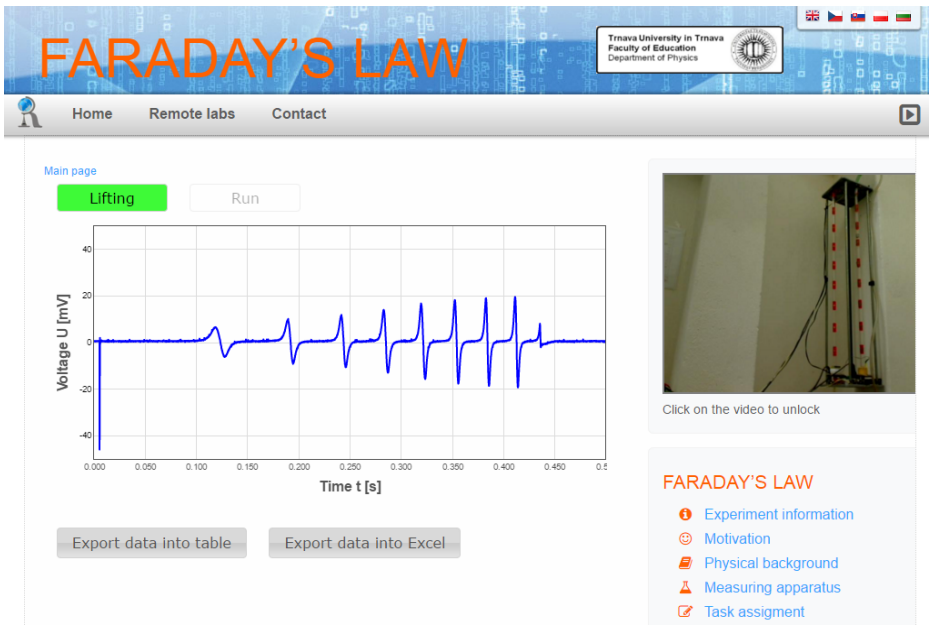


Figure 6 Web page of the experiment „ Faradays´ law" with controlling and data collecting controls and the recorded example of the measured data; also life stream from web camera is depicted

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Embedded simulation "Faradays´ law" by falling magnet in a tube

The aim of this project is to embed a model simulation in real e-experiment, describing modelling the observed the Faraday´ law phenomena. For this purpose, the Easy Javascript Simulations, also known as EjsS was chosen. It is a free authoring tool that helps non-programmers create interactive simulations in Javascript, mainly for teaching or learning purposes. EjsS has been created by Francisco Esquembre and is part of the Open Source Physics project (Francisco Esquembre,).

The EjsS environment is divided into three tabs which are Description, Model and HtmlView. HtmlView serves for setting elements of animations, graphs, buttons, etc. (Francisco Esquembre,). The most important part is Model, where the mathematical model of the simulation based on ordinary or differential equations mentioned above is entered. In Figure 7 is shown a part of evolution differential equations for a free fall (i.e with neglected dissipative forces). The rest parts of equations are written in others sections of model tab such as prelim code, fixed relations, etc. These differential equations are solved by Runge-Kutta solver.

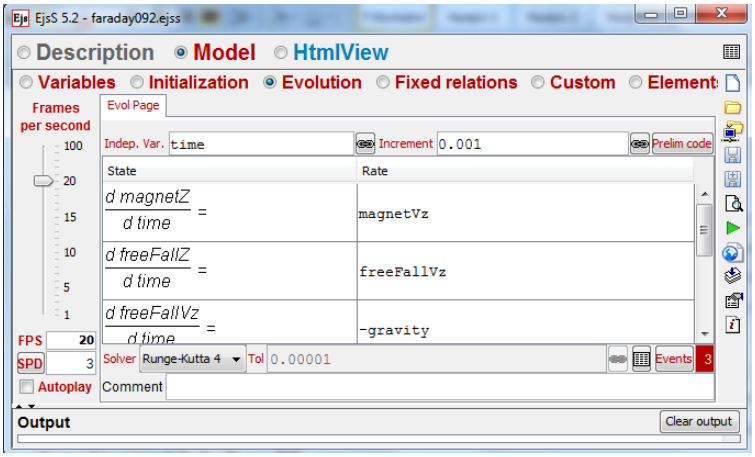


Figure 7 Differential equations of free fall in EjsS

The simulation can be divided into two different cases. In all cases the Faradays´ law as a detecting position instrument is modelled. This leads to the situation that the magnet is not falling at constant acceleration through coils. In the first case is an option when the parameters of the simulation are set exactly like the parameters of the real remote experiment. It means that the number of coils, distances between coils, gravitational acceleration, etc. are same as in real apparatuses of the experiment. Furthermore, in the second case of simulation, the user can set parameters of simulation as are a gravitational acceleration, diameter of the coil, number of coils, winding coils, etc. In additional, there is a possibility to enable or disable showing of a ball which is falling by free fall outside the glass tube concurrently with the magnet.

In Figure 8 are the results of the simulation arranged into three parts – animation window, graphical windows and data windows. In 3D animation window is depicted the time evolvement of the trajectory of the falling magnet $z(t)$ through the centres of the coils. The animation can be rotated by dragging the mouse in any direction. The number and sizes of coils may be changed as input parameter together with coils diameter and number of windings in detection coils. These options of changing input parameters are provided to user for the purpose of setting different conditions and examining their effect of resulting curve of emf. The students can try to set parameters and successively obtain by comparison with curve of real remote experiment the real value of them.

The dissipative forces are not considered because of short time of falling permanent magnet.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

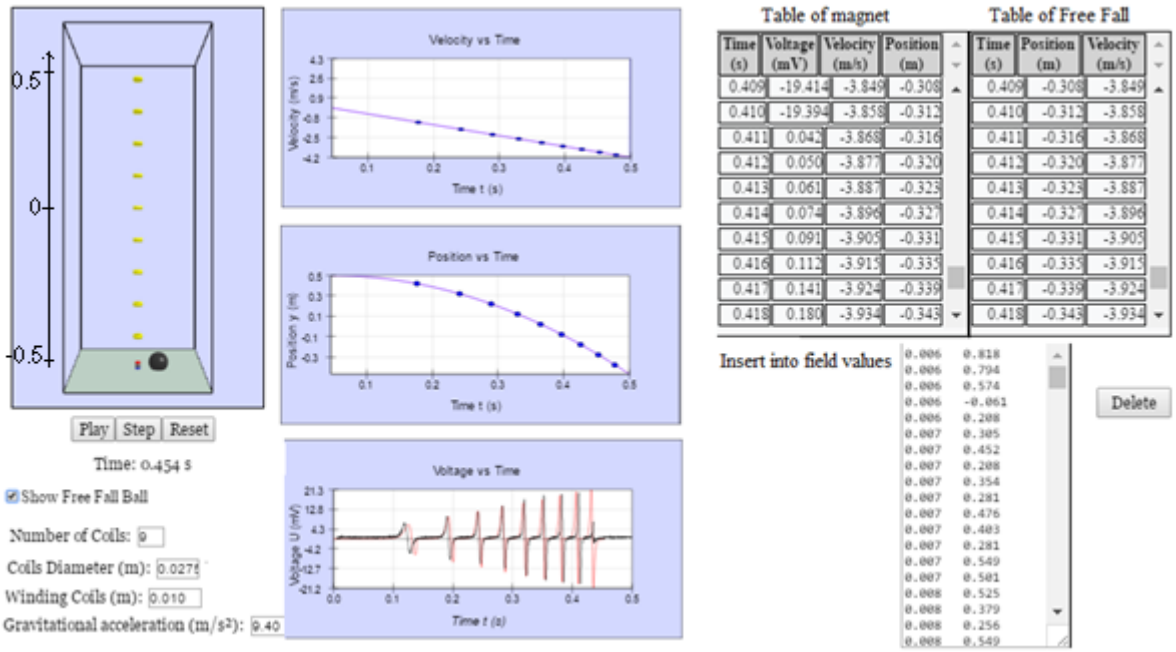


Figure 8 Simulation of Faradays´ law created in EjsS

The second part of the simulation is a section with the corresponding graphs, from the top to bottom are the time dependence of the coordinate $z(t)$ along the tube, the time dependence of the velocity $v(t)$ and the time evolution of the electromotive voltage $\varepsilon = \varepsilon$ (t) versus time. In the last one graph are two curves plotted, the first one (red) is a result of simulations and the second (black) are data from the real remote experiment (detail depicted in Figure 9).

In the third part are the data arranged into tables. There are values of time, position, velocity for falling ball and permanent magnet in the case of magnet there is one more column where are values of emf. The user can copy all of these data and then work with them. Under tables is the text area, where is possible to insert measured data from the real remote experiment in order to display them in the graph of time dependence of emf.

For a future work, the created mathematical model of remote experiment of Faradays´ law is important because this simulation will be a part of the module of content management system RemLabNet serving for inserting simulations into control web pages of the remote experiments.

EMBEDDING SIMULATION WITH REMOTE EXPERIMENT

The existence of the embedded simulation in a real remote experiment provides new options of experimentation. There are more possibilities of utilization this features, for instance, users can set modifiable values in order to examine initial values of modules and physical hardware components. Furthermore, can be set any values and compare the resulting relationships, depending on the each variable. In the case of the Faradays´ law simulation, values of gravitational acceleration, diameter, winding and number of coils can be modified. Due to this circumstance, the free fall of the magnet inside the tube can be investigated with the effect of different gravitational accelerations, which otherwise cannot be changed in the real environment.

For the purpose of inserting of simulations into remote experiment, the open source programming environment EjsS was chosen because its optimized mathematical solver is utilized and integrated into the new inserting module of Measureserver. As was mentioned earlier the Measureserver and also its modules are managed by .psc script file, hence the simulation need to be inserted just through it. After successful creation of desired mathematical model of simulation using EjsS environment, it is exported into XML file and consequently, it is inserted into the .psc control file of the remote experiment. While the mathematical solver of the inserting module calculates the simulated data and the Measureserver carries on the synchronization of these data with actual data of a remote experiment in the real time. And subsequently, the both of data are displayed in charts in a web page of the remote experiment.

Because the module serving for embedding the simulation with the remote experiment is still under the development, the comparison of data from simulation and experiment is for now provided by simulation in EjsS which is depicted in the graph of induced electromotive voltage versus time in Figure 9. The black curve is represented data from real remote experiment included by text area and the red curve is data calculated by simulation.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

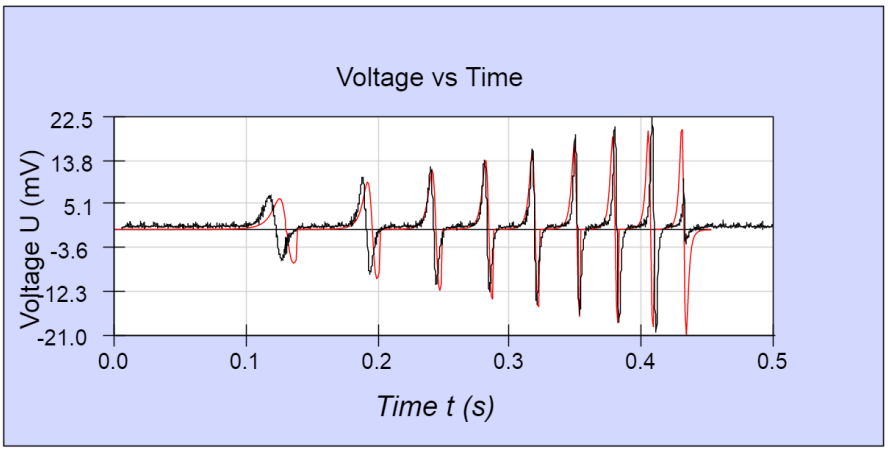


Figure 9 Graph of induced electromotive voltage versus time;
Red curve – simulation, Black curve – experiment

CONCLUSIONS

In this paper was described the mathematical model of Faradays´ law and its visualization in two ways as real remote experiment and simulation in EjsS. In additional, the remote laboratory management system RemLabNet and its extension in the form of new module serving for embedding the simulation with the remote experiment were represented. In order to provide the possibility to insert simulation into graphs of the remote experiment was created this simulation with the relevant mathematical model by using EjsS environment. The simulation exactly describes the remote experiment Faradays´ law. Furthermore, there is an option of change initial parameters.

The physical laws and processes are more understandable, longer kept in the memory and more interesting with using experiments or simulations. Therefore, our effort is to constantly develop and improve the RemLabNet, such as adding a new feature for inserting simulations.

REFERENCES

C. A. Matarrita, & S. Beatriz Concari. (2016). Remote laboratories used in physics teaching: A state of the art. Paper presented at the *2016 13th International Conference on Remote Engineering and Virtual Instrumentation (REV),* 385-390. doi:10.1109/REV.2016.7444509

Consortium of TBU in Zlín, TU in Trnava and Charles University in Prague.RemLabNet. Retrieved from http://remlabnet.eu/

Francisco Esquembre.**The wiki pages for easy java/javascript simulations**.

Gerža, M., Schauer, F., & Jašek, R. (2014). Security of ISES measureserver® module for remote experiments against malign attacks. *International Journal of Online Engineering (iJOE), 10*(03), 4-10. doi:http://dx.doi.org/10.3991/ijoe.v10i3.3132

Schauer, F., Krbecek, M., & Ožvoldová, M. (2013). Controlling programs for remote experiments by easy remote ISES (ER-ISES). Paper presented at the doi:http://dx.doi.org/10.1109/REV.2013.6502892

Schauer, F., Lustig, F., Dvořák, J., & Ožvoldová, M. (2008). An easy-to-build remote laboratory with data transfer using the internet school experimental system. *European Journal of Physics, 29*(4), 753. Retrieved from http://stacks.iop.org/0143-0807/29/i=4/a=010

Schauer, F., Krbecek, M., Beno, P., Gerza, M., Palka, L., & Spilakova, P. (2014). REMLABNET - open remote laboratory management system for e-experiments. Paper presented at the *2014 11th International Conference on Remote Engineering and Virtual Instrumentation, REV 2014,* Porto. 268-273. doi:10.1109/REV.2014.6784273

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MEASUREMENT OF TEACHERS' SELF-EFFICACY AND OUTCOME EXPECTATIONS FOR TECHNOLOGY INTEGRATION IN EDUCATION

Serkan PERKMEN
Necatibey Faculty of Education
Balikesir University
Turkey
sperkmen@balikesir.edu.tr

Yeşim SÜRMELİOĞLU
Necatibey Faculty of Education
Balikesir University
Turkey
yesimsurmelioglu@gmail.com

ABSTRACT
The main purpose of the study is to measure the reliability and validity of the Motivation for Technology Integration in Education Scale prepared in light of Bandura's Social Cognitive Theory. The participants were 228 high school teachers in Turkey. The results of confirmatory factor analysis revealed that self-efficacy and outcome expectations are related but distinct constructs. Outcome expectations seemed to consist of three dimensions: performance, self-evaluative and social outcome expectations. A moderate relationship between self-efficacy and outcome expectations was found. Based on these results, we believe that researchers can confidently use this scale to measure teachers' motivation for technology integration in education.

Keywords: Technology Integration, self-efficacy, outcome expectations, motivation

INTRODUCTION

Bandura's Social Cognitive Theory (1986) and its two main constructs, self-efficacy and outcome expectations, have received a great deal of attention in the field of educational technology (Wang, Ertmer & Newby, 2004; Tezci, 2011a,2011b; Perkmen & Pamuk,2011). Self-efficacy can be defined as people's beliefs about their ability to accomplish a given task whereas outcome expectations refer to their anticipated outcomes of an action (Bandura, 1997). Teachers who have high educational technology self-efficacy are likely to believe that they have necessary skills to use instructional technology in the classroom. Those who possess positive outcome expectations probably expect that technology will make a positive and remarkable contribution to their teaching practices. Research shows that self-efficacy and outcome expectations are moderately correlated, which suggests that those who have high educational technology self-efficacy tend to expect positive outcomes from using educational technology in the classroom (Sahin, 2008; Perkmen, 2014). Technology integration self-efficacy and outcome expectations are important because they affect technology integration performance (Perkmen & Pamuk, 2011). In other words, teachers who have high self-efficacy and expect positive outcomes from using technology in the classroom tend to use technology in their classroom in proper and effective ways.

Based on social cognitive theory, Wang, Ertmer, & Newby (2004) created a 24-item self-efficacy for technology integration in education scale, which consisted of two dimensions: computer technology capabilities and strategies and external influences of computer technology uses. Niederhauser and Perkmen (2008) developed an intrapersonal technology integration scale which consisted of four constructs: self-efficacy, outcome expectations, interests and intentions. In another validation study conducted by Perkmen and Niederhauser (2010), outcome expectations were proven to be consists of three dimensions: performance, self-evaluative and social outcome expectations. Intrapersonal Technology Integration Scale (Niederhauser & Perkmen, 2008) was translated into Turkish by Sahin (2008) and validated with faculty members. Semiz and Ince (2012) and Cengiz (2014) used these scales to measure pre-service physical education teachers' self-efficacy and outcome expectations beliefs.

Niedehauser and Perkmen (2008) and Wang, Ertmer and Newby (2004) conducted a study with pre-service teachers in the US. In the Sahin's study (2008), the participants were faculty members in Turkey. Semiz and Ince (2012) and Cengiz (2014) conducted their study with pre-service physical education teachers in Turkey. It seems that there is a need to validate these scales with practicing teachers.

The main purpose of the current study is to examine the validity and reliability of the motivation for technology integration in education scale using a sample of high school teachers. Specifically, this study tests goodness of three different models using confirmatory factor analysis. In addition, the teachers' motivation level and

 Copyright © International Conference on New Horizons in Education Conference (INTE)

relationship between self-efficacy and outcome expectations were examined. The current study addresses three research questions:

1) Does Motivation for Technology Integration in Education Scale have construct validity?
2) What is the level of teachers' motivation towards technology integration in education?
3) What is the relationship between self-efficacy and outcome expectations?

METHOD

Participants

The participants were 228 high schools teachers from 10 different fields in the city of Bursa. Of the participants 128 (56%) were female and 100 (%44) were male. The mean of their teaching experience was 10 years.

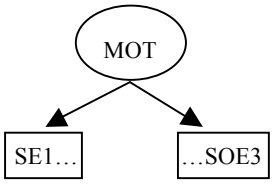
Research Instrument

Motivation of Technology Integration in Education Scale was used in this study to measure teachers' self-efficacy (6 items) and outcome expectancy beliefs (9 items) regarding technology integration in education. This scale has been designed on the basis of other technology integration scales (Niederhauser & Perkmen, 2008; 2010) and social cognitive theory. Some of the items regarding self-efficacy included "I feel confident that I have the necessary skills to use instructional technology in the classroom" and "I feel confident that I can help students when they have difficulty using instructional technology in the classroom". Outcome expectations consisted of three dimensions: performance, self-evaluative and social. Each dimension consisted of three items. The stem for all of the outcome expectations were "Using instructional technology in my classroom will likely allow me to….". Some of the items were "… will increase my productivity" and "…will make teaching more exciting".

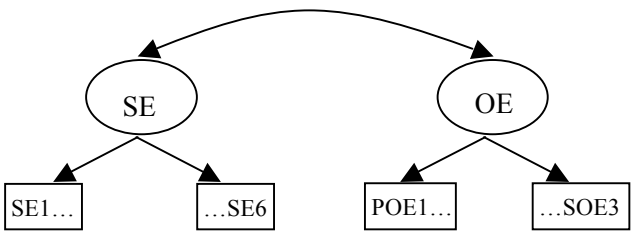
Data Analysis

Confirmatory factor analysis was used to examine the construct validity of the scale. Based on the theoretical framework, three models were tested. Several fit indices including Chi-Square/df, CFI, NFI, RMSEA and SRMR was utilized to measure goodness of the models. The first model (See Model 1) hypothesizes that all of the items in the scale reflect a unitary factor called motivation of technology integration in education. The second model (See Model 2) suggests that self-efficacy items constitute the first factor called self-efficacy, outcome expectations items constitute the second factor called outcome expectations. Like the second model, the third model (See Model 3) suggests that self-efficacy and outcome expectations are related but distinct factors; however, outcome expectations are made up of three dimensions.

Model 1



Model 2



 Copyright © International Conference on New Horizons in Education Conference (INTE)

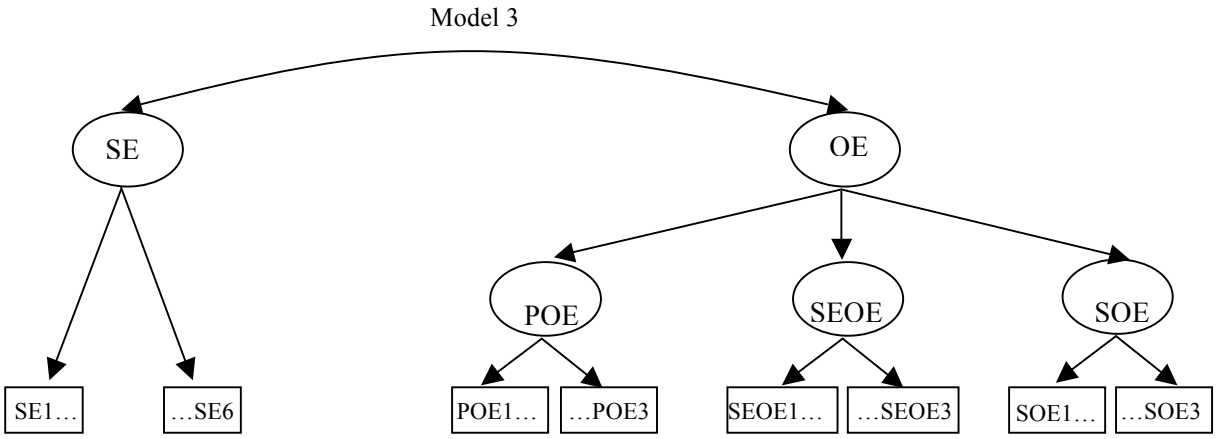


Figure 1: Three Models

FINDINGS

Table 1 illustrates the goodness of the three models. As expected, Model 3 had the highest chi-square/df, RMSEA and SRMR values and the lowest CFI, NFI values. This finding shows that the model 3 fits the data best.

Table 1: Goodness of the Models

Models	Chi-Square/df	CFI	NFI	RMSEA	SRMR
Model1	17.12	.77	.76	.26	.15
Model2	8	.88	.86	.17	.12
Model3	3.04	.95	.94	.09	.09

Factor loadings and error variance for the items in all the models are presented in Table 2. Factor loadings ranged from .51 to .60 in model 1, .71 to .81 in model 2 and model 3 for the self-efficacy items. This finding suggests that self-efficacy items had higher loadings in model 2 and model 3 than model 1. There seems to be no remarkable difference in factor loadings of self-efficacy items in model 2 and model 3.

In contrast to self-efficacy items, outcome expectations items seemed to have the highest factor loadings. Factor loadings ranged from .52 to .80 in model 1, .55 to .86 in model 2, .57 to .90 in model 3 for the outcome expectations items. It is worth noting that social outcome expectations had very high loadings in model 3, which suggests that social outcome expectations is a unique dimension of outcome expectations. In sum, both fit indices and factor loadings provided evidence that self-efficacy and outcome expectations are related but different constructs. Model 3, which suggests that outcome expectations consist of three dimensions seemed to fit data best.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 2: Comparing factor loadings and error variances of the three models

	Factor Loadings (Error Variance)		
	Model1	Model2	Model3
Self-Efficacy			
SE1. I feel confident that I have the necessary skills to use instructional technology in the classroom.	.51 (.74)	.71 (.50)	.71 (.50)
SE2. I feel confident that I can help students when they have difficulty with instructional technology.	.64 (.59)	.79 (.38)	.78 (.38)
SE3. It is easy for me find instructional technologies that are relevant to my teaching.	.55 (.70)	.75 (.43)	.75 (.43)
SE4.I can design technology-based classroom activities in my classroom in a way that my students can learn themselves under my guidance.	.53 (.72)	.75 (.44)	.74 (.45)
SE5. I can easily prepare lessons plans in which I am required to use instructional technology.	.57 (.67)	.81 (.35)	.81 (.34)
SE6. I can easily teach classes in which I am required to use instructional technology.	.60 (.64)	.80 (.36)	.80 (.35)
Outcome Expectations			
(Using instructional technology in my classroom is likely to…)			
POE1 …increase the quality of my teaching.	.71 (.49)	.75 (.44)	.75 (.43)
POE2 …make it easier for me to teach.	.73 (.47)	.75 (.43)	.79 (.38)
POE3 …increase my productivity.	.80 (.37)	.86 (.26)	.90 (.18)
SEOE1… make my teaching more satisfying.	.69 (.53)	.74(.45)	.74 (.46)
SEOE2…make my teaching more exciting.	.76 (.42)	.78 (.39)	.75 (.44)
SEOE3…give me a sense of accomplishment.	.60 (.64)	.61 (.62)	.57 (.67)
SOE1 … increase my colleagues' respect of my teaching ability.	.55 (.70)	.58 (.66)	.77 (.41)
SOE2…increase my popularity among my students.	.52 (.73)	.55(.70)	.94 (.12)
SOE3…help me to be seen as competent by my colleagues.	.53 (.72)	.56 (.68)	.88 (.22)

The cronbach alpha values were found to be .90 for self-efficacy, .89 for performance outcome expectations, .72 for self-evaluative outcome expectations, .87 for social outcome expectations and .89 for the overall outcome

 Copyright © International Conference on New Horizons in Education Conference (INTE)

expectations items. These values showed that the participants' gave consistent responses to the survey items.
Table 3 provides descriptive statistics for the variables used in the current study. The participants' performance outcome expectations were very high, which suggests that they believe that using technology will increase their teaching performance. Their overall self-efficacy and outcome expectations were high but social outcome expectations were relatively low. These findings suggest that the participants believe that they have sufficient skills and expect positive outcome expectations from using technology; however, they do not seem to attach importance to the other people's recognition if they use technology in their classroom.

Table 3: Descriptive Statistics for all of the Variables

Factor	Min	Max	Mean	SD
Self-efficacy	1	5	3.82	.71
Outcome Expectations	1.22	5	3.90	.69
Performance Outcome Expectations	1	5	4.40	.67
Self-Evaluative Outcome Expectations	1.3	5	4.10	.71
Social Outcome Expectations	1.22	5	3.19	1.06

Table 4 shows the results of correlation analysis. All of the variables were found to be significantly correlated with each other. As expected, self-efficacy and outcome expectations were moderately correlated ($r = .45$, $p < .01$). The lowest correlation was found to be between self-efficacy and social outcome expectations.

Table 4: Correlations among Variables

Variable	1	2	3	4	5
1.SE	-	.45	.50	.47	.25
2. OE		-	.78	.90	.85
3. POE			-	.77	.44
4. SEOE				-	.61
5. SOE					-

Note: All of the correlations were at least significant at .05 level.

DISCUSSION

The main objective of the current study was to examine the reliability of validity of the Motivation for Technology Integration Scale prepared on the basis of Bandura's Social Cognitive Theory and another scale developed by Niederhauser and Perkmen (2008) in the USA. The results, in general, supported the predictions of Social Cognitive Theory. Model 3, which suggests that self-efficacy and outcome expectations are unique constructs and outcome expectations are made up of three dimensions, had the best psychometric properties. These findings are similar to the original study conducted for pre-service teachers in the US (Niederhauser & Perkmen, 2008, 2010). It seems that the technology integration scale is not only suitable for pre-service teachers but also is an instrument help researches to measure the in-service teachers' motivation regarding technology integration in education.

The moderate relationship between technology integration self-efficacy and outcome expectations deserves attention. Although these two constructs seemed to differ, they are conceptually related. Other research studies also found a moderate relationship between these two constructs Niederhauser & Perkmen, 2008, 2010; Perkmen, 2011, Sahin, 2008). It seems that teachers who believe that they have necessary skills to use technology in the classroom tend to expect that their technology will make a positive contribution to their teaching practice.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

REFERENCES

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: Freeman

Cengiz, C. (2014). The development of TPACK, technology integrated self-efficacy and instructional technology outcome expectations of pre-service teachers. *Asia-Pacific Journal of Teacher Education,* http://dx.doi.org/10.1080/1359866X.2014.932332

Niederhauser, D. S., & Perkmen, S. (2008). Validation of the Intrapersonal Technology Integration Scale: Assessing the influence of intrapersonal factors that influence technology integration. *Computers in the Schools, 25* (1-2), 98–111

Niederhauser, D. S., & Perkmen, S. (2010). Beyond self-efficacy: Measuring pre-service teachers' instructional technology outcome expectations. *Computers in Human Behavior, 26*(3), 436–442.

Perkmen, S., & Pamuk, S., (2011). Social cognitive predictors of pre-service teachers' technology integration performance. *Asia Pacific Education Review, 12*(1), 45–58.

Sahin, İ. (2008). From the social-cognitive career theory perspective: A college of education faculty model for explaining their intention to use educational technology. *Journal of Educational Computing Research, 38*(1), 51-66.

Semiz, K., & Ince, M. L. (2012). Pre-service physical education teachers' technological pedagogical content knowledge, technology integration self-efficacy and instructional outcome expectations. Australasian Journal of Educational Technology, *28*(6), 1248 1265.

Tezci, E. (2011a). Factors that influence pre-service teachers' ICT usage in education. European Journal of Teacher Education, *34(*4), 483-499.

Tezci, E. (2011b). Turkish primary school teachers' perceptions of school culture regarding ICT integration. *Educational Technology Research and Development, 59*, 429-443.

Wang, L., Ertmer, P. A., & Newby, T. J. (2004). Increasing preservice teachers' beliefs for technology integration. *Journal of Research on Computing in Education, 36*(3), 231-250.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MEASURING ENTREPRENEURSHIP PROFILES IN HIGHER EDUCATION, CASE STUDY IN UNIVERSITAS INDONESIA

Iqbal Jordy Putranto
Department of Administrative Sciences,
Faculty of Sosial and Political Sciences, Universitas Indonesia
iqbaljordy@yahoo.com

Eko Sakapurnama
Department of Administrative Sciences,
Faculty of Sosial and Political Sciences, Universitas Indonesia
eko.sakapurnama@ui.ac.id

ABSTRACT
This research studies about the entrepreneurship profiles toward students in the last year at Universitas Indonesia. There are ten dimensions of entrepreneurship profiles that become theory that used on this article. The dimensions, namely desire for responsibility, preference for moderate risk, confidence in their ability to success, desire for immediate feedback, high level of energy, future orientation, skill of organizing, value of achievement over money, leadership and originality. The research method is quantitative method with descriptive statistic analyses. A survey through questionnaire distributed to 150 respondents of students in social humanities faculties as a respondents. The result shows that the students have a high entrepreneurship profile with a final average score of 3,76. The attributes of "preference of moderate risk" become the highest profiles which has by respondents. On the other hand, the attributes of "high level of energy" is the lowest average from the overall entrepreneurship profiles dimensions.
Keywords: Entrepreneurship Profile, Entrepreneurship, Intrapreneurship

1. INTRODUCTION

Nowadays, as the world becomes developed and more competitive, the role of human capital become more important in the corporation. Talented human capital viewed as an intangible resources that could lead the company to win the market. Ulrich (1997) defines competence worker as an employee which has skills, knowledge and abilities to perform his/her duties. Therefore, many companies are looking for potential worker to be recruited as a part of their companies.

Indonesia, as a member of The Association of Southeast Asian Nations, called ASEAN, will face ASEAN Economic Community in the late 2015. This policy will bring free flow of capital, trade, investment and also human capital amongst ASEAN countries. Thus, it would create the new era of “talent war” in Southeast Asian countries. The demand of industry toward potential worker from fresh graduate university become crucial. One type of competencies that they look for is strong entrepreneurship profile.

Recent study conducted by Wahyuningsih and Qamar (2011) found that the entrepreneurship learning process is required as a part of the curriculum in higher education. The study revealed that 81 % of the respondents stated that they strongly agree and 19% stated agree that entrepeneurship subject is important for college students. Moreover, they explained that the entrepeneurship education could develop student soft skills and life skills which contibute in their creativity.

According to the passage above, this study aims to explore the entrepreneurship profile in University of Indonesia’s student.

1.1 Research Method

The research method is using quantitative method, with questionnaire as a tools to collect data. The survey was conducted to 150 students from five faculties consisting of Faculty of Social and Political Sciences, Faculty of Economy and Business, Faculty of Law, Faculty of Humanities, and Faculty of Psychology. All of the respondents were chosen by purposive sampling with the criteria being students who entered the final semester at their faculties. Then, the data was analyzed using descriptive statistic to show the average of entrepreneur profile of the sample.

1.2 Theoretical Background

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The concept of entrepreneurship profile was emphasized by Meredith (2002), that person who posess some qualities which are self confident, result oriented, risk taker, leadership, originality and future oriented. (see table 1).

Tabel 1. Dimensions of entrepreneurship profile

Dimensions	Indicators
Self confident	Faith, independent, optimism, individuality
Result oriented	Need for achievement, profit oriented, resilience, hard-worker, full of energy, inisiative
Risk taker	Ability to mitigate the risk, challenger
Leadership	Act as a leader, social skills, broad-minded/open-minded
Originality	Inovative, Creative, Flexibility
Future oriented	Visioner

Source: Meredith (2002)

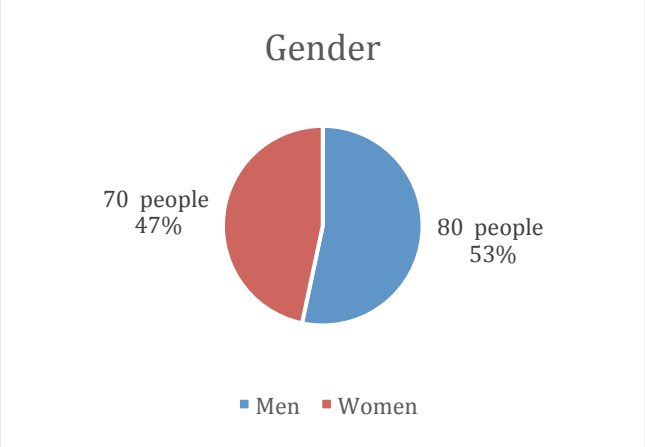
Meredith (2002) argued that from several characteristics of entrepreneurship profile explained above, the important ones are creativity and innovation. Thus, the person could become a good entrepreneuer when he/she posses those characteristics. Entrepreunership profile is basically the attributes that attached to person and drives the way they react or behave creatively, create an innovation that might have economic value.

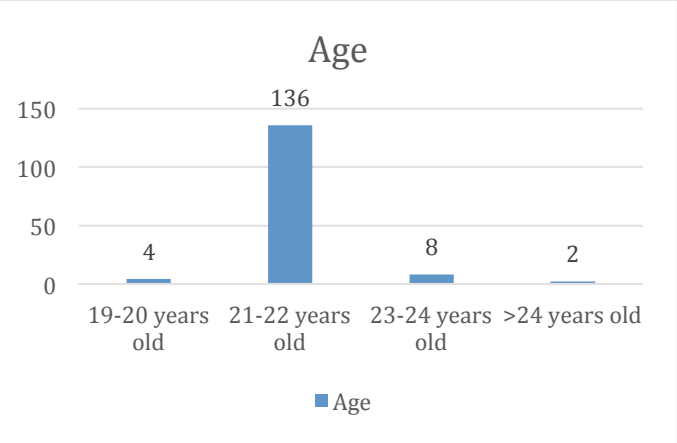
Morever, the concept of entrepreneurship profile which is also explored by Zimmerer (2012) resulted into eight (8) dimensions of entrepreneurship profile which are described in the passage below: a. Desire for Responsibility; b. Preference for moderate risk; c. Confidence in their ability to success; d. Desire for immediate Feedback; e. High level of energy; f. Future Orientation; g. Skill of organizing and the last is h. Value of achievement over money.

One of the components that is highly required in order to ensure a good performance of employees is a competence named enterpreneurship profile. Zimmerer (2012) has identified enterpreneurship profile to be consisted of these followings: high need for achievement, high self confidence, has problem solving abilities, actively seeking for feedbacks, and receiving personal responsibilities. Other researchers have identified other components of enterpreneurship profiles, namely tolerance to ambiguity and uncertainty, initiative, self confidence, aggressive nature, ability to mobilize and utilize resources efficiently, viewing money as performance measure, self awareness, and tendency to trust others. Hisrich (2012) stated that several characteristics of an enterpreneur, which are: becoming an innovator as a leader, energetic, flexible, optimistic, outcome-oriented, and independent. Further, the elaboration of values existing within a person with enterpreneurship profile was conducted by Robert D. Hisrich (2012). He claimed that an enterprenurship profile comprises of these following values: visionary, innovative, creative, careful risk-taker, opportunity seeker, effective user of resources, self-confident, and has high intrinsic motivation.

2. Analysis and Discussion

The result of this research from 80 respondents, equal to 53% of total respondents, are men. Meanwhile, 70 respondents are women. While The questionnaire used in this study places each respondents into one of 4 classes of age range of final year college students, namely 19-20, 21-22, 23-24, and >24 years old.



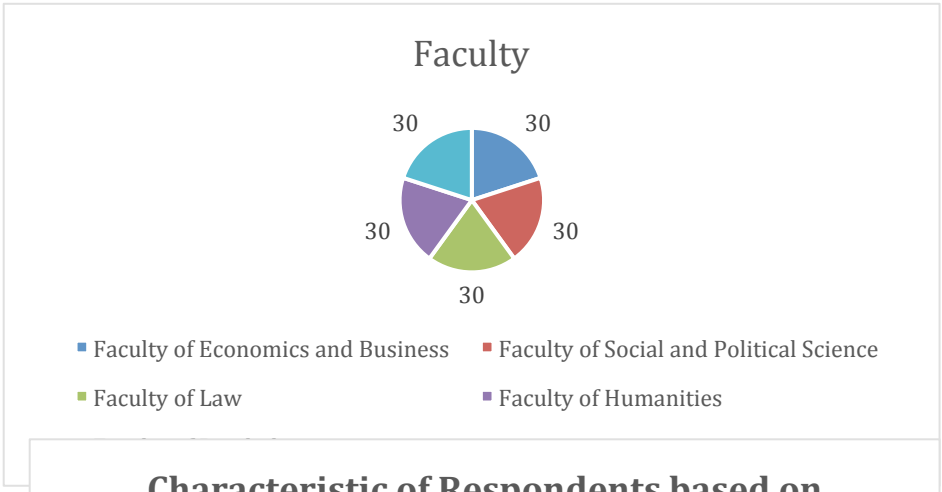


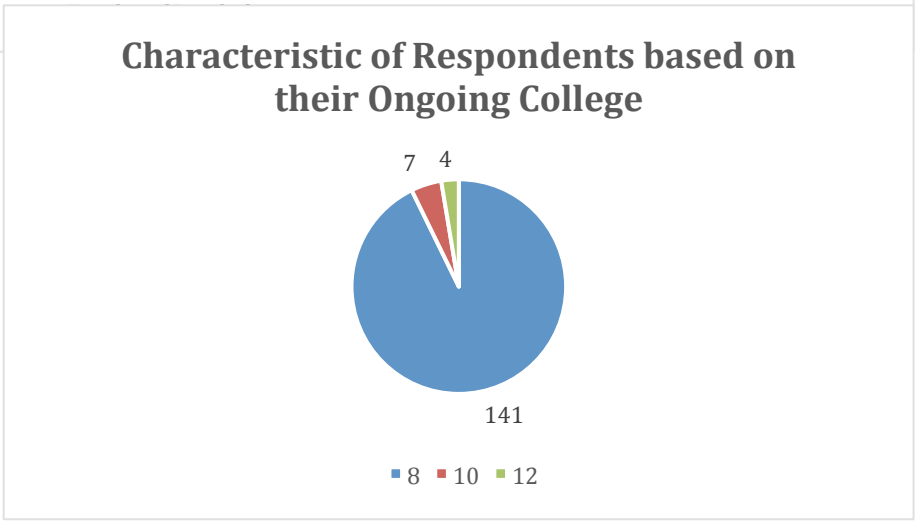
Source : authors' analyzed data (2015)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Characteristic of Respondents based on faculty of origin

The research samples of this study are final year students from 5 different faculties of the field of Social Science in University of Indonesia. The sampling technique that is used is quota sampling, which means each population group (faculty) has a set number of samples which will be taken from. The study limits the number of samples to 30 individuals per faculty so the total amount of respondents in the research is 150 students.





Source : Authors' analyzed data (2015).

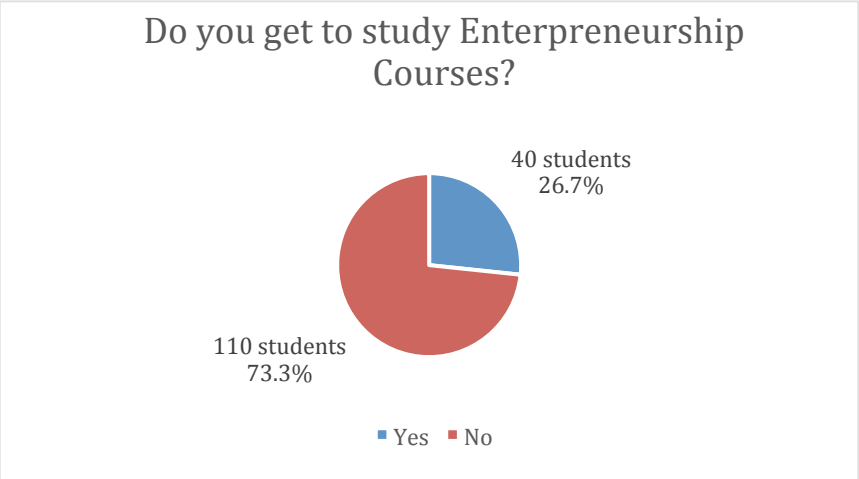
Characteristic of Respondents based on their Ongoing College

Source : Authors' analyzed data (2015).

141 Respondents are in their 8th semester, 7 Respondents are in their 10th semester and 4 respondents are in their 12th semester

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Characteristic of Respondents based on whether they get Enterprenurship Courses



Source : Authors' analyzed data (2015).

110 students, or 73,3%, did not get Enterpreneurship subject, the remaining 40 students get Enterpreneurship subject.

Mean Result Analysis

Mean result analysis of the ten dimensions which exist within the variable of entepreneurship profile indicates that the dimension with the highest mean score is "Preference of Modern Risk" with a mean score of 4.08 and is categorized as high. It is followed by "Desire for Immediate Feedback" with the second highest mean score, "Desire for Responsibility" coming in as third, and "Future Orientation" as fourth, with mean score of 3.87, 3.85, and 3.83 respectively which place them in the high score category. The following dimensions are also placed in the same category, and they are namely "Confidence in Their Ability to Success", "Skill of Organizing", "Leadership", and "Originality Dimension" with mean score of 3.79, 3.78, 3.69, 3.63.

Two other dimensions outside of the aforementioned eight is categorized as moderate scores, and are namely "Value of Achievement Over Money" and "High Level of Energy" which has the mean score of 3.57 and 3.53 respectively. The following table demonstrates the mean score of each dimension:

NO	DIMENSION	MEAN SCORE	NOTES
1	*Desire for Responsibility*	3.85	High
2	*Preference of Modern Risk*	4.08	High
3	*Confidence in Their Ability to Success*	3.79	High
4	*Desire for Immediate Feedback*	3.87	High
5	*High Level of Energy*	3.53	Moderate
6	*Future Orientation*	3.83	High
7	*Skill of Organizing*	3.78	High
8	*Value of Achievement Over Money*	3.57	Moderate
9	Leadership	3.69	High
10	Originality	3.63	High
Average Total of Enterpreneurship Profile Variable		3.76	High

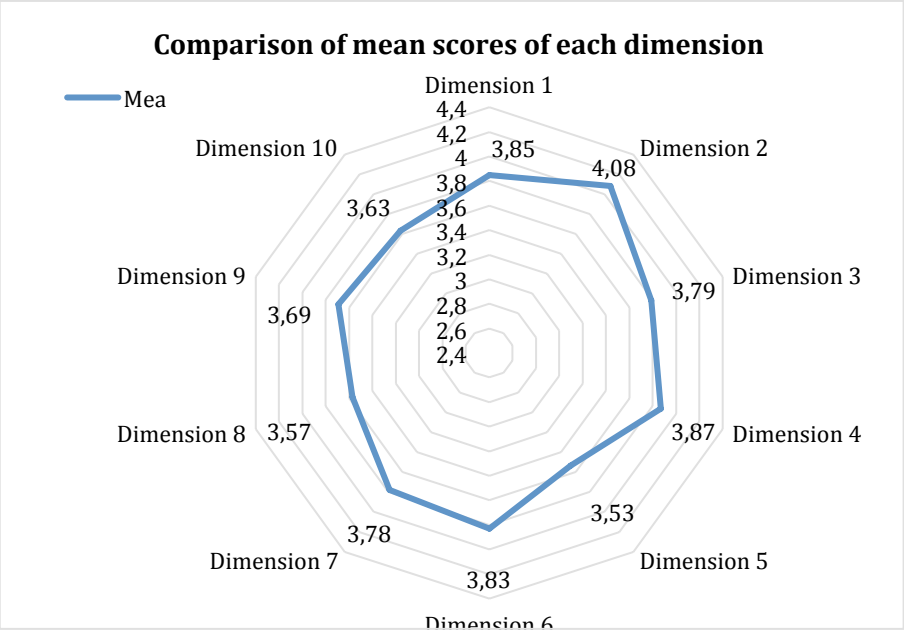
Source : Authors' analyzed data (2015).

As the result of mean measurements of the ten dimension indicates from the table above, the mean score of all of the variables of enterpreneurship profile amounts to 3.76. According to the class distribution set in the 3rd chapter of this article, the enterpreneurship profile of final year students of University of Indonesia is categorized as high.

Comparison of Mean Scores between Dimensions

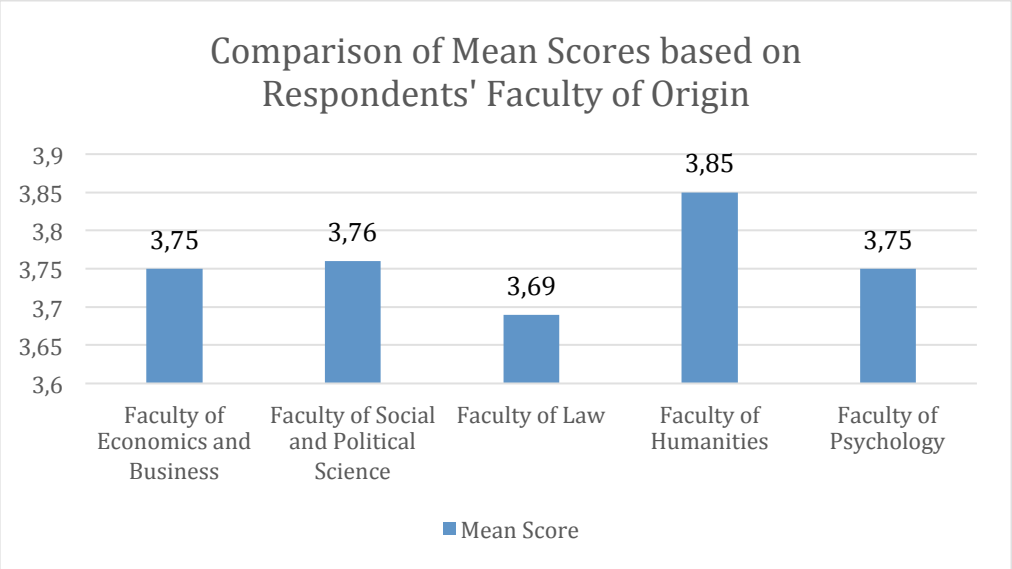
 Copyright © International Conference on New Horizons in Education Conference (INTE)

Comparison of the mean scores of each dimension within the variable of enterpreneurship profile has been elaborated in the previous sub-section. To ease, as well clarify the comparison of means, the authors provide the following chart which is conjured based on the mean scores of each dimension.



The Analysis of Mean Scores between Respondents' Faculty of Origin

The purpose of taking 5 different faculties as samples in this study is to ensure the variety of respondents in order to describe the comparison of high and low enterpreneurship profile from those 5 different faculties. Below is the chart of mean scores of the whole enterprenurship profile variable of each population:



Source : Authors' analyzed data (2015).

The result of mean calculation as demonstrated above indicates that the respondents from Faculty of Humanities have the highest mean score with 3.85, followed by Faculty of Social and Political Science with 3.76, and Faculty of Economics and Business as well as Faculty of Pscyhology, both of which acquired the same score of 3.75. Finally, the lowest mean score is acquired by respondents from Faculty of Law with the score of 3.69. The mean score of each faculty is categorized as high.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

CONCLUSION

Based on the analysis of result, it can be noted that the final year students of the social humaniora field of University of Indonesia have a high category of Enterpreneurship Profile. Particularly, University of Indonesia may provide coaching clinic to students of University of Indonesia regarding enterpreneurship skills, as well as facilitating an avenue for successful individuals with high working spirit to share their experience with students.

REFERENCES

A.A. Anwar Prabu Mangkunegara. 2001. *Manajemen sumber daya manusia perusahaan, Bandung : Remaja Rosdakarya*.

Al-Karin, Ahmad Yusuf dan Segar Handoyo.*2013.Kepribadian Entrepreneur Pada Mahasiswa Universitas Airlangga.*

Andreas *Budiharjo*. 2011. *Organisasi:menuju pencapaian kinerja optimal*. Jakarta: Prasetya Mulya Publishing

Asef Karimi, Iraj Malekmohamadi, Mahmoud Ahmadpour Daryani, Ahmad..Rezvanfar. 2011 *A Conceptual Model of Intrapreneurship in the Iranian agricultural extension organization: Implication for HRD.* Journal of European Industrial Training. Vol.35

Bezzina, F. Characteristics of the Maltese Entrepreneur. 2010. *International Journal of Arts and Sciences.*

Breeda Mccarthy.2003*The Impact of Entrepreneurs Personality on the strategy formation and planning process in SME*.

Cooper, D. R. & Schindler, P. S. 2011. *Business Research Methods, 7edition*. New York: McGrawHill Publishing Company

Damar, R. A. H. 2009.*Motivasi Berprestasi Pada Mahasiswa Yang Berkuliah Dengan Jurusan Pilihan Orang Tua*. Jakarta: Universitas Gunadarma

Drucker, Peter F. 2014.*Innovation and Entrepreneurship*. Harper Collins

Geoffrey, G. Meredith, 2002.*Kewirausahaan Teori dan Praktek*. Jakarta: PT. Pustaka Binaman Presindo

Hasibuan, Malayu S.P, Drd.H. 2005.*Manajemen Sumber Daya Manusia,* Jakarta: : bumi Aksara

Hisrich, R.D dan Claudine Kearney. 2012*Corporate Entrepreneurship,How to Create a Thriving Entrepreneurial Spirit Throughout Your Company*. Mcgraw-hill

Hisrich, R.D., Peters, M.P., dan Shepherd D.A. 2008.*Kewirausahaan Edisi 7.* Edisi bahasa Indonesia. Jakarta: Salemba empat

Jeffrey R. Buehl.1996*Entrepreneur value orientations and characteristics effect on choice of organization strategies and resulting successful performance in auto glass replacement firms.*

Laksmono, Didy. 2004.*Peningkatan Kompetensi Sumber Daya Manusia Dalam Merespon Tugas Bank Indonesia di Masa Depan,*Makalah SESPIBI angkatan XVI,

Lupiyoadi, Rambat dan A.Hamdani. 2008. *Manajemen Pemasaran Jasa,* cetakan keempat. Salemba Empat, Jakarta

Neuman, W. L. 2007. *Basics of Social Research: Quantitative and Qualitative Approaches (2nd ed.)*. Boston: Allyn and Bacon.

Sekaran, Uma. 2003. Research methods for business: A skill building approach. United States of America: John willey & Sons.

Sekaran, Uma & Bougie, Roger. 2013. *Research Methods for Business: A Skill-Building Approach (sixth edition)*. Wiley.

Sugiyono. 2004. *Metode Penelitian Bisnis*. Bandung: CV Alfabeta

Suryana. 2000. *Ekonomi Pembangunan, Problematika,dan Pendekatan.* Jakarta: Salemba Empat

Suryana. 2006. *Kewirausahaan, Pedoman Praktis, Kiat dan Proses Menuju Sukses.*Jakarta: Penerbit Salemba Empat

Ulrich, Dave. *Human Resource Champions.* Boston. Massachusetts: Harvard Business School Press. 1997

Umar, Husein. (2002). *Method Riset Bisnis*. Jakarta: PT Gramedia Pustaka Utama

Wahyuningsih, Sri Handari dan Ika Nurul Qamari. 2011. *Eksplorasi Urgensi Pembelajaran Kewirausahaan di Perguruan Tinggi.* Universitas Muhammadiyah Yogyakarta

Zimmerer, Thomas W., Norman M. Scarborough. *Essentials of Entrepreneurship and Small Business Management*. 2012. 3rd Edition, Prentice Hall, Upper Sadleriver

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MENTAL IMAGES OF CHILD DEVELOPMENT AND PRESCHOOL EDUCATION STUDENTS ON THE CONCEPT OF "CHILD" (KIRIKKALE SAMPLE)

Aygen Çakmak
Department of Child Development
Kırıkkale University
ayalp71@gmail.com

Damla Pektaş
Department of Child Development
Kırıkkale University
damlapkts@hotmail.com

Ezgi Akıncı Demirbaş
Department of Child Development
Kırıkkale University
akinciezgi87@gmail.com

ABSTRACT
The aim of this study was to identify the mental images of Child Development and Preschool Education students on the concept of "child" through metaphors. The study group comprised 155 students attending Kırıkkale University, Faculty of Health Sciences, Departments of Child Development and Preschool Education in the 2014-2015 academic year. The data of the phenomenological study were collected with qualitative research methodology. The participants were requested to complete the sentence "A child is like … because …," in order to reveal their metaphors on the concept of "child." The students' statements were the primary source of data for the study. The metaphors constructed by the students were compiled under the 10 conceptual categories developed by Kuyucu et al. (2013). Data analysis showed that the child development and preschool education students developed 68 and 50 metaphors, respectively. "Child as the source of joy" and "child as the source of purity and love" were the conceptual categories that contained the greatest number of metaphors developed by the preschool education students, while "child as a raw material" and "child as the foundation of society and future" were the conceptual categories that comprised the greatest number of metaphors developed by the child development students.

Keywords: Metaphor, child, mental image.

INTRODUCTION

"Child" has always been a concept associated with different images in each society and period. While children were regarded as miniature adults in the 18th century, childhood is accepted to be a physically, cognitively and emotionally separate period of life in the 21st century and consequently social life is transforming in particular areas in parallel with the significance attributed to children.

A child's developmental domains are supported within the triangle of family, school and stimulating environment. Adherence to the principles recognized in child development, correct interventions applied at the necessary place and time, and an approach suitable for individual differences is of great importance in child development. In education, equivalent elements are often interchangeably used to facilitate learning and to ensure retention, particularly for the acquisition of new knowledge (Öztürk, 2007). Metaphor, assumed to be mainly used in literature, is actually a linguistic analogy frequently used in daily life. A metaphor is suitable for a linguistic usage where one of two different equivalent elements are used in place of the other. According to Lakoff and Johnson (2005), a metaphor allows understanding and experiencing a phenomenon in terms of another. A metaphor is primarily a means of perception and involves transferring information from a known domain to a new/unknown one (as cited in Güveli et al., 2011). In essence, a metaphor is understanding and expressing something in terms of another (Lakoff and Johnson, 2005, as cited in Öztürk, 2007).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

As the definitions indicate, a metaphor is expressing a concept or a phenomenon as perceived using analogies. According to Forceville (2002), three questions need to be answered for something to be regarded as a metaphor: 1- What is the subject of the metaphor? 2- What is the source of the metaphor? 3- What are the features meant to be attributed from the source to the subject (as cited in Aydın and Ünaldı, 2010). Saban (2004) illustrated this relationship with an example: *The subject of the metaphor* (For example, the word "teacher" in "The teacher is like a gardener."), *the source of the metaphor* (gardener) and *the features attributed from the source to the subject* (the teacher's attention to individual differences of the students in the classroom like a gardener attends each sapling separately). He explained that the source of the metaphor functioned as a filter or screen in understanding the subject of the metaphor with a different perspective.

The metaphor has a similar usage to concepts such as simile and analogy in Turkish and has recently become one of the most important instruments of data collection in qualitative research. A metaphor can be defined as expressing a concept or situation with another concept or situation based on the symbolic use of language. Numerous studies have been conducted on metaphors in various disciplines of social sciences since the 1980s. Some of these studies pertain to education (Aydın and Pehlivan, 2010).

First and foremost, how members of occupational groups who work with children and their families perceive children could be one of the determining factors of their relationship with children in the future. In this respect, mental images or metaphors of professionals and professional candidates working in fields such as child development and preschool education can be regarded as a concrete outcome of this query.

THE STUDY

The study was aimed at identifying the mental images of students attending Child Development and Preschool Education departments at Kırıkkale University regarding the concept of "child" through metaphors. The study was conducted with the participation of 155 students (86 child development, 69 preschool education) attending the first and the second years of university in the 2014-2015 academic year. The Child Development and Preschool Education students participating in the study were requested to complete the sentence "A child is like … because …," in order to discover their metaphors on the concept of "child." The students were asked to focus only on a single metaphor and to express their thoughts. The metaphors constructed by the students constituted the primary source of data for the study. Content analysis was used in the analysis of the study data. The primary goal in content analysis is to arrive at relationships and concepts that could explain the data (Aydın, F. and Eser Ünaldı, Ü. 2010). In content analysis, similar data are compiled under specific themes and concepts. These concepts are organized and interpreted in a way the reader can understand (Yıldırım and Şimşek, 2006). Subsequently, the constructed metaphors were compiled under the 10 conceptual categories developed by Kuyucu et al. (2013). The findings were presented as frequency and percentage distributions.

FINDINGS

This study was carried out with the participation of 155 students (86 child development, 69 preschool education) attending the first and the second years of university in the 2014-2015 academic year. The metaphors on the concept of "child" developed by the participants were compiled under 10 different conceptual categories and the results were presented in tabular form. The percentages of the students attending the first and the second year at the university were 50.96% and 49.04%, respectively.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 1: Metaphors developed by the Child Development students on the concept of "child"

Metaphor Code	Metaphor Name	f	%	Metaphor Code	Metaphor Name	f	%
1	World	3	3.5	**29**	Flower bud	1	1.2
2	Rainbow	2	2.3	**30**	Butterfly	1	1.2
3	Life	2	2.3	**31**	Telephone	1	1.2
4	Angel	6	6.9	**32**	Home	1	1.2
5	Cotton	1	1.2	**33**	Rose	2	2.3
6	The joy of the house	2	2.3	**34**	Pomegranate	1	1.2
7	Tangled ball of yarn	2	2.3	**35**	Future	1	1.2
8	Purity	2	2.3	**36**	Sponge	2	2.3
9	Tree	3	3.5	**37**	Blank Slate (Tabula Rasa)	1	1.2
10	Flower	5	5.8	**38**	Smiling	1	1.2
11	Water	5	5.8	**39**	Self	1	1.2
12	Happy trouble	1	1.2	**40**	Architect	1	1.2
13	Field	1	1.2	**41**	Bridge to the future	1	1.2
14	Clay	3	3.5	**42**	Innocence	1	1.2
15	Naughty	1	1.2	**43**	Guarantee of the future	1	1.2
16	Monster	1	1.2	**44**	Philosopher	2	2.3
17	Daisy	1	1.2	**45**	Blank sheet of paper	1	1.2
18	Flying balloon	1	1.2	**46**	Leaf falling in autumn	1	1.2
19	Candy	1	1.2	**47**	The flavor of life	1	1.2
20	Sprout	1	1.2	**48**	Sapling	2	2.3
21	Human	1	1.2	**49**	Sea	1	1.2
22	Toy	1	1.2	**50**	From birth to death	1	1.2
23	Hope of the next generation	1	1.2	**51**	Light	1	1.2
24	Robot	1	1.2	**52**	Foundation of a house	1	1.2
25	Sun	1	1.2	**53**	Basic need	1	1.2
26	Joy	2	2.3	**54**	Building	1	1.2
27	Miracle	1	1.2	**55**	Amusement park	1	1.2
28	Bread	1	1.2	**56**	White	1	1.2
				TOTAL		86	100.00

According to Table 1 The child development students developed 56 different metaphors on the concept of "child."

Table 2: Metaphors developed by the Preschool Education students on the concept of "child"

Metaphor Code	Metaphor Name	f	%	Metaphor Code	Metaphor Name	f	%
1	Flower	11	15.8	**23**	Ant	1	1.5
2	Angel	4	5.6	**24**	Chocolate	1	1.5
3	Candy	4	5.6	**25**	Lollipop	1	1.5
4	Water	5	7.1	**26**	Work of art	1	1.5
5	Sapling	3	4.1	**27**	Tree roots	1	1.5
6	Joy	2	2.7	**28**	Colors	1	1.5
7	Mirror	2	2.7	**29**	Every color of the rainbow	1	1.5
8	Book	1	1.5	**30**	Clay	1	1.5
9	Garden	2	2.7	**31**	Cloud	1	1.5
10	Smile	1	1.5	**32**	White rose	1	1.5
11	Ocean	1	1.5	**33**	Seed	1	1.5
12	Rainbow	2	2.7	**34**	Manti (Turkish dumpling)	1	1.5
13	Novel	1	1.5	**35**	Perfume	1	1.5
14	Jar	1	1.5	**36**	Amusement park	1	1.5
15	Extract	1	1.5	**37**	Empty box	1	1.5
16	Rose	1	1.5	**38**	Fruit	1	1.5
17	Emotions	1	1.5	**39**	Little adult	1	1.5
18	Heart	1	1.5	**40**	Soil	1	1.5
19	Snow-white page	1	1.5	**41**	Sun	1	1.5
20	Reason to live	1	1.5	**42**	Tree	1	1.5
21	Cheesecake	1	1.5	**43**	Glue	1	1.5
22	Nature	1	1.5				
					TOTAL	69	100.00

 Copyright © International Conference on New Horizons in Education Conference (INTE)

According to Table 2 preschool education students developed 43 different metaphors on the concept of "child."

Table 3: Metaphor categories for the concept of "child"

	Child Development			Preschool Education		
Categories	**Metaphors**	**N**	**f**	**Metaphors**	**N**	**f**
Child as a reflector	Concrete (1), toy (1), robot (1), sponge (1), water (2), foundation of a house (1), building (1)	8	7	Emotions (1), rainbow (1), mirror (2)	4	3
Child as a passive receptor	Naughty (1), monster (1), human being who needs protection (1), blank slate (1), tree (1), philosopher (1), sponge (1), white sheet of paper (1)	8	8	White sheet of paper (1), jar (1), Empty box (1), tree (1)	4	4
Child as a growing being	Life (1), Water (2), process between birth and death (1), philosopher (1)	5	4	Flower (1), rainbow (1), ant (1), tree roots (1), soil (1)	5	5
Child as a valuable being	Flower (1), miracle (1), rose (1), pure (1), leaf (1), candy (1)	6	6	Flower (2), rose (1), pure (1), heart (1), water (1), fruit (1)	6	5
Child as a raw material	Cotton (1), tree (2), field (1), clay (2), daisy (1), sprout (1), flower (3), ball of yarn (1), flower bud (1), telephone (1), light (1)	15	11	Novel (1), water (1), garden (2), work of art (1), sapling (1), perfume (1), flower (1)	8	7
Child as the source of joy	Smiling (1), life (2), peace and joy (1), basic need (1), amusement park (2), joy (2)	9	6	Joy (4), book (1), candy (5), chocolate (1), rainbow (1), favorite food (manti) (1), sun (1)	13	7
Child as the source of purity and love	Angel (6), joy (1), butterfly (1), always innocent, natural and sincere; in a Word him/herself (1), white (1)	10	5	Angel (3), white (1), smile (1), reason to live (1), all colors (1), cloud (1), flower (2), water (3)	13	9
Child as the foundation of society and future	World (1), rainbow (2), joy (1), flying balloon (1), bread (1), home (1), hope (1), future (2), beauty spot (1), architect (1), life (1)	14	12	Extract (1), flower (1), adult (1)	3	3
Child as an unknown mysterious being	Ball of yarn (1), sun (1), pomegranate (1), world (2), sea (1)	6	5	Ocean (1), nature (1), clue (1)	3	3
Child as a being is need of affection and care	Clay (1), sapling (2), water (1), rose (1)	5	4	Sapling (1), flower (6), rose (1), seed (1), tree (1)	10	4
TOTAL		86	68		69	50

Conceptual Categories

The conceptual categories given in Table 3 and the statements of the students are presented with examples below.

1.Child as reflector: 7 metaphors by 8 child development students and 3 metaphors by 4 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is like concrete yet to dry because everything leaves its mark on it." (S15)

● "A child is like a mirror because it reflects whatever we teach. Whatever the environment does, it is the child's core that matters." (S150)

2.Child as passive receptor: 7 metaphors by 8 child development students and 3 metaphors by 4 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is like a philosopher because he/she always asks questions and is open to learning." (S63)

● "A child is like an empty box because he/she instantly learns whatever you teach." (S140)

3.Child as a growing being: 4 metaphors by 5 child development students and 5 metaphors by 5 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is like a little philosopher because he/she cleverly interprets the world and is curious about everything." (S83)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

● "A child is like an ant because he/she never tires and never stops." (S118)

4.Child as a valuable being: 6 metaphors by 6 child development students and 5 metaphors by 6 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is like a rose because the more it is valued the more beautifully it blossoms." (S47)

● "A child is like a heart because it is a part, the most important part, of you." (S99)

5.Child as raw material: 11 metaphors by 15 child development students and 7 metaphors by 8 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is like a field because you reap what you sow." (S17)

● "A child is like a garden of love because the more you love and labor the more colorful and plentiful your garden becomes." (S88)

6.Child as source of joy: 6 metaphors by 9 child development students and 7 metaphors by 13 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is like smiling because it gives joy." (S52)

● "A child is like a lollipop that sweetens life because when you eat it, the taste remains, sweetening life, your mouth." (S118)

7.Child as source of purity and love: 5 metaphors by 10 child development students and 9 metaphors by 13 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is like the color white because he/she stands before you in his/her purest, most beautiful and most natural state. A child is one who smiles with his/her entire purity." (S85)

● "A child is like water because he/she is pure, clean and innocent." (S138)

8.Child as foundation of society and future: 12 metaphors by 14 child development students and 9 metaphors by 13 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is the hope of the next generation because how a child is raised determines society's level of development." (S30)

● "A child is like a little adult ensuring the survival of the next generation because the child interacts with the environment to understand the world and to survive." (S139)

9.Child as an unknown mysterious being: 5 metaphors by 6 child development students and 3 metaphors by 3 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is like a world yet to be explored because it contains a life yet to be lived." (S79)

● "A child is like an ocean because it is resplendent and one could never know what will emerge from within." (S90)

10.Child as a being is need of affection and care: 4 metaphors by 5 child development students and 4 metaphors by 10 preschool education students represent this category. Examples of the students' statements in this category are as follows:

● "A child is like a sapling because if you take care of it well, it will bear fruit in return to your attention and love as a positive feedback." (S69)

● "A child is like a flower because it always needs attention, love and affection. It will wither and lose its colors (characteristics) when his/her needs are not satisfied." (S123)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

CONCLUSIONS

This study was conducted to identify the perceptions of child development and preschool education professionals on children through the mental images (metaphors) for the concept of "child" constructed by students attending these departments, to investigate the differences in these metaphors and to classify them under specific conceptual categories.

In the study, the child development (86) and preschool education (69) students constructed various metaphors to explain the concept of "child." The child development and preschool education students developed respectively 68 and 50 metaphors on the concept of "child." In addition child development students developed 56 different metaphors on the concept of "child" while preschool education students developed 43 different metaphors.
There are various studies on the construction of metaphors in educational environments in the literature. A prominent result of the metaphor studies conducted by Inbar (1996) on the concepts of "student," "teacher," "school administrator" and "school," by Hacıfazlıoğlu et al. (2001) on the concept of "technology leadership" of school administrators, by Ertan Kantos (2011) on the concept of "leadership," by Saban (2009) on the concept of "student" of prospective teachers, by Semerci (2007) on "curriculum development," by Aydın and Pehlivan (2010) on the concept of "geography" of prospective teachers, by Aydoğdu (2008) on the concept of "school," and by Töremen and Döş (2009) on the concept of "inspector" was the high number of metaphors developed by the participants on the respective concept or phenomenon.

The child development students used angel, water, flower, clay, tree and world metaphors most frequently for the concept of "child," while the preschool education students mostly preferred to use metaphors such as flower, water, angel, candy, sapling, mirror, garden, rainbow and joy. The metaphors used in common by the students of both departments reveal that these two closely associated departments have similar perspectives of children.

As Weade and Ernst (1990) indicate "metaphors are eclectic and represent only a single part of the phenomenon they try to explain, not the whole". "Child as the foundation of society and future" and "child as a raw material" were the conceptual categories that contained the greatest number of metaphors developed by the child development students. The child development students constructed 12 metaphors in this category that comprised 17% of the study group. This category is followed by "child as a raw material." The child development students constructed 11 metaphors in this category that comprised 16% of the study group. The categories with the least number of metaphors were "child as a growing being" and "child as a being in need of affection and care," with 4 metaphors in each category.

"Child as the source of purity and love" and "child as the source of joy" were the conceptual categories that contained the greatest number of metaphors developed by the preschool education students. The preschool education students constructed 9 metaphors in this category that comprised 18% of the study group. This category is followed by "child as a raw material" and "child as the source of joy," with 7 metaphors in each category. The categories with the least number of metaphors were "child as the foundation of society and future" and "child as an unknown mysterious entity." These categories contained 3 metaphors.

There is a similar case in other metaphor studies with different concepts and phenomena. Kuyucu et al. (2013) identified the mental images (metaphors) of preschool teachers on the concept of "child" using the metaphor technique. In the study, the conceptual category with the greatest number of metaphors constructed by the preschool teachers on the concept of "child" was "child as a raw material."

The study results show similar images in both the child development and the preschool education students. The students of both departments perceive "child" as purity, love, future and a raw material. This result indicates that the perception of the students from both occupational groups was based on affection and care for the child.

Metaphors can be a powerful research tool for understanding, discovering and explaining the perceptions of students on the concept of "child" (Saban, 2008). Metaphors could allow students to understand and, if need be, restructure the schemes they develop in their minds for particular educational phenomena. The present study provides insight in determining the perceptions of 1st and 2nd year university students attending the departments of child development and preschool education, and ascertaining whether there was a difference between the metaphors constructed by the two departments on the concept of "child."

This is a study on the phenomenon of "child". Metaphor studies could involve similar or different subjects. This study carried out with the participation of 1st and 2nd year university students attending the child development and preschool education departments could also be conducted with mothers, fathers, administrators and teachers. Metaphors could be adapted to learning environments. It could be beneficial especially for concretizing knowledge

 Copyright © International Conference on New Horizons in Education Conference (INTE)

in abstract fields like science. Metaphors could be employed in research both in characterization and as a conceptual key.

REFERENCES

Aydın, İ. S., and Pehlivan, A. (2010). Türkçe öğretmeni adaylarının "öğretmen" ve "öğrenci" kavramlarına ilişkin kullandıkları metaforlar. *Turkish Studies*, *5*(3), 818-842.

Aydın, F., and Eser-Ünaldı, Ü. (2010). Coğrafya öğretmen adaylarının Coğrafya kavramına ilişkin algılarının metaforlar yardımıyla analizi. *International Online Journal of Educational Sciences*, *2*(2), 600-622.

Ertan-Kantos, Z. (2011). Örgüt metaforlarında liderlik: Kavramsal bir çözümleme. *Eğitim Bilimleri Araştırmaları Dergisi-Journal of Educational Sciences Research*, *1*(1), 135-158.

Forceville, C. (2002). *Pictorial metaphor in advertising*. Routledge.

Güveli, E., İpek, A. S., Atasoy, E., and Güveli, H. (2011). Sınıf öğretmeni adaylarının matematik kavramına yönelik metafor algıları. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, *2*(2).

Hacifazlioğlu, Ö., Karadeniz, Ş., and Dalgiç, G. (2011). Okul yöneticilerinin teknoloji liderliğine ilişkin algıları: metafor analizi örneği. *Eğitim Bilimleri Araştırmaları Dergisi-Journal of Educational Sciences Research*, *1*(1).

Inbar, D. E. (1996). The free educational prison: Metaphors and images. *Educational research*, *38*(1), 77-92.

Kuyucu, Y., Şahin M., Kapıcıoğlu, O. (2013, Mayıs), Okul Öncesi Öğretmenlerinin "Çocuk" Kavramına İlişkin Sahip Oldukları Zihinsel İmgeler, Eğitim ve Öğretim Araştırmaları Dergisi, Cilt: 2, Sayı: 2

Lakoff, G., Johnson, M., Çeviri: Demir, G., (2005, Mart), *Metaforlar Hayat, Anlam ve Dil*, Dil ve Felsefe Serisi 3, Paradigma Yayıncılık

Öztürk, Ç. (2007). Sosyal bilgiler, sınıf ve fen bilgisi öğretmen adaylarının "coğrafya" kavramına yönelik metafor durumları. *Ahi Evran Üniversitesi, Kırşehir Eğitim Fakültesi Dergisi*, *8*(2), 55-69.

Semerci, Ç. (2007). "Program Geliştirme" Kavramina İlişkin Metaforlarla Yeni İlköğretim Programlarina Farkli Bir Bakiş. *Sosyal Bilimler Dergisi/Journal of Social Sciences*, *31*(2).

Saban, A. (2004). Giriş düzeyindeki sinif öğretmeni adaylarinin "öğretmen" kavramina ilişkin ileri sürdükleri metaforlar. *Türk Eğitim Bilimleri Dergisi*, *2*(2), 131-155.

Saban, A. (2008). Okula ilişkin metaforlar. *Kuram ve Uygulamada Eğitim Yönetimi*, *55*(55), 459-496.

Saban, A. (2009). Öğretmen Adaylarinin Öğrenci Kavramina İlişkin Sahip Olduklari Zihinsel İmgeler. *Türk Eğitim Bilimleri Dergisi*, *7*(2).

Toremen, F., and Dos, I. (2009). The Metaphoric Perceptions of Primary School Teachers on the Concept of Inspection. *Educational Sciences: Theory and Practice*, *9*(4), 1999-2012.

Weade, R., & Ernst, G. (1990). Pictures of life in classrooms, and the search for metaphors to frame them. *Theory into Practice*, *29*(2), 133-140.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MESLEK YÜKSEKOKULLARI ELEKTRİK PROGRAMI "ELEKTRİK MAKİNELERİ I" DERSİNİN ÖĞRENCİ VE ÖĞRETİM ELEMANI GÖRÜŞLERİNE GÖRE DEĞERLENDİRİLMESİ

Engin DEMİR
Karabük Üniversitesi, Türkiye
engindemir@karabuk.edu.tr

Halime Şenay ŞEN
Gazi Üniversitesi, Türkiye
senay@gazi.edu.tr

ÖZET
Bu araştırmanın amacı Meslek Yüksekokulları Elektrik Programı Elektrik Makineleri I dersi öğretim programının, programın dört boyutu (amaç, içerik, eğitim durumları ve değerlendirme) çerçevesinde öğretim elemanı ve öğrenci görüşlerine göre değerlendirilmesi ve programın geliştirilmesine yönelik önerilerin belirlenmesidir. Araştırma örneklemini amaçlı örnekleme ile seçilen toplam 10 üniversiteye bağlı meslek yüksekokullarının elektrik programına kayıtlı, elektrik makineleri I dersini almış olan normal ve ikinci öğretim 449 II. sınıf öğrencisi ile Türkiye genelinde elektrik programı bulunan üniversitelere bağlı 134 meslek yüksekokulunda ilgili dersi okutan toplam 95 öğretim elemanı oluşturmaktadır. Araştırmada genel tarama modeli kullanılmıştır. Araştırmaya katılan öğrenci ve öğretim elemanlarına programın öğelerine yönelik görüşlerini almak amacıyla benzer içeriklere sahip 16 maddeli iki ayrı likert tipi ölçek uygulanmış ve programın geliştirilmesine yönelik öneri almak amacıyla ölçek maddelerinin dışında iki adet açık uçlu soruya yer verilmiştir. Elde edilen bulgular yorumlandığında, programın ne derece yeterli olduğu tespit edilmeye çalışılmış, programın etkinliğini artırmaya ve gelecekte yapılabilecek bilimsel araştırmalara yönelik önerilerde bulunulmuştur.

ABSTRACT
The purpose of this study is to evaluate the instructional program of Vocational High School Electrical Machinery I in the framework of the four dimensions of the program (objectives, content, teaching and learning processes, and evaluation) from the perceptions of instructors and students and to put forward some recommendations in order to improve the program. The sample of this study consisted of 449 second grade students enrolled in the program of the 10 universities and who took the electric machinery I, and 95 instructors teaching the related course at 134 vocational high schools of the universities having the electric program in Turkey. The method utilized in the study is the survey method. Two different likert type questionnaires with 16 items having similar content were applied to the students and instructors in order to identify their perceptions related to the elements of the program and two open tip questions were included to take suggestions with the aim of program improvement besides questionnaire items. When the findings were analyzed, program effectiveness was tried to be evaluated, the recommendations were offered in order to increase the program effectiveness and for further research.

GİRİŞ
Gelişmiş ya da gelişmekte olan ülkelerde eğitim, hükümetlerin öncelikli politikaları arasındadır. Bunun en önemli sebebi yüksek standartlarda bir yaşam sürdürmek ya da bu yaşamı elde etmek isteyen ulusların, nitelikli insan gücü yüzdesinde dünyada ön sıralarda olması gerektiğinin farkında olmasıdır. Küreselleşen dünyada meslek tanımları artık değişmiştir. Kural tabanlı mesleklerin yerini, kural tabanlı olmayan, problem çözmeye dayalı, araştırma becerileri, bilimsel düşünme ve iyi iletişim gibi çok yönlü yeteneklerin gerektirdiği meslekler almıştır. Sözü edilen değişimleri takip etmek eğitim kurumlarının görevidir. Eğitim kurumları bu görevini, nitelikli programlar hazırlayarak, bu programları uygulamaya koyarak ve programları sürekli geliştirerek yerine getirebilir. Çünkü programlar; bireye kazandırılacak davranış, öğretilecek bilgi, beceri ve değerleri belirlemekle birlikte, öğretme etkinlikleri ve değerlendirme çalışmalarına da kılavuzluk eder.

Meslek eğitimi denince ilk akla gelen mesleki ve teknik eğitim kavramlarıdır. Bu sebeple çoğu yazar meslek eğitimi ile ilgili yazdıkları eserlerde başlıkları mesleki ve teknik eğitim olarak ele almışlardır. Bu sebeple meslek eğitimi ve teknik eğitim meslek eğitiminin temel yapı taşını oluşturmaktadır. Bireye hayatını kazanması için belirli bir meslek alanına ilişkin bilgi, beceri ve alışkanlıkları kazandıran ve bireyin kabiliyetlerini çeşitli yönlerle geliştiren eğitim süreci olan mesleki ve teknik eğitim; meslek liseleri, meslek yüksekokulları ile mesleki ve teknik eğitim fakülteleri bünyesinde eğitim verilmektedir (Alkan, Doğan ve Sezgin,1998). Meslek

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Yüksekokulları, ortaöğretim sonrası, ön lisans kademesinde, becerili işçi ile mühendis arasındaki orta kademe teknik insan gücünün yetiştirilmesini amaçlayan yükseköğretim kurumlarıdır. Teknikerlik eğitiminin ortaöğretim sonrası iki yıllık eğitim ile sağlanması dünyada yaygın bir uygulamadır. Ortaöğretim sonrası önlisans programları yaptığı görev yönünden mühendis ve araştırmacıya daha yakın olan teknikerleri yetiştirmeyi amaçlar. Programların kapsamında fen, matematik ve uygulamalı teknik derslerin ağırlığı ortaöğretim kademesinde uygulanan meslek eğitimi programlarına oranla daha fazladır.

Meslek eğitimi veren kurumların teknolojik gelişmeler ve yeni iş alanları çerçevesinde sanayi sektörünün ihtiyacını karşılaması yanında kişinin hayatını sürdürmesindeki gereksinimleri sağlamada kendi kendine yeterli bireyleri eğitmesi temel amaçları içindedir. Hızla gelişen teknoloji karsısında eğitim kurumlarında gelişen teknoloji göz önünde bulundurularak bir süreç olarak düşünülmesi gereken program değerlendirme çalışmaları yapılmalıdır. Bu çalışmaların devamında mevcut eğitim kurumlarındaki programların yenilenmesi, nitelikli ve isteğe yönelik iş gücünün artması, buna bağlı olarak sanayinin gelişmesi bunun sonucunda da ülke ekonomisinin iyi bir seviyeye gelmesi sağlayacağı varsayılmaktadır.

Teziç (2007:11) meslek yüksekokullarının öğretim programlarının iş dünyasının taleplerini karşılamada yeterli olmadığını belirtmektedir. TÜSİAD, mesleki ve teknik eğitimde kuramsal bilgi ile işyerlerinde uygulamalı eğitimin bir denge içinde sunulması önemli olup, işgücü piyasasının ihtiyaçları doğrultusunda düzenli aralıklarla öğretim programının güncellenmesi gerektiği görüşünü dile getirmektedir. Sözü edilen ihtiyaçları karşılayabilmek pek tabi ki kaliteli bir eğitim ve nitelikli öğretim programlarıyla mümkündür. Bu maksatla elektrik makineleri I dersi öğretim programı değerlendirilmeli, teknolojik alandaki gelişmeler ve eğitim alanındaki yenilikler göz önünde bulundurularak geliştirilmelidir. Araştırma sonuçları ışığında yapılacak bir program geliştirme çalışmasının, ilgili öğretim programının niteliğinin artırmasına, öğretim elemanları ve öğrencilerin beklenti ve ihtiyaçlarına daha çok cevap veren bir boyuta taşınmasına yardımcı olabileceği düşünülmektedir.

Elektrik makineleri, konutlarda ve sanayinin istisnasız tüm dallarında kullanıyor olması açışından oldukça önemlidir ve sürekli teknolojisi güncellenmektedir. Bu bağlamda, elektrik alanında en köklü derslerden biri olan Elektrik makineleri I dersi öğretim programının; amaç, içerik, eğitim durumları ve değerlendirme boyutlarına yönelik, öğretim elemanları ve öğrenci görüşlerinin tespit edilmesi, programının uygulanması sırasında ortaya çıkan sorunların belirlenmesine ışık tutacak, programın üzerinde ne tür değişikler yapılması gerektiğine yönelik fikir verecektir.

YÖNTEM

Betimsel yöntem kullanılan bu araştırmanın yürütülmesinde genel tarama modeli kullanılmıştır. Araştırma ile Meslek Yüksekokulları Elektrik Programı Elektrik Makineleri I dersi öğretim programı, öğretim elemanı ve öğrenci görüşleri doğrultusunda değerlendirilmiştir. Tarama modellerinde; mevcut durumlar ve şartlar aynen ortaya konulmaya çalışılır. Yapılan araştırmada program değerlendirme modeli olarak, Erden'in (1998) "programın öğelerine yönelik değerlendirme" modeli seçilmiştir. MYO elektrik programının hedef, içerik, eğitim durumları ve değerlendirme boyutlarının uygulamalarını incelemek amacıyla öğretim elemanı ve öğrenci görüşleri alınmıştır.

Araştırmanın Amacı

Araştırmanın amacı Meslek Yüksekokulları Elektrik Programı Elektrik Makineleri I dersi öğretim programının, programın dört boyutu olan; amaç, içerik, eğitim durumları ve değerlendirme unsurları temel alınarak, öğretim elemanı ve öğrenci görüşlerine göre değerlendirilmesidir.

Bu amaç kapsamında araştırmada şu sorulara yanıt aranmıştır:

- Elektrik makineleri I dersi öğretim programının amaç, içerik, eğitim durumları ve değerlendirme öğelerine ilişkin; öğretim elemanlarının görüşleri nelerdir?
- Elektrik makineleri I dersi öğretim programının amaç, içerik, eğitim durumları ve değerlendirme öğelerine ilişkin; öğrencilerin görüşleri nelerdir?
- Elektrik makineleri I dersi öğretim programının amaç, içerik, eğitim durumları ve değerlendirme öğelerine ilişkin; öğretim elemanlarının ve öğrencilerin görüşleri arasında anlamlı bir farklılık var mıdır?

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Çalışma Grubu

Araştırma evrenini, Türkiye genelinde elektrik programı bulunan üniversitelere bağlı 134 meslek yüksekokulunda ilgili dersi okutan öğretim elemanları ile dersi almış olan toplam 10.106 öğrenci oluşturmaktadır. Araştırma örneklemini, 2009–2010 öğretim yılı bahar döneminde, amaçlı örnekleme ile seçilen toplam 10 üniversiteye bağlı meslek yüksekokullarının elektrik programına kayıtlı, elektrik makineleri I dersini almış olan normal ve ikinci öğretim 449 II. sınıf öğrencisi ile Türkiye genelinde elektrik programı bulunan üniversitelere bağlı 134 meslek yüksekokulunda ilgili dersi okutan toplam 95 öğretim elemanı oluşturmaktadır. Bu öğretim elemanları 81 farklı meslek yüksekokulunda görev yapmaktadır. Öğrenci anketlerinin gönderildiği meslek yüksekokullarının seçiminde araştırmacının ulaşım kolaylığı ile Türkiye'nin farklı bölgelerinde bulunmaları göz önünde bulundurulmuştur.

Araştırma kapsamında öğretim elemanları için evrenin tamamına ulaşılmaya çalışılmıştır. Öğrenci sayısının belirlenmesinde ise örneklem seçimine gidilmiş ve 2009 –2010 öğretim yılı bahar döneminde, Türkiye genelinde sözü edilen elektrik programlarına kayıtlı olan II. sınıf öğrenci sayısının ÖSYM istatistiklerine göre 10.106 olması ve araştırmacının öğrencilere ulaşma zorluğu sınırlılık olarak dikkate alınmıştır. Örneklem seçilen öğrenci sayısı uzman görüşleri doğrultusunda belirlenmiştir. Öğrenci anketlerinin uygulandığı meslek yüksekokulları ile yüzde ve frekans dağılımları tablo 1'de verilmiştir.

Tablo 1. Öğrencilerin Meslek Yüksekokullarına Göre Yüzde ve Frekans Dağılımları

	Meslek Yüksekokulu Adı	f	%
1.	Gazi Üniversitesi Atatürk MYO	43	9,6
2.	Iğdır Üniversitesi Iğdır MYO	23	5,2
3.	Kahramanmaraş Sütçü İmam Üniversitesi MYO	57	12,7
4.	Karabük Üniversitesi MYO	60	13,4
5.	Kastamonu Üniversitesi Kastamonu MYO	49	11
6.	Kocaeli Üniversitesi Kocaeli MYO	49	11
7.	Mersin Üniversitesi Teknik Bilimler MYO	42	9,4
8.	Pamukkale Üniversitesi Denizli MYO	54	12
9.	Sinop Üniversitesi MYO	24	5,3
10.	Uşak Üniversitesi Uşak MYO	47	10,4
Toplam		**449**	**100**

Verilerin Toplanması

Bu araştırmada veri toplama aracı olarak araştırmacı tarafından geliştirilen anket kullanılmıştır. Araştırmacı tarafından hazırlanan veri toplama aracının geliştirilmesi aşamasında öncelikle konuyla ilgili literatür incelenmiş, elde edilen veriler yardımıyla veri toplama aracının kavramsal yapısı ve buna dayalı olarak ana çerçevesi belirlenmiştir. Anket, Meslek Yüksekokulları Elektrik Programı Elektrik Makineleri I dersi öğretim programının öğretim elemanı ve öğrenci görüşleri doğrultusunda değerlendirilmesi amacıyla hazırlanmıştır. Anketin ilk bölümünde öğretim elemanı ve öğrencilere yönelik kişisel bilgi soruları, ikinci bölümünde ise Elektrik Programı Elektrik Makineleri I dersi öğretim programını değerlendirmeye yönelik sorular yer almaktadır. Öğretim elemanı anketi e-posta yoluyla tüm öğretim elemanlarına ulaştırılmıştır. Cevaplanan anketlere ait veriler oluşturulan veri tabanına kaydedilmiştir. Ölçekte anket maddelerinden bağımsız olarak, öğrenci ve öğretim elemanlarının programın geliştirilmesine yönelik görüş almak amacıyla bir adet üç seçenekli soru ile bir adet açık uçlu soruya yer verilmiştir.

Anketin kapsam geçerliliğini belirlemek amacıyla uzman görüşleri alınmıştır. Yapı geçerliliği ve güvenirliğini belirleyebilmek için ise araştırma örneklemine giren Meslek Yüksekokullarında görev yapan öğretim elemanlarına ve öğrencilere ön uygulaması yapılmıştır. Ankette program değerlendirme ile ilgili maddelere "Hiç katılmıyorum", "Katılmıyorum", "Kısmen katılıyorum", "Büyük ölçüde katılıyorum", "Tamamen katılıyorum" arasında beşli bir derecelendirme kullanılmıştır. Her seçenek olumsuzdan olumluya artmak üzere birden beşe kadar puanlanmıştır.

Ön uygulama sonuçlarından elde edilen verilere Faktör Analizi uygulanmıştır. Yapı geçerliliğinin tespit edilmesi amacıyla Temel Bileşenler Analizi Tekniği (Principal Component Analysis) kullanılarak, ölçeğin faktör yapısı

 Copyright © International Conference on New Horizons in Education Conference (INTE)

belirlenmeye çalışılmıştır. 26 maddeden oluşan ölçeğin faktör sayısına müdahale edilmeyerek faktörler serbest bırakılmıştır. Temel bileşenler analizinde Kaiser-Meyer Olkin (KMO) değeri .82 bulunmuş ve eigen değeri 1.00'den büyük olan maddeler ölçeğe alınmıştır. Ölçeğin birbirinden bağımsız alt faktörlerini belirlemek için varimax dik döndürme yöntemi kullanılmıştır. Faktör örüntüsünün oluşturulmasında faktör yüklerinin alt kesme noktası olarak 0.45 değeri esas alınmıştır.

Ölçeğin her bir alt faktör için güvenirliğin bir göstergesi olarak alfa iç tutarlık katsayısı ve bu kapsamda madde toplam korelasyonları hesaplanmıştır. Madde toplam korelasyonları 0.30'un altında kalan ve eksi değere sahip maddeler ölçekten çıkarılmıştır. Yapılan analizler sonucunda ölçeğin dört faktörlü çıktığı, bu haliyle anketin hazırlanmasında dikkate alınan Elektrik Programı Elektrik Makineleri I dersi öğretim programını değerlendirmeye yönelik dört yapıyı (hedefler, içerik, öğrenme-öğretme süreci ve değerlendirme) yansıttığı düşünülmüştür. Tüm kriterler göz önünde bulundurularak yapılan değerlendirme sonucunda 26 maddelik deneme ölçeğinin 10 maddesi ölçekten çıkarılmış son durumda ankette 16 madde kalmıştır. Yapılan analiz sonucunda faktör yük değerlerinin, dört faktör için .57 ile .85 arasında yüksek düzeyde değiştiği görülmektedir.

Dört faktörlü bir yapıya sahip olduğu saptanan ölçeğin her bir alt faktör için madde toplam korelasyonları I. Faktör için .31 ile .57; II. Faktör için .34 ile .64; III. Faktör için .42 ile .57 IV. Faktör için de .47 ile .62 arasında değişmektedir. Ölçeğin güvenirliliğini belirlemek amacıyla Cronbach Alpha iç tutarlık katsayıları hesaplanmıştır. Güvenirlik çalışmaları 95 kişilik öğretim elemanı örnekleminden elde edilen veriler üzerinden yapılmıştır. Ölçeğin iç tutarlık katsayısı (Cronbach Alpha) .87 olarak bulunmuştur. Alt faktörlerden elde edilen iç tutarlık katsayıları sırasıyla .68, .79, .67, .83 olarak tespit edilmiştir. Ölçeğin geliştirilmesi aşamasında yapılan analizlerden elde edilen değerler tablo 2'de verilmektedir.

Tablo 2. Veri Toplama Aracı Geçerlik- Güvenirlik Analizi Sonuçları

FAKTÖRLER	Faktör Ortak Varyans	Varimax Faktör Yükleri	Madde Toplam Korelasyon	Eigen Değeri	Faktör Açıklanan Varyans %	Cronbach alpha
Faktör 1: Amaç				5,659	21,996	,677
Madde 1	,626	,651	,565			
Madde 2	,751	,845	,308			
Madde 3	,595	,630	,518			
Faktör 2: İçerik				1,962	16,511	,787
Madde 6	,665	,779	,341			
Madde 7	,656	,644	,523			
Madde 8	,645	,575	,609			
Madde 9	,428	,595	,463			
Madde 10	,787	,781	,635			
Faktör 3: Öğrenme öğretme süreci				1,365	12,435	,670
Madde 17	,567	,708	,420			
Madde 18	,622	,746	,448			
Madde 19	,644	,602	,572			
Faktör 4: Değerlendirme				1,034	11,684	,832
Madde 20	,634	,739	,492			
Madde 22	,719	,796	,606			
Madde 23	,645	,748	,618			
Madde 25	,645	,749	,562			
Madde 26	,391	,573	,471			
Ölçek Toplam					62,625	,868

Varimax rotasyonlu temel bileşenler faktör analizi (Principal components factor analysis).
K-M-O Örneklem Yeterliliği Ölçüsü = 0.822, Bartlett Test of Sphericity = 601,427; $p < 0.000$

 Copyright © International Conference on New Horizons in Education Conference (INTE)

BULGULAR

Araştırmaya katılan öğretim elemanlarının yaşları homojen dağılmış olup en fazla öğretim elemanı 41 yaş ve üzeri(%32) aralığındadır. Araştırmaya katılan öğretim elemanlarının kıdemleri 5 yıl ve altı(%28) ile 16 yıl ve üzeri(%38) kıdem aralığında yoğunlaşmaktadır. Öğretim elemanlarının %65'i teknik eğitim fakültesi mezunu, %35'i ise mühendislik fakültesi mezunudur. Araştırmaya katılan öğrencilerin %81'i 17-22 ve %19'u 23 ve üzeri yaş aralığında dağılım göstermektedir. Öğrencilerin %45'i 2.50 ve altı başarı ortalaması aralığında yer almakta olup bu sayı öğrencilerin başarı ortalaması arttıkça azalmaktadır. Bu durum elektrik programında öğrenim gören öğrencilerin başarı ortalamalarının oldukça düşük olduğunu göstermektedir.

Öğretim Elemanları ve Öğrencilerin Programın Amaç Boyutunu Değerlendirmelerine İlişkin Görüşlerinin Dağılımı

Öğretim elemanlarının ve öğrencilerin programın amaçları konusundaki değerlendirmelerine ilişkin görüşleri tablo 3'te yer almaktadır.

Tablo 3. Öğretim Elemanları ve Öğrencilerin Programın Amaç Boyutunu Değerlendirmelerine İlişkin Görüşlerinin t Testi Sonuçları

GÖRÜŞLER / Amaçlar	Grup	N	$\bar{x}$	Ss	SD	t	P
Amaç	Öğren.	449	3,37	,76	542	3,703	,000*
	Öğret. Elem.	95	3,63	,59			

*P <.05

Tablo 3. incelendiğinde araştırmaya katılan öğrencilerin programın amaç boyutunu değerlendirmelerine ilişkin görüşlerinin puan ortalamalarının $\overline{X}$ =3,37 "kısmen katılıyorum" şeklinde ve öğretim elemanlarının aynı boyutla ilgili değerlendirmelerine ilişkin görüşlerinin puan ortalamalarının $\overline{X}$ =3,63 " büyük ölçüde katılıyorum" şeklinde yoğunlaştığı gözlenmektedir. Bu ortalamalar arasında anlamlı bir farklılığın olup olmadığını belirlemek amacıyla yapılan t-testi sonucunda, öğrencilerin ve öğretim elemanlarının görüşleri arasında α= 0.05 düzeyinde anlamlı bir farklılığın olduğu görülmektedir (t=3,70, p<0.05).

Öğretim Elemanları ve Öğrencilerin Programın İçerik Boyutunu Değerlendirmelerine İlişkin Görüşlerinin Dağılımı

Öğretim elemanlarının ve öğrencilerin programın içeriği konusundaki değerlendirmelerine ilişkin görüşleri tablo 4'te yer almaktadır.

Tablo 4. Öğretim Elemanları ve Öğrencilerin Programın İçerik Boyutunu Değerlendirmelerine İlişkin Görüşlerinin t Testi Sonuçları

GÖRÜŞLER / İçerik	Grup	N	$\bar{x}$	Ss	SD	t	P
İçerik	Öğren.	449	3,19	,64	542	,245	,806
	Öğret. Elem.	95	3,17	,62			

Tablo 4 incelendiğinde araştırmaya katılan öğrencilerin programın içerik boyutunu değerlendirmelerine ilişkin görüşlerinin puan ortalamalarının $\overline{X}$ =3,19 "kısmen katılıyorum" şeklinde ve öğretim elemanlarının aynı boyutla ilgili değerlendirmelerine ilişkin görüşlerinin puan ortalamalarının $\overline{X}$ =3,17 "kısmen katılıyorum"

 Copyright © International Conference on New Horizons in Education Conference (INTE)

şeklinde yoğunlaştığı gözlenmektedir. Bu ortalamalar arasında anlamlı bir farklılığın olup olmadığını belirlemek amacıyla yapılan t-testi sonucunda, öğrencilerin ve öğretim elemanlarının görüşleri arasında α= 0.05 düzeyinde anlamlı bir farklılığın olmadığı görülmektedir (t= ,245 p>0.05). Dolayısıyla öğrenci ve öğretim elemanlarının programın içerik boyutuyla ilgili görüşlerinin anlamlı bir farklılık oluşturmayacak şekilde benzerlik gösterdiği söylenebilir.

Öğretim Elemanları ve Öğrencilerin Programın Öğrenme-Öğretme Süreci Boyutunu Değerlendirmelerine İlişkin Görüşlerinin Dağılımı

Öğretim elemanlarının ve öğrencilerin programın öğrenme-öğretme süreci konusundaki değerlendirmelerine ilişkin görüşleri tablo 5'te yer almaktadır.

Tablo 5. Öğretim Elemanları ve Öğrencilerin Programın Öğrenme-Öğretme Süreci Boyutunu Değerlendirmelerine İlişkin Görüşlerinin t Testi Sonuçları

GÖRÜŞLER Öğrenme-Öğretme Süreci	Grup	N	$\bar{x}$	Ss	SD	t	P
Öğrenme-Öğretme Süreci	Öğren.	449	3,20	,81	542	6,595	,000*
	Öğret. Elem.	95	3,79	,73			

*P <.05

Tablo 5 incelendiğinde araştırmaya katılan öğrencilerin programın öğrenme öğretme süreçleri boyutunu değerlendirmelerine ilişkin görüşlerinin puan ortalamalarının $\overline{X}$ =3,20 "kısmen katılıyorum" şeklinde ve öğretim elemanlarının aynı boyutla ilgili değerlendirmelerine ilişkin görüşlerinin puan ortalamalarının $\overline{X}$ =3,79 "büyük ölçüde katılıyorum" şeklinde yoğunlaştığı gözlenmektedir. Bu ortalamalar arasında anlamlı bir farklılığın olup olmadığını belirlemek amacıyla yapılan t-testi sonucunda, öğrencilerin ve öğretim elemanlarının görüşleri arasında α= 0.05 düzeyinde anlamlı bir farklılığın olduğu görülmektedir (t= 6,595 p<0.05). O halde, öğrenme öğretme sürecinin öğretim elemanları açısından olumlu olduğu söylenebilir.

Öğretim Elemanları ve Öğrencilerin Programın Değerlendirme Boyutuna İlişkin Görüşlerinin Dağılımı

Öğretim elemanlarının ve öğrencilerin programın değerlendirme boyutuna ilişkin görüşleri tablo 6'da yer almaktadır.

Tablo 6. Öğretim Elemanları ve Öğrencilerin Programın Değerlendirme Boyutuna İlişkin Görüşlerinin t Testi Sonuçları

GÖRÜŞLER Değerlendirme	Grup	N	$\bar{x}$	Ss	SD	t	P
Değerlendirme	Öğren.	449	3,48	,75	542	7,339	,000*
	Öğret. Elem.	95	4,02	,62			
Genel Ortalama	Öğren.	449	3,15	,51	542	4,547	,000*
	Öğret. Elem.	95	3,38	,44			

*P <.05

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 6 incelendiğinde araştırmaya katılan öğrencilerin programın "değerlendirme" boyutunu değerlendirmelerine ilişkin görüşlerinin puan ortalamalarının $\overline{X}$ =3,48 "büyük ölçüde katılıyorum" şeklinde ve öğretim elemanlarının aynı boyutla ilgili değerlendirmelerine ilişkin görüşlerinin puan ortalamalarının $\overline{X}$ =4,02 "büyük ölçüde katılıyorum" şeklinde yoğunlaştığı gözlenmektedir. Bu ortalamalar arasında anlamlı bir farklılığın olup olmadığını belirlemek amacıyla yapılan t-testi sonucunda, öğrencilerin ve öğretim elemanlarının görüşleri arasında α= 0.05 düzeyinde anlamlı bir farklılığın olduğu görülmektedir (t= 7,339 p<0.05).
Araştırmaya katılan öğrencilerin programın öğelerine yönelik genel ortalamaları incelendiğinde puan ortalamalarının $\overline{X}$ =3,15 "kısmen katılıyorum" şeklinde ve öğretim elemanlarının aynı boyutla ilgili değerlendirmelerine ilişkin görüşlerinin puan ortalamalarının $\overline{X}$ =3,38 "kısmen katılıyorum" şeklinde yoğunlaştığı gözlenmektedir. Bu ortalamalar arasında anlamlı bir farklılığın olup olmadığını belirlemek amacıyla yapılan t-testi sonucunda, öğrencilerin ve öğretim elemanlarının görüşleri arasında α= 0.05 düzeyinde anlamlı bir farklılığın olduğu görülmektedir (t= 4,547 p<0.05).

SONUÇ ve ÖNERİLER

1. Öğrenci görüşlerine göre programın amaçları kısmen, kazandırılabilir ve öğrenci seviyesine uygun niteliktedir. Öğretim elemanlarının, programın amaçlarının öğrenci seviyesine kısmen uygun olduğu görüşüne öğrenci bazında katıldığı sonucuna varılabilir. Bununla beraber öğretim elemanları programın amaçlarına genel olarak büyük ölçüde katılırken, öğrencilerin öğretim elemanlarına sadece programın amaçlarının birbirlerini desteklediği yönünde katıldığı sonucuna varılmıştır.

2. Programın içerik boyutuna ilişkin, öğretim elemanları konuların öğrencilerin güncel teknolojiyi takip edebilmelerini destekler nitelikte olduğuna ve öğrencilerin mesleki ihtiyaçlarını karşıladığına kısmen katılmaktadır. Öğrenciler konuların kısmen ilgilerini çektiğini belirtmesine rağmen öğretim elemanlarının bu konuda daha karamsar olduğu sonucuna varılabilir. Öğretim elemanları büyük ölçüde dersin amaçlarını gerçekleştirdiklerini ve öğretim ilkelerine uyduklarını belirtirken öğrencilerin bu konuda daha olumsuz düşündükleri tespit edilmiştir.

3. Programın öğrenme öğretme süreçlerine ilişkin, öğrenci görüşlerine göre dersin öğretiminde öğretim teknolojilerinden kısmen yararlanılmakta ve konular anlatılırken öğrencilerin anlamasını kolaylaştırıcı yöntemler kısmen kullanılmaktadır. Öğretim elemanları ise öğrencilere nazaran daha olumlu görüş belirtmişlerdir.

4. Programın değerlendirme boyutuna ilişkin öğretim elemanlarının öğrencilere göre daha olumlu görüşlere sahip olduğu sonucuna varılmıştır. Özellikle öğretim elemanları değerlendirme yaparken tamamen objektif olduklarını düşünürken öğrenciler bu görüşe kısmen katıldıkları sonucuna ulaşılmıştır.

5. Öğretim elemanları ve öğrencilerin programın tümüne yönelik görüşleri ele alındığında, öğretim elemanlarının öğrencilere nazaran programı daha olumlu bulmalarına rağmen, her iki gurubunda programın öğelerini kısmen yeterli bulmaları, programın aksaklılar içerdiği sonucunu ortaya çıkarmıştır.

6. Öğretim elemanı ve öğrenciler programın yeniden geliştirilmesi kısmen gerekli bulmuşlardır. Bu sonuç öğrenci ve öğretim elemanlarının programın geneline yönelik değerlendirmeleriyle tutarlıdır.

7. Öğretim elemanı ve öğrencilere sorulan açık uçlu bir soruların analizi sonucu, öğretim elemanlarının düşüncelerinin dört ana başlık altında toplandığı söylenebilir. Bu görüşler maddeler halinde ifade edilmiştir:

- Sınavsız geçiş ile gelen öğrenci seviyesinin çok düşük olduğu ve bu durumun özellikle sayısal derslerin yürütülmesinde sıkıntı oluşturduğu.
- Laboratuar imkânlarının azlığından dolayı teorik olarak anlatılan konuların pratikte kazandırılamaması.
- Dersin içeriğinde yer alan doğru akım makinelerinin günümüzde kullanımının azalması nedeniyle içeriğin daraltılması gerektiği.
- Doğru akım makineleri ve transformatörlerin aynı ders içeriğinde yer almasının öğrencilerin dersi kavramasını zorlaştırdığı.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Öğrencilerin programa ilişkin yorumları ise özellikle laboratuar olanaklarının yetersiz olması ve dersin kendilerine zor geldiği ifadelerinde yoğunlaşmıştır.

KAYNAKLAR

Alkan, C., Doğan, H. ve Sezgin, S. İlhan. (2001). *Mesleki ve Teknik Eğitimin Esasları***.** Ankara: Nobel Yayın Dağıtım.

Erden, M. (1998). *Eğitimde Program Değerlendirme*. Ankara: Anı Yayıncılık .

MEB, (1996). *Milli Eğitimde Sorunlar, Reformlar, Hedefler, Projeler, Yasal Düzenlemeler, Personel Durumu*. Milli Eğitim Basımevi: Ankara.

MEB-YÖK. (2002). Meslek Yüksekokulları Program Geliştirme Projesi - *Elektrik Eğitim Programı.* Ankara: Yüksek Öğretim Kurumu.

Oliva, F. Peter.(1988). *Developing the Curriculum*. Boston: Scott, Foresman/Little, Brown College Division.

Ornstein, C. A. & Hunkins. F. P. (1988). *Curriculum: Foundations, Principles, and Issues*. Prentice Hall, Englewood Cliffs.

Önal, N. (2010). *Meslek yüksekokullarında görev yapan öğretim elemanlarının öğretim materyallerini kullanım düzeyleri.* Yayımlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.

Postner, George J. (1995). *Analyzing the Curriculum (Second Edition)*. USA: McGraw-Hill Inc.

Sezgin, S. İ. (1994). *Mesleki ve Teknik Eğitimde Program Geliştirme.* Ankara:Gazi Büro Kitapevi.

Ünal, S. ve Çınar, A. (2005, 28-30 Eylül). *Sınavsız geçiş programındaki öğrencilerin programa giriş ve çıkıştaki beklentilerinin karşılaştırılması.* 3. Ulusal Meslek Yüksekokulları Sempozyumunda Sunuldu, Burdur.

Teziç, E. (2007). Uluslararası Mesleki ve Teknik Eğitim Konferansı "Açış Konuşması".

Yıldırım, A. & Şimşek, H. (2006). Sosyal bilimlerde nitel araştırma yöntemleri. Ankara: Seçkin Yayınevi.

MESLEK YÜKSEKOKULU ÖĞRENCİLERİNİN GÖRSEL OKURYAZARLIK YETERLİKLERİNİN İNCELENMESİ

Hakkı BAĞCI
Kaynarca Seyfettin Selim MYO, Bilgisayar Teknolojileri Bölümü
Sakarya Üniversitesi, Türkiye
hbagci@sakarya.edu.tr

Ersin BAŞARAN
MYO, Bilgisayar Destekli Tasarım ve Animasyon Bölümü
İstanbul Medipol Üniversitesi, Türkiye
ebasaran@medipol.edu.tr

ÖZET
Bu araştırma, meslek yüksekokulu öğrencilerinin görsel okuryazarlık yeterliklerini incelemek ve bazı değişkenlerin görsel okuryazarlık düzeyi ile ilişkisinin olup olmadığını ortaya koymak amacıyla yapılmıştır. Araştırmada genel tarama modeli ve ilişkisel tarama modeli kullanılmıştır. Araştırmanın örneklemini Bozok Üniversitesi Meslek Yüksekokulunda öğrenim görmekte olan 154 öğrenci oluşturmuştur. Araştırmada veri toplama aracı olarak "Kişisel Bilgi Formu" ve "Görsel Okuryazarlık Yeterlilikleri Ölçeği" kullanılmıştır. Araştırma sonucunda, meslek yüksekokulu öğrencilerinin genel olarak görsel okuryazarlık yeterlik düzeyinin yüksek olduğu belirlenmiştir. Aynı zamanda öğrencilerin görsel okuryazarlık düzeyleri cinsiyetleri arasında anlamlı fark olmadığı sonucu ortaya çıkmıştır. Bu sonuçların yanında görsel okuryazarlıkla ilgili ders alan ve almayan öğrenciler arasında da görsel okuryazarlık düzeyleri arasında anlamlı fark olmadığı bulunmuştur. Bu sonuçlar doğrultusunda, araştırma sonunda bazı önerilere yer verilmiştir.
Anahtar Sözcükler: Okuryazarlık, meslek yüksekokulu, görsel okuryazarlık, yeterlik

ABSTRACT
The purpose of this paper is to determine competencies of visual literacy of the students of vocational school and to clarify whether there is a relation between some variables and the level of visual literacy. In the study, general screening and relational screening models have been utilized. 154 students of vocational school who study at Bozok University have comprised the sample of the study. In the study, "Personal Information Form" and the scale of "Visual Literacy Scale" have been utilized as the data collection tool. According to the results of the study, it has been revealed that the level of visual literacy competency of the students of vocational school is high in general. The findings also show that here is no difference in the level of visual literacy in terms of gender. Another result is that there is no difference between the groups who take a course regarding visual literacy and do not take. From this results, some suggestions are given at conclusion part.

Keywords: literacy, vocational school, visual literacy, competency

GİRİŞ
Teknolojinin sürekli olarak geliştiği özellikle de eğitim ortamlarında ve sistemlerinde farklılıklar ortaya çıkmıştır. Bu farklılıklar sonucunda da bireyler kendine güvenen, öğrenme ortamlarına aktif olarak katılabilen bireyler olarak yetişmektedir. Bunların sonucunda da okuduğunu anlayan bireyler olması için ise okuryazarlıklarının gelişmesi gerekmektedir. Eğitim ortamlarında farklı türde okuryazarlıklar bulunmaktadır. Görsel okuryazarlıkta bu türlerden biridir. İlk olarak John Debes (1968) görsel okuryazarlığı, insanın görerek ve diğer algılama deneyimleriyle bütünleştirerek geliştirebileceği bir grup görme yetisi olarak tanımlamıştır. Bir başka tanıma göre ise görsel okuryazarlık, resimli veya grafiksel görsellerle sunulan bilgileri okuma, yorumlama ve anlama yeteneğidir (Wileman, 1993). Günümüze kadar teknoloji ve eğitim sitemlerinin gelişmesi sonucunda görsel okuryazarlık kavramının anlamı daha da genişlemiş ve bunun sonucunda da görsel mesaj üretme, okuma ve yorumlama yeteneğini barındıran farklı bir dil olarak da tanımlanabilir hale gelmiştir (Felten, 2008; Tüzel, 2010).

Çevremizde pek çok görsel bilgiler bulunmaktadır ve bireyler bu görselleri anlayabilmeleri için görsel okuryazarlık bilgilerini geliştirmeleri gerekmektedir. Heinich ve diğerleri (1989) görsel okuryazarlık yeterliliğini geliştirmek için iki yaklaşım önermişlerdir. Bunlardan biri öğrencilere görsel öğeleri okumak ve çözümlemek için gerekli analizleri yapmak, diğeri ise öğrencilerin düşüncelerini basit çizimler yardımıyla ifade etmesini öğretmektir (Özdemir ve Yıldız, 2015).

Görsel okuryazarlığa sahip bireylerin özelliklerini şu şekilde sıralamak mümkündür (İşler, 2002):

- Görsel mesajların anlamlarını yorumlama, anlama ve değerlendirme,
- Görsel tasarım ilke ve kavramlarını hem uygulayarak hem de çözümleyerek daha etkili bir iletişim gerçekleştirme,
- Karşılaşılan problemlere kavramsal çözümler üretebilmek için görsel düşünme biçimini kullanma

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Bu özelliklere sahip bireyler gördükleri mesajları daha rahat anlar ve irdeleyebilirler. Böylelikle de eğitim ortamlarında başarılarını arttırabilirler.

Eğitim ortamlarında bulunan bütün bireylerin görsel okuryazarlık düzeylerinin incelenmesi ve bunlara yönelik okuryazarlık düzeylerinin arttırılması önemlidir. Bu açıdan bakıldığında ara eleman yetiştiren meslek yüksekokullarında öğrenim gören öğrencilerin görsel okuryazarlıklarının incelenmesi de önem arz etmektedir.

Araştırmanın Amacı

Bu araştırmanın amacı, meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeylerini belirlemektir. Bu amaçla aşağıdaki sorulara yanıtlar aranmıştır.

1. Meslek yüksekokulu öğrencilerinin genel olarak görsel okuryazarlık düzeyleri nedir?
2. Meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeyleri
    a. Cinsiyetlerine,
    b. Öğrenim gördükleri program türlerine,
    c. Mezun oldukları lise türlerine,
    d. Öğrenim gördüklerini sınıf türlerine ve
    e. Görsel okuryazarlık ile ilgili bir ders veya eğitim alıp almamalarına

göre farklılaşmakta mıdır?

YÖNTEM

Bu çalışma meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeylerini ortaya koymayı amaçlamaktadır. Araştırma verilerini toplamak için tarama modeli kullanılmıştır. Tarama modelleri, geçmişte yada halen var olan bir durumu var olduğu biçimiyle betimlemeyi amaçlayan araştırma yaklaşımlarıdır. Araştırmaya konu olan birey ya da nesne kendi koşulları içinde olduğu gibi tanımlamaya çalışılır (Karasar, 2005). Ayrıca alt amaçlar doğrultusunda ilişkisel tarama modellerinin de yararlanılmıştır.

Katılımcılar

Araştırmanın katılımcılarını 2014-2015 eğitim öğretim yılında Bozok Üniversitesi Meslek Yüksekokulunda öğrenim gören öğrenciler oluşturmaktadır. Tablo 1' de ulaşılan ve ölçeği geçerli sayılan öğrencilerin öğrenim gördükleri programlar ile ilgili sayısal dağılımlar verilmektedir.

Tablo 1. Çalışma Grubu Özellikleri

Değişkenler		f	%
Cinsiyet	Bay	121	78,6
	Bayan	33	21,4
Program	Bilgisayar Programcılığı	71	46,1
	Bil. Destekli Tasarım ve Animasyon	23	14,9
	Elektrik	28	18,2
	Mobilya	32	20,8
Mezun Oldukları Lise Türü	Meslek Lisesi	135	87,7
	Genel Lise	19	12,3
Sınıf	1. Sınıf	98	63,6
	2. Sınıf	56	36,4
Görsel Okuryazarlıkla İlgili Ders Alma Durumu	Ders veya Eğitim Almış	24	15,6
	Ders veya Eğitim Almamış	130	84,4
Toplam		**154**	**100**

Araştırma kapsamında örneklem alınmamış, toplam 154 öğrenciye ulaşılmıştır. Araştırmaya katılanların 121'i (%78,6) bay, 33'ü (%21,4) ise bayandır. Ayrıca araştırmaya katılan öğrencilerin 98'i (%63,6) 1. sınıf, 56'sı (%36,4) ise 2. sınıf öğrencisidir.

Veri Toplama Aracı

Araştırmada veri toplamak amacı araştırmacılar tarafından oluşturulan kişisel bilgi formu ve Kiper, Aslan, Kıyıcı ve Akgün (2012) tarafından geliştirilen "Görsel Okuryazarlık Ölçeği" kullanılmıştır. Ölçek toplam 29 madde ve 6 faktörden oluşmaktadır. Bu faktörler; "Ofis yazılımlarını kullanarak Görselliğe Önem Verme" 7 madde, "Basılı Görsel Materyalleri Tanıyabilme" 4 madde, "Görsel Yorumlayabilme" 5 madde, "Günlük Hayatta Karşılaşılan Görsel Mesajları Ayırt Edebilme" 5 madde, "Araçlar Kullanarak Görsel Üretebilme" 5 madde ve "Görsellerdeki Mesajları Algılayabilme" 3 maddeden oluşmaktadır. Ölçekteki seçenekler ve seçeneklere ilişkin sınırlar; "Kesinlikle Yapamam" için 1, "Yapamam" için 2, "Az Çok Yaparım" için 3, "Yaparım" için 4 ve "Kolaylıkla Yaparım" için 5 biçiminde sıralanmış ve puanlanmıştır. Ölçeğin genel Cronbach Alpha iç güvenirlik katsayısı .94 olarak bulunmuştur. Ölçeğin alt boyutlarına ilişkin Cronbach Alpha güvenirlik katsayısı "Ofis yazılımlarını kullanarak Görselliğe Önem Verme" alt boyutu için .89, "Basılı Görsel Materyalleri Tanıyabilme" alt boyutu için .83, "Görsel Yorumlayabilme" alt boyutu için .86, "Günlük Hayatta Karşılaşılan Görsel Mesajları Ayırt Edebilme" alt boyutu için .78, "Araçlar Kullanarak Görsel Üretebilme" alt boyutu için .77 ve "Görsellerdeki Mesajları Algılayabilme" alt boyutu için .68 olarak hesaplanmıştır. Bu çalışmada bilgisayar programcılığı öğrencilerine uygulanan ölçeğin uygulama sonrası iç tutarlılık katsayısı .931 olarak hesaplanmıştır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Verilerin Analiz Edilmesi

Yeterli sayıda çoğaltılan veri toplama aracı, araştırmacılar tarafından öğrencilere uygulanmıştır. Uygulanan ölçekte her bir madde için alınabilecek en yüksek puan 5, en düşük puan ise 1' dir. Meslek yüksekokulu öğrencilerinin görsel okuryazarlıklarını değerlendirebilmek ve yorumlayabilmek için ortalama değer üzerinden beş değerlendirme aralığı ve kriteri belirlenmiştir (Tablo 2).

Tablo 2. Görsel Okuryazarlığına Yönelik Görüşleri Değerlendirme Ölçütleri

Değerlendirme Kriteri	Verilen Puanlar	Değerlendirme Aralığı
Kesinlikle Yapamam	1	1,00 – 1,80
Yapamam	2	1,81 – 2,60
Az Çok Yaparım	3	2,61 – 3,40
Yaparım	4	3,41 – 4,20
Kolaylıkla Yaparım	5	4,21 – 5,00

Verilerin analizinde betimsel istatistiklerden aritmetik ortalama, yüzde ve frekanstan yararlanılmıştır. Diğer yandan öğrencilerin cinsiyetlerine, öğrenim gördükleri programlara, mezun oldukları lise türlerine, öğrenim gördükleri sınıf türlerine ve görsel okuryazarlık ile ilgili bir ders veya eğitim alıp almamalarına göre görsel okuryazarlıklarının farklılaşıp farklılaşmadığını belirlemek için bağımsız örneklem t test ve varyans analizi kullanılmıştır. Verilerin analizlerde anlamlılık düzeyi .05 olarak alınmıştır. Ayrıca istatistiksel çözümlemelerde SPSS 16.0 (Statistical Package for the Social Sciences) paket programından yararlanılmıştır.

BULGULAR ve YORUMLAR

Araştırma kapsamında meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeyleri ve bu görsel okuryazarlık düzeylerinin görüşlerinin farklı değişkenler açısından değerlendirilmesi başlıklar şeklinde verilmiştir.

Meslek Yüksek Okulu Öğrencilerinin Görsel Okuryazarlık Düzeyleri

Meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeyleri; Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme, Basılı Görsel Materyalleri Tanıyabilme, Görsel Yorumlayabilme, Günlük Hayatta Karşılaşılan Görsel Mesajları Ayırt Edebilme, Araçlar Kullanarak Görsel Üretebilme, Görsellerdeki Mesajları Algılayabilme olarak üç farklı boyutta ele alınmıştır (Tablo 3).

Tablo 3. Alt Boyutları Açısından Görsel Okuryazarlık Düzeyleri

	Alt Boyutlar	$\overline{X}$	ss
1	Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme	3.63	.80
2	Basılı Görsel Materyalleri Tanıyabilme	3.46	.86
3	Görsel Yorumlayabilme	3.88	.78
4	Günlük Hayatta Karşılaşılan Görsel Mesajları Ayırt Edebilme	4.24	.78
5	Araçlar Kullanarak Görsel Üretebilme	3.95	.85
6	Görsellerdeki Mesajları Algılayabilme	3.84	.92

Meslek Yüksekokulu öğrencilerinin ($\overline{X}$ =3.63) ortalama ile ofis yazılımlarını kullanarak görselliğe verdiklerini, ($\overline{X}$ =3.46) ortalama ile basılı görsel materyalleri tanıyabildiklerini, ($\overline{X}$ =3.88) ortalama ile görselleri yorumlayabildikleri, ($\overline{X}$ =4.24)ortalama ile günlük hayatta karşılaştıkları görsel mesajları kolaylıkla ayırt edebildikleri, ($\overline{X}$ =3.95) ortalama ile araçlar kullanarak görseller üretebildiklerini ve ($\overline{X}$ =3.84) ortalama ile de görsellerdeki mesajları algılayabildiklerini ifade etmişlerdir. Ayrıca ölçeğin tümü değerlendirildiğinde öğrencilerin ($\overline{X}$ =3.83) ortalama ile görsel okuryazarlık yeterliklerinin yüksek olduğu yorumu yapılabilir.

Meslek Yüksek Okulu Öğrencilerinin Görsel Okuryazarlık Düzeylerinin Cinsiyetlerine Göre İncelenmesi

Araştırma kapsamında meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeylerinin cinsiyetlerine göre farklılaşıp farklılaşmadığı da incelenmiş, elde edilen bulgular Tablo 9' da verilmiştir.

Tablo 4. Öğrencilerin Cinsiyetlerine Göre Görsel Okuryazarlık Düzeyleri

Alt Boyutlar	Gruplar	n	$\overline{X}$	Sd	df	t	p
Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme	Bay	121	3.52	.76	152	-3.267	.001
	Bayan	33	4.02	.83			

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Basılı Görsel Materyalleri Tanıyabilme	Bay	121	3.50	.86	152	1.322	.188
	Bayan	33	3.28	.86			
Görsel Yorumlayabilme	Bay	121	3.82	.76	152	-1.988	.049
	Bayan	33	4.12	.82			
Günlük Hayatta Karşılaşılan Görsel Mesajları Ayırt Edebilme	Bay	121	4.27	.78	152	.978	.330
	Bayan	33	4.12	.76			
Araçlar Kullanarak Görsel Üretebilme	Bay	121	3.87	.87	152	-2.305	.023
	Bayan	33	4.24	.68			
Görsellerdeki Mesajları Algılayabilme	Bay	121	3.84	.93	152	.264	.792
	Bayan	33	3.80	.89			

Meslek yüksekokulu öğrencilerinin görsel okuryazarlığı ölçeğinin "Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme" [t(152)=-3.267, p<.01] alt boyutunda bayan öğrenciler lehine anlamlı bir farklılık göstermektedir. Bayan öğrencilerin Ofis Yazılımlarını Kullanarak Görselliğe Önem Vermeye yönelik düzeyleri ($\overline{X}$ =4.02), bay öğrencilere ($\overline{X}$ =3.52) göre daha olumludur. Diğer alt boyutlar arasında ise herhangi bir anlamlı bir farklılık bulunamamıştır.

Meslek Yüksek Okulu Öğrencilerinin Görsel Okuryazarlık Düzeylerinin Öğrencilerin Öğrenim Gördükleri Program Türlerine Göre İncelenmesi

Araştırma kapsamında meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeylerinin öğrenim gördükleri programlara göre farklılaşıp farklılaşmadığı da incelenmiş, elde edilen bulgular Tablo 5' de verilmiştir.

Tablo 5. Öğrencilerin Öğrenim Gördükleri Programa Göre Görsel Okuryazarlık Düzeyleri

Alt Boyutlar	Varyansın Kaynağı	K. T	sd	K. O	F	p	Anlamlı Fark
Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme	Gruplararası	9.375	3	3.125	5.247	.002	Var
	Gruplariçi	89.341	150	.596			
	Toplam	98.715	153				
Basılı Görsel Materyalleri Tanıyabilme	Gruplararası	2.010	3	.670	.895	.445	Yok
	Gruplariçi	112.257	150	.748			
	Toplam	114.267	153				
Görsel Yorumlayabilme	Gruplararası	3.925	3	1.308	2.205	.090	Yok
	Gruplariçi	89.018	150	.593			
	Toplam	92.943	153				
Günlük Hayatta Karşılaşılan Görsel Mesajları Ayırt Edebilme	Gruplararası	3.011	3	1.004	1.669	.176	Yok
	Gruplariçi	90.196	150	.601			
	Toplam	93.206	153				
Araçlar Kullanarak Görsel Üretebilme	Gruplararası	3.684	3	1.228	1.743	.161	Yok
	Gruplariçi	105.680	150	.705			
	Toplam	109.364	153				
Görsellerdeki Mesajları Algılayabilme	Gruplararası	.748	3	.249	.294	.832	Yok
	Gruplariçi	128.640	150	.858			
	Toplam	129.388	153				

Meslek yüksekokulu öğrencilerinin görsel okuryazarlığı ölçeğinin "Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme" alt boyutunda anlamlı bir fark olduğu görülmektedir. [F(3-153) =5.247, p<.01]. Bulunan anlamlı farkın hangi gruplar arasında olduğuna yönelik yapılan Scheffe testine göre hem Bilgisayar Programcılığı ile Mobilya ve Bilgisayar Destekli Tasarım ve Animasyon Programı ile Mobilya programı öğrencileri arasında anlamlı bir fark bulunmuştur. Bir başka ifadeyle Bilgisayar Programcılığı ($\overline{X}$ =3.74) ve Bilgisayar Destekli Tasarım ve Animasyon programı öğrencilerinin ($\overline{X}$ =3.96) Mobilya programı öğrencileri ($\overline{X}$ =3.20) lehine istatistiksel olarak anlamlı olduğu görülmüştür.

Meslek Yüksek Okulu Öğrencilerinin Görsel Okuryazarlık Düzeylerinin Öğrencilerinin Mezun Oldukları Lise Türüne Göre İncelenmesi

Araştırma kapsamında meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeylerinin öğrencilerin mezun oldukları lise türüne göre farklılaşıp farklılaşmadığı da incelenmiş, elde edilen bulguların Mann Whitney U-testi Tablo 6' da verilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 6. Öğrencilerin Mezun Oldukları Lise Türüne Göre Görsel Okuryazarlık Düzeyleri

Alt Boyutlar	Gruplar	n	S.O	S.T	U	p
Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme	Meslek Lisesi	135	77.47	10458.00	1278.00	.980
	Genel Lise	19	77.74	1477.00		
Basılı Görsel Materyalleri Tanıyabilme	Meslek Lisesi	135	76.93	10385.50	1205.50	.670
	Genel Lise	19	81.55	1549.50		
Görsel Yorumlayabilme	Meslek Lisesi	135	76.93	10312.00	1132.00	.406
	Genel Lise	19	85.42	1623.00		
Günlük Hayatta Karşılaşılan Görsel Mesajları Ayırt Edebilme	Meslek Lisesi	135	75.43	10183.50	1003.50	.120
	Genel Lise	19	92.18	1751.50		
Araçlar Kullanarak Görsel Üretebilme	Meslek Lisesi	135	77.26	10430.50	1250.50	.860
	Genel Lise	19	79.18	1504.50		
Görsellerdeki Mesajları Algılayabilme	Meslek Lisesi	135	75.65	10212.50	1032.50	.165
	Genel Lise	19	90.66	1722.50		

Tablo 6 incelendiğinde Meslek yüksekokulu öğrencilerinin görsel okuryazarlığı ölçeğinin tüm alt boyutlarına ilişkin ölçekten aldıkları puanlar öğrencilerin mezun oldukları lise türlerine göre farklılık göstermediği görülmektedir.

Meslek Yüksek Okulu Öğrencilerinin Görsel Okuryazarlık Düzeylerinin Öğrenim Gördükleri Sınıflara Göre İncelenmesi

Araştırma kapsamında meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeylerinin cinsiyetlerine göre farklılaşıp farklılaşmadığı da incelenmiş, elde edilen bulgular Tablo 7' da verilmiştir.

Tablo 7. Öğrencilerin Öğrenim Gördükleri Sınıflara Göre Görsel Okuryazarlık Düzeyleri

Alt Boyutlar	Gruplar	n	$\overline{X}$	Sd	df	t	p
Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme	1. Sınıf	98	3.70	.80	152	1.452	.149
	2. Sınıf	56	3.51	.81			
Basılı Görsel Materyalleri Tanıyabilme	1. Sınıf	98	3.50	.89	152	.783	.435
	2. Sınıf	56	3.38	.83			
Görsel Yorumlayabilme	1. Sınıf	98	3.96	.82	152	1.626	.106
	2. Sınıf	56	3.75	.68			
Günlük Hayatta Karşılaşılan Görsel Mesajları Ayırt Edebilme	1. Sınıf	98	4.21	.85	152	-.604	.547
	2. Sınıf	56	4.29	.65			
Araçlar Kullanarak Görsel Üretebilme	1. Sınıf	98	3.94	.90	152	-.136	.892
	2. Sınıf	56	3.96	.76			
Görsellerdeki Mesajları Algılayabilme	1. Sınıf	98	3.87	.91	152	.628	.531
	2. Sınıf	56	3.77	.94			

Meslek yüksekokulu öğrencilerinin görsel okuryazarlığı ölçeğinin "Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme" [t(152)=1.452, p>.05], "Basılı Görsel Materyalleri Tanıyabilme" [t(152)=.783, p>.05], "Görsel Yorumlayabilme" [t(152)=1.626, p>.05], "Günlük Hayatta Karşılaşılan Görsel Mesajları Ayırt Edebilme" [t(152)=-.604, p>.05], "Araçlar Kullanarak Görsel Üretebilme" [t(152)=-.136, p>.05] ve "Görsellerdeki Mesajları Algılayabilme" [t(152)=.628, p>.05] alt boyutlarında öğrenim gördükleri sınıf düzeyleri değişkeni yönünden anlamlı düzeyde fark bulunamamıştır. Bu bulguya göre araştırmaya katılan meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeylerinin birbirlerine yakın olduğu yorumu yapılabilir.

Meslek Yüksek Okulu Öğrencilerinin Görsel Okuryazarlık Düzeylerinin Öğrencilerinin Görsel Okuryazarlık İle İlgili Bir Ders Veya Eğitim Alıp Almama Durumlarına Göre İncelenmesi

Araştırma kapsamında meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeylerinin öğrencilerin görsel okuryazarlık ile ilgili bir ders veya eğitim alıp almama durumlarına göre farklılaşıp farklılaşmadığı da incelenmiş, elde edilen bulguların Mann Whitney U-testi Tablo 8' da verilmiştir.

Tablo 8. Öğrencilerin Görsel Okuryazarlık İle İlgili Bir Ders Veya Eğitim Alıp Almama Durumlarına Göre Görsel Okuryazarlık Düzeyleri

Alt Boyutlar	Gruplar	n	S.O	S.T	U	p
Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme	Ders Alma	24	91.63	2199.00	1221.00	.090
	Ders Almama	130	74.89	9736.00		
Basılı Görsel Materyalleri Tanıyabilme	Ders Alma	24	81.31	1951.50	1468.50	.646
	Ders Almama	130	76.80	9983.50		
Görsel Yorumlayabilme	Ders Alma	24	84.90	2037.50	1382.50	.375
	Ders Almama	130	76.13	9897.50		
Günlük Hayatta Karşılaşılan Görsel	Ders Alma	24	67.54	1621.00	1321.00	.227

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Mesajları Ayırt Edebilme	Ders Almama	130	79.34	10314.00		
Araçlar Kullanarak Görsel Üretebilme	Ders Alma	24	88.50	2124.00	1296.00	.186
	Ders Almama	130	75.47	9811.00		
Görsellerdeki Mesajları Algılayabilme	Ders Alma	24	91.69	2200.50	1219.50	.086
	Ders Almama	130	74.88	9734.50		

Tablo 8 incelendiğinde Meslek yüksekokulu öğrencilerinin görsel okuryazarlığı ölçeğinin tüm alt boyutlarına ilişkin ölçekten aldıkları puanlar görsel okuryazarlık ile ilgili bir ders veya eğitim alıp almama durumlarına göre farklılık göstermediği görülmektedir.

SONUÇ VE ÖNERİLER

Meslek yüksekokulu öğrencilerinin görsel okuryazarlıklarının incelendiği bu çalışmada meslek yüksekokulu öğrencilerinin görsel okuryazarlık düzeylerinin yüksek düzeyde olduğu görülmüştür. Kocaarslan ve Çeliktürk (2013) yaptıkları çalışmada eğitim fakültesi öğrencilerinin görsel okuryazarlık düzeylerinin yüksek olduğunu, Özsevgeç, Akbulut ve Özsevgeç (2010) çalışmalarında öğretmen adaylarının görsel okuryazarlık seviyelerinin yüksek olduğu sonucuna ulaşmışlardır. Aynı zamanda Özdemir ve Göktepe Yıldız (2015) yaptıkları çalışmalarında yedinci sınıf öğrencilerinin görsel okuryazarlık düzeylerinin yüksek olduğu sonucu ortaya çıkmıştır. Gerek yapılan bu çalışmada gerek de literatürde benzer sonuçlarla karşılaşılması olumlu bir sonuç olarak düşünülebilir. Eğitimlerine devam eden öğrencilerin artık görsel okuryazarlıklarının yüksek çıkması artık öğrencilerin gördüklerini anlamaya daha çok çalıştığı ve karşılaştıkları mesajlara daha bilinçli yaklaştıkları ifade edilebilir.

Araştırmada görsel okuryazarlık düzeyleri ölçeğinin "Ofis Yazılımlarını Kullanarak Görselliğe Önem Verme" alt boyutuna ilişkin sonuç cinsiyetler arasında farklılık ortaya çıkmıştır. Diğer bir deyişle bayan öğrencilerin ofis yazılımlarını kullanarak görselliğe daha fazla önem verdiği görülmüştür. Kocaarslan ve Çeliktürk (2013) yaptıkları çalışmalarında eğitim fakültesi öğrencilerinde de aynı sonuca ulaşmışlardır. Özdemir ve Göktepe Yıldız (2015) yaptıklarını çalışmada yedinci sınıf kız öğrencilerinin erkek öğrencilere göre görsel okuryazarlık düzeylerinin daha yüksek olduğu sonucunu bulmuşlardır.

Bir diğer sonuç ise bilgisayar programcılığı ile bilgisayar destekli tasarım ve animasyon programı öğrencilerinin mobilya programı öğrencilerine göre ofis yazılımlarını kullanarak görselliğe daha fazla önem verdikleridir. Gerek bilgisayar programcılığı gerek de bilgisayar destekli tasarım ve animasyon programı öğrencilerini ofis programlarını sıklıkla kullandıkları için görselliğe daha fazla önem vermeleri normal olarak görülebilir. Araştırmadaki diğer sonuçlar ise öğrencilerin mezun oldukları lise türüne göre, öğrenim gördükleri sınıf düzeyine göre ve görsel okuryazarlık ile ilgili ders veya eğitim alma durumuna göre her hangi bir farklılık ortaya çıkmamıştır.

Araştırma sonuçları dikkate alındığında eğitimin tüm kademelerinde öğrencilere görsel mesajların doğru okunması ile ilgili daha fazla gerekli bilgiler verilmesinin doğru olacağı düşünülmektedir. Çünkü gelişen teknolojiler ile her yaştan birey sürekli teknolojiler ile karşı karşıyadırlar. Bu teknolojilerin başında da bilgisayar ve internet teknolojisi gelmektedir. Bireyler bilgisayarı ve interneti sürekli kullandıkları için bu ortamlarda karşılaştıkları mesajları anlamaları gerekmektedir. Bunun için de bu konuda bireylere daha fazla destek olmak, onların görsel okuryazarlık konusunda daha fazla bilinçlendirilmelerine yardımcı olacaktır.

KAYNAKLAR

Debes, J. (1968). Some Foundations Of Visual Literacy. Audio Visual Instructional, 13, 961-964.
Felten, P. (2008). Visual Literacy. Change, 40(6), 60-64.
Heinich, R., Molenda, M., Russell, J. D. (1999). Instructional Media and New Technologies for Instrucion (3th Ed.) Macmillan Publishing Company.
İşler, A. (2002). Günümüzde Görsel Okuryazarlık ve Görsel Okuryazarlık Eğitimi. Uludağ Üniversitesi Eğitim Fakültesi Dergisi, 15(1), 153-161.
Karasar, N. (2005). Bilimsel Araştırma Yöntemi. Ankara: Nobel Yayın Dağıtım.
Kiper, A., Arslan, S., Kıyıcı, M. Ve Akgün Ö. E. (2012). Görsel Okuryazarlık Ölçeği: Geçerlik ve Güvenirlik Çalışması, TOJNED, 2(2), 73-83.
Kocaarslan, M. Ve Çeliktürk, Z. (2013). Eğitim Fakültesi Öğrencilerinin Görsel Okuryazarlık Yeterliklerinin Belirlenmesi, Bartın Üniversitesi Eğitim Fakültesi Dergisi, 2(2), 344-362.
Özdemir, A. Ş. Ve Göktepe Yıldız, S. (2015). Yedinci Sınıf Öğrencilerinin Görsel Okuryazarlık Düzeylerinin İncelenmesi. The Journal Of Academic Social Science Studies, 41, 529-541.
Özsevgeç, T., Akbulut, H. Ve Özsevgeç, L. C. (2010). Determination of Visual Literacy of Preservice Teachers. Turkish Science Education, 7(3), 29-41.
Tüzel, M. S. (2010). Görsel Okuryazarlık, Türk Bilimi Araştırmaları Dergisi, 27, 679-690.
Wielman, R, E. (1993). Visual Communicating. Englewood Cliffs, N.J:Educational TEchnology Publicationas.

MİLLİ EĞİTİM OKULLARINDA GÖREV YAPAN ÖĞRETMENLERİN PAYLAŞILAN LİDERLİK ALGILARI

Doç. Dr. Erkan YAMAN
Sakarya Üniversitesi, Eğitim Fakültesi, Türkiye
eyaman@sakarya.edu.tr

Nihan ORUÇ BATMAN
Milli Eğitim Bakanlığı, Türkiye
nihanoruc@gmail.com

ÖZET
Bu araştırmanın amacı Milli Eğitim Bakanlığında görev yapan öğretmenlerin paylaşılan liderlik algılarını belirlemektir. Araştırma 2014-201 eğitim -öğretim yılında Kocaeli ili İzmit ilçesinde ilk, ortaokulda ve lise olmak üzere 40 farklı okulda görev yapan toplam 352 öğretmeni kapsamaktadır. Araştırma ilişkisel tarama modelinden oluşturulmuştur. Araştırmada Özer ve Beycioğlu (2013) tarafından geliştirilen Paylaşılan Liderlik Ölçeği kullanılmıştır. Ölçme aracından elde edilen verilerin çözümlenmesinde, verilen normalliği belirlemek için yapılan Kolmogorov-Smirnov ve Shapiro-Wilk normallik testi ve verileri analiz etmek için Mann-Whitney U ve Kruskal Wallis analiz yöntemleri SPSS 17,0 paket programı kullanılmıştır. Bireylerin cinsiyete göre paylaşılan liderlik algısında anlamlı farklılıklar görülmüştür. Okul türüne göre paylaşılan liderlik algılarında anlamlı bir farklılık bulunmamıştır. Bireylerin paylaşılan liderlik algılarının eğitim durumuna göre anlamlı farklılık gösterdiği görülmüştür. Paylaşılan liderlik algıları kıdemine göre farklılık göstermektedir. Paylaşılan liderlik ile idare edilen kurumun öğrencilerinin ve okul başarılarının araştırılması önerilmiştir.
Anahtar Kelimeler: Okul liderliği, Meb okulları, Paylaşılan liderlik

THE NATIONAL EDUCATION SCHOOLS INVESTIGATIEON OF THE TEACHER AND SCHOOL MANAGEMENT SHARED LEADERSHIP PERCEPTIONS

The purpose of this research working in the Ministry of Education to determine teacher perceptions of leadership and management of the shared perception. This research was applied in 2014-2015 academic year, the first in the district of Kocaeli Izmit, in middle school and high school, including covers a total of 352 teachers working in 40 different schooils. Research was created from the relational model. In research was used “Shared Leadership Scale”that was developed by Ozer and Beycıoglu (2013). To analyze the data obtained from the measurement instrument the normality conducted to determine the Kolmogorov-Smirnov and Shapiro Wilk normality test and Mann Whitney U to analyze data and Kruskal Wallis analysis with SPSS 17.0 softwaere package was used. According to the gender of the individuals perception of shared leadership significant differences were observed. By school type, there was no significant difference in the perception of shared leadership. Individuals shared leadership and management of the school has been shown to vary significantly depending on the education level. Shared leadership and perceptions in school management varies accordind to seniority. Students shared leadership, which is managed by institutions and to investigate the school performance has been proposed.
Keywords: School leadership, MEB schools, shared leadership.

GİRİŞ

Çağımızda sürekli ve hızlı olarak değişim ve gelişim süreçleri içerisindeyiz. Bu değişime ayak uydurmak ve bu hıza yetişmek için eski geleneksel yönetim tarzları tartışılır hale gelmiştir. Liderlik tanımlamalarında değişimler oluşmaya başlamıştır. Demokrasinin daha çok benimsemeye başlamasıyla beraber daha çoğunluğun katılımı ile yönetim tarzına geçilmek istenmiştir. Yeni liderlik yaklaşımları meydana gelmiştir. Toplumdaki değişimden en çok eğitim etkilenmektedir. Okulların yönetim şekillerinin yeni liderlik yaklaşımlarına göre yönetilmesi için değişim ve dönüşümler başlamıştır.
Nitekim ülkemizde de paylaşılan liderliğe ilişkin yeni eğilimler görülmektedir. Bu bağlamda, MEB Dış İlişkiler Genel Müdürlüğü tarafından gerçekleştirilen “Okul Liderliği Anlayışında Değişim Zamanı: Yenilikçi, Gelişen ve Paylaşılan Liderlik” adlı konferansta, yönetim anlayışının liderlik anlayışından ayrı tutulamayacağı vurgusu yapılmış; yöneticiliğin yaratıcı ve üretken tarafını oluşturduğuna dikkat çekilmiştir (MEB, 2009).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Paylaşılan liderlik; okulun paydaşlarının bir çoğunun yönetim uygulamalarının içerisine alınarak yönetilmesidir (Spillane ve diğ., 2005). Liderliğin müdürleri, müdür yardımcılarını, öğretmenleri, aileleri, öğrencileri ve diğer çalışanları içine alarak genişlemesi gerekmektedir. (Arrowsmith, 2007). Paylaşılan liderlik, liderlik olgusunun okul adına bir kişinin sahip olduğu bilgi ve beceriden daha fazla konumunda olmasını sağlar. Çalışanlar ile olaylar arasındaki etkileşimlerde yer alarak örgütün işbirliği liderlik gücünü ortaya çıkarır (Baloğlu, 2011).
Paylaşılan liderlik için Spillane, Camburn, Pustejovsky, Pareja ve Lewis tarafından Amerika Birleşik Devletleri'nin kuzey batısında 52 okulda yapılan araştırmalarda çalışanların göstermiş oldukları davranışlarına bakılmıştır. Okulda çalışanların ortalama % 30'u zamanlarının bir kısmını liderlik rollerini belirlemeye, % 25'den daha fazlasının okulda geçirdiklerin zamanın tümünü liderlik rollerini belirlemeye ayırdıklarını belirtmişlerdir (Akt; Taşdan, 2013).
Paylaşılan liderliğin iş rolü çatışması ve belirsizlik algılamaları üzerinde doğrudan, iş stresi ve doyumu üzerinde ise dolaylı etkisi olduğunu Wood ve Fields tarafından yapılan araştırmalar ortaya çıkarmıştır. Black ve Westwood tarafından yapılan araştırmalara göre; paylaşılan liderliğin uygulandığı kurumlarda, çalışanları birbirleriyle iyi iletişim kurduğu ve kişilerarası ilişkilerinin daha iyi olduğu aynı zamanda grup üyeleri arasında güvenin artmasından kaynaklanan grup dayanışmasının kolaylaştığı, grup üyeleri arasında yanlış anlaşılmanın azaldığı, çalışanların grup içi çatışmayı önlemek için gerekli olan becerilere sahip oldukları gözlemlenmiştir. Diğer bir araştırmada da; paylaşılan liderliğin uygulandığı okullarda örgütsel bağlığın ilişkili olduğu öğretmenlerin işlerinden daha memnun oldukları ve okullarının tutarlı bir liderlik ekibi tarafından yönetildiğine inandıkları görülmektedir. Slavit, Kennedy, Deuel ve Nelson tarafından yapılan araştırma sonucuna göre, paylaşılan liderlik uygulaması sonucunda, okul üyelerinde kolektif sorumluluk ve profesyonellik duygusu artırmıştır (Akt; Bostancı, 2012).
Paylaşılan liderlik; Türkiye'de eğitim alanında tartışılmaya başlanmış olup ayrıca paylaşılan liderlik (Beycioğlu, 2009), dağıtılmış liderlik (Oğuz, 2010), dağıtımcı liderlik (Baloğlu, 2011) vb. kavramlar altında irdelenmektedir.
Milli Eğitim Bakanlığı'na bağlı kamu ilk ve ortaokullarında görev yapan öğretmenlerin çalıştıkları kurumun paylaşılan liderlik algıları ile okul yönetiminde kayırmacılık algıları arasındaki ilişkiyi tespit etmeyi amaçlayan bu çalışmada ayrıca çalışmaya katılan bireylerin paylaşılan liderlik puanlarının; cinsiyete, görev yerine, eğitim durumuna, kıdeme, örgüt yönetim tarzına ve iletişim becerisine göre farklılaşıp farklılaşmadığı araştırılmıştır.

2. YÖNTEM

2.1. Araştırmanın Modeli

Bu araştırmada betimsel tarama modelinde ilişkisel tarama yöntemi kullanılmıştır. Çünkü tarama modelleri geçmişte ya da halen var olan bir durumu var olduğu şekli ile betimlemeyi amaç edinen araştırmalar için uygun bir modeldir (Karasar, 2006). Betimsel tarama modelleri kendi içinde iki bölüme ayrılmaktadır. Bu bölümler; genel tarama ve örnek olay taramalarıdır. İlişkisel tarama modeli genel tarama yöntemi içine giren bir yöntemdir. Genel tarama modelleri; çok sayıda elemandan oluşan bir evrende, evren hakkındaki genel yargıya varmak amacı ile evrenin tümü ya da ondan alınacak bir grup örnek ya da örneklem üzerinde yapılan tarama düzenlemeleridir. Bu grup içinde yer alan ilişkisel tarama modelleri ise; iki ve daha çok değişken arasındaki birlikte değişim varlığını veya derecesini belirlemeyi amaçlayan araştırma modelleri için kullanıldığından bu tür araştırmalar için uygun görülmektedir (Karasar, 2006).

2.2.Evren ve Örneklem

Araştırmanın evrenini, 2014–2015 eğitim-öğretim yılında, Kocaeli ili İzmit ilçesinde ilk, orta öğretim ve lise okullarında çalışan öğretmen olan 352 kişiden oluşturmuştur. Çalışma grubunun demografik bilgilerine ilişkin sonuçlar tablo 1'de verilmiştir.

Tablo 1: Çalışma grubunun demografik bilgilerine ilişkin sonuçlar

		Frekans	Yüzde
Cinsiyet	**Erkek**	126	35,8
	Kadın	226	64,2
	Toplam	352	100,0
Görev yeri	**İlkokul**	166	47,2
	Ortaokul	180	51,1
	Lise	6	1,7
	Toplam	352	100,0

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Eğitim durumu	**Ön lisans**	18	5,1
	Lisans	274	77,8
	Yüksek lisans	60	17,0
	Toplam	352	100,0
Kıdem	**1-5**	56	15,9
	6-10	64	18,2
	11-15	67	19,0
	16-20	81	23,0
	21 ve üzeri	84	23,9
	Toplam	352	100,0

Araştırmaya katılan bireylerin %35,8'i erkek, %64,2'si kadın; %47,2'si ilkokul, %51,1'i ortaokul ve %1,7'si ise lisede görev yapmaktadır. Bireylerin %5,1'i ön lisans mezunu, %77,8'i lisans mezunu ve %17'si ise yüksek lisans mezunudur. Bireylerin öğretmenlik sürelerinin dağılımı ise %15,9'u 1-5 yıl, %18,2'si 6-10 yıl, %19'u 11-15 yıl, %23'ü 16-20 yıl ve %23,9'u 21 ve üzeri yıl şeklinde olmuştur.

3.3.Veri Toplama Araçları

Araştırmada, Özer ve Beycioğlu (2013) tarafından geliştirilen Paylaşılan Liderlik Ölçeği kullanılmıştır. Araştırmanın verileri " Paylaşılan liderlik algıları anketi" 10 madde toplanmıştır. Anketler 5'li likert tipinde düzenlenmiştir. Paylaşılan Liderlik Ölçeği; hiçbir zaman (1), nadiren (2), bazen (3), sık sık (4), her zaman (5) seçeneklerinden oluşmaktadır. Ölçekteki en düşük puan 1 iken en yüksek puan 5'tir.

3.4.Verilerin Analizi

Verilerin analizi aşamasında öncelikle bağımlı değişkenlerin normal dağılıp dağılmadığına Kolmogorov-Smirnov ve Shapiro-Wilk normallik testleri ile bakılmıştır. Elde edilen sonuçlar tablo 2'de verilmiştir.

Tablo 2: Paylaşılan liderlik ölçeğine ilişkin normallik testi sonuçları

	Kolmogorov-Smirnov			Shapiro-Wilk		
	İstatistik	sd.	*p*	İstatistik	sd	*P*
Paylaşılan Liderlik	,091	349	,000	,963	349	,000

Verilen normalliğini belirlemek için yapılan Kolmogorov-Smirnov ve Shapiro-Wilk normallik testi sonuçlarına göre paylaşılan liderlik ölçeğinin normal dağılım göstermediği görülmüştür. Normallik varsayımının sağlanmadığı durumlarda nonparametrik analiz yöntemlerinden faydalanılmaktadır. Verileri analiz etmek için Mann-Whitney U ve Kruskal Wallis analiz yöntemleri SPSS 17,0 paket programı kullanılarak gerçekleştirilmiştir.

BULGULAR

"Çalışmaya katılan bireylerin paylaşılan liderlik puanları cinsiyete göre farklılık göstermekte midir?" alt probleminin çözümü için elde edilen Mann-Whitney U testi sonuçları tablo 3 'de verilmiştir.

Tablo 3: Cinsiyete göre Mann-Whitney U testi analizi sonuçları

	Cinsiyet	N	Sıra ort.	Sıra toplamı	U	p
Paylaşılan liderlik	Erkek	126	166,32	20956,50	12955,50	,161
	Kadın	226	182,17	41171,50		

Tablo 3 incelendiğinde erkek bireylerin sıra ortalaması 166,32 kadınlar için ise 182,17'dir. Bireylerin paylaşılan liderlik puanları cinsiyete göre farklılık göstermemektedir ($p>0,05$).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

"Çalışmaya katılan bireylerin paylaşılan liderlik puanları görev yerine göre farklılık göstermekte midir?" alt probleminin çözümü için elde edilen Kruskal Wallis testi sonuçları tablo 4'de verilmiştir.

Tablo 4: Görev yerine göre Kruskal Wallis testi analizi sonuçları

	Görev yeri	N	Sıra ort.	Ki-kare	sd	p	Fark
Paylaşılan liderlik	İlkokul	166	186,70	3,215	2	,200	
	Ortaokul	180	167,71				
	Lise	6	158,08				

Tablo 4 incelendiğinde çalışmaya katılan bireylerin paylaşılan liderlik puanları öğretmenlerin görev yaptıkları okul türüne göre değişiklik göstermemektedir (p>0,05).

"Çalışmaya katılan bireylerin paylaşılan liderlik puanları eğitim durumuna göre farklılık göstermekte midir?" alt probleminin çözümü için elde edilen Kruskal Wallis testi sonuçları tablo 5'da verilmiştir.

Tablo 5: Eğitim durumuna göre Kruskal Wallis testi analizi sonuçları

	Görev yeri	N	Sıra ort.	Ki-kare	sd	p	Fark
Paylaşılan liderlik	Ön lisans	18	237,25	13,492	2	,001	Ön lisans-Lisans
	Lisans	274	179,97				Ön lisans-Yüksek lisans
	Yüksek lisans	60	142,41				Lisans-Yüksek lisans

Çalışmaya katılan bireylerin paylaşılan liderlik puanları eğitim durumuna göre istatistiksel olarak anlamlı farklılık göstermektedir (p<0,05). Farklılığın tespit edilebilmesi için planlama puanları görev yerine göre Mann-Whtney U testi ile analiz edilmiştir. Analiz sonucunda paylaşılan liderlik puanları ön lisans-lisans, ön lisans-yüksek lisans ve lisans-yüksek lisans grupları arasında, eğitim düzeyi düşük olan grupların lehinde bir farklılık olduğu görülmüştür.

"Çalışmaya katılan bireylerin paylaşılan liderlik ve okul yönetiminde kayırmacılık puanları kıdemine göre farklılık göstermekte midir?" alt probleminin çözümü için elde edilen Kruskal Wallis testi sonuçları tablo 6'de verilmiştir.

Tablo 6: Kıdeme göre Kruskal Wallis testi analizi sonuçları

	Kıdem	N	Sıra ort.	Ki-kare	sd	p	Fark
Paylaşılan liderlik	1-5	56	202,00	11,221	4	,024	1-5 yıl-11-15 yıl
	6-10	64	199,66				1-5 yıl-20 yıl ve üzeri
	11-15	67	159,37				6-10 yıl-11-15 yıl
	16-20	81	172,33				6-10 yıl-20 yıl ve üzeri
	21 ve üzeri	84	159,54				

Çalışmaya katılan bireylerin paylaşılan liderlik puanları kıdemine göre farklılık göstermektedir (p<0,05). Bireylerin paylaşılan liderlik puanları tablo 6'da belirtildiği gibi farklı kıdemler arasında farklılıklar bulunmuştur.

"Çalışmaya katılan bireylerin paylaşılan liderlik puanları, örgüt yönetim tarzına göre farklılık göstermekte midir?" alt probleminin çözümü için elde edilen Kruskal Wallis testi sonuçları tablo 7'de verilmiştir.

Tablo 7: Örgüt yönetim tarzına göre Kruskal Wallis testi analizi sonuçları

	Örgüt Yönetimi	N	Sıra ort.	Ki-kare	sd	p	Fark
Paylaşılan Liderlik	Demokratik	230	222,22	143,305	2	,000	Demokratik-Otokratik
	Otokratik	59	85,08				Demokratik-Serbest bırakıcı
	Serbest bırakıcı	61	86,79				

Tablo 7 incelendiğinde örgüt yapısını demokratik-otokratik ve demokratik-serbest bırakıcı olarak tanımlayan bireyler arasında paylaşılan liderlik puanları arasında istatistiksel olarak anlamlı farklılıklar vardır (p<0,05). Elde edilen bu farklılık paylaşılan liderlik puanları için örgüt yapısını demokratik olarak tanımlayan bireylerin lehine bir farklılık vardır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

"Çalışmaya katılan bireylerin paylaşılan liderlik ve okul yönetiminde kayırmacılık puanları iletişim becerisine göre farklılık göstermekte midir?" alt probleminin çözümü için elde edilen Kruskal Wallis testi sonuçları tablo 8'de verilmiştir.

Tablo 8: İletişim becerisine göre Kruskal Wallis testi analizi sonuçları

	Görev yeri	N	Sıra ort.	Ki-kare	sd	p	Fark
Paylaşılan liderlik	Kötü	4	145,63	8,054	2	,018	Orta-İyi
	Orta	66	113,40				
	İyi	204	145,14				

Tablo 8 incelendiğinde bireylerin paylaşılan liderlik puanları arasında iletişim becerisine göre istatistiksel olarak anlamlı farklılık bulunmaktadır ($p<0,05$). Bu farklılık iletişim becerisini iyi olarak gören bireyler ile orta olarak gören bireyler arasında, iyi olarak gören bireylerin lehinedir.

TARTIŞMA

Araştırma bulgularına göre Paylaşılan liderlik puanlarının cinsiyete, okul türüne göre farklılık göstermediği görülmüştür. Araştırmalarda buna benzer şekilde sonuçlar alındığı gözlemlenmiştir (Korkmaz, 2011; Kolamaz, 2007). Paylaşılan liderlik puanlarına göre örgüt yapısını demokratik olarak tanımlayan bireylerin lehine, iletişim becerisini iyi olarak gören bireyler ile orta olarak gören bireyler arasında, iyi olarak gören bireylerin lehine sonucu çıkmıştır. Paylaşılan liderliğin temelinde demokratik ve okulun paydaşlarıyla işbirliği içinde bir yönetim şekli vardır (Aydemir, 2009). Kurum içindeki bireylerin de bu özelliklere sahip olmasından ötürü paylaşımcı liderlerle birlikte çalıştıkları söylenebilir.

Analiz sonucunda paylaşılan liderlik puanları ön lisans-lisans, ön lisans-yüksek lisans ve lisans-yüksek lisans grupları arasında, eğitim düzeyi düşük olan grupların lehinde bir farklılık olduğu görülmüştür. Bunun sebeplerinin araştırılması gerekmektedir.

Araştırma bulgu ve sonuçlarına göre geliştirilen öneriler şöyledir:

1. Kurumlarda paylaşılan liderlik ile ilgili eğitimler verilebilir.
2. Okullarda iletişim becerisinin geliştirilmesi üzerine hizmet içi eğitimler yapılabilir.
3. Mevzuatlarda paylaşılan liderliği ortaya çıkarıcı gerekli düzenlemeler ya da yenilikler yapılabilir.
4. Okulun bütün paydaşlarından okul hakkında anında dönüt alınabilecek bir sistem kurularak okul yönetimi ve paydaşları ile işbirliği içerisinde kurumun yönetilmesi sağlanabilir.
5. Araştırma diğer illerde de yapılarak bulunan sonuçlar karşılaştırılabilir.
6. Paylaşılan liderlikle idare edilen kurumların öğrenci ve okul başarıları araştırılabilir.

KAYNAKÇA

Arrowsmith T. (2007). Distributed leadership in secondary schools in England: the impact on the role of the headteacher and other issues, *Management in Education*, 21, 21-27.

Aydemir Ö. (2009). Meslek lisesi müdürlerinin yöneticilik davranışlarının öğretmenlerin örgütsel bağlılıklarına etkisi, Yeditepe Üniversitesi Sosyal Bilimler Enstitüsü, y.l.t., İstanbul.

Baloğlu N. (2011). Dağıtımcı liderlik: Okullarda dikkate alınması gereken bir liderlik yaklaşımı, *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi*, 12(3), 127-148.

Baloğlu, N (2011). Dağıtımcı liderlik: Okullarda yönetiminin yeniden yapılandırması sürecinde dikkate alınması gereken bir liderlik modeli. VI. Ulusal Eğitim Yönetimi Kongresi, Gazi Üniversitesi-EYEDDER. 16-17 Nisan, Gazi Mağusa, KKTC.

Beycioğlu K. (2009). İlköğretim okullarında öğretmenlerin sergiledikleri liderlik rollerine ilişkin bir değerlendirme: Hatay ili örneği, İnönü Üniversitesi Sosyal Bilimler Enstitüsü, y.l.t., Malatya.

Bostancı, A. (2012). Paylaşılan liderlik algısı ölçeği'nin Türkçe uyarlaması. *International Journal of Human Sciences* (9)2, 1619-1632.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Karasar, N. (2006). *Bilimsel araştırma yöntemi.* Ankara: Nobel Yayın Dağıtım.

Kolamaz, C. (2007). Destekleyici ve geliştirici liderlik yaklaşımlarının örgütsel bağlılığa etkisi. Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Ankara.

Korkmaz, M. (2005). Okul yöneticilerinin yetiştirilmesi: sorunlar-çözümler ve öneriler. *Gazi Eğitim Fakültesi Dergisi,* 25 (3), 237-252.

MEB Dış İlişkiler Genel Müdürlüğü (2009) liderliğin geliştirilmesi konferansı özet raporu. (09-10 Nisan) Ankara. Web: http://digm.meb.gov.tr/uaorgutler adresinden ek 2014 tarihinde alınmıştır.

Oğuz, E. (2010). Dağıtılmış liderlik. H. B. Memduhoğlu ve K. Yılmaz (Ed.). Yönetimde yeni yaklaşımlar. (157-174) Ankara: Pegema Yayıncılık.

Özer N.,Beycioğlu K.(2013). Paylaşılan liderlik ölçeğinin geliştirilmesi: Geçerlik ve güvenirlik Çalışmaları. *İlköğretim Online 12*(1), 77-86.

Spillane J.P. vd. (2005). "Distributing leadership", Developing Leadership: Creating the schools of tomorrow, Ed.: M. J. Coles ve G. Southworth, Berkshire: Open University Press, s.37-49.

Taşdan M. ve Oğuz E. (2013). İlköğretim öğretmenleri için dağıtımcı liderlik ölçeğinin geçerlik ve güvenirlik çalışması, *Kafkas Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 11, 103-124.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MODA TASARIMI EĞİTİMİNDE JÜRİLİ ÖLÇME VE DEĞERLENDİRMEYE YÖNELİK ÖĞRENCİ GÖRÜŞLERİ

Esra VAROL
Fashion Design Department
Architecture and Design Faculty
Anadolu University
Turkey
evarol@anadolu.edu.tr

ÖZET

Tasarım eğitiminde ölçme, objektif ölçme yöntemlerinden farklı olarak gözlem ve uzman yargısına dayanan performans ölçmenin konusudur. Bununla birlikte tasarım eğitiminde öğrenci performansının ölçülmesi ve değerlendirilmesinde kullanılan başlıca yaklaşım jürili yaklaşımdır. Jürili yaklaşımın benimsendiği temel dersler ise tasarım eğitiminin stüdyo dersleridir. Gerek tasarım probleminin cevapları olarak sunulan ürünler, gerekse bu çözümlere nasıl ulaşıldığına yönelik yapılan açıklamalar ile öğrencinin tasarım başarısına dolayısı ile stüdyo derslerindeki başarısına karar verilmektedir. Her ölçme ve değerlendirme yaklaşımında bulunan olumlu ve olumsuz yönlerin jürili yaklaşımda da bulunduğu söylenebilir. Bu doğrultuda bu araştırmanın temel amacı moda tasarımı eğitiminin stüdyo derslerindeki jürili ölçme ve değerlendirme yaklaşımını olumlu ve olumsuz yönleriyle ele almak, öğrenci görüşlerini belirleyerek bu yaklaşımın iyileştirilmesine katkıda bulunmak ve konu ile ilgili çalışan araştırmacılara, akademisyenlere ve öğrencilere bilgi sunmaktır.

Bu araştırmanın yöntemi betimseldir. Araştırma verilerinin elde edilmesinde jürili yaklaşıma yönelik toplam 30 yargıdan oluşan beşli likert tipi anket formu kullanılmıştır. Anket formu 2015-2016 öğretim yılı bahar döneminde Anadolu Üniversitesi, Mimarlık ve Tasarım Fakültesi, Moda Tasarımı Bölümünde öğrenim gören ve jürili yaklaşımı deneyimleyen 92 öğrenciye uygulanmıştır. Elde edilen verilerin istatistiksel analizleri sonucunda araştırma bulgularına ulaşılmıştır. Araştırma bulgularının değerlendirilmesi, ilişkilendirilmesi ve yorumlanması ile araştırma sonuçları sunulmuş ve önerilerde bulunulmuştur.

STUDENT VIEWS ON MEASUREMENT AND EVALUATION WITH JURY IN FASHION DESIGN EDUCATION

ABSTRACT

Measurement in design education is the subject of performance measurement based on observation and expert judgment unlike objective measurement methods. However, in design education, the main approach used in measurement and evaluation of student performance is the jury approach. The main courses that adopted the jury approach is the studio courses in design education program. Students' success in design and thus their success in studio courses are decided upon with both the products presented as solutions to design problems and with explanations made regarding how these solutions are reached. Positive and negative aspects found in every measurement and evaluation approach can also be found in the jury approach. Accordingly, the main purpose of this study is to discuss the jury approach used in studio courses in design education with its positive and negative aspects, to contribute to the improvement of this approach by determining students' views and to present information to the researchers, academicians and students who are working on this subject.

The method of this study is descriptive. To obtain the study data, a five likert-type questionnaire with 30 items regarding the jury approach was used. The questionnaire was administered to 92 students who studied at the Department of Fashion Design of Anadolu University's Faculty of Architecture and Design during the 2015-2016 academic year and who were evaluated by a jury. The study findings were reached through the statistical analysis of the data obtained. The study results were presented and suggestions were made after the study results' evaluation, association and interpretation.

GİRİŞ

Casakin'in aktarımı ile Goel'e (1995) göre, yaratıcılığın temel unsur olduğu tasarım, karmaşık ve tanımsız yapılı (ill-structured, ill-defined), belli işlemler sürecine yönelik uygulamalarla çözülemeyen problemlerin yer aldığı bir aktivitedir. Bu problemlerin, matematik problemleri gibi, doğru ya da yanlış olarak kabul edilebilecek, tek bir cevabı yoktur. Çeşitli derecelerde iyi ya da kötü, çok sayıda cevap olabilir (Casakin,2007, s.22; Kozbelt &Serafin, 2009, s.349-350). Bu nedenle, tasarım eğitiminde öğrenci başarısı, performansa yönelik tek bir doğru cevabın bulunduğu objektif testlerle ölçülemez. Bu alanda yapılan ölçmeler, çeşitli ölçütlerin (kriterlerin) kullanımına, gözlem ve uzman yargısına dayanan ve alternatif yöntem olarak kabul edilen performans ölçmenin konusudur. Performans ölçme, doğası gereği subjektiftir (Stiggins, 1987, s.33).

Tasarım ve sanat eğitiminde ölçmenin subjektif doğası ve çok boyutlu becerilerin bir arada ölçülmesi gereğinin yanı sıra, yaratıcılık, estetik gibi tam olarak açıklanamayan subjektif ölçütlerin varlığı da söz konusudur **(**ADC-

 Copyright © International Conference on New Horizons in Education Conference (INTE)

LTSN, 2002, s.1). Bunun yanı sıra teknik çözümler gibi objektif ölçütler de bulunur. Bu duruma rağmen, tasarım eğitiminde yaratıcılık, özgünlük gibi ölçütler, ancak gözlem ve uzman yargısına dayanan performans ölçme ile ölçülebilir. Performans ölçmede, insan kararlarına ve bu şekilde yapılan ölçmelere güvenilmek zorundadır (Christiaans, 2002, s. 41; Stiggins, 1987, s.33).

Ehmann'a (2005) göre de, tasarım eğitimi, doğası gereği ilginç eğitimsel problemlere sahiptir. Beceri-uygulama tabanlı (practiced-based) ya da proje tabanlı (project-based) olarak bilinen, geleneksel sınavlara bağlı olmayan bir ölçmeyi içerir (s.108).

Tasarım eğitiminin stüdyo derslerinde benimsenen geleneksel ölçme yaklaşımı jürili yaklaşımdır. Diğer derslere yönelik ölçme ve değerlendirme, genellikle standart yöntemlerle yapılmaktadır. Tasarım jürileri, her bir öğrencinin çalışmasını, sınıf arkadaşları, diğer öğrenciler, davet edilen üyeler ve öğretim elemanları karşısında sunduğu ortamlardır. Bu ölçmede, öğrenciler ve jüri üyeleri birebir etkileşim halindedir. Öğrenci, hem aldığı eğitimin genel, hem de tasarım uygulamasının profesyonel temellerine bağlı olarak çalışmalarını açıklar ve savunur. Jüri sunumu, genellikle öğrencinin tasarımlarına yönelik fikir ve süreçleri açıklaması ile başlar. Bu açıklamalar doğrultusunda, jüri üyeleri ile birlikte tasarımların başarısı ya da başarısızlığı üzerine tartışılır (Demirbaş&Demirkan, 2007, s.357; Oak, 2000, s.88-89).

Tasarım derslerindeki performans ölçmede jüriler, çizimler, üç boyutlu modeller ya da raporlar kullanılabilir (Demirbaş&Demirkan, 2007, s.357). Moda tasarımında öğrenciler, jüri sunumuna, genellikle hikaye panoları, son illüstrasyonlar ve üretilmiş tasarımlarla birlikte gelirler. Jüri kritiği, öğretim elemanlarının bir tasarım projesinde öğrencinin hazırladığı işi ölçme ve değerlendirme olayıdır. Öğrencinin gereklilikleri nasıl ve ne düzeyde yerine getirdiğinin, hem objektif, hem de subjektif bir değerlendirmesidir. Jüri üyeleri, projenin belirlediği problemi çözen, estetik, özgün ve başarılı kumaş ve dekoratif öge seçimi olan tasarımlar ararlar. Ayrıca üretimde, pratik becerilerin de geliştiğini görmek isterler. Öğrencinin, hem teorik, hem de uygulamalı olarak, proje özetine (brief) verdiği tasarım cevaplarını, açıklama ve destekleme düzeyine göre notlar verilir (Jones, s. 179-180.).

Jürili değerlendirmenin çok sayıda öğretim elemanından farklı görüşleri alabilme, tasarım detaylarını daha ayrıntıları ile ifade edebilme gibi olumlu yönlerinin bulunmasının yanı sıra, farklı görüşler karşısında etkili dönüt alamama, öğrenci sayısının fazla olması durumunda yeterli eleştiriyi alamama ya da sözlü sunum becerisinin zayıf olması durumunda tasarım detaylarının ifade sorunu gibi olumsuz yönleri de bulunabilmektedir. Bu doğrultuda bu araştırmanın temel amacı moda tasarımı eğitiminin stüdyo derslerindeki jürili ölçme ve değerlendirme yaklaşımını olumlu ve olumsuz yönleriyle ele almak, öğrenci görüşlerini belirleyerek bu yaklaşımın iyileştirilmesine katkıda bulunmak ve konu ile ilgili çalışan araştırmacılara, akademisyenlere ve öğrencilere bilgi sunmaktır.

YÖNTEM

Bu araştırmanın modeli tarama modelidir. "Tarama modelleri, geçmişte veya halen varolan bir durumu varolduğu şekli ile belirlemeyi amaçlayan araştırma yaklaşımlarıdır (Karasar, 1991:77). Bu araştırmanın örneklemini, Anadolu Üniversitesi, Mimarlık ve Tasarım Fakültesi, Moda Tasarımı Bölümü'nde öğrenimini sürdüren ve jürili değerlendirmeye katılan her öğrenim düzeyinden (2. sınıf sonrası) toplam 92 öğrenci oluşturmaktadır. Örneklemde yer alan öğrencilerin yaşları, en az 19, en çok 33 yaşlar arasında değişmektedir. Öğrenim düzeylerine göre öğrenci sayıları Tablo 1'de sunulmaktadır.

Tablo 1: Örneklemin öğrenim düzeyi

Öğrenim Düzeyi	f	%
2. Sınıf	39	42,4
3. Sınıf	27	29,3
4. Sınıf	26	28,3
Toplam	92	100,0

Araştırma, 2015-2016 öğretim yılı bahar yarıyılında, Anadolu Üniversitesi, Mimarlık ve Tasarım Fakültesi, Moda Tasarımı Bölümü'nde yapılmıştır. Araştırma verilerinin toplanmasında, araştırmacı tarafından geliştirilen ve pilot çalışması yapılarak son şekli verilen anket formu kullanılmıştır. Anket formunda jürili değerlendirmenin olumlu ve olumsuz yönlerine yönelik önermelerden oluşan 30 madde yer almaktadır. Ayrıca başlangıçta anket formunda yer alan 35 madde, yapılan pilot çalışma sonrası güvenilirlik analizi sonucunda 30 maddeye indirilmiştir. Anket formunun kapsam geçerliliği konusunda, Moda Tasarımı Bölümü'nde görev yapan ve jürili değerlendirmeyi gerçekleştiren üç öğretim elemanından uzman görüşü alınmıştır. Anket formunda bulunan

maddeler, likert tipinde, kesinlikle katılıyorum: 5, katılıyorum: 4, kararsızım: 3, katılmıyorum: 2 ve kesinlikle katılmıyorum: 1 şeklinde puanlanmıştır. Puan aralıkları, kesinlikle katılıyorum: 5,00 – 4,20, katılıyorum: 4,19 – 3,40, kararsızım: 3,39 -2,60, katılmıyorum: 2,59 – 1,80 ve kesinlikle katılmıyorum: 1,79 – 1,00 şeklindedir. Jürili değerlendirmenin olumlu ve olumsuz yönlerine ilişkin önermeler anket formunda karışık olarak sıralanmıştır. Bu doğrultuda 1.,3.,4.,5.,6.,8.,9.,10.,11.,13.,15.,17.,19.,21.,23.,24.,26.,27.,28. maddeler ölçmenin olumlu yönlerine yönelik önermelerdir. 2., 7., 12., 14., 16., 18., 20., 22., 25., 29., 30. maddeler ise ölçmenin olumsuz yönlerine yönelik önermelerdir.

Araştırma verilerinin güvenilirlik analizlerinde Cronbach Alpha güvenilirlik katsayısı, olumlu ve olumsuz yönlere yönelik görüşlerin belirlenmesinde aritmetik ortalama ve standart sapma değerleri, öğrenim düzeylerine göre görüşlerin farklılık gösterip göstermediğinin belirlenmesinde varyans analizi (One-way ANOVA), farklılığın hangi gruplardan kaynaklandığının belirlenmesinde ise çoklu karşılaştırma (post-hoc) yapılmıştır.

Moda Tasarımı Bölümün'de yapılan bu araştırma sonucunda ölçeğin tüm maddelere göre Cronbach Alpha güvenilirlik katsayısı ,71'dir. İstatistiksel anlamda, iç tutarlılık düzeyinin kabul edilebilmesi için genellikle istenen Alpha düzeyi ,70 ya da üzeridir. Alpha değeri ,60 ila ,80 arasında ise ölçek oldukça güvenilirdir (Özdamar, 2004, s. 632-633'ten aktaran: Akbulut, 2010, s.80). Bu doğrultuda, araştırma verilerinin güvenilirliğinin yeterli olduğu söylenebilir. Araştırma verilerinin istatistiksel analizleri SPSS 11.5 paket programında yapılmış, elde edilen bulgular ilgili tablolarda sunulmuş ve yorumlanmıştır.

BULGULAR ve YORUM

Moda Tasarımı Bölümü öğrencilerinin jürili değerlendirmenin olumlu ve olumsuz yönlerine ilişkin önermeler konusundaki görüşleri ve bu görüşlerin öğrenim düzeylerine göre farklılık durumları ilgili tablolarda sunulmaktadır.

Tablo 2: Jürili değerlendirmenin olumlu yönlerine yönelik öğrenci görüşleri

Olumlu Yönlere Yönelik Önermeler	Sınıf	n	Ortalama	Standart sapma
1. Jürili ölçme ve değerlendirme ile farklı jüri üyelerinden farklı eleştiriler alarak, tasarımımı daha iyi geliştirebiliyorum.	2. sınıf	39	3,8205	,96986
	3. sınıf	27	3,6667	1,03775
	4. sınıf	26	3,5385	1,10384
	Genel	**92**	**3,6957**	**1,02431**
3.Jürili ölçme ve değerlendirmede öğretim elemanlarının ifadelerinden hangi ölçütleri kullandığını anlayabiliyorum.	2. sınıf	39	3,3846	,96287
	3. sınıf	27	2,9630	1,31505
	4. sınıf	26	3,5769	,85665
	Genel	**92**	**3,3152**	**1,06832**
4. Jürili ölçme ve değerlendirmenin öğretim elemanlarından kaynaklanabilecek ölçme hatalarını azalttığını düşünüyorum.	2. sınıf	39	3,2051	,97817
	3. sınıf	27	3,3704	1,18153
	4. sınıf	26	3,0769	1,05539
	Genel	**92**	**3,2174**	**1,05691**
5. Jürili ölçme ve değerlendirmede diğer arkadaşlarımın çalışmalarını izleme fırsatı bularak, giysi tasarlama konusunda kendimi geliştirebiliyorum.	2. sınıf	39	4,1282	,95089
	3. sınıf	27	4,2593	,94432
	4. sınıf	26	3,5000	1,20830
	Genel	**92**	**3,9891**	**1,06384**
6. Jürili ölçme ve değerlendirmede tasarımlarımı canlı modele giydirerek sunmam tasarımlarımın özelliklerini daha iyi gösterebilmemi sağlıyor.	2. sınıf	39	4,2051	,80064
	3. sınıf	27	4,4444	,84732
	4. sınıf	26	4,4615	,70602
	Genel	**92**	**4,3478**	**,79053**
8. Jürili ölçme ve değerlendirmede arkadaşlarımın tasarımlarını izlemek, yaptığım ve yapacağım tasarımlara yönelik özeleştiri yapabilmemi sağlıyor.	2. sınıf	39	4,0769	,77407
	3. sınıf	27	4,3333	,83205
	4. sınıf	26	3,7308	,96157
	Genel	**92**	**4,0543**	**,86905**
9. Jüri üyelerinin olumsuz eleştirilerini dikkate alarak daha sonraki tasarımlarımı geliştirebiliyorum.	2. sınıf	39	4,0000	1,05131
	3. sınıf	27	4,0741	,78082
	4. sınıf	26	3,8462	1,04661
	Genel	**92**	**3,9783**	**,97189**
10. Jüride farklı uzmanlık alanlarından (Giysi Tasarımı, Tekstil Tasarımı) öğretim elemanlarının bulunması, tasarımlarımın farklı yönlerden gelişimine katkı sağlıyor.	2. sınıf	39	3,7436	1,18584
	3. sınıf	27	4,0741	,91676
	4. sınıf	26	3,7692	1,06987

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	Genel	**92**	**3,8478**	**1,07861**
11. Jürili ölçme ve değerlendirmede arkadaşlarımın tasarımlarını görerek bir sonraki çalışmamda kullanmak üzere yeni tasarım fikirleri konusunda ilham alabiliyorum.	2. sınıf	39	3,7436	,99255
	3. sınıf	27	3,5556	1,01274
	4. sınıf	26	3,0385	1,11286
	Genel	**92**	**3,4891**	**1,06384**
13. Jürili ölçme ve değerlendirmede arkadaşlarımın sunumlarını izlemek, yaptığım ve yapacağım sunumlara yönelik özeleştiri yapabilmemi sağlıyor.	2. sınıf	39	3,9487	,82554
	3. sınıf	27	4,1852	,68146
	4. sınıf	26	3,7308	1,00231
	Genel	**92**	**3,9565**	**,85051**
15. Farklı uzmanlık alanlarına (Giysi Tasarımı, Tekstil Tasarımı) sahip jüri üyelerinin daha kapsamlı bir ölçme yaptığını düşünüyorum.	2. sınıf	39	3,3077	1,07981
	3. sınıf	27	3,9630	,97985
	4. sınıf	26	3,3846	,94136
	Genel	**92**	**3,5217**	**1,04280**
17. Jürili ölçme ve değerlendirme ile tasarımımı daha iyi ifade etme imkanı buluyorum.	2. sınıf	39	3,4615	1,14354
	3. sınıf	27	3,7407	,94432
	4. sınıf	26	3,3077	1,01071
	Genel	**92**	**3,5000**	**1,05351**
19. Jürili ölçme ve değerlendirme tasarım becerimi geliştirdiği gibi sunum becerimi de geliştiriyor.	2. sınıf	39	4,1282	,97817
	3. sınıf	27	4,0370	,75862
	4. sınıf	26	3,6538	1,19808
	Genel	**92**	**3,9674**	**,99946**
21. Jürili ölçme ve değerlendirme, gelecekte gerçek bir iş ortamında yapacağım tasarım sunumunu deneyimlememe olanak sağlıyor.	2. sınıf	39	4,1026	,96777
	3. sınıf	27	4,0370	,80773
	4. sınıf	26	3,7308	1,15092
	Genel	**92**	**3,9783**	**,98314**
23. Jüride kullanılan eleştiri dilinin öğrenim seviyeme uygun olduğunu düşünüyorum.	2. sınıf	39	3,6154	,87706
	3. sınıf	27	3,2222	1,05003
	4. sınıf	26	3,3462	1,16421
	Genel	**92**	**3,4239**	**1,01887**
24. Jürili ölçme ve değerlendirmenin tasarım eğitiminde daha adil olduğunu düşünüyorum.	2. sınıf	39	3,0513	1,41326
	3. sınıf	27	2,6296	1,21365
	4. sınıf	26	2,4615	1,24035
	Genel	**92**	**2,7609**	**1,32075**
26. Jürili ölçme ve değerlendirmede sadece yaptığım ürünlerle ilgili değil, süreçte yaptığım çalışmalarla da ilgili bilgi verme olanağı buluyorum.	2. sınıf	39	3,0513	1,41326
	3. sınıf	27	3,5926	1,04731
	4. sınıf	26	3,3846	,85215
	Genel	**92**	**3,3043**	**1,18358**
27. Jürili ölçme ve değerlendirmede öğretim elemanlarının verdiği notların ortalamalarının alınması, aldığım notun daha güvenilir olduğunu düşündürüyor.	2. sınıf	39	3,3846	1,11486
	3. sınıf	27	3,0370	1,05544
	4. sınıf	26	2,7692	1,06987
	Genel	**92**	**3,1087**	**1,10400**
28. Birden fazla jüri üyesinden olumlu eleştiriler almak derse karşı motivasyonumu yükseltiyor.	2. sınıf	39	4,7179	,51035
	3. sınıf	27	4,4444	,80064
	4. sınıf	26	4,0000	,97980
	Genel	**92**	**4,4348**	**,80253**

Tablo 2. incelendiğinde, öğrenim düzeylerine göre öğrencilerin jürili değerlendirmenin olumlu yönlerine yönelik görüşlerinden çarpıcı olan bulgulardan bazıları şöyledir. Genel aritmetik ortalamalar dikkate alındığında öğrenciler, giysi tasarımları konusunda birden fazla jüri üyesinden olumlu eleştiri almalarının proje derslerine yönelik motivasyonlarını yükselttiği önermesine (ortalama, 4,4348) ve jürili sistemde canlı model üzerinde tasarımlarını sunmalarının tasarım detaylarını daha iyi gösterebilmelerine olanak sağlaması önermesine (ortalama 4,3478) kesinlikle katıldıklarını ifade etmişlerdir. Genel standart sapma değerleri dikkate alındığında ise öğrenciler, jürili ölçme ve değerlendirmenin tasarım eğitiminde daha adil olduğunu düşündüklerini (standart sapma 1,32075) belirtmişlerdir. Bu sonuç dikkate alındığında, tasarım eğitiminde jürili ölçme ve değerlendirmenin daha adil olduğunun düşünülmesinin temel nedeninin şu olduğu söylenebilir: Tasarım eğitiminin doğası gereği, özellikle yaratıcılık ve estetik gibi ölçütler görelidir. Bu ölçütler üzerinde tartışılarak jüri üyelerinin ortak bir görüşe varması ve verilen notların jüri sayısına göre ortalamasının alınması durumunun ölçme ve değerlendirmenin daha adil olmasına katkı sağladığı söylenebilir. Bu görüşü destekleyen bir başka

 Copyright © International Conference on New Horizons in Education Conference (INTE)

bulgu da öğrencilerin öğretim elemanlarından aldığı notların daha güvenilir olduğu yönünde görüş bildirmeleridir (standart sapma 1,10400). Ölçmeci ve ölçüm sayısı arttığında ölçmenin güvenilirliğinin de artması, yani ölçmenin tesadüfi hatalardan daha arınık olması ve duyarlılığının artması söz konusu olabilir. Bunlarla birlikte öğrenciler performanslarının ölçülmesinde sadece ürünlerinin değil, ürünlerini gerçekleştirme süreçleri konusunda da bilgi verme olanağı buldukları görüşündedirler (standart sapma 1, 18358). Bu durum da ölçmenin kapsayıcı niteliğine katkıda bulunmaktadır.Tüm bu konular ile ilgili ayrıntılı bilgiye literatürde de ulaşmak mümkündür (Turgut, 1983,s. 27-44).

Tablo 3: Jürili değerlendirmenin olumsuz yönlerine yönelik öğrenci görüşleri

Olumsuz Yönlere Yönelik Önermeler	Sınıf	n	Ortalama	Standart sapma
2. Jürili ölçme ve değerlendirmede öğretim elemanlarının yorumlarının kısa olması başarısız olduğumu düşündürüyor.	2. sınıf	39	3,0256	1,28733
	3. sınıf	27	3,3704	1,33440
	4. sınıf	26	2,6538	,97744
	Genel	**92**	**3,0217**	**1,24015**
7. Öğrenci sayısı fazla olduğunda, çalışmalarımı ifade etmede yeterli zamanımın olmadığını düşünüyorum.	2. sınıf	39	4,1795	1,04810
	3. sınıf	27	3,7037	1,23459
	4. sınıf	26	3,6154	1,26734
	Genel	**92**	**3,8804**	**1,18454**
12. Öğrenci sayısı fazla olduğunda öğretim elemanlarının çalışmalarımı yeterli şekilde eleştiremediğini düşünüyorum.	2. sınıf	39	3,7949	1,08044
	3. sınıf	27	3,6296	1,18153
	4. sınıf	26	3,8077	1,20064
	Genel	**92**	**3,7500**	**1,13510**
14. Öğrenci sayısı fazla olduğunda jüri sıramı beklemek konsantrasyonumu bozuyor.	2. sınıf	39	4,1538	1,13644
	3. sınıf	27	3,7037	1,29540
	4. sınıf	26	3,1923	1,32723
	Genel	**92**	**3,7500**	**1,28922**
16. Jürili değerlendirmede jüri üyelerinin kendi öğrencilerine diğer öğrencilere kıyasla daha yüksek not verdiğini düşünüyorum.	2. sınıf	39	3,4103	1,39015
	3. sınıf	27	4,3333	,87706
	4. sınıf	26	4,0385	,91568
	Genel	**92**	**3,8587**	**1,19137**
18. Jüride kullanılan eleştiri dilinin öğrenim seviyemin altında olduğunu düşünüyorum.	2. sınıf	39	2,6410	1,03840
	3. sınıf	27	2,9259	,99715
	4. sınıf	26	2,7692	1,06987
	Genel	**92**	**2,7609**	**1,03105**
20. Jüride kullanılan eleştiri dilinin öğrenim seviyemin üstünde olduğunu düşünüyorum	2. sınıf	39	2,2308	,66734
	3. sınıf	27	2,7037	,95333
	4. sınıf	26	2,1154	,76561
	Genel	**92**	**2,3370**	**,81574**
22. Sunum becerim yeterli değilse, jürili değerlendirmede tasarımlarımın hak ettiği değeri alamadığını düşünüyorum.	2. sınıf	39	3,3590	1,08790
	3. sınıf	27	4,1111	,97402
	4. sınıf	26	3,9231	1,05539
	Genel	**92**	3,7391	**1,08809**
25. Jürili ölçme ve değerlendirmede süreçte yaptığım çalışmalar dikkate alınmıyor.	2. sınıf	39	2,8718	1,17383
	3. sınıf	27	3,1852	1,17791
	4. sınıf	26	3,3462	1,23101
	Genel	**92**	**3,0978**	**1,19578**
29. Çok sayıda öğretim elemanı karşısında sunum yapmak stres kaynaklarımdan birisi.	2. sınıf	39	3,5641	1,20950
	3. sınıf	27	3,7037	1,17063
	4. sınıf	26	3,5385	1,50282
	Genel	**92**	**3,5978**	**1,27581**
30. Jürili ölçme ve değerlendirmede, moda tasarımı alanından olmayan kişilerin yer alması durumunda tasarımlarımı geliştirmemde yanlış yönlendirmeler yapıldığını düşünüyorum.	2. sınıf	39	2,8974	1,18754
	3. sınıf	27	3,7778	1,12090
	4. sınıf	26	3,9615	1,03849
	Genel	**92**	**3,4565**	**1,21721**

Tablo 3. incelendiğinde, öğrenim düzeylerine göre öğrencilerin jürili değerlendirmenin olumsuz yönlerine yönelik görüşlerinden çarpıcı olan bulgulardan bazıları şöyledir. Genel aritmetik ortalamalar dikkate alındığında

 Copyright © International Conference on New Horizons in Education Conference (INTE)

öğrenciler, öğrenci sayısı fazla olduğunda tasarımlarını ve bunlara yönelik çalışmalarını ifade etmede yeterli zamanlarının olamadığı görüşüne katıldıklarını (ortalama 3,8804) ifade etmişlerdir. Bununla birlikte yine öğrenci sayısının fazla olması durumunda sıra beklemenin sınava yönelik konsantrasyonlarını da bozduğu görüşündedirler (ortalama 3,7500). Jürili değerlendirmede her bir öğrencinin tasarımlarının ayrı ayrı değerlendirilmesi söz konusu olduğundan, öğrenci sayısı arttığında ölçme ve değerlendirmenin niteliklerinde sorunlar meydana geldiği söylenebilir. Sadece öğrenciler değil, ölçmeyi gerçekleştiren öğretim elemanlarının da yorulma durumu nedeniyle ölçmeye hata karışma olasılığı da artabilmektedir. Bir diğer önemli öğrenci görüşü ise jüri üyelerinden bazılarının, sınav sırasında kendi öğrencilerine diğer öğrencilere kıyasla daha yüksek not verme eğiliminde olduğudur (ortalama 3,8587). Ölçme ve değerlendirmede olmaması gereken bu duruma yanlılık adı verilmektedir (Turgut, 1983, s. 29). Yanlılık, sistematik hatalardan birisi olup ölçmenin objektiflik ve güvenirliliğini tehlikeye düşürmektedir. Bu konuda ölçmeyi gerçekleştiren öğretim elemanlarının daha dikkatli ve duyarlı olmaları gerekmektedir. Genel standart sapma değerleri dikkate alındığında ise öğrenciler çok sayıda öğretim elemanı karşısında tasarımlarını savunmanın stres kaynaklarından birisi olduğunu belirtmişlerdir (standart sapma 1,27581). Jürili değerlendirme stres kaynağı olarak görülmesine rağmen tasarımcılar gerçek iş yaşamlarında da tasarımlarını gerek üyesi oldukları üretim ekibine, gerekse müşterilerine ve izleyicilerin değerlendirmesine sunmak zorundadırlar. Bu doğrultuda, stressiz bir tasarım ortamı düşünülemeyeceği için, gerçek iş yaşamının benzetimi olan jürili değerlendirmenin onları iş yaşamlarına hazırlamaya katkı sağladığı da söylenebilir. Öğrencilerin jürili değerlendirmenin olumsuz yönlerinden bir başkasına yönelik görüşü ise jürili ölçme ve değerlendirmede, moda tasarımı alanından olmayan kişilerin yer alması durumunda tasarımlarının geliştirilmesinde yanlış yönlendirmeler yapıldığını düşünmeleridir (standart sapma 1, 21721). Bu doğrultuda öğrencilerin ölçme ve değerlendirmeden doğru dönütler alabilmesinde jüri üyelerinin seçimi konusuna da dikkat edilmelidir.

Tablo 4: Öğrenim düzeylerine göre jürili değerlendirmenin olumlu yönlerine yönelik varyans analizi

Olumlu Önermeler	Varyansın Kaynağı	Sum of Squares	df	Mean Square	F	p*
5. Jürili ölçme ve değerlendirmede diğer arkadaşlarımın çalışmalarını izleme fırsatı bularak, giysi tasarlama konusunda kendimi geliştirebiliyorum.	**Guruplar arası**	8,945	2	4,472	4,233	,018
	Gurup içi	94,044	89	1,057		
	Toplam	102,989	91			
8. Jürili ölçme ve değerlendirmede arkadaşlarımın tasarımlarını izlemek, yaptığım ve yapacağım tasarımlara yönelik özeleştiri yapabilmemi sağlıyor.	**Guruplar arası**	4,844	2	2,422	3,374	,039
	Gurup içi	63,885	89	,718		
	Toplam	68,728	91			
11. Jürili ölçme ve değerlendirmede arkadaşlarımın tasarımlarını görerek bir sonraki çalışmamda kullanmak üzere yeni tasarım fikirleri konusunda ilham alabiliyorum.	**Guruplar arası**	7,925	2	3,963	3,710	,028
	Gurup içi	95,064	89	1,068		
	Toplam	102,989	91			
15. Farklı uzmanlık alanlarına (Giysi Tasarımı, Tekstil Tasarımı) sahip jüri üyelerinin daha kapsamlı bir ölçme yaptığını düşünüyorum.	**Guruplar arası**	7,532	2	3,766	3,666	,030
	Gurup içi	91,425	89	1,027		
	Toplam	98,957	91			
28. Birden fazla jüri üyesinden olumlu eleştiriler almak derse karşı motivasyonumu yükseltiyor.	**Guruplar arası**	8,045	2	4,022	7,080	,001
	Gurup içi	50,564	89	,568		
	Toplam	58,609	91			

*p< 0,05

Tablo 4. incelendiğinde, varyans analizi (One-way Anova) sonuçlarına göre, öğrenim düzeyleri arasında, jürili ölçme ve değerlendirmenin olumlu yönlerine yönelik beş önermede istatistiksel açıdan anlamlı farklılıklar bulunmaktadır. Diğer önermelerde anlamlı farklılıklar yoktur. Anlamlı farklılıkların hangi öğrenim düzeylerinden kaynaklandığını belirlemek amacı ile ise Scheffe testi yapılmıştır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 5: Öğrenim düzeylerine göre jürili değerlendirmenin olumlu yönlerine yönelik farklılıklar

Olumlu Önermeler	Öğrenim Düzeyi	Öğrenim Düzeyi	Ortalama Fark	p*
5. Jürili ölçme ve değerlendirmede diğer arkadaşlarımın çalışmalarını izleme fırsatı bularak, giysi tasarlama konusunda kendimi geliştirebiliyorum.	2. sınıf	3. sınıf	-,13105	,879
		4. sınıf	,62821	,060
	3. sınıf	2. sınıf	,13105	,879
		4. sınıf	,75926(*)	,031
	4. sınıf	2. sınıf	-,62821	,060
		3. sınıf	-,75926(*)	,031
8. Jürili ölçme ve değerlendirmede arkadaşlarımın tasarımlarını izlemek, yaptığım ve yapacağım tasarımlara yönelik özeleştiri yapabilmemi sağlıyor.	2. sınıf	3. sınıf	-,25641	,484
		4. sınıf	,34615	,277
	3. sınıf	2. sınıf	,25641	,484
		4. sınıf	,60256(*)	,040
	4. sınıf	2. sınıf	-,34615	,277
		3. sınıf	-,60256(*)	,040
11. Jürili ölçme ve değerlendirmede arkadaşlarımın tasarımlarını görerek bir sonraki çalışmamda kullanmak üzere yeni tasarım fikirleri konusunda ilham alabiliyorum.	2. sınıf	3. sınıf	,18803	,769
		4. sınıf	,70513(*)	,030
	3. sınıf	2. sınıf	-,18803	,769
		4. sınıf	,51709	,196
	4. sınıf	2. sınıf	-,70513(*)	,030
		3. sınıf	-,51709	,196
15. Farklı uzmanlık alanlarına (Giysi Tasarımı, Tekstil Tasarımı) sahip jüri üyelerinin daha kapsamlı bir ölçme yaptığını düşünüyorum.	2. sınıf	3. sınıf	-,65527(*)	,040
		4. sınıf	-,07692	,956
	3. sınıf	2. sınıf	,65527(*)	,040
		4. sınıf	,57835	,122
	4. sınıf	2. sınıf	,07692	,956
		3. sınıf	-,57835	,122
28. Birden fazla jüri üyesinden olumlu eleştiriler almak derse karşı motivasyonumu yükseltiyor.	2. sınıf	3. sınıf	,27350	,354
		4. sınıf	,71795(*)	,001
	3. sınıf	2. sınıf	-,27350	,354
		4. sınıf	,44444	,106
	4. sınıf	2. sınıf	-,71795(*)	,001
		3. sınıf	-,44444	,106

*p< 0,05

Tablo 5. incelendiğinde, jürili ölçme ve değerlendirmede, diğer arkadaşlarının çalışmalarını izleme fırsatı bularak, giysi tasarlama konusunda kendilerini geliştirebilme önermesine ve arkadaşlarının tasarımlarını izleyerek, yaptıkları ve yapacakları tasarımlara yönelik özeleştiri yapabilme önermesine yönelik öğrenci görüşlerinde 3. ve 4. sınıflar arasında farklar bulunmaktadır. 3. sınıf öğrencileri bu önermelere kesinlikle katıldıklarını belirtirken, 4. sınıf öğrencileri bu önermelere 3. sınıf öğrencilerine kıyasla daha az katıldıklarını belirtmişlerdir. Jürili ölçme ve değerlendirmede arkadaşlarının tasarımlarını görerek bir sonraki çalışmalarında kullanmak üzere yeni tasarım fikirleri ilham alabilme ve birden fazla jüri üyesinden olumlu eleştiriler alarak derse karşı motivasyonun yükselmesi önermelerine yönelik öğrenci görüşlerinde ise 2. ve 4. sınıf öğrencileri arasında farklılık bulunmaktadır. Bu önermelere 2. sınıf öğrencileri daha çok katılırken onlara kıyasla, 4. sınıf öğrencileri daha az katılmıştır. Farklı uzmanlık alanlarına (Giysi Tasarımı, Tekstil Tasarımı) sahip jüri üyelerinin daha kapsamlı bir ölçme yaptığı konusundaki önermeye yönelik görüşlerde ise 2. ve 3. sınıf öğrencileri arasında farklılıklar bulunmaktadır. Bu önereye 2. sınıf öğrencileri daha az katılırken 3. sınıf öğrencileri daha çok katılmıştır. Tüm sonuçlar dikkate alındığında jürili ölçme ve değerelendirmenin olumlu yönlerine yönelik bazı önermelerde öğrenim düzeyine göre öğrencilerin farklı görüşlere sahip olduğu söylenebilir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 6: Öğrenim düzeylerine göre jürili değerlendirmenin olumsuz yönlerine yönelik varyans analizi

Olumsuz Önermeler	Varyansın Kaynağı	Sum of Squares	df	Mean Square	F	p*
14. Öğrenci sayısı fazla olduğunda jüri sıramı beklemek konsantrasyonumu bozuyor.	**Guruplar arası**	14,505	2	7,252	4,720	,011
	Gurup içi	136,745	89	1,536		
	Toplam	151,250	91			
16. Jürili değerlendirmede jüri üyelerinin kendi öğrencilerine diğer öğrencilere kıyasla daha yüksek not verdiğini düşünüyorum.	**Guruplar arası**	14,766	2	7,383	5,744	,005
	Gurup içi	114,397	89	1,285		
	Toplam	129,163	91			
20. Jüride kullanılan eleştiri dilinin öğrenim seviyemin üstünde olduğunu düşünüyorum	**Guruplar arası**	5,348	2	2,674	4,311	,016
	Gurup içi	55,207	89	,620		
	Toplam	60,554	91			
22. Sunum becerim yeterli değilse, jürili değerlendirmede tasarımlarımın hak ettiği değeri alamadığını düşünüyorum.	**Guruplar arası**	10,252	2	5,126	4,680	,012
	Gurup içi	97,487	89	1,095		
	Toplam	107,739	91			
30. Jürili ölçme ve değerlendirmede, moda tasarımı alanından olmayan kişilerin yer alması durumunda tasarımlarımı geliştirmemde yanlış yönlendirmeler yapıldığını düşünüyorum.	**Guruplar arası**	21,608	2	10,804	8,493	,000
	Gurup içi	113,218	89	1,272		
	Toplam	134,826	91			

*p< 0,05

Tablo 6. incelendiğinde, varyans analizi (One-way Anova) sonuçlarına göre, öğrenim düzeyleri arasında, jürili ölçme ve değerlendirmenin olumsuz yönlerine yönelik beş önermede istatistiksel açıdan anlamlı farklılıklar bulunmaktadır. Diğer önermelerde anlamlı farklılıklar yoktur. Anlamlı farklılıkların hangi öğrenim düzeylerinden kaynaklandığını belirlemek amacı ile ise Scheffe testi yapılmıştır.

Tablo 7: Öğrenim düzeylerine göre jürili değerlendirmenin olumsuz yönlerine yönelik farklılıklar

Olumsuz Önermeler	Öğrenim Düzeyi	Öğrenim Düzeyi	Ortalama Fark	p*
14. Öğrenci sayısı fazla olduğunda jüri sıramı beklemek konsantrasyonumu bozuyor.	2. sınıf	3. sınıf	,45014	,354
		4. sınıf	,96154(*)	,012
	3. sınıf	2. sınıf	-,45014	,354
		4. sınıf	,51140	,328
	4. sınıf	2. sınıf	-,96154(*)	,012
		3. sınıf	-,51140	,328
16. Jürili değerlendirmede jüri üyelerinin kendi öğrencilerine diğer öğrencilere kıyasla daha yüksek not verdiğini düşünüyorum.	2. sınıf	3. sınıf	-,92308(*)	,007
		4. sınıf	-,62821	,097
	3. sınıf	2. sınıf	,92308(*)	,007
		4. sınıf	,29487	,640
	4. sınıf	2. sınıf	,62821	,097
		3. sınıf	-,29487	,640
20. Jüride kullanılan eleştiri dilinin öğrenim seviyemin üstünde olduğunu düşünüyorum.	2. sınıf	3. sınıf	-,47293	,062
		4. sınıf	,11538	,846
	3. sınıf	2. sınıf	,47293	,062
		4. sınıf	,58832(*)	,029
	4. sınıf	2. sınıf	-,11538	,846
		3. sınıf	-,58832(*)	,029
	2. sınıf	3. sınıf	-,75214(*)	,019
		4. sınıf	-,56410	,110

 Copyright © International Conference on New Horizons in Education Conference (INTE)

22. Sunum becerim yeterli değilse, jürili değerlendirmede tasarımlarımın hak ettiği değeri alamadığını düşünüyorum.	3. sınıf	2. sınıf	,75214(*)	,019
		4. sınıf	,18803	,808
	4. sınıf	2. sınıf	,56410	,110
		3. sınıf	-,18803	,808
30. Jürili ölçme ve değerlendirmede, moda tasarımı alanından olmayan kişilerin yer alması durumunda tasarımlarımı geliştirmemde yanlış yönlendirmeler yapıldığını düşünüyorum.	2. sınıf	3. sınıf	-,88034(*)	,010
		4. sınıf	-1,06410(*)	,002
	3. sınıf	2. sınıf	,88034(*)	,010
		4. sınıf	-,18376	,839
	4. sınıf	2. sınıf	1,06410(*)	,002
		3. sınıf	,18376	,839

*p< 0,05

Tablo 7. incelendiğinde, öğrenci sayısı fazla olduğunda jüri sırasını beklemenin konsantrasyonu bozması önermesine yönelik öğrenci görüşlerinde 2.. ve 4. sınıflar arasında farklar bulunmaktadır. 2. sınıf öğrencileri bu önermeye katıldıklarını belirtirken, 4. sınıf öğrencileri bu önermeye karılım konusunda kararsız olduklarını belirtmişlerdir. Jürili değerlendirmede jüri üyelerinin kendi öğrencilerine diğer öğrencilere kıyasla daha yüksek not verdiğini düşünüyorum ve sunum becerim yeterli değilse, jürili değerlendirmede tasarımlarımın hak ettiği değeri alamadığını düşünüyorum önermelerine yönelik öğrenci görüşlerinde 2. ve 3. sınıf arasında farklılık bulunmaktadır. 2. sınıf öğrencileri ilk önermeye katıldıklarını belirtirken 3. sınıf öğrencileri kesinlikle katıldıklarını belirtmişlerdir. İkinci önerme için ise 2. sınıf öğrencileri kararsız olduklarını belirtirken, 3. sınıf öğrencileri katıldıklarını belirtmişlerdir. Jüride kullanılan eleştiri dilinin öğrenim seviyemin üstünde olduğunu düşünüyorum önermesi konusunda ise 3. ve 4. sınıf öğrencilerinin görüş farklılığı bulunmaktadır. 3. sınıf öğrencileri bu önermeye katılmadıklarını belirtirken 4. sınıf öğrencileri kesinlikle katılmadıklarını belirtmişlerdir. Jürili ölçme ve değerlendirmede, moda tasarımı alanından olmayan kişilerin yer alması durumunda tasarımlarımı geliştirilmesinde yanlış yönlendirmeler yapıldığını düşünüyorum önermesine ise 2. sınıf öğrencileri, 3. ve 4. sınıf öğrencilerinden farklı görüş bildirmişlerdir. Bu önermeye katılım konusunda 2. sınıf öğrencileri kararsızken, 3. ve 4. sınıf öğrencileri katıldıklarını belirtmişlerdir. Tüm sonuçlar dikkate alındığında jürili ölçme ve değerelendirmenin olumsuz yönlerine yönelik bazı önermelerde öğrenim düzeyine ve jüri deneyimlerine göre öğrencilerin farklı görüşlere sahip olduğu söylenebilir.

SONUÇ ve ÖNERİLER

Moda tasarımı eğitiminde ölçme ve değerlendirme performans ölçme ve değerlendirmenin konusudur. Ölçmenin, kapsam geçerliliğini ve güvenilirliğini artırmada benimsenen ölçme ve değerlendirme yaklaşımı ise jürili ölçme ve değerlendirmedir. Her ölçme ve değerlendirme yönteminde bulunabilecek olumlu ve olumsuz yönlerin bu yöntemde de olabileceği söylenebilir. Bu doğrultuda, jürili ölçme ve değerlendirmenin olası olumlu ve olumsuz yönlerine yönelik öğrenci görüşlerinin belirlenmeye çalışıldığı bu araştırmada ulaşılan çarpıcı sonuçlardan bazıları şunlardır:

- Öğrenciler, giysi tasarımları konusunda birden fazla jüri üyesinden olumlu eleştiri almalarının proje derslerine yönelik motivasyonlarını yükselttiğini, jürili sistemde canlı model üzerinde tasarımlarını sunmalarının tasarım detaylarını daha iyi gösterebilmelerine olanak sağladığını ve jürili ölçme ve değerlendirmenin tasarım eğitiminde daha adil olduğunu düşündüklerini belirtmişlerdir. Bu görüşlerini destekleyen bir başka sonuç öğrencilerin öğretim elemanlarından aldığı notların daha güvenilir olduğu yönünde görüş bildirmeleridir Bunlarla birlikte öğrenciler performanslarının ölçülmesinde sadece ürünlerinin değil, ürünlerini gerçekleştirme süreçleri konusunda da bilgi verme olanağı buldukları görüşündedirler . Tüm sonuçlar dikkate alındığında, jürili ölçme ve değerlendirmenin niteliklerine uygun yapılması durumunda tasarım eğitimi için geçerli ve güvenilir bir yöntem olduğu ve öğrencilerinde bu sonuca katıldığı söylenebilir.

- Öğrencilerin jürili değerlendirmenin olumsuz yönlerine yönelik önemli görüşleri ise öğrenci sayısı fazla olduğunda ölçmenin niteliklerinin zarar gördüğüdür. Bir diğer önemli öğrenci görüşü ise jüri üyelerinden bazılarının, sınav sırasında kendi öğrencilerine diğer öğrencilere kıyasla daha yüksek not verme eğiliminde olduğudur. Ölçme ve değerlendirmede olmaması gereken bu durum, ölçmeyi gerçekleştiren öğretim elemanlarının daha dikkatli ve duyarlı olmalarını gerektirmektedir. Öğrenciler ayrıca çok sayıda öğretim elemanı karşısında tasarımlarını savunmanın stres kaynaklarından birisi olduğunu belirtmişlerdir. Jürili değerlendirme stres kaynağı olarak görülmesine rağmen tasarımcılar gerçek iş yaşamlarında da tasarımlarını gerek üyesi oldukları üretim ekibine, gerekse müşterilerine ve

izleyicilerin değerlendirmesine sunmak zorundadırlar. Bu doğrultuda, stressiz bir tasarım ortamı düşünülemez. Öğrencilerin bu konuda daha fazla bilgilendirilmelerinin bu görüşün değişmesinde katkı sağlayacağı düşünülmektedir. Bir başka önemli sonuç ise öğrencilerin jüride moda tasarımı alanından olmayan kişilerin yer alması durumunda tasarımlarının geliştirilmesinde yanlış yönlendirmeler yapıldığını düşünmeleridir Bu doğrultuda öğrencilerin ölçme ve değerlendirmeden doğru dönütler alabilmesinde jüri üyelerinin seçimi konusuna da dikkat edilmelidir.

- Varyans analizi sonuçlarına göre, öğrenim düzeyleri arasında, jürili ölçme ve değerlendirmenin olumlu ve olumsuz yönlerine yönelik bazı önermede istatistiksel açıdan anlamlı farklılıklar bulunmaktadır.Konu ile ilgili tüm sonuçlar dikkate alındığında jürili ölçme ve değerelendirmenin olumlu ve olumsuz yönlerine yönelik bazı önermelerde öğrenim düzeyine ve jüri deneyimlerine göre öğrencilerin farklı görüşlere sahip olduğu söylenebilir.

KAYNAKLAR

ADC-LTSN Learning and Teaching Fund Project: Effective Assessment in Art and Design. (2002). *Writing Learning Outcomes and Assessment Criteria in Art and Design.* London Institute: <http://www.arts.ac.uk> (2008, Şubat 15).

Akbulut, Y. (2010). *Sosyal bilimlerde SPSS uygulamaları, Sık kullanılan istatistiksel analizler ve açıklamalı SPSS çözümleri*, İstanbul: İdeal Kültür Yayıncılık.

Casakin, H.P. (2007). Methaphors in Design Problem Solving: Implications for Creativity, *International Journal of Design*, 1(2), 21-33.

Christiaans, H.H.C.M. (2002). Creativity as a Design Criterion, *Creativity Research Journal,* 14 (1), 41-54.

Demirbaş, O.O. and Demirkan, H. (2007). Learning Styles of Design Students and The Relationship of Academic Performance and Gender in Design Education, *Learning and Instruction*, 17, 345-359.

Jones, S. J. (2009). *Moda tasarımı.* (Çeviren: Hüseyin Kılıç). İstanbul: Güncel Yayıncılık.

Karasar, N. (1991). *Bilimsel araştırma yöntemi: kavramlar, ilkeler, teknikler*.Ankara: Sanem Matbaacılık.

Kozbelt, A. and Serafin, J. (2009). Dynamic Evaluation of High and Low Creativity Drawings by Artist and Nonartist Raters, *Creativity Research Journal*, 21 (4), 349-360.

Stiggins, R. J. (1987). Design and Development of Performance Assessments, *Educational Measurement Issues and Practice*, 6(3), 33-42.

Turgut, F. M. (1983). *Eğitimde ölçme ve değerlendirme metotları.* (2. Baskı). Ankara: Saydam Matbaacılık.

MODA TASARIMI EĞİTİMİNDE TASARIMCI ADAYLARININ MEZUNİYET DEFİLESİ KONUSUNDAKİ GÖRÜŞLERİ

Nilay ERTÜRK
Fashion Design Department
Architecture and Design Faculty
Anadolu University
Turkey
nilaye@anadolu.edu.tr

Esra VAROL
Fashion Design Department
Architecture and Design Faculty
Anadolu University
Turkey
evarol@anadolu.edu.tr

ÖZET

Defile, tasarımcının koleksiyonunu basına, alıcılara, sektör yetkililerine ve moda izleyicilerine tanıttığı görsel etkinliktir. Tasarımcının koleksiyonunu tanıttığı bir etkinlik olmasının yanı sıra tasarımcıya yaptığı çalışmanın dönütünü veren, öz eleştiri yapma imkanı sunan ve gelişimine katkıda bulunan sunumlardır.

Mezuniyet defileleri, yurt içi ve yurt dışında moda tasarımı eğitimi veren çeşitli kurumların düzenlediği ve son sınıf öğrencilerinin koleksiyonlarını sergiledikleri gösterilerdir. Zorlu bir süreç sonunda ve çok çalışarak hazırlanan bu koleksiyonlar genellikle daha önce belirlenen temel bir tema çerçevesinde gerçekleştirilmektedir. Bu tema altında tasarımcı adayları, içselleştirdikleri alt temalar doğrultusunda koleksiyonlar hazırlamaktadır. Bu araştırmanın amacı, mezuniyet defilesi hazırlama sürecini tasarımcı adayları yönünden ele almak, gerek koleksiyon hazırlama sürecini gerekse mezuniyet defilesinin kendilerine sağladığı katkıları inceleyerek duygu ve düşüncelerini ortaya koymaktır. Araştırmanın yöntemi betimseldir. Araştırma verilerinin elde edilmesinde, son sınıf öğrencileriyle yapılandırılmış görüşmeler yapılmış ve Anadolu Üniversitesi, Mimarlık ve Tasarım Fakültesi, Moda Tasarımı Bölümü 4.sınıf öğrencileri araştırma örneklemini oluşturmuştur. Araştırma bulguları betimsel analiz yolu ile elde edilmiş ve araştırma sonuçları sürece yönelik görsellerle birlikte sunulmuştur.

OPINIONS OF THE CANDIDATES OF THE FASHION DESIGNERS ON GRADUATION FASHION PARADE

ABSTRACT

The parade is a visual activity in which the designer introduces the collection to the press, industry authorities and fashion followers. In addition to the introduction of the collection, they are also presentations where the designer has got feedbacks on the works, find the chance for self-critique, and they contributes to the advancement of the designer.

The graduation fashion parades are the activities in which the senior students in institutions giving fashion design education either in the country or in the world exhibit their collections. These collections as a result of a difficult and hard-working process, are generally on a previously defined theme. According to this theme, the candidate designers prepare their collections with reference to the sub-themes which they internalised. The aim of this study is to consider the graduation fashion parade process in terms of the students, to figure out the feelings and thoughts of the students by examining either collection preparation process or the contributions of the graduation fashion parade to them. This is a descriptive research. The data of the research was gained from structured interviews with senior students from the 4th grade in the Department of Fashion Design in the Faculty of Architecture and Design in Anadolu University, as the sample of the research. The research findings were gained by descriptive analyses and the results of the research are presented together with images on the process.

GİRİŞ

Defile, tasarımcının tasarladığı ürünleri, genellikle basına, alıcılara ve seyircilere yönelik görsel sunumunun yapıldığı üretim ve tanıtım etkinliğidir (Green-Withrow, 2008,3-4; Jackson ve Shaw, 2009). Defile, bir ürünün, canlı modellerle sunumunun yapıldığı bir şov olarak da tanımlanabilmektedir. Defilenin temel amacı, tasarlanan ürünlerin satışının yanı sıra, sunulan ürünlerle moda hakkında genel bir ifadenin de oluşmasına yardımcı olmasıdır (Kawamura, 2005). Tasarımların özgün ve bir önceki sezondan farklı olması, oluşturulan yeni moda akımının tüketici tarafından tanınması ve aynı zamanda bu tanıtımın basın ve medya yoluyla geniş kitlelere aktarılmasıdır (T1). Moda'da yer alan son trendlerin yer aldığı defileler, genellikle ilkbahar – yaz, sonbahar – kış olmak üzere iki sezonda gerçekleşmektedir.

Tarihte ilk moda tasarımcı olma özelliği taşıyan Charles Worth aynı zamanda koleksiyonlarını sunarken canlı manken kullanan ilk moda tasarımcısı olmuştur. Başlangıçta tasarımlarını eşi üzerinde sergileyen Worth, maddi

 Copyright © International Conference on New Horizons in Education Conference (INTE)

durumunun güçlenmesiyle birlikte, farklı mankenler ile çalışmaya başlamıştır. Mankenlerin tasarlanan ürünleri, müşterilere bir salonun içinde yürüyerek sergilemesi sonucunda defile kavramı ortaya çıkmıştır. Worth'un moda evinde bir süre çalışmış olan Poul Poiret ise, çeşitli ülkelerde ve organizasyonlarda gerçekleştirdiği defilelerini ilginç şovlara dönüştürerek, defile kavramının sınırlarının genişlemesini ve popüler hale gelmesini sağlamıştır. Haute couture tasarımcı Jean Patou defilelerinde daha çok basını ve sosyeteyi hedef alarak bu kavramın kitlelere yayılmasında etkili olmuştur (Kawamura, 2005), (Tungate, 2006), (Mueller ve Smiley,1995).
Moda defileleri modanın kurumsallaşmasından sonra ilk olarak Fransa"da başlamıştır. Yapılan defileler sonrasında kıyafetlerin faturaları evlere gönderilerek satış yapılmıştır. Defile modasının çıkmasına paralel olarak da mankenlik mesleği popüler olmuştur. Paris ve Milano gibi moda merkezlerinin halka açık defileler düzenlemeye başlamasıyla modaevlerinin ve tasarımcıların kreasyonları daha çok tanınmaya başlamıştır (Kawamura, 2005; Gürsoy, 2010).
Günümüz defileleri ise artık sadece moda ve pazarlama amacına hizmet eden bir argüman olmaktan çıkmış kareografsiyle bir görsel şölene dönüşmüştür. Defilenin en önemli hedefleri tasarımların özgün ve bir önceki sezondan farklı olması, oluşturulan yeni moda akımının tüketici tarafından tanınması ve aynı zamanda bu tanıtımın basın ve medya yoluyla geniş kitlelere aktarılmasıdır (Jones, 2009) .
Defilenin tasarımların ve tasarımcıların tanıtılmasında bu denli önemli olması bu alanda eğitim veren Yükseköğretim Kurumları'nın bir kısmında mezuniyet defileleri düzenlemelerini sağlamıştır. Mezuniyet defilelerinin başlıca amacı tasarımcı adaylarının gerçek bir defilenin benzetimini deneyimlemelerini sağlamak olmuştur. Mezuniyet defileleri, yurt içi ve yurt dışında moda tasarımı eğitimi veren çeşitli kurumların düzenlediği ve son sınıf öğrencilerinin koleksiyonlarını sergiledikleri gösterilerdir (Varol ve Ertürk, 2015). Zorlu bir süreç sonunda ve çok çalışarak hazırlanan koleksiyonlar genellikle daha önce belirlenen temel bir tema çerçevesinde gerçekleştirilmektedir. Bu tema altında tasarımcı adayları, içselleştirdikleri alt temalar doğrultusunda koleksiyonlar hazırlamaktadır.

Bu araştırmanın amacı, mezuniyet defilesi hazırlama sürecini tasarımcı adayları yönünden ele almak, gerek koleksiyon hazırlama sürecini gerekse mezuniyet defilesinin kendilerine sağladığı katkıları inceleyerek duygu ve düşüncelerini ortaya koymaktır.

YÖNTEM

Gerek araştırma problemi gerekse kullanılan veri toplama araçları ve ulaşılan verilerin betimsel analizi doğrultusunda bu araştırma niteldir (Yıldırım ve Şimşek, 2006: 81-90). Araştırma verilerinin elde edilmesinde araştırma örneklemini Eskişehir Anadolu Üniversitesi Mimarlık ve Tasarım Fakültesi Moda Tasarımı Bölümü 2014 – 2015 öğrenim yılı mezuniyet defilesine seçilen 14 öğrenci oluşturmaktadır.
Araştırma verilerinin toplanmasında öncelikle literatür taraması yapılmıştır. Yapılan bu tarama sonucunda bir görüşme formu oluşturulmuştur. Görüşme formunda araştırma örnekleminde yer alan öğrencilere yöneltilen 8 soru bulunmaktadır. Örneklemi oluşturan öğrenciler ile süreleri 10 dakika ila 20 dakika arasında değişen yapılandırılmış görüşmeler yapılmıştır. "Bu görüşme, daha çok, önceden yapılan ve ne tür soruların ne şekilde sorulup, hangi verilerin toplanacağını en ayrıntılı biçimde saptayan, görüşme planının aynen uygulandığı bir görüşmedir" (Karasar, 2005). Görüşmelerin kaydında alınan izinlerle ses kayıt cihazı kullanılmıştır.
Araştırma bulgularının elde edilmesinde ise görüşmeler öncelikle 10 sayfalık rapor (el yazısı ile) haline getirilmiştir. Daha sonra bu rapor okunarak araştırma probleminin çözümünde ve bulguların elde edilmesinde betimsel analiz yapılmıştır. Betimsel analiz örnek diyaloglar, fotoğraflar ile zenginleştirilmiş ve görüşme soruları doğrultusunda sunulmuştur.

BULGULAR

Araştırmada yer alan görüşme verilerinin analizinde betimsel analiz yöntemi kullanılmıştır. Elde edilen veriler araştırma soruları doğrultusunda betimlenmiştir. Bu doğrultuda araştırmada ulaşılan bulgular şöyledir:
Görüşme formlarında yer alan ilk soru örneklemde yer alanları tanımaya yöneliktir.

2. Soru: Mezuniyet defilesinin tasarımcı adayının mesleki gelişimine katkısı nedir?

Mezuniyet defileleri öğrencilerin kendilerini gerçek iş koşullarına hazırlamaları, koleksiyon hazırlama süreçlerini öğrenmeleri, defileye sektörden gelen izleyiciler sayesinde iş imkânlarının gelişmesi, tanınırlıklarının artması yönünden büyük önem taşımaktadır. Bunun yanı sıra gerçekleştirilen defile ile birlikte öğrencilerin kendilerine öz güvenleri artmakta ve manevi anlamda doyuma ulaşmaları sağlanmaktadır.

> "Bence büyük bir katkısı var çünkü tanınmamızı sağlayacak. Bir kere iş hayatına attığımız en önemli adımlardan biri. Oraya gelen insanların da dikkatini çekebiliriz. Aynı konsept üzerinden insanlarla bağlantı

 Copyright © International Conference on New Horizons in Education Conference (INTE)

kurup iş imkanı sağlayabiliriz. Çünkü bizim bölümde tanınma kısmı çok önemli olduğuna inanıyorum. Tanınmışlığın, bunun içinde okulun buna vesile olması çok önemliydi. Bunun dışında özgün olabileceğimiz kendimi iyi ifade edebileceğimiz bir alan. Birde her şeyin tam ve düzenli bir şekilde bütün bir kombinle çıkmamız bütün arkadaşlarımın çalışmalarıyla hep beraber yer almamız aynı konsepte o çok keyifli olacak bence. Birde detaylara inebilme olanağı sağlıyor. Yani önceden işte ayakkabısından makyajına kadar tam her şeyiyle ilgili net sonucu görmek çok keyifli deneyim kazandırıyor".

3- Soru: Mezuniyet defilesine hazırlık aşamalarını anlatır mısın? Neler yaptın?

Mezuniyet defile projeleri için bu dersi veren hocalar tarafından her yıl bir ana tema belirlenmektedir. Örnekleme alınan 2014 – 2015 defile projesinin ana teması "uyanış" olarak belirlenmiştir. Bu dersi veren hocalar tarafından öğrencilere verilen ana tema onların daha yaratıcı fikirler geliştirebilmeleri ve geniş kapsamlı araştırmalar yapabilmeleri doğrultusunda olmaktadır. Her bir öğrenci ana tema doğrultusunda alt temalar belirleyerek kendilerine ilham kaynağı oluşturmaktadır. Öğrenciler bir koleksiyon mantığında hazırladıkları 5 adet giysi tasarımında, çeşitli tekstil tekniklerine başvurdukları gibi sadece kumaşları kullanarak değişik ifade biçimlerinde yorumlara da ulaşmışlardır.

"Önce bize temamız verildi. Ondan sonra araştırmaya başladık. İlgi alanlarıma, bilmediğim konulara yöneldim. Bilmediğim birçok şey öğrendim. Konumu seçtim ve çizimlerime başlamıştım o sırada çizimlerimle birlikte araştırdığım konularla bütünleşen bir konuyu buldum. Daha doğrusu çizimlerim beni konuma götürdü. Sonra minimaliz de karar kıldım. Minimalizmi daha çok araştırdım daha çok içine girdim. Nasıl çıktığını öğrendim. Kim tarafından ilk olarak meydana geldiğini öğrendim. Onunla ilgili eserleri araştırdım. Manifestolarını incelemeye çalıştım. Tüm kaynaklara baktım diyebilirim. En çok beni heykeller etkiledi. Minimalizm akımından sonra bende Minimalizme öncü olan heykel tıraşların eserlerindeki yuvarlaklıklardan, koniklerden esinlenerek tasarımlarımı devam ettim. Kumaş konusunda şöyle bir avantajım oldu benim, kumaş araştırması yaparken gezdiğim bir kumaşçıda bir tane kumaşı çok beğendim. Kumaşta son kalmıştı belki 10 m bile yoktu acaba olur mu olmaz mı derken kumaşın 1960'lardan kaldığını öğrendim. Benim akımımda 1960'larda meydana çıkan bir akımdı. Kumaşımı zaten çok sevmiştim hocalarımda onayladı. Derken kumaşımla akımımı birleştirerek tasarımlar yaptım. Tasarımlarım genelde kalıbı parçalayarak oldu"(Şekil 1).



Şekil 1. Öğrenci Koleksiyonu Defile Görüntüsü

"Defileye hazırlık aşamasında en önce uyanış ana teması altında araştırma yaparken hiçbir şekilde sıkılmayacağım bir alt tema seçmeye önem verdim. Temayı seçerken sosyal olaylar beni etkiledi. Artık her şey çok fazla yapaylaşıyor ve kalanlarında değeri artık korunamıyor bunun üzerine belki bir şeyler yapabilirim diye düşündüm. Hayatımızda birçok şeyi eskitiyoruz kendimizden hayatımızdan değerlerimizi kaybediyoruz. Her şey bir koşuşturmaca içinde hani ne moda kumaşlar, ne de moda renkler ben bunun peşinden gitmektense daha çok içimden gelen birde ufakta olsa mesajı olan bir tema düşündüm Temamın adını "tohum" koydum. Bunun için doğal malzemeler kullandım pamuk gibi. Gerçekten benim yapmak istediğim tasarım kalıbı çıkarayım işte dikeyim tam üstüne otursun şeklinde değildi. Form olarak tamamen form dışı olmasına dikkat ettim. Amaçladığım şey bir kaba sığmamış olmak bir çerçevenin olmaması dişiliği ve erkeksiliği öne çıkarmaya yönelmedim" (Şekil 2).

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Şekil 2. Öğrenci Koleksiyonu Defile Görüntüsü

4 - Soru: Mezuniyet defilesinin portfolyona sağladığı katkı sence nedir?

Portfolyo, tasarımcının yeteneğini yansıtan görsel kimliğidir. Mezuniyet defilesi ile tasarımcı adaylarının daha profesyonel portfolyo hazırlamaları amaçlanmaktadır. Portfolyo, tasarımcı adaylarının iş başvurularında, firmaların onları daha iyi tanımasını ve değerlendirmesini sağlaması açısından büyük önem taşımaktadır.

> "Portfolyo benim için birinci sınıftan şu zamana kadar geçen bir süreç. Mezuniyet defilesini de bu süreçte gelişimimin en uç noktası olarak düşünüyorum ve portfolyoma çok güzel katkı sağladığına inanıyorum. Bir koleksiyon mantığı, daha önceden bir koleksiyon hazırlıyorduk ama bir ürün çıkartıyorduk. Mezuniyet defilesi için hazırladığımız koleksiyondan 5 ayrı ürün hazırlıyoruz ve bunu portfolyomuza koyuyoruz. Bu iş başvurularımızda çok önemli".

> " Defile projemizde ürettiğimiz ürünler çok daha özenliydi. Bunun için çok uzun süre araştırma yapıp, çizimler yaptık. Ürettiğimiz ürünlerle ilgili çekimler yapmamız çok önemliydi çünkü bunlar portfolyomuzun düzenli görünmesi sağlıyordu. Portfolyo, logomuzdan yazı karakterine, temayı anlattığımız detaylara kadar derlenip toplanıp düzenli bir şekilde kitap haline getirilme kısmıydı. Düzenli bir şekilde sunumu sağlamamızdı. İş görüşmelerimizde ürünü tek tek taşıyamadığımız için orada kendimizi ifade edebilecek bir şey sunuyoruz ve işveren bizi ona göre değerlendirme yapıyor".

5 - Soru: Mezuniyet projesinin yaptığın diğer projelerden farkı nedir?

Mezuniyet projelerinde öğrencilerin daha araştırmacı, daha bilinçli ve daha yaratıcı olmaları hedeflenmektedir. Öğrenciler, diğer projelerinde tasarlamış oldukları koleksiyonlarından bir parça üretirken mezuniyet projesinde tasarımlarından 5 parça üreterek daha kapsamlı bir çalışma gerçekleştirmektedir. Ayrıca mezuniyet projesi jüri değerlendirmesi sonucunda başarılı olan öğrencilerin tasarımlarının defile sunumu ile daha profesyonel bir çalışma gerçekleştirmelerini sağlamaktadır.

> "Öncelikle farkı diğer projelere göre daha özenli olması. Ardından bir de son sene olduğu için diğer projelerin o bebeksi emekleyen adımlarını biraz daha üzerimizden atıp daha olgunlaşmış bir tasarım süreci geçiriyoruz. Daha araştırmacı daha özgün giysiler yapmaya çalışıyoruz. Son sınıf ve son projemiz olduğu için biraz daha özverili çalışıyoruz. Bir de mezuniyet projesi yaratıcılık bakımından bizi daha üst seviyelere taşıdı" (Şekil 3).

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Şekil 3. Öğrenci Koleksiyonu Defile Görüntüsü

6- Soru: Defilenin bir tasarımcıya ve koleksiyona katkılarının neler olduğunu düşünüyorsun?

Defile, bir tasarımcının tasarladığı ürünlerin podyumda görsel sunumunun yapıldığı üretim ya da tanıtım etkinliğidir. Tasarımcının koleksiyonunu tanıttığı bir etkinlik olmasının yanı sıra tasarımcıya yaptığı çalışmanın dönütünü veren, öz eleştiri yapma imkanı sunan ve gelişimine katkıda bulunan sunumlardır. Defile, tasarımcının özgüvenini artırdığı gibi aynı zamanda yaratıcılığını daha geniş kitlelere tanıtma fırsatı da sağlamaktadır. Öğrenciler defile sürecini yaşayarak bu konu ile ilgili daha fazla tecrübe sahibi olmaktadır.

> "biz diğer projelerde birer ürün şeklinde çalışıyorduk ve her zaman konumuz değişiyordu. Burada 5 parçayı birbiriyle bütünlemek zorundayız. Temadan sapmamak zorundayız. Bu durum tamamıyla kumaş bilgisinden dikiş bilgisine kadar etkiliyor. Bugüne kadar gelen bütün deneyimleri orada sergilemek zorundayız çünkü bütünlük olmak zorunda tek tek parçalar değil. Bana kattığı en büyük katkı bütünlük ve konsepten sapmama diyebilirim".

> "Artık kendimi bir tasarımcı olarak nitelendirebilirim sanırım. Defile bizim için ilk tecrübemiz o yüzden çok heyecanlıyım. Ama orda yaptığım işleri gururla izlemek sevdiğim insanlara bunları ben yaptım diye söyleyebilmek, gösterebilmek çok güzel duygular. Belki de bu defile bana iş hayatında daha fazla şey katacaktır. Çok fazla tecrübe yaşadım bu defilede, benim ilk tecrübem olduğu için gururla hatırlayacağım".

7 - Soru: Koleksiyonunun ismi ne ve neden bu koleksiyonu seçtin?

8 - Soru: Temanı koleksiyonuna nasıl yansıttın?

Öğrencilere verilen ana tema doğrultusunda her bir öğrenci bir alt tema belirleyerek kendilerine ilham kaynağı oluşturmaktadır.

> "Koleksiyonumun ismi "kimliksizleşme", aslında günümüz çağına uygun bir konu çünkü tek tipleşmeye başladığımızı düşünüyorum. Yapay zekâya doğru gidiyoruz günümüzdeki çağda bunun kırılmasının bir uyanışla sağlanabileceğini düşünüyorum. Bunun alt temasında beyin ve uyarıcılar var, algı kapılarının temizlenmesi. Kişi kimliksizleşmeden sıyrılmalı yani aklı kullanabilme cesaretini göstermeli. Özgün olmalı tavırlarında düşüncelerinde ancak bu şekilde bir uyanış sağlanabilir. Temamı giysilerimde donelerle, akımlarla sağladım. Beyin algılarının temizlenmesini Action painting akımını kullanarak gösterdim" (Şekil 4).

 Copyright © International Conference on New Horizons in Education Conference (INTE)



Şekil 4. Öğrenci Koleksiyonu Defile Görüntüsü

"Van Gogh'un "Yıldızlı Gece" ve "Ayçiçekleri" tablosu. Bu konuya gelene kadar yoğun bir araştırma yaptım. Emperyalist akımını araştırdım ve bu akımın sanatçılarını inceledim bu konuda bana en yakın gelen sanatçı Van Gogh oldu. Empresyonizm uyanış anlamına gelen bir akım stüdyodan çıkıp sanatçıların doğaya yönelmesi, doğayla ilgili çalışmalar yapması beni etkiledi. Van Gogh'un tablolarını oluştururken kendi uyanışı var. Van Gogh'un en önemli eserlerinden ikisi "Yıldızlı Gece" ve "Ayçiçekleri" tablolarını tasarımımda kullandım. Tasarımlarımda bunları ele alırken eserlerde kullanılan renkleri, fırça darbelerini tabloda bulunan dokunuşları veya eserlerinde yer alan formları kendi tasarımlarıma yansıttım" (Şekil 5).



Şekil 5. Öğrenci Koleksiyonu Defile Görüntüsü

SONUÇ

Defile, bir tasarımcının veya markanın tasarladıkları ürünleri canlı modellerle basına, alıcılara, moda editörlerine, hedef kitleye, sanatçılara ya da diğer tasarımcılara tanıtmayı amaçladığı gösterilerdir. Moda dünyasındaki en etkin gösteri olarak kabul edilen defileler, birçok firmanın etkili bir biçimde izleyiciye iletmek istedikleri mesajları, düzenledikleri 'imaj gösterileri' yoluyla aktardıkları sunumlardır (Çivitçi, 2004).

Sözgelimi moda tasarımı eğitimi veren bazı üniversiteler mezuniyet defileleri düzenlenmektedir. Örneklemi oluşturan Anadolu Üniversitesi Mimarlık ve Tasarım Fakültesi Moda Tasarımı Bölümü mezuniyet defilesi gerçekleştiren üniversitelerden bir tanesidir. Mezuniyet defileleri tasarımcı adaylarının kendilerini iş koşullarına hazırlamaları, koleksiyon hazırlama süreçlerini öğrenmeleri, sektörden gelen izleyiciler sayesinde iş imkânlarının gelişmesi, tanınırlıklarının artması, profesyonele yakın portfolyolara sahip olmaları yönünden büyük önem taşımaktadır. Tasarımcı adaylarının yapmış oldukları portfolyolar, onların iş başvurularında işverenin tasarımcı adaylarını daha iyi tanımasını ve değerlendirmesini sağlamaktadır.

Mezuniyet projesinde defilenin yer alması öğrencilerin daha araştırmacı, daha bilinçli ve daha yaratıcı olmaları açısından önemli olmuştur.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Öğrencilerin diğer projelerden farklı olarak mezuniyet projesinde 5 giysi üretmeleri onların koleksiyon mantığındaki bütünlüğü daha iyi içselleştirmelerini sağlamıştır.

Defile, tasarımcının özgüvenini artırdığı gibi aynı zamanda yaratıcılığını daha geniş kitlelere tanıtma fırsatı da sağlamaktadır. Bu anlamda öğrenciler defile sürecini yaşayarak bu konu ile ilgili daha fazla tecrübe sahibi oldukları gibi öğrencilerin kendilerine öz güvenleri artmakta ve manevi anlamda doyuma ulaşmaktadırlar.

KAYNAKLAR

Çivitci, Ş. (2004). *Moda pazarlama*, Ankara: Asil Yayın Dağıtım LTD. ŞTİ.

Erdoğan, D.İ. (2011). Bir Moda Tasarımcısının Koleksiyon Hazırlama Süreci ve Simay Bülbül Örneği, Eskişehir: Anadolu Üniversitesi Fen Bilimleri Enstitüsü Endüstriyel Sanatlar Anabilim Dalı Yüksek Lisans Tezi. Danışman: Yard.Doç.Dr. Nilay ERTÜRK.

Green-Withrow, B. (2008). *How does your fashion show, show*?, USA: PSFI Association.

Gürsoy, A.T. (2010). *Giyim kültürü ve moda*, İstanbul: Türkiye Tekstil Sanayi İşverenleri Sendikası.

Jackson, T. ve Shaw, D. (2009). *Mastering fashion marketing*, England: Macmillan Publishers Limited.

Jones, S. J. (2009). *Moda tasarımı*, İstanbul: Güncel Yayıncılık.

Karasar,N. (2005). *Bilimsel araştırma yöntemi*, Ankara: Nobel Yayın Dağıtım.

Kawamura,Y.(2005). *Fashion-ology an ıntroduction to fashion studies*, UK: Oxford International Publishers Ltd.

Mueller, C.S ve Smiley, E.L. (1995).*Marketing today's fashion*, NJ: Prentice-Hall.

Oyman, N.R ve Erdoğan, D.İ. (2012). Defilenin Tarihteki Yeri Önemi ve Moda Pazarlamasına Etkileri, Antalya: Akdeniz Üniversitesi G.S.F. Moda ve Tekstil Tasarımı Bölümü, *1. Uluslararası moda ve tekstil tasarımı sempozyumu*, 113 – 115.

Tungate, M. (2006). *Modada marka olmak/Armani'den Zara'ya moda devlerinin marka oluşturma tarzları,* İstanbul: Rota Yayınları.

Varol, E. ve Ertürk, N (2015). Moda Tasarımı Eğitiminde Yılsonu Defilesi Hazırlama Süreci, Ankara: Gazi Üniversitesi Sanat ve Tasarım Fakültesi, *2. uluslararası sanat sempozyumu*, s: 215- 219.

Yıldırım, A. ve Şimşek, H. (2006). *Sosyal bilimlerde nitel araştırma yöntemleri*, Ankara: Seçkin Yayınları.

(T1) (http://bayancizme.gen.tr/tag/defile/)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MODEL OF NON-FORMAL EDUCATION AND INFORMAL EDUCATION IN ASEAN

Sumolnit KERDNOONWONG
Faculty of Education
Srinakharinwirot University, Thailand
sumolnit@g.swu.ac.th

ABSTRACT
The aims of this research are (1) to investigate compositions of Non-Formal Education in ASEAN (2) to investigate compositions of Informal Education in ASEAN and (3) to comparative synthesize the compositions of Non-Formal and Informal Education in ASEAN. A documentaries review & synthesize was used as an instrument to collect data from Units which are responsible to Non-Formal Education, Informal Education, Lifelong Education, Continuing Education, Adult Education and Human Resource Development in ASEAN. The result shows that there are differences of the Model depend on the contexts in each country. Moreover, there is no definitely separation between Non-Formal Education and Informal Education activities.

INTRODUCTION
Education is essential to human life at every stage of life. The human are facing of social and environmental change over time. Especially in the current conditions are changing more rapidly which affects the living conditions and lifestyle. Beyond the knowledge accumulated during the school system help, when people get the education in the school, it is just part of life. Maybe that is the basis of learning and as a tool to help individuals in order to get further knowledge. The after-school life through a life span is longer than studying in school system, so it is imperative for people in every stage of life, from birth to death. Everyone has the ability to learn throughout life. The study does not end when a person graduates from school or institution. While lifelong education is an overview of human learning with covering all types and levels of education.

In addition, the study provides a comprehensive definition rather than to school. Although he was educated in the public school system is important. But we need to look at in the context of a lifelong learning process. The study began when the child was born at home, and continued until the children grow up into adults. Education is the education system. Informal education Non-formal education Study at home As well as initiatives Run by the community and government. These terms are often used to confuse and significantly different in different cultures and contexts. But in general, "Education system" refers to a study conducted by institutions such as schools, colleges and universities are often given qualification and a diploma after graduation. "Non-formal education" refers to educational activity held in addition to the education system and "informal education" refers to all the learning that occurs throughout life. Learning from a family Friends and community, which is often no pattern or structure of the education system and the education system.

Non-Formal and Informal education is the educational model that can response needs of learners' learning continuously. So people can develop their full potential as well as an opportunity for all population groups in order to receive educational services that meet their needs throughout their lives. It is part of social development, has a strong and balanced.

The Association of Southeast Asian Nations, or ASEAN, was established on 8 August 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the Founding Fathers of ASEAN, namely Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei Darussalam then joined on 7 January 1984, Viet Nam on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999, making up what is today the ten Member States of ASEAN.

In accordance with the ASEAN Community which consists of three pillars: (1) AEC (ASEAN Economic Community: AEC) (2) ASEAN Socio-Cultural Community. (Socio-Cultural Pillar) and (3) the ASEAN Security Community (Political and Security Pillar) is important in the context driven strategies. The ASEAN Socio-Cultural Community aims to make the public well-being., free from sickness, good environment and a sense of unity. In cooperation with specialized (functional cooperation) under social and cultural issues covered in several areas, including youth, education and human resource development, human rights, public health, science and technology, environment, labor, women's poverty, social welfare and development culture and information civil affairs. The immigration and consular, drug and disaster management rights by the working group responsible for the implementation of ASEAN cooperation on each side.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Therefore, the study on the Model of Non-Formal and Informal Education in ASEAN context would be an indication of the condition of the current situation in the Non-Formal and Informal education. The compositions of the education are synthesized in each ASEAN countries for developing an appropriate model of Non-Formal and Informal education in Thailand in the context of ASEAN for the future.

THE STUDY

This documentary study is on selected ASEAN countries; Cambodia, Lao PDR, Indonesia, Malaysia, Myanmar and Thailand. Study on documentaries gathering from units where provide Non-Formal, Informal education, Continuing education, Lifelong education, Adult education included Human resource development in the studied ASEAN countries

Methodology of the research is the study on documentaries gathering from units where provide Non-Formal, Informal education, Continuing education, Lifelong education, Adult education included Human resource development in the studied ASEAN countries then content analysis is used to identify the data gathering.

FINDINGS

Cambodia

The goal of Cambodia's Education Strategic Plan (ESP) is 'to develop an inclusive, easily accessible and high quality service, which is available to all', as a means of enabling 'economic growth, improved employment prospects and income-generating opportunities'. The Plan also recognises education as necessary to realising improved family wealth and nutrition, family planning, and to 'engendering democratic traditions' (Ministy of Education, Youth and Sports (MoEYS) 2001: 7). As such, it is clearly right in making education a 'central tenet' in all efforts to end the marginalisation of vulnerable and under-served groups. It is rather less strong in appearing to limit inclusive education to 'inclusive schooling' (MoEYS 2001: 12). A critical gap in the framework is in not giving due recognition to education as a system made up of core delivery components of formal schools and non-formal programs. As parts of a whole, each needs to act 'in-tandem'; to evolve in terms of its own organisational and professional pedagogical requirements, but with an open and effective link between them. The need to make education more available, and the education system more inclusive, is indisputable. The problems underlying this need are enormous and the implications of not taking action will certainly be tragic. The estimated functional illiteracy rate (combining the fully and semi-illiterate) of 15-45 year olds is 63 percent; the annual school dropout rate 350,000 (and many of these are the youngest children). The 1999 survey estimated that only about 2 percent of the adult illiterate population is being effectively reached. In such a situation, it is critical that all decisions around policy, legitimacy and resources must take equally into account both delivery systems. (Ministry of Education, Youth and Sports (MoEYS), 2001)

The objectives of Community Temple Learning Centers (CTLCs) and Community Learning Centers (CLCs) are to aid neo-literates acquire knowledge, as well as maintain and improve reading, writing and practice simple arithmetic skills. Furthermore, they also provide literacy training and prevent the learners from relapse into illiteracy. Cambodia has five UNESCO sponsored community temple learning centers in Battambang, Siem Reap, and Kandal provinces, as well as two community learning centers in Takeo and Kampong Speu provinces. (APPEAL Resource and Training Consortium and Indian Institute for Education, Pune, 2001)

Indonesia

The decision of the People's Consultative Assembly of Indonesia has stated clearly that work productivity level of the people must be raised, new employment opportunities must be developed, and development programs and projects in all fields, including education, must be geared to bridge existing gap between the haves and the have-nots. The President of the Republic of Indonesia emphasized that 'a new effort to fight illiteracy in a new style' must be carried out. These new efforts are intended not only to abolish ignorance of the Indonesian national language, but also to raise the level of basic education. This is one of the reasons why literacy education in Indonesia has been successful in reducing the estimated number of 21 million illiterates in 1977 to less than 4 million by the mid-1990s.

The Learning Kejar Packet Program is a program for illiterates or primary school dropouts in Indonesia. The Indonesian word 'Kejar' means to 'catch-up'. The illiterates or primary school drop-outs studying Learning Kejar Packet A have not only to catch up in terms of literacy, but should also form a learning group and learn together and earn a living while utilising their leisure time to learn i.e. they learn by doing. The success of the program lies in the integration of knowledge, skills and attitudes in content, graded material, learning by doing, a delivery system tuned to daily habits and situations of learners, openness and flexibility, and mutual assistance social system - or the system of volunteerism. The 'Packet A' consists of a series of basic learning materials on all

 Copyright © International Conference on New Horizons in Education Conference (INTE)

aspects of life (packet A-1 to A-100) needed by the illiterates and primary school dropouts. The Indonesian illiteracy eradication program has been perceived and conceived as pre-literacy, literacy and post-literacy programs in one continuous process. Learners are, therefore, first motivated under the pre-literacy program and then learning packet A-1 is introduced until the learners master up to A-20 of the literacy program. The materials from A-21 to A-100 come under the post-literacy program. Packet 'A' consists of 100 booklets structured into 22 levels of difficulties. The contents, knowledge, skills and attitudes are very closely linked to real life situation while reading, writing and arithmetic are integrated. The knowledge, attitude and skills introduced in Packet A are not just to be known and understood but also to be utilised and practised for quality of life improvement (viz. skills like dress making, vegetable growing, fish breeding, chicken- raising etc.). The delivery system is not formalized and neither are special literacy teachers trained for the program. The tutors and facilitators of Learning Kejar Packet A are volunteers recruited from available educated villagers including the village primary school teachers and religious leaders. As the Indonesian economy improves, the tutors are now given a token, small amount of cash. A unique feature of the program is that it opens the learners to new ideas such as motivating the members of the armed forces to participate both as tutors as well as facilitators of the Learning Kejar Packet A. The Kejar Pakat A program is implemented at the village level. It is designed for illiterates - adults and dropouts from the elementary schools. Learner groups consist of five to ten people. They use materials in the form of sheets and booklets. Successful completion of Kejar Pakat A is considered equivalent to elementary education. Kejar Usaha is the name for Income Generating Learning groups. These groups consist of three to ten members and typically function at the village level. Those who have completed Kejar Pakat A are admitted to this program. The apprenticeship program operates at village as well as subdistrict levels. It has been developed essentially for dropouts from the junior and senior high schools. (Handa, R., 1997).

The Directorate-General of Out-of-School Education and Youth, Ministry of National Education, who is in charge of adult and lifelong learning has already established Balai Pengembangan Kegiatan Belajar - Learning Activities Development Center (BPKBs) in each of the provincial capital of Indonesia with the main task of developing models for effective learning for youth and adults. Sanggar Kegiatan Belajar - Learning Activities Center (SKBs) in each of the district/municipality is planning to draw an action plan based on the learning models received from the BPKBs to be implemented by the Pusat Kegiatan Belajar Masyarakat - Community Learning Activities Center (PKBMs). While BPKBs and SKBs are managed and run by the Government, i.e. the Directorate-General of Out-of-School Education and Youth, the PKBMs are managed and run by the community. These centers were established mainly to serve adult and lifelong learning in Indonesia (Napitipulu, W.P., 1990).

Lao PDR

The national policy and strategy for promoting continuing education focuses on literacy, upgrading education and basic skills training. The country's non-formal education lays importance on three major activities:

1) Eradication of illiteracy for ethnic groups residing in the countryside, especially for women and disadvantaged population in remote areas;

2) Raising the primary and secondary level education for staff, military personnel and police, in conjunction with the two responsibilities above,

3) The promotion of basic vocation for educationally disadvantaged and low-income populations, in order to increase levels and to improve social conditions;

In Lao PDR ethnic groups make up 48 percent of the population and live largely in rural areas. In recognition of the inadequacies of the formal curriculum and methodology in relation to the rural population of Lao PDR, the Ministry of Education established the Department of Non-Formal Education (NFE) in 1991 as a supplement to – and in some areas as a substitute for – formal education. The NFE topics are connected to rural life, encompassing health and agricultural subjects, various income-generating activities, e.g. chicken raising, as well as literacy classes. In the NFE activities the rural communities are involved in the planning, and wisdom and resources are built upon.

The characteristic of indigenous education is that it is learning for life, a process that is not confined either to a schoolroom, a fixed curriculum or a timetable, and does not end with exams showing academic results. The ultimate goal of indigenous education is to integrate the individual into his society. Among indigenous peoples the rites of passage encompass both social and practical learning as well as the responsibilities that follow from passing from one stage of life to another. Indigenous education is carried out in the Lao PDR following approximately the same pattern. The womb-to-tomb learning is essential for the maintenance of the society, and the learning processes are present in all aspects of indigenous life – in the mythology, songs, handicraft, herbal medicine etc. In other words the understanding of the importance of learning is innate in everybody. In order to make education programs succeed among minority groups, functional learning must be reflected in practice, and

 Copyright © International Conference on New Horizons in Education Conference (INTE)

educators must understand that 'basic education' is already carried out by the villagers themselves. In order for the minority groups to have equal opportunities, master their own development and to make choices, the curriculum ought to be better adapted to rural life, in terms of topics and language. (Kanstrup-Jensen, A., 2000)

In 1991, the establishment of Department of Non-Formal Education: NFE to enhance and compensate Formal education due to 48% Lao PDR population are ethnics. The National strategic plan focus on literacy, raising on education and skill trainings and Non-Formal education activities are classified in 3 types; (1) Decreasing of illiteracy rate of rural people especially women and disadvantage people in remote area. (2) Raising education qualification of government staff, soldiers and police. (3) Promoting career trainings for disadvantage and low income people for better lives. The learning activities are related to their rural lives, health promotion, agriculture, raising income as well as literacy. The rural communities participate in planning learning activities by using their local wisdoms and resources.

Malaysia

The need for adult learning in Malaysia began to be realized in the 1970s as seen from the emphasis given by the New Economic Policy (1971- 1990) and the 5-Year Malaysian plans. New training institutions were established not only by existing and newly formed government agencies but also by large private firms. Adult learning is basically provided by the government in the industrial, agricultural and community development sectors especially for the rural poor. A large sum is allocated through government agencies to carry out the learning economy, greater private sector participation in adult leaning was promoted through strategies including the setting up of the Human Resources Development Fund in 1993. A special program was also formulated by the government to develop and train bumiputera, who are Malay communities and groups indigenous to the country. The focus is on assisting the entry of bumiputera entrepreneurs into business as well as developing a viable competitive and resilient small and medium entrepreneur group. The shift to industry as a priority sector of the economy when manufacturing became the focus in the late 1980s resulted in a corresponding shift in resource allocation for adult learning. Public allocations went to technical training in manufacturing and recently, to instructional technology for the purpose of producing skilled workers to boost productivity and effectiveness. Greater private sector participation in training programs for their employees was promoted and facilitated in the early 1990s. In the mid-1990s the government took measures to improve accessibility in order to increase participation in educating through the distance-learning program as stipulated in the Seventh Malaysia Plan. Second-chance education has materialised in the country to provide opportunities for advanced education and career enrichment for the adults who missed opportunities through the initial education system. Distance education supported by instructional technology will particularly address the challenge of providing access for adult learning, especially among the people in the rural areas, neglected areas in the city, women and disadvantaged groups. Training providers should adequately respond to the efforts of the government to upgrade skills for personal, community and cultural development. Government regulations such as the Human Resource Development Fund influence the participation of the employees of many organisations. The focus of contemporary adult education is related to personal growth and development and occupational and career related education. All of these resulting trends would not have materialised without the direction set by the Government. Reviews of the Government Five-Year Plans show the consistent importance placed on education and training for the purpose of national development and to meet the human resource requirements to enhance economic growth with emphasis in areas related to science and technology. The providers in education and training from all sectors have aligned initiatives with the national agenda set by the Government. (Mazanah Muhamad and Associates, 2001)

The agricultural sector has for a long time been the main contributor to the economic development of Malaysia. With the formulation of the NEP (1971-1990) in 1971, the agricultural sector was prioritised to contribute to the objectives of eradicating rural poverty by raising income levels and generating greater employment opportunities and restructuring society to correct economic imbalances. Many new agencies were established by expanding existing functions of the Department of Agriculture. These agencies were established to support the small holder sub-sector of agriculture in the rural areas. The main thrust of adult education was to improve productivity and income of the small holder through extension programs and farmers' training. Many training centers were built in the early 1970s in the area of fisheries and management of land development. The other aspect of adult learning in the agricultural extension services, is the transfer of agricultural technologies to farmers. Many agencies are involved in providing extension services to farmers based on commodity specialisation. The budget for agriculture extension and training is mainly from public allocation, either from the federal or state government, as agriculture extension is a state matter. With the introduction of the National Agricultural Policy (1984- 2000) and the new National Agricultural Policy (1992-2010) launched in 1992, focus was given to the development of entrepreneurs among the farmers. Agencies are now trying to make use of the facilities and some changes are being undertaken to transform existing training centers into agrotourism,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

marketing or entrepreneur development centers.

In the area of adult and continuing education in Malaysia, the growing numbers of private providers offer a variety of programs to meet the demand of their clients. Th primary motivating factor is the clients' demands and in return, providers gain expected profits. The increase in the number of private providers is also due to corporatisation and privatisation policies in Malaysia. Several government providers are corporatised through Acts to offer programs, especially in training. The 1996 Private Education Act and the establishment of the Human Resource Development Council, which specifies that private companies have to allocate some money for staff development, has given the opportunity for private companies to receive allocations from the Human Resources Development Fund to sponsor training for their personnel. Based on the resources and facilities available to them, there are two categories of private providers. The first is a small and medium sized companies of only 5 to 20 staff. This type of provider typically does not have its own facilities and resources. Their business does not only focus on providing training but is sometimes combined with other kinds of business transactions. The second category of provider is usually an institution or training center that is part of private or corporate organisation.

The Institute for Rural Advancement (INFRA) functions under the Ministry of Rural Development as a dynamic center for the management of rural development. It serves as a bridge between the world of training and research analysis and the world of development policy. Objectives of INFRA are: (1) to produce 'Master Trainers' in the field of rural development management so as to increase the number of ordinary trainers on the ground, who will be able to advance the rural vision movement in each district; (2) to increase the capabilities of agencies in the public and private sectors and of NGOs, so they can act as effective channels for presenting the Rural vision program; (3) to become a reference and research center, a data bank and a 'think-tank' for non-formal education and rural development programs; (4) to instruct those involved in rural development on the intended changes in the paradigms of management of rural development; and (5) to provide training support to other countries in accordance with South-South cooperation. INFRA's central principle is radical change in the paradigms of rural management. INFRA works with experts from local and international institutions of higher learning to provide training course. INFRA's clients will be government and private-sector employees, members of non-government organisation (NGOs), community leaders, and certain target groups. INFRA will also assist other countries with training, in accordance with South-South co-operation. INFRA's main programs cover: (1) Training, (2) Rural Computerisation, (3) Research, (4) International Networking (5) The Rural Gallery (6) and seminars at the national and international level.

Myanmar

A national literacy policy, which will be effective as well as self sustaining, has been adopted by the EFA Central Co-ordinating Committee to cover the whole union. In order to reduce the adult illiteracy rate by half, from 22 at least 11 percent in the 1990s, the Myanmar government will be organising literacy programs through non-formal education. In the context of Myanmar, non-formal education refers to any organised educational activity outside the structure and routine of the formal school system to provide selected types of learning to sub-groups in population, especially out of school youth and adults. Programs of non-formal education cover the following activities: literacy; training for tackling common socio-economic problem; occupational skills for raising productivity in agricultural and industrial sector; supplementing formal education or providing an alternative to it; and entrepreneurship. The target groups for non-formal educational include the rural population, school dropouts and out-of-school youths, unemployed, under-employed and under-privileged youths, and handicapped persons. While the Departments of Basic Education and the Department of Education Planning and Training are responsible for conducting formal education programs, the Myanmar Education Research Bureau (MERB) is responsible for NFE programs. The strategy is to create community-based literacy groups, which are self-sustaining and linked by a nation-wide network (central, state and divisional levels). The local authority and community are to carry out the programs and mobilise local resources. Local literacy committees at the ward and village level will also serve as focal points to organize learning centers for the illiterates. The Non-formal Education Committee is supported by four teams. The Township Committees are responsible for supervising township wise non-formal education activities. The Technical Team develops teaching-learning materials. The Information Team organises informal education and cultural programs for awareness raising on literacy. The Fund-Raising Team collects donations and other sources of funding. The programs included in Education for All and Non-formal Education are basic literacy, post literacy, functional literacy, income generation programs and quality of life improvement programs. The national policy on literacy clearly believes that literacy programs can be sustainable with the strong will and participation of the local administrative body and community. Hinthada district of Ayeyarwaddy Division is an example. The District Peace and Development Council gave guidelines and assistance for basic literacy movement. Literacy classes

 Copyright © International Conference on New Horizons in Education Conference (INTE)

were organised and supervised by the Township Committees and also monitored by the district EFA Committee. Continuing programs will have to be given priority for future development by governments and NGOs, various UN agencies, private sectors and most of the communities. The shift towards a market oriented economy has directed attention to skills-based NFE as a strategy for meeting Myanmar's changing manpower needs. (Tin Nyo, U., 1999)

Myanmar educationists, in collaboration with experts from UNESCO and financed by UNDP, initiated the Non-formal Primary Education Program (NFPE) in 1998 to improve access, quality, and equity in education and started in some project areas in 2000-2001. The project has two chief purposes, namely: to produce a literate and numerate population that can deal with problems at home and at work; and to serve as a foundation upon which further education can be built. NFPE's aim is to achieve EFA goals by offering a second chance for education to the younger age group (10-14 years) who missed the opportunity to complete formal primary education. It is a two-year program, which is flexible, and is equivalent to formal primary education in terms of knowledge and skills. The Myanmar concept of continuing education is adopted as a broad concept of education, which includes all forms of lifelong learning. The starting point of continuing education is the place where formal education ceases to be in a position to provide time for further learning opportunities for citizen in the country. Post Literacy, Income Generation and Quality of Life Improvement Programs have been carried out in Community Learning Centers (CLCs). Future Oriented Programs and Equivalency Programs are under preparation. Continuing education via CLCs includes: mobilising local resources with 'for them, with them, by them' concept; ensuring sustainability of program through strong will and community participation; basing programs on the realities and needs of the community; and networking between governmental, non-governmental, and international organisations. There are 135 CLCs in the Mandalay Division. Income generation activities entail cash loans through revolving funds and various types of skill-based training. Many families in low socio-economic groups shift to the middle economic group. Future plans include increasing the quantity of CLCs and promoting the quality of activities. The literacy rate is currently 94.69 percent. The factors for success include choosing the right key persons; relevant approaches (sometimes IGP first, literacy second and vice versa); strong partnership between local authorities, central government, NGOs, the private business sector and communities; sufficient financial and technical support and finally encouragement and support of local authorities and leaders, and a strong commitment by NFE personnel. The Century Resource Center and Resource Center for Ancient Manuscripts were opened in Yangton and Mandalay in 2000 and 2001 respectively to further promote continuing and further education. They can enable researchers from both Upper and Lower Myanmar to conveniently conduct research. The New Century Resource Centers with e-Education learning centers, e-Education resource centers, computer training centers, language labs and shops that sell computer related books and equipment are providing access to the general public to e-Education giving them the opportunity to attend a broad range of ICT related courses

The National Center for Human Resource Development based at the Department of Higher Education, Lower Myanmar was established by the Ministry of Education in June 1998. Viewing education as a lifelong learning process, the center was established with the main purposes to establish a parallel education system, which will aid the formal system to produce a number of skilled technicians and intellectuals required by the country. It is also attempts to address educational wastage by enabling those who have not completed their higher education to do so at their own pace during their free time, and widens the scope of choices, increasing education and re-education, training and retraining opportunities.

There are some links Between Formal, Non-Formal Myanmar and Informal Education from the perspective of lifelong education, the following settings are the contexts through which learning takes place in Myanmar:

1) Every day life experience; informal education (IE),
2) Formal institutes of learning; formal education (FE), and
3) Organised out-of-school programs; non-formal education (NFE).

Adults continue to benefit from the informal education provided by newspapers, periodicals and books, radio and television, and social contacts relating to political and cultural activities. The organised teaching-learning situations fall in two categories, the formal and non-formal. Teaching-learning situations are formal when they are provided in a specialised institution. Non-formal teaching learning situations are those that are provided outside the formal system of education, however they may use the facilities and the personnel of the formal system. The teaching-learning which taken place in programs of rural agricultural or industrial development, falls into the category of non-formal education. Most of the existing non-formal education programs are linked to formal education in either of the following ways:

1) Complementary Programs: evening classes to complement certain formal school programs
2) Successor Programs: agricultural extension programs for youth who have completed primary school
3) Second Chance Programs: programs aiming at reintegrating school dropouts into the stream of formal

 Copyright © International Conference on New Horizons in Education Conference (INTE)

schooling.

4) Substitute Programs: literacy course for rural youth who have never had any access to formal schooling.

Thailand

The Department of Non-Formal Education provides the out-of-school and underprivileged population with opportunities to study and improve their occupations and living conditions. The Department's services are organised through the operationalisation of five Regional NFE Centers, 76 provincial NFE centers, 2 vocational training and development 32 centers, and 4 Bangkok NFE centers. Courses are offered through these centers to tackle illiteracy and meet vocational training needs in addition to their role in researching, planning and co-ordinating with other non-formal education agencies. The Department of Non-formal Education has 3 principal missions as follows:

1. Organisation of non-formal education activities and/or services for populations who have missed the chance to pursue their learning in the formal education system and for those populations who are disadvantaged for one reason or another.

2. Providing support and encouragement to programs and activities conducted in formal education sector in order to enable them to achieve curriculum goals and objectives.

3. Providing support and encouragement to the population in their pursuits of learning through informal modes in order to help them achieve their learning goals from various sources such as families, communities, societies as well as other educational resources that exist in the environment in which they live. The prominent services of non-formal education can be categorized into 3 components: Basic knowledge for subsistence: The activity to be organised under this category are functional literacy program, the education for special target group, the curriculum of elementary education for hilltribe inhabitants and the general non-formal education programs at primary level, lower secondary level and upper secondary level through classroom teaching, distance education and self-instruction. Current news and information services: After being endowed with basic knowledge it is necessary for the people to further acquire up-to-date information regularly in order to improve their life. The activities conducted in this category cover the provision of village reading center public library, science museum, planetarium, mobile audio-visual education, mobile museum, mobile boat library, etc. Augmentation of knowledge and skills on vocational education: This type of non-formal education activities will deal with interest group learning, vocational training of short and long-term, as well as disseminating vocational knowledge through mass media. (Department of Non-formal Education and Ministry of Education, 1995)

The Quality of Life Promotion Project, introduced in the 1980s aims to meet the basic minimum needs of learners within the framework of community development activities. The learning process is based on the Delsilife approach i.e. self-reliance through the organisation of villagers into problem solving groups. Villagers are grouped into different learning groups led by the village education volunteers. The department officials help to train the village education volunteers and later act as facilitators and advisors to the groups. Most educational activities, followed up by socio-economic activities for self-reliance, have to be organised by the villagers themselves, with the department officials and para-officials acting as advisors. Apart from the social interaction and group action generated, this model offers a more integrated learning system. Comparative studies of the Delsilife projects in Indonesia, Thailand and the Philippines, have shown that basic life skills and the instrumental skills are integrated. Basic life skills include basic literacy, general competence in marketing and accounting, as well as human relationship and co-ordinating skills. Instrumental skills comprise predominantly vocational skills such as auto-mechanic, agricultural techniques, and so forth. The promising feature of Delsilife is that these two categories are integrated as necessary elements for the social and economic development of the village community for self-reliance. Such a network of community-based learning needs to be continually maintained and promoted so that they serve as the connecting link between the three sub-systems of the basic education facilities, the information facilities, and the vocational short courses. The sustainability of the group process is important for acknowledging the learning needs of the community for which the sub-systems need to be designed and provided.

The country operates Non-Formal and Informal education under the strategic framework of Ministry of Education. There is The Office of Non-Formal and Informal education (ONIE) which is responsible to do the learning activities. The various learning activities differ by needs of communities included depend on resources and staff in each local ONIE. The operation like this is consistent to the concept of Non-Formal education that focus on flexibility and recognition of learners' needs provided by formal institutions or hosts as well as formal learning evaluation. The Informal education activities are also operated by local ONIE. The activities are blended in Non-Formal Education activities as supplementary activities.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

CONCLUSIONS

The Model of Non-Formal education and Informal education in the ASEAN, found that the primary agency responsible for the management of Non-Formal and Informal education is the government units. They conducted both Non-Formal education and Informal education to the defined target group as well as consistency to economic and social policy. The focus of the trend and the context of the annual budget, but each country has made a report on results of operations or policies of the responsible Ministry. It could be that the model of Non-Formal education and Informal education in ASEAN are operated under the framework of the strategy in each country which the central government is responsible for operations in a concrete way.

The Model of Non-Formal education includes basic courses such as literacy, curriculum development skills which are chose by target groups. And these courses are designed in different contents according to the needs of their own local community. This kind of operation is consistent to the concept of Non-Formal education – mainly in flexibility and needs of learners with accurate operation host and actual learning evaluation.

The Model of Informal education, the learning activities are included in Non-Formal education activities as well as are separated to be Informal education activities as the extra-curricular activities. This is similar to Formal education activities that use Informal education activities to enhance students' learning.

The local staffs have to take roles of leader in community in order to create learning environment that encourages informal learning. This implementation of the activities is consistent with the concept of lifelong education process which includes informal learning activities into a part of their community life. However, the nature of Informal education is abstract, the learning outcome or the assessment of student learning is not as clear as the Non-Formal education.

Recommendations

- Informal Education activities should be blended in both Formal and Non-Formal education in order to enhance learners' lifelong learning.
- The survey study in each country should be done for gathering insight data, to more analyze in real current contexts.

REFERENCES

Handa, R. (1997) 'The Learning Kejar Packet A of Indonesia', in *Indian Journal of Adult Education*, April-June. Bhola, H.S. (1994) A Source Book for Literacy Work, London, Jessica Kingsley Publishers and UNESCO.

Kanstrup-Jensen, A. (2000) *'Educational Constraints and Educational Resources among Ethnic Minority Groups in the Lao PDR'*, presented at the Third International Conference on Hani/Akha Culture, organised by the Municipality of Xishuangbanna, China.

Madhu Singh. (2002). *Adult Education in selected countries in the Asian Region*. UNESCO Institute for Education, Hamburg.

Mazanah Muhamad and Associates (2001) *Adult and Continuing Education in Malaysia*, Kuala Lumpur, UNESCO Institute for Education and the Universiti PutraMalaysia Press

Ministry of Education, Youth and Sports (MoEYS) (2001) *Education Sector Support Program 2001-2005*, Lnom Penh, Royal Government of Cambodia/MoEYS.

MoEYS (2001) *Education Strategic Plan 2001*-5, Phnom Penh, Royal Government of Cambodia/MoEYS.

National Non-formal and Informal Education Act of 2008. Royal Thai Government Gazette No. 125 Section 4/ก/ 3rd March 2008.

Sumalee Sangsri. (2000). Lifelong Education Strategies for Thai Society in 21st century, Bangkok: National Technology for Education Institution.

The Office of Non-Formal and Informal Education. (2013). Policy and operation of ONIE year 2013. (Online).Available: (http://www.nfe.go.th). Accessed [16/12/2013]

Tin Nyo, U. (1999) 'An Overview of Non-Formal Education in Myanmar', in *Final Report of the National Workshop on Development of Strategies for Promoting Continuing Education through Community Learning Centers* held in Yangon, Myanmar, 23 February - 4 March 1999, Yangon, Asia/Pacific Cultural Center for UNESCO (ACCU).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MULTI-LAYERED IDENTITY IN LIFE STORIES OF KORYO SARAM

Heejin YUN
Inha University, South Korea
cultureheejin@gmail.com

Youngsoon KIM
Inha University, South Korea
kimysoon@inha.ac.kr

ABSTRACT
This study aims to analyze life stories of Koryo Saram and to determine the identity of Koryo Saram explained by them. For this purpose, we visited the Elders' Weekend School for Koryo Saram in Almaty, Kazakhstan in 2014, provided the way to writing autobiography for 23 Koryo Saram and then collected 26 biographies in 2014-2015. Also, 4 of them were selected as interview objects and in-depth interviews were conducted in 2016. The results of the study are as follows: The majority of the Koryo Saram found out their identity, 'Koryo Saram as a minority race in Kazakhstan' after the Independence of Kazakhstan or after they retired. In their life stories, factors as a minority race such as discrimination or oppression were not remarkable, and these were different from the results of research on Korean residents in the U.S. and Japan. The identity of 'Koryo Saram' is a form in which the identity of each country such as the Soviet Union, Kazakhstan, South Korea and North Korea has been hybridized, and each of these elements has been mixed in language, ceremony, living and play, etc. Koryo Saram have am identity in which the identities of a number of countries are multi-layered, so the education for them should be organized as well based on this fact.

INTRODUCTION

It has been 150 years since the word 'Koryo Saram' was first made. In 1864, the history of Koryo Saram started from the 13th-generation farmers who crossed frozen Tumen River escaping from poverty and settled down around Ussuri River, and they have spread throughout Eurasia. The number of Koreans living in Russia is now approx. 530 thousand. In Korean society, Koryo Saram are often expressed as 'Koreans' through words such as 'migration' and 'deportation'. This is because the Korean society is focusing on Koryo Saram who were deported to Central Asia due to Stalin's suppression on the minority and deportation policy in 1937. As Koryo Saram of this time (1937-1953) "struggled for survival and maintained the spirit of the Korean race even under the legal oppression, restriction of residence", they are now considered to have the identity of Koreans (An & Lee, 2013).

There are many studies on Koryo Saram conducted in this context. Studies on Koryo Saram have been conducted in earnest since 1990 with titles of 'independence movement' and 'deportation', and within those titles, especially the literature and the ethnic identity of Koryo Saram have been mainly researched. According to Chung (2011), studies on the identity of Koryo Saram conducted during 1990s-2000s only focused on their attachment relationship with the homeland, Korea, not suggesting the multiple characteristics of the identity of Koryo Saram. Thus, there are few studies paying attention to the various identities of Koryo Saram by considering their current residence, hometown, language, and social situation.

Individual identity is a cultural composition that is not fixed but made by the meaning of language and social discourse. Individual identity changes flexibly and variously depending on the individual's diverse circumstances and contexts. However, this change is realized by the entity within the frame of consistency and unity. Thus, this entity lives his or her life as an individual having various identities, and accordingly one should be able to read the individual's diverse circumstances and contexts to study his or her individual identity. That is, in order to study the identity of Koryo Saram living in 2016, it is necessary to consider their various situations as much as the migration of the first generation of 'Koryo Saram'.

From this perspective, this study tried to determine the identity of Koryo Saram explained by them. The identity of 'Koreans' is not all of the identity of Koryo Saram. In order to grasp the layers of their various identities, this study used life stories of Koryo Saram living in Almaty, Kazakhstan.

ETHNIC IDENTITY

The national identity is a part of the identity that every human has and a sense of belonging that a person feel about an ethnic group. An aspect of a relationship between two or more groups who see themselves as bearing

 Copyright © International Conference on New Horizons in Education Conference (INTE)

"cultural differences". It emerges where such differences are made socially relevant (Eriksen, 1993). The national identity is something socially formed rather than something primitive based on biological differences (Geertz, 1973). An aspect of a relationship between two or more groups who see themselves as bearing "cultural differences". It emerges where such differences are made socially relevant (Eriksen, 1993). The national identity is a word meaning both objective characteristics shared among nation members and a subjective sense of belonging in terms of their ethnic group (Yoon, Kang, Kim, Lee and Jung, 2000). This national identity can be defined by themselves or others (Uba, 1994).

KAZAKHSTAN'S KORYO SARAM

The people moved from Korea to the Soviet Union prior to 1930 are called Koryo Saram. Koryo Saram in Kazakhstan moved from Korea to Yunhaju of Russia between late 1880s and early 1930s due to the independence movement in Korea, natural disaster such as drought and flood, and economic reasons, and settled in CIS area by the deportation policy of Stalin in 1937. After the Soviet Union collapsed in 1991, the majority of Koryo Saram in each countries in CIS have moved to Almaty in Kazakhstan due to education, economy, and family. About one hundred thousand Koryo Saram are living in Kazakhstan and eighty thousand of them are staying in Almaty. It is about 6% of the overall Kazakhstan population, and Koryo Saram is the eighth largest minority group in Kazakhstan (Ministry of Foreign Affairs in Republic of Korea, 2015). The research on Koryo Saram has been conducted by scholars in the Soviet Union and other foreign countries before 1991. The main research topic at that time was to investigate how much Koryo Saram have assimilated with the culture of the Soviet Union. Collaborative research projects of Korean and Koryo Saram researchers started as soon as the Soviet Union collapsed in 1991. The research on the history of deportation in 1937 or how Koryo Saram keep their identities is dominated.

RESEARCH METHODOLOGY

This study mainly aims to understand the identity of Koryo Saram living in Almaty of Kazakhstan and their perception of Korea and Korean culture. Thus, we proceeded with qualitative research methods in order to describe peoples' experience, perception, and values more generously.

This study starts from the autobiographies of Koryo Saram living in Almaty, Kazakhstan that the authors collected in 2014-2015. The authors gave a lecture about the autobiography description method at an elder's college for Koryo Saram located in Almaty, Kazakhstan in 2013. Then, 26 autobiographies written in Russian were collected, translated, and analyzed. The analysis gave weight to the chronicles of their lives, special events, and their emotions. Based on the autobiographies analyzed, four participants were selected. The participants of this study are as below.

No.	Assumed Name	Age	Birth-nation	Langauge
1	Kim	68	Russia-Sakhalin	Russian, Korean
2	Lee	77	Kazakhstan	Russian
3	Jung	65	Uzbekistan	Russian, Geman
4	Han	69	Kazakhstan	Russian

Research participants judged to need a closer examination were interviewed in May 2016 in Almaty. The in-depth interview was conducted in Russian and Korean and international students from Kazakhstan, Uzbekistan, and Kyrgyzstan in research team translated Russian into Korean. And we analyzed individual life story based on the collected materials and conducted storytelling.

ETHNO-TELLING OF KORYO SARAM

1. Proud Experience as Soviet Citizen

Koryo Saram, research participants, have lived much of their life as Soviet citizen. They have lived as Soviet citizen rather than Korean following the national policy of Soviet Union. The policy "national in form, but socialist in content" pushed by Lenin has aimed to make all races true Soviet citizens, and it has been realized at the end. The Lenin's policy has oppressed people as Stalin has seized power, Koryo Saram taken by deportation have been unable to operate Korean school, have their own media, hold the rally, and inherit the traditional culture. Although the suppressive policy has been somewhat eased after Stalin's death, the culture of Koryo Saram has already assimilated into the Russian culture. Koryo Saram has experienced great difficulty in keeping their language and culture. Koryo Saram have actively adapted socialist system rather than maintained their own ethnic identity. As a result, the Russification of Koryo Saram has been realized.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

(the preceding: finished third year in Korean school and moved to Russian school) I have never used (Korean) for 40 years. I have entered a company after graduation and have been unable to use Korean. I have never meet Koryo Saram. I have only talked to Russains (Kim, 2015).

I entered an elementary school with my grandmother when I became 8 years old. I could speak Korean and Kazak. However, I was expelled since I could not speak Russian (Lee, 2014).

We, Koreans, have lived our life as the people of Soviet Union. Living like a Russian has become common among us. Russian language, culture, and traditions called Soviet have governed us. Speaking in Korean and overemphasizing Korean culture has not been encouraged. Therefore, we learned Russian language, culture, and traditions perfectly and at the same time have forgotten those of Korean (Han, 2014).

After deportation by Stalin in 1937, they have avoided telling about their ancestor and distrusted each other. They have focused only on their production activity and tried to prove their identity as patriotic citizen who are loyal to Soviet socialism. All research participants who have spent school years at that time have proudly said how well they have made good achievements at school. In addition, they have said their 'proud' jobs, how valuable are the jobs, and how high are their positions.

My sister Yulya and I have read all books in the 'Baba Yurt' library several times. In particular, we have ben entangled by the magazines 'Learning and Life' and 'Skills of Young People.' Many nations such as Koryo Saram, Germans, and Chechen people have studied in the same class. I went to 'Makhachkala' to attend chemistry and physics contest on behalf of my classmates when I was in ninth grade. I graduated tenth grade in 1970 and went to 'Prunja' city in Kirgiz. I studied hard there and got a scholarship (Jung, 2014).

Actually, many Koryo Saram were evaluated as "hard-working and smart nation" in Soviet times and occupied high positions in terms of education, society, agriculture, and economy. This was due to their high obsession with education and earnestness. Koryo Saram has remembered themselves as 'proud Soviet citizens.' However, their 'proud experience' as Soviet citizens has become useless after the collapse of Soviet Union.

2. Koryo Saram as Primordial Ethnic

Although ethnic identity is renewed depending on situations, rejecting individuals' biological and historical reasons is difficult. Although research participants have lived most of their life as Soviet citizens, they have understood the fact that they are originally Korean.

My father made my Korean name when I was born. It was Ok-hee (assumed name). He made my Russian name as well. It was Nadezhda, meaning hope. I have been called Ok-hee at home and Nadezhda outside (Kim, 2015).

Unlike other research participants, Kim has used her Korean name. According to her, she has been called her Korean name at home, and her parents have talked about their hometown (Pyongyang) frequently and wanted her to visit there. However, even in this case, she has been called her Korean name only before her marriage (while her parents' living years), and her Korean name has never been used in her new family following her marriage. In this respect, her name represents primordial ethnic identity.

I can read KORYOMAL (similar to Korean) well. I have learned and used KORYOMAL until middle school years at Kyzylorda.. However, I do not understand KORYOMAL (Han, 2015).

The ethnicity of research participants has remained at primitive level due to the 'absence of national language.' The impact of national language on ethnic identity is absolute. However, Koryo Saram, unlike other minority groups who find their identity from their language and culture, build their identity on the fact that their parents are Koryo Saram and unique food culture, leading their identity to remaining at symbolic and spiritual level (Югай Илья, 1998). In addition, Choi (1996) said that national tradition conserved by Koryo Saram are "Gemeinschaft vestiges to survive in socialized and Russianized society and do not mean much to ethnic identity."

Koryo Saram' identification cards specify them as Korean. This specification means that Koryo Saram are treated differently than other minority groups in Kazakhstan and Soviet Unio. For these reasons, the identity of Koryo Saram tend to be distinguished against their will.

3. Koryo Saram recognized themselves as Korean following exchange with Korea

Koryo Saram have not been able to talk about their history easily until materials for deportation have been disclosed in the late 1980s. In addition, Koryo Saram has interacted more with North Korean than with South

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Korean prior to Seoul Olympic in 1988 and recognized South Korea as a very poor country. Many Koryo Saram say that they have first known that Seoul has grown up a lot after watching the Seoul Olympic on TV.

An international exhibition, Daejeon Expo, was held in 1993. I saw South Korea for the first time at that time. I deluded myself into a pretense that I am in Japan because I have never seen something about South Korea before. At that time, I first felt that we are not Koryo Saram if we do not know how to speak Korean (Lee, 2014).

As interaction with South Korea has become more active, the frequency of contact between Koryo Saram and Koreans has also increased. The activities of Korean missionaries started in early 1990s have provided Koryo Saram with opportunities to learn Korean language.

Missionaries entered here in 1990s and I started to learn Korean at that time (Kim, 2015).

The identity of Koryo Saram as Korean race has formed due to social interactions. Exchange and close contact among Koryo Saram have started after Koreans have begun to enter into Kazakhstan. In particular, Korean churches and Korean education centers have played various roles in social culture. They provide Koryo Saram with opportunities to socialize with Korean friends, contact to Korean society and Korean people, learn Korean, expand family for old ages, and have social and spiritual stability.

I was invited in a concert held by Korea education institute in 2011. I saw Korean traditional clothes for the first time, and I was even able to try it. We learned the history, culture, and tradition of our homeland (Han, 2014).

However, it is right that Koryo Saram have begun to have identity since they have wanted to belong to the reputation and economic power of Korea. This is associated with the nation policy of Kazakhstan, and the first president N.A.Najarbaev has adopted a policy to build a country through harmony among all majority and minority groups in Kazakhstan. This policy has stemmed from the decision that overemphasizing 'nationalism' is not politically expedient, and it is a multicultural policy supporting the cultural traditions and language development of majority and minority groups.
With this background, 'The Korean Association' organized in 1995. It has educated Korean language and culture to young people and helped them to have identity as Koryo Saram. That is, the bond of Koryo Saram is not from the 'primordial' sentiment but from the intention to found their social and economic positions within Kazakhstan using the economic development of Korea as their background. The identity as Kazakhstan is redesigned based on Korean development and the raise of ethno-nationalism in Kazakhstan.

CONCLUSION

Koryo Saram has strong multiple identity both as Korean people and the people of the country of residence. The various layers of identity can be composed of Soviet citizens who lived most of their life in Soviet Union, Koryo Saram which is a primordial ethnicity, Korean that they have recently acquired, and North Korean that they have had before recognizing themselves as South Korean. According to Kim (2008), although Koreans feel strongly about their ethnic identity from psychological aspects, they are passive in actual behaviors such as conserving and succeeding Korean people's tradition, culture, and norms. It may be associated with policies in the Soviet Union, but it also different from Kazakhs or Tatar people who lived in the same era. Koryo Saram should interact with Kazakhs and learn Kazakh language to live in Kazakhstan. This may lead to the change in their multiple identity. In addition, since their identity has not been based on their national language, the identity of Koryo Saram in Kazakhstan as Korean people is now moving to change.

REFERENCES

An, S.,& Lee, B. (2013). A Survey of Transmission of Korean Traditional Folk Culture in Goryein Community of CIS - Focusing on Folk Culture of Goryein Kolkhoz in Tashkent Province of Uzebekistan-. *Slavic Studies, 29-1.*

Chung, J. (2011). The Life and National identity of Russian-Korean in Maritime District and Sakhalin - focussing Diagnosis and Task of the Study-. *The Review of Korean Cultural Studies*, 38.

Eriksen, T. H. (1993). *Ethnicity and nationalism: their Psychological Foundations*. New Haven: Yale University Press.

Geertz, C. (1973). *The Interpretation of Cultures: Selected Essays*, New York: Basic Books.

Yoon, H, Kang, J., Kim, K., Lee, H., & Jung, Y. (2000). Emergence of Kazakh Ethno-nationalism and Identity Problems of Koreans in Kazakstan in the Post-USSR ere. *CROSS-CULTURAL STUDIES*, 3-62.

Uba, L. (1994). *Asian Americans: Personality patterns, identity, and mental health*. NY: Guilford Press.

Ministry of Foregin Affairs in Republic of Korea (2015). *Overseas Koreans Status.*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

MUSICAL PERFORMANCE OF THE HOLY QURAN WITH ASSISTANCE OF THE ARABIC MAQAMS

Tsonka Al BAKRI
College of Fine Arts, Music Department
Yarmouk University Jordan
tsonka@netbg.com

Mohammed MALLAH
College of Fine Arts, Music Department
Yarmouk University Jordan

ABSTRACT

When a West European observer is listening to a professional performance of the Holy Quran, he notes its chant-like character. This paper has been prompted by the widespread performance of the Holy Book by the present-day *mudjawideen* (those reading/chanting the Holy Quran) in everyday life of the Arab people. These performances are characterized by outstanding melody-making, beautiful melodizing and remarkable improvisation. This has led the researchers to the idea of studying the roots and rules of the musical presentation of the Holy Quran.

It has been an undisputed fact that the intellectual and artistic advancement of the Arabs in the Middle Ages led to a specific manner of reading the Holy Quran, modifying it from the recitation-like reading *al tartil* to a new, original and specific method of singing *al tajweed.* This study will be devoted to *al tajweed* and the use of different maqams from the realm of Arabic music. In this paper, the researches will focus their attention on the suitable timbres, appropriate for the performance of the Holy Text, according to Arabic academic literature, as well as the emotional characteristics of the most frequently used maqams and their respective application to the specific parts of the Holy Quran.

INTRODUCTION

This paper aims to outline the real picture, associated with the musical presentation of the Holy Quran, the historical facts and information available regarding the manner of its performance. The most frequently encountered maqams applied in the Holy Quran reading will be presented and their specific features shall be defined. Readers will be introduced to the *madkhalat soutieh* (the degrees composing the maqams), the *Jins* or *Adjnas* as plural (tetrachords) and the *fasel tanini* (the transition linking up the two tetrachords). The researches will try to facilitate and assist those reading the Holy Quran and interested in the connotative meaning of the music by representing the diverse colors and moods, created by the different maqams in the reproduction of certain texts of the Holy Quran.

The aim of this paper is to be a useful tool to every *mudjawideen* seeking to read the Holy Book and understand the meaning of the existence of some musical elements in the realization of the Holy Quran. Furthermore, it is the authors' ambition to familiarize Western theorists with the musical aspect of Islamic theological practice. The formulated aims are as follows:

1. To define the maqams used in the *al tajweed* of the Holy Quran.
2. To present the ancient semantic idea of the existence of "colors", a specific emotional impact of every maqam, which determines its respective use in recreating the atmosphere of certain *Suras*.
3. To present the maqams as a means of "invigorating" the Holy Quran, enriching its beauty and strength.

The authors believe that this information will help in the formation of an adequate evaluation of the true role of music and its real place in Islamic Culture.

The researchers define the problems accompanying this elaboration in the following order:

-Division of the social and academic view on the status regarding "the permissibility" of music as art within the frameworks of Islam.

-The absence of adequately sufficient thorough academic studies devoted to the subject.

-The absence of Music education among the *Sheikhs* reading the Holy Quran, which reflects on their ability to correctly define the musical phenomena.

-A willingness on the part of the theological community to consider music to be profane and disregard its power of impact during the performance of the Holy Texts.

The methodology on which the paper rests, is a *case study*. The main attention will be concentrated into the sphere of performance of the Holy Quran, and at the same time other objects and subjects involved and directly related to it will also be presented.

Key words: Quran, Music, Maqam, al Tartil, al Tajweed.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The paper cannot be started without an introduction explaining and defining the problems, which the researchers encountered due to the division of views for and against conducting such an investigation in the first place. On the one hand, music is within the realm of the banned (*haram*) arts, alongside the spectacular genres, the art of dancing and the images of people and animals in paintings. On the other, despite the established bans, the Arabs have created a rich heritage in various spheres of the art of music. During the time of the Middle Ages and golden age of "The House of Wisdom", sciences, along with music theory and aesthetic norms attained heights unknown to Europe, just to prove the intransigence of knowledge over religious dogmatism. The question regarding "the permissibility" of music in Islamic culture has never ceased being a topic of discussion over the course of many centuries. This has been due to the absence of direct instructions or an explicit ban in the Holy Quran itself, which allows freedom in dealing with the subject to the interpreters of the Holy Book. Over time an indefinite compromise situation took shape, which allows music in the form of a "pure" art, which engenders noble feelings, while at the same time rejects music in the forms giving rise to "sinful" or erotic thoughts. Tolerance to music became established, although the possibility remains that this tolerance could turn at any moment into rejection and complete ban of any kind of music events. The *status quo* has proven this claim. Existing in quite a number of Arab countries are music conservatoires, colleges of arts, schools for music. "Music" is presented as a subject in secondary schools, while in other Arab countries all this is prohibited. Arabic satellite channels broadcast ethno-pop music, performed by male and female singers, which exercise their rights to repeat or quote stereotypes of behaviors, vision or dancing aesthetics, directly borrowed from West-European and American pop trends. At the same time there are families, entire settlements, regions and even states where access to these channels is strictly banned and defined as an expression of the purest evil. Consideration must also be given to the extreme orthodox Islam, preached by the so-called Islamic State, some structures of Al Qaeda *et al.* which provide the death penalty to people dealing with music or arts. Despite, or precisely because of what has been presented, the topic of the existence of music in the cult art of Islam is an extremely delicate theme. Every discussion or study undertaken regarding these types of questions encounters numerous opponents and a number of obstacles in the collection of adequate information, especially related to theological texts, as well as a certain amount of distancing on the part of the very performers and interpreters of the Holy Quran. Other obstacles in carrying out the current investigation have been the lack of knowledge or unwillingness on the part of the religious interpreters and performers to define and, respectively, give answers on topics related to the correlations between the subjects of the paper; Music and the Holy Quran.

The music characterizing the reading of the Holy Texts is vocal, which has been due to the widespread view that the musical instruments are the product of human hand and for that matter are carriers of "sinfulness". It is not known when and who had banned the use of instruments in the performance of the Holy Quran or whether at some point there had been such a phenomenon at all, but practice has enforced the complete absence of any instrumental accompaniment in the recitation of the Holy Book. This fact could also be attributed to the Arabs' traditional attachment to monody and the song.

SINGING/READING OF THE HOLY QURAN

It should be emphasized that when referring to a performance of the Holy Quran in Muslim countries, the word "singing" is never used, instead, this is referred to as "reading\reciting" or "*kura'a*". The poetic emphasis does not fall directly on the musical aspect of what is being performed, but on the narrative, logos or spoken principle. Recitativeness, characteristic of the reading of the Holy Quran is distinguished by a sing-song manner of a certain genesis, rooted back in antiquity. The Prophet Mohammed (pbuh) waged a permanent planned struggle against paganism. At the same time he cleverly borrowed the traditions of the centuries interweaving the new religion into culturally generated structures from ancient times, through which he found the suitable way of combining tradition with the new doctrine. This applies not only to the pilgrimage to the Black Stone- *Kaaba* and so called *Hajj*, but also the poetical heritage from the pre-Islamic period. It has been common knowledge that quite a few of the sacral chants of the Arabic tribes like *Tahmeel* and *Talbeah* were passed over to the way of reading the Holy Quran. It is well known that the hallmark or way of using the rhymed prose of the Holy Book has been based on the *Sadj* or pagan ritual genre. "Some structural stylistic specificities of the early *Suras* of the Holy Quran provoke certain associations with the formation of the ancient maqams and the *Sadj* rhythm" (Filshetin'skij, 1971, 50).

Reading of the Holy Quran has been accepted to be performed in the mosques and at gatherings during family events including childbirth, weddings and death. In modern times listening to the Holy Book is usually done using electronic carriers, over the radio and through satellite channels. The performance is done by well-known *mudjawedeen*. This is due to the generally accepted view that the musical recitation of the Holy Quran by select,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

trained and schooled performers is conducive both to the more lively emotional perception of the text and to the thorough penetration into the philosophical and lexical semantics of the text.

The question naturally arises wherefrom does the tradition of melodic presentation of the Holy Quran originate. As already pointed out, the Holy Book itself does not mention anything and there are no specific instructions along this line. The only reference to the style of reading is found in the *Sura* "The Enfolding" "*Al Musammil*" that says "And you should read the Holy Quran with moderation and piety". (The Holy Quran, Ayah 3, 4, 5, 6). However, hadith[s] or parables have been passed down the generations and left by the followers of the Prophet (pbuh), which give some concepts along this line. One hadith is often quoted in which the Prophet Muhammed (pbuh) insists that the Muslims *yataghannah* (sing) the Holy Quran, whereby the significance and its beauty could be adequately shown. Furthermore, the Prophet (pbuh) says: "Whoever does not *yataghannah* the Holy Quran is not one of us" and "You should decorate the Holy Quran with your voices" (Bin Ibrahim 2005, 1029). This has also been brought up by Ibrahim bin Hamzah, who heard it from Ibn Abi Hazem, who in turn had heard it from Yazid, who in turn had heard it from Mohammed bin Ibrahim, who quotes Sulma and Abi Hureira, who had heard from the Prophet (pbuh) the words " God would not permit something which has been banned" (or musical performance of the Holy Texts) . Or: "The believer is righteous who reads the Holy Quran with a beautiful voice" (Bin Ibrahim, 2011, 626). The upholders of the "permissibility" of music in Islam lay stress on this hadith, pointing out that when the reading is performed by a righteous man, having a beautiful voice, singing the Holy Quran finely, this could not be qualified as a *Haram* (sin), rather has been allowed by Allah. They consider that in the combination of these few factors: the righteousness of the performer, the beautiful voice and the perfect poetry of the Holy Quran, supreme virtues are manifested which as a result entail strengthening of the faith in God and homage to his greatness.

Some of the supporters of the Prophet Mohammed (pbuh), who were acknowledged by He Himself as the best readers of the Holy Quran have been passed down. They all were reported to have had rich and beautiful voices. Owing to their merits as inspired and skillful singers, they had assisted the spread of Islam. These were Abi Mussa Ashari, Salem Mulla Ibn Hudaifa, and, of course, Bilal Habashi. A hadith, based on information from Aisha, goes like this: one evening she came home late to the Prophet (pbuh) and he asked her why she had been late. Aisha answered that she had been to a meeting of his associates, at which one of his followers was reading the Holy Quran in such a beautiful voice that she felt she had never heard the Holy Texts performed with such a magical force. The Prophet (pbuh) answered her that this must have been Salem Mulla Ibn Hudaifa, and added: "Glory to God that there are such men in our *umma* (community)" (Al Sharif, 2003, 61). A similar hadith was indicative that the Prophet Mohammad (pbuh) advised his followers to follow an example of how his officers should perform the Holy Quran. He listed the names of the four with the most beautiful voices: Abdallah Bin Masoud, Salem Mulla Ibn Hudaifa, Mouad and Abi Bin Ka'a. The same hadith says that when these followers of the Prophet (pbuh) were reading the Holy Quran, the Prophet (pbuh) himself used to say that "when someone was reading the Holy Text with such a beautiful voice, even God Himself listened to him". (Al Hrazi, 2001, 58).

It is impossible to prove how and who specifically gave the idea of melodic rendition of the Holy Quran, because the musical tradition of the Arabs is empirical and is based on improvisation, rather than on note-writing. The musical tradition had been kept up by the correct and strict handing down of information from generation to generation. The missing clarity on the matter and the available historical data do not preclude the real existence of *tajweed*, as a direct expression of the art of musical rendition of the Holy Texts. Let us say that *tajweed* derives from *tarteel*. *Tarteel*, this is "the right" way of reading the Holy Quran, or a kind of art recitation. The meaning of *Tarteel* is the slow, measured rhythmic way of hymn type recitation. *Tarteel* teaches how certain letters are to be stressed and others extended, whereby all this is put down in the Holy Quran itself in the form of diacritical signs, but the performance is the objective of the performing improvisation. There are seventeen *makharej al huruf,* or emission points of the letters, located in the different points of the vocal system use in performance of Islamic recitation. They are found pronounced through the throat, tongue, mouth, lips, and nose, and all should be properly used in the vocalization of the letters, the symbols of the beauty of the text. It should not be forgotten that as early as at its very appearance, the Holy Quran was called even by pagans "*mu'jizah*" or "wonder" of the Arabic poetry, moreover in times of true upsurge of the art of poetry. *Tajweed* or "to do better", is aimed not only at the correct pronunciation of the Holy Book, but also at its vocalization. It is understood that it teaches how to articulate, how to make pauses in the text, and how to culminate the dramatic tension. However, the most important thing that *tajweed* aims at is the reflexive rendition of a number of spiritual rules, essential for the performance of the Holy Quran, or recognizing the meaning of each pronounced word, read with the awareness that the text is no work of man, but the speech of the Lord. *Tajweed* teaches the performer to clear his mind from everything material, and dedicate himself to sensing the logos.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

It instructs that the texts are personally directed to everyone, reading or listening, and have respectfully to be recreated with honesty and responsibility. It creates practices, lending to a song-like rendition of the text. Unlike the available fixed written rules of *Tarteel* and *Tajweed* dedicated to recitation, such are lacking as far as the melodious rendition goes. Singing in the Holy Quran radically differs from any other kind of vocal music. It is considered to be the highest, most sophisticated kind of performance. He, who reads the Holy Quran, is duty bound to show the beauty of the Holy Book and its philosophy, whereby singing is an auxiliary means, leading to the supreme goal of penetration and involvement in the text. In order that the theological community may "approve" the reading of the Holy Quran, it should not present manipulation of the words of the Lord by adding or cutting out any text, as well as freely prolonging or reducing the words. Another important element is that the performer should not be carried away by breaking into a song, thereby transferring the semantic accent of the text to the music. In conclusion: *tajweed* is assumed to be an offspring of the spiritual, cultural and social progress of theological society. It has been assumed that from its very creation the Holy Quran has been presented in the form of recitation accompanied by melody making." This kind of "reading" was called *Al Quran al Murattal* and was in the course of time turned into a new way of reading/singing called *Tajweed "*. (Sami, 1071, 46). *Tajweed* is accepted as a science related to the oratory art and with the melodic rendition of the religious text of the Holy Quran. The main idea of this kind of art is to present "the right" or "significance" of each single letter, so that it can be correctly pronounced, to have a precise ring, and not to lose its irreplaceable place among the rest. *Tajweed* postulates that each letter is unique in its essence and as such deserves to get its exclusive place and meaning. "The grammatical and linguistic rules have been created to emphasize precisely that irreplaceability ". (Al Akrabawi, 1991, 38). "It is common knowledge that the basic letters in the Holy Quran are a total of fifteen, and each one of them finds self-expression in specific vibrations ", (Al Hrazi,2001, 61), which influence the cosmic and spiritual tie-up of the person reading the Holy Quran with God. In our times every *mudjawideen* studies this science in depth, which is an obligatory condition for the correct reading of the Holy Quran. "(Al Hamd, 2009, 12). " The art of reading the Holy Quran follows the norms of separating the phrases, stressing on words or the phrase' parts; pauses are due which are to lead to a definite concentration of the attention. No wrong articulation is allowed, the vocal rendition is free, and there is no excessive decoration, whereby all is subordinated to the idea of conveying the expressiveness of the text." (Geta M. 1987, 57).

As a generalization, the professional readers of the Sacred Book should know *tarteel* (or how to read correctly, with due rubato in the text, with mandatory pauses and stresses at definite places, emphasizing the meaningful accents on the letters), *tahkik* (correct reading, without dropping or adding letters to the text) and *tajweed* (how to make it better, melodizing, getting into song like recitation, attaining to the highest level of perfection in the performance of the Holy Texts). *Mudjawideen* are trained over the course of many years in the ways and rules of performance, and all of the knowledge is orally handed down from teacher to pupil. Let us refer straightaway to the Holy Quran, specifically to Sura "The Resurrection" "Al Kaiama", which reads: "And when we read (the Holy Quran) follow His reading (of Mohammed (pbuh)). Thereupon our concern is the exponent (of the texts)". (The Holy Quran, "Resurrection", ayah 18, 19).

Arabic scholars list seven schools of Holy Quran recitation, which do not differ in the main principles. Three of them are quoted as foundation-laying: Egyptian, Syrian and Maghreb (or Northern African). "The Egyptian school is best developed in terms of music and is most liberal in ornamentation. Close to it is the Syrian, but more rigid, sparing in ornamentation, with a clearer vocal outline, which is made up for with the faster speed of recitation. The Maghreb School, in turn, is characterized by estheticism of the cantilena (melodiousness) and the vocal range not exceeding interval forth." (Eolyan, 1990, 72).

CONDITIONS FOR THE PERFORMANCE OF THE HOLY QURAN BY MUDJAWIDEEN (THOSE READING/SINGING THE HOLY QURAN)

It has to be emphasized that it is practically impossible to be fixed, the exact note highs of the performance of the Holy Quran, because the ornamentation is overly-rich and each performance, even by one and the same performer, differs from the preceding one. The vocalization is realized in a certain way by drawing the sound from the rhynopharinx and the throat, rather than from the chest or the diaphragm. This methodology of sound production leads to the extraction of a specific timbre, which does not allow any outstanding singing, but helps a very precise reproduction of the sounds through interaction of the vocal cords, tongue, nose and the lips.

The idea to read the Holy Quran by using the Arabic maqams probably came with attempt of sophisticating the sound of the Holy Text through the means of music. The melodious line no doubt helps with the memorization of the text by way of the color it lends. The use of music also entails "a beautification" of the Holy Quran, emphasizing definite meaningful accents from the text, through the resources provided by musical expression. This, however, led to the need for structuring a clear-cut standard of performance in order not to allow everyone to chant the Holy Texts

 Copyright © International Conference on New Horizons in Education Conference (INTE)

in their own way, thereby distorting the meaning of the words or, generally speaking, the idea. Presented below are some conditions mandatory for all the *mudjawideen*, teachers, scholars and performers of the Holy Quran.

- Precision of expression of the language. In other words, notwithstanding the melodic rendition, the pronunciation has to be impeccably precise. "The Arabic language is a beautiful and singing language, which is easily subjected to vocalization. It is specific and this results in a typical musical color, distinguishing it from the other languages" (Drar, 2012, 41).
- A beautiful voice. This requirement includes the availability of data, which should be perfected. In this sense the condition is made that each performer should have a beautiful timbre, but also should study and perform with his heart and feel the texts, in order to successfully reach out to the hearts of the listeners.
- To have knowledge about theology and the maqams. "The knowledge about the interval correlations, the modes and the way we move between these intervals helps to reach the true art." (Al Helu, 1972, 14). Regretfully the majority of performers of the Holy Quran do not possess even an elementary musical culture, at the expense of streamlined and thorough theological knowledge. The musical aspect of their performances is the fruit of long years of exercising and memorizing the melodious lines and vocal specificities directly from their teachers. As a result of this, a level is reached that is typical of people who have worked in the field of music for many years.
- Knowledge of the laws of *tarteel*, and *tajweed*.
- "The availability of physical and vocal features, securing sufficient power of the sound, to carry the text within the frameworks of the whole mosque." (Al Khalek and Hafeth, 1984, 85). The performer has to possess a rich and strong voice with a decent vocal range and power that would help him perform fully his obligations."Availability of musical features: a sense of the different degrees of the tone and a good ear for music." (Al Sharif, 2003, 62).

It should be emphasized that the Holy Quran may be read in mosques and public places only and solely by men. It is traditionally considered that the female voice carries a feeling of eroticism and its beauty would distract the believers from their main objective of concentrating their attention on the text. It is considered that the performers of the Holy Quran should not rely on the features presented by their voice, but should be trained by way of persistent vocal exercises. These exercises should be purposefully and individually selected by the teachers with the basic idea to lead to the attainment of perfection in the declamation and vocal presentation of the Holy Text.

Kinds of Human Voices Suitable for the Performance of the Holy Quran

Human voices are divided into two basic groups by Islamic theologists. The first group includes the beautiful human voices "*al latifa*", which translates as "soft", and the second group "*al makruha*", which translates as "undesirable" voices. (Al Khalek and Hafeth, 1984, 85). Listed below are the voices defined as *Al Latifa*:

- *Sot al shedji* - "melodious" voice, which is the most beneficial for reading, because of its pure musical sound.
- *Sot al naghem* - a "soft" voice, which is defined as light, airy and melodious.
- *Sot al rateb wa al nadi* – this voice is described as a "humid", "velvety" voice, "flowing like water".
- *Sot al abah* - "horse-like" voice, (Ibid 66) is a hoarse, raucous, dusky voice, which can also sound well.
- *Sot al aghan* - "a sheepish" voice. (Ibid 62) The timbre leans towards getting into a large vocalization, but if well trained it may sound sweet and beautiful.
- *Sot al kroani* - the timbre of a "crooked beak". (Ibid 67) This voice is pure, soft, "elastic" and easily makes the transitions between the tones.

The undesirable human voices:

- *Sot asiahi* - "shrill" voice, with a high obtrusive timbre, producing false tones and unpleasant feelings.
- *Sot al muzaghradj* - "indolent voice" or heavy obstructive intrusive voice, which is not melodious in its character/nature. (Ibid, 67&68).
- *Sot al musalsal* - *"*rough, primary" voice lacking beauty and a sense of art. (Al Sharif, 2003, 63).

Relations of Arabic Cult Music with the Medieval Philosophical Heritage

Music is an art based on mathematics and the science of music; an art related with the aesthetics, psychology and its very sound essence. Even back in ancient times the Arabs took a keen interest in studying the sounds, their colors and impact. The study of sounds and language was descriptive and precisely outlined in the tracts of the medieval Arab philosophers. "Linguists theorized the conjugations as *alal, ebdal, idgham* (different grammatical genders in the Arabic language), depending on which are the diacritical signs and stresses associated with the use of vowels between the consonants and their relation to music". (Mallah, 1990, 71). During the time of Umayyads and Abbasids, and following of the Arabic Islamic philosophy, music was based on the Mesopotamian theories and the Ancient Greek scholars who calculated the intervals depending on the length of the strings of the musical

 Copyright © International Conference on New Horizons in Education Conference (INTE)

instruments. This theory has been known as the theory of Pythagoras. In following these trends, a streamlined Arabic system was gradually developed to the musical scales and tetrachords, which were naturally related to the heights of the tones. Listed below are some of the Arab philosophers, who had dedicated thesis on music and more specifically on the music scales and maqams:

- *Doctor Abu Bakr Mohammed bin Zakariya Al-Razi*, (854-923), who wrote "*Madjalle fil Musika*" or "Journal about Music"
- *Philosopher Abi Nasri Al Farabi* (872-950), who wrote "*Ketab al musika*" "Book About Music"; "*Hasa al Ikaat*" or "Kinds of Time Signature", "Words in Music" and "The Great Musician".
- *Abu Jusef Ya'qub Al Kindi*, (801-874), who left 15 well-known books dedicated to music, among which was "*Ketab al muzica*" "Book about Music".
- *Safi Ad Din Al Urmawi* (1216-1294), who developed the foundation laying maqams art in "*Al Kitab al Adwar*" "The Book of the Modes".
- *Abu Al Faraj Al Isfahani* (897-967) who left a rich musical theory legacy, among which was "*Kitab al Aghani al Kabir*" "The Great Book of the Songs".
- *Ishaq Al Muwsili* (767-850) was one of the most famous and prominent musicians of the Middle Ages, who also left several "*Ketabat*" books about music. (Al Jaleel, 2001, 64).

In Arab philosophy, music is categorized in one group, together with mathematics, philosophy and astronomy. This tradition is a natural continuation of the Ancient Greek Scholastics. Music is not discussed solely from the point of view of the elementary theory of music; it is remodeled in a kaleidoscope of influences together with other sciences: psychology (impact of the music tones on man's emotional world, the impact of the maqams on the listener's mood), physiology (tying up of the sound and more specifically its vibration with various somatic features: ethos, physical characteristics), medicine (direct tie-up of music with the treatment of various diseases, structuring of the discipline of music therapy and its application in practice), astronomy (the influence of the vibrations and energies, flooding us from the planets and the universe as a whole, and their impact on the sounding and quality of the overtones, as well as of every sound by itself, its interrelation in specific energy series of tones- maqams, possessing characteristic energy), philosophy (poetic association of music with the spiritual development, with aesthetic and moral models). This wealth of ideas, empathic relations between the knowledge of music, man and the universe, naturally exert their influence on cult tradition. Though in Islamic theological literature the musical theory is considered completely profane, the accumulated knowledge and concepts have been imperceptibly interwoven, orally handed down and never written. In this way a phenomenon is created. Ideas originating from medieval Arabic tracts have become interwoven in practice, turning into an indelible part of the performance of the Holy Texts, without this being visibly shown. These practices have been handed down by the generations, having lost their philosophical and original interpretation, lawless and defaced, but alive in the actual, real performance of the Quranic texts.

Arabic Maqams as a music phenomenon

"The term maqam has an Arabic origin and means place, state or stop. The new studies testify that the term *maqam* was reached during the Middle Ages, but it appeared considerably after the time when the very system of the *maqams* had taken shape". (Agaeva, 1987, 79). ' If you look up the etymology of the term "*maqam*", we find that this is an Arabic word more common in the pre-Islamic era. It means location or place where he met the tribe itself, gatherings of people, or attendees." (Dolinina , 1999, 9) . According to information of H. Kushnarev "the system of the maqams became established in the 10th century". (Kushnarev, 1958, 86) *Maqam* is the name of a mode or kind of a tone in Persian-Arabic and Middle Eastern music. Each maqam has its system of mode links, inclinations and different interrelations between the degrees of its code. (Musical Terminology Dictionary, 1979, 181). Each one of the degrees of the maqam is built in a definite order with respect to the others, through fixed interval links. A modal scale is composed of an octave that consists of a combination of two or three sequences of the following: trichords, tetrachords or pentachords, (in Arabic: "*Tabe'* ", "*Jins or Ajnas"* as plural, and "*Eqed*" respectively). Accordingly, every mode has one primary sequence, and one or more secondary sequences. The three methods of creating modal scales of the tetrachordal joining ("*Jam'e"*) in the modal system are:

- Detached *(Munfasil*).
- Conjunct (*Muttasil*).
- Overlapping (*Mutadkhil*).

Generally every maqam is divided into two tetrachords of four degrees each. The first tetrachord begins with the first degree of the maqam. "The second tetrachord turns out to be a branch or the crown of the tree and is built on the four higher degrees". (Al Hameed Mish'el, year not available, 99). "*Eistiljah musiki* (scale order), is made up of two groups called *diwan* or tetrachord. Every scale is based on eight tones, whereby the basic tone is repeated in the first and eighth degree." (Abbas, 1986, 29). There are nine basic Arabic modes, and many other modes can be

 Copyright © International Conference on New Horizons in Education Conference (INTE)

derived from them. "The number of Arabic modes is very large…it has reached 235 modes, however, after the first conference in Cairo was held in 1932, the modes practiced in Egypt and Syria were limited to only 52 modes…" (Shoura, 2006, 12). Arabic musical culture determines the place and use of each single maqam depending on its features, both the distance between the degrees and its "color". Arab musicians recognize the maqams by their emotional impact. Additionally it is maintained that the ear distinguishes the color and feature of each different maqam and it is precisely owing to these variations that the different feelings or senses are derived from the direct impact of the maqam. The Arabic musical system differs from the major-minor European one. While the European system was based, from the time of Hellenism, on definite relations between half and whole tones, the Arabic musical system is based on interrelations between smaller intervals "*kar flat*"and "*kar sharp*" or quarter flat and quarter sharp. There are interval differences in the performance of the *kar* flat and the *kar* sharp in the different Arab countries. This brings confusion and makes it impossible to precisely fix the size of the *kar* flat and the *kar* sharp with respect to their frequencies. "This is also the cause of the lack of consensus in the creation of a uniform system for determining the size of the *kar* flat and the *kar* sharp in Arabic academic music from the Conference of Arabic Music in 1932 in Cairo" (Katat, 2003, 7). By going back to the manuscripts of Arab philosophers from the period of the Abbasids, it can be a defined that certain conclusions concerning the differences in the frequencies of the intervals within the framework of the scale have been attainted emperically using mathematical or astronomical calculations. These differences in the size of the intervals have a direct connection with the length of the strings of the *ud*, which has its roots in the theory of Pythagoras. The Arab philosophers gave a name to each one of the strings of the *ud*, which names transfer over to the names of the maqams. The Tonic of the maqam usually takes the name of the string carrying the name of the Tonic.

Nowadays, scales are being built in Arabic theory using the main pillar of Western musicology known as "*nidam muaddal*" (interval co-relations). The "Scale" is being construed as a code, whereby the tones are arranged according to height in an upward or downward direction from a Tonic to a Tonic, and their degrees are placed in certain interval correlations within the frameworks of an octave, and are co-related in a position of stability or instability of one with respect to the other." (Hadjiev, 1993, 115&116). Arabic music is based on the quarter tone or Comma. The Comma in Arabic music is of two kinds: Comma pythagoricien and Comma Holderien (Katat, 2003, 52). In 1932 an International Arab Conference on Music was held in Egypt, which defined and put into use the term "*arba'a al muaddal*" or the comma tone interval (Mish'el, year not available, 5).). Al Farabi introduced the tonal system in 25 unequal temperaments, giving mathematical evidence to support his theory. The first scholar to present the tone system as 24 equal temperaments was Mikhael Mishaqa (1800-1888) in his book "*Al Risala Al Shihabiya"*. At the same time an attempt was made to preserve the scholastic interrelation with the European theoretical model, enforced in the practice of Johann Sebastian Bach. The Arab Conference however, divided the scale not into 12, but into 24 Commas.

Notwithstanding its overall complexity, the existence of Music within the frameworks of Islam has been developing by way of the verbal handing down of knowledge in the monadic tradition. The system of the maqams has been gradually perfected over the course of ages as a result of the efforts of generations of musicians in an extensive region in terms of geography, from the Gulf to the African countries and from Iraq to Spain. In the foundation-laying works of the great scholars from the Middle Ages, Al Kindi, Al Farabi, Ibn Sina, and Safi Al Din, the term maqam was not always used in its current modern meaning. The discussion whether the maqam is a mood or mode, a melodious structure, a model or a shape-forming principle associated with an emotional charge characterizing it continues until the present day. " The word *maqam* acquires great importance in many areas, such is the main pillar in Bedouin tents which is called *maqam*. Art miniatures were created illustrating the literary genre maqam . One of the most valuable pieces are the works of Yahi al Vasitim maqam to the famous writer al- Hariri (1054-1122)" (Kaptereva , 1989 , pp 38-39). This question has been discussed with special significance in Russian musicology as the result of the differences in perception of the maqams on the part of different Middle Eastern states some of which are former members of the USSR. Similar standpoints can be found in the work of a number of West European theorists. "The link-up of the maqam with a concrete artistic and aesthetic idea is widespread in the East, in the same way as the idea of imaginative concepts and symbols, rigorously attached to each one of them (the maqams), visible even at first sight". (Chottin, 1939, 82). There is a similar discussion in Arabic literature, but this does not invalidate (or negate) the fact the maqam is perceived by the majority of musicians as a model of mode or scale. It is understood that for the people of the Middle East the maqam has its own functional meaning of a concrete mode, but it likewise has a certain emotional charge and a specific psychological sphere of influence. In "*Kitab al Advar*", composed by an anonymous Azerbaijani author, each maqam has been defined as corresponding to a certain time of the day, season, temperament of the listener or performer, going as far as dependence on the physical features of the person – whether he/she is fair-haired, or dark-skinned. "The dark haired are more highly emotional characters and matching them is the *Al Iraq* maqam, while those who have tender but warm nature fit the *Isfahan* maqam. The fair-

 Copyright © International Conference on New Horizons in Education Conference (INTE)

haired who are cool and 'humid' match *Rast*". (Anonym. 1974, 29). This understanding for the specific colors of each maqam slinks in the performance of the Holy Quran. It is traditionally confirmed that some maqams are widely used in the performance of the Holy Texts, and others are never employed. Additionally some are implemented in lyrical or story tale ayahs while others are in use in majestic or glorifying places. This particular practice indisputably originates from the influence of the ancient Arab philosophers and their concepts of music as an immanent vibration and vital force, having its own colors and power.

Maqams Used in the Performance of the Holy Quran

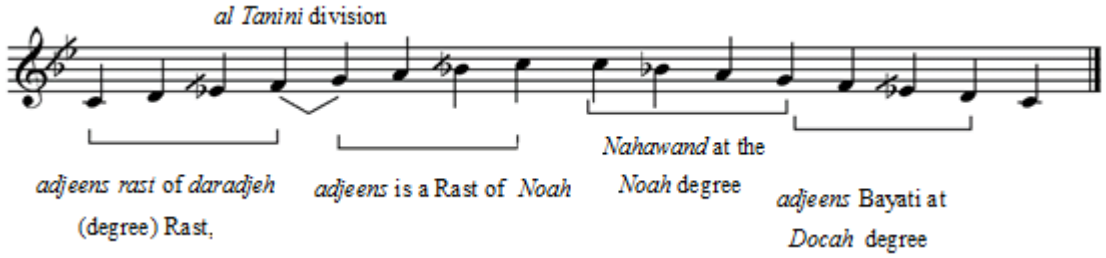
The spread of Islam in the Arab countries brought about the blossom of the art of performing the Holy Texts. This was accomplished with the resources of the philosophers in the region. As explained earlier, music was part of the philosophic education and it can be presumed that the educated people, who preached the new religion, used the maqams and music tools to express the beauty of the Holy Book. All knowledge concerning aesthetic and philosophic ideas, implemented in the theory of maqams poured into the Cult of Islam. The tradition of performing the Holy Quran was verbal and there are no written documents showing the way in which particular maqams were being chosen, who was responsible for and how the tradition of the performance was established. There is no doubt this did not happen at once and instead this is the result of a long path, the fruit of the work and talent of many unknown theologists and musicians. Nowadays, the basic musical maqams used in the performance of the Holy Quran can be observed and specified as:

Maqam Rast
Maqam Bayati
Maqam Hazan
Maqam Nahawand
Maqam Sikah
Maqam Hijaz
Maqam Ajam
Maqam Saba
Maqam Kurd

Following is a review of the maqams most used in the performance of the Holy Quran with their theoretical and emotional characteristics.

Maqam al Rast

Maqam Rast has Persian roots to which it owes its straightforwardness and simple beauty. Rast is typical with its masculine power and peace. It is used when more melodious and poetical Ayahs are being read. Most imams from Madina Minawarah and Haram Sharif (Mecca) like Alhadifi, Sdais and Al Mushsinio, read the Holy Quran in Maqam Rast. During *tajweed* most readers start with a Rast or Bayati, because these are recognized to be among the most beautiful scales. Rast consists of two tetrachords, the first of which is *Jins Rast* of *daradjeh* (degree) Rast, while the second *Jins* is a *Rast* of *Noah* degree. (Abbas, 1986, 36). There is *al Tanini* division between the first and the second tetrachords.



Maqam Bayati

Maqam Bayati is the broadest maqam in the recital of the Holy Quran. This is a simple maqam, calm like a deep quiet sea, vital and gently joyful. It gives the feeling of humility, prayer and fear of the Lord. Reading the Holy Quran often starts and ends with it." This maqam makes us think while listening to the Holy Text and look for its deep meaning." (Ibid, 39). There are two *Jins*: the first is Bayati at Docah degree, the second is *Nahawand* at the *Noah* degree. *Fasel tanini* is at the end of the first and the second *Jins*.

 Copyright © International Conference on New Horizons in Education Conference (INTE)



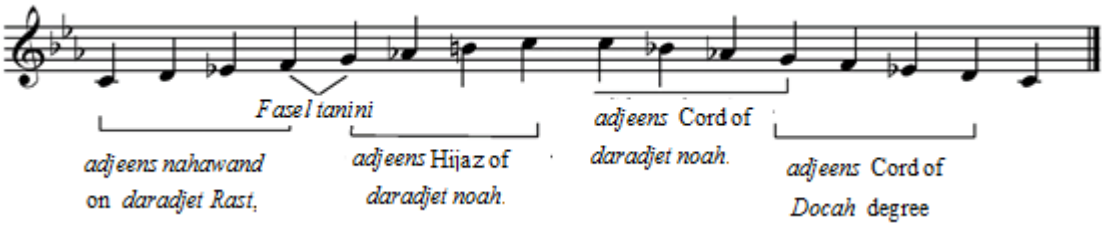
Maqam Al Hoozam

This maqam is slow and stretching and it gets into the depths of the heart. This maqam helps the readers and listeners to attain the wisdom of the Holy Quran. "It is soft and expressive, giving beautiful emotions and tenderness. It is used in ayahs about paradise" (Ibid, 43). Maqam Al Hoozam consists of two *Jins*. The first is a triple *Sikah* on a *Sikah* degree, while the second is *Al Hijarz* on a *Noah* degree. *Fasel tanini* appears at the end of the first and second Jins.



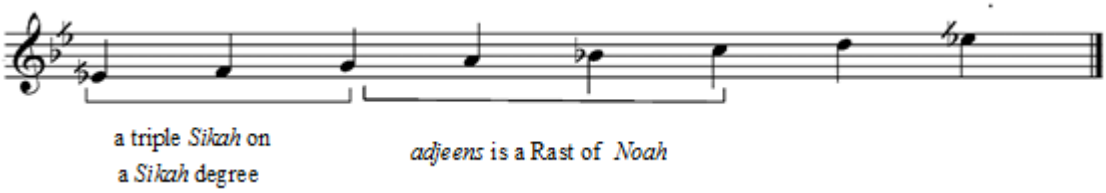
Maqam Al Nahawand

This maqam carries tenderness and a soft ring, which makes us feel humble and start thinking. It is characterized by seriousness and discourse. Nahawand is an Iranian town, with which the origin of the maqam has been associated. Among the best known readers in this maqam were Al Fassi and Shatri. It is most used in the expression of Quranic stories. Maqam Al Nahawand has two *Jins*: the first is *nahawand* on daradjet *Rast*, the second is Card of *daradjet noah*. *Fasel tanini* follows every *Jins*.



Maqam Sikah

The name *Sikah* comes from the Persian language and consists of two words: "*si*" meaning "three", and "*ka*", meaning "string". This mode features stretching and sadness, evangelism and forgiveness. Its sonority helps get into Ayahs dedicated to the greatness of the Lord. It is used also in the reading of tales and legends in the Holy Quran. There are numerous cult songs based on the *Sikah* maqam. One of them has come down to us, "*Talla al Budr alena*" or "The Full Moon Has Shown Itself to Us". With this song, the Prophet Mohammed (pbuh) was welcomed by the people in Madina Monawarah. This song is often quoted by the music adherents as evidence of the fact that the Prophet (pbuh) liked music and, respectively, joyfully welcomed this song from those welcoming him. The maqam consists of a triple *Sikah trichord* called *Tabe' Sikah*, while the second tetrachord is a *Rast* on darajet *Noah*. *Fasal tanini* is again at the end of every *Jins*.



Maqam Al Hidjaz

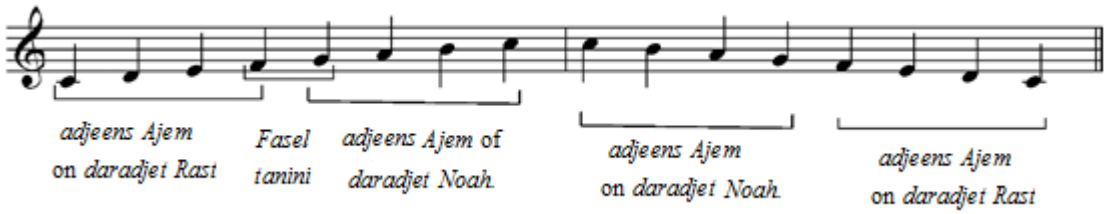
This maqam is juicy, smooth and tender and brings quiet sadness. It is used in Ayahs telling about the bliss of paradise. Maqam *Al Hidjaz* consists of first *Jins* Hidjas on *daradjet Dokah* and a second *Jins Nahwand* on *daradjt Noah*. *Fasel tanini* is available at each end.

 Copyright © International Conference on New Horizons in Education Conference (INTE)



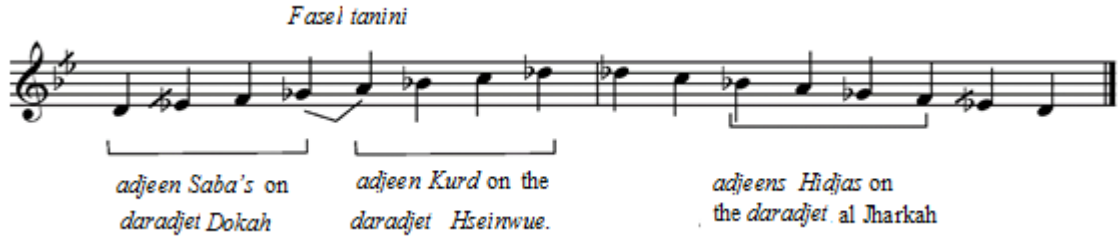
Maqam Ajam

This maqam possesses inner strength, clarity and happy feelings. The soul strives for its sonority because of its beauty. It is characterized by precision and fluency in its development which leads to strong emotions. It is used in the performance of hymns and military songs, as well as at moments when there is talk about determining the fate of the soul, or whether it would be directed to paradise or to hell. The maqam consists of *Jins Ajem* on *daradjet Rast*, and a second *Jinss Ajem* of *daradjet Noah. Fasel tanini* is between the first and second tetrachord..



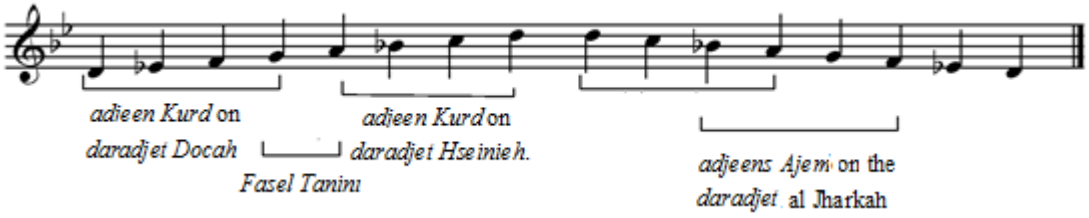
Maqam Saba'a

This maqam is characterized by a fighting spirit and enthusiasm, as well as sadness and pain. It is used in the places concerning the divine blessings in the Quranic texts. By it, the reader may convey striking and shocking emotions. "Ayahs, which are read with its assistance are those referring to the Apocalypse and the Last Day". (Ibid, 49). Maqam Saba's consists of *Jins Saba's* on *daradjet Dokah* and the second *Jins Kurd* on the *daradjet Hseinwue*. *Fasel tanini* is between the first and second tetrachord.



Maqam al Kurd

This maqam is very popular. It is emotional and tender, but can also be used on topics connected with kindness, exquisiteness and delicacy in nature. "Al Kurd is a maqam, which can most outstandingly express the individual feelings and emotions of the reader." (Ibid, 53) Maqam Kurd consists of first *Jins Kurd* on *daradjet Docah* and second *Jins Kurd* on *daradjet Hseinieh*. *Fasel Tanini* is between the first and second tetrachord.



The Best Known Readers of the Holy Quran in Our Times

 Copyright © International Conference on New Horizons in Education Conference (INTE)

At the end of this paper it is fitting to mention some of the best known contemporary readers of the Holy Quran:
-Salah Yamout, (1945) from the Yaslah family, known for their beautiful voices. He is a Lebanese, born in Beirut https://www.youtube.com/watch?v=PP7GFGctMaU
Salah Yamout reads the Holy Quran without restricting himself to one maqam and often makes modulations and transpositions from one maqam to another.
-Shaih Abdul Rahman Sdeis, (1962) general manager of the mosque in Mecca, imam in Medina.
https://www.youtube.com/watch?v=r748pEV5MTw
He has an extraordinarily beautiful and strong voice. Sdeis mainly reads in Maqam Rast. His performances are rendered in a highly emotional manner and on some occasions the Shaih was seen to cry.
-Shaih Mohammed Sadiq, Minshawui (1940) from Egypt
https://www.youtube.com/watch?v=YkHCmEHKPJo
One of the most esteemed readers of the Holy Quran by the theological community. At the age of eight years he had learned by heart the Holy Texts. He uses almost all of the maqams listed in the paper.
-Sheih Abdl Baset Abdl Summet (1927-1988) also was Egyptian. He possessed a great number of awards for *al tartil* and was called "The Golden Throat". He sang in different maqams and delivered in the question and answer style. He had a specific way of singing by using long stretching phrases. His style was distinguished by striking vocalization and bursting into song.
https://www.youtube.com/watch?v=_3NvDiJPhLQ

CONCLUSION

The researchers of this paper have tried to present the maqams as a center in Arabic Islamic musical culture. Some historical and academic references have been quoted, which are to prove the place of the maqams in the music of Islam and more specifically in the performance of the Holy Quran. The meaningful accents have been pointed out over the *tajweed* and *tartil* in the performing art of the Holy Quran. The idea to familiarize the Western musicologist with the unknown sphere, the use of music in Islam, has been achieved through presenting numerous quotations from Arabic musical literature and philosophy, as well as by describing the concepts of the Arab musicians concerning the structure of the maqams and their application in religious practice. The other axis of the paper, presenting the idea about the "permissibility" and applicability of music in Islam, was directed to the Arab performers and teachers of the Holy Quran. This has been achieved by presenting quotations and references for the historical roots of the existing practice, as well as by showing the best known performers of the Holy Quran and the maqams through which they realized their art. As a conclusion and consequence of the examples presented in this paper, it can be concluded that in the performance of the Holy Quran, the maqams are used in varied ways, but always in conformity with the quintessence showing their emotional expression. This is one of the crucial positions which the researchers of this paper wanted to emphasize, that the performers of the Holy Quran should possess not only musical qualities, but also the knowledge of musicians. They should know the rules of Arabic music, the structure and theory of the maqams, as well as the aesthetic and form-shaping characteristics of the scales. With this knowledge, they could achieve more emotional and full-fledged expression in their performances. The great number of talks, which the authors of this paper held with different sheikhs and teachers of *tadjeed*, have led to the conclusion that most of the performers of the Holy Quran basically proceed from the tradition, handed down to them by their teachers. Very often the *mudjawideen* are not in a position to name the maqams they use, although this does not interfere with the ability to correctly recreate them as the result of well acquired practice. This does not preclude the existence of such [performers] who are familiar with the history and theory of music, but are trying to get away from questions, relating to music. There is also a small group, confirming their knowledge of the theory of music, and confirming that this is the base of the real sensorial impact and indubitable successes of their performances. The authors would refrain from criticizing or analyzing the fact in question, but will take the liberty of stating a view, that the antinomy of the Music-Islam thesis should not be considered profane. On the contrary, the idea should be accepted and covered about the sacred nature of Theism and music as its wordless expression. In this way, by knowing and studying the science of music by the professional readers of the Holy Quran, the enrichment of the performance of the Holy Text could be achieved, which, in turn, would lead to new horizons of self-expression and self-realization of the Quranic texts in our time.

REFERENCES

Abbas Taher. (1986), Theories on Arabic Music, edn. Miniarey of Culture Iraq, Iraqi Academy of Musical Studies , Iraq, p.29, 36, 39, 43, 49, 53
Agayeva E, (1978) Maquam,Mugam and Contemporary Musical Creativity, edn. Nauka, Tashkent , p.7
Al Akrabawi Zeedan Mahmud Siama. (1991) *Guide in the science of Tajweed*, edn. Dar Al Furkan ,, Jordan p, 38

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Al Hamd, Ghanem Kdouri. (2009) , Introduction in the science of Tajweed, 1St edn Centre for Quranic Studies) KSA p. 12
Al Helu Salim. (1972), Musical Encyclopedia, History of Arabic Music 2nd Ed. Edn Dar Al Haya , Lebanon, p.14
Al Hrazi Mahdi Muhamed (2001) In order to move from *el marid* to intonation, 1st , edn. Dar Al Baaha'ir Al Islamiia Publishing, Lebanon , p 58; p 61
Al Jaleel Abd al Aziz Bin Abd. (2001), The View of Abu Faraj in naturalization songs, 1st edn. Arab Music Journal , 1) Egypt , p. 64.
Al Khalek Atayat Abd and Hafeth Nahed Halef Ahmed. (1984), The Art and Science in Tajweed edn. Anglo-Egyptian Library, Egypt, p. 85, 66, 62, 67, 68
Anonymous, (1974) 18th century "Advar", edn. Muzika, Tbilisi, p. 29.
Al Sharif Maroof Muhamed Rashid . (2003), Singing in the Quran and its relation to Melody, Master's Thesis, University of Al Beet Department of Theology and Law Jordan , p. 61, 62, 63
Bin Ismail Bin Ibrahim. (2005) Sahih Al Bukhri, 1st edn Dar Aljeel Publishing , Lebanon p.1029
Bin Ismail Bin Ibrahim . (2011) , 2nd , edn Alfa Publishing Egypt , p. 626
Chottin A. (1939) , "Tableau de la musique marocain", edn Geuthner, Paris, p. 82
Drar Maki (2012) Lingual standards of Arabic sources edn. World of Modern Books , Jordan, p. 41
Dolinina A, (1999) Badi Zaman al- Hamed and ego makams , Sankt Peterburg, p 9
Eolyan I.R. (1990) ,Traditional Music of the Arab East, edn Music, Moscow, p.72
Fil'shetinskiy I & Shidfar B. (1971) Essay of Arabic Muslim Culture, edn Nauka, Moscow p.50
Getta, M. (1987) Traditions of the Musical Culture of the Peoples in the Near and Middle East and Our Times, edn. Soviet Composer, Moscow, p. 57
Hadjiev, P. (1983), Elementary Theory of Music, edn. Music, Bulgaria, pp. 115,116.
The Holy Quran, (2009) . edn. Mujammaa Al Malk Fahed li tibaet al mushaf al sharif, Saudi Arabia, ayah, 3,4,5,6, 18, 19,
Kaptereva T (1989) Art of Medieval East , Moscow , p 38-39
Katat Mahmud. (2003), Research in Musical Scales and Maqams 1st edn, Arab Journal of Music /2, Egypt p. 7, 52,
Kushnarev H. (1958), The Question of the History and Theory of Monodic Music, edn. Muzgiz, Leningrad, p. 86
Mallah Yasser. (1990), Linguistic Origins, 1st edn. Centre for Islamic Research, Dar Al Tufal Al Arabiieen Jerusalem, p.71
Mish'el Abd Al Hameed . (year not available) Scientific explanation of the rules of music, 2nd edn, not available , p.99, p 5,
Musical Terminology Dictionary, (1979), edn Muzika , Sofia, p.181.
Sami, Mohaman . (1971) History of Arab Music , edn not available ,Egypt p. 46
-Shoura, N. (2006). *Dalil Al Musiqa Al Arabiya* (A Guide to Arabic Music). Al Qahira p 12

 Copyright © International Conference on New Horizons in Education Conference (INTE)

NAMIK KEMAL'İN TİYATRONUN EĞİTİCİ İŞLEVİ HAKKINDAKİ FİKİRLERİ*

Yard. Doç. Dr. Refika ALTIKULAÇ DEMİRDAĞ
Eğitim Fakültesi, Türkçe Eğitimi Bölümü
Çukurova Üniversitesi
raltikulaccu.edu.tr

ÖZET
Namık Kemal şiir ve romanları ile olduğu kadar tiyatro oyunlarıyla da Türk edebiyatına önemli etkisi olan yazarlardan biridir. Batı tarzı tiyatro eserleri Tanzimat döneminde kaleme alınmaya başlamıştır. İlk tiyatro örneklerini veren sanatçılardan biri olan Namık Kemal, kuramsal anlamda Batı tiyatrosunu topluma tanıtmak için makaleler de kaleme almıştır. Bu makalelerinde tiyatronun işlevi hakkında savunduğu fikirler dönemin tiyatroya bakışını anlamamız açısından anlamlıdır. Yazar, tiyatronun öncelikli işlevinin eğlendirmek olduğunu söylemekle birlikte bu işlevi eğitimle ilişkilendirmektedir. Tiyatronun toplumu eğlendirerek eğitmesi gerektiğini söyleyen yazarın aslından tiyatroya faydacı bir yaklaşımı olduğunu görmekteyiz. Bu çalışmada Namık Kemal'in *Celaleddin Harzemşah* adlı oyununa yazdığı "Mukaddime-i Celâl" başlıklı önsözü temel alınarak tiyatro ve eğiticilik işlevi hakkındaki fikirleri değerlendirilecektir.
Anahtar Kelimeler: Namık Kemal, Tiyatro, Eğitim

Türk edebiyatında Tanzimat dönemi yeni edebî türlerle tanışma devresidir. Bununla birlikte Namık Kemal'in bu konuda hem düşünsel hem de edebî anlamda katkıları bir lider vasfı niteliğindedir. Onun gazetelerdeki yazıları, ideolojik duruşuyla birlikte halkı bilinçlendirme çabası, aslına bakılırsa edebi türlerle taçlandırılır. Bu türler içinde tiyatronun yazar tarafından önemle vurgulanan bir sanat olduğu her zaman dile getirilmiştir. Biz de bu çalışmamızda sanatçının gazetelerde çıkan yazıları ile *Celaleddin Harzemşah* adlı oyununa yazdığı "Mukaddime-i Celâl" başlıklı önsözünü değerlendirerek tiyatrodan beklentilerini ve bunun toplumsal dinamiklerini eğitimle ilişkilendiren sanatçının ideolojik yaklaşımının izlerini takip etmeye çalışacağız.

Namık Kemal'in *Hadika Gazetesi*'nin 27 Şevval 1289 tarihli 33. sayısında ve *İbret* Gazetesinde Hicri 2 Safer 1290'da yayınlanan nüshasında çıkan yazıları öncelikle tiyatro sanatını halka tanıtma amacı taşır. Bu dönemde yazarlar ve tiyatro sanatçıları tarafından gazete ve dergilerde tiyatro sanatı hakkında basit bilgilerin verilmesi tercih edilmektedir. Henüz bir tiyatronun varlığından söz edilemeyeceği için tiyatro eleştirisi yapılması için erken bir dönem olduğunu söyleyebiliriz. Öncelikle seyircinin tiyatroyu tanıması, tiyatrodan ne bekleyeceğini bilmesi ve oyunu izlerken nasıl davranması gerektiğini öğrenmesi beklenmektedir. Bu dönemde Güllü Agop'un tiyatro için yaptıkları her zaman tartışma konusu olmuştur. Namık Kemal'in de tiyatronun henüz oluşmaya başladığı bu dönemde önemi hiç de küçümsenmeyecek çok yönlü bir etkisi vardır. Öncelikle gazetelerde çıkan yazıları halkı bilinçlendirme amacı güderken yazdığı oyunlarla da edebiyat tarihimizin oyun yazma geleneğinin önemli kilometre taşlarını ortaya koymuştur. *Celaleddin Harzemşah* adlı oyununa yazdığı "Mukaddime-i Celâl" adlı önsözünde ise tiyatroyu halka tanıtma ve benimsetme amacının ötesine geçerek tiyatronun gerçekte tüm dünyada ne olduğu ve ne olması gerektiği yönünde kapsamlı bir tartışma yürütmektedir. Bu önsöz araştırmacılar tarafından Victor Hugo'nun *Cromwell* önsözü ile paralel değerlendirilmektedir. Çünkü Hugo da Namık Kemal gibi tiyatronun eğitici işlevi üzerinde durmaktadır.
İbret Gazetesinde çıkan "Tiyatro" başlıklı yazı, "Ma'arifin bir şubesidir" sözleriyle başlar. Tiyatroyu eğitim kurumu olarak tanımlayan bu fikrin kaynağının Batı'nın gelişmiş şehirleri olduğunu anlıyoruz: "hiç mütemeddin şehir yok ki tiyatrosu olmasın" (İbret Gazetesi, 10 Ramazan 1289, Numara 50) diye devam eder yazar. Tiyatronun bu medenileşmeyi nasıl ve ne sebeple sağlayacağı hakkında da fikirlerini şöyle sıralar:

> Tarihler geçmiş zamanın vuku'ât-ı garibe ve ahvâl-i acibesini beyân eder tiyatroyla o vukû'ât ve ahvâlin vesî'atını tecessüm ve tasvir ederek derpiş-i im'ân ve tenvir-i idhan ede geldiği derkârdır. Gerçi tarihlerin mutâla'asından vaktiyle şöyle olmuş böyle gitmiş diye bir takım hikâye ve efsaneden insan mütelezziz ve müteessir olur ise de o hâli göz önünde tecessüm ettirmek ve o vakitte yaşar gibi görmek nasıl fâ'ideli bir şey olduğu muhtaç-ı ta'rîf değidir. (İbret Gazetesi, 10 Ramazan 1289, Numara 50.)

Tiyatronun tarihte geçmiş garip olaylarla acayip halleri canlandırarak tasvir etmesinin gerçekleri daha açık ve anlaşılır kılacağını iddia etmesi yazarın tiyatroyu halka sunma biçimini anlamamız açısından anlamlıdır. Namık Kemal'in tiyatroyu bir okul, hatta gerçek tarihi hikâyelerin tiyatro yoluyla öğretildiği, ahlak dersleri verilen bir okul olarak tanıtması, tiyatroyu halkın gözünde saygın bir yere oturtma çabasından ilham alır. Elbette böyle bir çabanın altında yatan bazı sosyal nedenler olması gerektiğini düşünebiliriz. Öncelikle halkın tiyatroya önyargılı bakışını engellemeye çalıştığı söylenebilir. Nitekim tiyatronun Osmanlı'daki ilk yıllarında dini-ahlâki ve milli

*Bu çalışma Çukurova Üniversitesi, Bilimsel Araştırma Projeleri Koordiyasyon Birimi tarafından desteklenmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

bazı yönlerden sakıncalı bulunduğu, halk tarafından sık sık şikâyet edildiği, kapatıldığı, sansüre uğradığı ve özellikle kadın seyirciler ve Müslüman oyuncular meselelerinin sık sık tartışma yarattığı görülmektedir. Bu durumda tiyatronun halk nezdinde saygın bir yer kazanmasının güçlüğü de ortadadır. Namık Kemal bu sorunların henüz başladığı yıllarda halkın bu sanata saygın bir yer vermesi için bazı fikirlere yaslanır. Gazetelerdeki yazılarında tiyatroyla ahlâk eğitimini ilişkilendirmesinin en önemli nedeni de bu olsa gerektir. "Terbiye ve ahlâk-ı hasenatın ma'ârifle hâsıl olacağını kimse inkâr edemediği gibi terbiyesiz adamların dahi ma'ârifden bî-behre olduklarında şüphe yoktur." sözleri halkı ikna çabasının bir ürünüdür. Yine İbret Gazetesinde çıkan Hicri 2 Safer 1290 tarihli sayısında tiyatro için, "Eğlencelerin ise en edibânesi ve binâenaleyh en fâidelisi tiyatrodur. Edeb ve mûsiki ki vicdân-ı beşerin hâkim-i hissiyât ve nedîm-i neşâtı olmak için yaratılmış iki hemşîre-i dil-rübâdır. Tiyatro ma'razlardan teşahhus eder. Cân bulur. Bin şekle, bin kıyâfete girer. İnsanı ağlatır, güldürür, vicdânı açar, tenvîr eder, tathîr eder." derken abartıya kaçan üslubuyla dikkat çeker. Namık Kemal, "Tiyatrodan Bahseden Arkadaşlara" başlıklı yazısında da tiyatronun faydalı bir eğlence olduğunu ispatlamaya çalışır. Bu ispat etme yöntemi aslında akıl yürütmeye dayanır:

> "Yine tekrar ederim: tiyatro eğlencedir. Fakat fikr-i beşerin icâd ettiği eğlencelerin cümlesine mücerrah ve cümlesinden fâ'idelidir.
>
> Herkes istediği yerde istediği tarzda eğlenir.
>
> Fakat "eğlencelerin cümlesinden müfiddir" da'vâsını zannımca isbât edebilirim. Meydâna koyuşuma nazaran isbât ihtiyacında bulunduğum ise umûr-ı ma'lûmedendir.
>
> -Tiyatro nedir? –Adetâ taklid –Neyi taklid ediyor? – Ahvâl-i beşeri! – Şu dört ibarecik tiyatronun en fâideli bir eğlence olduğunu meydana çıkarmağa kâfidir zannederim. Eğlenceden 'ibret-bahşlıkdan büyük ne fâ'ide tasavvur olunabilir?
>
> Evet 'işde eğlence bulunur. Fakat eğlencede iş bulunmaz'. Şurası da var ki insan her iş ile eğlenebilir. Ancak her insan iş ile eğlenemez.
>
> Binâ'en-'aleyh cemiyet-i beşere fâ'ideli eğlenceler de lâzım görünür."

"Faydalı eğlence" mesajının sık sık tekrarlanmasının özel bir önemi olduğunu düşünmekteyiz. Eğlencelerin her zaman faydalı olmayacağı gibi zararlı bazı eğlenceler olduğu da düşünülerek bu fikirden ya da toplumun bilinçaltında yatabileceğini öngördüğü bir yargıdan hareket ederek ikna edici olmaya çalıştığını söyleyebiliriz. Fakat burada faydadan ne kastettiğini de irdelememiz gerekmektedir. Namık Kemal, tiyatronun ahlaka faydalı olacağını iddia ederken bir insana nasihat etmektense kötü davranışlarının sonuçlarını göstermenin daha etkili olacağı fikrinden yola çıkar. Ayrıca yazar, tiyatronun bir sanat eseri olmasının insanda yaratacağı estetik hazza dikkat çeker. Ağlatırken de eğlendirdiğini söylemesinin nedeni budur. Fakat bu faydaların yazar tarafından içten içe arzulanan yanı halkı bilinçlendirme etkisidir. Namık Kemal'in siyasi duruşu ve Genç Osmanlıların halka yaklaşım biçimi düşünüldüğünde bazı konular hakkında tiyatro vasıtasıyla halkın aydınlatılmasının beklendiğini söyleyebiliriz. Ebuzziya Tevfik bu konuyla ilgili olarak şunları söylemektedir:

> "Yeni Osmanlılar'ın tarihini yazarken böylece tiyatrodan söz etmek ve meşrutiyet yönetimini amaçlayan bir kuruluşla nihayet bir eğlence aracı olan tiyatro arasında bir ilişki kurmak – ihtimal ki- birçok kimseler tarafından garip karşılanacaktır. Ancak şurasını unutmamak gerekir: Eski Jön Türkler ana hedef olan özgürlük ve meşrutiyete ulaşmak için, gelişme ve ilerlemenin elde mevcut her türlü aracından yararlanmayı öngörüyorlardı. Bundan dolayı, tiyatroyu da gelişme ve ilerlemenin vazgeçilmez yardımcı araçlarından biri olarak kabul etmişlerdi. Tiyatro belki bir eğlenceydi ama eğlendirerek öğretmesini ve eğitmesini de biliyordu. O halde, ondan da –imkânlar oranında- elbette yararlanacaklardı. Hele ki basında elde etmek istedikleri sonuç ikide bir engelleniyordu. Öyle zaman oluyordu ki iş sadece tiyatroya bel bağlamaya kalıyordu. Sonra tiyatronun basına göre bazı üstün tarafları vardı. Eğlendiriyor, görerek eğitiyor ve etki altında bırakıyordu. Gazete ve dergileri sadece okuma yazma bilenler izleyebilirken, tiyatroyu hiç okuma yazması olmayan bir kimse de rahatlıkla izleyebilir ve ondan etkilenebilirdi. Dahası da vardı. Toplum bilinci tiyatroda daha yaygın ve daha birinden birine geçici bir hal kazanıyordu. Bütün bunlar öyle kolay kolay vazgeçilmez şeylerdi; o halde onları amacın emrine vermek gerekliydi." (Ebuzziya Tevfik 2006: 443)

Bu durumda Namık Kemal'in aslında itibarı olmayan "eğlence" aracını kendi fikirlerini yaymak için kullanması bu "basit eğlence" aracını daha nitelikli bir hale getirecektir. Ebuzziya Tevfik'in fikrine göre aslında ciddi

 Copyright © International Conference on New Horizons in Education Conference (INTE)

konuların içinde tiyatroya değinmek "tuhaf" bir durumdur. Nitekim tiyatronun bir eğlence aracı olarak tanımlanması itibarının düşük olduğu yargısını da beraberinde getirmektedir. Yazar da bu durumu dolaylı yoldan dile getirmiş olmaktadır.

Namık Kemal, gazetelerde çıkan bu ilk yazılarında tiyatroyu slogan benzeri betimleyici cümlelerle halka tanımayı tercih etmektedir. Sloganın akılda kalıcı etkisini kullanarak halkın bakışını şekillendirmeye çalıştığını söyleyebiliriz[1]. Bu konuya şu cümleler örnek verilebilir.

> "Edebiyatta tiyatroya takdim edebilecek bir kısım yoktur"
> "Kitap enîs-i tenhâ-i nişînâna ise tiyatro nedîm-i cem'iyyetdir."
> "Kitabı göz, tiyatroyu vicdan görür" "Bir millet umûman ahlâk kitabı yazsa bir adamı pek kolay terbiyet edemez."
> "Bir edip birkaç güzel tiyatro tertip etse bir milletin umumunu terbiye edebilir"

Namık Kemal'in tiyatroyu halkı bilinçlendirmek için bir araç olarak kullanmayı tercih ederken sanat yönünü ıskaladığı araştırmacılar tarafından dile getirilmektedir. Onun Victor Hugo'ya olan yakınlığı hakkında yapılan incelemeler de bu yargıyı desteklemektedir: "Sebepleri ne olursa olsun N. Kemal, Hugo hayranlığını aşamamıştır. Bu hayranlık, sanatkâr Hugo'dan ziyade vatanperver, hürriyetperver, idealist, mütefekkir Hugo'ya müteveccihti. Cemiyete rehber olan meşale-şair telakkisini benimsemişti." (Eyüboğlu 1997,s.112-113). Namık Kemal'in bu yönüyle *Celaleddin Harzemşah* adlı oyununa yazdığı "Mukaddime-i Celâl" adlı önsözündeki eğitime ilişkin fikirlerini Hugo ile karşılaştırmak anlamlı olacaktır.

Victor Hugo'nun sanatçıyı Romantik edebiyat kuramı çerçevesinde betimleme biçimini Abdulhalim Aydın şöyle değerlendirir:

> "Onda sanatçı, toplumun ve sonra da insanlığın mutluluk ve selameti için yerince acı çeken, sıkıntı duyan, mücadele veren, yol gösteren, elinden tutan "üstün nitelikli" bir eylem insanıdır. O, bütün varlığıyla kendini topluma adamış bir kişidir. O, yaşamın ve varlığın gerçekliği karşısında haz değil ancak acı duyar. Çünkü Hugo'ya göre sanatçı kendi başına haz dünyasına dalan bir münzevi değil, kitleler ve toplumlar adına acı çeken, eşyanın ve yaşamın gerçekliğine inerek temsil ettiği insanlar için eylemde bulunan bir misyon ve vizyon adamıdır. Bir üst insan konumuna getirilmiş sanatçı tüm bunları, ona göre sanat ve edebiyat yoluyla yapacaktı." (Aydın 2012: 372)

Namık Kemal'in sanatçı algısının Victor Hugo'nun sanatçı algısına benzerliğini dile getiren Aydın, Namık Kemal için, "sanatçıya/ozana insanüstü, tanrısal nitelikler vermek konusunda Hugo'dan ayrılır. O, sanatçıyı topluma rehberlik edecek, kurtuluşa ve ileriye götürecek bir dahi kişilik olarak telakki etmiştir. Yine de ondaki Hugo etkisi yüzeysel bir etkilenme veya günün modasına uyma gibi eğilimlerin çok ötesindedir." (Aydın 2012: 376) der. Namık Kemal'in bu etkilenme biçimi eserlerin karşılaştırmasına dayanmaktadır. Bizse Hugo'nun düşünsel izlerinin Namık Kemal'de görülme biçimini eğitim yaklaşımı açısından değerlendirdiğimizde *Celaleddin Harzemşah'*da bir yöntem olarak etkilenmeden söz edilebileceğini düşünmekteyiz. Namık Kemal'in her ne kadar Yeni Osmanlıların halk fikirleri ve Hugo'nun romantizmiyle hareket ettiğini tekrar söylemekte bir sakınca görmesek de Namık Kemal'in yöntem olarak bir eğitimci üslubuna yaklaştığını düşünmekteyiz. Halka nasıl düşünmesi, ne yapması gerektiği hakkında nasihatler vermesinin ötesinde nasıl hissetmesi (özgürlük fikri buradan çıkıyor) gerektiği hakkında da yönlendirmeleri bulunmaktadır. Edebiyatı eğitimin bir şubesi gibi değerlendirdiğinden onda sanatçının da uyması gereken kalıplar vardır. Aslında halkın bilinçaltında yatan tiyatronun sakıncalı olduğu önyargısından hareket ederken bu önyargıyı peşinen kabul ettiğini tiyatroyu ıslah etmeye dayanan fikirlerinden anlamaktayız. Kısacası Namık Kemal tiyatroyu bir eğlence aracı olarak küçümsemekte onu daha değerli kılmak için eğitimle donatarak ıslah etmeye çalışmaktadır. Ancak bu koşulla tiyatro halkın gözünde itibar kazanabilecektir.

Namık Kemal tiyatronun ne olduğunu söylerken aslında ne olması gerektiğini de söyler. Tiyatro eğlendirmeli ama aynı zamanda eğitmeli derken bunun ahlak ve toplum kurallarına uygunluğu şartını da dolaylı olarak ileri sürmüş olur. Tiyatronun tarihi ve toplumun ahlâki konularını konu edinmesi gerektiğini ileri sürmektedir. Öyleyse tiyatronun sadece eğlendirme işlevinden söz edilemez. Hatta eğlenmenin de nasıl bir eğlenme olduğunu yazar bize anlatır:

> "Fıtratta bir tesir, nefste bir maraz yoktur ki temâşâgâhlarda bir misâl-i zî-hayâtı bulunmasın!..
>
> Tabiatta bir maskaralık, gönülde bir garaz bulunmaz ki marazlarda bir hayâl-i mücessemi görünmesin!..

[1] Bu konuyla ilgili daha önceden yaptığımız *Tiyatroda Seyirci Fikri ve Tanzimat Tiyatrosu* adlı çalışmada aynı örnekler kullanılmıştır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

> Tiyatro aşka benzer. İnsanı hazin hazin ağlatır, fakat verdiği şiddetli teessürlerde bir başka lezzet bulunur.
>
> Tiyatro, cihânın aynıdır. İnsanı doya doya güldürür, fakat hatıra getirdiği tuhaflıklar bile – tabiatın aczini gösterdiği için âshâb-ı intibâhta gülerken ağlamak için bahisler tevlît eder. Başka bir yerde demiştim:
>
> Tiyatro eğlencedir, fakat eğlencelerin en fâidelisidir. Çünkü tebliğ-i merâmda havâss-ı zâhirenin şiddet-i infiâl ve kuvvet-i intikâlde cümlesine fâik olan nazârı sâmiaya teşrîk ettiği için fikir ve vicdâna iki vasıta ile tesîrini acrâ eder.
>
> Bu cihetlerle tiyatrolar eğlencelik mâhiyetinden ayrılmamakla beraber memâlik-i mütemeddinenin inkılâbât ve terakkiyâtına, neşriyâtın cümlesinden ziyade hizmetler eylemiştir."

Bu sözlerde özellikle "maraz" kelimesine dikkat çekmek istiyoruz. Namık Kemal, nefisteki marazı gösteren tiyatronun insanı terbiye edeceğine inanır. Bu kişisel faydadan toplumsal faydaya ulaşmaya çalışır. Medeni toplumların ilerlemesini sağlayan vasıtalardan biri olarak gördüğü tiyatroyu diğer edebi türlere üstün tutmasının nedeni de bu yayılan ıslah fikridir. Kısacası Namık Kemal'in toplumun medenileşmesini insan yaradılışındaki kusurların terbiye edilmesine bağladığını söyleyebiliriz. Bu durumda tiyatrodan beklenenle eğitimden beklenen arasında büyük oranda bir yakınlaşma olduğunu görmekteyiz. Tiyatronun bunu başarabilmesi için sanatçının ne tür eserler kaleme alması gerektiği yönünde de Namık Kemal'in bir formül sunduğunu söyleyebiliriz. Tiyatroda canlandırılan konular insanın yanlış davranışlarının sonuçları hakkında olmalıdır. Böylece tiyatronun, bir insana nasihatin yaratacağı etkinin çok daha üstünde bir etki yaratacağını iddia etmektedir. Aslında Namık Kemal'in yazdığı oyunlarda verdiği mesajları incelediğimizde ne demek istediğini daha iyi anlayabiliriz.

Namık Kemal'in *Vatan Yahut Silistre* adlı oyununun sahnelendiğinde yarattığı olaylar Türk tiyatro tarihi için oldukça büyük bir önem taşımaktadır. Güllü Agop'un Gedikpaşa'daki Osmanlı Tiyatrosunda oynanmasının ardından seyircinin galeyana gelmesi ve sokaklarda, 'Yaşasın vatan, yaşasın millet, yaşasın Kemal… Allah bizlerin muradını versin, biz muradımızı isteriz!...' çeşidinden gösteriler yap(ması)" (Ebuzziya Tevfik 2006: 437-438) çeşitli şekillerde yorumlanmaktadır. Bununla birlikte halkın bu tepkisini *Tiyatroda Seyirci Fikri ve Tanzimat Tiyatrosu* adlı çalışmamızda şöyle değerlendiriyoruz:

> "halkın yürüyüş yapması, oyunun çok beğenilmesi neticesinde her akşam salonun dolması ve sonra tekrar yürüyüş yapılması tiyatronun insanları fiziki anlamda bir araya getirmesinin sonucudur. Seyirci birlikte hareket etme imkânı bulmuş olmaktadır. Aynı oyundan aynı anda etkilenen insanlar ortak hareket etmeyi tercih etmiş olmaktadırlar. (…) Halkın daha önce yürüyüş yapılmayan bir toplumda yürüyüş yapmaya kalkışması, hem de bir tiyatro oyunu neticesinde bu olayın meydana gelmesi halkın tiyatroyu benimsediğini ve tiyatro tarafından etkilenmeye açık olduğunu göstermektedir. (…) Sonuçta bütün bu olayların nedeni sadece bir tiyatro gösterisi değildir. Fakat düşüncelerin yayılması ve Padişahın baskıcı tutumu bir arada düşünüldüğünde oyunun sahnelenmesinin beklenen patlama anı olduğu söylenebilir. Bu olay gerilimin sonuçlanmasına ve beklenen sansürün yaşanmasına neden olmuştur. Bununla birlikte olayların tiyatro salonundan çıkan seyircilerin bir arada yürüyüş yapıp slogan atmaları üzerine gelişmiş olması konumuz açısından anlamlıdır. Bu nedenle her ne kadar oyundan sonra yazılan veda yazısının Padişahı çok kızdırdığı söylense de Namık Kemal'in halk üzerindeki etkisinden korkulduğu da söylenebilir. Çünkü tiyatro hürriyetçi fikirlerin yayılması için bir araç olarak kullanılmakta ve bu yolda başarı sağlanmış olduğu gösterilmektedir." (Altıkulaç Demirdağ 2016: 70)

Bu durumda Namık Kemal'in tiyatrodan beklenen işlevi tam da iddia ettiği gibi başardığını söyleyebiliriz. Namık Kemal, "Önsöz"de "Tiyatrodan târihe ve hattâ iki meslekten birine derece-i muvâfakatından birkaç kat mühim bir ciheti vardır ki o da eşhâsın tasvîr-i ahlâkıdır ." (Namık Kemal 2005: 61) der. Nitekim *Vatan yahut Silistre*'deki İslâm, Zekiye, Miralay Ahmet Bey, *Akif Bey*'deki Akif Bey, *Gülnihal*'deki Muhtar, *Celaleddin Harzemşah*'taki Celâl gibi kahramanlar hem fikirleri hem de eylemleriyle ideal tiplerdir (Altıkulaç Demirdağ 2016: 174). Ayrıca bu oyunlarda kullandığı yöntemse hitabete yaklaşmaktadır. Tiyatro hakkındaki düzyazılarında kullandığı slogan benzeri cümleler, oyunlarının konusuna göre şekillenmektedir. "Beni Allah yarattı, vatan büyüttü.". "Beni Allah besliyor, vatan için besliyor!", "Vatan için fedakârlık etmeyecek miyiz? O yolda sevgilimden ayrılmalıyım ki adam olduğumu anlayabileyim." (Namık Kemal 1972: 36) benzeri sözlere sık sık rastlanabilir. Böylece Namık Kemal, kutsal saydığı kavramları halka öğretmek ve duygularını coşturarak harekete geçirmek yolunu tutmuş olmaktadır. Buna rağmen Namık Kemal'in ideolojik duruşu yönetimle arasının kötü olmasına neden olmuş, dolayısıyla da tiyatro hakkındaki çabası sansüre uğramıştır: "Gerçi Abdülhamid'in ilk yıllarında *Vatan yahut Silistre* pek çok kez oynanmıştır. Ancak bu olaydan sonra tiyatroya yönelik

kısıtlamaların ve sansürün baskısının, yoğunluğunu kerte kerte arttırdığı" görülmektedir (And 1999: 71). Fakat bu bilgiden yönetimin sansüre başvurmasını gerektirecek denli tiyatronun önemli bir etki alanına sahip olduğu sonucuna da ulaşabiliriz. Namık Kemal'in oyunlarda vermeye çalıştığı mesajlar halkı yönetime karşı bilinçlendirme amacı güttüğüne ve bu amaç da hedefe yaklaştığına göre tiyatronun bir eğitim kurumu gibi kullanılabildiği de ispatlanmış olmaktadır.

Namık Kemal'in "Önsöz"de kendi çabaları hakkında yazdığı şu sözler de oldukça anlamlıdır:

> "bundan takriben beş sene mukaddem bazı âshâb-ı kalem bir encümen yaparak tiyatromuz için bazı eser tertîbini derûhte eylediler ki bendeniz de liyâkatsızlığımla beraber aralarında bulunmuştum. Encümenin âsârından en evvel nazâr-ı temâşâya *Vatan yahut Silistre* arz olundu. Bu oyun tiyatroyu bulunduğu hâlden kırk elli derece ileri götürmüş ve bundan başka Silistre'nin zuhûru lisanımızda o kısm-ı edep için bir devr-i terakkiye de târih-i bidâyet olmuştur." (Namık Kemal 2005: 41)

Bu sözlerde yazarın Türk tiyatrosu için kendi çabasını olumladığını görmekteyiz. Bunun nedeni eserine seçtiği "vatan" konusudur. Konunun bu önemi ise tiyatronun belli bir kalıp içinde değerlendirildiğini, belli bir program çerçevesinde yürütülen okul formuna yaklaştırıldığını ifade etmektedir. Elbette burada sanat yönünün ıskalanması da söz konusu olabilir. Nitekim Namık Kemal'in oyunları her ne kadar duyguları coştursa da Tanpınar, "Onun kahramanları his ile hissiliği, ihtirasla ihtiras taklidini, teatralı karıştırırlar. O nasıl sözün kudretini büyük ve şişkin kelime yahut hayalle elde edilir zannederse hislerin de helecanla, telâşla ifade edileceğini zanneder." (Tanpınar 2001: 396) der. Namık Kemal'in kahramanı Celâl'i nasıl yarattığı hakkındaki sözlerinden yola çıkarak sanatçının bir ahlâk timsali yarattığını söyler. Fakat buna rağmen Kemal'in amacını, "ideale doğru bu doğrudan doğruya savlet istenilen neticeyi vermemişse bu hedefin yüksekliğindendir" (Tanpınar 2001: 397) sözleriyle değerlendirmektedir.
Namık Kemal, düzyazılarında betimlediği tiyatro anlayışına uygun oyunlar kaleme alarak nasıl bir tiyatro olması gerektiği hakkında örnekleme yoluna gitmiştir. Vatan *yahut Silistre*'nin konusu her ne kadar İslâm'la Zekiye'nin aşk hikâye üzerine kurulmuş gibi görünse de aslında ağırlıklı olarak "vatan" kavramına ilişkindir. Erkek kılığına grip savaşa katılan Zekiye her ne kadar ilgi çekici olsa da yazıldığı dönemde eleştirilmiş bir kadın kahramandır. Fakat Namık Kemal'in savaşı ve vatan kavramını anlatışı seyirciyi coşturucu abartılarla örülüdür. Bu abartılarla ilgili olarak daha önceki çalışmamızda da şu saptamayı yapmıştık:

> "Askerin kesik kolunu silah gibi kullanmak için koparması, dişlerin tırnakların silah kesilmesi, yanar humbarayı kucaplayıp düşman kafasına atma, *Şehname*'deki hikâyelere benzer işlerin yapıldığının söylenmesi savaşı sempatik göstermek için kullanılan imajlardır. Fakat bu imajlardaki abartıya dikkat çekmek gerekmektedir. Yazar bu sayede seyirciyi harekete geçirebilecektir. *Celâlettin Harzemşah*'ın sonunda da böyle bir abartı kullanmıştır. Celâl ölürken karısı küçük parmağını kanına batırarak, gömleğin üzerine bir vasiyet yazar. Bu uzun vasiyetin bu şekilde yazılabilmesi elbette mümkün değildir. Namık Kemal'in eserlerinde bu abartıyı kullanması "edebi eserde tarihî ve tabii gerçeklere her zaman uymak lâzımgelmediğine inanıyordu" (Kocatürk 1970: 669) diyerek açıklamak yeterli olmayabilir. Düşüncemize göre Namık Kemal bu abartıları mesajının şiddetini, nüfuz etme gücünü arttırmak için kullanmaktadır. Dolayısıyla bu durum sanatla değil doğrudan ideolojiyle ilişkilidir." (Altıkulaç Demirdağ 2016: 181)

Namık Kemal'in düzyazılarında tiyatronun amacı hakkında söylediklerinden yola çıkarak bu abartıları bilinçli olarak kullandığını söyleyebiliriz. Abartmalar, hem seyircinin etkilenmesine hem de oyunun mesajının akılda kalıcılığının sağlanmasına hizmet etmiş olmaktadır. Bu durumda seyircinin sloganlarla donatılması ve sloganlara inanması hedefine de dolaylı yoldan ulaşılmaktadır.

SONUÇ

Tanzimat döneminde halkın bu sanatı tanıması ve benimsemesi için Türkçe oyunlara olan ihtiyaç göz ardı edilmemiş, sanatçılar bu boşluğu doldurmaya çalışmışlardır. Fakat bu çabalar tiyatronun ne olduğu hakkında halka verilen ilk temel bilgileri içermektedir. Dolayısıyla Tanzimat Dönemi sanatçılarının kaleme aldıkları oyunlara seyirciyi tiyatroya çekebilmek adına önemli bir görev yüklenmiştir. Namık Kemal'in bu süreçte sadece halkı değil sanatçıları da yönlendiren bir lider rolü üstlendiğini söyleyebiliriz. Yazarın çabaları halka tiyatronun ne olduğunun ötesinde nasıl olması gerektiği hakkında yönlendirmeler içerir. Böylece tiyatro algısının temelinde halkın eğitilmesi fikri yatmaktadır. Bu eğitim her ne kadar ahlâki, dinî ve millî hedefler gözetse de sonuçta Namık Kemal'in ideolojik söylemleri ağırlıklı olarak kendini gösterir. Sanatçının halkı eğitmek için tiyatroyu tanımlama biçimine baktığımızda da halkın bilinçaltında yatan tiyatronun sakıncalı olduğu önyargısını yok etme

 Copyright © International Conference on New Horizons in Education Conference (INTE)

çabası dikkatimizi çekmektedir. Bu çabanın altında da aslında sanatçının halkın önyargısına katıldığını tiyatroyu ıslah etmek istemesinden anlıyoruz.

Namık Kemal'in ideolojinin emrine verdiği tiyatro sanatını belli bir siyasi görüşle sınırlandırması romantik duruşuna işaret etmektedir. Farklı görüş ve bakış açılarına yer vermemesi ise düşüncemize göre tiyatroya yaklaşımının halkın yargılarıyla örtüştüğünü göstermektedir. Bu nedenle tiyatroyu bir eğitim kurumuna yaklaştıran fikirleri ile öne çıkmaktadır.

KAYNAKÇA

ALTIKULAÇ DEMİRDAĞ, Refika. (2016). ***Tiyatroda Seyirci Fikri ve Tanzimat Tiyatrosu (Padişahlardan Halka Tiyatro Seyircisi Olmak).*** Adana: Karahan Kitabevi.

AYDIN, Abdulhalim. (2011), "Namık Kemal'i Victor Hugo'ya Götüren Etkenler"**,** ***Turkish Studies*** *- International Periodical For The Languages, Literature and History of Turkish or Turkic Volume 6/3 Summer p. 197-204*

AYDIN, Abdulhalim. (2012), "Namık Kemal'in Sanat/Sanatçı Algısında Romantizm ve Victor Hugo Etkisi", ***Turkish Studies*** - International Periodical For The Languages, Literature and History of Turkish or Turkic Volume 7/3, Summer p. 369-379.

AND, Metin. (1972). ***Tanzimat ve İstibdat Döneminde Türk Tiyatrosu 1839-1908***. Ankara: Türkiye İş Bankası Yayınları.

AND, Metin. (1999). ***Osmanlı Tiyatrosu***. Ankara: Dost Kitabevi Yayınları.

EYÜBOĞLU, S. (1997). ***Sanat Üzerine Denemeler ve Eleştiriler***, İst., Haz: Azra Erhat, Cem Yay.

NAMIK KEMAL. (1972). ***Akif Bey***. Tertib eden: Mustafa Nihat Özön. İstanbul: Remzi Kitabevi.

NAMIK KEMAL. (2005). ***Celaleddin Harzemşah***. Haz. Oğuz Öcal. Ankara: Akçağ Yayınları.

NAMIK KEMAL. (2001). ***Gülnihal***. İstanbul: Milli Eğitim Bakanlığı Yaynevi.

NAMIK KEMAL. (1989). ***Kara Belâ***. Haz. A. Feriha Sever. Ankara: Kültür Bakanlığı Yayınları.

NAMIK KEMAL. (1960). ***Vatan yahut Silistre***. Haz. Kenan Akyüz. Ankara: Dün-Bugün Yayınevi.

NAMIK KEMAL. (1940). ***Zavallı Çocuk***. Tertib eden: Mustafa Nihat Özön. İstanbul: Remzi Kitabevi.

SEVENGİL, Refik Ahmet. (1961). ***Türk Tiyatrosu Tarihi III Tanzimat Tiyatrosu***. İstanbul: Milli Eğitim Basımevi.

TANPINAR, Ahmet Hamdi. (2001). ***19 uncu Asır Türk Edebiyatı Tarihi***. İstanbul: Çağlayan Kitabevi.

UÇMAN, Abdullah. (2006). "Namık Kemal". ***Tanzimat Edebiyatı***. Haz. İsmail Parlatır ve diğerleri. Ankara: Akçağ Yayınları: 201-288.

YETİŞ, Kazım. (1996). ***Namık Kemal'in Türk Dili ve Edebiyatı Üzerine Görüş ve Yazıları***. İstanbul: Alfa Basın Yayın ve Dağıtım.

NARRATIVE THINKING AND MOTIVATION TO STUDY IN UNIVERSITY STUDENTS.

Marco PICCINNO
University of Salento, Lecce
Puglia - Italy
marco.piccinno@unisalento.it

ABSTRACT
The attitudes and behaviour of university students towards their degree courses are affected by the way they describe their learning experience. The evidence for this can be found in the words they use to describe this experience. These words are classifiable into categories which express the narrative functions the students use to describe their experience. The aim of this investigation is to explore these functions in the students' narrative, in order to identify patterns in their educational needs.

INTRODUCTION

In his essay *Actual Minds, Possible Worlds,* J. Bruner (1986) asserts that the mind uses two resources for knowledge: paradigmatic thinking and narrative thinking.

Paradigmatic thinking is the resource the mind uses to understand things objectively. This way of thinking is used to define objects[1] and their quality and it reveals itself in linguistic constructions which have the form "*A is B*". It defines what the object is "in itself".

Narrative thinking is complementary to it and not opposite. It is the thinking that the mind uses to define the value of an object. This thinking does not define the object "in itself" but defines its value for the person. It explains the meaning that the object has for the person, the reasons it is important to him or her. Narrative thinking is based on a person's behaviour and his or her thinking and feeling about things. The language the person uses is the "context" that on the one hand explains, and the other hand builds, this meaning.

When the person describes his or her experiences, textual markers are used as markers of cause, engagement, resource, social references, etc., which help to define and explain how the person perceives his or her life (in general, and in that particular experience).These textual markers can be grouped into categories, from which how the person lives the experience he or she is describing can be deduced. This is important for education, because it allows us to see how the person builds motivation around that experience, and what their educational needs are in relation to it.These categories can be grouped around statements that express the textual functions described below (Bruner, 1996, Groppo, Ornaghi, Grazzani & Carrubba, 1999). The first category is *cause or action*. It is expressed in terms or statements describing freely decided actions, or actions explaining an intention and which are deliberately oriented towards a goal.

The linguistic form of this category is the personal pronoun, associated with an action verb: *At the end of the first year, I decided to change my course of study; I plucked up courage, and I went to talk with my professor.*The second category is *engagement*. It is expressed in terms or statements describing freely decided actions and motivated by an attachment to a system of values. Actions expressing control of impulsiveness and deferral of immediate gratification fall into this category. In linguistic form, the category is expressed by words such as have or must, can, will, and other expressions with the same meaning: *I believed in medicine, so I didn't discourage myself, and I continued to study it; I had to continue to study.*

The third category is *resource*. It includes powers or other means the person believes he or she has to help reach their goals. These resources can be *external* (economic resources, power, social relationships, etc.) and *internal* (personal skills and attitudes such as steadiness, patience, etc.): *The task was difficult, but I knew I was a tenacious person*; *there was a lot of data but I could count on a powerful computer*.

The fourth category is *social references*. This category includes information on where and to whom the person turns to legitimize and evaluate his or her commitments. These social references can be to real people or real groups, or to someone holding a professional or social role (lawyer, priest, teacher, psychologist).

[1] In this essay, the term "object" indicates the person's meanings, that is the values that he or she attributes to their life experience (himself/herself, other, situation, things, etc).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The fifth category is *evaluation*. It includes judgements such as whether the person is satisfied or dissatisfied with his or her actions. This category also explains the perception of internal change, and it can be expressed in sentences using the third conditional (if…I would have…): *if I had studied, I would have found a job more easily; I was satisfied with my decision to follow the course in literature*; *I began to have doubts regarding my choice of studies*.

The sixth category is *quality*. It explains the "feel of life", and reveals the way in which the person "feels" his or her life. This category does not refer to the evaluation of a particular situation or choice but explains the evaluation of life "on the whole": *I felt fully realized; I felt satisfied with myself.*

The seventh category is *consistency*. It expresses coherence between action and guidelines of personality. It is also expressed by sentences which reveal disagreement between these variables and which refer to actions or facts of life in which the person does not recognize himself or herself. The markers of consistency express how the person judges his or her life, in relation to what they consider normal: *I felt that my life was going in a different direction to the one I had chosen*.

Narrations may also be classified as *closed narrations* and *open narrations* (Trzebinsky, 1997). A *closed narration* tells a personal story as if it has already been completed: *That disappointment marked my life forever*. An *open narration* tells a personal story as if it could still evolve: *Despite that disappointment, I felt I could achieve my goals.* Closed narrations can also be told as *defensive narrations,* where a personal story starts with the description of a problem and the narrator's aim is to defend a previous situation. His attention is focused on obstacles and difficulties which threaten the maintenance of the present state. In this case, the problem is not the actual state (that is wanted and desired) but difficulties that the person meets in defending it from undesired changes. Open narrations can also be told as *proactive narrations*, where a story starts with a declaration of intentions and goals that the person wants to achieve. Life is understood as a sequence of actions aimed at meeting these goals. Obstacles must be overcome to achieve goals and not to preserve the status quo (as in closed narrations).

The narration is focused on a future and desired state. It is this wish that causes the problem, not the situation itself.

Narrations may also be structured on *archetypical couples* (Massa & Demetrio, 1991). These are couples of opposite attitudes expressing the way in which a person "feels" his or her life.
The following are archetypical couples:

- *obstacle* vs *overcoming*: this couple refers to the way a person faces up to difficulties. An *obstacle* is a difficulty a person experiences as unsurmountable. It is *overcoming* such difficulties that gives the person reasons to act. *When I was confronted by their tragedy, I felt I couldn't do anything; their problem motivated me to continue.*
- *Maturation* vs *understanding*: *maturation* is the result of natural growth. It is manifest in sentences where a person feels changed but does not feel that he or she is "the cause" of this change (it feels that the change has taken place without his wanting it; it feels that the change took place independently). *Understanding* is an intentional change, that is a change that the person wanted and feels with satisfaction: *I suddenly realized that I had become less impulsive/more thoughtful; I understood that my attempts to become more thoughtful had gone well.*
- *Stagnation* vs *realization*: *stagnation* is where a person is not able to set a meaningful goal in life; *realization* is where a person is able to decide the goal: *I wasn't able to understand what was important or not; I knew what was the most important thing to do.*
- *Claim* vs *restitution*: *claim* is where a person feels a need that has to be accepted and promoted by an educator; *restitution* is where a person feels the need to give to others what he or she feels that they have received from others: *I felt I had to grow up and I searched for someone who could help me*.
- *Loneliness* vs *protectiveness*: *loneliness* is where a person feels they are alone in the world. *Protectiveness* is where a person feels part of a group. It shows itself in the pleasure felt when in the company of others: *There was someone around me who I could ask to help me; I felt protected because I knew that I had many friends I could count on.*
- *Loss* vs *achievement*: experience of *loss* is seen in sentences which express regret for losing someone or something that could help; *achievement* is the experience of having won something important. The person also feels that they have kept themselves and the situation under control. He or she is also

 Copyright © International Conference on New Horizons in Education Conference (INTE)

excited for something new or unexpected: *The departure of my friend left me without moral support; meeting someone new gave me a new energy.*

- *Compulsion* vs *freedom*. *Compulsion* indicates a situation in which the person feels controlled by others or where others are seen as obstacles; *freedom* is seen in sentences in which a person shows that he or she is able to sever links and overcome obstacles: *The presence of my parents frightened me; that change was not an obstacle but a push to improve.*

2. RESEARCH

The narrative categories described have been used to analyse undergraduates' answers to a questionnaire about their university experience. This questionnare, entitled "Raccontaci di te"[2], put five questions, related to three different periods of university experience: the moment of *choice*, the *development of university experience,* and *future time*. These questions asked students to report their experiences in story form.
For the first period *(choice)*, the questionnaire asked two questions:

- (Scelta) Racconta gli eventi, le situazioni, le persone che hanno contribuito a farti maturare la scelta di intraprendere il tuo corso di studi[3].
- (Persone) Racconta gli incontri con le persone che hanno avuto un certo rilievo per la tua scelta[4].

The first question is a general one, focusing on the general circumstances behind their choice of university course.
The second question is more specific. It does not concern general events but asks about the people who helped the student make his or her choice.

For the second period *(development of university experience)*, the questionnaire again asked two questions:

- (Impatto) Racconta il tuo primo impatto con la vita universitaria[5];
- (Episodi) Racconta uno o più episodi della vita universitaria che ritieni rilevanti[6];

For the third period *(future time)* the questionnaire put one question only:

- (Futuro) Racconta come ti vedi dopo l'esperienza universitaria[7].

The questionnaire also asked:

- Sex (male or female);
- Year of study (first, second or third year of a three-year degree; off-course student – three-year degree; first year master's degree; second year master's degree; off-course student – master's degree)
- Age: 18 to 20 years; 21 to 24 years; over 24 years
- Field of study: humanities; economic and legal; scientific.

Of the 104 students interviewed, 57% were male and 47% female); 34% came from humanities degree courses, 33% from scientific degree courses, and 33% from economics and law degree courses. 60% (of whom 47% were male and 53% female) were enrolled in the first year of a master's degree and 40% in the second year. All were aged between 21 and 24 years.

Responses to each question have been considered as a "single text" and then compared to each other. The responses have been also analysed by t-lab software, using the following steps:

[2] tell you us about yourself.
[3] (Choice) Describe the events, circumstances and people that helped you decide upon your choice of degree course.
[4] (Persons) Describe some meetings with people who were influential in your choice.
[5] (Impact) Describe your first experience of university life.
[6] (Episode) Describe one or more episodes of university life which were important to you.
[7] (Future) How do you see yourself after your time at university?

 Copyright © International Conference on New Horizons in Education Conference (INTE)

- *First step*: "specificity analysis". This function analyses occurrences (frequency of headwords) in each text and identifies which forms occur most frequently. This analysis is based on the chi-square index, which identifies the linguistic forms (headwords) which occur more frequently than others. Headwords were considered as significant values, when the p-value of the chi-square index was equal to or less than 0.05. These forms were considered as forms clearing the meaning of the text.
- *Second step*: "cluster analysis". This function analyses all text, gathering headwords and text into uniform groups. In this analysis, each answer has been considered as a variable and inserted into a wider group, making its meaning clearer.
- *Third step*: "factor analysis". This function inserts headwords and text into a wider group, in order to identify more precisely the semantic references students use to give meaning to their college experience.

The aim of the research is to identify, through the analysis, the "semantic references" students use to give meaning to their study. These references are important if one is to understand the attitudes the students have towards their study, and their educational needs.

3. RESULTS

a) First step: specificity analysis

Specificity analysis of the first period *(choice*), draws the form *educazione*[8] *(education)* like the specificity headword of the first question (choice), and the form *professore*[9] (professor) like specificity headword of the second question (persons).

The meaning of the form "educazione" (choice) may be inferred by sentences found in responses such as:

- *La voglia di lavorare con I bambini e la possibilità di educare in carcere*[10].
- *Ho scelto questo corso di laurea perché ho sempre avuto una vocazione per il mondo del sociale*[11].
- *la convizione che l'educazione sia il più potente strumento per migliorare la società*[12]

The reference of education is typical of the degree course which includes students who have given these answers. In these responses, beyond their specificity, a more general consideration can be identified. They show that choice of degree course is not motivated by "functional reasons" but by "personal reasons". It is considered by students a way to achieve personal fulfilment and realizing a professional experience in present time, giving them a strong sense of self-actualization.

The form "professore"[13], together with the form "genitore" ("parent", present in "exclusive specificities") in second question, is not used by students to indicate a person who has had a positive role in the choice but to affirm that nobody of this subject has influenced the choice:

- "Nessuno mi ha aiutato a fare questa scelta [decisa] attraverso le esperienze di stage fatte a scuola, le esperienze di volontariato, l'aver svolto per tanti anni l'educatrice nelle parrocchie[14].

These "absences" show that the student's choice is due to life situations rather than meetings with "significant others". These have little relevance in the choice, while much relevance is attributed by the students to the possibility of experimenting themselves directly "in the field".

Specificity analysis of the second period *(development of university experience*) draws the form *spaesato*[15] *(lost)* like the specificity headword of the first question (impact), and the form *esame*[16] (*exams*) like the specificity headword of second question.

Impact with university experience (first question) causes students to feel disorientation, tied to a perception of the strong difference between university and the school environments from which they come:

[8] Chi square 12,95; p. 0.00

[9] Chi square 7, 26; p. 0,00

[10] The desire to work with children and to have the opportunity educate prisoners;

[11] I chose this university course because I have always had a vocation for social work.

[12] The belief that education is the most powerful instrument of change in society.

[13] Chi square 7, 26; p. 0.00.

[14] Nobody helped me make this choice, which depended on school training experiences and on voluntary work experience in my parish church.

[15] Chi square 10,15; p. 0.00

[16] Chi square 8,97; p. 0,00

 Copyright © International Conference on New Horizons in Education Conference (INTE)

- Il primo impatto mi ha disorientata[17]
- L'univeristà era un mondo totalmente diverso dall'ambiente scolastico[18]

Entering university represents to students an experience that brakes off the natural development of the training course.

The meaning of episodes (second question) is referred by students especially to exams. The first exam represents to students a "total" experience, which influences them in many respects:

- L'esame iniziale ha provocato in me numerosi stati d'animo negativi, prima e durante l'esame. Stati d'animo come tristezza, paura e senso di fallimento[19]

Exams are seen by students as an experience which overshadows other aspects of their university course, such as meetings, learning experiences, lessons, interacting with teachers, and so forth. These experiences are not referred to by students. They view their time at university as one of study, completely separate from other parts of their lives.

Specificity analysis of the third period *(future*), draws the form *lavoro*[20] *(job)* like the specificity headword of its responses:

- Spero di trovare un lavoro che mi consenta di mettere in pratica ciò che sto acquisendo in questi anni[21]

Responses show that a student's orientation towards a future professional identity is strongly linked to the job profile implicit in their course of study. This means they do not take into consideration a professional area, but consider only a specific job. All this exposes them to the risk of disappointment if they do not find such a job and, in addition, they do not find a job that lives up to the expectations of the professional profile associated with their course of study. The students' responses indicate, therefore, that their mindset and attitudes towards the future are not flexible but rigid. This puts them at risk of disappointment.

b) Cluster analysis

Cluster analysis considered the responses to each question like a partition wider text, which also includes the answers to the other questions. This analysis has found four clusters, which coincide with the answers given by students to each question (fig. 1).

[17] I was disoriented at the beginning

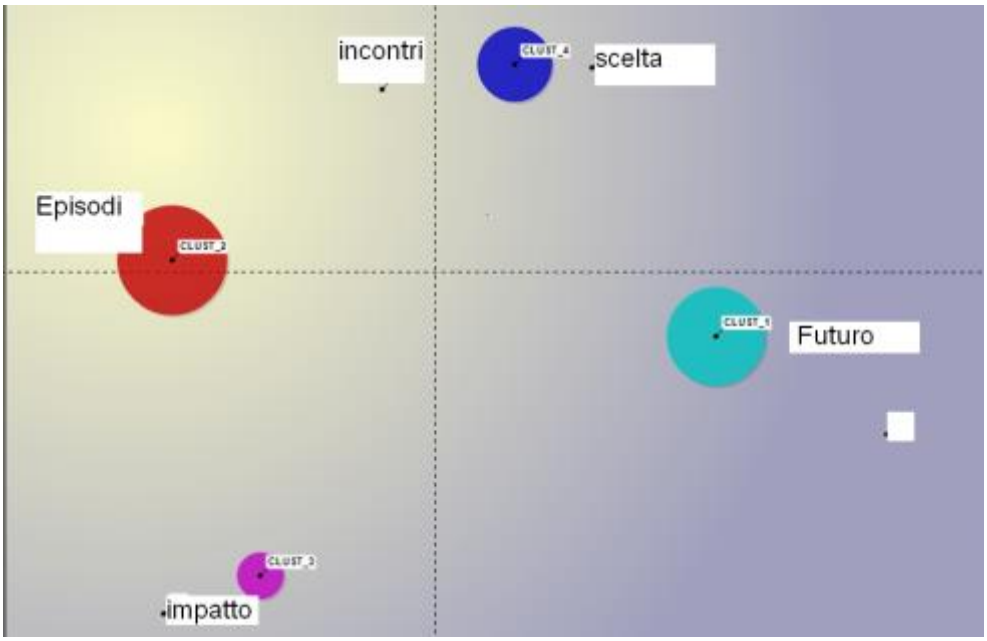
[18] university was a totally different world from my school

[19] The first examination caused me to experience many negative feelings, before and during the exam. Moods such as sadness, fear and a sense of failure

[20] Chi square 15,2; p. 0.00

[21] I hope to find a job which allows me to put into practice what I am learning during these years.

 Copyright © International Conference on New Horizons in Education Conference (INTE)



This means that the way the words are grouped in clusters reproduces the way they are grouped in the answers to each question.

The graph in figure 1 shows that the factor space occupied by the responses to each question is near the factor space occupied by the clusters. However, it is necessary to point out that the text "incontri" (meetings)[22] and "scelta" ("choice") (which were both placed in the "first period") are both close at cluster 4, and that the text "episode" and "impact" are close at different clusters ("impact" is close at cluster 3, and "episode" is close at cluster 2), while they were both placed in the "second period".

The results in the graph show that the semantic repertoire used by students to work through the spheres of each question (choice, person, impact, episode, future) are distinct and do not intersect, with the exception of "person" and "choice", which are placed (in this research) in the same time period (first period).

c) Factor analysis

The factor analysis allows us to study the meaning of the responses in depth.



[22] The word "incontri" ("meetings") in the graph indicates the word that, in the text, was indicated by the word "persons".

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The first factor, represented on the X axis, contains, in the negative field, the text "episodi" ("episodes"), and in the positive field, the text "future" ("future"). This axis represents how the students work through their experience of study, from the viewpoint of *temporality*. The word "condensed" toward the text "episodi" are "primo esame" ("first exam"), "professore" ("professor"), etc.; it indicates "actual experience", that is the most important variables, which the students refer themselves, to work through their university experience. The word "condensed" toward the text "futuro" are "persona" ("person"), "realizzare" ("realize"), "continuare" ("continue"), "lavorare" ("work"). They indicate the way in which the students work through their "post-university experience".
The second factor, shown on the Y axis, contains, in the negative field, the text "impatto" ("impact"), and in the positive field, the texts "persone" ("persons") and "scelta" ("choice"). This axis represents how the students work through their experience of study from the point of view of *familiarity*. The word "condensed" toward the texts "person" and "choice", are "genitore" ("parent"), "scuola superiore" ("upper school") "corso di laurea ("degree course"), "aspettare" ("attend"), etc.; They indicate "familiar experience", that is the people and situations that the students feel are close and familiar; The word "condensed" toward the text "impact" are "disorientate" ("lost"), "biblioteca" ("lecture hall"), etc. They indicate "unfamiliar experience", that is experiences the students feel are "unknown" or that they are unused to.
The factor analysis allows us to identify a semantic space showing the criteria students use to give meaning to their college experience. The results of the analysis are summarized in the following table:

	University experience (current time)	**Post-university experience (next time)**
Known experience	Episode/Person	Choice
Unknown experience	Impact	Future

First, the experience of study is labelled according to two temporal moments: "current time" (university experience) and "next time" (post-university experience). Secondly, it is labelled according to what the students perceive as being known or unknown (known experience/unknown experience).
The table shows that "choice" and "future" are both placed by students in post-university experience. However, the "future" is considered by students to be an unknown experience, while "choice" is a known experience. All this suggests important considerations.

First, the responses reveal that, for these students, the choice of university course, even though it is taken in the present, is processed through the semantic categories they use to deal with post-university experience. The choice shown as an act placing it in the present time (university experience), but it is processed, by the student, with the semantic categories they use to represent post-university experience.
Second, post-university experience is seen by the students as something uncertain, except for matters relating to the choice of university course. More precisely, future representations linked to this choice are considered solid by these students; they are not affected by the uncertainties that the same students project onto future considerations in other respects.
The trust that the students have for the choice of degree course is transformed by students into trust in the future aspect that they consider a normal consequence of that choice. The future connected to the university choice represents for the students a future form, different from those linked to other areas of life.
The semantic categories of other texts appear more linear. Areas of university experience reveal the texts "episode" and "person" in the known experience, and "impact" in unknown experience. This means that the impact with university experience, even though it is placed in the "present time", is worked through by students toward the same semantic categories that they use to work through the future time (for precision, future time is different to professional future). The impact of university experience is, therefore, affected by the same degree of uncertainty associated with this form of future. The semantic categories of choice and impact are mirror images: choice is a semantic variable placed in future time, but that suffers from the same safeties of the present; impact is a semantic variable placed in present time, but it suffers from the same uncertainties of the future.

CONCLUSION

The semantic categories used by students to work through their university experience are referred to in different narrative categories.
The most important narrative categories refer to "personal areas". They are *engagement* and *consistency*.
University experience is felt by the students as a freely decided choice, and motivated by an attachment to a system of values (*engagement*). It is not perceived by students as a utilitarian choice but as a moral choice, one motivated by the moral value that they attribute to the job relating to it.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The experience of going to university is also felt as a personal realization, because it expresses the coherence between the action and guidelines of personality (*consistency*). The choice of university is seen as a way of achieving itself, already in the present time.
The other narrative categories used by students refer to *resources* and *social references*.
The *resources* indicated by the students are mostly "internal resources". The interviewed students claim to have relied mostly on personal attitudes when making their choice. They did not consider external resources (such as economic resources, spaces, etc), and these do not appear in their semantic repertory.
The *social references* have a negative value in the semantic repertory of the students. The students claim not to have asked for advice from any significant person, in helping them make their choice. They also say that their choice was influenced by life situations, and that these were the "turning points" for their decision.
In conclusion, the university students, in choosing their course of study, are focused on themselves. Their reference points are their values, their attitudes, their preferences. They do not give importance to the variables related to the context, or to professional opportunities. They do not even feel the need to consult with adults of reference (parents, teachers, etc.). It seems, moreover, that they are sure they will get, in the future, a job which corresponds to their course of study, and they do not feel they will have to consider other similar jobs. The students see the work they will find as a certain consequence and a necessary result of their degree programme: "Because I followed this course, I have to do the same work; it is not possible for me to do a different job." This certainty, however, comes with an element of risk, since it weakens the flexibility needed to live in the contemporary world.

REFERENCES

Bruner J. (1986). *Actual Minds, Possible Worlds.* Cambridge: Harvard University Press.
Bruner. J (1996). *The culture of education.* Cambridge: Harvard University Press.
Cambi F., & Frauenfelder. E (1994). *La formazione*, *studi di pedagogia critica:* Milano: Unicopli
Cavarero A. (2001). *Tu che mi guardi, tu che mi racconti.* Milano: Feltrinelli.
Demetrio D. (1991). Crescita e cambiamento. in Massa R. &, Demetrio D. (Ed.). *Le vite normali. Una ricerca sulle storie di formazione dei giovani.* Milano: Unicopli, pp. 23-133.
Demetrio D. (1996). *L'autobiografia come cura di sé.* Milano: Raffaello Cortina.
Fabbri M. (2015). *Controtempo. Una duplice narrazione tra crisi e empatia*. Brescia: Junior
Ferraro G. (2015). *Teorie della narrazione.* Roma: Carocci.
Groppo M., Ornaghi V., Grazzani I., & Carrubba L. (1999). *La psicologia culturale di Bruner.* Raffaello Cortina: Milano.
Lorenzett R., & Stame S. (Ed.), (2004). *Narrazione e identità. Aspetti cognitivi e interpresonali*. Bari: Laterza.
Melucci A. (1991). *Il gioco dell'Io.* Milano: Feltrinelli.
Rollo D. (2007). *Narrazione e sviluppo psicologico.* Roma: Carocci.
Smorti A. (2007). *Narrazioni*. *Cultura, memorie, formazione del Sé.* Firenze; Giunti.
Trzebinsky J. (1997). Il Sé narrativo. In Smorti A. (Ed.). *Il Sé come testo*, Firenze: Giunti, pp. 60-82.
Watzlawitck P. (1971). *Pragmatica della comunicazione umana.* Roma: Astrolabio

 Copyright © International Conference on New Horizons in Education Conference (INTE)

NEW ENTREPRENEURS CREATION AND THE SURVIVAL OF THE CERAMIC ENTERPRISE

Phainphin Kowuttiphong, Wanno Fongsuwan

Faculty of Administration and Management
King Mongkut's Institute of Technology Ladkrabang Thailand
p_kowuttiphong@hotmail.com

INTRODUCTION

The global ceramic market in 2012 stood at $279 USD billion and is forecast to grow to $408 USD billion by 2018 [1]. As a subset of this, the global ceramic tile market is expected to reach over $USD 125 billion by 2020 and Thailand has moved to the number 1 spot globally in production of tile [2]. by 2025 Ceramic is a material made of elements and metals extracted from soil and includes products such as glass, tile, and cement but it is now being spotlighted as a cutting- edge substance used in advanced technologies in energy, IT, and the bio and medical industries [3]. Asia-Pacific is the biggest market for advanced ceramics, and accounted for a share of around 40% of the global market share in terms of value in 2014 which was majorly contributed by China [4]. In Thailand, however, the ceramic industry is dispersed and lacking in many modern technologies with lack of innovation and marketing being a barrier to competiveness and survivability with concerns about climate change and environmental regulations also hindering future prospects for growth [5]. The industrial ceramics industry is one that is important both to Thailand and its economy which is continuously supported and promoted by the government. Thus, the survival of the ceramic enterprise depends on the new entrepreneurs creation. They need to have sufficient understanding of innovativeness and strategic planning method in developing products with new innovation and creating an effectiveness of the production process. Therefore, the researchers are undertaking this study to using a structural equation model to develop a greater understanding of the importance of the Thai industrial ceramic industry and the variables effecting its survival and organizational performance.

THE STUDY

This research aims to model the structure of the factors influencing the survival of the industrial ceramics industry of Thailand, so the researchers wish to determine the details and procedures from the methods below:

The approach used in the study used both quantitative and qualitative research from both primary and secondary data.

Secondary Data Research this was comprised of published research, internet materials, media reports, and data which has been cleaned, analyzed and collected for a purpose other than the needs assessment, such as academic research or an agency or sector specific monitoring reports [6]. Therefore, secondly data is a research tool for development of the variables and the structural equation model in understanding the survival determinants of the Thai ceramic industry.

Data collection by surveys from 220 (20X11: SEM Approach) managers of ceramic production facilities in Thailand [7].

Questionnaires were constructed to be a tool to measure concept definition and practice. The instrument or questionnaire used the 5-Point Likert Scale [8] as the measurement scale and the conceptual framework for determining the internal consistency measured by coefficient alpha. (α-coefficient) of Akron BAC (Cronbach) to calculate the average value of the correlation coefficient. All values lower than 0.50 were eliminated from the measurement.

From the above conceptual review and development, the researchers have developed the following 5 hypotheses for the study (Figure 1):

H1: Innovation has a direct effect on Organization Survival.
H2: Innovation has a direct effect on Firm Performance.
H3: Business Strategies have a direct effect on the Firm Performance.
H4: Business Strategies have a direct effect on Organization Survival.
H5: Firm Performance has a direct effect on Organization Survival.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

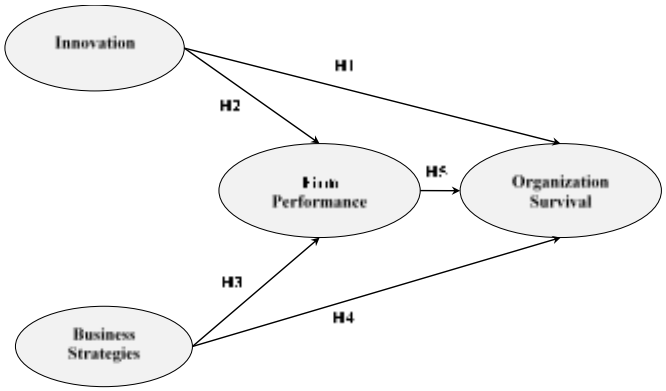


Figure 1: Proposed Research Framework and Research Hypotheses

CONCLUSIONS

We expect that our studied variables (i.e., Innovation, Business strategy and Organizational Performance) would have a direct and indirect influence on Organizational Survival. From the review of the literature,

numerous studies enforce the idea that there are also combinations of factors that are all coming together that will make innovation the key component of an organization's survival within the industrial ceramics sector. These include: first, an competitive environment due to the 2015 economic and trade integration date of the AEC, second, the growth and expansion (and competition) of the middle-class in both ASEAN's developing nations as well as China and third, a radical change in manufacturing technologies. Ceramics is as old as civilization itself but yet is a craft that is being used in the most advanced disciplines of technology, construction, aerospace, medicine, nanotechnology, etc. In all areas, innovation is a key player in the firm's survival as can be seen from the over 8,000 patents for structural ceramic since 1980, mostly aerospace related. Bringing the products to market using sound strategic decisions with a strong financial sheet are also keys to the firm's survival. Ceramics is an exciting and extremely interesting industry and the researchers hope to continue their journey in the discovering of the companies and technology in this amazing industry. Understanding the variables that create organizational performance using business strategies and innovation that encourage organizational survival is a key to our research. Therefore, this will help new entrepreneurs of ceramic enterprise have sufficient knowledge of innovation and business strategies on the effective of the organization for the ultimate survival of the ceramic industry's future.

REFERENCES

[1] Grand View Research (2015). Construction Growth Expected to Drive Ceramic Tile Market. Retrieved from http://tinyurl.com/lp6vpnb

[2] Wintergreen Research (2012). Ceramics: Market Shares, Strategies, and Forecasts, Worldwide, 2012 to 2018, Retrieved from http://tinyurl.com/ocsq2rn

[3] Korea JoongAng Daily (2015, May 13). These days, ceramic means much more than pottery. Retrieved from http://tinyurl.com/zk57vkg

[4] MarketsandMarkets (2014, May 15). Advanced Ceramics Market Worth $9.5 Billion by 2020. Retrieved from http://tinyurl.com/gwjfm67

[5] Ceramic World Review (2014). Large sizes, efficiency & green technologies • SCG goes on thinking "big". Retrieved from http://tinyurl.com/heradbp

[6] Acaps (2012). Qualitative and Quantitative Research Techniques for Humanitarian Needs Assessment: An Introductory Brief, May 2012. Retrieved from http://tinyurl.com/krnh24h

[7] Schumacker, R.E. & Lomax, R.G. (2010). A Beginners Guide to Structural Equation Modeling - Third Edition. New York: Routledge. Retrieved from http://tinyurl.com/z2sdwtr

[8] Likert, R. (1970). A Technique for the Measurement of Attitudes, In: Attitude Assessment, Summers, G.F. (Ed.). 149-158.

Chicago, IL., USA.: Rand-McNally and Company.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

NORTH KOREAN DEFECTOR PARENTS' PERCEPTION OF SCHOOL ACTIVITIES PARTICIPATION

Hee CHOI
PhD. Program in Multicultural Studies & Multicultural Education
Inha University
South Korea
eksrns06@naver.com

Hyeonmin KANG
PhD. Program in Multicultural Studies & Multicultural Education
Inha University
South Korea
miirulove@naver.com

ABSTRACT
While studying experiences of teachers who have taught North Korean defector students at one of the "North Korean Defector Students Policy Implementation Research School" called "J" elementary school, this research was triggered from the fact that the teachers' perception on North Korean defector Parents of the elementary school children are "unsupportive" toward their children's education and school participations. In order to define better on the elementary teachers' perception called "unsupportiveness," the objective of this research is to understand the mindset of the defector parents' in their participation toward school educational activities.

As the education philosophy and subject realization become more diverse in Korea, students as well become educators rather than being educated by teachers. In other words, teachers as well as the local citizens both become partners in educational processes. However, since Labor Party participates directly in the educational system of North Korea's centralized governing system, the philosophies of education and pursuing objectives are obviously different. For the defector parents, who grew up in this environment, the inadequate understanding of Korean school education become another conflicting element which parents has to overcome. In order to achieve the objectives, the defector parents, with elementary, middle and high school students, were selected and compared in-depth, and carefully studied their experiences of participations in school educations. The case study, which was realized in the actual contexts, was a very detailed research focusing an exclusive and selected number of cases (Punch, 2005) for understanding of complicated and specialized activities in the midst of some particular situations(Stake, 1995). The defector parents' experiences were analyzed based upon both of the supplemental research materials teachers' "Participation Diaries" for the period from 2014 through 2015, and the in-depth interviews conducted with defectors for a year from 2015 through 2016.

The research was able to conclude that it is essential to improve the perspective of defector parents' participation in school education. Furthermore, the study was able to deduce a conclusion that education for the defector parents has a high priority. Since they are too accustomed to North Korean Education, their pre-conceived methodologies and stereotypes will not change easily. For those experiencing various conflicts and learning mainly by mistakes, like the defectors, suggesting a guideline for school education participations can be an excellent solution.

Keywords: North Korean Defector Parents, School Participation, Teachers' Perception on School Participation, South and North Korean School Education

INTRODUCTION

While studying the experiences of teachers, instructing North Korean defector students at one of the "North Korean Defector Students Policy Implementation Research School" called "N Elementary School," this research was triggered from the fact that the teachers' perception on North Korean defector Parents of the elementary school children are "unsupportive" toward their children's education and school

 Copyright © International Conference on New Horizons in Education Conference (INTE)

participations. In order to better define the elementary teachers' perception of "unsupportiveness," an understanding of the mindset of the defector parents' in their participation toward school educational activities became the objective of this research.

The influx of North Korean defectors has been increasing since mid-1990. And, as of the end of March 2016 according to the Ministry of Unification, 29,137 people defected to South Korea. The backgrounds of the defectors children also became diverse, varying from North Korean origins, 'third countries origins, or local South Korean origins etc. In addition, with various educational support programs by South Korean government, the school dropout rate fell from 10.8% in 2008 down to 2.5% in 2014 (Ministry of Education, 2015). However, despite the continuous educational support from the government, the dropout rate of 2.5% which is still much higher than the average student dropout rate of 0.9% in South Korea. This show the current programs are inadequate. Now is the time for parents to step in. They are the most responsible in their children's education system and their cooperation are essential. (Choi Hee et al 2016)

The parents' enthusiasm for education in South Koran is worldwide recognized. In fact, it is famous enough to be noted by many international celebrities and figures. This enthusiasm reached at the peak during the 1980's, when the education was utmost importance in Korean society, in fact, terms such as: "Degree-disease" and "Degree-society" were used to describe the phenomena in Korea. Gradually, by the 1990's, the parents consequently became the principles of education.

Regarding the enthusiasm, Lee Jonggak(2013) emphasized the power of the parents' involvements by saying "There aren't much successful educational policies available without support and cooperation of the parents'." In conclusion, the effects of the education will be maximized by interacting and cooperating between parents and teachers. Furthermore, a seamless communication between the parents and school is again absolutely essential. (Yoo JungSoo & Baek Hyunki, 2009)

As social ideologies on the education such as "Parents Right to Choose Education" or "Parents as a Consumer" start to emerge from mid-1990's, the social consensus with respect to the importance of the parents role started to form (Choi Sankeun et al, 2010). The parents' participation in school education has become a global trend and is expanding gradually in the OECD countries as well. The Ministry of Education, Science and Technology, one who regulates the law in Korea, activity promotes school education policies involving parents. However, the understanding with respect to the parents involvement in school education obviously feel very new to the defector parents. Because it is very different from the social backgrounds and living environment that the defector parents lived, for the parents who are used to the socialistic education, the idea of parents involvement in school education itself is not understandable.

These defector parents got most of their education in North Korea while none from South. Therefore, their understanding on South Korean Education is inadequate, and the effects of it reflect solely on their children. As Lee Jonggak(2014) claimed in the "Quality of Parents Determines the Education," because of the importance in parents roles he raised issues on the research of "School-Parents Study." This research studies on the defector parents, who became the principle subject of the education, perception on the participation of the school education thru their experiences in schools involvements activities.
The research boundaries and problems of the research have been set as below:
First, how is the defector parents' participation in school education?
Second, how is the defector parents' perception in participation of school education?

Theoretical Background

The participation in school education of parents is parents participating in educational practices in various roles such as: decision-maker, supporter, and teacher assistant, and means the education right of parents. Pedagogy Glossary explains the education right of parents as follows: "The education right of parents is the right that parents can decide how to fulfill the responsibility of children education freely, and consists of the right of choice and the right to participate. The right of choice is the right to choose an educational place and so on, and the right to participate is the right that parents participate in decision-making of an educational institution and submit opinion related to children education to an educational institution. The education right of parents has instrumental characteristic guaranteed for children's happiness." (Korea University, Institute for Education and Culture, 2007).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The Schools, who are 'leading' the educational methodologies, depart from the traditional systems now and emerges dramatically into a new paradigm, which all the entities who are involved in education participates. Concurrently and synergistically, with increase in education levels of parents, parents' desire for participating education also gradually increases. Therefore, parents, who traditionally had been cut off from the educational community, are connected and steadily shifting into the center of the community instead. At this center of 'consumer' centric educational paradigm change, there places importance and necessity of the school parents' participations, the core 'consumer'. 43% of students talk worry with friends, 30% of students talk worry with parents, and 3% of students talk worry with teachers (Ministry of Education, Science and Technology, 2013), so the importance of parents is more emphasized than the importance of teachers.

Today's School education constitute of a social group consisting of nation, teachers, students, and parents. However, there was no perception to admit parents as the principal of common group perceptions even until just few years ago. Parents were realized merely as monetary sponsors, and the perception as a participant for true education in school education was not been accepted by society and parents themselves. In modern school education, the parents' participation means a process of parents to correctly understand their children via close relationships with educational institutions as well as achieving an effective education via participating personally at the site. In other words, the parents' participation in modern education means parents intervening and involving at the educational sites by being a decision maker as well as a teachers' assistant (Jeong Choonghyuk, 2004).

The traditional Korea foundation ideology of the "humanitarianism ideology" or the " Hong Ik In Gan.' which was emphasized in Korea 1949, maintained the emphasis again through the Fundamental Education Act in 1997, but this time with an emphasis on enjoying happy and harmonious life with democratic citizens as its pursuit. As a result, the principles in realizing the educational ideology became more diverse. Which means, students, who are being educated by teachers, become principles of education, and teachers and parents as well as local citizens play a joint role as educational partners.

However, North Korea before the 1990s focuses on 'developing communistic individual,' which was emphasized in 'The Thesis of the Socialistic Education', and teachers train students to be individual equipped with knowledge, virtue, and physique. In 2009, the government revises the Education Act, the Article 43 of the constitution: "The country hereby declare implementing the principles of the socialistic education concept, and train individuals as the revolutionist who fight to protect following generations and society, and develop as "JuChe(Self Sufficient/Independent) type individuals" equipped with the knowledge, virtue and physique. (Jung Choonghyuck, 2004)." In order to implement this in North Korea, a centralized government system, the Labor Party intervenes and controls the educational institution directly.

Like this, South and North Korean ideals of education are different, so are the objectives to pursue are different, and when parents of North Korean defector students do not fully understand South Korean school education, school life of children is the another headache that parents has to overcome. In South and North Korea, the Korean War began by the Cold War, and when the 38th parallel of latitude is drawn north and south in the Korean Peninsula, not only country but also society, economy, people, culture, and education are split into two parts. In South and North Korea where was one group of people, a gap of school education grows bigger as two political systems and social structures (Lee Sangkyun et al, 2015). North Korean defector parents first experiencing this environment experience a cultural difference between educational environment they live in and new environment. According to Park Bongsoo et al 2013, the parents themselves should learn to overcome the challenges of adapting new and unfamiliar culture for their children's school life adaptation, and also said that the role of parents is to support children socially and emotionally to adapt unfamiliar environment and to become effective functionally.

Research Method

As a very specific study of single or few cases (Punch, 2005), a qualitative case study in a practical context is to understand a complex and particular act in specific situation (Stake, 1995). That is, it is a method to describe and analyze characteristics or problems of an object synthetically and in depth. Characteristics of a case study can be certain specific person or group, but can be certain program or

 Copyright © International Conference on New Horizons in Education Conference (INTE)

social phenomenon. It is to investigate in-depth on personal attributes of participation experiences on their children's school education. The research participants are ones who doesn't have educational experience in South Korea,. Therefore, it is to build various cases how their attitudes or perceptions of participations in school education differ. The general present condition of research participants is presented in <Table 1>.

For the research participants, six defector parents who have children in either elementary, middle and high schools, and their in-depth study was conducted from the period from 2015 through the February 2016. Some of the unique aspects of the subjects are such that all of them are either graduated from the J elementary school or currently attending the school. One exception among the research subjects was a person who completed 60 hours a job training program from the "N Teachers' Academy," and current working as a North Korean Student Coordinator at "H Elementary School." For the defector parents who have graduated high school in North Korea but completed a degree in South Korean University program were excluded from the research participants. Among these research participants who have no experiences in Korean educational programs, the objective of the study was to conduct the in-depth research on their common personal attributes.

Table 1: The General Present Condition of Research Participants

Research Participant	Age	Entry Year	(North Korea) The Highest Level of Education	North/South Korea Job	Family	Birthplace of Children/Present Grade
A	46	2007	University of Education	Elementary School Teacher/Coordinator	Husband, Son, Daughter	North Korea/High School Senior(Son), Fifth Grader in Elementary School(Daughter)
B	49	2007	High School	Factory Worker/Insurance Sales Man	Daughter	China/Middle School Senior
C	47	2007	High School	Mine/Dayworker	Husband, Son	China/Middle School Senior
D	46	2011	High School	Farmer/dayworker	Husband, Son	China/First Grader in Middle School
E	50	2007	High School	Factory Worker/Employee	Husband, Daughter	South Korea/Second Grader in Elementary School
F	46	2008	High School	Mine/Dayworker	Husband, 2 Daughters	China/First-year High School Student, Third Grader in Elementary School

One of the special aspects of "Case Study" is the fact that there are no limitations in collecting materials for the research. One case of the diverse form materials collected was the interview records. For the period from January of 2015, frequent meetings and interviews conducted with the research participants, and these interview records served as one of the research materials. These various forms of the research materials from variety of different sources enabled the collection of the research materials. The differences in research materials change the topics of the research not only the range and the focus.
This research, starting from the fact that the teachers' perception (Choi Hee et al, 2016) that North Korean defector parents are "Negative" toward their children's education and school participations, made a continuous effort to observe the parents and focused on collecting the materials.
For the study, the actual interviews are conducted from Oct 2015 through February 2016 for one or two times for 60 to 90 minutes each. In order to make things convenient for the participants, the interview were conducted by visiting their job sites as well as their homes.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Data analysis focuses on analyzing individual characteristics or problems of a study object synthetically and discovering their hidden characteristics through depth interview. However, the researcher has many troubles how to extract linguistic uncouthness of research participants, their expression, and conflicting tacit meaning as key words. The researcher tries to focus on individual experiences, to form meaning by meaningful word or line, and to reveal hidden meaning in a context.

The Results

There have been several researches done overseas on positive contribution of the parents' school activity participations on the children. Also a study in Korea showed that parents' school activity participations contribute at least in collecting variety information by interacting with teachers more so than by interacting with children (Lee Kangyi et al, 2013).
By parents participating in school activities, parents achieve a partnership that can cooperate, support, and advice. In the long run, parents' roles are important in such a way that can make an significant influences in school decisions (Lee Gyeyeong, 2010).

1. The Limit of Communication

Parents' participation in school education not only includes school education activities of children but also includes participating activities to support school or volunteer activities. Defector parents are unfamiliar to the educational environment such as driving children to school and working as a traffic service volunteers for traffic safety on the way to school of children, and a school system in South Korea is different from a system in North Korea, so these parents have no choice but to depend on teachers. Oh Kyunghee et al (2009) said that school and parents are commensal cooperative ties, so break communication between parents and teachers intensifies distrust in each other. North Korean defector parents informed of 'a parent meeting' are hard to understand strange terms, although they attend a lecture in Korean. Because of this one-sided communication, they play a passive role in various school activities.

> "At that time, I couldn't understand anything they say. I went to what they call 'a conference.' They were talking in Korean for sure but couldn't understand it at all. I felt like I was going deaf. The words don't register at all to me. They were explaining what is needed in order to go to the Junior High School, and said something about 'specialization or some short,' but nothing was comprehensible. As the Korean saying, 'it was like reading a bible on cow ear.' " (Research Participant A)

> "Just like they do with South Korean parents, they set us all in one place. And, we just set there listening to the inapprehensible words, and then go home. Whatever that is? Anyhow, why go when I cannot understand anything they are saying? So, I went there for the first time, and went there again one more time after that…" (Research Participant B)

A research participant 'A' who was a teacher in North Korea has both experiences of teacher and parent, because her child (son#1) is an elementary school student in North Korea. However, she expresses herself as 'the deaf', because she does not understand strange terms of school when she participates in a parent meeting. 'The deaf' means a hearing-impaired person. If people do not understand language the other side delivers, the non-disabled are no better than hearing-impaired people. Applying terms originating from different social orders in South and North Korea during 70 years of division, defector parents experience a difference of social order given by strange language.

2. Realizing Main Agents of Education

In a study of Epstein (1995) about cooperation between parents and school, school participating types of parents about children education are divided into a role of parents about children, home study,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

communication among students, parents, and school, and volunteer work to support school and students, decision-making of school management, and cooperation with a community(Lee Kangyi et al, 2013). However, in North Korea, its country and the school play a determining role in school education, thus parents' influences are limited. Children raise in an educational environment that a school class teacher take care of after school studies, so this is what teachers and school should do and is expected naturally from parents. On the other hand, in South Korean, when students leave the school, each head home or to the separate after-hour school called "Hakwon." Therefore, the defector parents feel negative about the school system as some of the responsibilities of the teachers are passed over to parents.

A child of a research participant 'B' was born in China, so did not speak Korean at all when she entered South Korea(7-year-old). She entered elementary school on a note that she does not speak Korean and does not know Korean alphabet, so had many difficulties to adapt to school. However, the research participant 'B' did not attempt to teach basic Korean alphabet. B draws a line that a role of school is clear in school education, and school education is not a role of parents but a role of school and teachers.

> "Teaching is the responsibility of the school. Otherwise, what is the reason for sending the kids to school? Just like in North Korea, if one cannot understand the school work, one has to stay after the school and repeats until one memorize or understand it. These are what the school needs to do…We (North Korea), when a kid doesn't get it, the school keep him even after school until he finally understands it. We do not have that here." (Research Participant B)

> "Why the schools exist? Is this a place to teach kids? This should be a place only to control the kids? Education is what the school has to do.. The parents should only be responsible for the kids' morals or ethics, right? It is so different from the way we are. Here, parents have to do everything that is needed. We wonder what the homeroom teachers are doing." (Research Participant D)

> "When the grades changes, teachers as well as homeroom teacher change, and when these happens, it is painful to repeat the family history again. My kids do not want that either. My kid just tells me not to come to school… so, I haven't even seen the teachers face." (Research Participant E)

In addition, South Korea has a system that a class teacher changes annually, so it is bounded to understand family circumstances, talent and aptitude of students. Therefore, a consultation with parents about school life of children leads to 'an insincere consultation'. In this educational system, it is not easy for North Korean defector parents to open their circumstances to a class teacher changed annually. North Korea operates a system fixing a class teacher until students all graduate, so a class teacher can know from a family business of students to achievement of these students. Therefore, this class teacher educates round aptitude of students, and organizes a learning group round an inclination of students.

3. Reestablishing Identity of Children

As <Table 1>, the rest except for the research participant 'A' are from 'multi-cultural families,' so have children born by marrying Chinese. Most research participants have no experience to participate in parent activities. In Parent-Teacher Organization, parents participate in various activities such as 'feeding monitoring activity' and 'curriculum management'. They think that a word 'Is OO's mother a defector?' has an impact on school adaptation of children, so avoid school participating activities. In case of a research participant 'C', her son hates that schoolmates and teachers know his mother is from North Korea and his father is from China, And, he does not want his parents to come near school. In the meantime, the research participant 'C' said that not participate in school activities in order to help his kid reestablishing identity in school. This shows negative social attitudes in Korean Society about 'North Korean defector children' or 'multi-cultural families', but this is also North Korean defector parents' perception to reestablish identity of children from 'multi-cultural families'. Therefore, teachers point out that North Korean defector parents are carefree with or neglect school life of children (Choi Hee et al,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

2016).

> "I went to a parents-teacher's meeting once when I was asked to come. At the meeting, one of the parents asked out loud, so and so's mom was a defector?". Amongst the kids, they do not know anything about that that… They are young, but as they reach puberty, when a parent tells their kids, the kids in turn tells that other kids.. After a while, my kid will get isolated from other kids in school… So, I am so afraid to trigger this kind of situation. I rather not show up in parents' school activities if possible." (Research Participant E)

> "My kid tells me 'if mom is a defector, that doesn't mean I am also a defector!' and tells me not to come to school. I feel, not show up at the school helps him hide the background as a defector. In return, I do anything he asks…" (Research Participant C)

> "Being not so fluent in Korean ('South Korean dialogues'), I am not confident in teaching my kids what and how to do things. So, I just sent my kid to school… (abr) When I showed up at the school when asked by the homeroom teacher, the teacher tells me my son is becoming a serious 'problem some kid' in school and asked me to educate and guide him at home…But, I wonder what I need to do in order to educate him at home? Actually, he listens to me well at home." (Research Participant D)

Like this, parents, educational consumers and members of school education, play a very important role to create a school climate, so parents' participation in school education should work actively (Chun Youngmi, 2014), but as a result of the study, North Korean defector parents' perceptions of participation in school education originating from different educational environment in South and North Korea are divided into 4 kinds.

First of all, because of strange educational environment and different terms, it is difficult for these parents to understand school education, and one-sided communication, break communication between parents and teachers, leads to distrust in each other. Therefore, high barriers of communication give perception like 'Formal Parent-Teacher Organization'. Second, there is perception of 'main agents of education'. 'Main agents of education' realized in North Korea are school or teachers, but 'main agents of education' realized in South Korea are students and parents. North Korean defector parents think that a role of teacher is everything from education of students in school to school life in general. Therefore, they play 'a role of bystander' as parents, and this perception originates from North Korean educational system becoming their habit. Third is the 'role of parents' in reestablishing the identity. The perception of the parents' school education participations is extremely negative if their purposes are reestablishing identities children as the 'multi-cultural families'. Fourth, there is passive participation in school education because of inferiority complex.

Like this, education of North Korean defector parents is needed to change their perception of school education and to derive participation in school education as main agents of school education. To do so, first of all, North Korean defector parents with foreign born children when going through the "Hanawon (a government funded training school for defectors in Korea)" are educated and guide in understanding the need of participation in school education. Next, it is necessary to improve perception of 'main agents of education' to raise North Korean defector parents' participation in school education. It may be for economic independence, but it is to change the perception that education is completely 'a share in school or teachers'. They are used to North Korean education, so it is good to submit guideline of participation in school education to people experiencing many conflicts, and trial and error. In addition, considering that parents' participation in school education can interact as direct interests in school adaptation, and relationships with friends and teachers of children, education for mutual understanding between teachers and parents is needed by increasing communication between students and teachers, and teachers and parents and binding ties closely.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

REFERENCES

Choi, H., Kim, Y., & Yoon, H. (2016). A Study on the Teachers' Experiences on the School Participant Activities of North Korean Defector Parents in the Policy Research School. *The Korea Association of Yeolin Education,* 24(1), 1-21.

Choi, S., Yang, S., & Yi, J. (2010). A Research on Parents' Education Toward their Children and Participation Survey Meathodology. *Ministry of Education and Science Technology*.

Epstein, J. L. (1995). School, family, community partnerships: Caring for the children we share. *Phi Delta Kappan*, 76, 701-712.

Jeon, Y. (2014). The Status and Effects of Utilizing School Information Announcement Systems by Parents of Elementary School Students. *Gyeongin National University of Education.*

Jung, C. (2003). A Study on Parents' Participation in the School Education. *Yonsei University Graduate School of Education.*

Korea University Education Research Center(2007). *Dictionary on Education Language*. Seoul;Wonmisa.

Lee, J. (2013). An Examination of Policy Implications of and New Directions in Research on Educational Enthusiasm in Korea. *Korean Education*. 10(40), 121-153.

Lee, G. (2010). A study on Practical Conditions of Parents' Participation for School Education and its Activities. Korea National University of Education.

Lee, K., Choi, I., & Seo, H. (2013). Parents' School Participation and Adaptation of Children and Youth. *Center for Family-School Partnership Policy Research at Seoul National University, School Parent Policy*(2013.04).

Ministry of Education(2015). *The Education Support Plan for the North Korean Defector Students.* Ministry of Education.

Ministry of Science and Technology(2013). Parents' School participation Guide. A Report on the Tend Research.

Oh, K., & Hahn, D. (2009). A deep understanding of parents' consciousness and desires on their children's schooling. *The Korea Association of Yeolin Education.*

Park, B., Kim, Y., & Choi, S. (2013). A Study on the Parent's Role Performances to the Social Adaptation of the Immigrant Youths from China. *The Korea Association of Yeolin Education*

Punch, K, F. (2005). *Introduction to social research: Quantitative and quslitative approaches* (2nd ed). Thousand Oaks, CA:Sage.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Unikrea website. www. unikorea.go.kr

Yi, S., & Choi, H. (2015). Territorial Education in North Korea and Korea's Sovereignty over Dokdo. *Territory and Seas*, No. 9, 43-74.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

NOVEL APPROACH TO THE FORMATION OF THE ENGINEERING SKILLS OF STUDENTS

Alexander A. SYSOEV
Physics&Mathematics Sciences
sysoev@mephi.ru

Elena B. VESNA
Psychological Sciences

ABSTRACT
The article notes the negative impact of traditional training approaches to professional orientation of the mental thinking of the future engineer-developers. The main component of the development of students is the formation of so-called psyche-heuristic programs forming the creative ability of the students in the generation of innovative products. Primordial for the formation of the mentioned skills is the inclusion of students in professional activities at the early courses. For example this is achieved by performing a student of a through multi-semester course project, starting from the 1 st - 2 nd courses.
Keywords: education, engineering skills, the new technology education, psyche-heuristic programming, through a course project.

INTRODUCTION

Preparation of design engineers of a new technique has specific features that are almost no taken into account in the technical universities. This is largely due to the fact that the used technology of training in principle cannot provide such training, because it contradicts to the mental processes inherent to contingent of developers of innovative technique. Low efficiency of traditional learning technology is emphasized by the Daily [1], and in subsequent studies of the National Training Center (Maryland, USA, 1980) [2]. However, the true reasons for this result are not fully disclosed. Figure 1 shows one of the possible versions of the pyramid, which is a synthesis of the pyramid shown in these studies, and of the authors of this article. The first five horizontal position fit into the traditional learning technology, named as "Information Education Technology" (hereinafter referred to as IET). Analyzing failure IET, we can distinguish two main reasons for the low quality of the training engineer-developers of innovative technique.

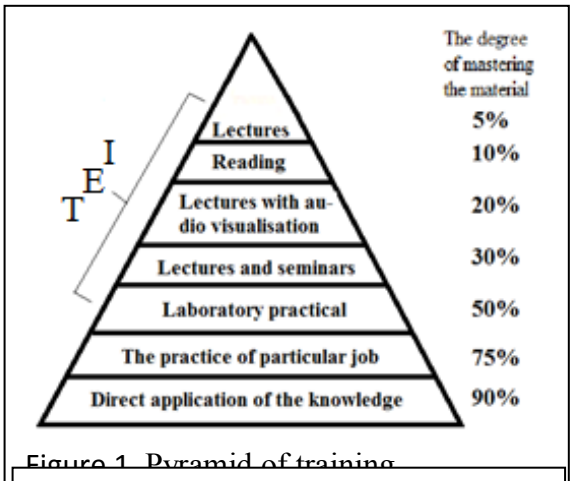


Figure 1. Pyramid of training

The received information by a student in the classroom is transferred into the subconscious during the dream and is fixed by the formation of specific proteins in neurons [3]. This form of information storage may remain in the subconscious of the whole life of the individual. But mental methods of extracting this information cannot be long-lasting and require its playback. Figure 2 is shown the upper curve for storage been learned words. This experiment should be attributed to the simple information. If the student has to deal with much more complex information such as, for example, mathematics, physics and other natural sciences, loss of memory, more likely to be displayed the lower curve (Figure 2). Of course, there are also more favorable cases can be, when by student actively involved the emotional, motivational mechanisms of memory. It should be noted in [3] a motivational mechanism of memorizing identified with a form of involuntary of memorizing. Then, as an arbitrary form of memorizing is typical of the educational university process and it many times is less effective.

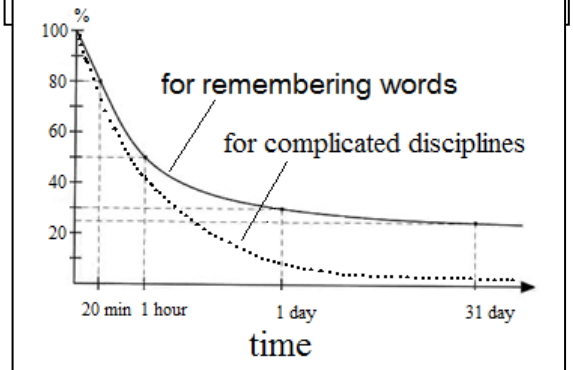


Figure 2. Loss of memorized material according to time

However, it cannot claim that the forgotten information is completely useless. Its usefulness lies in the fact that it lays down in the subconscious, so-called "orientations", which in the process of mental activity can at the right time "emerge", as the basis of mental processes in a specific area of activity. Many psychologists point to the principle of orienting activities of the brain (for example, [5, 6]).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

There is another key reason for the low effectiveness of the training engineer-developers of innovative technique. His thinking is formed as an adequate to educational process. According to the mental orientations its activity is formed. To have developed engineering skills, engineer-developer must have a mental orientations corresponding to the developing innovative technique. These skills he acquires only after graduation.

Obviously, the above contradiction can eliminate the only way - to change the structure of the educational process so that it is laying in the subconscious of the future engineer-developers the orientations of mental technologies that are specific to this category of specialists.

That is principal?

Insufficiency in the resulting knowledge to succeed in the designing and inventive field is associated more with the lack of formation at university graduates of a specific style of thinking, which should have creator of an innovative technique. The features of this style of thinking are as the following:

1. The large number of mental images of known technical solutions as referential ones in order to create new technical product.
2. The presence with a personality of mental technologies that can generate mental images from a large number of related technical solutions; those are fixed in the past professional experience.
3. Highly developed ability to reproduce high level of motivation in the process of work on the creation of an innovative product that is a highly effective means of achieving a positive result.
4. In the subconscious must be the mental technologies, providing a synthesis of different kinds of information from different disciplines (fields of knowledge), and that is more important to ensure the generation of new images of technical products. This is because it is the basis of engineering. For this the mental orientations of such technology should be pre-created in the subconscious [4, 5].

In which direction to go?

To build a scheme of activities of engineer-developers, a block diagram of a holistic behavioral act of personality, proposed P.V. Simonov (Figure 3), we use as a basis [5]. The starting point for purposeful actions is the need of personality to a specific type of activity. As consequence of it the motivation and emotion, what is the driving force, are generated. In our opinion, in this scheme, an amendment should be made, because the emotions are the result not only the needs but also motivation. Main thing in the center direction is action and, as a consequence, the final result. After reaching the final result of a person ceases to work in that direction.

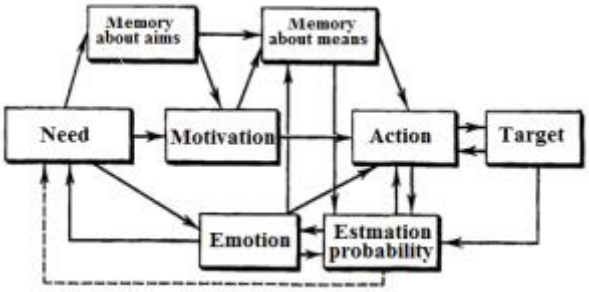


Figure 3. The structure of a holistic personality behavioral act [5].
Dotted - inhibitory effect

The proposed scheme is poorly suited to describing activities of the engineer-developers. For specific activities engineer-developers in the construction of the block-diagram the new components need to be considered. Ones are not peculiar to most types of behavioral activities. General can be only triad - motivation, needs, and emotions. Their feature is only that they do not arise by themselves, but ones must be formed.

Analyzing the long-term experience in the development of creative abilities of students as part of their preparation for engineering innovative activities, the following block-diagram of a holistic behavioral act was created. This scheme describes the mental processes in the development of the technical innovative product. As a result of this scheme, there are the directions of academic activities of the university collective of faculty and staff has to be realized. The mentioned block diagram is shown in Figure 4. The starting point for the beginning of the creative process is the formulation of the solution ways to some an actual problem. In the science of science, there are special techniques for scientific formulation of various types of innovative problems.

Here, we do not touch upon these issues, as more emphasis would be paid to the psychological aspects of the development of creative abilities of the individual, which is aimed at the creation of innovative technical products. A necessary condition for this is the formation of the need state of specialist. But the need is seen as a burning desire that becomes intrinsic to the individual in achieving results. The key mechanism to form the need state of a student is an imitation by him of a professional activities. Initially a person may not know about its need state [6, 7]. Its need is formed in the process of activities, if it is successful and exciting. Then, as a result of activities a desire to continue this one comes into being, and the target object becomes by the motive, which impels and directs the activities. There are other ways to activate students' motivation to actively work on the development of professional skills [8].

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Activities in the implementation of the design works are played another important role. Fixation in consciousness and then transfer into the subconsciousness carried stages of design operations, strengthened by motivation and emotional mechanisms reinforces their mental mapping many times is better than all the other ways of assimilation information. This is correlated with the training pyramid (Figure 1, two lower rows).

Creativity can only be realized under certain conditions. They cannot be general, but must be based, in accordance with the theory of the orientation activity of the personality (see Figure 4), on the following key conditions:

1. In the subconscious a number of mental images what is similar to creating technical product should be recorded. This will be the orientation points in the generation of new improved mental images. This is reflected in the module called "Memory of psycho-heuristic programs of INFO"
2. In the subconsciousness psyche-heuristic programs of retrieving mental images for further processing should be formed. This is important because for a huge amount of memory equal to the order of 10^{10} GB, the search and retrieval of relevant mental images is one of the most important tasks.
3. In the subconsciousness should be formed psyche-heuristic programs (technologies) of processing and synthesis of mental images of orientation technical products. In this way, each micro-step creates a new mental image that is different from the original, which adds to a series of existing orientations of mental images. This is reflected in the named module as "Memory of the psyche-heuristic programs of synthesis". It should be noted, the process of synthesis of mental images can be carried out consciously (controllable) and unconsciously - at subconsciousness level. In the first case, under the action of emotional mechanisms this occurs by generating mental mutations (according to Simonov, [5]).

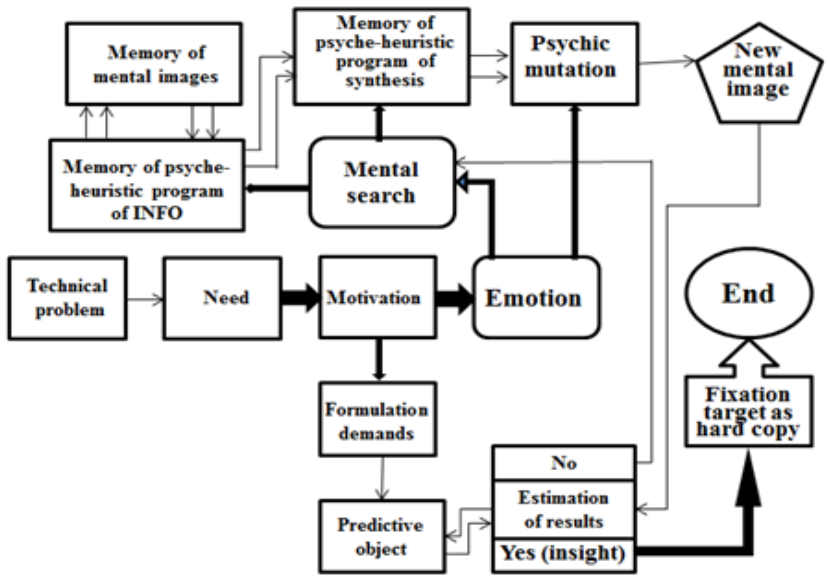


Figure 4. Structure of mental processes for search of innovation solution

Each new mental image in the feedback chain is evaluated for compliance with the expected result, i.e. the achieved target object. And if it meets the original requirements, the process of solving the problem is completed. If not, then the search cycle is repeated.

How to implement this scheme?

How easily to see the student learning process is fundamentally contrary to the discussed structural scheme of holistic behavioral act of engineer-developer in the process of creating an innovative product. Receiving general education a student improves his erudition. But it does not form a mental orientations of holistic behavioral act to developing innovative technical products. Creating mental technology should be formed in two ways: as referring to a holistic behavioral act, and in all of its individual particular directions.

Since it is initially student entering the university does not have the basic knowledge in designing activity, it would seem, this problem is not solved. However, such a judgment is refuted by practical experience obtained in the former Soviet Union (Kharkov) in the 80s of the last century. The experiment was conducted by training students on the new technology. Basis of this technology have been developed by Marquardt [9]. A key factor in this technology was the principle, according to which students should be engaged in project activities with 1st course, permanently increasing the more and more complex operations of projection and corresponding fundamental and professional knowledge.

Here we consider the modified technology of training engineer-developers. One is developed as applied to the training of students in the National Research Nuclear University MEPhI. The common position is involving students to the design activities from the 1st - 2nd courses. As foundations of a successful tool to students is offered to carry out the through multi-semester course project with 1-year. At the initial stage this project is formed in a simplest

 Copyright © International Conference on New Horizons in Education Conference (INTE)

version a feasible by a first year student. On this project the following functions will be laid on: 1) thesis project, or final work must be the final stage of the project; 2) ensure that the processes of student activities are strongly fixed in the subconsciousness; 3) due to obvious goals of the project dramatically improve the learning motivation; 4) join disciplines studied in a single system of professional knowledge; 5) to lay down in subconsciousness patterns of creating complex technical systems by a student which are installed within the past experience (by the simple to the complex).

Choice and executing of the through course project should be, on the one hand, sufficiently broad to reach the optimal effect of training for design innovative technique. On the other hand, - one must be feasible for students of a particular specialty. A priori, it is assumed that the through course project should consist of a set of logically related course projects of each semester as one problem. Each semester the project should be based on several previously studied or investigated in the same semester disciplines. It should be noted the through course project imposes definite conditions on structuring of the educational process in the time and harmonization of academic disciplines in content. The implementation of this approach is carried out by compiling the individual curriculum to the student.

Other important requirements to the project are:

1. The problem must be new. Moreover, it is highly desirable that the problem was new and for the teacher. In this case, the student learns from the teacher to the search methodology for new solutions.
2. Implementation of the project should simulate the engineering process this must be included in all project stages, typical for complex engineering projects.
3. The execution of design work in each semester and the acquiring knowledge must be accompanied by psychological support to students. This increases the motivation in mastering engineering skills.

The main results of the implementation the through multi-semester course project are: 1) its implementation lays into subconsciousness mental fundamentals of engineering design technology; 2) extends the ability of the acquisition of the engineering skills; 3) forms in the subconsciousness of the student psyche-heuristic programs of engineering.

Additional methods of activation of the project activities of students are aimed at enhancing the mastering of related disciplines. So homework in parallel disciplines are formed so as to coincide with the theme the through course project. Some disciplines are studied on their own with a compulsory execution of abstract, as well as with fixing the material associated with the project. Besides, this material is weekly discussed with the teacher. Other methods are also used.

In real life activities of the engineer takes place in a professional environment. Therefore, the learning activities of the student should take place in the environment, which is similar to the professional environment. At the University of as a training analog of the future professional environment of experts can be educational and scientific laboratory. In one students with the help of a teacher and senior students solve both educational and scientific tasks. One of the important features of the professional environment is the intensification of information exchange. In traditional learning technology the student gets information mainly from the teachers. In the new technology the laboratory is one of the most important sources of information. Students in addition to their activities receive information from comrades same group and also of senior students, staff, faculty. From the teachers they are acquiring for the most part theoretical approaches in the formulation of problems, mastering methodology for activity. Moreover, the informal exchange of information is more effectively for an assimilation than the formal exchange (teacher - student). Therefore, at the present study the environment was used as one of the most important learning tools.

CONCLUSION

During the last 50-60 years, advances of psychologists have allowed to make a major step in the explanation of the mental mechanisms of formation in the thinking of the individual of behavioral psychological toolkit. In reality, such toolkit unconsciously is laid as the basis for the development of each particular person, whether an engineer or professor. However, this toolkit is practically not used as a means of integral holistic training of engineer-developers, where the effect could surpass all expectations. In made in NRNU "MEPhI" many years of research the toolkit laid to the foundation of the developed technologies for training of such specialists. The experiments have shown the effectiveness of this approach in the development of the designing skills. The level of training allows to the University graduate solve innovative engineering problems. Almost all the students training on the new technologies have 1-3 publications. They are necessarily make presentations at various scientific conferences. At competitions of scientific works of young scientists for the last 15 years, they have received 20 awards as the winners. During this period, students and graduate students received 20 diplomas for prizes. Among the awards are grants for a trip to the 15th, 17th, 20th International Mass Spectrometer Conferences. Several students have fulfilled their projects at the level of inventions, for which they received the appropriate certificates. Two of the graduates have become leaders of the largest scientific the instrument companies (USA). In some cases, (3 students) level of theses was equivalent to the level of the thesis for the degree of Candidate of Sciences (PhD - on foreign classification).

The obtained results can be considered as a promising start in the direction of improving the training of engineer-developers. Of course this technology requires increased financial costs and greater participation of staff in training.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Therefore, at this stage the technology could be used for the elite training of engineer-developers in cutting-edge areas of science, engineering, and technology.

REFERENCES

1. Dale, E. The cone of experience**.**
http://www.willatworklearning.cjm/2006/05/people_remember.html
2. Pyramid Learning National Education Center Maryland State, USA https://yandex.ru/images/search?text=%D0%9F%D1%83%D0%B1%D0%BB%D0%B8%D0%BA%D0%B0%D1%86%D0%B8%D0%B8%20%D1%83%D1%87%D0%B5%D0%BD%D1%8B%D1%85%20%D0%BD%D0%B0%D1%86%D0%B8%D0%BE%D0%BD%D0%B0%D0%BB%D1%8C%D0%BD%D0%BE%D0%B3%D0%BE%20%D0%BE%D0%B1%D1%80%D0%B0%D0%B7%D0%BE%D0%B2%D0%B0%D1%82%D0%B5%D0%BB%D1%8C%D0%BD%D0%BE%D0%B3%D0%BE%20%D1%86%D0%B5%D0%BD%D1%82%D1%80%D0%B0%20%D1%88%D1%82%D0%B0%D1%82%D0%B0%20%D0%BC%D1%8D%D1%80%D0%B8%D0%BB%D0%B5%D0%BD%D0%B4%20%D1%81%D1%88%D0%B0&img_url=http%3A%2F%2Fuchebana5.ru%2Fimages%2F969%2F1937814%2Fm7c8bc4a5.gif&pos=19&rpt=simage (It is find for April 14/2016.
3. Gromova, E.A. (1980) *Emotional memory and its mechanisms*. Moscow, Publisher: "Science", (in Russian).
4. Ponomarev, Y. A. (1976) *The psychology of creativity. Psychological modeling of scientific creativity*. Moscow. Publisher: “Nauka” (in Russian).
5. Simonov, P.V. (1981) *The emotional brain. Physiology. Neuroanatomy. Psychology of Emotion*. Moscow: Publisher: “Nauka”, (in Russian).
6. Leontiev, A.N. (1975) *Activities, Consciousness, Personality*. Moscow, Publisher: “Politizdat” (in Russian).
7. Leontiev A.N. (1971) *Needs, motives and emotions*. Moscow, Publisher: “Moscow State University” (in Russian).
8. Sysoev A.A., Vesna E.B. (2014) Role of psychological factors in new technology of design engineer education. *Procedia - Social and Behavioral Sciences*. 128, 469-474.
9. Marquardt K.G. (1981) *Developing system of training.* Moscow. Publisher: "Knowledge" (in Russian).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

KNOWLEDGE LEVELS OF THE STUDENTS OF MEDICAL IMAGING TECHNIQUES PROGRAM ABOUT THE RADIATION IN THE PRACTICE SETTINGS

Nurhan GÜMRÜKÇÜOĞLU
Vocational School of Health Science
Karadeniz Technical University,Turkey
ngumrukcuoglu@ktu.edu.tr

ABSTRACT
For now, it is unlikely to think that developed industrial economies and high living standards can be maintained without using certain radiation sources which do not exist in nature. That is why human kind has needed to produce certain radiation sources in artificial ways as a necessity of technological development. In thepresent study, the aim is to determine the knowledge levels of students about the radiation dose being exposed to during some frequently-used radiological imaging techniques. The study group consisted of 90 students studying in Medical Imaging Techniques Program (TGTP) of Karadeniz Technical University VocationalSchool of Health Science in 2015-2016 spring and fall semesters. In this descriptive and cross-sectionalstudy, data were collected from the students practising in various hospitals between October 2015 and May 2016 via surveys. At the end of the study, it was revealed that there were knowledge deficiencies about the physical, chemical and biological changes caused by ionized radiation in human organism as well as protection from radiation.

INTRODUCTION
We call the rays named alpha, beta and gamma as 'ionizing radiations' that have high energy and that are self-emanating from the atomic nucleus of some natural ingredients as uranium, radium without any external factor and we also call the materials radiating them as "radioactive substances". We call radiation also as "radiance "or "ray "conditionally. In fact, radiation is nothing short of very fast flow of energy(Preston, 2008, p.428).
Many people afraid of the implementation of radiation (irradiation) to his/her body or lying under the instruments and being irradiated as a result of the idea that radiation is something mysterious and very dangerous. Definitely, the radiation applications have a risk as all other things.
Radiation causes adverse biological effects on living organisms.These harmful biological effects are associated with thedose of radiation and exposure time (Bolus, 2001, Brenner et al., 2003). Some of the imaging methods that are used in medical diagnosis and treatment of many diseases today include ionizing radiation. The ionizing radiation exposed in diagnostic radiology creates stochastic effects. This affect can occur even at lower doses as cancer risk although it is extremely rare. However, it is difficult to prove it. Also, the high doses of ionizing radiation used in treatment shows deterministic effect. The effects from the formation of blood and chromosomal damage for certain levels of the dose until the death in human can be executed clearly (Bolus, 2001, p. 67). However, the threshold dose of radiation that can create cancer and genetic damage in human is not known. Thus, the consciously use of investigations which include ionizing radiation in medical applications is important. The dose of threshold was tried to be predicted in some experimental and epidemiological studies (Sont et al., 2001).There was expressed in the studies done that hundreds of unnecessary tests are performed every year(Shiralkar et al., 2003, Güzel et al., 2010, Jacob et al., 2004).
In this study, there was aimed to research the knowledge level of the students of medical imaging techniques program and radiology staff about the dose of radiation which the patients and employees are exposed during some radiological imaging methods that are commonly used.

THE STUDY
The study was done by asking the questions of questionnaire to students who are performing an application in Karadeniz technical university medical faculty hospital and radiology staff working in various hospitals and getting their answers under observation. The study is a descriptive and cross-sectional study and data were acquired with survey method between the dates of October 2015 and May 2016.
The questionnaire form; includes questions about age, gender, education level, occupation,worked department, working years in the profession and which radiological tests include how much radiation and the effects of them on living organisms.
The answers were evaluated according to the report of (United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR, 2000). According to this, the numbers of equivalent chest radiography according to chest radiography are 95 for abdominal CT, 26 for barium stomach radiography, 4 forabdominal radiograph and2for mammography. All data obtained from the study were recorded to SPSS 17 program on personal computer and analyzed accordingly. The numeric variables were summarized as average± SD;categorical variables were summarized as number and percentage.

FINDINGS

 Copyright © International Conference on New Horizons in Education Conference (INTE)

There was negotiated with total participants consisted of 90 students and 40 personel during the study period.The gender, age group, education level, occupation,working years in the profession of the group and percentage distributions of the students as 1st grade and 2nd grade were given in Table 1.

Table 1. The distribution of participants according to defining features

		n	%
Sex	Male	50	61.5
	Female	80	53.8
Age	18-30 Years old	95	73.1
	31-40 Years old	15	11.5
	41-55 Years old	20	15.4
Educational status	University	97	74.6
	High school	20	15.4
	Primary education	13	10.0
Occupational group	Student	90	69.2
	Personel	40	30.8
Working years (for employees)			
	<10 Years	9	6.9
	>10 Years	31	23.8
Student class	1. Grade	40	30.8
	2. Grade	50	38.5

In the study, the rate of the people who think magnetic resonance (MR) and ultrasound imaging (USG) among the radiological examinations for all participants include radiation were determined as %50 (n=65) and %27 (n=35) respectively. The answers of other radiological examinations about the radiation content are given in Table 2.

Table 2. The answers of participants about the radiation content of examinations

	STUDENT 1st Grade (n=40)		STUDENT 2nd Grade (n=50)		PERSONNEL (n=40)	
	R Exists (%)	R Does not exist (%)	R Exists (%)	R Does not exist (%)	R Exists (%)	R Does not (%)
USG	32.7	67.3	18.3	81.7	33.1	66.9
MR	56.8	43.2	37.4	62.6	57.9	42.1
BT	93.8	6.2	92.5	7.5	85.7	14.3
Sintigrafi	56.2	43.8	50.1	49.9	50.6	49.4
Skopi	17.1	82.9	13.2	86.8	52.8	47.2
Anjiyografi	45.4	54.6	33.6	66.4	56.8	43.2
Mamografi	6.6	13.4	93.8	6.2	54.3	45.7
Röntgen	97.1	2.9	93.8	6.2	85.8	14.2
PET BT	93.0	7.0	76.4	23.6	71.4	28.6
DEXA	52.3	47.7	26.5	73.5	51.2	48.8

BT: I DEXA: Dual Enerji X Işın Absorbsiyometri, MR: Manyetik Rezonans, PET BT: Pozitron Emisyon Tomografi,

BT(CT):computed tomography DEXA: Dual Nenergy absorptiometry MR:Magnetic resonance PET BT:POSITRON Emission Tomography

R:Radiation USG: ULTRASOUND IMAGING

In the study, there was seen that the question that asks which of the determined radiological examinations contained most of the radiation was answered as; PET BT by %47.3 of 1st grade students, BT by %51.8 of 2nd grade students and BT and PET BT at an equal rate by %25.8 of the personnel. The answers of participants for various questions about radiation knowledge are summarized in Table 3.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 3. The answers of participants for various questions about radiation knowledge

Question (number of answerers)		Yes n (%)	No n (%)	I do not have an idea n (%)
Is radiation harmful for living creatures?	(n=130)	127 (97.7)	1 (0.8)	2 (1.5)
Does the amount change the extent of damage?	(n=128)	122 (95.3)	3 (2.3)	3 (2.3)
Does the damage depend on the duration of exposure?	(n=126)	118 (93.6)	7 (5.5)	1 (0.8)
Do the entrances and exits to the radiation field require attention?	(n=130)	71 (54.6)	33 (25.4)	26 (20.0)
Are the patients informed before imaging?	(n=130)	42 (32.3)	63 (48.5)	25 (19.2)
Are the measures taken in order to prevent exposure?	(n=125)	70 (56.0)	46 (36.8)	9 (7.2)
Is there any side effect of radiation ?	(n=127)	106 (83.5)	6 (4.7)	15 (11.8)
Does the nature of the target tissue change the degree of damage ?	(n=125)	74 (59.2)	32 (25.6)	19 (15.2)
Is the general or local application of radiation important?	(n=127)	109 (85.8)	6 (4.7)	12 (9.4)
Is it known how much radiation enters to our body and exists from it in a day?	(n=110)	5 (4.5)	95 (86.4)	10 (9.1)
Can human be regarded as a low radioactivity radiation source?	(n=114)	10 (8.8)	55 (48.2)	49 (43.0)
Does the kind of ionizing radiation affect the risk of creating damage to the body ?	(n=112)	80 (71.4)	20 (17.9)	12 (10.7)
Is the age of living creature irradiated effective on radiation risk?	(n=115)	65 (56.5)	35 (30.4)	15 (13.1)
Are the corporal damages seen only in people get radiation dose?	(n=110)	41 (37.3)	27 (24.5)	42 (38.2)
Is the effective dose limit known for the people working with radiation?	(n=110)	44 (40.0)	36 (32.7)	30 (27.3)
Is it known how the radiation affect our body?	(n=110)	18(16.4)	77 (70.0)	15 (13.6)

Table 4. The answers of participants about the quantity of radiation according to examinations

Imaging method		Less than normal n (%)	True n (%)	More than normal n (%)
Abdominal BT	(n=126)	94 (%74.6)	0 (%0)	32 (%25.4)
Barium stomach graphy	(n=110)	91 (%82.7)	0 (%0)	19 (%17.3)
Abdominal graphy	(n=114)	68 (%59.6)	19 (%16.7)	27 (% 23.7)
Mammography	(n=130)	15 (%11.5)	34 (%26.2)	81 (%62.3)

In the study, the question "how many chest radiography does the ionizing dose of radiation included by commonly used imaging examinations correspondsto?" was asked to the participants. There was determined that most of the participants guessed less than normal for abdominal BT (CT) barium stomach graphy and abdominal graphyand more than normal for mammography. The answers of participants for the question about the quantity of examinations and radiation were presented in Table 4. Also, there was determined (n=40) %70 (n=25) abdominal BT(CT) examination, %82,4'ü (n=31) barium stomach graphy and %68,1 (n=24) abdominal graphy of personnel included radiation less than normal.

- % 21 (n=130) of the participants explained the question « are the positive effects of Ionizing radiation known? » as accelerating the growth and development of the body,increase the rate of survival of cells and being more resistant to high doses for the cells as a result of low-dose irradiation of the cells in advance; and % 74 of the participants did not answer the question.
- %88, 5 (n=115) of participants specified the USG applied to pregnant is harmless, %60 (n=78) of participants

 Copyright © International Conference on New Horizons in Education Conference (INTE)

specified MR is harmless and %80 (n=104) of participants specified that BT is harmful. The question « In which trimester the radiation applied is harmful mostly? »was answered by %90, 8 (n=118) of participants as in first three months of pregnancy (first trimester).

The question about « Entering of the pregnant women to X-ray room » was answered by %96, 9 (n=126) of participants as the pregnant women cannot get into the x-ray room during the radiography. The rate of the people who think that is also harmful to the pregnant women to get into the room while there is no radiography action was determined as %75,4 (n=98).

CONCLUSIONS

The radiological examinations have great importance in diagnosis and treatment of diseases. The adverse biological effects of radiation on the living organisms are known(Lee et al., 2004, Tack et al., 2004, Hauptmann et al., 2003).It is specified in literature that every year averagely 100-150 people die of cancers due to medical radiation applications(Shiralkar et al., 2003, Güzel et al., 2010, Jacob et al., 2004).

In the study, 2nd grade students specified that there is radiation in USG and MR methods in the rates of %18, 3and %37, 4 respectively.However, it is determined these rates are higher in other groups.

It came in sight that almost all of 1st grade students think that radiation exists in BT (CT), Rontgenand PET BT (CT). This situation makes us think that 2nd grade students have more clinical experience and at the same time, they can interpret the data more accurately in comparison with personnel and 1st grade students as a result of the fact that they have new and updated information.

1stgrade students bring to mind that they can avoid applying BT (CT), mammography and Rontgenbecause they think these methods include radiation more than the others.

It can cause the exposure to unnecessary radiation because of the fact that almost %50 of personnel specified that there is no radiation in examinations ofscintigraphy, fluoroscopy, angiography, mammography and DEXA.Further, it came into the openthat nearly & 20 of hospital staff have wrong information about the examinations involving radiation. This situation can cause not to take precautions in the area of radiation while helping the patients and making the students the practices done.

It was found that 2nd grade students have better level information than the other groups in the questions addressed to participants about general radiation information. This situation makes us think that 2nd grade students have sufficient information about radiation in comparison with 1st grade students as a result of the fact that 2nd grade students are having more intensive training in the theoretical application.

The situation that the other group has information at a lower level can originate because of the educational status, inter-academic different applications, and postgraduate educational differences. In order to overcome this shortcoming; supporting the students after graduation or supporting them by in-service training programs can be useful in terms of refreshing the information. At the same time, preparing brochures about radiation and its effects in hospital contribute to it.

There was required from the physician to answer the ionizing dose of radiation in radiological imaging methods in Sievert (mSv) terms in comparison with chest radiography in the studies done in order to measure the awareness about the examinations including Ionizing radiation.

Also in questionnaire form, the ionizing radiation doses the patients are exposed to radiological imaging methods were asked as “how many chest radiography they correspond to” in terms of answering the questions in an easier way.

While it is evaluated separately (n=40) in the research, %70 (n=25) of personnel specified about abdominal BT (CT) examination, %82.4 (n=31) of them specified about stomach graphy and %68.1 (n=24) of them specified about abdominal graphy that these examinations have less radiation than normal.

The fact that almost more than half of personnel think examinations have the dose less than normal also presents a danger in terms of radiation safety.

Almost all of the participants explained the question “what are the prevention methods from the radiation?” as follows: «Keeping away from the radiation source as far as possible,standing near the source for less time and putting suitable armor materials which will absorb rays and mitigate the impact of them between the source and person».

The constraints of study can be sorted as;inhomogeneity of distribution of participants, educational status, andevaluations remain limited because the participants leave some questions empty.

The deficiency of knowledge about ionizing radiation shows that radiology education should be renewed and improved before and after the graduation in terms of safely usage of radiological examinations.

Long-term and comprehensive scientific studies should be done in various branches because of the fact the impact retains the uncertainty at low radiation doses.It is essential that the patient and radiology staff get the minimum dose in the use of examinations include ionizing radiation on the principle of "least as far as possible".The examinations include radiations which do not have the important contribution for diagnosis pose a risk to patients.

Giving in-service training about radiation information and safety after graduation can help physicians to be

 Copyright © International Conference on New Horizons in Education Conference (INTE)

more conscious and careful while requiring examinations include ionizing radiation.

- Today,the softwares of patient information system and radiology information system are used almost in all hospitals in Turkey. If the doctor who requires the radiological examinations sees “how much dose of radiation will the patient get in which examination and how many chest radiography the examination corresponds” on the request screen, he/she can change order of priority for examination and preferences.
- This is an important proposition and the doctor who requires examinations can relinquish the examination that he/she does not believe the necessity of it or he/she can give primacy to the other examination at the same level that does not include radiation accordingly.

REFERENCES.

Bolus, NE. (2001).Basic review of radiationbiologyandterminology, *J NuclMedTechnol*,29(pp. 67-73).

Brenner, DJ., Doll, R., Goodhead, DT. Et al. (2003). Cancerrisksattribute abletolowdoses of ionizingradiation: assessingwhatwereallyknow. *ProcNatlAcadSci USA*,100(pp.13761 -13766).

Güzel, A., Temzioöz, O., Aksu, B., Süt, N., Karasalihoğlu, S. (2010). A costanalysis of radiologic imaging in pediatric traumapatients. *Ulus Travma Acil Cerrahi Derg.* 16 (pp.313-318).

Hauptmann , M., Mohan, AK., Doody , MM., Linet, MS., Mabuchi , K. (2003). Mortality from diseases of the circulatory system in radiologic technologists in the United States. *Am J Epidemiol* , 157 (pp. 239 - 248).

Jacob, K., Vivian, G., Steel, JR. (2004). X-ray dose training: are we exposed to enough? *Clin Radiol*, 59 (928 - 934).

Lee, CI., Haims, AH., Monico, EP., Brink, JA., Forman, HP. (2004). Diagnostic CT scans: assessment of patient, physician, and radiologist awareness of radiation dose and possible risks. *Radiology*, 231 (pp. 393 - 398).

Preston, DL. (2008). Solid cancer incidence in Atomic Bomb Survivors Exposed in Utero or as Yaung Children .*JNCI J Natl Cancer Inst*, 100 (pp. 428-436). Oxford Jornals Medicine.

Sont, WN., Zielinski, JM., Ashmore, JP.et al. (2001).First analysis of cancerincidenceandoccupationalradiationexposurebased on theNationalDoseRegistry of Canada. *Am J Epidemiol*,153 (pp. 309- 318).

Shiralkar, S., Rennie, A., Snow, M., Galland, RB., Lewis, MH., Gower-Thomas, K. (2003). Doctorsknowledge of radiationexposure: questionnairestudy. *BMJ*, 327 (pp. 371 -372).

Tack, D., Gevenois, PA. (2004). Radiationdose in computedtomography of thechest. *JBRBTR*, 87 (pp. 281-288).

United Nations Scientific Committee on the Effects of Atomic Radiation. *www.unscear. org/reports/2000_1. Annex D: Medical radiation exposures. Table 15, Parts A and B* (pp.375- 377).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

OKUL ÖNCESİ EĞİTİM KURUMUNA DEVAM EDEN 60-72 AYLIK ÇOCUKLARIN PROSOSYAL DAVRANIŞLARININ ÇEŞİTLİ DEĞİŞKENLER AÇISINDAN İNCELENMESİ

Ali ÖZCAN
Pamukkale Üniversitesi, Denizli, Turkey
aliozcan@pau.edu.tr

ABSTRACT
The purpose of this study is an investigation of the prosocial behaviors in terms of different variables (gender, working or not working for mother, father and mother's level of education and monthly income of the family) of 60-72 months old children who attend a pre-school institution. In line with this aim, a total 201 pre-school students consisting of 89 female and 112 male students were implemented Prosocial Behavior Scale and Personal Information Form. According to the result of the t-tests and one-way analysis of variance (One-Way ANOVA) conducted, the prosocial behavior scores of the students were found to be significant difference for gender, father and mother's level of education, monthly income of the family. And also the prosocial behavior scores of the students were found not to be significant difference for working or not working for mother.

Key Words: Prosocial Behavior, Pre-School Institution, 60-72 Months Old Children

ÖZET
Bu çalışmanın amacı, cinsiyet, annenin çalışıp çalışmaması, anne ve babanın eğitimi ve ailenin aylık gelirinin 60-72 aylık çocukların prososyal davranışlarını nasıl etkilediğini incelemektir. Bu amaca yönelik olarak 89 kız ve 112 erkek olmak üzere toplam 201 okul öncesi eğitim kurumuna devam eden çocuğa olumlu sosyal (Prososyal) davranış ölçeği ve çocukların ailelerine demografik bilgilerini belirlemek için kişisel bilgi formu uygulanmıştır. Elde edilen veriler bağımsız gruplar t-testi, tek yönlü varyans analizi (One-Way ANOVA) kullanılarak istatistik analizlerden geçirilmiştir. Analiz sonuçlarına göre çocukların olumlu sosyal (prososyal) davranış puanlarında annenin çalışması değişkeninde anlamlı bir fark bulunmazken; cinsiyet, anne ve babanın eğitim durumu ve ailenin aylık gelir durumu değişkenleri arasında anlamlı bir fark bulunmuştur.

Anahtar Kelimeler: 60-72 Aylık Çocuklar, Prososyal Davranışlar, Okul Öncesi Eğitim

GİRİŞ

İnsanlar doğumla birlikte kendilerini sosyal bir yaşamın içinde bulurlar. Bir çocuk doğduğunda yaşamını sürdürebilmesi için annesi, babası veya kendisine bakan kişiye muhtaç durumdadır. Bu da bebeğin çevresindeki insanlarla ilk sosyal ilişkileri veya bağları kurması anlamına gelir (Artan ve Bayhan, 2004, s. 237). Çocuk yaşamının ilk yedi yılında anne, baba ve kardeşleriyle dönüm noktası sayılabilecek bazı ilişkiler kurar. Doğumdan sonraki birkaç ay içerisinde sosyal ilişkiler bebek için hoşnutluk yaratıcı bir duruma gelmiştir. İlk başta bebek, insanların ayrımına varamaz. Sonra insanların bir parçasını; yani yüzlerini, seslerini, sıcaklıklarını ya da verdikleri rahatlığı algılar ve algılama alanından kaybolduklarında onları unutur. Anne babaları, en yakın olduğu kişiler olduğu için onları tanır ve unutmaz. Bu sosyal ilişkilerden hoşnutluk duyması, bakıcısı ile arasında sıkı bağlar kurulmasını sağlar (Wolff, 2004, s. 26).

Okul öncesi yıllarındaki bir çok çocuk oldukça kendinden emin, özgür ve sosyal olacaktır. Diğer çocuklarla ve yetişkinlerle etkileşime girme yetisi ve isteğine sahip olacaklardır. Akranlarını ikna edebilirler, oyunlarına kendini kabul ettirebilirler veya devam eden etkinliklere katılabilirler ve anlaşmazlıkları çözebilirler. Sosyal becerileri olan çocuklar daha fazla sevilirler ve daha fazla arkadaşlara sahip olurlar. Bu şekildeki olumlu akran ilişkileri, uzun dönem olumlu sosyal gelişim ve akıl sağlığının belirleyicileridir. Aslında anaokulunda arkadaşa sahip olmak ve başkaları tarafından sevilmek okulda sınavlarda başarılı olmaktan daha çok ileride yetişkin mutluluğunun güçlü belirleyicileri olabilir (Berndt, 2007; Ladd, 2007; Ladd ve Burgess, 1999, aktaran Trawick-Smith, 2014 s.296). Yardımlaşma ve paylaşma gibi olumlu sosyal davranışlar, bireylerin içinde yaşadıkları toplumla sosyal ilişkiler kurmasını ve bu ilişkilerin sağlıklı bir şekilde devam etmesini sağlar (Kim ve Stevens, 1987). Prososyal davranışlar ya da olumlu sosyal davranışlar sosyal yeterliliğin önemli bir yönünü gösterir ve çocukların diğer insanlarla yaşayacağı ilişkilerine yönelik sadece şu anki öngörüleri değil, aynı zamanda çocukların daha sonra yaşayabileceği ilişkilerine dair ipuçlarını da verir (Hay, 1994). Prososyal davranışlar; "başka bir insanın ya da insanlar topluluğunun yararına olabilecek, kişinin üzerinde herhangi bir baskı ve zorlama olmadan tamamen kendi özgür iradesi ile sergilediği davranışlardır" (Eisenberg ve Mussen, 1989, s. 3).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Bağımlı, muhtaç ve çaresiz olan bebeğe annenin ve toplumdaki diğer insanların süreğen bir şekilde verme davranışına yönelik bir eğilimi vardır. Bebek kendisine sunulanları ağız ve duyu organları aracılığı ile içe alırken, bir taraftan da kendisine verilenleri toplumsal anlamda almayı öğrenir. Böylece de bebek kendisine bakım veren kişi ve kişilerden alma ve verme yeteneğini kazanır. İnsan hayatının temel davranış biçimi almak ve vermek üzerine kurulmuştur denilebilir (Öztürk, 1997, s. 72). Bebeğin; annesi, babası, kardeşleri ve bebeğe bakım veren ya da vermeyen toplumdaki diğer insanlarla kurduğu etkileşim sonucunda almayı ve vermeyi öğrenen çocukta zamanla, yardımlaşma, paylaşma ve işbirliği gibi olumlu sosyal davranışlar gelişmeye başlar (Çağdaş ve Seçer, 2005, s. 36). Çocukların sosyal gelişimlerinde oldukça önemli bir yere sahip olan; sosyal beceri, psiko-sosyal gelişim ve sosyal problem çözme becerilerini kazanmada kritik ve duyarlı oldukları dönem 5- 6 yaş arasıdır. Sosyal gelişim özelliklerini kazanmış okul öncesi çocuklar akademik ve kişilerarası ilişkilerde daha başarılı olmakta, daha çok prososyal davranışlar sergilemekte, akranları ve öğretmenleri tarafından daha çok kabul edilmektedirler (Caprara, G.V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. G., 2000).

AMAÇ

Bu çalışmanın amacı; okul öncesi eğitim kurumuna devam eden 60-72 aylık çocukların, prososyal davranışlarının çeşitli değişkenler (cinsiyet, annenin çalışıp çalışmaması, anne babanın eğitimi ve ailenin aylık geliri) açısından incelemektir.

YÖNTEM

Okul öncesi eğitim kurumuna devam eden 60-72 aylık çocukların, prososyal davranışlarının çeşitli değişkenler açısından incelendiği bu araştırmada ilişkisel tarama modeli kullanılmıştır. Araştırmanın örneklemini Denizli İli'nin merkez ve diğer ilçelerinde öğrenim gören 89 kız ve 112 erkek olmak üzere toplam 201 çocuk oluşturmaktadır. Araştırmanın evreni ise Denizli İli'nde eğitim gören 60-72 aylık tüm okul öncesi eğitim öğrencileridir.

Araştırmada veri toplama aracı olarak prososyal davranışların ölçümü için Iannotti'nin (1985) oluşturduğu 13 madde ve Wilby'nin (2005) oluşturduğu 6 maddeden meydana gelen 19 maddelik Olumlu Sosyal (Prososyal) Davranış Ölçeği (Öğretmen Değerlendirmesi) kullanılmıştır. Ölçeğin Türkçeye Uyarlamasını Yağmurlu, Sanson, ve Köymen (2005) yapmıştır. Ölçeğin iç tutarlılık katsayıları, "kendiliğinden" koşulundaki yardım etme için 85, paylaşma için 86, teselli etme için 91 ve işbirliği için 80; "öğretmen istediğinde" koşulundaki yardım etme için 83, paylaşma için 81, teselli etme için 92 ve işbirliği için 75 olarak bulunmuştur. Öğretmen değerlendirmesinde her bir davranış iki kez değerlendirilmektedir. Çocuğun öğretmeni aynı prososyal davranışların düzeyini "kendiliğinden" ne sıklıkta yapıldığı ve "öğretmen istediğinde" ne sıklıkta yapıldığını düşünerek, iki kez değerlendirmektedir. Dolayısıyla bu ölçek dört prososyal davranış kullanılarak (yardımlaşma, paylaşma, işbirliği ve teselli etme) sekiz alt ölçekten oluşmaktadır. 19 maddeden 4'ü yardımlaşma (Ortalığı toplar), 6'sı paylaşma (O an oynamakta olduğu şeyi başka bir çocuğa verir), 5'i teselli etme (Üzüntülü bir çocuğu ya da yetişkini teselli etmek için bir şeyler söyler) ve 4'ü işbirliği (Başka bir çocukla veya sizle işbirliği yapar) davranışlarından oluşmaktadır. Ölçekte 7'li derecelendirme kullanılmıştır (1=hiçbir zaman, 7=her zaman). Ölçekten alınan yüksek puanlar daha fazla prososyal davranışı göstermektedir.

Demografik değişkenlerle ilgili çocukların ailelerinden bilgi toplamak üzere, cinsiyet, annenin çalışıp çalışmaması, anne babanın eğitimi ve ailenin aylık geliri gibi soruların yer aldığı kişisel bilgi formu kullanılmıştır.

BULGULAR

Bu bölümde bulgular ve bulgular ile ilgili yorumlar yer almaktadır.

1) Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların Prososyal Davranış Puanlarının Cinsiyete Göre Farklılığına İlişkin Bulgular

Çocukların cinsiyete göre prososyal davranış puanlarında anlamlı bir fark olup olmadığı bağımsız gruplar t-testi ile test edilmiştir. Bu verilere ait analiz sonuçları Tablo 1 ve Tablo 2'de verilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 1. Çocukların Cinsiyet Değişkenine Göre "Kendiliğinden" Koşulundaki Prososyal Davranış Puanlarına İlişkin t Testi Sonuçları

Bağımlı Değişken	Cinsiyet	N	$\overline{X}$	Ss	t	p
Yardımlaşma	Kız	89	23,61	6,90	2,451	,015
	Erkek	112	21,11	7,40		
İşbirliği	Kız	89	9,51	2,86	1,294	,197
	Erkek	112	8,97	3,02		
Teselli	Kız	89	27,42	8,19	2,178	,031
	Erkek	112	24,95	7,82		
Paylaşma	Kız	89	27,51	8,13	1,688	,093
	Erkek	112	25,59	7,89		

Tablo 1 incelendiğindeçocuklarıncinsiyete göre prososyal davranış puanları arasında"kendiliğinden" koşulundaki yardımlaşma ve teselli etme alt ölçeklerinde anlamlı bir fark bulunurken (t=2,451 ve t=2,178, p<.05), paylaşma ve işbirliği alt ölçeklerinde anlamlı bir fark bulunamamıştır (t= 1,688 ve t=1,294, p>.05).

Tablo 2. Çocukların Cinsiyet Değişkenine Göre "Öğretmen İstediğinde" Koşulundaki Prososyal Davranış Puanlarına İlişkin t Testi Sonuçları

Bağımlı Değişken	Cinsiyet	N	$\overline{X}$	Ss	t	p
Yardımlaşma	Kız	89	29,21	6,13	1,812	,071
	Erkek	112	27,53	6,81		
İşbirliği	Kız	89	11,52	2,71	,919	,359
	Erkek	112	11,16	2,76		
Teselli	Kız	89	33,61	7,62	1,266	,207
	Erkek	112	32,21	7,95		
Paylaşma	Kız	89	34,39	7,68	1,111	,268
	Erkek	112	33,13	8,21		

Tablo 2 incelendiğinde çocuklarıncinsiyete göre prososyal davranış puanları arasında"Öğretmen istediğinde" koşulunda yardımlaşma, paylaşma, işbirliği ve teselli etme alt boyutlarının hiçbirinde anlamlı bir fark bulunamamıştır (t=1,812, t=,919, t=1,266 ve t= 1,111, p>.05).

2) Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların Prososyal Davranış Puanlarının Anne Eğitim Durumuna Göre Farklılığına İlişkin Bulgular

Çocukların Prososyal Davranış Puanlarının annenin eğitim durumuna göre anlamlı bir farklılık gösterip göstermediğini belirlemek için tek yönlü varyans yapılmıştır. Analiz sonuçları Tablo 3 ve Tablo 4'de verilmiştir.

Tablo 3. Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların "Kendiliğinden" Koşulundaki Prososyal Davranış Puanlarının Anne Eğitim Durumuna Göre Farklılığına İlişkin Tek Yönlü Varyans Analizi Sonuçları

	Anne Öğrenim	Varyans Kaynağı	S.d.	Kareler Toplamı	Kareler Ortalaması	F	p	Fark
Yardımlaşma	1.İlkokul 2.Ortaokul 3.Lise 4.Üniversite	Gruplar Arası	3	453,723	151,241	2,939	,034	1-3 / 1-4 2-3 / 2-4
		Gruplar İçi	197	10137,203	51,458			
		Genel	200	10590,925				
İşbirliği	1.İlkokul 2.Ortaokul 3.Lise 4.Üniversite	Gruplar Arası	3	64,251	21,417	2,491	,061	
		Gruplar İçi	197	1693,550	8,597			
		Genel	200	1757,801				
Teselli	1.İlkokul 2.Ortaokul 3.Lise 4.Üniversite	Gruplar Arası	3	626,954	208,985	3,325	,021	1-3 / 1-4 2-3 / 2-4
		Gruplar İçi	197	12380,549	62,845			
		Genel	200	13007,502				
Paylaşma	1.İlkokul	Gruplar Arası	3	528,443	176,148	2,799	,041	1-3 / 1-4

 Copyright © International Conference on New Horizons in Education Conference (INTE)

2.Ortaokul	Gruplar İçi	197	12399,259	62,940		2-3 / 2-4
3.Lise	Genel	200	12927,701			
4.Üniversite						

Tablo 3'deki tek yönlü varyans analizi sonuçları incelendiğinde çocuklarınanne eğitim durumuna göre prososyal davranış puanları arasında "Kendiliğinden" koşulunda yardımlaşma, teselli etme ve paylaşma alt boyutlarında anlamlı bir fark bulunmuştur. İşbirliği alt boyutunda ise anlamlı bir fark bulunamamıştır. Üniversite ve lise mezunu annelerin, ilkokul ve ortaokul mezunu annelere göre "kendiliğinden" koşulundaki yardımlaşma, teselli ve paylaşma alt boyutlarında değişen oranlarda anlamlı düzeyde daha yüksek puanlar aldığı "Scheffe" testi sonuçlarına bakıldığında görülmektedir. (F= 2,939, F= 3,325, F= 2,799, p<.05).

Tablo 4. Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların "Öğretmen İstediğinde" Koşulundaki Prososyal Davranış Puanlarının Anne Eğitim Durumuna Göre Farklılığına İlişkin Tek Yönlü Varyans Analizi Sonuçları

Bağımlı Değişken	Varyans Kaynağı	S.d.	Kareler Toplamı	Kareler Ortalaması	F	p
Yardımlaşma	Gruplar Arası	3	179,628	59,876	1,401	,244
	Gruplar İçi	197	8420,770	42,745		
	Genel	200	8600,398			
İşbirliği	Gruplar Arası	3	23,852	7,951	1,057	,369
	Gruplar İçi	197	1482,476	7,525		
	Genel	200	1506,328			
Teselli	Gruplar Arası	3	301,008	100,336	1,656	,178
	Gruplar İçi	197	11936,574	60,592		
	Genel	200	12237,582			
Paylaşma	Gruplar Arası	3	235,476	78,492	1,235	,298
	Gruplar İçi	197	12521,399	63,560		
	Genel	200	12756,876			

Tablo 4'deki tek yönlü varyans analizi sonuçları incelendiğinde çocuklarınanne eğitim durumuna göre prososyal davranış puanları arasında "Öğretmen İstediğinde" koşulunda yardımlaşma, işbirliği, teselli etme ve paylaşma alt boyutlarında anlamlı bir fark bulunamamıştır (F= 1,401, F=1,057, F= 1,656, F= 1,235, p>.05).

3) Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların Prososyal Davranış Puanlarının Baba Eğitim Durumuna Göre Farklılığına İlişkin Bulgular

Çocukların Prososyal Davranış Puanlarının babaların eğitim durumuna göre anlamlı bir farklılık gösterip göstermediğini belirlemek için tek yönlü varyans yapılmıştır. Analiz sonuçları Tablo 5 ve Tablo 6'da verilmiştir.

Tablo 5. Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların "Kendiliğinden" Koşulundaki Prososyal Davranış Puanlarının Baba Eğitim Durumuna Göre Farklılığına İlişkin Tek Yönlü Varyans Analizi Sonuçları

		Varyans Kaynağı	S.d.	Kareler Toplamı	Kareler Ortalaması	F	p	Fark
Yardımlaşma	1.İlkokul	Gruplar Arası	3	526,108	175,369	3,433	,018	
	2.Ortaokul	Gruplar İçi	197	10064,818	51,090			1-3 / 1-4
	3.Lise	Genel	200	10590,925				2-3 / 2-4
	4.Üniversite							
İşbirliği	1.İlkokul	Gruplar Arası	3	86,811	28,937	3,412	,019	
	2.Ortaokul	Gruplar İçi	197	1670,990	8,482			1-3 / 1-4
	3.Lise	Genel	200	1757,801				2-3 / 2-4
	4.Üniversite							
Teselli	1.İlkokul	Gruplar Arası	3	575,603	191,868	3,040	,030	
	2.Ortaokul	Gruplar İçi	197	12431,900	63,106			1-3 / 1-4
	3.Lise	Genel	200	13007,502				2-3 / 2-4
	4.Üniversite							
Paylaşma	1.İlkokul	Gruplar Arası	3	683,597	227,866	3,666	,013	
	2.Ortaokul	Gruplar İçi	197	12244,105	62,153			1-3 / 1-4
	3.Lise	Genel	200	12927,701				2-3 / 2-4
	4.Üniversite							

Tablo 5'deki tek yönlü varyans analizi sonuçları incelendiğinde çocuklarınbaba eğitim durumuna göre prososyal davranış puanları arasında "Kendiliğinden" koşulunda yardımlaşma, işbirliği, teselli etme ve paylaşma alt boyutlarında anlamlı bir fark bulunmuştur. Üniversite ve lise mezunu babaların, ilkokul ve ortaokul mezunu babalara göre "kendiliğinden" koşulundaki alt boyutlarda değişen oranlarda anlamlı düzeyde daha yüksek puanlar aldığı "Scheffe" testi sonuçlarına bakıldığında görülmektedir (F= 3,433, F= 3,412, F= 3,040, F= 3,666, p<.05).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 6. Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların "Öğretmen İstediğinde" Koşulundaki Prososyal Davranış Puanlarının Baba Eğitim Durumuna Göre Farklılığına İlişkin Tek Yönlü Varyans Analizi Sonuçları

Bağımlı Değişken	Varyans Kaynağı	S.d.	Kareler Toplamı	Kareler Ortalaması	F	p
Yardımlaşma	Gruplar Arası	3	163,013	54,338	1,269	,286
	Gruplar İçi	197	8437,385	42,829		
	Genel	200	8600,398			
İşbirliği	Gruplar Arası	3	31,800	10,600	1,416	,239
	Gruplar İçi	197	1474,528	7,485		
	Genel	200	1506,328			
Teselli	Gruplar Arası	3	208,293	69,431	1,137	,335
	Gruplar İçi	197	12029,289	61,062		
	Genel	200	12237,582			
Paylaşma	Gruplar Arası	3	261,470	87,157	1,374	,252
	Gruplar İçi	197	12495,406	63,428		
	Genel	200	12756,876			

Tablo 6'daki tek yönlü varyans analizi sonuçları incelendiğinde çocuklarınbaba eğitim durumuna göre prososyal davranış puanları arasında "Öğretmen İstediğinde" koşulunda yardımlaşma, işbirliği, teselli etme ve paylaşma alt boyutlarında anlamlı bir fark bulunamamıştır (F= 1,269, F=1,416, F= 1,137, F= 1,374, p>.05).

4) Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların Prososyal Davranış Puanlarının Ailenin Aylık Gelir Durumuna Göre Farklılığına İlişkin Bulgular

Çocukların Prososyal Davranış Puanlarının ailenin aylık gelir durumuna göre anlamlı bir farklılık gösterip göstermediğini belirlemek için tek yönlü varyans analizi yapılmıştır. Analiz sonuçları Tablo 7 ve Tablo 8'de verilmiştir.

Tablo 7. Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların "Kendiliğinden" Koşulundaki Prososyal Davranış Puanlarının Ailenin Aylık Gelir Durumuna Göre Farklılığına İlişkin Tek Yönlü Varyans Analizi Sonuçları

	Aylık Gelir	Varyans Kaynağı	S.d.	Kareler Toplamı	Kareler Ortalaması	F	p	Fark
Yardımlaşma	1. 0-1400 TL	Gruplar Arası	2	576,395	288,197	5,698	,004	1-2
	2.1401-2000 TL	Gruplar İçi	198	10014,531	50,578			1-3
	3.2001 TL ve Üstü	Genel	200	10590,925				
İşbirliği	1. 0-1400 TL	Gruplar Arası	2	90,548	45,274	5,377	,005	1-2
	2.1401-2000 TL	Gruplar İçi	198	1667,253	8,420			1-3
	3.2001 TL ve Üstü	Genel	200	1757,801				
Teselli	1. 0-1400 TL	Gruplar Arası	2	532,423	266,211	4,225	,016	1-2
	2.1401-2000 TL	Gruplar İçi	198	12475,080	63,005			1-3
	3.2001 TL ve Üstü	Genel	200	13007,502				
Paylaşma	1. 0-1400 TL	Gruplar Arası	2	606,247	303,123	4,871	,009	1-2
	2.1401-2000 TL	Gruplar İçi	198	12321,455	62,230			1-3
	3.2001 TL ve Üstü	Genel	200	12927,701				

Tablo 7'deki tek yönlü varyans analizi sonuçları incelendiğinde çocuklarınailenin aylık gelir durumuna göre prososyal davranış puanları arasında "Kendiliğinden" koşulunda yardımlaşma, işbirliği, teselli etme ve paylaşma alt boyutlarında anlamlı bir fark bulunmuştur. Aylık gelir bakımından "1401-2000 TL" ile "2001 TL ve üstü" gelire sahip ailelerin çocukları, "0-1400 TL" gelire sahip olan ailelerin çocuklarından "kendiliğinden" koşulundaki alt boyutlarda değişen oranlarda anlamlı düzeyde daha yüksek puanlar aldığı "Scheffe" testi sonuçlarına bakıldığında görülmektedir (F= 5,698, F= 5,377, F= 4,225, F= 4,871, p<.05).

Tablo 8. Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların "Öğretmen İstediğinde" Koşulundaki Prososyal Davranış Puanlarının Ailenin Aylık Gelir Durumuna Göre Farklılığına İlişkin Tek Yönlü Varyans Analizi Sonuçları

Bağımlı Değişken	Varyans Kaynağı	S.d.	Kareler Toplamı	Kareler Ortalaması	F	p
Yardımlaşma	Gruplar Arası	2	187,064	93,532	2,201	,113
	Gruplar İçi	198	8413,334	42,492		
	Genel	200	8600,398			
İşbirliği	Gruplar Arası	2	28,806	14,403	1,930	,148
	Gruplar İçi	198	1477,522	7,462		
	Genel	200	1506,328			
Teselli	Gruplar Arası	2	135,387	67,694	1,108	,332
	Gruplar İçi	198	12102,195	61,122		

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	Genel	200	12237,582			
Paylaşma	Gruplar Arası	2	128,005	64,003	1,003	,368
	Gruplar İçi	198	12628,870	63,782		
	Genel	200	12756,876			

Tablo 8'deki tek yönlü varyans analizi sonuçları incelendiğinde ailelerin aylık gelir durumuna göre çocuklarınprososyal davranış puanları arasında "Öğretmen İstediğinde" koşulunda yardımlaşma, işbirliği, teselli etme ve paylaşma alt boyutlarında anlamlı bir fark bulunamamıştır (F= 2,201, F=1,930, F= 1,108, F= 1,003, p>.05).

5) Okul Öncesi Eğitim Kurumuna Devam Eden 60-72 Aylık Çocukların Prososyal Davranış Puanlarının Annenin Çalışma Durumuna Göre Farklılığına İlişkin Bulgular

Çocukların Prososyal Davranış Puanlarının annenin çalışma durumuna göre anlamlı bir farklılık gösterip göstermediği bağımsız gruplar t-testi ile test edilmiştir. Bu verilere ait analiz sonuçları Tablo 9 ve Tablo 10'da verilmiştir.

Tablo 9. Çocukların Annelerinin Çalışma Durumuna Göre "Kendiliğinden" Koşulundaki Prososyal Davranış Puanlarına İlişkin t Testi Sonuçları

Bağımlı Değişken	Anne Çalışma	N	$\overline{X}$	Ss	t	p
Yardımlaşma	Çalışıyor	51	23,62	7,92	1,601	,111
	Çalışmıyor	150	21,74	7,00		
İşbirliği	Çalışıyor	51	9,68	3,25	1,320	,188
	Çalışmıyor	150	9,05	2,85		
Teselli	Çalışıyor	51	27,07	9,36	1,055	,293
	Çalışmıyor	150	25,70	7,57		
Paylaşma	Çalışıyor	51	27,41	9,15	,991	,323
	Çalışmıyor	150	26,12	7,62		

Tablo 9 incelendiğinde annenin çalışma durumuna göre çocuklarınprososyal davranış puanları arasında "kendiliğinden" koşulunda yardımlaşma, paylaşma, işbirliği ve teselli etme alt boyutlarının hiçbirinde anlamlı bir fark bulunamamıştır (t=1,601, t=1,320, t=1,055 ve t= ,991, p>.05).

Tablo 10. Çocukların Annelerinin Çalışma Durumuna Göre "Öğretmen İstediğinde" Koşulundaki Prososyal Davranış Puanlarına İlişkin t Testi Sonuçları

Bağımlı Değişken	Anne Çalışma	N	$\overline{X}$	Ss	t	p
Yardımlaşma	Çalışıyor	51	28,74	7,13	,587	,558
	Çalışmıyor	150	28,12	6,36		
İşbirliği	Çalışıyor	51	11,60	2,90	,841	,401
	Çalışmıyor	150	11,23	2,69		
Teselli	Çalışıyor	51	33,27	8,41	,463	,587
	Çalışmıyor	150	32,68	7,63		
Paylaşma	Çalışıyor	51	34,23	8,62	,562	,575
	Çalışmıyor	150	33,50	7,77		

Tablo 10 incelendiğinde annenin çalışma durumuna göre çocuklarınprososyal davranış puanları arasında "öğretmen istediğinde" koşulunda yardımlaşma, paylaşma, işbirliği ve teselli etme alt boyutlarının hiçbirinde anlamlı bir fark bulunamamıştır (t=,587, t=,841, t=,463 ve t= ,562, p>.05).

Tartışma ve Sonuç

Çocukların cinsiyete göre prososyal davranış puanları arasında "kendiliğinden" koşulundaki yardımlaşma ve teselli etme alt ölçeklerinde anlamlı bir fark bulunurken, paylaşma ve işbirliği alt ölçeklerinde anlamlı bir fark bulunamamıştır. Bu araştırmadan elde edilen bulgular ile, Eisenberg ve Fabes'in (1998) yaş ve cinsiyet değişkenlerinin prososyal davranışlar üzerindeki etkisini incelediği araştırmasının bulguları ve Gembeck, Geiger

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ve Crick'in (2005) kızların prososyal davranışlarının ve arkadaşları tarafından tercih edilme oranının erkeklerden daha yüksek olduğu sonucuna ulaştığı araştırma bulguları ile bir tutarlılık gösterdiği görülmektedir.

Çocukların annelerinin eğitim durumuna göre prososyal davranış puanları arasında "kendiliğinden" koşulundaki "yardımlaşma, teselli etme ve paylaşma alt boyutlarında anlamlı bir fark bulunurken işbirliği alt boyutunda anlamlı bir fark bulunamamıştır. Babalarının eğitim durumuna göre prososyal davranış puanları arasında "kendiliğinden" koşulundaki yardımlaşma, işbirliği, teselli etme ve paylaşma alt boyutlarında anlamlı bir fark bulunmuştur. Üniversite ve lise mezunu anne ve babalar, ilkokul ve ortaokul mezunu anne ve babalara göre değişen oranlarda anlamlı düzeyde daha yüksek puanlar almışlardır.Bu araştırmadan elde edilen sonuçların; Günindi'nin (2008) anne ve babaların öğrenim düzeylerinin çocukların sosyal uyum becerilerini olumlu yönde etkilediği yönündeki araştırma bulguları ve Lefebvre ve Merrigan'ın (1998), aile yapısının ve sosyo-ekonomik düzeyin prososyal davranışlarla ilişkilerini inceledikleri araştırmadan elde ettikleri bulgular ile tutarlılık gösterdiği görülmüştür. Diğer taraftan Fletcher, Steinberg, Darling ve Dornbusch (1995) tarafından elde edilen annenin öğrenim düzeyine göre sosyal davranış kalitesinin farklılaşmadığı yönündeki bulgularıyla tutarsızlık gösterdiği çalışmalar da literatürde yer almaktadır.

Çocukların ailelerinin aylık gelir durumuna göre prososyal davranış puanları arasında "kendiliğinden" koşulundaki yardımlaşma, işbirliği, teselli etme ve paylaşma alt boyutlarında anlamlı bir fark bulunmuştur. Aylık gelir bakımından "1401-2000 TL" ile "2001 TL ve üstü" gelire sahip ailelerin çocukları, "0-1400 TL" gelire sahip olan ailelerin çocuklarından değişen oranlarda anlamlı düzeyde yüksek puan almışlardır. Araştırmadan elde edilen sonuçlar Pekdoğan'ın (2011) okul öncesi eğitim kurumuna devam eden beş-altı yaş çocuklardaki sosyal becerileri bazı özellikler açısından incelediği çalışmasının sonuçları ile paralellik göstermektedir.

Annenin çalışma durumuna göre çocukların prososyal davranış puanları arasında yardımlaşma, paylaşma, işbirliği ve teselli etme alt boyutlarının hiçbirinde anlamlı bir fark bulunamamıştır. Bu bulgu, Uzmen ve Mağden'in (2002) çocukların yardım etme ve paylaşma davranışları üzerinde anne-babaların yaşları, öğrenim düzeyleri, mesleklerinin etkili olmadığı yönündeki bulgularla tutarlı, McLyod ve arkadaşlarının (1998) yaptığı ve çalışmayan annelerin çocuklarının sosyal olarak daha yeterli oldukları sonucuna vardığı araştırma bulguları ile tutarsız olduğu gözükmektedir.

Sonuç olarak cinsiyet, anne ve babanın eğitim durumu ve ailenin aylık gelir durumunun çocukların olumlu sosyal (prososyal) davranış sergilemelerinde önemli bir değişken olduğu saptanırken, annenin çalışmasının veya çalışmamasının önemli bir değişken olmadığı yönünde bir sonuca ulaşılmıştır. Bu değişkenler ile ilgili bilgilerin çocukların olumlu sosyal davranışlarını artırmaya yönelik eğitim programları hazırlanırken dikkate alınması bakımından önemli olduğu düşünülmektedir. Bu bağlamda çocukların ve ailelerinin olumlu sosyal davranışlarını geliştirme amaçlı eğitim programları düzenlenebilir. Annenin çalışmasının çocukların olumlu sosyal (prososyal) davranışları üzerinde anlamlı bir etkisinin olmaması, ilk olarak annelerin çocuğuyla geçirdiği zamanın süresinden çok, çocuğuyla geçirdiği zamanın niteliğinin çocukların prososyal davranışları üzerinde daha etkili olduğu düşüncesini akla getirmektedir. Okul öncesi dönem çocuğunun davranışları üzerinde ailesinin çok önemli etkisinin olduğu düşüncesinden hareketle olumlu sosyal davranışlar ve sosyal davranış problemleri konularını içeren, ailelerin bilinçlenme sürecinde faydalı olabilecek anne-baba okulları ve rehberlik hizmetlerinin ülke çapında yaygınlaştırılması için çalışmalar yapılabilir.

KAYNAKLAR

Artan, İ.& Bayhan, P. (2012). *Çocuk Gelişimi ve Eğitimi*. İstanbul: Morpa Yayınları.

Caprara, G.V., Barbaranelli, C., Pastorelli, C., Bandura, A.&Zimbardo, P. G. (2000). *Prosocial foundations of children's academic achievement*. Psychological Science, 11(4), 302-306.

Çağdaş, A.& Seçer, Z. (2005). *Çocuk ve Ergende Sosyal ve Ahlaki Gelişim*. Ramazan ARI (Ed.). Konya: S. Ü M.E. F. Yaşatma ve Geliştirme Vakfı Yayınları.

Eisenberg, N.&Mussen, P. H. (1989). *The Roots of Prosocial Behavior in Children*. U.S.A.: Cambridge University Press.

Fletcher, A. C., Steinberg, L., Darling, N., & Dornbusch, S. M. (1995). The company they keep: Impact of authoritative parenting in the adolescent's social network on individual adjustment and behavior. *Developmental Psychology*, 31, 300-310.

Gembeck, Z. J. M., Geiger, C. T., & Crick, R. N. (2005). Relational and physical aggression, prosocial behavior, and peer relations, gender moderation and bidirectional associations. *Journal of Early Adolescence*, 4, 421-452.

Günindi, N. (2008). *Okul öncesi eğitim kurumlarına devam eden altı yaş çocuklarının sosyal uyum becerileri ile*

anne-babalarının empatik beceriler arasındaki ilişkinin incelenmesi. Yüksek Lisans Tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.

Hay, D. F. (1994). Prosocial development. *Journal of Child Psychology and Psychiatry*, 35(1), 29-71.

Iannotti, R. J. (1985). Naturalistic and structured assessments of prosocial behavior in Preschool children:The influence of empathy and perspective taking. *Developmental Psychology*, 21(1), 46-55.

Krevans, J.& Gibbs, J. C. (1996). Parents' use of inductive discipline: Relations to children's empathy and prosocial behavior. *Child Development*, 67, 3263–3277.

Kim, Y. O. & Stevens, J. H. (1987). The socialization of prosocial behavior in children. Childhood Education, 63 (3), 200-206.

Lefebvre, P. & Merrigan, P. (1998). Family background, family income, maternal work and child development. *Working Paper,* 78, Department of Economics, Quebec a Montreal University.

Mağden, D. &Uzmen, S. (2002). Okulöncesi Eğitim Kurumlarına Devam Eden Altı Yaş Çocuklarının Prososyal Davranışlarının Resimli Çocuk Kitapları İle Desteklenmesi. *Marmara Üniversitesi Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 15, 193-212.

McLoyd, V. C. (1998). Socioeconomic disadvantage and child development.*American Psychologist*, 53, 185-204.

Pekdoğan, S. (2011). *Okul Öncesi Eğitim Kurumuna Devam Eden Beş-Altı Yaş Çocuklardaki Sosyal Becerilerin Bazı Özellikler Açısından İncelenmesi*. Yüksek Lisans Tezi, Malatya: İnönü Üniversitesi Eğitim Bilimleri Enstitüsü.

Öztürk, M. O. (1997). *Ruh Sağlığı ve Bozuklukları*. Ankara: Medikomat Hekimler.

Trawick – Smith, J. (2014). *Erken Çocukluk Döneminde Gelişim* (B. Akman, Çev.). Ankara: Nobel.

Uzmen, S. & Mağden, D. (2002). Okul öncesi eğitim kurumlarına devam eden altı yaş çocuklarının prososyal davranışlarının resimli çocuk kitapları ile desteklenmesi. *Marmara Üniversitesi, Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi,* 15, 193-212.

Wilby, A. (2005). The role of parenting and child temperament in the development of prosocial and empathic behaviour in preschool children: *A follow-up study*. La Trobe University.

Wolff, S. (2004). *Problem Çocuklar* (A. Oral-S.Kara, Çev.). İstanbul: Say.

Yağmurlu, B., Sanson, A., & Köymen, S. B. (2005). Ebeveynlerin ve çocuk mizacının olumlu sosyal davranış gelişimine etkileri: Zihin kuramının belirleyici rolü. *Türk Psikoloji Dergisi*, *20*(55), 1-20.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

OKUL REHBER ÖĞRETMENLERİNİN (OKUL PSİKOLOJİK DANIŞMANI) OKULDA EN SIK KARŞILAŞTIĞI SORUNLAR

Zeynep KARATAŞ
Education Faculty , Educational Sciences Department
Mehmet Akif Ersoy University, Türkiye

Özlem TAGAY
Education Faculty , Educational Sciences Department
Mehmet Akif Ersoy University, Türkiye

Çalışmanın amacı okul rehber öğretmenlerinin okulda en sık karşılaştığı sorunları saptamaktır. Çalışma farklı okul türlerinde çalışan 72 okul rehber öğretmeni ile gerçekleştirilmiştir. Çalışmaya katılan rehber öğretmenlerden 16'sı anaokulunda, 18'i ilkokulda, 18'i ortaokulda, 20'si lisede çalışmaktadır. Çalışma araştırmacılar tarafından hazırlanmış yarı yapılandırılmış görüşme formu aracılığı ile gerçekleştirilen nitel araştırma yöntemlerinden görüşmenin kullanıldığı olgu bilimi (fenomonolojik) içeren nitel bir çalışmadır. Çalışmanın verileri içerik analizi ile çözümlenmiştir. Çalışmanın bulguları incelendiğinde *anaokulunda* karşılaşılan sorunların frekans ve yüzde değerleri incelendiğinde en yüksek değere sahip sorunların %81.25 ile iletişim sorunları, arkadaş ilişkileri, gelişimsel sorunlar olduğu görülmektedir. Daha sonra sırasıyla %75 ile okula uyum problemleri, olumsuz ana baba tutumları olduğu görülmektedir. *İlkokulda* karşılaşılan en yüksek değere sahip sorunların %83,33 ile saldırganlık: Fiziksel ve sözel saldırganlık, (küfür etme, sataşma), alay etme, dışlama (dolaylı saldırganlık), istismar (fiziksel ve sözel istismar), kavga, küfür, şiddet içerikli davranışlar olduğu görülmektedir. *Ortaokulda* karşılaşılan en yüksek değere sahip sorunların %77,77 ile internet ve sosyal medya bağımlılığı olduğu görülmüştür. Daha sonra sırasıyla, %72,22 ile kişilerarası iletişim sorunları, doğru çalışma alışkanlıklarını bilememe olmuştur. *Lisede* en yüksek değere sahip sorunların %80 ile kişilerarası iletişim sorunları: İletişim problemleri, öğretmenle iletişim sorunu, ergenlik sorunları, problem davranışlar, teknoloji bağımlılığı, doğru çalışma alışkanlıklarını bilememe olduğu görülmektedir. Çalışmanın sonucunda ise bulgular alan yazın ışığında tartışılmış ve çeşitli öneriler sunulmuştur.

Anahtar Sözcükler: Okul, okul psikolojik danışmanı, psikolojik danışma

PROBLEMS MOST FREQUENTLY ENCOUNTERED IN SCHOOL BY SCHOOL COUNSELOR

ABSTRACT
The aim of this research is to determine most common problems encountered in school by school counselors. The research was carried out with 72 school counselors working in different types of school. Among school counselors participated in the research, 16 of them work in kindergarten, 18 of them in primary school, 18 of them in the secondary school and 20 of them work in the high school. The research is a qualitative study containing phenomenology in which interview method was used among qualitative research methods carried out through semi-structured interview form prepared by researchers. Research data was analyzed using the content analysis. Analyzing the research findings and analyzing the frequency and percentage values encountered in *kindergarten*, problems with the highest value were observed as communication problems, friendly relations, and developmental problems with the value of 81.25%. Then, school adjustment problems and negative parental attitudes with a value of 75% were observed respectively. It was observed that problems encountered in *elementary school* with the highest value were aggression with 83.33%: Physical and verbal aggression (swearing, bullying), teasing, exclusion (indirect aggression), abuse (physical and verbal abuse), fighting, and violent behaviors containing violence and swearing. It was observed that problems encountered in *secondary school* with the highest value were the Internet and social media addiction with a rate of 77.77%. Then, interpersonal communication problems and failure in knowing correct study habits with a rate of 72.22% were observed. It was observed that problems encountered in *high school* with the highest value were interpersonal communication problems with a rate of 80%: Communication problems, teacher communication problem, puberty problems, problematic behaviors, technology addiction, and failure in knowing correct study habits. Consequently, findings were discussed in consideration of the field literature, and various suggestions were prepared.

Keywords: School, School counselor, Counseling

 Copyright © International Conference on New Horizons in Education Conference (INTE)

GİRİŞ

Psikolojik danışma ve rehberlik (PDR), bir insanın başka bir insana ya da gruba, insanların kendilerini gerçekleştirmelerine en elverişli yolları bulabilmeleri için yapılan yardımlardır (Baymur, 1975). Tan (2000) PDR'yi bireyin gelişmesi ve doyum verici uyumlar sağlamasında gerekli olan seçimleri, yorumları, plânları yapmasına ve kararları vermesine yarayacak bilgi ve becerileri kazanması ve ulaştığı bu seçim ve kararları uygulaması için kişiye yapılan sistemli ve profesyonel yardım olarak tanımlamıştır. Kepçeoğlu (1999)'na göre PDR bireyin kendini anlaması, problemlerini çözmesi, gerçekçi kararlar alması, kapasitesini geliştirmesi, çevresine dengeli ve sağlıklı bir uyum yapması ve böylece kendini gerçekleştirmesi için uzman kişilerce bireye yapılan psikolojik yardımlardır. PDR hizmetlerine ilişkin tanımların genelde bireyin kendini anlaması, gerçekçi hedefler belirleyip gerçekçi kararlar alması ve kendini gerçekleştirmesi üzerinde birleştiği görülmektedir. Ayrıca rehberlik ve psikolojik danışma kavramının bireylerin verimli ve mutlu yaşayabilmeleri ve sosyal yaşamlarına uyumlu olabilmelerine yardımda birleştiği de gözlenmektedir (Colombia Electronic Encyclopedia, 2013).

Öğrenciler okulda kişisel, eğitsel ve mesleki alanlarda yardıma ihtiyaç duymaktadırlar. Öğrenciler karşılaştıkları sorunlarla başa çıkamayabilirler ve başa çıkma konusunda profesyonel yardıma ihtiyaç duyabilirler. Okullarda bu yardım psikolojik danışma ve rehberlik hizmetleri altında okul psikolojik danışmanlarının çalışmaları ile yürütülmektedir (Yüksel-Şahin, 2008). Okullarda psikolojik danışma ve rehberlik hizmetleri öğrencilerin tam olarak her yönüyle gelişmesini ve öğrencilerin kendini gerçekleştirmesini amaçlamaktadır. (Yeşilyaprak, 2013). Myrick (1994) psikolojik danışma ve rehberlik hizmetlerinin çare bulucu-iyileştirici, krize müdahale edici, gelişimsel ve önleyici olmak üzere dört temel yaklaşımından bahsetmektedir. Son yıllarda okullarda yürütülen rehberlik ve psikolojik danışma hizmetleri incelendiğinde ise daha çok gelişimsel ve önleyici hizmetlerin öne çıktığı görülmektedir.

Okul rehber öğretmenlerinin okullardaki rehberlik ve psikolojik danışman hizmetlerinin uygulayıcısı olduğu düşünüldüğünde bireylerin gerçekçi kararlar almalarında ve nihayet kendilerini gerçekleştirebilmelerinde okuldaki var olan sorunları görebilmesi ve en çok hangi sorunla karşılaştığını fark etmesi hizmeti planlama açısından oldukça önemlidir. Hizmeti planlarken sadece okuldaki sorunlardan değil ayrıca PDR hizmetinin yürütülmesine yönelik yönetmelikten faydalanılmaktadır. Bu yönetmelikte hizmetin uygulanması ile ilgili her türlü usul ve esaslar belirtilmiştir.

Türkiye'de okullarda PDR hizmetleri 2524 sayılı Tebliğler Dergisinde yayınlanan Millî Eğitim Bakanlığı Rehberlik ve Psikolojik Danışma Hizmetleri Yönetmeliği (2001) çerçevesinde yürütülmektedir. Bu yönetmeliğin amacı, il/ilçe düzeyinde PDR hizmetlerinin ve bu hizmetlerin verildiği rehberlik ve araştırma merkezleri ile eğitim-öğretim kurumlarındaki PDR servislerinin kuruluş ve işleyişine ilişkin esasları düzenlemektir. PDR Hizmetleri Yönetmeliğinde PDR hizmetlerinin okul öncesi, ilköğretim ve ortaöğretim kurumlarında yürütüldüğü belirtilmektedir. Ayrıca yönetmelikte okul rehber öğretmenlerinin görev tanımı yapılmış bu görev tanımında PDR hizmeti ile ilgili araştırmalar yapmak, sonuçlarından faydalanmak, formasyonu uygunsa öğrencilere psikolojik danışma yapmak, çeşitli bireyi tanıma teknikleri uygulayarak sonuçlarından faydalanmak, çeşitli konferans ve seminerler düzenlemek gibi çeşitli görevleri sıralanmıştır (Tebliğler Dergisi, 2001). Bu görevleri yaparken öğrencilerden gelen sorunlar PDR hizmetini planlamada oldukça önemlidir. Bu sorunların eğitim kademelerine göre farklılaşıp farklılaşmadığının bilinmesi de hizmetin sunulmasında son derece önemlidir. Okullarda okul rehber öğretmenlerinin en sık karşılaştığı sorunların belirlenmesi önleyici rehberlik açısından da oldukça önemlidir. Sorun oluşmadan sorunu önlemek için öğrencilere çeşitli seminerler ve konferanslar planlanabilir. Bu doğrultuda bu çalışmanın amacı okul rehber öğretmenlerinin okullarda en sık karşılaştığı sorunların saptanmasıdır.

YÖNTEM

Bu çalışmada nitel araştırma desenlerinden olgu bilim kullanılmıştır. Nitel araştırma, gözlem, görüşme ve doküman analizi gibi nitel veri toplama yöntemlerinin kullanıldığı, algıların ve olayların doğal ortamda gerçekçi ve bütüncül bir biçimde ortaya konmasına yönelik bir sürecin izlendiği araştırma türüdür. Olgu bilim deseni, farkında olduğumuz ancak derinlemesine ve ayrıntılı bir anlayışa sahip olmadığımız olgulara odaklanmaktadır. Olgu bilim araştırmalarında veri kaynakları araştırmanın odaklandığı olguyu yaşayan ve bu olguyu dışa vurabilecek veya yansıtabilecek bireyler ya da gruplardır (Yıldırım ve Şimşek, 2006).

Katılımcılar

Çalışma farklı okul türlerinde çalışan 72 okul rehber öğretmeni ile gerçekleştirilmiştir. Çalışmaya katılan okul rehber öğretmenlerinden 45'i kadın, 27'si erkek, 16'sı anaokulunda, 18'i ilkokulda, 18'i ortaokulda, 20'si lisede çalışmaktadır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Veri Toplama Aracı
Çalışmada verileri toplamak amacıyla, okul rehber öğretmenlerinden okulda en sık karşılaştıkları sorunlara yönelik görüşlerinin alınması amacıyla yarı yapılandırılmış görüşme formu hazırlanmıştır. Görüşme formundaki sorulara, biri Niğde Üniversitesi, diğer ikisi Mehmet Akif Ersoy Üniversitesi Psikolojik Danışma ve Rehberlik Anabilim dalında görev yapan üç öğretim üyesinin görüşleri alınarak son hali verilmiştir.

Verilerin Toplanması ve Analizi
Çalışmada gönüllülük esası dikkate alınmıştır. Görüşmeler için bir yönerge hazırlanmış, yönergede araştırmanın amacı ve çalışmanın nasıl gerçekleştirileceği açık bir şekilde belirtilmiştir. Ayrıca görüşmelerde katılımcıların kimliklerinin de saklı tutulacağı vurgulanmıştır. Görüşmeler, iki araştırmacı tarafından ayrı ayrı yapılmış ve sorulara verilen cevaplar görüşme anında yazılarak kaydedilmiştir. Görüşmeler, yaklaşık 15 ile 20 dakika arasında sürmüştür.

Olgu bilim araştırmalarında veri analizi, yaşantıları ve anlamları çıkarmaya yöneliktir. Bu amaçla yapılan içerik analizinde verinin kavramsallaştırılması ve olguyu tanımlayabilecek temaların ortaya çıkarılması çabası vardır. Sonuçlar betimsel bir anlatım ile sunulur ve sık sık doğrudan alıntılara yer verilir. Bunun yanında ortaya çıkan temalar ve örüntüler çerçevesinde elde edilen bulgular açıklanır ve yorumlanır (Yıldırım ve Şimşek, 2006). Bu nedenlerle bu araştırmada, verilerin analizinde içerik analizi yöntemi kullanılmıştır. Bu amaçla toplanan veriler, önce kavramsallaştırılmış daha sonra da ortaya çıkan kavramlara göre mantıklı bir biçimde düzenlenmiş ve buna göre veriyi açıklayan temalar saptanmıştır. Bu doğrultuda veriler dört aşamada analiz edilmiştir. Bu aşamalar: Verilerin kodlanması, temaların belirlenmesi, kodların ve temaların düzenlenmesi, bulguların tanımlanması ve yorumlanmasıdır. Araştırmada veriler her iki araştırmacı tarafından önce ayrı ayrı sonra bir araya gelerek analiz edilmiştir. Araştırmacılar tarafından elde edilen kodlar tekrar gözden geçirilerek, ortak temalar altında toplanmıştır. Araştırmacılar arasındaki kodların uyuşma tutarlığı ise .89 olarak saptanmıştır.

BULGULAR

Anaokulunda en çok karşılaştığınız sorunlar hangileridir? Sorusu çalışmaya katılan okul öncesi eğitim kurumlarında çalışan 16 okul rehber öğretmenine (okul psikolojik danışmanlarına) sorulmuş verdikleri cevapların frekans ve yüzde değerleri Tablo 1'de gösterilmiştir.

Tablo 1. Anaokulunda karşılaşılan sorunların frekans ve yüzde değerleri (n=16)

Alanlar	Sorunlar	f	%
Kişisel Problem Alanı	Ayrılma kaygısı	8	50
	İletişim sorunları (iletişim kurmada zorluk)	13	81,25
	Kişisel bakım becerileri eksikliği	9	56,25
	Arkadaş ilişkileri (Oyun kurma, oynama, sürdürme)	13	81,25
	Tablet, cep telefonu, TV bağımlılığı vs.	5	31,25
	Gelişimsel sorunlar (el göz koordinasyonu ve dil gelişimi becerileri sorunları…)	13	81,25
	Korkular	8	50
	Alt ıslatma	6	37,5
	Isırma, tükürme	7	43,75
	Parmak emme	4	25
	Sosyal beceri ile ilgili sorunlar	8	50
Eğitsel Problem Alanı	Okul korkusu	9	56,25
	Okula uyum problemleri	12	75
	Kurallara uymama	8	50
Diğer Problemler	Aile içi iletişim problemleri ve aile içi şiddet	8	50
	Boşanma	7	43,75
	Olumsuz ana baba tutumları (Baskıcı, ilgisiz, mükemmeliyetçi, tutarsız, kuralsız, gevşek aile tutumları)	12	75
	Özel eğitime gereksinimi olan çocukların ve ailelerinin sorunları (Zihinsel, fiziksel, işitsel problemler)	10	62,5
	Okulun fiziki koşullarının uygunsuzluğu (Bireysel görüşme ve test odası olmaması)	5	31,25

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	Çalışan ana babanın çok vakit ayıramaması	10	62,5
	Olumsuz bakıcı tutumları	7	43,75
	Okulda öğretmen veli ilişkisinin uygun olmaması	5	31,25
	Velinin kurumdan beklentilerinin farklı olması	7	43,75
	Yardımcı personelle yaşanan sorunlar (mesleki yetersizlik, iletişim problemleri)	6	37,5
	Sınıf mevcudunun kalabalık olması	6	37,5
	Okul öncesi öğretmenlerinin nitelik sorunu	7	43,75
	Okul öncesi kurumlarda rehberlik için gerekli program ve malzeme eksikliği, var olan rehberlik yaklaşımının ilkokul ve daha büyük öğrencilere yönelik olması	12	75
	Okul rehber öğretmeni ve okul öncesi öğretmeninin koordinasyon problemleri	6	37,5
	Okul öncesi öğretmenlerinin değişime açık olmamaları	5	31,25

Tablo 1'deki anaokulunda karşılaşılan sorunların frekans ve yüzde değerleri incelendiğinde en yüksek değere sahip sorunların %81.25 ile iletişim sorunları (iletişim kurmada zorluk), arkadaş ilişkileri (oyun kurma, oynama, sürdürme), gelişimsel sorunlar (el göz koordinasyonu ve dil gelişimi becerileri sorunları…) olduğu görülmektedir. Daha sonra sırasıyla %75 ile okula uyum problemleri, olumsuz ana baba tutumları (baskıcı, ilgisiz, mükemmeliyetçi, tutarsız, kuralsız, gevşek aile tutumları), okul öncesi kurumlarda rehberlik için gerekli program ve malzeme eksikliği, var olan rehberlik yaklaşımının ilkokul ve daha büyük öğrencilere yönelik olması olduğu görülmektedir. Özel eğitime gereksinimi olan çocukların ve ailelerinin sorunları (zihinsel, fiziksel, işitsel problemler) ile çalışan ana babanın çocuğa ve okula çok vakit ayıramaması sorunlarının ise %62,5 yüzde değerine sahip olduğu görülürken, %56,25 ile kişisel bakım becerileri eksikliği ile okul korkusu olduğu görülmektedir. Ayrılma kaygısı, korkular, kurallara uymama, sosyal beceri ile ilgili sorunlar, aile içi iletişim problemleri ve aile içi şiddet sorunlarının ise %50 değere sahip oldukları görülmektedir. Tabloda görüldüğü gibi en az belirtilen sorunlar ise %25 ile parmak emme olurken, %31,25 ile tablet, cep telefonu, TV bağımlılığı vs., okulun fiziki koşullarının uygunsuzluğu (bireysel görüşme ve test odası olmaması), okulda öğretmen veli ilişkisinin uygun olmaması, okul öncesi öğretmenlerinin değişime açık olmamaları olarak sıralanmaktadır. Çalışmaya katılan katılımcıların ifadelerinden birkaçı aşağıda sunulmuştur.

K5 (K): "*Benim anaokulunda genel karşılaştığım problemler; özellikle sene başlarında okul korkusu, aileden ayrılma korkusu ve okula uyum sorunlarıdır. Daha sonra aile içi sorunlardan (ebeveynler arası kavga, şiddet, ayrılma) kaynaklı problemler gelmektedir. Ailenin çocukla iletişimindeki hatalardan, yanlış aile tutumlarından (baskıcı-otoriter, umursamayan-gevşek, mükemmeliyetçi, tutarsız aile tutumları) kaynaklı problemler, özel eğitime ihtiyacı olan çocukların ve ailelerin problemleridir.*"

K8 (E): *"Çocuğun isteksiz oluşu, tanımadığı kişilerle iletişim kurma konusunda sıkıntı yaşaması, psiko-motor becerilerinde görülen problemler en çok karşılaşılan problemlerdir. Ayrıca mevcut rehberlik anlayışı gelişimsel rehberliği gerekli kılan bu yaş dönemine uygun olmadığını düşünüyorum. Yeterli doküman ve materyal olmaması da sorundur. "*

İlkokulda en çok karşılaştığınız sorunlar hangileridir? Sorusu çalışmaya katılan ilkokulda çalışan 18 okul rehber öğretmenine (okul psikolojik danışmanlarına) sorulmuş verdikleri cevapların frekans ve yüzde değerleri Tablo 2'de gösterilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 2. İlkokulda karşılaşılan sorunların frekans ve yüzde değerleri (n=18)

Alanlar	Sorunlar	f	%
Kişisel Problem Alanı	Saldırganlık: Fiziksel ve sözel saldırganlık, (küfür etme, sataşma), Alay etme, dışlama (dolaylı saldırganlık), istismar (fiziksel ve sözel istismar), kavga, küfür, şiddet içerikli davranışlar	15	83,33
	Akran zorbalığı	10	55,55
	Cinsel istismara uğrama	5	27,7
	Kaygı, sosyal kaygı	6	33,33
	Özgüven ve benlik saygısı ile ilgili sorunlar	8	44,44
	Utangaçlık		
	Teknoloji bağımlılığı, PC, tablet, akıllı telefon uygunsuz kullanımı	9	50
	Kaynaştırılan öğrencilerle yaşanan sorunlar,	5	27.7
	Dikkat eksikliği ve hiperaktivite, öğrenme güçlükleri	4	22,22
	Problem davranışlar (Tırnak yeme, yalan söyleme, çalma, eşyaları kaybetme)	10	55,55
	Sosyal beceri ile ilgili sorunlar	10	55,25
Eğitsel Problem Alanı	Sınav kaygısı	9	50
	Okula uyum problemleri, okul kurallarına uymama	5	27,7
	Doğru çalışma alışkanlıklarının olmaması, hedefsiz ve plansız çalışma, ödev yapmama	6	33,33
Mesleki Problem Alanı	Geleceğe yönelik meslek hedefinin olmaması,	3	16,66
	Meslek seçimi konusunda kararsızlık	3	16,66
Diğer Problemler	Parçalanmış aile	5	27,7
	BEP hazırlama konusundaki bilgi yetersizliği	8	44,44

Tablo 2'de görüldüğü gibi ilkokulda karşılaşılan sorunların frekans ve yüzde değerleri incelendiğinde en yüksek değere sahip sorunların %83,33 ile saldırganlık: Fiziksel ve sözel saldırganlık, (küfür etme, sataşma), alay etme, dışlama (dolaylı saldırganlık), istismar (fiziksel ve sözel istismar), kavga, küfür, şiddet içerikli davranışlar olduğu görülmektedir. Daha sonra sırasıyla sorunlar %55,55 ile akran zorbalığı, sosyal beceri ile ilgili sorunlar ve problem davranışlar (tırnak yeme, yalan söyleme, çalma, eşyaları kaybetme) iken, %50 ile teknoloji bağımlılığı, Pc, tablet, akıllı telefon uygunsuz kullanımı ve sınav kaygısı olmuştur. En düşük yüzdeye sahip sorunlar ise sırasıyla, %16,66 ile geleceğe yönelik meslek hedefinin olmaması, meslek seçimi konusunda kararsızlık olurken, %22,22 ile dikkat eksikliği ve hiperaktivite, öğrenme güçlükleri olmuştur. Çalışmaya katılan katılımcıların ifadelerinden birkaçı aşağıda sunulmuştur.

K7 (K): *"Sınav kaygısı, ebeveynlerin sigara bağımlılığından dolayı öğrencinin duyduğu rahatsızlık, aşırı heyecandan derste söz almaktan çekinme, utanma, yeteri kadar çalıştığını düşünmesine rağmen sınavda başarılı olamama gibi sorunlarla öğrenci kendisi gelirken, öfke problemleri, cinsel istismar, akran zorbalığı, tırnak yeme, şiddet eğilimi, hiperaktivite, dikkat eksikliği, kurallara uymada sıkıntı ve teknoloji bağımlılığı (PC, tablet, akıllı telefon vs.) gibi sorunlarla öğretmen, veli yönlendirmesi ile öğrenciler rehberlik servisine başvurmaktadırlar."*

K3 (K): *"Öğrencilerde yaygın olarak gözlenen sorunlar şiddet içerikli davranışlar, argo ve küfürlü konuşma, dikkat eksikliği, hiperaktivite, öğrenme problemleri, doğru çalışma alışkanlığının olmaması, hedefsiz ve plansız çalışma, geleceğe yönelik meslek hedefinin olmaması, başarısız öğrencilerde meslek seçimi konusunda kararsızlık ya da hiç hedeflerinin olmamasıdır."*

Ortaokulda en çok karşılaştığınız sorunlar hangileridir? Sorusu çalışmaya katılan ortaokulda çalışan 18 okul rehber öğretmenine (okul psikolojik danışmanlarına) sorulmuş verdikleri cevapların frekans ve yüzde değerleri Tablo 3'de gösterilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 3. Ortaokulda karşılaşılan sorunların frekans ve yüzde değerleri (n=18)

Alanlar	Sorunlar	f	%
Kişisel Problem Alanı	Kişilerarası iletişim sorunları: İletişim sorunları, karşı cinsle iletişim problemleri, kız erkek arkadaşlığı problemleri, öğretmene aşık olma vs.	13	72,22
	Saldırganlık: Sataşma, dışlanma, küfür etme, alay etme, öfke kontrol güçlüğü	12	66,66
	Ergenlik sorunları	11	61,11
	Problem davranışlar: Sigara kullanımı, okuldan kaçma, madde kullanımı (sigara, bully, çakmak gazı), çalma davranışı, uygunsuz fotoğraf paylaşımı	12	66,66
	Yakınların kaybı (Anne-baba-kardeş-yakın akraba-yakın arkadaş)	7	38,88
	İnternet, sosyal medya bağımlılığı	14	77,77
	Kıskançlık: Arkadaş, kardeş kıskançlığı	7	38,88
	Akran baskısı, zorbalığı	5	27,77
	Cinsel istismar	5	27,77
Eğitsel Problem Alanı	Sınav Kaygısı: Okuldaki sınavlar, genel sınavlar ve TEOG sınavı	12	66,66
	Doğru çalışma alışkanlıklarını bilememe: Verimli ders çalışma yollarını bilememe, akademik başarısızlık	13	72,22
	Okula uyum sorunları, okuldan kaçma	7	38,88
	Bir üst öğrenim kurumu seçme konusunda kararsızlık	10	55,55
Mesleki Problem Alanı	Mesleki amaç ve hedef belirleyememe	9	50
	Meslek seçimi konusunda karar verememe	9	50
Diğer Problemler	Aileden kaynaklanan problemler: Olumsuz ana baba tutumları	8	44,44
	Aile desteği eksikliği	5	27,77

Tablo 3'de görüldüğü gibi ortaokulda karşılaşılan sorunların frekans ve yüzde değerleri incelendiğinde en yüksek değere sahip sorunların %77,77 ile internet ve sosyal medya bağımlılığı olduğu görülmüştür. Daha sonra sırasıyla, %72,22 ile kişilerarası iletişim sorunları: Karşı cinsle iletişim problemleri, kız erkek arkadaşlığı problemleri, iletişim problemleri, öğretmene aşık olma vs., doğru çalışma alışkanlıklarını bilememe: Verimli ders çalışma yollarını bilememe, akademik başarısızlık, %66,66 ile Saldırganlık: Sataşma, dışlanma, küfür etme, alay etme, öfke kontrol güçlüğü, problem davranışlar: Sigara kullanımı, okuldan kaçma, madde kullanımı (sigara, bally, çakmak gazı), çalma davranışı, uygunsuz fotoğraf paylaşımı, sınav Kaygısı: Okuldaki sınavlar, genel sınavlar ve TEOG sınavı, %61,61 ile ergenlik sorunları, %55,55 ile bir üst öğrenim kurumu seçme konusunda kararsızlık olmuştur. En düşük yüzdeye sahip sorunlar ise sırasıyla, %27,27 ile akran baskısı, akran zorbalığı, cinsel istismar ve aile desteği eksikliği olmuştur. Çalışmaya katılan katılımcıların ifadelerinden birkaçı aşağıda sunulmuştur.

K12 (E): *"Arkadaş ilişkileri, kız erkek arkadaşlığı problemleri, iletişim problemleri, kavga, şiddet, sataşmalar, amaç ve hedef belirleyememe, ders çalışma problemleri, problemli sosyal medya kullanımı, sosyal medya, internet bağımlılığı, üst sınıflarda sigara kullanımı ve okuldan kaçma, aile desteği eksikliği görülmektedir."*

K1 (K): *"Üst sınıflarda ergenlik sorunları, sınav kaygısı en fazla görülürken daha alt sınıflarda arkadaşlık ilişkileri, verimli ders çalışma yollarını bilememe ve okula uyum problemleri yaşanmaktadır."*

Lisede en çok karşılaştığınız sorunlar hangileridir? Sorusu çalışmaya katılan lisede çalışan 20 okul rehber öğretmenine (okul psikolojik danışmanlarına) sorulmuş verdikleri cevapların frekans ve yüzde değerleri Tablo 4'de gösterilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 4. Lisede karşılaşılan sorunların frekans ve yüzde değerleri (n=20)

Alanlar	Sorunlar	f	%
Kişisel Problem Alanı	Kişilerarası iletişim sorunları: İletişim problemleri, öğretmenle iletişim sorunu	16	80
	Ergenlik sorunları: Karşı cinsle arkadaşlık problemleri, kız erkek arkadaşlığı, öğretmene aşık olma, yaşça büyük kişilere aşık olma	16	80
	Problem davranışlar: Okuldan kaçma, okulu bırakma, sigara, alkol, kopya çekme, sınıf düzenini bozma, okul kurallarına uymama, kendine zarar verme, intihar girişimi	16	80
	Teknoloji bağımlılığı: Telefon ve sosyal paylaşım sitesini fazla kullanım	16	80
	Öfke kontrol problemleri	12	60
	Akran zorbalığı	7	35
	Akran baskısı	7	35
	Saldırganlık	9	45
	Cinsel istismar	7	35
Eğitsel Problem Alanı	Doğru çalışma alışkanlıklarını bilememe: Nasıl ders çalışacağını bilememe, derse adapte olamama, motivasyon, etkili dinlememe, derse karşı ilgisizlik, plansız programsız çalışma	16	80
	Okula uyum problemleri	10	50
	Okula devamsızlık problemleri	5	25
	Sınav kaygısı: Okul sınavları ve genel yerleştirme sınavları	13	65
	Alan seçimini koşunda kararsızlık	8	40
	Alan seçimi sorunları (kendi seçmek istediği alanla ailesinin isteği arasında tutarsızlık, arkadaş baskısı ile alan seçme)	6	30
Mesleki Problem Alanı	Meslek seçimi ile ilgili yaşanan sorunlar: Meslek seçimi konusunda kararsızlık, meslekler hakkında bilgi yetersizliği, kendi istediği meslekle ailesinin isteği arasında tutarsızlık	12	60
	Mesleki gelecek kaygısı	5	25
Diğer Problemler	Aileden kaynaklanan problemler: Uygun olamayan ana baba tutumları, Aile içi iletişimsizlik, babanın otoriter olması, ailenin ergenlik dönemine ilişkin bilgi eksikliği, ailenin ergenin arkadaş seçiminden memnun olmaması, ergenin kısıtlanması, aile baskısı,	14	70
	Boşanma, parçalanmış aile	8	40
	Aile içi şiddet	7	35
	Okuldan kaynaklanan problemler: Olumsuz öğretmen tutumları ve davranışları, ders işlemede yaşanan sıkıntılar	10	50

Tablo 4'de görüldüğü gibi lisede karşılaşılan sorunların frekans ve yüzde değerleri incelendiğinde en yüksek değere sahip sorunların %80 ile kişilerarası iletişim sorunları: İletişim problemleri, öğretmenle iletişim sorunu, ergenlik sorunları: Karşı cinsle arkadaşlık problemleri, kız erkek arkadaşlığı, öğretmene aşık olma, yaşça büyük kişilere aşık olma, problem davranışlar: Okuldan kaçma, okulu bırakma, sigara, alkol, kopya çekme, sınıf düzenini bozma, okul kurallarına uymama, kendine zarar verme, intihar girişimi, teknoloji bağımlılığı: Telefon ve sosyal paylaşım sitesini fazla kullanım, doğru çalışma alışkanlıklarını bilememe: Nasıl ders çalışacağını bilememe, derse adapte olamama, motivasyon, etkili dinlememe, derse karşı ilgisizlik, plansız programsız çalışma olduğu görülmektedir. Daha sonra %70 ile Aileden kaynaklanan problemler: Uygun olamayan ana baba tutumları, aile içi iletişimsizlik, babanın otoriter olması, ailenin ergenlik dönemine ilişkin bilgi eksikliği, ailenin ergenin arkadaş seçiminden memnun olmaması, ergenin kısıtlanması, aile baskısı olduğu görülmektedir. Sonra sırasıyla, %65 ile sınav kaygısı: Okul sınavları ve genel yerleştirme sınavlarında yaşanan sorunlar, %60 ile öfke kontrol problemleri, Meslek seçimi ile ilgili yaşanan sorunlar: Meslek seçimi konusunda kararsızlık, meslekler hakkında bilgi yetersizliği, kendi istediği meslekle ailesinin isteği arasında tutarsızlık olduğu görülmektedir. En

 Copyright © International Conference on New Horizons in Education Conference (INTE)

düşük yüzdeye sahip sorunla arasında ise %25 ile okula devamsızlık problemleri ve mesleki gelecek kaygısı yer almaktadır. Çalışmaya katılan katılımcıların ifadelerinden birkaçı aşağıda sunulmuştur.

K18 (K): *"Ergenlik problemleri, arkadaş ilişkilerinde yaşanan problemler, kız erkek arkadaşlığı problemleri, duygusal problemler, doğru çalışma alışkanlıklarını bilememe, alan bölüm ve meslek seçiminde kararsızlık, aile ilişkilerinde yaşanan sorunlar, olumsuz ana baba tutumları, aile ve arkadaş şiddeti, uygunsuz sosyal medya kullanımı ya da bağımlılığı, okuldan kaçma, sigara kullanımı en çok karşılaşılan sorunlar olarak sıralanabilir.*

K9 (E): *"Okulda öğrenciler en çok doğru çalışma alışkanlıklarını bilemedikleri için rehberlik servisine gelmektedir. Ayrıca, sınav kaygısı, arkadaş, öğretmen ilişkileri, aile ilişkileri problemleri ile de gelmektedirler. Alan seçimi, meslek seçimi, gelecek kaygısı genel yaşanan problemler olmaktadır. Öğrenciler arasında sosyal medya ve akıllı telefon kullanımında sıkıntı yaşandığı görülmektedir. Zaman zaman da sataşmalar, kavgaları içeren saldırganca davranışlar gözlenmektedir."*

TARTIŞMA

Çalışmanın bulgularına göre anaokulunda karşılaşılan sorunların frekans ve yüzde değerleri incelendiğinde en yüksek değere sahip sorunların %81.25 ile iletişim sorunları, arkadaş ilişkileri, gelişimsel sorunlar olduğu görülmektedir. Daha sonra sırasıyla %75 ile okula uyum problemleri, olumsuz ana baba tutumları olduğu görülmektedir. İlkokulda karşılaşılan en yüksek değere sahip sorunların %83,33 ile saldırganlık: Fiziksel ve sözel saldırganlık, (küfür etme, sataşma), alay etme, dışlama (dolaylı saldırganlık), istismar (fiziksel ve sözel istismar), kavga, küfür, şiddet içerikli davranışlar olduğu görülmektedir. Ortaokulda karşılaşılan en yüksek değere sahip sorunların %77,77 ile internet ve sosyal medya bağımlılığı olduğu görülmüştür. Daha sonra sırasıyla, %72,22 ile kişilerarası iletişim sorunları, doğru çalışma alışkanlıklarını bilememe olmuştur. Lisede en yüksek değere sahip sorunların %80 ile kişilerarası iletişim sorunları: İletişim problemleri, öğretmenle iletişim sorunu, ergenlik sorunları, problem davranışlar, teknoloji bağımlılığı, doğru çalışma alışkanlıklarını bilememe olduğu görülmektedir.

Bu bulgulardan anlaşıldığı gibi her okul türünde karşılaşılan sorunların sıklığı öğrencilerin yaş gruplarına göre değişmektedir. Okul öncesinde iletişim, arkadaş ilişkileri, gelişimsel sorunlar ön plandayken, ilkokulda daha çok saldırganlık (fiziksel, sözel saldırganlık, alay etme, dışlama) ön plana çıkmaktadır. Kapcı (2004) çalışmasında ilkokulda öğrencilerin %40'ının zorbalıkla karşılaştığı ve duygusal zorbalığın benlik saygısını, depresyonu ve durumluk kaygıyı etkilediğini ortaya koymuştur. Yapıcı ve Yapıcı (2007) çalışmalarında ilköğretimde öğrencilerle yaşanan sorunları belirlemişlerdir. Araştırmanın sonucuna göre bu sorunların ilk beşi öğrencilerin derse hazırlıksız gelmeleri, motivasyonlarının düşük olması, ilgisiz olmaları, öğrencilerin psikolojik sorunlarının olması ve ailedeki sorunların öğrenciyi olumsuz etkilemesi, öğrencilerin disiplin sorunu yaşadığı ve öğrenciler arasında iletişim problemleri olduğu şeklinde belirtilmiştir. Ayrıca velilerden kaynaklanan sorunlar olarak velilerin çocuklarına karşı ilgisiz olması, velilerin okulla ilişki halinde olmaması, velilerin eğitim seviyelerinin düşük olması, ekonomik yetersizlikler ve velilerin sadece yüksek not beklentisi içinde olması sıralanmıştır. Çankaya sınıf öğretmenlerinin sınıflarında karşılaştıkları sorunları belirlemiş ve araştırmanın bulgularına göre bu sorunlar sırasıyla "öğrenciler arası kavgalar, derse ilgisizlik, öğretmene saygısızlık, kopya çekmek, sınıf içerisinde gruplaşma, dersin akışını bozmak ve öğrencinin sorumluluktan kaçması şeklindedir. Özer (2009)'e göre ise sınıfta izinsiz yüksek sesle konuşmak, kavga etmek, küfürlü konuşmak gibi sorunlar okullarda en sık karşılaşılan sorunlardandır. Elban (2009)'ın çalışmasına göre ise sınıfta en sık karşılaşılan sorunlar izin almadan konuşmak, yalan söylemek, şikayet etmek, küfür ve kavga etmek, veli ilgisizliği şeklindedir. Genel olarak araştırmalara bakıldığında ilkokullarda saldırganlık ve okul kurallarına uymama sorunları ile sık karşılaştığı görülmektedir. Alan yazındaki sonuçlar bu araştırmanın sonuçları ile tutarlılık göstermektedir.

Ortaokulda internet ve sosyal medya bağımlılığı, iletişim sorunları ve çalışma alışkanlıklarında problemler ön plandayken; lisede ise iletişim problemleri, ergenlik problemleri, problem davranışlar, teknoloji bağımlılığı ve çalışma alışkanlıklarında problemler ön plandadır. Araştırmalara göre ergenlerin gelişimini olumsuz etkileyen bazı sorunlar alkol, sigara gibi bağımlılık yapan madde kullanımı, olumsuz beslenme alışkanlıkları, sağlıksız cinsel ilişkiler, ergenin kendisine zarar verecek hızlı, ehliyetsiz ve kontrolsüz araba kullanması, evden ya da okuldan kaçması, şiddet içeren davranışlarda bulunması gibi davranışlardır (Alikaşifoğlu, 2008; Jessor, 1991; Savi-Çakar, Tagay ve Karataş, 2015). Ayrıca Siyez (2009) çalışmasında liselerde karşılaşılan olumsuz öğrenci davranışlarını belirlemiştir. Buna göre en sık karşılaşılan olumsuz davranışlar dersin düzenini bozmak gibi akademik yaşantı ile ilgili olumsuz davranışlar, küfür etme, zarar verme gibi arkadaşlarına yönelik olumsuz davranışlar, öğretmenlere karşı saygısızlık gibi öğretmenlere yönelik olumsuz davranışlar, devamsızlık geç kalmak gibi okul kuralları ile ilgili olumsuz davranışlar, gelecek beklentisinin olmaması, sigara içmek gibi kendisi ile ilgili olumsuz davranışlar, sınıf eşyalarına zarar vermek gibi çevreye ilişkin olumsuz davranışlar şeklindedir. Durmuş çalışmasında okullarda şiddet sorununun sık yaşandığını ve ergenlerin kavgalarının en önemli nedenlerinden birisinin duygusal ilişkilerinden (flört) kaynaklandığını belirtmektedir. Ayrıca okul

 Copyright © International Conference on New Horizons in Education Conference (INTE)

çevresinde çetelerin varlığı da şiddet davranışlarının nedenlerindendir. Benzer şekilde okullardaki şiddet, kavga ve bunların sonucunda yaralanmalara ilişkin bulgulara pek çok araştırmada rastlanmaktadır (Durmuş ve Gurgan, 2005; Kepenek ve Çınkır, 2002; Öğülmüş, 2006). Çalışmalar incelendiğinde sigara kullanımının ulaşımının da kolay olması nedeniyle ergenler arasında yaygın olduğu ve ergenin bağımsızlık kazanma adına madde kullanımına daha çok yöneldiği görülmektedir. Ayrıca intihar girişimi riskinin en çok ergenlik döneminde görüldüğü; ergenlikteki hızlı bedensel değişimle beraber beden algısının önem kazandığı ve bunun beslenme alışkanlıklarına da yansıdığı, mezun olmadan okulu terk eden ergenlerin de mesleki ve sosyal anlamda pek çok sıkıntı yaşadığı söylenebilir (Diler, 2003; Gençtanırım-Kuru, 2010; Siyez, 2009). Ayrıca bu çok gözlenen sorunların yanı sıra okullarda çalışan bir psikolojik danışman akademik başarısızlık, uygun karar verememe, duygusal yönden karşı cinsle sorun yaşama, başkaları ile olumlu ilişki kuramama, aile ilişkilerini sağlıklı biçimde sürdürememe, yetenekleri konusunda kendisine güvenmeme, sevdiği kişinin kaybı nedeniyle kaygı yaşama, akran baskısıyla uygun başa çıkamama gibi sorunlar yaşayan ergenlerle karşılaşabilir (Einsberg ve Delaney, 1998; Geldard ve Geldard,2013)

SONUÇ ve ÖNERİLER

Çalışmanın sonuçlarına göre anaokulunda en çok karşılaşılan sorunlar incelendiğinde bu sorunların, iletişim sorunları, arkadaş ilişkileri, gelişimsel sorunlar olduğu görülmektedir. Daha sonra sırasıyla ile okula uyum problemleri, olumsuz ana baba tutumları olduğu görülmektedir. İlkokulda en çok karşılaşılan sorunların, saldırganlık: Fiziksel ve sözel saldırganlık, (küfür etme, sataşma), alay etme, dışlama (dolaylı saldırganlık), istismar (fiziksel ve sözel istismar), kavga, küfür, şiddet içerikli davranışlar olduğu görülmektedir. Ortaokulda en çok karşılaşılan sorunların internet ve sosyal medya bağımlılığı olduğu görülmüştür. Daha sonra sırasıyla kişilerarası iletişim sorunları, doğru çalışma alışkanlıklarını bilememe olmuştur. Lisede en yüksek değere sahip sorunların ise kişilerarası iletişim sorunları: İletişim problemleri, öğretmenle iletişim sorunu, ergenlik sorunları, problem davranışlar, teknoloji bağımlılığı, doğru çalışma alışkanlıklarını bilememe olduğu görülmektedir.

Çalışmadaki elde edilen sonuçlar değerlendirildiğinde çalışmanın sonuçlarına yönelik şu öneriler sıralanabilir; Okul PDR programları hazırlanırken her okulun ihtiyacı temelli hazırlanırsa daha etkili PDR hizmeti verilebilir. Okul rehber öğretmenleri en çok karşılaştıkları sorunlarla ilgili bir sonraki sene önleyici amaçlı çalışmalar yaparsa faydalı olabilir. Saldırganlık, şiddet, iletişim problemleri ve sosyal medya bağımlılığı en çok gözlenen sorunlar olduğundan bu sorunlarla ilgili ailelere ve öğrencilere seminerler, konferanslar düzenlenmesi faydalı olabilir. Anaokulundaki sorunlar iletişim problemleri ve arkadaş ilişkileri ve gelişimsel sorunlar olduğundan bu okullarda seminer çalışmalarından ziyade küçük yaş grubu olduğu için öğrenci bazında çalışmalar yapmak ve veli bilgilendirme çalışmaları yapmak faydalı olabilir. Ev ziyaretleri bu yaş gruplarından sorun çözmede işlevsel olabilir.

KAYNAKLAR

Alikaşifoğlu, M. (2008). *Ergenlerde davranışsal sorunlar*. Adolesan Sağlığı II, Sempozyum Dizisi, 63, 55-59

Baymur, F. (1975) *Rehberlik*. Ankara: Milli Eğitim Basımevi.

Colombia Electronic Encyclopedia, (2013). Guidance and counseling, 1.

Diler, R. (2003). İntihar eğiliminde gençlere dikkat. *Basında Çukurova.* www.cuova.edu.tr Erişilme tarihi 13.08.2016.

Durmuş, E. (2013). Ergen bakış açısıyla okulda şiddet ve çözüm önerileri. E-International Journal of Educational Research, 4 (3), 41-57.

Durmus, E.,Gürgan, U. (2005). Lise öğrencilerinin şiddet ve saldırganlık eğilimleri. *Türk Eğitim Bilimleri Dergisi*, 3 (3),253-267.

Eisenberg, S., & Delaney, D.J. (1998). *The process of psychological guidance. (Psikolojik danışma süreci)* Çev. Ören, N., Takkaç, M. Istanbul: M.E.B.

Elban, L. (2009). *İlköğretimdeki öğretmenlerin istenmeyen öğrenci davranışlarıyla karşılaşma ve çözüm bulma durumlarının incelenmesi.* Konya: Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Yayınlanmamış Yüksek Lisans Tezi.

Geldard, K. & Geldard, D. (2013). *Counseling adolescent the proactive approach for young people (Ergenler ve geçlerle psikolojik danışma)* Çev. Edi. Pişkin, M. Ankara: Nobel Yayın.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Gençtanırım-Kuru, D. (2010). Ergenlerde riskli davranışların yordanması. Yayımlanmamış Yüksek Lisans Tezi, Hacettepe Üniversitesi Sosyal Bilimler enstitüsü, Ankara.

Jessor, R. (1991) Risk behavior in adolescence: A psychosocial framework for understanding and action. *Journal of Adolescent Health*. 12. 1991: 597-605.

Kapcı, E., G. (2004). İlköğretim öğrencilerinin zorbalığa maruz kalma türünün ve sıklığının depresyon, kayı ve benlik saygısı ile ilişkisi. Ankara Üniveristesi Eğitim Bilimleri Fakültesi Dergisi, 37(1), 1-13.

Kepçeoğlu, M. (1999). *Psikolojik danışma ve rehberlik.* İstanbul: Alkım Yayıncılık.

Kepenkçi, Y. ve Çınkır, Ş. (2005). Bullying among turkish high school students, *Child Abuse & Neglect,* 1717, 1-12.

Myrick, R. D. (1994). *Developmental guidance and counseling:* A practical approach. Minneapolis: Educational Media Corporation.

Öğülmüş, S. (2006). Okullarda Şiddet Ve Alınabilecek Önlemler. *Egitime Bakıs, Egitim-Ögretim ve Bilim Arastırma Dergisi*, 2(7)

Savi Çakar F, Tagay Ö, Karatas Z (2015). Adolescents' life satisfaction: risky behaviors and hopelessness,. *International Journal on New Trends in Education and Their Implications*,, 6(1),55-62.

Siyez, D., M. (2009). Liselerde görev yapan öğretmenlerin istenmeyen öğrenci davranışlarına yönelik algıları ve tepkileri. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 1 (15).

Tan, H. (2000). *Psikolojik danışma ve rehberlik teori ve uygulama*. İstanbul: MEB Yayınları

Tebliğler Dergisi (2001). MİLLÎ Eğitim Bakanlığı psikolojik danışma ve rehberlik hizmetleri yönetmeliği.

Yapıcı, M. & Yapıcı, Ş. (2003). İlköğretim öğretmenlerinin karşılaştığı sorunlar. Üniversite ve Toplum Dergisi, 3 (3).

Yeşilyaprak, B. (2013). 21. Yüzyılda eğitimde rehberlik hizmetleri. 22. Basım, Nobel Akademik Yayıncılık, Ankara.

Yıldırım, A. ve Şimşek, H. (1999). *Sosyal bilimlerde nitel araştırma yöntemleri (5. Baskı)*. Ankara: Seçkin Yayıncılık.

Yüksel-Şahin, F. (2002). Bazı değişkenlerin yönetici adaylarının, okul psikolojik danışmanlarından görev beklentileri düzeylerine etkisi*, Eğitim ve Bilim Dergisi*, 27 (123), 13-21, Ankara.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

OKUL YÖNETİCİLERİNİN ÖĞRETMENLERE MENTORLUK YAPMA YETERLİLİKLERİNE İLİŞKİN GÖRÜŞLERİ

Celal GÜLŞEN
Fatih Üniversitesi Eğitim Fakültesi EYTPE Anabilim Dalı Başkanı/TURKEY
celalgulsen@gmail.com

ÖZET
Bu araştırmada rehber, akıl hocası, danışman, lider, kılavuz gibi isimlerle de anılan Mentorluk; "kişilerin potansiyellerini keşfetmelerini sağlayarak, onları hedefleri doğrultusunda harekete geçirmeyi hedefleyen, bireyin yolunu açarak kararlılığını güçlendirmeyi ve gelecek odaklı farkındalık oluşturmasını hedefleyen bir yönetim anlayışı" olarak ele alınmıştır.

Araştırmanın yürütülmesinde "genel tarama modeli" kullanılmıştır. Araştırmanın evrenini Nevşehir İl Milli Eğitim Müdürlüğü bünyesindeki okullarda 2012 yılında okul müdürü ve müdür yardımcısı olarak görev yapan okul yöneticilerinin tamamı oluşturmuştur. Araştırmada evrenin tamamına ulaşıldığından, ayrıca örneklem alınmamıştır.

Öncelikle araştırmanın belirlenen amaçlara ulaşabilmesi için ilgili literatür taraması yapılmıştır. Elde edilen veriler yardımıyla uzman görüşleri de alınarak geçerlik ve güvenirlik testleri yapılan üç bölümden meydana gelen 30 maddelik "Okul Yöneticilerinin Öğretmenlere Mentorluk Yapma Yeterlilikleri" anketi geliştirilmiştir. Hazırlanan anket, Nevşehir İl örneğindeki okullarda görev yapan okul yöneticilerinin tamamına uygulanmıştır. Uygulanan anketlerle yöneticilerin önermelere katılım dereceleri belirlenmiş ve elde edilen veriler tablolara yerleştirilerek, istatistikî yönden tablolar aracılığıyla değerlendirilmiş ve yorumlanmıştır.

Araştırma bir bütün olarak değerlendirildiğinde "Okul Yöneticilerinin Öğretmenlere Mentorluk Yapma Yeterlilikleri" konusunda kendilerini yeterli gördükleri görülmüştür. Görev değişkenine göre değerlendirildiğinde ise, müdür yardımcılarının müdürlere oranla kendilerini Öğretmenlere Mentorluk Yapma konusunda daha yeterli gördükleri görülmüştür. Bu sonuçlara bakılarak, okul müdürlerinin okul dışı iş yükleri sebebiyle müdür yardımcılarına göre daha az mentorluk yaptığı dikkate alındığında, okul dışı iş yüklerinin azaltılmasında fayda görülmektedir. Bunu sağlayabilmek için de okul müdürlerinin öğretmenleriyle daha yakından ilgilenmesini sağlayacak görev tanımlarında düzenleme yapılması önerilmektedir.

Anahtar Kelimeler: Mesleki Koçluk, Mentorluk, Öğretmen, Okul Yöneticileri, Eğitim Yönetimi.

1. GİRİŞ

Eğitim kurumlarında okul kültürünün yerleşmesinde okul yöneticilerinin çok önemli misyonlarının olduğu, bu nedenle de okul yönetimlerinin güçlendirilmesi, yöneticilerin daha çağdaş vasıflarla donatılması gerektiği çoğu zaman gündeme getirilmektedir. Yönetici kriterleri tartışılırken, okulları yönetecek kişilerin sadece atanmış yetkileri bulunan yöneticiler olmasının kurumsal kimliklerin oluşmasını engellediği belirtilmektedir. Son dönemlerde atanmış yönetici yerine, lider yönetici, koçluk yapan, mentor olan yönetici kavramları ön plana çıkmaktadır. Okul kültürünün oluşturulmasında ve öğretmen performansının arttırılmasında okul yöneticilerinin yönlendirici ve destekleyici olması beklenmektedir (Akdemir, 2016, s.1-8; Özdemir, 2012, s.35). Bu etkiyi gösterecek yöneticilerin ise, atanmış yönetici olmanın ötesinde, liderlik, mentorluk ve mesleki koçluk gibi daha üst düzey yeterliliklerle donatılmış olması gerektiği vurgulanmaktadır. Günümüz eğitim sistemlerinde okul yöneticilerinin rehber, yol gösterici, lider ve özellikle de "mentor" olması beklenmektedir (Aktan, 2016, s.1; Harvard, 2007, s.16-17; Kocabaş ve Yirci, 2011, s.3).

Rehber, akıl hocası, danışman, lider, kılavuz gibi isimlerle de anılan mentor kelimesi, Türk Dil Kurumu güncel sözlüğünde "yönder" kelimesinin karşılığı olarak "herhangi bir iş yerinde farklı görevlerde çalışarak deneyim kazanmış olan, danışan kişinin hedefine ulaşmasını sağlayacak yolu bulmasına yardımcı kimse" olarak açıklanmaktadır (Kocabaş ve Yirci, 2012, s:78; Stueart ve Sullivan, 2010, s.81; Şerefhanoğlu, 2014, s. 45; TDK, 2016, s.1).

Bu araştırmada akıl hocası, danışman, lider, kılavuz olması beklenen mentor yöneticilerin yapacağı "mentorluk; "kişilerin potansiyellerini keşfetmelerini sağlayarak, onları hedefleri doğrultusunda harekete geçirmeyi hedefleyen, bireyin yolunu açarak kararlılığını güçlendirmeyi ve gelecek odaklı farkındalık oluşturmasını hedefleyen bir yönetim anlayışı" olarak ele alınmıştır.

Mentorluk, kişilerin potansiyellerini keşfetmelerini sağlayarak hedefleri doğrultusunda harekete geçirmeyi hedefleyen, bireyin yolunu açarak kararlılığını güçlendirmeyi ve gelecek odaklı farkındalık yaratmayı hedefleyen bir yönetim anlayışıdır. Mentorluk; bireylere ve kurumlara ulaşmayı hedefledikleri amaçlar

 Copyright © International Conference on New Horizons in Education Conference (INTE)

doğrultusunda destek sağlayan bir programdır. Birey ve organizasyonlara yönelik olarak yapılan Mentorluk sürecinde "Erickson College" metodolojisi kullanılmaktadır. Bu süreçte; birey ve organizasyonların varolan potansiyellerini fark etmeleri, gelişirken, değişimi; değişirken gelişimi yaşamaları ve tam da istedikleri gibi harekete geçmeleri amaçlanmaktadır (Brockbank ve McGill, 2006, s. 253; Barbuto, 2000, s. 300).

Bir metaforla ifade etmek gerekirse; mentorluk; yoldaki ışık, taş, yol çizgileri gibidir, asla yolun kendisi değildir. Mentorluk; performansı ve başarıyı artıran etkili bir sistem olması nedeniyle, iş dünyası yanında okullarda da uygulanmaktadır. Kanada, ABD, İngiltere, Singapur, Avustralya ve Yeni Zelanda gibi ülkelerin başarılı okullarında yaygınlaşan mentorluk uygulamaları yönetici olma kriterleri arasında sayılırken, öğretmen ve öğrencilere mentorluk yapılması gereği üzerinde durulduğu görülmektedir. Bazı bölgelerde koçluk olarak ta anılan öğretmen ve öğrenci mentorluğunun uygulandığı okullarda, akademik başarının yükseldiği ve disiplin problemlerinin büyük ölçüde ortadan kalktığı gözlenmiştir (Brockbank ve McGill, 2006, s. 253; Tosun, 2014).

Öğrenci koçluğu yanında, öğretmen koçluğunun da gündemde olduğu günümüzde okul yöneticilerinin (müdür, müdür yardımcısı) okullarındaki öğretmenlere Mentorluk yapma düzeylerinin yükseltilmesi de, okullardaki akademik başarının arttırılmasına olumlu etki sağlayacaktır (Pınar, 2013, s.124-131).

Ülkemizde öğrenci koçluğu olarak uygulama örnekleri görülen Mentorluk anlayışının, yönetimde mentorluk olarak ta kullanılması eğitimde kaliteyi arttıracaktır. Bu nedenle okul yöneticilerinin atanmış bir müdür olmanın ötesinde, öğretmenlere mesleki anlamda mentorluk yapmaları da gerekmektedir.

Okul yöneticilerinin öğretmenlere mentorluk yapmaları durumunda okulların birçok kazanımı olacaktır. Bu kazanımlardan bazıları şunlardır (Bakioğlu, vd, 2011, s.148-152; Brockbank ve McGill, 2006, s. 253; Tunçay, 2014, s.25-30; Yıldırım, 2013, s.100; Kocabaş ve Yirci, 2011, s.125-128):

- Okulun akademik ve sosyal başarısı yükselir.
- Öğrencilerde görülen disiplin problemleri büyük oranda ortadan kalkar
- İçinde bulunduğumuz çağın tehlikeleri ve tehditleri önlenir
- Yaratıcılığı ve başarıyı destekleyen eğitim ortam yaratılır. Okulun rekabet gücü artar.
- Sistemin uygulanma aşamasında alınan geri bildirimlere göre geliştirilmesi sağlanır
- Uygulayıcıların yaratıcı katkılarıyla inovasyon (farklı, değişik, yeni fikirleri geliştirme ve uygulama) sağlanır.

Bu faydalar düşünülerek yapılan bu araştırmayla, "Nevşehir il örneğinde Milli Eğitim Bakanlığına bağlı okullarda okul yöneticisi olarak görev yapan müdür ve müdür yardımcılarının *ö*ğretmen performansını geliştirmeye yönelik mentorluk yapma yeterlilikleri'ni belirlemek, sonrasında da araştırma verilerine dayalı olarak uygulayıcılara önerilerde bulunmak amaçlanmıştır.

2. YÖNTEM

Araştırmanın yürütülmesinde "genel tarama modeli" kullanılmıştır. Öncelikle araştırmanın belirlenen amaçlara ulaşabilmesi için ilgili literatür taraması yapılmıştır. Sonrasında elde edilen veriler yardımıyla "Okul Yöneticilerinin Öğretmenlere Mentorluk Yapma Yeterlilikleri"ni belirlemeye yönelik uzman görüşleri de alınarak üç bölümden oluşan, bütün halinde Cronbach Alfa Güvenirlik Katsayısı .82 olarak hesaplanan, 30 maddelik "Okul Yöneticilerinin Öğretmenlere Mentorluk Yapma Yeterlilikleri" anketi geliştirilmiştir. Anketin "*Mentorun Rahat İletişim Ve Mesleki Gelişime Katkı Sağlaması*"na ilişkin önermelerden oluşan birinci bölümü "Beşli Likert Ölçeği" ile; "*Mentorun Öğretmenlere Destek Sağladığı Alanlar*"a ilişkin önermelerden oluşan ikinci bölümü "Dörtlü Likert Ölçeği" ile ve "*Aktivitelerin Takibinde Öğretmenlerle Meşgul Olma Sıklığı*"na ilişkin önermelerden oluşan üçüncü bölümü ise "Altılı Likert Ölçeği" ile hazırlanmıştır.

Bu araştırmanın evrenini, 2012 yılında Nevşehir İl Milli Eğitim Müdürlüğü bünyesindeki okullarda okul müdürü ve müdür yardımcısı olarak görev yapan okul yöneticilerinin tamamı oluşturmaktadır. Araştırmada evrenini oluşturan 220 okul müdürü ve 202 okul müdür yardımcısının tamamına ulaşıldığından, ayrıca örneklem alınmamıştır.

Hazırlanan anket, Nevşehir İl örneğindeki okullarda görev yapan okul yöneticilerinin tamamına (220 müdür, 202 müdür başyardımcısı ve müdür yardımcısı) uygulanmıştır. Uygulanan anketlerin müdürlerden % 89,54'ü (197'si), müdür yardımcılarından ise 94,55'i (191'i) geri dönmüştür. Dönen anketler bütün halinde ele alındığında değerlendirilen yönetici anketlerinin % 50,77'si okul müdürlerine ve %49,23'ü de müdür yardımcılarına ait olduğu görülmektedir. Uygulanan anketlerle yöneticilerin önermelere katılım dereceleri belirlenmiş ve elde edilen veriler tablolara yerleştirilerek, istatistikî yönden tablolar aracılığıyla değerlendirilmiş ve yorumlanmıştır. Evrenin tamamına ulaşıldığı için, elde edilen veriler frekans (f), yüzde (%) ve aritmetik

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ortalama ($\overline{X}$)'lara göre yorumlanmıştır. Görev değişkeni (müdür-müdür yardımcısı) açısından verilerin karşılaştırılmasında ise t-testi kullanılmıştır.

3. BULGULAR

Araştırma ile elde edilen bulgular üç ayrı alt boyuta göre aşağıdaki şekilde yorumlanmıştır. Yorumlama yapılırken cinsiyet değişkeni dışında anlamlı ilişki kurulabilecek grup oluşmadığından, değerlendirme sadece görev değişkeni açısından yapılmıştır. Aşağıda evrenin tamamına ulaşıldığı için Tablo 1'de edilen bulguların frekans (f), yüzde (%) ve aritmetik ortalama ($\overline{X}$)'larına,Tablo 2'de ise görev değişkeni (müdür-müdür yardımcısı) açısından t testi ile yapılan karşılaştırma sonuçlarına yer verilmiştir.

Tablo-1: Müdür ve Müdür Yardımcılarının "Öğretmen Performansını Geliştirmeye Yönelik Okul Yöneticilerinin Mentorluk Yapma Yeterlilikleri" ile ilgili Görüşlerine ait Frekans (f), Yüzde (%) ve Aritmetik Ortalamalar ($\overline{X}$):

Sıra No	Öğretmen Performansını Geliştirmeye Yönelik Okul Yöneticilerinin Mentorluk Yapma Yeterliliklerine Ait Alt Boyutlar	Yöneticilerin Görevleri					
		Okul Müdürü			Müdür Yardımcısı		
		f	%	$\overline{X}$	f	%	$\overline{X}$
1	Mentorun Rahat İletişim Ve Mesleki Gelişime Katkı Sağladığı Alanlar Alt Boyutu	197	50,77	4,09	191	49,23	4,49
2	Mentorun Öğretmenlere Destek Sağladığı Alanlar Alt Boyutu	197	50,77	3,14	191	49,23	3,57
3	Aktivitelerin Takibinde Öğretmenlerle Meşgul Olma Sıklığı Alanı Alt Boyutu	197	50,77	2,91	191	49,23	3,72
GENEL ARİTMETİK ORTALAMALAR				3.38			3.93

Tablo 1'de de görüldüğü üzere, "Mentorün Rahat İletişim Ve Mesleki Gelişime Katkı Sağlaması"na yönelik ifadelerin yer aldığı beşli likert tipi önermelerin yer aldığı birinci alt boyuta, okul müdürleri aritmetik ortalama olarak " $\overline{X}$:4,09" düzeyinde "çok" olarak; müdür yardımcıları ise aritmetik ortalama olarak " $\overline{X}$:4,49" düzeyinde "tam" olarak katılım göstermişlerdir. Okul Müdürleri de müdür yardımcıları da okullarındaki öğretmenlere yeterince mentorluk yaptıklarına inanmaktadırlar. Müdür yardımcıları, öğretmenlere görev açısından daha yakın bir konumda bulunduklarından, okul müdürlerine göre aritmetik ortalama olarak daha yüksek oranda Mentorluk yaptıklarını beyan etmişlerdir.

Araştırmanın ikinci bölümü olan "Mentorun Öğretmenlere Destek Sağladığı Alanlar"a yönelik ifadelerin yer aldığı dörtlü likert tipi önermelerin bulunduğu ikinci alt boyuta ise, okul müdürlerinin aritmetik ortalama olarak " $\overline{X}$:3,14" düzeyinde "genellikle" derecesinde; müdür yardımcılarının da aritmetik ortalama olarak " $\overline{X}$:3,57" düzeyinde "Her zaman" derecesinde katılım gösterdikleri görülmektedir.

Okul Müdürleri de müdür yardımcıları da okullarındaki öğretmenlere en az genellikle düzeyinde değişik alanlarda destek sağladıklarını beyan etmişlerdir. Burada da müdür yardımcıları, öğretmenlere görev açısından daha yakın bir konumda bulunduklarından, okul müdürlerine göre aritmetik ortalama olarak daha yüksek oranda Mentorluk yaptıklarını beyan etmişlerdir.

Araştırmanın üçüncü ve son alt boyutu olan "Aktivitelerin Takibinde Öğretmenlerle Meşgul Olma Sıklığı"na yönelik ifadelerin yer aldığı altılı likert tipi önermelerin bulunduğu üçüncü alt boyuta ise, okul müdürlerinin aritmetik ortalama olarak " $\overline{X}$:2,91" düzeyinde "ayda bir" derecesinde; müdür yardımcılarının ise aritmetik ortalama olarak " $\overline{X}$:3,72" düzeyinde "Haftada bir" derecesinde katılım gösterdikleri görülmektedir.

Okul Müdürleri haftada bir öğretmen aktiviteleri ile meşgul olduğunu belirtirken müdür yardımcıları yine görevsel konum nedeniyle müdürlere göre daha üst düzeyde ilgi gösterdiklerini beyan etmişlerdir. Müdür yardımcıları haftada bir öğretmen aktiviteleri ile meşgul olduğunu belirterek, öğretmelerin faaliyetlerine ilgi gösterdiklerini beyan etmişlerdir.

Ankete bütün halinde bakıldığında ise, okul müdürlerinin aritmetik ortalama olarak " $\overline{X}$:3,38" düzeyinde; müdür yardımcılarının ise aritmetik ortalama olarak " $\overline{X}$:3,93" düzeyinde katılım gösterdikleri, anketin bütününe müdür yardımcılarının daha olumlu yaklaştıkları görülmüştür. Tablo 2'de okul müdürleriyle müdür yardımcılarının öğretmenlere mentorluk yapma yeterliliklerine ilişkin görüşlerinin karşılaştırıldığı istatistiki sonuçlara yer verilmiştir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 2: Okul Müdürlerinin ve Müdür Yardımcılarının Mentorluk Rolleri Konusundaki Görüşleri Arasındaki Fark

Öğretmen Performansını Geliştirmeye Yönelik Okul Yöneticilerinin Mentorluk Yapma Yeterliliklerine Ait Alt Boyutlar	Okul Müdürü (n=197)		Müdür Yardımcısı (n=191)		t	p
	Ort	Ss	Ort	Ss		
Mentorun Rahat İletişim Ve Mesleki Gelişime Katkı Sağladığı Alanlar Alt Boyutu	4.09	0,790	4.49	0,861	-5,010	0,000
Mentorun Öğretmenlere Destek Sağladığı Alanlar Alt Boyutu	3.14	0,761	3.57	0,747	-4,865	0,000
Aktivitelerin Takibinde Öğretmenlerle Meşgul Olma Sıklığı Alanı Alt Boyutu	2.91	0,985	3.72	0,820	-4,742	0,000

Araştırmaya katılan yöneticilerin Mentorun Rahat İletişim Ve Mesleki Gelişime Katkı Sağladığı Alanlar Alt Boyutu puanları ortalamalarının görev değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla yapılan t-testi sonucunda grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmuştur(t=-5.001; p=0.000<0,005). Müdür yardımcılarının mentorle rahat iletişim ve mesleki gelişime katkı puanları ($\bar{x}$=4,49), müdürlerin mentorle rahat iletişim ve mesleki gelişime katkı puanlarından ($\bar{x}$=4,09) yüksek bulunmuştur.

Araştırmaya katılan yöneticilerin Mentorun Öğretmenlere Destek Sağladığı Alanlar Alt Boyutu puanları ortalamalarının görev değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla yapılan t-testi sonucunda grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmuştur(t=-4.865; p=0.000<0,05). Müdür yardımcılarının mentorun desteği puanları ($\bar{x}$=3,57), müdürlerin mentorun desteği puanlarından ($\bar{x}$=3,14) yüksek bulunmuştur.

Araştırmaya katılan yöneticilerin Aktivitelerin Takibinde Öğretmenlerle Meşgul Olma Sıklığı Alanı Alt Boyutu puanları ortalamalarının görev değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla yapılan t-testi sonucunda grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmuştur (t=-4.742; p=0.000<0,05). Müdür yardımcılarının mentorun ilgisi puanları ($\bar{x}$=3.72), müdürlerin mentorun ilgisi puanlarından ($\bar{x}$=2.91) yüksek bulunmuştur.

4.TARTIŞMA VE SONUÇ

Araştırma bir bütün olarak değerlendirildiğinde "Okul Yöneticilerinin Öğretmenlere Mentorluk Yapma Yeterlilikleri" konusunda kendilerini yeterli gördükleri anlaşılmaktadır. Görev değişkenine göre değerlendirildiğinde ise, müdür yardımcılarının müdürlere oranla kendilerini Öğretmenlere Mentorluk Yapma" konusunda daha yeterli gördükleri görülmüştür. Alt boyutlar düzeyinde değerlendirme yapıldığında ise, "Mentorün Rahat İletişim Ve Mesleki Gelişime Katkı Sağlaması"na yönelik ifadelere okul müdür yardımcıları, okul müdürlerine oranla daha üst düzeyde katılım gösterdikleri ve bu katılım düzeyinde müdür yardımcılarının öğretmenlerin ilk ulaştıkları idari kadrodaki yetkili olmalarının etkisinin olduğu söylenebilir. "Mentorun Öğretmenlere Destek Sağladığı Alanlar"a yönelik ifadelerin yer aldığı önermelere de müdür yardımcıları daha üst düzeyde katılım göstermişlerdir. Müdür yardımcılarının okul işlerinin koordinasyonunda müdürler tarafından birinci derece yetkilendirilmiş olması bunda etkili olabilir."Aktivitelerin Takibinde Öğretmenlerle Meşgul Olma Sıklığı"na yönelik ifadelerin yer aldığı önermelere okul müdürleri "ayda bir" seviyesinde destek verdiklerini belirtirken, müdür yardımcıları ise "haftada bir" seviyesinde destek verdiklerini belirtmişlerdir. Mentorluk yapma yeterlilikleri konusunda okul müdürlerin, müdür yardımcılarına oranla daha alt düzeylerde katılım göstermelerinde, onların idari görevleri gereği okul dışındaki mesailerinin çokluğunun olmasının etkili olduğu söylenebilir.

5.ÖNERILER

Bu sonuçlara dayalı olarak aşağıdaki *öneriler* yapılmıştır.

- Okul müdürlerinin okul dışı iş yüklerinin yoğunluğunun da etkisiyle, müdür yardımcılarına oranla personele daha az mentorluk yaptığı görülmektedir. Bu nedenle okul müdürlerinin öğretmenleriyle daha yakından ilgilenmesini sağlayacak görev tanımlarında düzenleme yapılması ve okul dışı iş yüklerinin azaltılması önerilmektedir.
- Milli Eğitim Bakanlığı ile Yüksek Öğretim Kurumunun mentorluk uygulamalarının yaygınlaştırılması konusunda işbirliği yapması, bu çerçevede çeşitli hizmetiçi eğitim faaliyetleri, aktiviteler yapması, yükseköğretimde eğitim fakülteleri müfredatına mentorluk dersi konulması gerekli görülmektedir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

- Araştırmanın daha sağlam verilere ulaştırılarak genellenebilmesi için ilgili diğer kesimlerin de mentorluk konusunda görüşlerinin alınarak karşılaştırma yapılması konuyla ilgili anlaşılırlığı ve uygulamaları kolaylaştıracaktır.

6.Kaynaklar

Akdemir, Ali (2016). "Entellektüel Liderlik" http://docplayer.biz.tr/6393607-Entelektuel-liderlik-prof-dr-ali-akdemir-kocaeli-universitesi-i-i-b-f-ogretim-uyesi.html. (ET: 20.03.2016).

Aktan, C. Can (2016). "Organizasyonda Başarı İçin Liderlik İlkeleri" http://www.canaktan.org/yonetim/yeni-yonetim/liderlik.htm (ET: 20.03.2016).

Barbuto, John. E. Jr. (2000). "Developing a Leadership Perspective in the Classroom" Journal of Adult Development, Faculty Publications: Agricultural Leadership, Education & Communication Department. Paper 42. http://digitalcommons.unl.edu/aglecfacpub/42. (ET:20.03.2016).

Bakioğlu, Ayşen, Bayhan, Güzide ve Özgen Bahar. (2013). Eğitimde Mentorluk içinde "Öğretmenlerin Profosyonel Gelişiminde Mentorlük". Ankara: Nobel Yayını.

Brockbank, Anne and McGill, Ian. (2006). Facilitating Reflective Learning through Mentoring and Coaching. British Library Cataloguing-in Publication Data. London. http://www.amazon.co.uk/dp/0749444487/ref=rdr_ext_tmb (ET: 15.03.2016)

Harvard Business SP. (2007). Pocket Mentor-Koçluk. (Çev:Ahmet KARDFAM). İstanbul. Optimist Yayını.

Kocabaş, İbrahim ve Ramazan Yirci. (2012).Öğretmen ve Yönetici Yetiştirmede Mentorluk. Ankara. Anı Yayınları.

Kocabaş, İbrahim ve Ramazan Yirci. (2011).Öğretmen ve Yönetici Yetiştirmede Mentorluk. Ankara. Anı Yayınları.

Özdemir, Tuncay Yavuz. (2012) : *"İl Eğitim Denetmen ve Yardımcılarının Mesleki Gelişimlerini Devam Ettirmede E-Mentorluk Modeli*", Doktora Tezi, Fırat Üniversitesi, Eğitim Bilimleri Enstitüsü Eğitim Yönetimi Teftişi Planlaması ve Ekonomisi Anabilim Dalı, Elazığ.

Pınar, Ali H. (2013) : *" Mintzberg'in Yönetim Yaklaşımı Açısından İlköğretim Sınıf Öğretmenliğinin Koçluk ve Mentor Yetkinlikleri İle Öğrencilerin Sınav Başarı Puanları Arasındaki İlişki Üzerine Bir Araştırma* " Ç.Ü. Sosyal Bilimler Enstitüsü Dergisi, Cilt 22, Sayı1, 2013, Sayfa 121-138

Stueart, Robert D., Sullivan, Maureen. (2010): *''Developing Library Leaders : A How To Do It Manual For Coaching, Team Building, and Mentoring Library Staff'',* New York: Neal - Schuman Publishers Inc.

Şerefhanoğlu, Ozan. (2014). Okul Müdürlerinin Mentorluk Fonksiyonları İle Öğretmenlerin Örgütsel Uyum Düzeyleri Arasındaki İlişki Balıkesir İli Örneği. Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Yayımlanmamış Yüksek Lisans Tezi, Balıkesir.

TDK (Türk Dil Kurumu). (2016). Güncel Türkçe Sözlük, "Mentor", "Yönder". http://www.tdk.gov.tr/index.php?option=com_gts&arama=gts&guid=TDK.GTS.56ef1ce47c88d3.58272663. (ET.20.03.2016).

Tosun, U. (2014). Anger Management of Students for a Peaceful School Environment: The Group Studies. *Procedia-Social and Behavioral Sciences*,*159*, 686-690.

Tunçay, Selin. (2014). Eğitimde mentorluk uygulamaları Üzerine bir araştırma. Trakya üniversitesi Sosyal Bilimler Enstitüsü. Yüksek Lisans Dönem Projesi. Edirne.

Yıldırım, Rüştü. (2013). *"Okul Yöneticilerinin Mentorluk Rollerinin Okulun Akademik Başarısı ve Bazı Değişkenler Açısından İncelenmesi",* Yüksek Lisans Tezi, Necmettin Erbakan Üniversitesi, Eğitim Bilimleri Enstitüsü Eğitim Bilimleri Anabilim Dalı Eğitim Yönetimi, Teftişi, Planlaması ve Ekonomisi Bilim Dalı, Konya.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ON THE BORDER OF MANAGEMENT AND BUSINESS INFORMATICS

Petr DOUCEK
Faculty of Informatics and Statistics
University of Economics, Prague, Czech Republic
doucek@vse.cz

Lea NEDOMOVA
Faculty of Informatics and Statistics
University of Economics, Prague, Czech Republic
nedomova@vse.cz

ABSTRACT
This contribution presents general information about the specialization "Information Management" which is taught in the University of Economics, Prague (UEP). The specialization "Information Management" is situated between two areas "Business Informatics" and "Management". Specific features of instance of "Information Management" at UEP are presented in the article. The analysis of data queue since 2011 gives basic annually information about progress of number of students for this program, structure – Czech and foreign students, results of entrance examinations. Data were collected from central information agendas of the UEP, then they have been worked out using standard functionality of MS Excel. Trends and progress in "Information Management" studies at UEP are presented in this contribution.

INTRODUCTION

The "Information Management" specialization is designed as a business informatics oriented study curricula's with relative good share of management oriented courses. As is presented in (Hinton, 2006) " Information management is the conscious process by which information is gathered and used to assist in decision making at all levels of organization." The core of the approach to "Information Management" at UEP are, based on essential work (Vodaček & Rosicky, 1997) three basic areas System Science, Management and Management Sciences and Informatics. The concept of "Information Management" that is general accepted on UEP is presented on the [Figure 1].

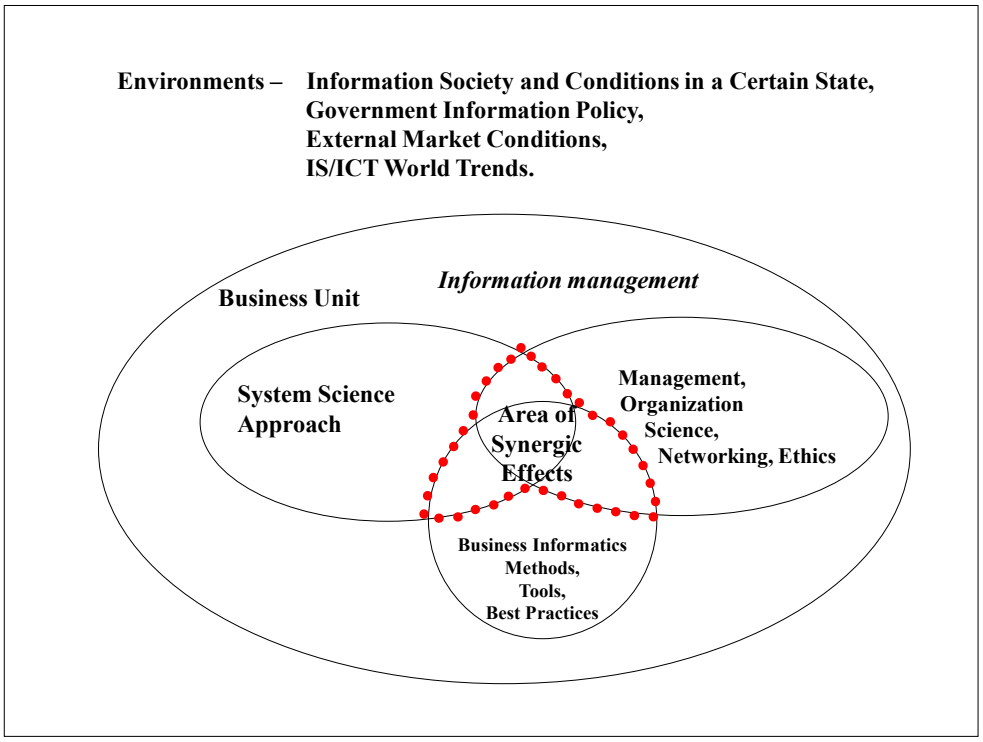


Figure 1: Information Management and Its Synergic Effects (Doucek & Novotny, 2009)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Little weakness of this approach is, that, it does not include ethical dimension of information society and into the information management as well. Ethical aspects not only of information technology, but also of management and management application are more detail presented and discussed in (Sigmund, 2015).

Today's "Information Management" on the strategic level is defined as trans-disciplinary collection of knowledge, methods and recommendations (from all source areas of information management) which helps in effective way to realize information processes in managerial thinking and managerial actions for achieving organization's goals (Hanclova, Rozehnal, Ministr & Tvrdikova, 2015). Information management is continually applied to business and to the whole organization. It is significant not only for core-business oriented managers but also for information system developers and IS/ICT managers. (Doucek & Novotny, 2009)

System approach offers tools for problem identification, common approach to problem solving and complex and holistic view on facts, Management brings with it into the concept methods for human motivation, leadership method and tools and skills for facts presentation as rhetoric, documents design and etc. Also facts about economy networking, social networks aspects and ethics challenges are included into the concept on UEP. Business Informatics contributes especially with reference models for corporate informatics management or for management of parts of it as security, quality, environment, service, managerial skills and roles etc. (Flégl & Vltavská, 2013, Kuncova & Mulac, 2015). A specific feature of "Information Management" is appearing of synergic effects arising from combination of these above mentioned three essential components. These effects have source in interdisciplinary approach to problem solving on the border between components. For example applying system approach on informatics and IS/ICT methodology was a base for formulating of the soft system methodology (SSM) by Peter Checkland at the end of the 80s and at the beginning of the 90s in the last century (Checkland, 1990). Another synergic effect is publishing the "world's" best practices in the form of ISO international norms using a principle of feedback from theoretical cybernetics. Feedback is represented by working group members preparing each ISO standard and used mechanisms for each standard approval process. Here is clear visible the future of "Information management" and area for further research work realized by the Department of System Analysis at Faculty of Informatics and Statistics at University of Economics, Prague.

The classical approach to "Information Management" is a little modified in our Czech conditions. That is way we are part of economic university, courses with accent on economic sciences and on data presentation were added into our curriculum during last update in the 2010. Typical representative of this category is the course "Business Intelligence" and also courses with relation to data and information presentation and courses with evaluation of impact of new media on information society –as for example "New Media and Information Society" and "Information and Media" (more information in Pavlicek, 2013). By this way we try to integrate not only theoretical aspects of above mentioned three disciplines of "Information Management", but we also turn this theory into the practical applications of it in business. Also courses of system theory and business and information ethics have been implemented into curriculum as obligatory courses during the last update in 2010.

The aim of this contribution is to present analysis of "Information Management" study on the graduate level on the Faculty of Informatics and Statistics at the University of Economics, Prague. The overview reflects statistical data from the period 2011 – 2015 for structural indicators, and period 2009 – 2014 for education based indicators, because we do not dispose the data from examinations in the school year 2015/2016 yet.

DATA COLLECTION AND METHODOLOGY

The basic sources for required data for our analysis were UEP´s central information agendas especially the part supporting educational processes. These applications contain data about all graduate applicants of specialization "Information Management" as well as about their examination´s results of all applicants who then became the specialization students.

According to the Czech Republic passed Act No. 101/2000, on the protection of personal data, we have to make anonymous all processed data at all levels. We removed from data all information that could lead to the identification of a specific applicant or student. For working out our data, we removed the information about an applicant's first and last name, birth certificate number and other identifiers from original study information system data set. None of the additional information obtained from primary systems and used in our data subset made it possible to identify an applicant´s or student´s identity.

All data were worked out on MS Excel platform using standard statistical functionality of the software and graphics were design in the same application as well.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

GENERAL DATA CHARACTERISTICS

The data file with entrance exams currently includes 1415 records that we have been collecting since the year 2009 wit data of entrance examination. Each record provides information about the admission procedure result of one student. The most key attributes in the data file include gender, field of study, faculty, type of study, entrance examination result and information about whether or not a student passed the entrance examinations and was accepted.

Other evaluated information are records about the examinations results during Information management studies. This file contents 7,217 records about all examinations results in all courses taught in this specialization.

REALIZED ANALYSIS

Here presented analysis is a part of complex analysis that has been realized for master study curricula "Information Management". We want to present the gender structure of applicants and students and also the share of foreign students in the Czech study curricula in this contribution (Sperkova & Nedomova, 2015). Further scope of interest is focused on average results of selected obligatory and voluntary courses. The grade of courses is following: 1-3 – passed (1- excellent, 2- very good, 3 - good), 4 not sufficient and has to repeat the course. In case, that the final evaluation of the course is 4+, student repeats the examination in this semester.

RESULTS

The first characteristics of "Information Management" is number of accepted students on the specialization in the structure man and woman is presented in the [Table 1].

Table 1: Number of Students Accepted on "Information Management"– Graduate Study

Gender/Year	**2011**	**2012**	**2013**	**2014**	**2015**
Male	50	35	57	43	50
Female	13	5	20	13	27
Summary	**63**	**40**	**77**	**56**	**77**

Facts presented in [Table 1] show that the majority of "Information Management" students are men. But perhaps it appeared the new trend in increasing number of women accepted for study in 2015. The structure of foreign students in Information management study is visible in the [Table 2].

Table 2: Number of Foreign Students in Czech Study Curricula "Information Management"

Country/Year	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Armenia	1					
White Russia	1				1	
Moldavia	1					
Republic of Peru	1					
Russian Federation	2			1	2	2
Slovak Republic	12	7	4	7	7	14
Ukraine				1		1

This [Table 2] presents relative small interest of foreign students for studying "Information Management" in Czech language. On the other hand the number of Slovak students has been increasing since 2012. We have to watch this trend and we want to analyze it in the future. Relative constant interest is visible by students from Russian Federation. This fact is related to increasing number of Russian citizens in the Czech society in last years.

The next question what we want to present here as a part of complex analysis of "Information Management" study in Czech language on University of Economics, Prague is analysis of average results in obligatory courses and in selected voluntary courses in investigated period.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

We took all examination results of all students annually (it does mean two semesters together) and we counted the average value from all results. In case, that student repeated the examination the first result was counted as 4. In case that the student obtained 4+, this result is not included into average, but only the next successful attempt. Students with evaluation 4 repeated the course in the next semester with new classification.

Table 3: Main Courses in Czech Study Curricula "Information Management" – Results

Course/Year	2009	2010	2011	2012	2013	2014
Obligatory courses						
Information Management	1.86	2.37	2.43	2.30	2.32	2.38
Project Management	3.31	2.71	2.60	2.54	2.67	3.02
System Dynamics	2.00	2.13	2.03	1.82	1.88	1.86
IS Audit	2.03	2.00	2.11	1.95	2.08	2.50
Information Security Management	2.05	2.11	2.32	2.13	2.14	2.27
Presentation and Communication of Information	2.75	2.33	2.33	2.49	2.29	2.31
Master Thesis Seminar	1.33	1.36	1.17	1.51	1.35	1.41
Theory of Systems - Introduction	2.50	2.47	2.48	2.12	2.35	2.37
Final State Examinations	**2.80**	**2.66**	**2.54**	**2.23**	**2.70**	**2.32**
Master Thesis	**1.75**	**1.94**	**1.59**	**1.55**	**1.62**	**1.53**
Voluntary courses						
New Media and Information Society	2.00	1.79	1.74	1.94	1.77	1.67
Information and Media	3.00	2.25	2.32	2.17	2.12	2.08
Business Intelligence	-	2.00	1.71	2.20	2.33	2.00

Note to [Table 3]: "Business Intelligence" and "Theory of Systems - Introduction" courses have been added into the curriculum in 2010. The course "Theory of Systems - Introduction" was voluntary course up to 2009.

[Table 3] shows that the most difficult course is "Project Management" where students are available to get competences for management of IT projects and they also worked out the project for delivery of information system into selected corporation. The second course is "Information Management" where students get information about information society (legal frame of the Czech Republic included and also basic documents of EU concerning information society), integrated management system and its parts and introducing information for auditing. The third course according to difficulty, it seems to be "IS Audit".

On the opposite side is the course "Master Thesis Seminar". This course serves as a platform for discussion of topics, methods and final results presentation of master thesis. The second course is "System Dynamics". During this course students obtain basic information about system science and its application in problem solving. Also computer application for supporting managerial work the "Prosim" software is presented to students. They "program" simply applications in this framework in order to get skills in simulation and in design of control panels.

Big advantage of here presented curriculum is that it is positive accepted by Czech Business. We do not have any graduate that is unemployed and their wages are above the country average (Nedomova, Doucek & Maryška, 2015, Hanclova, 2015). After very few years they entrance the middle management positions with perspective to get positions in top management not only in national, but also in international corporations.

CONCLUSIONS

Graduate study curricula "Information Management" on the Faculty of Informatics and Statistics the University of Economics, Prague offers to student's education on the border between classic management and information technology. Structure of courses respects ideas of triangle that contents "System Science" and system approach, basic and more detail knowledge and skills from the area of management with accent on its application in the third area – in "Business Informatics". The part of "Business Informatics" is represented by courses with orientation on "Integrated Management System", its components, on information security management and auditing of information systems.

Majority of applicants for "Information management" studies are men [Table 1]. The share of women is increasing, but still they represent only 35 % of accepted students in 2015.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Attractiveness of "Information Management" studies for foreign students after decrease in 2011 and 2012 has been increased in 2014 [Table 2]. The majority of foreign students is coming from the higher education institutions of Slovak Republic. The main reason is only very low language barrier between these two countries. Other foreign applicants for study are citizens of Russian Federation, this trend reflect increasing number of these citizens in the Czech population in last years.

The most difficult course for graduate "Information Management" study it seems to be the course "Project Management". On the other hand the best results are visible for course "Diploma Seminar" that is for preparing Master Thesis and it also serves as a platform for discussion of topics, methods and final results presentation of master thesis [Table3].

The trend in "Final state examinations" and in "Master Thesis" results is positive. Results shows decreasing value (quality is increasing) [Table3].

REFERENCES

Checkland, P. (1990). *Soft System Methodology in Action*. John Wiley, Chichester.

Doucek, P. & Novotný, O. (2009). Applied information management – How to Apply Organization Reference Models in the Real World? In: *PAAPE, Bjorn, VUK, Drago. Synthesized Organization*. Frankfurt am Main: Peter Lang, (pp. 139–160). ISBN 978-3-631-59215-1.

Flegl, M. & Vltavska, K. (2013). Efficiency at Faculties of Economics in the Czech Public Higher Education Institutions: Two Different Approaches. In *International Education Studies*, vol. 6, no. 10, (pp. 1–12). Canadian Center of Science and Education. ISSN 1913-9020.

Hanclova, J. (2015). Comparison of production performance in information and communication sectors in the EU selected countries. In *IDIMT 2015 - Information Technology and Society - Interaction and Interdependence - 23rd Interdisciplinary Information Management Talks* (pp. 111-118). Linz: Trauner Verlag Universität. ISBN 978-3-99033-395-2.

Hanclova, J., Rozehnal, P., Ministr, J. & Tvrdikova, M. (2015). The Determinants of IT Adoption in SMEs in the Czech-Polish Border Areas. In *Information Technology for Development*, vol. 21, no. 3, (pp. 426-444). Taylor & Francis Group. ISSN 0268-1102.

Hinton, M. (2006). *Introducing Information Management*. Elsevier, The Open University.

Kuncova, M. & Mulac, P. (2015). Higher professional education funding systems in selected european countries and in the czech republic. In *Turkish Online Journal of Educational Technology*, *Special Issue for INTE* 2015 (pp. 293-300). ISSN 1303 – 6521.

Nedomova, L., Doucek, P. & Maryška, M. (2015). ICT professionals in the Czech Economy, structural changes in human resources. *Proceedings of the 11th International Conference on Strategic Management and Its Support by Information Systems 2015* (pp. 419-430). VŠB-Technical University of Ostrava, Faculty of Ecomnomics, Ostrava. ISBN 978-80-248-3741-3.

Pavlicek, A. (2013). Possibities of Social Networks in Education. *Proceedings of the 10th International Conference on Strategic Management and Its Support by Information Systems 2013* (pp. 147–154). VŠB-Technical University of Ostrava, Faculty of Ecomnomics, Ostrava. ISBN 978-80-248-3096-4.

Sigmund, T. (2015). Vztah etického a ekonomického chování. In *Politická ekonomie*, vol. 63, no. 2, (pp. 223–243). University of Economics, Prague. ISSN 0032-3233.

Sperkova, L. & Nedomova, L. (2015). Are the entrance exams results of applicants to university in english and german languages equally good? In *Turkish Online Journal of Educational Technology, Special Issue for INTE 2015* (pp. 44-50). ISSN 2146-7242.

Vodáček, L. & Rosický, A. (1997). *Information Management (Informační management – pojetí, poslání a aplikace)*. Management Press, Praha, ISBN 80-85943-35-2.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ONTOLOGICAL CONVERSION: THE PLACE OF SELF-KNOWLEDGE, THE CONTEMPLATIVE TRADITION AND CONTEMPORARY MINDFULNESS IN EDUCATION

Carlos Sousa Reis
Coimbra University, CEIS 20
csreis@uc.pt

Albertina Oliveira
Coimbra University
aolima@fpce.uc.pt

ABSTRACT
In this paper, we will try to show how philosophy, psychology and education can still dwell on common issues, namely ontological transformation while using similar insights approaches. This is the case, for instance when we compare Epictetus' spiritual exercises and the current contemplative knowledge stream to which Mindfulness is inserted. By essaying to look for the connection between the stated approaches perhaps we can bring forth some mutual enriching ideas to the mentioned fields.

Vain is the word of that philosopher which does not heal any suffering of man.
Epicurus
But all excellent things are as difficult as they are rare.
Spinoza
The longest journey is the journey inward.
Dag Hammarskjöld

INTRODUCTION

There is an ancient but, perhaps, today inadvertent link between philosophy, psychology and education. Since the pre-Socratic endeavours around the concept of "psyché" –from the Greek word ψυχή– until the more contemporary philosophical common set of issues that have been developed, for instance, by Foucault (1999). However, nowadays such a historic and genealogic disciplinary imbrication may not be easily received, much less perceived and, perhaps, neither welcome from some entrenchments coming from both sides.

Fortunately, the work of Pierre Hadot, "Philosophy as a way of life" (1995), has brought attention to the issue, long ago somehow neglected by the Academy, when, in late XIII century, philosophy became more a matter of erudite practice of producing treatises than the expression of an existential option perseveringly sought, which would correspond more accurately to the original meaning of the word: the love for wisdom, while envisaging living accordingly to it. This is, precisely what Deleuze and Guattari (1994) stress as being real philosophy: the art of looking to things anew and creating concepts that insert meanings to life, which allow them to say that the philosopher (the friend of wisdom) killed the Sage (the one who arrogates to own wisdom). As Boyum (2010) explains, philosophical education does not turn out to be merely cognitive or intellectual, simply conveying a knowledge increase –although it is expected that this will also happen–, because it implies a transformation, a change of attitude and character, a transformation of the individual, a kind of conversion, though different people may reach different destinations, with different experiences and different results. Such process presents a very close parallel to current scientific approaches to Mindfulness and the purpose of this study is, precisely, to find the possible connections between both approaches, in order to bring forth some mutual enriching ideas to these two disciplinary fields.

THE REFLECTIVE AND PRACTICAL PHILOSOPHICAL TRADITION

Epictetus' (55-135 a.C.) *Enchiridion* (1865, 2012) and the *Meditations* (2002) from Marcus Aurelius (121-180 a.C.) are, perhaps, two of the most ancient and relevant references of the Stoic tradition that combined the concept of *Lógos* developed by Heraclitus (535-475 b.C.) with the Socratic quest for virtue, which implies a rejection of the shallow surrender to power, wealth, and fame. Such rejection came to embody the core of the critic carried on by the Cynics, like Antisthenes (465-365 b.C.), who became an ardent disciple of Socrates (470-399 b.C.), after studying rhetoric with Gorgias (485-380 b.C.). For its part, Antisthenes then became a teacher of Diogenes (412-323 b.C.),

 Copyright © International Conference on New Horizons in Education Conference (INTE)

from Sinope, who turn out to be considered the archetypal Cynic philosopher and, perhaps, the most renown of all times, as he took Cynicism to its logical extremes.

Stoicism's tripartite origin has, as Dinucci (2012) has shown, a very much consequent demonstration. Relying on Heraclitus they assume that the whole Cosmos is ruled by a divinity, according to his own law, which is the real underlying reason for all phenomena, although men tend to consider them just or unjust –as they live in a specific level of the flux of things–, failing to understand that such perspectives, sometimes apparently contradictory, depend on the circumstances of the subjects who do not realize the more global and profound logic controlling all events. We can make here a parallel with the tectonic plates movement: they move, but not for us, once our perception is not of the same scale. From Socrates, they assume a practical sense of philosophy committed to the indefatigable pursuit of the path to becoming an integral, strong and free man, along with his also paradigmatic use of irony as a critical method to denude the common tendency to adopt preconceived ideas. Many of Socrates' enmities actually sprung from his caustic use of irony. One must not forget that the Cynics indelibly recorded in history their names for posterity because of their ferocious critics upon customs and their very prone orientation to ascetic life.

Regarding the practical sense of philosophy, we can also find it very stark among the Cynics. For them philosophy was not a case of producing treatises and demonstrating some theoretical superiority, above all, it was a way of life – We could also say an "art of living" ("techne tou biou")–, coherently expressed in the way one lives (Hadot, 1995). Following Socrates, what they really search for was a posture of living and so they call for philosophy, taken in its etymologic sense, in order to assist such purpose. That is why the book compiled by Arriano, from Epictetus' classes, was named after the Greek word *enkheiridion* (ἐγχειρίδιον), which refers to a dagger, a portable weapon or portable book or even a book at hand, made of *apóphthegma* (αποφθεγμα), i.e., statements pronounced out loud, as weapons blow.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

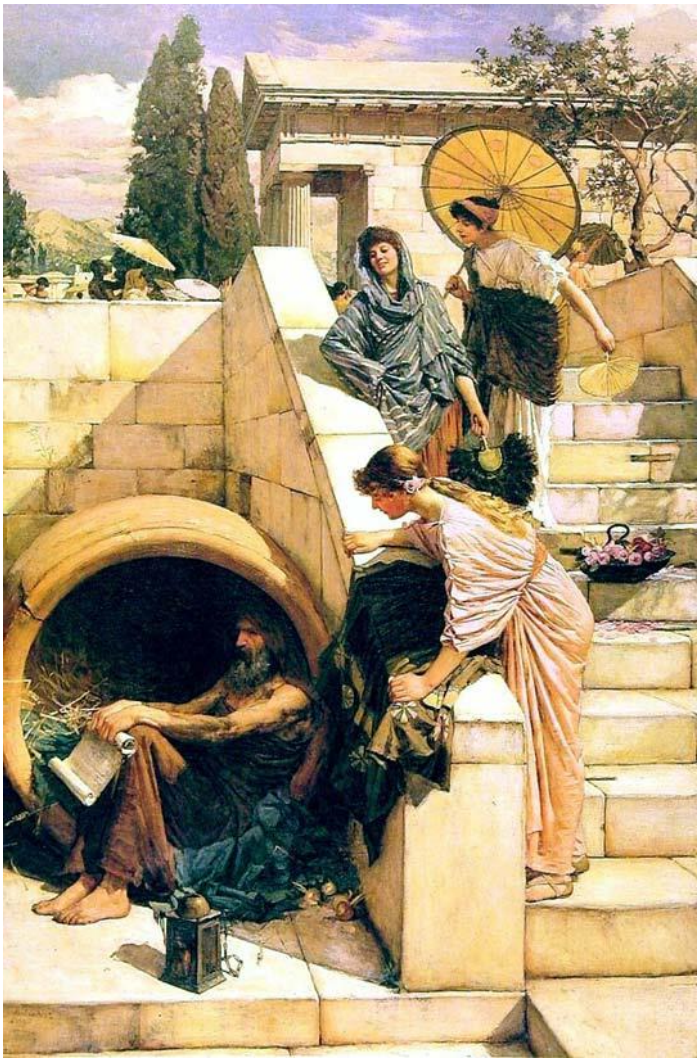


Figure 1: *Diogenes from Sinope* by John William Waterhouse
(1905, oil on canvas - Art Gallery of New South Wales - Sydney, Australia)

Besides, from Socrates the Stoics took another principle, intrinsically intertwined with the above mentioned. In his works, Plato often makes Socrates utter the maxim "know thyself" to motivate the Dialogues, namely in the *Charmides* (164d), the *Protagoras* (343b), the *Phaedrus* (229e), the *Philebus* (48c), the *Laws* (II.923a) and in the *Alcibiades* (124a, 129a, 132c). The credibility of such use is confirmed by Xenophon's *Memorabilia* (1923, 4.2.24), who was another disciple of Socrates (as it is referred by Aristophanes in The Clouds (814), which was written to make a mockery of philosophers in general and took Socrates as the "party brass drum"). In fact, Socrates was well aware that the maxim belonged to a long-established wisdom. In Greece was common knowledge that it was inscribed in golden letters on the forefront of Apollo's temple at Delphi, followed by another admonition from the god to the worshipers entering: "Nothing too much!". Of course, Socrates knew it very well, as he knew that it was attributed to the seven ancient Sages (Protagoras, 343b), as Pausanias (Description of Greece, 10,24, 1-2) confirmed. Socrates used de maxim abundantly and it came to grant him the epithet of being also a sage. In Plato's *Apology* of Socrates (21a-e), he reports a did of his dear friend Chaerephon: "Well, once he went to Delphi and made so bold as to ask the oracle this question; and, gentlemen, don't make a disturbance at what I say; for he asked if there were anyone wiser than I. Now the Pythia replied that there was no one wiser." Socrates was not retelling this to praise himself, rather he wants to made explicit the difference between his humility and the disproportionate sleaze of those that assume to be wise, to know something worthwhile, but after all they did not, while Socrates at least knew he knew nothing for sure when compared to the Divinity: "I thought to myself, 'I am wiser than this man; for neither of us really knows anything fine and good, but this man thinks he knows something when he does not,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

whereas I, as I do not know anything, do not think I do either. I seem, then, in just this little thing to be wiser than this man at any rate, that what I do not know I do not think I know either.'" So, Socrates came to be known as the philosopher of the "enlightened ignorance", in what he was afterwards followed by many others over the centuries, who also claimed to focus in the maxim of "know thyself": Saint Augustin, Peter Abelard, Petrarch, Montaigne, Kant, Hegel, Fichte and Cassirer, just to name a few. We shall get back to this issue in order to consider its relation to contemporary mindfulness theoretical approach, which can claim an oriental and occidental tradition that takes the "Know thyself" precept as a core principle of existence.

It is important to close our discussion by referring three related issues. The first one, is the Socratic and Stoic awareness about the existential difficulty of carry on with the principle, already mentioned by Thales of Miletus, according to Diogenes Laertius (*Lives and opinions of eminent philosophers, I, 12,15*) and also referred in Plato's *Alcibiades* (132a-e). The second issue concerns the principle that "the unexamined life is not worth living" (Apology, 38a), which was paramount for Socrates and the Stoics' philosophy and way of living and is indeed the spring of all meditation, as well as it has become the basis of current mindfulness. Consequently, we come to realize that the "Delphic precept" has been the pillar of all time for philosophy, ethics, and mysticism, as it is today for mindfulness.

SPIRITUAL EXERCISES, EXISTENCE, AND MINDFULNESS

We have stated above that western ancient philosophical tradition was deeply involved in propitiating a reflexive focus on one's existence, consisting in a practical endeavour with ethical implications. Particularly, the Stoic tradition has developed a reflexive practice bound to open a path for achieving an existential clarification regarding different, although interconnected, fields. Piérre Hadot presented a sound explanation of such approach, bringing forth the practical purpose of the Stoic philosophy, namely the structure of its reflexive practice while exposing the underlying organization of their work that so many times was erroneously taken as fragmentary. After a long quoting of Philo of Alexandria, Hadot explains:

> "it means that philosophy was a mode of existing-in-the-world, which has to be practiced at each instant, and the goal of which was to transform the whole of the individual's life.
> For the ancients, the mere word *philo-sophia* – the love of wisdom – was enough to express this conception of philosophy. In the Symposium, Plato had shown that Socrates, symbol of the philosopher, could be identified with Eros, the son of Poros (expedient) and of Penia (poverty). Eros lacked wisdom, but he did know how to acquire it. Philosophy thus took on the form of an exercise of the thought, will, and the totality of one's being, the goal of which was to achieve a state practically inaccessible to mankind: wisdom. Philosophy was a method of spiritual progress which demanded a radical conversion and transformation of their individual's way of being.
> Thus, philosophy was a way of life, both in its exercise and effort to achieve wisdom, and its goal, wisdom itself. For real wisdom does not merely cause us to know: it makes us 'be' in a different way. […] The ancients knew that they would never be able to realize wisdom within themselves as a stable, definitive state, but they at least hoped to accede to it in certain privileged moments and wisdom was the transcendent norm which guided their action.
> Wisdom, then, was a way of life which brought peace of mind (ataraxia), inner freedom (autarkeia), and a cosmic consciousness. First and foremost Philosophy presented itself as a therapeutic, intended to cure mankind's anguish" (Hadot, 1995, 265-266).

While peace of mind implies the development of a "cosmic consciousness" that extends the soul throughout the infinity of universal nature, freedom means, precisely, being independent of all exteriority and the sense that because the rules of nature transcend our will and power we should search for acceptance of what we can not change and envisage it with the eyes of that same nature, let us say its own scale. In few words, it meant one should look for being also at peace with the world, in harmony with the cosmos we are a part of. As to the practical reflexive approach that can mediate such a way of being, it is necessary to distinguish, as the Stoics did, between the *discourse about philosophy* and *philosophy itself*: in the first case, for pedagogical reasons, logic, physics and ethics appear as theories on those matters, although, in fact, they are but parts of philosophical discourse, while "philosophy itself – that is, the philosophical way of life – is no longer a theory divided into parts, but a unitary act, which consists in living logic, physics, and ethics. In this case, we no longer study logical theory – that is, the theory of speaking and thinking well we simply think and speak well. We no longer engage in theory about the physical world, but we

 Copyright © International Conference on New Horizons in Education Conference (INTE)

contemplate it. We no longer theorize about moral action, but we act in a correct and just way" (Hadot, 1995,267). Philosophy is not about devouring theory books that are then put into discourse but not into practice and conversely, practice is not something extraneous to one's philosophy, i.e., the way of living could not contradict the discourse one presents. Philosophy is not about producing systematic treatises, rather it should be systematic in producing the striking essential principals that could transform us and frame our lives.
Therefore, philosophizing must be, and it was for Stoicism and Epicureanism, as it was before for Socrates, "a continuous act, permanent and identical with life itself, which had to be renewed at each instant. For both schools, this act could be defined as an orientation of the attention" (Hadot, 1995, 268). It becomes now clear another correspondence with contemporary mindfulness: the crucial role played by attention to one's own life and the undergoing related inner processes; nothing else but an awareness towards the finitude of life. For Stoicism, it was a paramount issue the purity of intentions through which the conformity of the individual will with reason – the same that ruled the cosmos – could be attained. Such attention, however, comes with a cost, the systematic effort of practicing the adequate meditation exercises: "the ever-renewed awareness of the finitude of life, examination of one's conscience, and, above all, a specific attitude towards time" (Hadot, 1995, 268). As the only reality that depends on us, the present was then taken as the suffice condition for happiness to be considered, aside the worries of the past and the future. The former can no longer be changed and the later can not be controlled due to its imponderability. One can and must be happy now, paying the right tribute to the incommensurable value of existing. Thus philosophy also obtains an aesthetic function, as it is assumed as a means of carrying on the art of living, by exercising the art of taking care of oneself. A process the ancient Greeks called "epimeleia heautou" and then took the designation of "cura sui" within the Latin culture. The important thing for the ancient philosophers was the personal work on oneself, the set of a series of practices that constituted a way of being, or a way of life.

We must now focus our attention on the Stoic-Platonic exercises of attention (*prosoche*), a meditation technique that triggers conscience examination, rooted in the sense of our finitude, thus entailing, since Socrates, a preparation to death. As we have seen above, Philosophy as a theoretical approach is pedagogically divided into three disciplines: Logic, Physics, and Ethics. However, aside being forms of discourse, they are foremost about a practical clarification of what we can think, what we can desire and what can we do. Therefore, these three realms configure domains of our freedom, once they depend on nothing else but what it is within our reach. According to the Stoics, we have a fair independence of thinking well, to consider the desires we should follow and the paths to be trodden. The process can be represented as follows (Figure 2)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

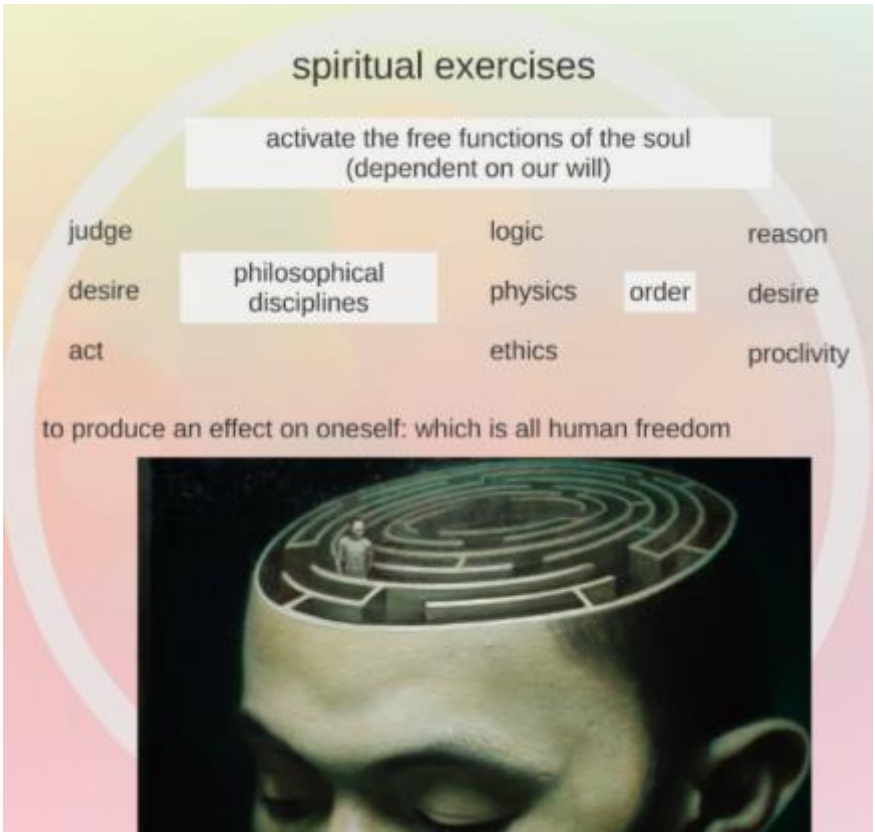


Figure 2: Scheme of Epictetus' spiritual exercises

When we activate the free (i.e. depending on our will) functions of the soul (to judge, to desire and to decide how to act), which correspond to the philosophical disciplines of Logics, Physics, and Ethics, we can put an order in our reason, our desires and the proclivity of our behaviours. This allows us to produce an effect on ourselves, which is all the freedom human beings can really aspire to. As Epictetus says in his Enchiridion (I, 1-5), which means "something at hand" or "Manual" and was like an instrument gathering the maxims to be used in current everyday life situations and especially in times of trouble (as reading and number base we used the Dinucci & Julien (2012) version, regarding the translation for English we used the Thomas Wentworth Higginson (1865) version):

> Of things, some are in our power, and others are not. In our power are opinion (ὑπόληψις), movement towards a thing (ὁρμή), desire, aversion (ἔκκλισις), turning from a thing); and in a word, whatever are our own acts: not in our power are the body, property, reputation, offices (magisterial power), and in a word, whatever are not our own acts. And the things in our power are by nature free, not subject to restraint nor hindrance: but the things not in our power are weak, slavish, subject to restraint, in the power of others. Remember then that if you think the things which are by nature slavish to be free, and the things which are in the power of others to be your own, you will be hindered, you will lament, you will be disturbed, you will blame both gods and men: but if you think that only which is your own to be your own, and if you think that what is another's, as it really is, belongs to another, no man will ever compel you, no man will hinder you, you will never blame any man, you will accuse no man, you will do nothing involuntarily (against your will), no man will harm you, you will have no enemy, for you will not suffer any harm.
>
> If then you desire (aim at) such great things, remember that you must not (attempt to) lay hold of them with a small effort; but you must leave alone some things entirely, and postpone others for the present. But if you wish for these things also (such great things), and power (office) and wealth, perhaps you will not gain even these very things (power and wealth) because you aim also at those former things (such great things):1 certainly you will fail in those things through which alone happiness and freedom are secured. Straightway then practice saying to every harsh appearance,2 You are an appearance, and in no manner what you appear to be. Then examine it by the rules which you possess, and by this first and chiefly, whether it

 Copyright © International Conference on New Horizons in Education Conference (INTE)

> relates to the things which are in our power or to things which are not in our power: and if it relates to any thing which is not in our power, be ready to say, that it does not concern you.

It thus becomes clear that if we want to dominate those things that are not under our control is to become their slave and that is why we ought to keep within those realms of our freedom, which require a kind of spiritual exercise. Once again we see that philosophy is not about producing Treatises or trying to impose one's own theoretical perspective about an issue, it is about to undertake a way of life, with the intent of sculpting one's character and perfect oneself. Dialogue shall be understood as a friendly confrontation, as a process between two fighters performing an exercise which benefits them both; like a struggle between oneself –the equivalent of playing chess alone– in order to determine the perspective, change of attitude or conviction, in the form of a dialogue with oneself. In such case, the written word was used only for educational purposes of induction an active spiritual exercise. Exercises because practical, experienced, requiring effort and practice, spiritual because involving the spirit as a whole. The aim is not the doctrine, but a synthetic and coherent constellation of existential principles that can ensure security, serenity, peace, balance, mental harmony, happiness and so the result was not a treaty, but a manual, "at hand"... A Manual one should read, reread, meditate and learn in order to build a lasting matrix for one's own behaviour, because the aim now is to be courageous enough to confront and disclose the truth about oneself (askesis, understood in the broad sense of an exercise or practical training) (Foucault, 1999). That is why teaching philosophical doctrines do not guarantee that the principles are put into practice, does not guarantee the "trans/formation" of the soul and one's way of life, does not serve to penetrate the being. Only the systematic practice of spiritual exercise that articulates reason, imagination and affectivity can root deeply penetrate the being and produce a "second nature" fruit of the margin of freedom to act upon ourselves. The goal of such practice was: self-knowledge, authenticity, freedom, peace. The method: systematic spiritual exercises, combining reason, imagination, and affectivity. Thus creating a de-subjective distancing and endowing one of self-control and guidance for frugality and serenity, the focusing in the present and egalitarianism.
As Pierre Hadot (1995) said, life is complex only approachable by different methods, representing Epicureanism and Stoicism the poles of the inner life: tension and relaxation; commitment and selflessness; enthusiasm and reserves; certainty and scepticism; passion and indifference.

Finally, one may ask, what kind of exercises did Epictetus practice to come to the maxims recollected in his "Manual". Here we will call upon Foucault's "Techniques of parrhesia" (1999). "Parrhesia" can be translated as telling the truth to someone or telling the truth about oneself, which is the for the Stoics and Epictetus as we shall see. According to his analysis of Epictetus' spiritual exercises, they all serve a central purpose: to guarantee the sovereignty of our will and self-stability by putting on constant trial all representation; thus self-sovereignty must be recognized as the organizing principle of Epictetus' form of self-examination. By undertaking such spiritual exercises Epictetus overcomes the problems he met by guaranteeing himself that he could "distinguish those representations that he can control from those that he cannot control, that incite involuntary emotions, feelings, behaviour, etc., and which must therefore be excluded from his mind".

Foucault identifies two types of exercises, although he admits there are numerous types of self-examination techniques and practices in Epictetus. Some of them resembling the evening examinations of Sextius, other similar to the general self-scrutiny of Serenus. In the evening examination practiced by Sextius, as described by Seneca, the examiner asks himself everyday "What bad habit have you cured today?", "What fault have you resisted?", "In what respects are you better?" while following the principle of nothing concealing or omitting from himself, i.e., his consciousness. For Sextius the benefits were obvious and wonderful: anger will cease and become controllable if it finds that it must appear before a judge every day; sleep that follows self-examination becomes delightful, tranquil, deep and untroubled, once the examiner and critic of self has given report of its own character, either praising or admonishing his own soul.

According to Foucault's analysis, Epictetus' spiritual exercises can be explained through two metaphors: "the metaphor of the nightwatchman or doorkeeper who does not admit anyone into his house or palace without first checking his identity; and the metaphor of the 'money-changer' who, when a coin is very difficult to read, verifies the authenticity of the currency, examines it, weighs it, verifies the metal and effigy, and so on". Epictetus want to be sure that through permanent surveillance with regard to all his representations he can guarantee what lies within the moral real, what is within our control.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

For the purpose of our work, it is also very important to describe the kind of practices that can be applied. One, borrowed from the Sophists, consists in in game where one partner states a fact and the other has to answer, quickly, whether if it is good or evil by considering if it is within or beyond our control. The second practice develops by a simple way, it just takes one goes walking through the streets asking himself whether any representation that comes to his mind depends on one's will or not. In the former case, it is allowed and considered in the latter it is rejected.
It is time to conclude this issue. Stoicism is a powerful contemplative approach that envisages life as a construction from inside out. It is focused on wide open our eyes to see as if we were seeing for the first time. How much of this philosophical attitude does not need today to be recovered? Especially to confront the invasive "performativity" trend? According to Lyotard (1979), performativity is the culture of performance, where only efficacy and efficiency counts; eventually, it becomes a kind of "culture" that invades all realms of life reducing everything to its regimen of utility, acceleration, measurability, and profitability. However, recently, Mindfulness approaches are gaining increasing scientific attention. What proximities and distances exist between the so-called "Buddhist Trojan Horse" and the ancient human reflexive tradition? That is what still remains to be shown.

MINDFULNESS, SPIRITUAL EXERCISES AND EXISTENCE

As stated above, during the whole Antiquity learning to know oneself (*gnóthi seauton)* or to take care of oneself (*cura sui,* in the Latin expression) was a goal of philosophy rooted in a practical approach. However, the moment Modern Science was born, after the sixteenth century, was equally the moment that goal and methods were depreciated and discarded from the map of the paths that lead to knowledge, the paths of scientific research (Antunes, 2014). Nowadays many scholars and researchers from different fields are rehabilitating that ancient tradition which we can claim to be equally oriental and occidental (Bai, Scott, & Donald, 2009), known as mindfulness, meditation or contemplative approaches, although it is presented in contemporary literature as mainly inspired by the Buddhist tradition (Oliveira & Antunes, 2014).

Mindfulness approaches in contemporary scientific knowledge, whereas in the domain of psychology or education, emphasize, rightly, clear thinking, wisdom and the intention of living in the present as attentive, openly, receptive and completely as one can live. This requires a practical approach, training, and a huge commitment to a way of life oriented toward personal and spiritual growth. As Thoreau put it, 'to waken to a poetic and divine life' we need to enter the realm of contemplation. Arthur Zajonc, a physics scientist committed to contemplative inquiry, asserts that we need to extend science methods as well as "the same values of clarity, integrity and collegiality can infuse contemplative exploration as have supported natural scientific exploration" (2009, p. 16). The author assumes also that "once we appreciate the full multidimensional nature of the human being and of our universe, we will be better equipped to deal with its problems" (p. 16). Going further he also explains that "we seek through meditation to confront the depths and heights, the moral and spiritual realities that underlie all things" (p.35). Stressing the differences between conventional science (under a positivist orientation), and contemplative inquiry, he states that "where conventional science strives to disengage or distance itself from direct experience for the sake of objectivity, the contemplative inquiry does exactly the opposite. It seeks to engage direct experience, to participate more and more fully in the phenomena of consciousness. It achieves "objectivity" in a different manner, namely through self-knowledge and what Goethe in his scientific writings termed a "delicate empiricism" (p. 35).
Human being know yourself is a call to self-knowledge. Let's consider how a contemporary contemplative scientist describes his experience:

> "I hear the call, I pause, and I take up the injunction. I turn first to myself as physical human being. I sense the earthly, substantial aspect of myself: my physical body. I begin with my limbs, my hands and arms, my feet and legs […] next I turn to the inner life of thoughts, feelings, and intentions. I notice how my will is carried out mysteriously. My intentions to think or to act culminate, via ways that are unknown to me, in a coordinated flow of movement. I live in that activity, which I can direct. It is part of my nature […]. Finally, I turn to my thinking. My life of thoughts is at once my life and a participant in something that transcends me. I can communicate with others, share thoughts with them. This points to something universal in thinking: like all others, I participate in a universal stream of thinking activity. I know, through experiencing it inwardly, that thinking is a part of my nature. […] Finally, I shift my attention away from the body and even away from my thoughts, feelings, and intentions. I attend instead to a presence or activity that animates but transcends all of these" (Zajonc, 2009, p. 37).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

But, what does mindfulness really mean? Although we saw that mindfulness is not exclusive to eastern knowledge, the concept, as it has been appropriated by contemporary scientific knowledge, is mainly rooted in eastern meditative practices and addresses a specific way of paying attention. According to Kabat-Zinn (1990), its practice requires three key elements: 1) attention focused on the present moment, 2) intentionality and 3) a non-judgemental attitude. This approach is especially used to deal with the tangle of thoughts and feelings on the past or the future, as well as the rationalization which leads individuals to lose sight of what is happening at the present moment and to live in a state termed as "automatic pilot".

Mindfulness is the English translation of the Pāli word *sati* that means the act of paying attention in the present moment, but this only captures the mechanistic function of *sati*. Considering the total spectrum of meaning, *sati* also means clear comprehension or full awareness (*sati-sampajañña*) that is a psychological stance wherein the object or situation is considered within its context of time, place, and situation. This view incorporates ethical concerns in the sense that includes "an appreciation of the practitioner's attitudes and the impact that any actions they are involved in will have upon themselves and others" (Amaro, 2015, p. 65). And a third meaning of mindfulness (*sati-paññā*) points to "the quality that leads to the full blossoming of human well-being" (p.65) that is conjoined with wisdom and that involves a process of examination of all experience as it flows. The training in this process culminates in the letting go of absolute realities and in the realization that "what is experienced is not 'the world' as a fixed and definite external reality, but rather it is the mind's representation of the world" (p. 66).

We can add, as Nyanaponika (cit. by Bodhi, 2013) highlighted, that the open, receptive, and non-judgmental attitude inherent in bare attention, is a process of "tidying up the mental household" (p. 29), that requires us to examine the mind. Thus, mindfulness lies not in the conceptual realm but is specifically a pragmatic way of dealing with reality. Buddha took a radically pragmatic approach toward human development and well-being. He started with the experiential domain, the everyday experience of dissatisfaction and suffering and have adopted the attitude of a clinician "*Where does it hurt?"* rather than a theoretical instance, "*Let me tell you how it all works"* (Amaro, 2015, p. 63). This means that concerning mindfulness and the contemplative exploration, the experience of the individual is the defining factor. Such principle, according to Amaro (2015), is clearly articulated in the *Kalama Sutta* where Buddha gave the following orientations:

> "Kalamas, do not go upon what has been acquired by repeated hearing; nor upon tradition; nor upon rumour; nor upon a scripture; nor upon deduction; nor upon a bias toward a notion that has been pondered; nor upon another's apparent ability; […] Kalamas, when you yourself know: 'These things are unwholesome; these things are blameworthy; these things are criticized by the wise; undertaken and followed, these things lead to harm and dissatisfaction,' then you would be wise to abandon them…And when you yourselves know: "These things are wholesome; these things are not blameworthy; these things are praised by the wise; undertaken and followed, these things lead to benefit and happiness,' you would be wise to enter upon and dwell in them" (A 3.65, cit. by Amaro, 2015, p. 64).

This pragmatic approach helps us to escape, to the extent it is trained, from the trap of using mainly conceptual knowledge and from the tendency, reinforced by the Judeo-Christian tradition of the West, to adopt an instance of judgment everything as right and wrong, good or bad. Judging things as right or wrong comes from a dichotomist and very naïve perspective. In the context of Buddha teachings, the Pāli word *sammā* translated as *right* does not mean right as the opposite of wrong, but rather that which is "balanced", "attuned". As Sumedho (2014, cit. by Amaro, 2015, p. 64) put it "one can relate to actions, speech, livelihood and responses to life through wisdom and through being aware of the appropriateness of time and place. This comes through wise intuition, through harmony, through seeing things with a sense of balance and transcendence".

Thus, mindfulness awareness is cultivated through training, leading us always to a pragmatic standpoint: "Does this attitude, this action, alleviate suffering? Rather than the theoretical question, "Does this experience match the picture of how I believe things to be?" (Amaro, 2015, p. 64).

Lastly, we should emphasize that Mindfulness, spiritual exercises, and existence are profoundly intertwined and that it is a path of practice, development, and (trans)formation and above all of the liberation of human suffering as well as of achieving balance, harmony, and well-being.

CONCLUSION

 Copyright © International Conference on New Horizons in Education Conference (INTE)

For concluding, we would like to stress the parallelism found between the philosophical tradition –from Socrates to the late Stoics like Epictetus and Seneca, which has recently gain momentum with Hadot (1995) and Foucault (1999)– and contemporary Mindfulness, which has gain status among psychologists and scholars from other disciplines. As we have tried to show, such parallelism extends from the principles and motives to the purposes, namely self-awareness and a life lived under examination, in order to attain peace of mind, equilibrium, happiness, i.e., spiritual self-development.

REFERENCES

Amaro, A. (2015). A holistic mindfulness. *Mindfulness, 6,* 63-73.

Antunes, B. (2014, August). *The Cartesian moment and the contemplative turn: Reshaping epistemology*. Paper presented at Summer Research Institute, Mind & Life Europe, Fraueninsel, Chiemsee.

Aristophanes (1853?). *Clouds*. *The Comedies of Aristophanes*. London/Bohn: William James Hickie.

Bai, H., Scott, C., & Donald, B. (2009). Contemplative pedagogy and revitalization of teacher education. *The Alberta Journal of Educational Research, 55*(3), 319-334.

Bodhi, B. (2013). What does mindfulness really mean? A canonical perspective. In J. M. Williams & J. Kabat-Zinn (2013). *Mindfulness: Diverse perspectives on its meaning, origins and applications* (pp. 19-38). London: Routledge.

Brandwood, L. (1976). *A word index to Plato*. Leeds: W. S. Maney and Son.

Boyum, S. (2010). The concept of philosophical education. *Educational Theory*, 60, 5: 543-560.

Deleuze, G. & Guattari, F. (1994). *What is philosophy?* New York: Columbia University Press.

Dinucci, A. (2012). Introdução ao Manual de Epicteto. In A. Dinucci, & A. Julien (Transls), *Manual de Epicteto* (pp. 3-13). São Cristóvão: Universidade Federal de Sergipe.

Diogenes (1972). *Lives of eminent philosophers*. *Diogenes Laertius*. Cambridge: Harvard University Press.

Epicteto (2012). *Manual de Epicteto*. (A. Dinucci, & A. Julien Translators). São Cristóvão: Universidade Federal de Sergipe.

Epictetus (1865). *The works of Epictetus*. Boston: Little, Brown and Company.

Foucault, M. (1999). Techniques of Parrhesia. In Joseph Pearson (Ed.), *Discourse and Truth: the Problematization of Parrhesia*. Digital Archive: Foucault. Accessed at http://foucault.info/doc/documents/parrhesia/foucault-dt5-techniquesparrhesia-en-html

Hadot, P. (1995). *Philosophy as a way of life: Spiritual Exercises from Socrates to Foucault*. London: Blackwell.

Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness*. New York: Delacorte.

Keiser, P. (1992). A stylometric method and the chronology of Plato's works. *Bryn Mawr Classical Review*, 3 (1), 58-73.

Lima, M. P., Oliveira, A. L., & Godinho, P. (2011). Promover o bem-estar de idosos institucionalizados: Um estudo exploratório com treino em mindfulness. Revista Portuguesa de Pedagogia, 45(1), 165-183. DOI http://dx.doi.org/10.14195/1647-8614_45-1_9f

Lyotard, J.-F. (1979). *The Postmodern condition: A report on knowledge*. Manchester: Manchester University Press.

Marcus Aurelius (2002). *Meditations*. New York: Modern Library.

Pausanias (1918). *Pausanias description of Greece*. Vol. 4. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd.

Plato (1955). *Alcibiades 1*. In *Plato* (Vol. 8). Cambridge, MA: Harvard University Press; London: William Heinemann Ltd.

Plato (1966). *Apology*. In *Plato* (Vol. 1). Cambridge, MA: Harvard University Press; London: William Heinemann Ltd.

Plato (1967). *Charmides*. In *Plato* (Vol. 3). Cambridge, MA: Harvard University Press; London: William Heinemann Ltd.

Plato (1967). *Laws 2*. In *Plato* (Vol. 11). Cambridge, MA: Harvard University Press; London: William Heinemann Ltd.

Plato (1967). *Phaedrus*. In *Plato* (Vol. 9). Cambridge, MA: Harvard University Press; London: William Heinemann Ltd.

Plato (1967). *Philebus*. In *Plato* (Vol. 9). Cambridge, MA: Harvard University Press; London: William Heinemann Ltd. Palto (1923).

Plato (1967). *Protagoras*. In *Plato* (Vol. 3). Cambridge, MA: Harvard University Press; London: William Heinemann Ltd.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Xenophon (1923). Memorabilia. In E. C. Marchant (Transl.), *Xenophon in Seven Volumes* (Vol 4.). Harvard University Press, Cambridge, MA; William Heinemann, Ltd., London.

Zajonc, A. (2009). *Meditation as contemplative inquiry: When knowing becomes love.* Massachusetts: Lindisfarne Books.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

OPINIONS OF CANDIDATE TEACHERS ON ACHIEVING TURKISH NATIONAL EDUCATION SYSTEM'S GOALS

Aygül OKTAY
Abant İzzet Baysal University, Faculty of Education,
Educational Sciences Department,
oktay_a@ibu.edu.tr

ABSTRACT
The aim of this study was to find out the opinions of preservice teachers about reaching to the goals of Turkish National Education System. This study was done with a total of 230 candidate teachers enrolled to teacher's formation education program and last-semester's undergraduate students in the class of the Turkish Education System and School Management Courses of the Faculty of Education. The data of the present study were collected by the "Analysis of goals of Turkish National Education System Questionnaire" developed by the researcher. At the end of the study, it is concluded that the candidate teachers have opinions in "average and above average" levels about the Turkish National Education System's goals related to Atatürk's Principles and Revolution, national and ethics values, responsibilities for Republic of Turkey as a citizenship. Besides, the candidate teachers have described to reach to the levels of "average" about the goals related to Atatürk's nationalism, cultural values, having positive relationship and personality, preparing for life by developing their interests. The Turkish National Education System should be improved in order to reach the goals of Turkish National Education, to solve problems with scientific methods, and to adapt into new situations. Along with many different factors related to reaching to the goals of Turkish National Education System, educating qualified teachers is the most important factor. The candidate teacher's sufficiency should be improved about achieving the goals of Turkish National Education System.

Keywords: Turkish National Education System, Goals, Candidate Teachers

PROBLEM STATEMENT

For the upbringing of children in primitive and feudal societies the informal education of family and peer groups is sufficient. Because of the growth of the division of labour in the society with the industrialization, arising professions requiring speciality and the increase of the cultural background the formal education is needed and the education system is institutionalised. Education is a process that lasts life-long and provides individuals with knowledge, skills and manners (Ertürk, 1979). The functions of Education can be grouped in four dimensions; these are social, political, economic and the development of individuals (Erden,2011,pp.75).

The social functions of education are socialization of the individual and the transfer of cultural heritage. Education plays an important role arising of the common values in society. Society socializes individuals by educating them and transfers cultural heritage to individuals (Güvenç,1989). Socialization is an important process for both the individual and the society where it can be considered a member of that society as biological asset. The society teaches students the common values of the society and the role of behavioural patterns in the society. Thus, it is ensured that the individuals become coherent with the society, that is, to be collaborative, to be aware of their rights and responsibilities. Nowadays, because of the fast cultural accumulation, the importance of schools is increasing to take the initiative passed to a new generation of cultural heritage. Out of cultural properties schools selects those elements most suitable to the age and necessities of the pupils. They provide those elements to the pupils in a purposeful and planned way. Besides transferring the existing culture, the schools contribute also to the development of culture. In rising progressive and creative individuals, the schools initiate and develop innovations in the society. Thus, it plays a role in ensuring the cultural accumulation (Erden,2011, pp.40-42).

In political function, education means to raise citizens, who are aware of the political system, care for the nation and are aware of his/her tasks and responsibilities. Societies teach children national values and symbols in schools in order to defend the existing political system. The basic philosophies and principles are transferred to the children and youth by celebrating special day events. So it aims to defend the existing political system.Education provides children with leadership skills according to the abilities and interests of the children. For this, it is important to know pupils features, to make them aware of their own powerful and weak parts and lead them accordingly. Education also has the role to raise children who know about their tasks and responsibilities and develop these as an attitude (Erden,2011, pp. 77).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

One primary function of economy is to raise enough manpower with the necessary qualification. In schools, it is important to provide individuals with knowledge and skills, which are compatible with the modern technology. This means that education needs to be seen as an investment and that, this investment needs has to be in accordance to the necessities of the country.Also by acquiring a profession according to the interests and skills individuals may lead a dignified and happy life. The second role of education is to provide individuals with the accurate consumption behaviour. These are;(i) to develop a spending awareness, (ii) to make a market research, (iii)to have consciousness about quality consumption and (iv)to develop a saving behaviour (Karakütük,2000).

The educational function of improving individuals began gaining in importance with the increasing value ascribed to individuals in our modern and democratic societies. In educational institutions individuals acknowledge his/her natural and social environment, learn to make use from these and to satisfy the needs in a best possible way. Education enables individuals not only to serve society but also to acquire a profession with a high income, and to gain status as well as self-realisation of the individual. Educational institutions, in order to improve individuals' functions it needs to take into account individuals necessities. It is important to teach the individual the necessary knowledge, skills and manner that helps him/her to meet the own economic needs (Ozankaya,1977).

The right to education, is acknowledged as a birth right and established internationally with the Declarion of Universal Human Rights (28th and 29th clauses) and Children's Rights Declaration (26th clause). Accordingly the right to education is being articulated in the Clause 42 (1982) of the constitution of the Republic of Turkey as follows: *No one must be bereft of the right of education and learning. The scope of the right to education is determined by the law. Education and learning is conducted according to the principles and reforms of Atatürk and according to the guidelines of modern science and education, under the control of the state. It is not allowed to establish educational institutions which do not comply with these guidelines. The freedom of education and learning does not annihilate the duty of loyalty. Elementary education is for all girls and boys with a Turkish citizenship compulsory and free of charge in state schools.*

A countries education system is dominated by general aims and fundamental principles, which reflect the education philosophy and the politics of a society. The Turkish Education System is directed by general aims and principles. According to the Fundamental Law on Education (nr. 1739) "General Aims" are articulated as follows (www.meb.gov.tr. Downloanded by: Jun 24.2016)

> *1. To educate individuals to citizens who are loyal to the reforms and principles of Atatürk and to his notion of nationalism; embracing, preserving and developing the national, moral, humanitarian, spiritual and cultural values of the Turkish nation; loving his/her family, nation and dignify it all times, to comply with the human rights, respect the secular and social Turkish state that is determined by the constitution and acknowledge his/her own tasks and responsibilities.*
>
> *2. Raising individuals as positive, creative and efficient having a character and personality, which is improved healthily and balanced in point of body, mind, morality, soul and emotion, free and scientific thinking strength, wide of conception of the World, raising individuals respecting human rights, esteeming personality and enterprise, feeling responsible for he community.*
>
> *3. Preparing them for the life via acquisiting group working habit and needed information, ability, attitudes by improving their attention, verification and capabilities, and ensuring them jobs contributing happiness for themselves and community, on the one hand, raising welfare and happiness of Turkish community and Turkish citizens; on the other hand, supporting and accelerating the development of cultural, social, economic in national unity and integrity, and finally making Turkish nation a prominent, creative, positive partner of contemporary civilization.*

Programs and activities of all formal and common educational institutions dependent education system are organized in the point of this general aim and priciples. Influental schools were defined as organisations at the conference "Eduacation for Everybody" held in Thailand, Jomtien in 1991. These organisations provide knowledge and skills in some fields in line with the requirements of the individual and the society and with the active and participating approaches the acquisition of moral and behaviors (UNESCO, 1991).

According to the aim-centred approach; organizations need to try to reach their defined goals. According to this approach effectiveness, can be defined as the application level of reaching the goals determined by the aims of each school and the education system (Rovvan, 1985).The effectiveness of a school is measured by pupils'

 Copyright © International Conference on New Horizons in Education Conference (INTE)

achievements, which is assessed with standardised tests. In determining the effectiveness the general unit of measure is the school average of the pupils' score (MacKenzie, 1983; Purkey ve Smith, 1985; Rovvan, 1985; Bickel, 1990).

According to a report prepared by the Turkish Government in 2014 the radical reforms in education made in the 10 years can be summed up as following: In consideration of the "constructivist" and the "multiple intelligence theory" approach in the education years of 2004 and 2005 there has been a curriculum change in nine cities and 120 pilot schools. It was expected that this curriculum change would raise Turkey's success in tests such as PISA, however contrary to the expectations there was no improvement of the scores of Turkey in PISA test of 2006.

In 2010, there were fundamental changes in Secondary Education system, namely all public high schools were transformed to Anatolian high schools or vocational high schools. The purpose of this change was to annihilate the differences in quality of education and to diminish the variety of schools. The number of religious vocational high schools was raised.

In 2010 a movement named FATIH emerged and started its implementation. The purpose of this movement has been to increase the opportunities and to develop technologies. The aim of this movement is to equip all schools with lap-tops, projection, internet connection and an interactive whiteboard. Since the beginning of 2012, 52 pilot schools have been taken into the scope of the project and tablet computers have been distributed to the pupils of those schools.

In Aug. 14.2011 a Decree with Power of Law (nr. 652) was published that changed the structure of the central organization of Ministry of Education considerable. In this context, the central organisation was made smaller in order to be able to work more efficiently and to become more influential.

In 2012 with the 6287 numbered law, a new system of education was established that is commonly known as 4+4+4.This law brings fundamental changes in the structure of education system. For example, elementary schools have been divided in 4 years primary and 4 years in middle and 4 years high schools. Also, the compulsory education time was raised from eight to 12 years.

The majority of those reforms do not comply with the general aims and principles of the education system. The teacher are those who are most affected from these changes as they are expected to reach the set aims of the system. When we consider that the potential teachers of future will an important role in fulfilling the aims of the Turkish education system then it is important to take their opinion about the feasibility of those aims. The main question of this paper is; whether or not the potential teachers' opinions exhibit any differences in reaching the aims of the education system according to a range of variables.

PURPOSE AND SIGNIFICANCE

The purpose of this research is to investigate whether or not the potential teachers' opinions exhibit any differences in reaching the aims of the education system according to gender, Grade Point Average (GPA), departments and groups which they are enrolled (undergraduate and formation programme).

General goals and main principles are two factors that demonstrate a society's education policy and give direction to a country's education system. Analysing the goals and understanding them properly makes them easier to embrace. Findings of this research can be used for education of the candidate teachers and future reforms so that they correspond to the anticipated goals.

METHOD

Research is screening model. Currently, it is aimed to describe the way that there is a situation that exists. The qualitative research method, observation, interview, using data collection methods such as document analysis, a realistic perception of the events and the natural environment can be established in all (Yıldırım and Şimşek, 2006: 39). Content analysis in research and quantitative research methods were used together. Teachers' opinions of the candidates that were collected by a questionnaire developed by the researchers.

The study population; Abant İzzet Baysal University Faculty of Education in 2014- 2015 academic year at the Turkish Education System and School Management Summer School Course of the field consists of 290 final year students and 70 teacher training programs by a total of 366 teachers.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Scanning the field, and Republic History Turkey, the Turkish general aims of the education system, by using the content analysis of qualitative research methods; meaning that the integrity of each word, the meaning of phrases or sentences have been analyzed (Akyüz,1985; Başgöz &Wilson, 1968). The overall aim of the Turkish education system consists of three paragraphs, paragraph 1 of the contact; citizenship, 2. Paragraph contact; training individuals; 3. The theme of the paragraph; Occupation is determined as acquirement example, Turkish national education of the general objective of all members of the Turkish nation, Ataturk Revolution (1) and the principle (2), and as expressed in the Constitution to Atatürk nationalism (3); national of Turkish nation (4, 5), moral (6,7), which adopts humanitarian and cultural values, protect and improve; family, country, and always loving the nation which attempt to glorify; (8,9) democratic, based on the basic principles at the beginning of the human rights and the Constitution, task against the secular and social state of law which Turkey Republic and who know their responsibilities (10), and citizens have made their behavior (11) as the train.

Themes: Citizenship

Subthemes: 1) act in accordance with Atatürk's reforms,

a) adopt the values of the Republic,
b) adhere to the Constitution,
c) the Union's commitment to Education,
d) status Soon Party life,
e) comply with the closure of dervish lodges and
f) Calendar, to comply with changes in time and dimensions
g) the implementation of the Civil Code
h) the implementation of the Turkish Penal Code
ı) Status of implementation of the Law Hats
i) implementation Alphabet Reform Law
j) the planned development, 10y to maintain status
k) costume and act in accordance with the Dress Code
l) the application Surname Law

Content analysis prepared in accordance with material and personal information (gender, department and academic grade point average), and (1) very little, (2) low (3), (4) good, (5) very good a five-point Likert scale is the very best option the survey was prepared using the draft opinion of three experts for content validity and reorganized in line with the proposals. 15 main topics and survey generated 112 articles of the Turkish Education System and School management course for 60 teachers were applied twice by two months. The correlation r = 0.76 between the two applications' materials which Under removed. 13 topics and was finalized in polls in Article 78.

Research, Abant İzzet Baysal University Faculty of Education Turkish Education System and School Management Course has been applied to the area of 210 preservice students and 70 volunteers continued teacher training program for a total of 280 teachers. 256 questionnaires were returned. Examined questionnaires returned, gender of materials section was left blank in one of the academic grade point average with a variable and more than half of 26 questionnaires were eliminated unchecked. 230 questionnaires were included in the evaluation.

Reliability Cronbach's Alpha 1 Theme; Citizens Training $\alpha = 0, 87$; 2. Theme: Individuals (Human) Training $\alpha =$ 0,77v 3 Theme: Vocational Training $\alpha = 0.87$, respectively[Table 1].

Table 1 According to Theme Cronbach's Alpha (α)

Theme	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1.Citizens Training	6.15	4.09	.79	.87
2. Individuals (Human) Training	6.51	2.76	.86	.77
3. Vocational Training	6.61	3.09	.75	.87

 Copyright © International Conference on New Horizons in Education Conference (INTE)

In analyzing the data SPSS 20 package program was used. From descriptive statistics techniques; frequency (f), percentage (%), in comparison with two groups of variables; Gender (Female / Male), grade point average (2.00-3.00 / 3.00 and +) and group (formation, license) Independent t-Test, One Way ANOVA test was used for more than two groups with variable section. The level of significance was accepted as .05.

FİNDİNGS

Due to limited time and pages, the findings are generally stated as a summary below.

Features of Candidate Teachers Within The Scope of Research

64.3 % of the candidate teachers within the scope of the research are female and 29.1 % of them are male. Female candidate teachers seem to form the bigger group. 80.9 % of the canditate teachers' Grade Point Average (GPA) are 2.00 – 3.00 and 19.1 % of the canditate teachers' are 3.00 and above. 25.2 % of the candidate teachers are students who are still studying at Teacher Formation Programme. 74.8 % of the candidate teachers are final year undergraduate students. 25.2 % of the candidate teachers study at Department of Turkish Language and Literature within teacher formation group 36.1 % of them study at Department of Primary Education, 13.5 % of them study at Department of Turkish Language and 25.2 % of them belong to Other departments such as Fine Arts, Special Education,Preschool Education [Table 2].

Table 2 Features of Candidate Teachers

Features			Gender		Total
			Female	Male	
Grade Point Average (GPA)	2,00-3,00	f	119	67	186
		%	51.7	29.1	80.9
	3,00 and +	f	29	15	44
		%	12.6	6.5	19.1
	Total	f	148	82	230
		%	64.3	35.7	100.0
Group	Formation	f	36	22 9.6	58
		%	15.7		25.2
	License	f	122	60	172
		%	48.7	26.1	74.8
	Total	f	148	82	230
		%	64.3	35.7	100.0
Departments	Turkish Language and Literature(1)	f	36	22	58
		%	15.7	6.9	25.2
	Primary Education (3)	f	60	23	83
		%	26.1	10.0	36.1
	Turkish Language (4)	f	19	12	31
		%	8.3	5.2	13.5
	Other (2)*	f	33	25	58
		%	14.3	10.9	25.2
	Total	f	148	82	230
		%	64.3	35.7	100.0

Other (2)*: Fine Arts, Special Education and Preschool Education

Mean Scores of the Themes and Subthemes

When the Table 3 is examined Opinions of Candidate Teachers According To Themes and Subthemes

Candidate teachers opine that Turkish National Education System achieves its goals such as citizens training ($\bar{X}$=3.48), individuals (human) training ($\bar{X}$=3.13) and vocational training ($\bar{X}$=3.02) with respective mean scores as an intermediate level.

When the Table 3 is examined At Citizens training theme; acting in accordance with Atatürk Reforms ($\bar{X}$=3.78), protecting national values of Turkish nation ($\bar{X}$=3.78), embracing ethical values of Turkish nation ($\bar{X}$= 3.67), embracing intangible values ($\bar{X}$=3.61) are above the average ($\bar{X}$=3.50). Fulfilling duties and responsibilities to Republic of Turkey ($\bar{X}$= 3.49), awareness of duties and responsibilities to Republic of Turkey ($\bar{X}$=3.30), acting in accordance with Atatürk's Principles ($\bar{X}$= 3.30), protecting ethical values of Turkish nation ($\bar{X}$=3.17), commitment to Atatürk Nationalism stated in the Constitution ($\bar{X}$=3.01), embracing cultural values of Turkish nation ($\bar{X}$=3.13) are below the average ($\bar{X}$=3.50).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 3 Mean Scores of the Themes and Subthemes

Theme and Subthemes of the Questionaire	Mean Scores($\bar{X}$)
Theme 1: Citizens Training	**3.48**
Subtheme 1. Acting in accordance with Atatürk Reforms	3.78
Subtheme 2. Acting in accordance with Atatürk's Principles	3.30
Subtheme 3. Commitment to Atatürk Nationalism stated in the constitution	3.01
Subtheme 4. Embracing national values of Turkish nation	3.62
Subtheme 5. Protecting national values of Turkish nation	3.78
Subtheme 6. Embracing ethical values of Turkish nation	3.67
Subtheme 7. Protecting ethical values of Turkish nation	3.17
Subtheme 8. Embracing intangible values	3.61
Subtheme 9. Embracing cultural values of Turkish nation	3.13
Subtheme 10. Awareness of duties and responsibilities to Republic of Turkey	3.30
Subtheme 11. Fulfilling duties and responsibilities to Republic of Turkey	3.49
Theme 2. Individuals (Human) Training	**3.13**
Theme 3. Vocational Training	**3.02**

Opinions of Candidate Teachers About Level of Achieving Turkish National Education System's Goals According to Gender

When the Table 4 is examined, it is concluded that eventhough both female and male candidate teachers share the same opinions about achieving "citizens training" and "vocational training" goals that are promoted by Turkish National Education System, their opinions differ about "individuals training" goal (P= .04 ≤.05). Female candidate teachers ($\bar{X}$=3.24) find Turkish National Education System more successful in terms of achieving "Individuals training" goal than male candidate teachers ($\bar{X}$=2.93).

Table 4 Independent t- Test Results Regarding the Opinions of Candidate Teachers About Level of Achieving Turkish National Education System's Goals According to Gender

Goals	Gender	N	$\bar{X}$	ds	df	t	p
	F	148	3.55	.73			
Citizens Training					228	1.83	.06
	M	82	3.36	.76			
	F	148	3.24	1.10			
Individuals (Human) Training					228	2.10	.04*
	M	82	2.93	1.04			
	F	128	3.08	1.11			
Vocational Training					228	1.06	.29
	M	82	2.92	.97			

p ≤.05

Opinions of Candidate Teachers About Level of Achieving Turkish National Education System's Goals According to Group Variable

Table 5 Independent t- Test Results Regarding Opinions of Candidate Teachers About Level of Achieving Turkish National Education System's Goals According to Group Variable

Goals	Group	N	$\bar{X}$	ds	df	t	p
	Formation	58	3.57	.69			
Citizens Training					228	1.05	.29
	License	172	3.45	.77			
	Formation	58	3.25	1.09			
Individuals (Human) Training					228	.95	.34
	License	172	3.09	1.09			

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	Formation	58	3.00	1.23			
Vocational Training					228	- .09	.85
	License	172	3.03	1.01			

p ≤.05

According to the Table 5, there is no differance between the opinions of undergraduate and formation programme group candidate teachers about achieving citizens training, individuals training and vocational training goals of Turkish National Education System.

Opinions of Candidate Teachers About Level of Achieving Turkish National Education System's Goals According to GPA Variable

Opinions of candidate teachers whose GPA's are 3,00 and above and candidate teachers whose GPA's are 2,00 – 3,00 do not differ about achieving citizens training, individuals training and vocational training goals of Turkish National Education System [Tablo 6].

Table 6 Independent t- Test Results Regarding Opinions of Candidate Teachers About Level of Achieving Turkish National Education System's Goals According to GPA Variable

Goals	Grade Point Average (GPA)	N	$\bar{X}$	ds	df	t	p
	2.00-3,00	186	3.50	.76			
Citizens Training					228	.60	.55
	3,00 and+	44	3.42	.72			
	2.00-3,00	186	3.18	1.09			
Individuals (Human) Training					228	1.36	.17
	3,00 and+	44	2.93	1.07			
	2.00-3,00	186	3.05	1.11			
Vocational Training					228	0 .92	.36
	3,00 and+	44	2.89	.88			

p ≤.05

Opinions of Candidate Teachers About Level of Achieving Turkish National Education System's Goals According to Department Variable

According to the results of One Way Anova Test; there is no difference between the opinions of candidate teachers who are studying at different types of departments, about achieving citizens training, individuals training and vocational training goals goals of Turkish National Education System [Table 7].

Table 7 One Way Anova Test Results Regarding Opinions of Candidate Teachers About Level of Achieving Turkish National Education System's Goals According to Department Variable

GOALS	Department	N	Mean Scores ($\bar{X}$)	ds	Variance Source	ANOVA				
						Sum of Squares	df	Mean Square	F	P
Citizens Training	1	58	3.57	.69	Between groups	.72	3	.24	.42	.74
	2	58	3.44	.88	Within Groups	129.40	226	.57		
	3	83	3.46	.71	Total	130.12	229			
	4	31	3.50	.73						
	Total	230	3.48	.75						
Individuals (Human) Training	1	58	3.25	1.09	Between groups	1.61	3	.54	.45	.72
	2	58	3.02	1.24						

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	3	83	3.15	.99	Within Groups	268.99	226	1.19		
	4	31	3.06	1.05	Total	270.60	229			
	Total	230	3.13	1.09						
Vocational Training	1	58	3.00	1.23	Between groups	.30	3	.10	.09	.97
	2	58	3.02	1.12	Within Groups	260.23	226	1.15		
	3	83	3.01	.95						
	4	31	3.11	.99	Total	260.53	229			
	Total	230	3.02	1.07						

$p \leq .05$

CONCLUSION

Candidate teachers opine that Turkish National Education System achieves its goals such as citizens training, ($\bar{X}$=3.48), individuals(human) training ($\bar{X}$=3.13) and vocational training ($\bar{X}$=3.02) with respective mean scores as an intermediate level.

According to candidate teachers, it can be inferred that education system is not sufficient to reach its goals such as raising a decent citizen, raising a decent human and vocation gaining. This indicates that education cannot sufficiently accomplish its functions such as social, political, economical and self-improvment of the individual. It is asserted that there still exists inequalities within education due to rural-urban, rich-poor and gender issues in Turkey. Campaigns, projects and social responsibility works that are organized for female students are shown as examples of this inequalities (Kantos,2007,pp. 55-76). In addition, one of the most significant problem is educating and raising sufficient amount and quality of teachers (Okcabol& Others,2003) . It can be said that Turkish Education System cannot fulfill its functions regarding education and this is a prior problem for development of the country as a whole.

In the research, it is found that eventhough both female and male candidate teachers share the same opinions about achieving "Raising Citizen" and "Vocation Gaining" goals that are promoted by Turkish National Education System, their opinions differ about "Raising Individual" goal (P= .04 $\leq$.05). Female candidate teachers ($\bar{X}$=3.24) find Turkish National Education System more successful in terms of achieving "Raising Individual" goal than male candidate teachers ($\bar{X}$=2.93). According to TUIK, (2015) data, illiteracy rate for female is 8,40 % and for male it is 1,74 % (www. tuik,gov.tr Downloanded by Apr. 14.2016). In Turkish Education System, there is discrimination based on gender and for this reason female illiteracy rate is lower than male illiteracy rate. During every step of education, female participation is lower than male participation. This gap extends when the level increases (Oktay, 1998,pp.45). This conclusion proves that female candidate teachers who can access education opportunities comprehend the significance of education and have positive judgements about it more than male candidate teachers. In other words, female candidate teachers have a more positive view about gainings from education.

The candidate teachers' opinions do not exhibit any differences in reaching citizens training, individuals training and vocational training aims of Turkish National Education System according to Grade Point Average (GPA), departments and groups which they are enrolled (license and formation programme). Both final year undergraduate students from education faculty and students who are enrolled to formation programme have similar ideas about the level of reaching the aims of the National Education because they are the product of exactly the same education system.

For reaching the aims of of Turkish National Education System, it has to fulfill the functions of education. The Turkish National Education System should be improved in order to reach the goals of Turkish National Education, solve problems with scientific methods, and adapt into new situations. Along with many different factors related to reaching to the goals of Turkish National Education System, educating qualified teachers is the

 Copyright © International Conference on New Horizons in Education Conference (INTE)

most important factor. The candidate teacher's sufficiency should be improved about achieving the goals of Turkish National Education System.

REFERENCES

Akyüz, Y. (1985). Türk Eğitim Tarihi. Ankara:Universitesi Eğitim Bilimleri Yayınları,No: 149.
Başgöz, İ. ve Wilson H. E. (1968) Türkiye Cumhuriyeti'nde Milli Eğitim ve Atatürk. Ankara: Dost Yayınları.
Bickel, VV.E. (1990). The effective schools literatüre: implications for research and practice. In Handbook of School Psychology. New York, NY: VViley & Sons.
Çocuk Hakları Sözleşmesi. http://www.turkhukuksitesi.com/showthread.php?t=5719 Downloanded by Mar. 14.2016.
DPT (1990) VI. Beş Yıllık Kalkınma Planı Öncesinde Gelişmeler, 1984-1988. Ankara: DPT Yayınları.
Erden, M.(2011).Eğitim Bilimlerine Giriş 6. Baskı. Ankara: Arkadaş Yayınevi. pp. 32-33, 75-79
Ertürk, S. (1979) Eğitimde Program Geliştirme. Ankara: Yelkentepe Yayınları.
Güvenc, B. (1984) İnsan ve Kültür. İstanbul: Remzi Kitabevi.
İnsan Hakları Evrensel Beyannamesi http://www.turkhukuksitesi.com/showthread.php?t=6584 Downloanded by Mar.14.2016.
Karakütük, K. (2000) Eğitimin Ekonomik Temelleri. Sonmez,V. (Ed.) Oğretmenlik Mesleğine Giriş. Ankara: Anı Yayıncılık.
Kantos, Z.E.(2007). Federal Almanya Cumhuriyeti Eğitim Sistemi Balcı,A.(Ed.) Karşılaştırmalı Eğitim Sistemleri, Ankara: Pegem Yayıncılık. pp.55-76.
Research for school improvement: An appraisal of some recent research trends. Educational Research, April, pp. 5-17. http://edr.sagepub.com/content/12/4/5.refs Downloanded by :Jun 14.2016.
Milli Eğitim Bakanlığı (1997) Milli Eğitimle ile İlgili Bilgiler. Ankara: Milli Eğitim Basımevi.
Okcabol, R., Akpınar, Y., Caner A., Ertekin E., Gok, F., & Unluhısarcıklı, O. (2003).Öğretmen Yetiştirme Araştırması. Ankara: Eğitsen Yayınları.
Oktay,A.(1998)Eğitim Örgütlerinde Cinsiyete Dayalı Ayırımcılık (Bolu Merkez Ortaöğretim Düzeyi Örneği) Yayımlanmamış Doktora Tezi . Bolu: Abant İzzet Baysal Üniversitesi Sosyal Bilgiler Enstitüsü.pp. 45
Ozankaya, O. (1977) Toplumbilime Giriş. A. U. Siyasal Bilgiler Fakultesi Yayınları.No: 403.
Purkey, S.C. & Smith, M.S. (1985). School reform: The district policy implications of the effective schools literatüre. Elementary School Journal, 85, 353-38.
Rowan, B. (1985). The assessment of school effectiveness. In R. Kyle (Ed.),Reaching for excellence: An effective schools sourcebook.Washington, DC: National Institute of Education, The Institute.
T.C. Anayasası (1982) http://www.turkhukuksitesi.com/showthread.php?t=6584 Downloanded by Mar.14.2016.
T. C. Kalkınma Bakanlığı. (2014). Eğitim Sistemi'nin Kalitesinin Artırılması, Özel İhtisas Komisyonu Raporu. (http://www.cka.org.tr/dosyalar/Ozel%20Ihtisas%20Komisyonu%20 Raporlar%FD/e%F0itim%20sistemi.pdf) Downloanded by: May. 10.2016. pp.76
TUIK, (2015). www. tuik,gov.tr. Downloanded by Apr. 14.2016.
UNESCO, (1991). Education for ali conference: Final report. Jomtien, Thailand, UNESCO publications.
World Bank. (1990). Primary Education. A World Bank Policy Paper. Washington,D.C.:The World Bank.
Yıldırım,A.,& Şimşek,H.(2006).Sosyal Bilimlerde Nitel Araştırma Yöntemleri, Ankara: Seçkin Yayınları.pp.39
652 Sayılı Milli Eğitim Bakanlığının Teşkilat ve Görevleri Hakkında Kanun Hükmünde Kararname. (2011). http://www.resmigazete.gov.tr/eskiler/2011/09/20110914.htm Downloanded by Apr.14.2016.
1739 Sayılı Temel Eğitim Kanunu www.meb.gov.tr. Downloanded by Feb.13.2015.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ORGANISATIONAL COMMITMENT AMONG ACADEMICS IN MALAYSIAN PUBLIC UNIVERSITIES

[1]Rahman Hashim, [2]Safiah Sidek, [3]Norain Ismail, [4]Rahimah HP Shawkataly
[1,2,3] Universiti Teknikal Malaysia Melaka, Malaysia
[4]Universiti Teknologi Mara Melaka, Malaysia
Correspondent email: rahmanhashim@utem.edu.my

ABSTRACT
The increasing number of universities in Malaysia since the past few years has driven management to set a more ambitious ultimate goal. Academics, such as senior lecturers and professors, are requested to have a better performance by fulfilling a series of requirements, such as actively involved in journal publishing. However, academics commitment are also subject to problems of dissatisfaction at work place. Besides teaching, academics are required to conduct research and publish their works. They are also expected to be involved in administration as well as clerical work which add to the work load. This may result as mood disruption, stress and dissatisfaction or discontent. Academics satisfaction normally depends on what they can get or receive from their job. To avoid or overcome this, steps must be taken to ensure that the academics are satisfied with their job. Hence, these study attempt to determine what are the main organisational commitment that dominance job performance among the academics in Malaysian public universities.

INTRODUCTION

The development of a country relates to their level of education. Developed or undeveloped depends on the achievement of the people in education. Hence, education becomes a turning point towards civilisation of a nation. The successfulness of education always relates to the excellence and quality of the academics in the institution. The quality lecturers may teach efficiently besides giving full commitment to the organisation at their work place. In fact, to become the hub of a world class higher education, it is important for public universities to ensure that their academic staff perform well and has high organisational commitment. Therefore, to be able to play the role effectively, lecturers need to be committed to their job as educators.

On the other hand, commitment may depend on several factors such as ethics, job satisfaction and job involvement. According to Allen and Meyer (1990), commitment refers to the attitude of the employees toward their organisations. Employees normally will commit if they are really satisfied with their present job. On contrarary, some may even withdraw if they feel they could not withstand the situation. In other words, satisfaction normally depends on what the employees can get or receive from the job.

LITERATURE REVIEW

In her study on organisational commitment and job performance among 248 academics and administrative staff in an accredited university in Manila, Dr Rebecca C. Tolentino (2013) found that the respondents have a strong desire to remain with the university. Both the academic and administrative staff desire to stay in the university because they feel they ought to. The feeling is driven by their loyalty to the university. Academic staff has stronger affective and normative commitment than the administrative while the administrative staff have a stronger continuance commitment than the academic. Both the academics and administrative staff are performing very well in their job. Among the academics, only affective commitment correlates significantly with job performance while among the administrative, not a single commitment dimension is related to job performance.

Meanwhile, Faranak Joolideh, K. Yeshodhara (2009) in their study on Organisational Commitment Among High School Teachers of India and Iran, found that, Indian teachers had better organisational commitment in the affective and normative components, where as Iranian teachers were found to have better organisational commitment in the continuance component. In both countries age groups and subject taught by teachers did not have any influence over their organisational commitment.

Negin Memari, Omid Mahdieh and Ahmad Barati Marnani (2013) in their study on The Impact of Organizational Commitment on Employees Job Performance, discover that the organisational commitment is positively and significantly correlated with job performance. Other than that, correlation analysis establishes that affective commitment has significant relationship with job performance. However, out of the three dimensions, normative commitment has significant effects on Job performance. The findings also reveals that the demographic variables such as, age of the respondents both in public and private sectors has no significant variation in their job performance. The respondents with age group below 25 years have high performance as compared to other age categories. The results also indicate that the males were higher performers' from female.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Study conducted by Huam Hon Tat, Teo Pei-Ni and Amran Md Rosli (2012) found that there are three factors of job satisfaction which is job design, salary and welfare, and management. The study found that only one factor of job satisfaction which is job design has significant relationships with affective commitment. On the other hand, continuance commitment and normative commitment has no significant relationship with all three factors of job satisfaction. Therefore, they proposed employers to provide an interesting and challenging task to increase job satisfaction at once can reduce the rate of turnover.

Finally, study conducted by Munirah Salim, Halimahton Kamarudin and Mumtaz Began (2008) in Factors Affecting Organizational Commitment Among Lecturers in Higher Educational Institution in Malaysia found that the job satisfaction, job involvement and perceived organizational support have a significant relationship with the three subscales of organizational commitment.The results of this study suggest improvements in social change by increasing job satisfaction, job involvement, and perceived organizational support is an effective way to get committed human resources.

METHODOLOGY

This study employed a self-administered survey as a means to collecting data. The data collection stages cover conceptualising, survey design, planning, sampling, briefing, pretesting, surveying, monitoring, verifying, coding, processing, analysing and reporting. A total of 300 questionnaires was distributed to respondents from the selected universities in Melaka and Klang Valley. According to Ruziah (2007) and Aishah (2006), the self-administered questionnaire form is the most common method for surveying or measuring people's interests, beliefs or perceptions.

The general objective of this study to explore what are the factors that contribute toward job performance among academics in Malaysian public universities. Beside that, it also aims to determine what are the types of commitment that mostly dominant the academicians.

A total of 300 questionnaires was distributed to several faculties in five selected universities, namely Universiti Malaya, Universiti Kebangsaan Malaysia, Universiti Pertanian Malaysia, Universiti Teknologi Mara and Universiti Teknikal Malaysia Melaka.

FINDINGS

Out of 300 respondents, only 220 people who responded to a questionnaire that was given. The percentage of respondents who responded was 73.3%.

Earlier findings shows that, a total of 182 respondents were Malays (82 %), followed Chinese (7.3%), Indians (4.5%), and other races (5.5%). The majority of respondents were aged from 30-34 years (28.6%), then followed by 35-39 years (21.8%), 40-44 years (20.5%), 45-49 years (16.4%), 50-54 (16%) and above 55 years (16%). The result show that majority of respondents are from married person 83.6%).

In terms of length of service, majority of the academics have work for 10 – 15 years (78.6%). A total 0f 10.5% respondents have been working from 16 – 20 years, followed by 21 – 30 years (6.4%) and more than 31 years (4.5%).

Meanwhile for the basic income, there are 20.5% with total income RM 6501 to RM 7000, 19.1% get RM6001 to RM 6500, 11.8% get lower RM6000, 10.9% get RM 7001 to RM 8000, 9.5% get more than RM9000, 6.8% get RM 8001 to RM 8500, and 0.5% get RM 8500 to RM 9000.

According to Sekaran (2010), reliabilities with less than 0.60 are deemed poor while those in the range of 0.70 ranges, is acceptable and those above 0.80 is considered as good. On the over all, the reliability of all the measures was comfortably above 0.80, ranging from 0.85 to 0.95. In summary, the instrument used to measure each variable in this study is reliable. The reliability analysis are shown in Table 1.

Table 1: Summary of Reliability Analysis

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Variables	Number of Items	Number of Items Discarded	Cronbach's Alpha
Affective Commitment	8	0	.870
Continuance Commitment	8	0	.857
Normative Commitment	8	0	.852
Job Satisfaction	14	0	.889
Job Performance	16	0	.929
Religiosity	23	0	.948

As shown in Table 2, all variables are evaluated based on a 5-point scale (1 being strongly disagree to 5 being strongly agree). The results show that the mean on affective commitment was 3.82 with standard deviation was 0.63, the mean for normative commitment was 3.25 with SD = .69, the mean for continuance commitment was 3.51 with SD = .70, and the mean for job performance was 4.10 with SD = .46,

Table 2: Descriptive Analysis

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Affective commitment	220	1.25	5.00	3.8210	.63300
Normative commitment	220	1.00	5.00	3.2483	.69103
Continuance commitment	220	1.25	5.00	3.5063	.70013
Job performance	220	3.00	5.00	4.1014	.46020

In this study, affective commitment was measured using eight items that asked the respondents about their perception towards the institution. The items were adapted from Allen and Meyer (1990). The researcher also decided to apply the 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5), for the purpose of consistency with the overall format of questionnaires and to obtain consistent scores from the respondents (Gay & Airasian, 2000).

From Table 3, it was found that the mean score for affective commitment ranged from 3.09 to 4.12. The overall percentage was 77% which reflects that more than two-thirds of the academics reported that they were happy to work in their work place.

Table 3: Level of Affective Commitment

No.	Items	Scale					Mean	SD
		1	2	3	4	5		
1	**I would be very happy to spend the rest of my career with this organisation.**	2 (.9%)	9 (4.1%)	34 (15.5%)	91 (41.4%)	84 (38.2%)	**4.12**	**.88**
2	**I enjoy discussing my organisation with people outside it.**	5 (2.3%)	13 (5.9%)	59 (26.8%)	100 (45.5%)	43 (19.5%)	**3.74**	**.92**
3	**I really feel as if this organisation's problems are my own.**	1 (.5%)	11 (5.0%)	50 (22.7%)	119 (54.1%)	39 (17.7%)	**3.84**	**.79**
4	**I think that I could hardly become as attached to another organisation as I am to this one.**	14 (6.4%)	43 (19.5%)	89 (40.5%)	58 (26.4%)	16 (7.3%)	**3.09**	**1.00**
5	**I feel like 'part of the**	1	9	30	129	51	**4.00**	**.76**

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	family' in my organisation.	(.5%)	(4.1%)	(13.6%)	(58.6%)	(23.2%)		
6	**I feel 'emotionally attached' to this organisation.**	1 (.5%)	14 (6.4%)	46 (20.9%)	100 (45.5%)	59 (26.8%)	**3.92**	**.88**
7	**This organisation has a great deal of personal meaning for me.**	1 (.5%)	14 (6.4%)	42 (19.1%)	98 (44.5%)	65 (29.5%)	**3.96**	**.89**
8	**I feel a strong sense of belonging to my organisation.**	2 (.9%)	14 (6.4%)	40 (18.2%)	111 (50.5%)	53 (24.1%)	**3.90**	**.87**

In Table 4, it shows the level of the normative commitment among the respondents. The result indicates that the mean score for normative commitment ranged from 2.93 to 3.76. The overall percentage was 65 % which is lower than the affective commitment. It reflects that reflects some of the academicians feel that they ought to work with the institution.

Table 4: Level of Normative Commitment

No.	**Items**	**Scale**					**Mean**	**SD**
		1	**2**	**3**	**4**	**5**		
1	**I don't think that people these days move from company to company too often.**	10 (4.5%)	57 (25.9%)	61 (27.7%)	73 (33.2%)	19 (8.6%)	**3.15**	**1.05**
2	**I believe that a person must always be loyal to his or her organisation.**	3 (1.4%)	20 (9.1%)	50 (22.7%)	101 (49.5%)	46 (20.9%)	**3.76**	**.93**
3	**Jumping from organisation to organisation is unethical to me.**	18 (8.2%)	57 (25.9%)	82 (37.3%)	49 (22.3%)	14 (6.4%)	**2.93**	**1.03**
4	**One of the major reasons I continue to work for this organisation is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.**	6 (2.7%)	29 (13.2%)	78 (35.5%)	80 (36.4%)	27 (12.3%)	**3.42**	**.96**
5	**If I get another offer for a better job elsewhere, I would not feel it was right to leave my organisation.**	17 (7.7%)	53 (24.1%)	87 (39.5%)	51 (23.2%)	12 (5.5%)	**2.95**	**1.00**
6	**I was taught to believe in the value of remaining loyal to one organisation.**	11 (5.0%)	36 (16.4%)	78 (35.5%)	76 (34.5%)	19 (8.6%)	**3.25**	**1.00**
7	**Things were better in the days when people stayed with one organisation for most of their career.**	9 (4.1%)	50 (22.7%)	78 (35.5%)	65 (29.5%)	18 (8.6%)	**3.15**	**1.00**
8	**I believe that wanting to be a 'company man' or 'company woman' is no longer sensible anymore.**	5 (2.3%)	24 (10.9%)	102 (46.4%)	62 (28.2%)	27 (12.3%)	**3.37**	**.92**

However, Table 5 shows the level of the continuance commitment among the respondents. The result indicates that the mean score for continuance commitment ranged from 3.05 to 3.80. The overall percentage was 70% which is higher than normative commitment. The result shows almost two-third of the whole respondents felt that they have to work with the institution because there are no other alternatives for them to go. Besides that, they also worried that the benefits received from the universities might not being offered by other institution if they insist to leave the universities.

Table 5: Level of Continuance Commitment

No.	**Items**	**Scale**	**Mean**	**SD**

 Copyright © International Conference on New Horizons in Education Conference (INTE)

		1	2	3	4	5		
1	**I am worried of what might happen if I quit my job without having another one lined up**	8 (3.6%)	22 (10.0%)	43 (19.5%)	81 (36.8%)	66 (30.0%)	**3.80**	**1.09**
2	**It would be very hard for me to leave my organisation right now, even if I wanted to.**	5 (2.3%)	17 (7.7%)	59 (26.8%)	108 (49.1%)	31 (14.1%)	**3.65**	**.90**
3	**Too much in my life would be disrupted if I decided I wanted to leave my organisation now.**	7 (3.2%)	20 (9.1%)	65 (29.5%)	88 (40.0%)	40 (18.2%)	**3.61**	**.99**
4	**It would be too costly for me to leave my organisation now.**	7 (3.2%)	15 (6.8%)	67 (30.5%)	93 (42.3%)	38 (17.3%)	**3.64**	**.95**
5	**Right now, staying with my organisation is a matter of necessity as much as desire.**	4 (1.8%)	14 (6.4%)	47 (21.4%)	118 (53.6%)	37 (16.8%)	**3.77**	**.87**
6	**I feel I have too few options to consider leaving this organisation.**	6 (2.7%)	38 (17.3%)	94 (42.7%)	56 (25.5%)	26 (11.8%)	**3.26**	**.97**
7	**One of the consequences of leaving this organisation would be the scarcity of having other alternatives.**	13 (5.9%)	52 (23.6%)	84 (38.2%)	52 (23.6%)	19 (8.6%)	**3.05**	**1.03**
8	**One of the major reasons I continue to work for this organisation is that leaving would require considerable sacrifice. Another organisation may not match the overall benefits I have here.**	11 (5.0%)	50 (22.7%)	55 (25.0%)	81 (36.8%)	23 (10.5%)	**3.25**	**1.08**

CONCLUSION

In summary, we can conclude that the levels affective commitment among public universities academicians can be considered moderate. Some of the academics may be satisfied with the salary and benefits allocated to them. On contrary, others may not be happy with management as their work may not be appreciated significantly. In addition, some of the academics are worried of what would happen if they quit their job without having another lined up. For them, staying with the institution is just a matter of necessity as much as they desire.

ACKNOWLEDGMENT

This paper was supported by Malaysian Higher Education Ministry grant (FRGS/2/2014/SS09/PBPI/02/F00247) and Universiti Teknikal Malaysia Melaka.

REFERENCES

Faranak Joolideh, K.Yeshodhara, (2009). *Organizational commitment among high school teachers of India and Iran. Journal of Educational Administration*, Vol. 47 Issue: 1, pp. 127 – 136

Huam Hon Tat, Teo Pei-Ni, Amran Md Rasli. (2012). *Job Satisfaction and Organizational Commitment in a Malaysian Public University's Library.* International Journal of management Sciences and Business Research. Vol. 1, Issue 6.

Munirah Salim, Halimahton Kamarudin, Mumtaz Begam Abdul Kadir. (2008). *Factors affecting Organizational Commitement among lecturers in higher educational institution in Malaysia*. Retrieved from www.mara.gov.my

Negin Memari, Omid Mahdieh, Ahmad Barati Marnani. (2013). *The impact of organizational commitment on employees job performance. A Study of Meli Bank*. Interdisciplinary Journal of Contemporary in Business, Vol. 5, Noo. 5

Rebecca C.Tolentino. (2013). *Organizational Commitment and Job Performance of the Academic and Administrative Personnel*. International Journal of Information Technology and Business Management, Vol.15, No.1

Sekaran, U., & Boogie, R. (2010). Research methods for business: A skill building approach (5th ed.). West Sussex, UK: John Wiley & Sons Ltd.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ORTAOKUL MATEMATİK DERS KİTAPLARINDAKİ PROBLEM TÜRLERİNİN SUNUŞ, İÇERİK VE ÇÖZÜM BAĞLAMINDA İNCELENMESİ

Cemalettin YILDIZ
Giresun Üniversitesi, Türkiye
cemalyildiz61@gmail.com

Mihriban Hacısalihoğlu KARADENİZ
Giresun Üniversitesi, Türkiye
mihrideniz61@gmail.com

ABSTRACT
Considering the update of curricula and the importance of problem solving skills in mathematics education; the need for examining the problems in mathematics textbooks in the context of presentation, content, and solution becomes a current issue. In this study, it was aimed to designate the problem types used in middle school mathematics textbooks and to determine whether the problem types used are dependent on class levels or not. The study was conducted by using the document analysis method. Data were analyzed by using content analysis method. In terms of presentation, it was observed that textbooks involved the problems rather verbal, not including quantitative data, and short. When contents of the problems were considered, it was observed that the use of the problems routine, not involving insufficient and irrelevant data, being curriculum-dependent, and not being far from daily life is quite high. On the other hand, in terms of solution, it was observed that textbooks included the problem types which are easy, not requiring much calculation, and not involving different strategies more. Types of problems used in the textbooks can be enriched in the context of presentation, content, and solution to improve achievements and problem solving skills of students in mathematics classrooms.
Keywords: Mathematics education, problem types, problem solving, mathematics textbooks.

GİRİŞ

Problem, günlük hayatta karşımızda çıkan engeller ve baş etmekte zorlandığımız durumlardır (Huilt, 1992; Kneeland, 2001). Başka bir deyişle problem, bireyin bir hedefe ulaşmada engel ile karşılaştığı bir çatışma durumudur (Morgan, 1999). Bir matematik öğretmeni için problem, öğrencileri çözüme ulaştıracak adımların ve yolların önceden bilinmediği sıra dışı soru anlamına gelmektedir (Schoenfeld, 1989). Matematikte problem çözme ise, rutin olmayan problemleri çözme, matematiği gerçek durumlara uygulama, yeni alanların oluşmasına sebep olabilecek yorumları oluşturma ve test etme süreci olarak tanımlanmaktadır (Charles, 1985). Bireyin çocukluğundan itibaren kazandığı tüm deneyimler, problem çözme sürecine temel oluşturur (Kennedy, 1980). Bu anlamda problem çözme, bireyin gelişiminde birçok engeli ortadan kaldırabilecek bir süreç olarak görülebilir.

Matematik Öğretmenleri Ulusal Konseyi (National Council of Teachers of Mathematics-NCTM), 1989 yılında Okul Matematiği İçin Müfredat ve Değerlendirme Standartları (Curriculum and Evaluation Standards for School Mathematics) isimli bir doküman yayımlamıştır (NCTM, 1989). Bu dokümanda; öğrencilerin problem çözme becerilerini kullanması "problemleri matematiksel denklemlere dönüştürmesi, problemleri çözerken farklı stratejilerden yararlanması, sonuçlarının doğruluğunu kontrol etmesi ve bunları genellemesi ile mümkün olabilir" biçiminde belirtilmiştir (NCTM, 1989: s.209). Bu cümle, problem çözmenin matematik öğretimi için ne kadar önemli olduğunu vurgulamaktadır. Bu nedenle problem çözme, hayati bir öneme sahiptir (Yıldız, 2016). Türkiye'de yenilenen ve güncellenen matematik dersi öğretim programlarında da problem çözmenin önemine vurgu yapılmaktadır (Milli Eğitim Bakanlığı [MEB], 2009, 2013).

Ortaokul matematik dersi öğretim programı, öğrencilerin matematikteki temel kavram ve becerileri kazanmalarını, problem çözme stratejilerini anlamalarını ve matematiğin günlük yaşam problemlerinin kendisi olduğunu hissetmelerini hedeflemektedir (MEB, 2013). Öğrenciler, problem çözme sürecinde farklı çözüm yolları bulduklarında matematiğe değer vermeyi öğrenecek, bu durum öğrencilerin başarı olmalarını sağlayacak, öğrenciler başarılı olduklarını gördüklerinde de matematiğe yönelik olumlu tutum geliştireceklerdir (MEB, 2009). Ayrıca, öğretmenlerin bir problemle ilgili farklı yöntem ya da strateji kullanmaları öğrencileri motive edecek ve sınıf içi uygulamalarda öğrencilerin etkin olmalarını sağlayacaktır (Silver, Ghousseini, Gosen, Charalambous ve Font Strawhun, 2005). Öğretmenler öğrencileri derste aktif tutmak için derslerinde farklı problem türlerine de yer verebilirler. Sınıf içi uygulamalarda farklı problem türlerini kullanma, öğrencilerin problem çözme becerilerinin gelişimi için büyük önem taşımaktadır (Özmen, Taşkın ve Güven, 2012).
Problem çözme becerilerinin gelişiminde öğretim programlarının ve öğretmenlerin sınıf içi uygulamalarının öğrencileri istenen hedefe ulaştırma noktasında tek başına yeterli olamayacağı aşikârdır. Bununla birlikte, matematik kitaplarında kullanılan problemler türlerinin de önemli olduğu inkâr edilemez. Çünkü öğrenciler, her

 Copyright © International Conference on New Horizons in Education Conference (INTE)

zaman aynı tür problemlerle karşılaştıklarında öğrencilerden bu gelişimi beklememiz mümkün olamaz (Özmen vd., 2012). Bu nedenle, yazarların ders kitaplarında, "öğretmenlerin de sınıf içi uygulamalarında kullandıkları problem türlerini seçerken dikkatli olmaları (Hembree, 1992)" gerekmektedir. Ayrıca, ortaokul matematik dersi öğretim programının problem çözme ile ilgili yukarıda belirtilen amaçlarına ulaşabilmek için öğretmenleri süreçte farklı problem türleri ile hazırlanmış ders kitaplarıyla tanıştırmak gereklidir. Çünkü öğretmenler neyi, nasıl öğreteceklerine ve öğretim programından nasıl yararlanacaklarına karar verirken ilk önce ders kitaplarına başvurmaktadırlar (Beaton, Mullis, Martin, Gonzalez, Kelly ve Smith, 1996). Ayrıca ders kitabı, öğretimi kolaylaştırmada öğretmene rehberlik yapmanın yanı sıra evinde ders çalışmak, proje ya da ev ödevini yapmak isteyen öğrencilerin ellerinin altında bulunan en önemli kaynaktır (Duman, Karakaya, Çakmak, Eray ve Özkan, 2001). Matematik dersi kitaplarında farklı problem türlerinin kullanılması problemleri anlayan, problemlerle baş edebilen ve problemlerin çözümü için uygun stratejiler geliştiren bireyler yetiştirilmesine yol açacaktır. Mademki problem türleri problem çözme becerilerinin gelişiminde önemli rol oynamakta ve ders kitapları öğretmen ve öğrenciler için hayati bir değer taşımakta, o halde matematik dersi kitaplarının farklı problem türlerini içerecek şekilde hazırlanıp hazırlanmadığının ve kitaplardaki problem türlerinin sınıf düzeylerine bağlı olup olmadığının araştırılması gerekmektedir.

Literatürde yapılan çalışmalara bakıldığında, sınıf içi uygulamalarda kullanılan problem türlerinin sunuş, içerik veya çözüm bağlamında sınıflandırıldığı ve bunlardan bir ya da birkaçının üzerinde durulduğu görülmektedir (Özmen vd., 2012). Matematik dersi kitaplarını farklı amaçlar için inceleyen literatürde birçok çalışma olmasına rağmen (Altun, Arslan ve Yazgan, 2004; Arslan ve Özpınar, 2009; Demir, Maskan, Çevik ve Baran, 2009; Erbaş, Alacacı ve Bulut, 2012; Gökçek ve Hacısalihoğlu Karadeniz, 2013; Işık, 2008; Şahin ve Turanlı, 2005; Ünsal ve Güneş, 2004; Yan ve Lianghuo, 2002; Yıldız, Hacısalihoğlu Karadeniz ve Göl, 2015), ortaokul matematik kitaplarındaki problem türlerini sunuş, içerik ve çözüm açısından değerlendiren bir çalışmanın olmaması, mevcut araştırmanın yapılma ihtiyacını gündeme getirmiştir. Buradan hareketle, MEB'in yayımladığı ortaokul matematik dersi kitaplarında yer alan problem türlerinin sunuş, içerik ve çözüm açısından nasıl ele alındığı ve kullanılan problem türlerinin sınıf düzeylerine bağlı olup olmadığı önemli bir araştırma konusu olarak ortaya çıkmaktadır. Dolayısıyla bu araştırmanın amacı, ortaokul matematik dersi kitaplarındaki problem türlerinin sunuş, içerik ve çözüm açısından mevcut durumunu ve problem türlerinin sınıf düzeylerine bağlı olup olmadığını belirlemektir.

YÖNTEM

Araştırmada, doküman inceleme yönteminden yararlanılmıştır. Doküman inceleme, araştırmanın konusu ile ilgili bilgi içeren yazılı veya görsel materyallerin (kitap, dergi, gazete, mektup, günlük, film, video vb.) analizidir (Cansız Aktaş, 2014). Bu çalışmada doküman inceleme yöntemi, araştırmanın amacı dikkate alınarak ortaokul matematik dersi kitaplarını incelemeye olanak sağlaması sebebiyle kullanılmıştır.

Veri Kaynakları ve Verilerin Toplanması

Araştırmanın veri kaynakları MEB'in kendi web sitesinde 2015-2016 eğitim-öğretim yılında ortaokullarda okutulacağını açıkladığı matematik dersi kitapları içinden rastgele seçilmiştir. Çalışmada kullanılan ortaokul matematik dersi kitaplarının künyeleri aşağıda verilmiştir:

Komisyon. (2015). *Ortaokul matematik 5. sınıf 1. kitap* (3. Baskı). Ankara: MEB Yayınları.
Komisyon. (2015). *Ortaokul matematik 5. sınıf 2. kitap* (3. Baskı). Ankara: MEB Yayınları.
Bağcı, O. (2015). *Ortaokul matematik 6 ders kitabı.* Ankara: Dikey Yayıncılık.
Bağcı, O. (2015). *Ortaokul matematik 7 ders kitabı.* Ankara: Tutku Yayıncılık.
Baykal Yelli, B., & Kişi, E. (2015). *İlköğretim matematik 8 ders kitabı* (2. Baskı). Ankara: MEB Yayınları.

Ortaokul matematik dersi kitaplarını incelemek için araştırmacılar tarafından "Problem Türleri Veri Toplama Formu" geliştirilmiştir. Veri toplama formu geliştirilirken ilk olarak ilgili literatür taranarak ortaokul matematik kitaplarındaki çözümlü problemleri sunuş, içerik ve çözüm açısından incelemek için kullanılabilecek bir veri toplama aracının mevcut olup olmadığı araştırılmıştır. Ardından, araştırmanın amacı ve kapsamı doğrultusunda matematik kitapların hangi ölçütlerle incelenebileceği tartışılmış, bu doğrultuda üç matematik ve bir Türkçe eğitimi uzmanının düşünceleri alınmıştır. Bu bağlamda, kitaplarda yer alan çözümlü problemlerin sınıf düzeyi, ünite, konu ve problem türleri başlıkları altında incelenmesine karar verilmiştir. Veri toplama formunda yer alan sınıf düzeyi başlığı 5., 6., 7. ve 8. sınıfları, ünite ve konu başlıkları çözümlü problemlerin ilgili ders kitabının hangi ünite ve konusunda geçtiğini, problem türleri başlığı ise Tablo 1'deki kategori ve alt kategorileri göstermektedir. Özmen ve arkadaşları (2012)'nın çalışmasından uyarlanarak problem türleri için oluşturulan kategoriler, alt kategoriler ve alt kategorilerle ilgili tanımlamalar Tablo 1'de verilmiştir:

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 1: Problem türleri için kullanılan kategoriler, alt kategoriler ve tanımlamalar

	Problem Türleri	Açıklamalar
SUNUŞ	Sözel	Yazılı ifadelere veya rakamlara yer veren problemlerdir.
	Görsel	Şekil, tablo veya grafik gibi göze hitap eden nesnelere yer veren problemlerdir.
	Çok sayısal veri içeren	İçeriğinde 5 veya daha fazla sayısal veri içeren problemlerdir.
	Çok sayısal veri içermeyen	İçinde 4 veya daha az sayısal veri içeren problemlerdir.
	Uzun	Çok sayıda kelime veya cümle kullanılarak sunulan problemlerdir. (en az beş cümle)
	Kısa	Kısa ve az sayıda kelime veya cümlelerin kullanıldığı problemlerdir. (dört veya daha az cümle)
İÇERİK	Rutin	Öğrencilerin gerçek hayatta sık karşılaştıkları olayların sorulaştırılmış biçimlerini içeren problemlerdir.
	Rutin olmayan	Öğrencilerin alışık olmadığı şekilde farklı anlatım yolları kullanılarak sunulan problemlerdir.
	İlgisiz veri içeren	Problem durumunda ve çözümünde gerekli olmayan verilerin de yer aldığı problemlerdir.
	İlgisiz veri içermeyen	Verilen bilgilerin hepsinin çözüm için yeterli olduğu, gereksiz veri bulunmayan problemlerdir.
	Günlük yaşamdan uzak	İçeriği, öğrencilerin günlük hayatla karşılaştırarak uyarlama yapabilecekleri türde olmayan problemlerdir.
	Günlük yaşamla ilgili	İçeriği, öğrencilerin günlük hayatla karşılaştırarak uyarlama yapmalarını sağlayacak türde olan problemlerdir.
	Eksik veri içeren	Problemin çözülmesi için gerekli bilgilerden bazılarının verilmediği problemlerdir.
	Eksik veri içermeyen	Problemin çözülmesi için gerekli bilgilerin tamamının verildiği problemlerdir.
	Program bağımlı	İlgili sınıf düzeyinin kazanımlarını içeren problemlerdir.
	Program bağımsız	İlgili sınıf düzeyinin kazanımlarının dışında farklı sınıf düzeylerine veya seviyelere hitap eden problemlerdir.
ÇÖZÜM	Bol işlem içeren	Çözümü zaman alan ve çok sayıda işlemin çözümünü gerektiren problemlerdir.
	Bol işlem içermeyen	Çözümü kısa olan ve daha az sayıda işlemin çözümünü gerektiren problemlerdir.
	Farklı strateji gerektiren	Doğrusal yol dışında farklı çözüm yollarıyla da çözülebilen problemlerdir. (bağıntı / örüntü arama, diyagram / şekil çizme, geriye doğru çalışma, sistematik liste yapma, tahmin ve kontrol (deneme ve yanılma) vb.)
	Farklı strateji gerektirmeyen	Doğrusal yol dışında problemin farklı yollardan çözümüne imkân vermeyen problemlerdir. (çözümde direkt hesaplama yapma veya denklem kurma)
	Zor	Her öğrencinin çözemeyeceği ve farklı seviyedeki öğrencileri ayırt edebilecek nitelikte olan problemlerdir.
	Kolay	Öğrencilerin rahatlıkla çözebileceği ve benzerlerinin tekrarı şeklinde olan problemlerdir.

Verilerin Analizi

Veriler, içerik analizi yöntemiyle analiz edilmiştir. Yazılı kaynakların özelliklerini ürettikleri mesajlarla ilişkilendirebilme ve bilgilendirme tekniklerini analiz etme fırsatı sağlama (Arıkan, 2004) gibi nedenlerden dolayı bu araştırmada içerik analizi yöntemi kullanılmıştır. Veriler, sınıf düzeyi, ünite, konu ve problem türleri başlıkları altında içerik analizine tabi tutularak tablolaştırılmıştır. Ders kitaplarındaki çözümlü problemlerin türleri, iki araştırmacının ortak düşünceleri doğrultusunda belirlenmiştir. Ortak karara varılamayan hususlarda iki matematik eğitimi uzmanının düşüncelerine başvurulmuş ve uzman görüşleri doğrultusunda çözümlü problemlerin türlerine son halleri verilmiştir. Çözümlü problemler birden fazla kategoride değerlendirilerek sınıflandırılmıştır. Ayrıca, ders kitaplarında kullanılan problemlerin sunuş, içerik ve çözüm yapısı ile ilgili türlerinin sınıf düzeylerinden bağımsız olup olmadığını belirlemek için ki-kare bağımsızlık testinden yararlanılmıştır. Beşten küçük frekansların sayısı tüm verilerin %20'sini geçtiğinden ki-kare bağımsızlık testi yapabilmek için verilerde bazı düzenlemeler yapılmıştır. Bu bağlamda, sunuş yapısındaki çok sayıda veri içeren problemlerle uzun kategorisindeki problemler birleştirilmiştir. Benzer şekilde, içerik

 Copyright © International Conference on New Horizons in Education Conference (INTE)

yapısındaki ilgisiz-eksik veri içeren problemler ve program bağımsız-rutin olmayan problemler birleştirilmiştir. Son olarak, tüm problem türleri bir araya getirilerek problem türlerinin sınıf düzeylerinden bağımsız olup olmadığını tespit etmek için tekrar ki-kare testi kullanılmıştır.

Sınırlılıklar

Bu çalışma kapsamında ortaokul matematik dersi kitaplarındaki çözümlü problemler sunuş, içerik ve çözüm bağlamında incelenmiştir. Dolayısıyla, ders kitaplarındaki çözümsüz problemler bu araştırmanın kapsamı dışındadır.

BULGULAR

5., 6., 7. ve 8. sınıf matematik dersi kitaplarında sırasıyla 133, 69, 50 ve 49 adet çözümlü problem kullanıldığı tespit edilmiştir. Bu problemlerin hangi ünite ve konularda bulunduğuna ve sayılarına dair bilgiler aşağıda özetlenmiştir:

İncelenen 5. sınıf matematik dersi kitabının 5 ünitesinin toplam 22 konusunda çözümlü problemlere yer verildiği belirlenmiştir. "Doğal Sayılar ve İşlemler (39)" ünitesinin '*Örüntüler (3)', 'Doğal Sayılarla İşlemler (16)', 'Parantezli İşlemler (1)', 'Zihinden İşlemler (1)', 'Problemler (8)' ve 'Zaman Ölçme (10)'* konularında çözümlü problemler yer almaktadır. "Veri İşleme (7)" ünitesinde '*Araştırma Sorusu Oluşturma ve Veri Toplama (4)', 'Verileri Düzenleme ve Yorumlama (2)' ve 'Ağaç Şeması (1)'* konularında çözümlü problemlere yer verilmiştir. "Geometri (1)" ünitesinde ise sadece '*Noktaların Birbirlerine Göre Durumları (1)'* konusunda çözümlü problemler bulunmaktadır. "Kesirler, Ondalık Gösterim ve Yüzde (34)" ünitesinde çözümlü problemlere yer veren konuların adları '*Tam Sayılı Kesirleri Tanıyalım (3)', 'Denk Kesirler (2)', 'Bir Çokluğun İstenen Kesir Kadarını Hesaplama (3)', 'Kesirlerle Toplama ve Çıkarma İşlemleri (11)', 'Ondalık Gösterimler (1)', 'Ondalık Gösterimlerle Toplama ve Çıkarma İşlemleri (4)' ve 'Yüzdeler (10)'* şeklindedir. "Geometri ve Ölçme (52)" ünitesinde ise *'Uzunluk Ölçme (13)', 'Çevre Uzunluğu (15)', 'Üçgen ve Dörtgenlerde Açılar (6)', 'Alan Ölçme (15)' ve 'Geometrik Cisimler (3)'* konularında çözümlü problemlere yer verildiği görülmüştür.

İncelenen 6. sınıf matematik dersi kitabının 5 ünitesinin toplam 21 konusunda çözümlü problemlere yer verildiği tespit edilmiştir. "Doğal Sayılar (10)" ünitesinin *'Doğal Sayılarla İşlemler (2)', 'Doğal Sayılarla Problem Çözme (4)', 'Asal Sayılar (2)', 'Komşu-Tümler-Bütünler ve Ters Açılar (2)'* konularında çözümlü problemlerin yer aldığı ortaya çıkmıştır. "Kesirler (26)" ünitesinde '*Oran (7)', 'Kesirlerde Toplama ve Çıkarma İşlemleri (2)', 'Kesirlerde Çarpma ve Bölme İşlemleri (7)', 'Kesirlerle Problem Çözme (4)', 'Ondalık Kesirlerde Çarpma ve Bölme İşlemleri (1)', 'Ondalık Kesirli İşlemlerin Sonucunu Tahmin Etme (2)' ve 'Ondalık Kesirlerde Problem Çözme (3)'* konularında çözümlü problemler mevcuttur. "Veri, Tablo ve Grafikler (11)" ünitesinde ise sadece *'Veri Analizi (11)'* konusunda çözümlü problemlerin bulunduğu görülmüştür. "Tam Sayılar (5)" ünitesinde çözümlü problemlere yer veren konuların adları ise*'Tam Sayılar (1)', 'Tam Sayılarda Toplama ve Çıkarma İşlemleri (4)'* şeklindedir. "Çevre, Alan ve Hacim (17)" ünitesinde ise *'Paralelkenarda Alan (2)', 'Üçgende Alan (1)', 'Alan Ölçme Birimleri (3)', 'Alan Ölçme İle İlgili Problem Çözme (5)', 'Hacimle İlgili Problem Çözme (2)', 'Hacim Ölçme Birimleri (2)' ve 'Sıvı Ölçme Birimleri (2)'* konularında çözümlü problemlere yer verilmiştir.

İncelenen 7. sınıf matematik dersi kitabının 5 ünitesinin toplam 10 konusunda çözümlü problemlere yer verildiği görülmüştür. "Tam Sayılar ve Rasyonel Sayılarla İşlemler (9)" ünitesinin *'Tam Sayılarla İşlem Yapmayı Gerektiren Problemler (5)', 'Rasyonel Sayılarla Çok Adımlı İşlemler ve Problemler (4)'* konularında çözümlü problemler yer almaktadır. "Denklemler (5)" ünitesinde '*Denklemlerde Eşitliğin Korunumu (4)' ve 'Koordinat Sistemi (1)'* konularında çözümlü problemlere yer verildiği tespit edilmiştir. "Oran-Orantı ve Yüzdeler (26)" ünitesinde çözümlü problemlere yer veren konuların adları ise*'Oranda Çokluklar (5)', 'Ters Orantı (11)' ve 'Yüzdeler (10)'* şeklindedir. "Doğrular, Çember ve Veri İşleme (3)" ünitesinde ise '*Daire Grafiği (1)', 'Doğrular ve Açılar (2)'* konularında çözümlü problemlere yer verilmiştir. "Çokgenler ve Dönüşüm Geometrisi (7)" ünitesinde ise sadece *'Eşkenar Dörtgenin ve Yamuğun Alanı (7)'* konusunda çözümlü problemler bulunmaktadır.

İncelenen 8. sınıf matematik dersi kitabının 6 ünitesinin toplam 12 konusunda çözümlü problemlere yer verildiği açığa çıkmıştır. "Geometriden Olasılığa (12)" ünitesinin *'Üslü Sayılar (2)', 'Olasılık ve Kombinasyon (10)'* konularında çözümlü problemler yer almaktadır. "Sayıların Dünyası (9)" ünitesinde *'Gerçek Sayılar (5)', 'Özdeşlikler, Çarpanlarına Ayırma ve Rasyonel İfadeler (4)'* konularında çözümlü problemlere yer verilmiştir. "Üçgenlerin Dünyası (7)" ünitesinde çözümlü problemlere yer veren konuların adları ise '*Üçgenlerde Kenarlar ve Açılar (1)', 'Üçgenlerde Eşlik-Benzerlik ve Trigonometrik Oranlar (6)'* şeklindedir. "Matematikte Yolculuk (6)" ünitesinde ise '*Eğim, Denklem Sistemleri ve Grafikler (4)', 'Verilerin Farklı Gösterimi ve İstatistik (2)'* konularında çözümlü problemlere yer verildiği görülmüştür. "Geometrik Cisimleri Tanıyalım (9)" ünitesinde '*Prizmalar ve Piramitler (3)', 'Koni ve Küre (3)' ve 'Geometrik Cisimlerin Ara Kesitleri (3)'* konularında

 Copyright © International Conference on New Horizons in Education Conference (INTE)

çözümlü problemler bulunmaktadır. ”Geometrik Cisimlerin Hacimleri ve Çizimler (6)” ünitesinin ise sadece *‘Hacim Bağıntıları (6)’* konusunda çözümlü problemlerin bulunduğu belirlenmiştir.

Çözümlü Problemlerin Sunuş Açısından Dağılımına Yönelik Bulgular

Ortaokul matematik dersi kitaplarında kullanılan çözümlü problemler sunuş açısından incelenerek her bir alt kategori ile ilgili problem sayısı sınıf düzeylerine bağlı olarak aşağıdaki gibi tablolaştırılmıştır:

Tablo 2: Çözümlü problemlerin sunuş açısından dağılımı

Sınıflar	Ünite Adları	Sözel	Görsel	Çok Sayısal Veri İçeren	Çok Sayısal Veri İçermeyen	Uzun	Kısa
5. Sınıf	Doğal Sayılar ve İşlemler	36	3	2	37	9	30
	Veri İşleme	5	2	3	4	1	6
	Geometri	0	1	1	0	0	1
	Kesirler, Ondalık Gösterim ve Yüzde	31	3	0	34	0	34
	Geometri ve Ölçme	18	34	5	47	3	49
6. Sınıf	Doğal Sayılar	10	0	3	7	4	6
	Kesirler	25	1	2	24	5	21
	Veri, Tablo ve Grafikler	10	1	8	3	4	7
	Tam Sayılar	5	0	1	4	2	3
	Çevre, Alan ve Hacim	15	2	2	15	5	12
7. Sınıf	Tam Sayılar ve Rasyonel Sayılarla İşlemler	2	7	1	8	1	8
	Denklemler	1	4	1	4	1	4
	Oran-Orantı ve Yüzdeler	18	8	0	26	1	25
	Doğrular, Çember ve Veri İşleme	1	2	0	3	0	3
	Çokgenler ve Dönüşüm Geometrisi	4	3	2	5	0	7
8. Sınıf	Geometriden Olasılığa	12	0	1	11	4	8
	Sayıların Dünyası	8	1	0	9	3	6
	Üçgenlerin Dünyası	2	5	1	6	5	2
	Matematikte Yolculuk	4	2	3	3	6	0
	Geometrik Cisimleri Tanıyalım	2	7	1	8	5	4
	Geometrik Cisimlerin Hacimleri ve Çizimler	2	4	2	4	5	1
Toplam		211	90	39	262	64	237

Tablo genel olarak incelendiğinde, ortaokul matematik dersi kitaplarında sözel, kısa ve çok sayısal veri içermeyen problemlerin daha çok kullanıldığı görülmektedir. Problemlerin sunuş yapısı ile ilgili türlerinin sınıf düzeylerinden bağımsız olup olmadığı ile ilgili yapılan istatistik sonucu χ^2(sd=12, n=903)=90,836 ve p=0,000<0,05 olarak hesaplanmıştır. Sınıf düzeyleriyle ders kitaplarında kullanılan problemlerin sunuş yapısı ile ilgili türler arasında anlamlı bir ilişki olduğu anlaşılmaktadır.

Çözümlü Problemlerin İçerik Açısından Dağılımına Yönelik Bulgular

Ortaokul matematik dersi kitaplarında kullanılan çözümlü problemler içerik açısından incelenerek her bir alt kategori ile ilgili problem sayısı sınıf düzeylerine bağlı olarak aşağıdaki gibi tablolaştırılmıştır:

Tablo 3: Çözümlü problemlerin içerik açısından dağılımı

Sınıflar	Ünite Adları	Rutin	Rutin Olmayan	Veri İlgisiz İçeren	Veri İlgisiz İçermeyen	Günlük Yaşamdan Uzak	Günlük Yaşamla İlgili	Veri Eksik İçeren	Veri Eksik İçermeyen	Program Bağımlı	Program Bağımsız
5. Sınıf	Doğal Sayılar ve İşlemler	34	5	0	39	1	38	0	39	39	0
	Veri İşleme	7	0	0	7	0	7	0	7	7	0
	Geometri	1	0	0	1	0	1	0	1	1	0
	Kesirler, Ondalık Gösterim ve Yüzde	34	0	0	34	0	34	0	34	34	0
	Geometri ve Ölçme	42	10	0	52	18	34	0	52	52	0

 Copyright © International Conference on New Horizons in Education Conference (INTE)

6. Sınıf	Doğal Sayılar	10	0	0	10	3	7	0	10	10	0
	Kesirler	25	1	2	24	1	25	0	26	26	0
	Veri, Tablo ve Grafikler	11	0	0	11	5	6	0	11	11	0
	Tam Sayılar	5	0	0	5	0	5	0	5	5	0
	Çevre, Alan ve Hacim	17	0	0	17	5	12	0	17	17	0
7. Sınıf	Tam Sayılar ve Rasyonel Sayılarla İşlemler	9	0	0	9	0	9	0	9	0	9
	Denklemler	5	0	0	5	1	4	0	5	5	0
	Oran-Orantı ve Yüzdeler	26	0	0	26	0	26	0	26	26	0
	Doğrular, Çember ve Veri İşleme	3	0	0	3	0	3	0	3	3	0
	Çokgenler ve Dönüşüm Geometrisi	7	0	0	7	2	5	0	7	7	0
8. Sınıf	Geometriden Olasılığa	12	0	1	11	0	12	0	12	12	0
	Sayıların Dünyası	9	0	0	9	3	6	0	9	9	0
	Üçgenlerin Dünyası	7	0	0	7	0	7	0	7	7	0
	Matematikte Yolculuk	6	0	0	6	0	6	0	6	6	0
	Geometrik Cisimleri Tanıyalım	8	1	0	9	1	8	0	9	9	0
	Geometrik Cisimlerin Hacimleri ve Çizimler	5	1	0	6	1	5	0	6	6	0
Toplam		283	18	3	298	41	260	0	301	292	9

Tablo incelendiğinde, ortaokul matematik dersi kitaplarında rutin, program bağımlı, günlük yaşamla ilgili, ilgisiz ve eksik veri içermeyen problemlere daha fazla yer verildiği anlaşılmaktadır. Problemlerin içerik yapısı ile ilgili türlerinin sınıf düzeylerinden bağımsız olup olmadığı ile ilgili yapılan istatistik sonucu χ^2(sd=21, n=1505)=23,666 ve p=0,310>0,05 olarak hesaplanmıştır. Sınıf düzeyleriyle ders kitaplarında kullanılan problemlerin içerik yapısı ile ilgili türler arasında anlamlı olmayan bir ilişki olduğu anlaşılmaktadır.

Çözümlü Problemlerin Çözüm Açısından Dağılımına Yönelik Bulgular

Ortaokul matematik dersi kitaplarında kullanılan çözümlü problemler çözüm açısından incelenerek her bir alt kategori ile ilgili problem sayısı sınıf düzeylerine bağlı olarak aşağıdaki gibi tablolaştırılmıştır:

Tablo 4: Çözümlü problemlerin çözüm açısından dağılımı

Sınıflar	Ünite Adları	İşlem Bol İçeren	İşlem Bol İçermeyen	Farklı Strateji Gerektiren	Farklı Strateji Gerektirmeyen	Zor	Kolay
5. Sınıf	Doğal Sayılar ve İşlemler	12	27	1	38	2	37
	Veri İşleme	5	2	2	5	0	7
	Geometri	0	1	0	1	0	1
	Kesirler, Ondalık Gösterim ve Yüzde	6	28	2	32	3	31
	Geometri ve Ölçme	19	33	14	38	13	39
6. Sınıf	Doğal Sayılar	4	6	4	6	4	6
	Kesirler	5	21	6	20	1	25
	Veri, Tablo ve Grafikler	6	5	0	11	2	9
	Tam Sayılar	0	5	0	5	0	5
	Çevre, Alan ve Hacim	8	9	0	17	1	16
7. Sınıf	Tam Sayılar ve Rasyonel Sayılarla İşlemler	0	9	0	9	1	8
	Denklemler	4	1	5	0	5	0
	Oran-Orantı ve Yüzdeler	6	20	8	18	6	20
	Doğrular, Çember ve Veri İşleme	0	3	0	3	0	3
	Çokgenler ve Dönüşüm Geometrisi	0	7	0	7	0	7
8. Sınıf	Geometriden Olasılığa	8	4	3	9	4	8
	Sayıların Dünyası	2	7	1	8	2	7
	Üçgenlerin Dünyası	3	4	1	6	2	5
	Matematikte Yolculuk	4	2	2	4	1	5
	Geometrik Cisimleri Tanıyalım	2	7	0	9	2	7
	Geometrik Cisimlerin Hacimleri ve Çizimler	3	3	0	6	1	5
Toplam		97	204	49	252	50	251

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo genel olarak incelendiğinde, ortaokul matematik dersi kitaplarında kolay, bol işlem içermeyen ve farklı strateji gerektirmeyen problemlerin daha çok kullanıldığı görülmektedir. Problemlerin çözümü ile ilgili türlerinin sınıf düzeylerinden bağımsız olup olmadığı ile ilgili yapılan istatistik sonucu χ^2(sd=15, n=903)=17,577 ve p=0,286>0,05 olarak hesaplanmıştır. Sınıf düzeyleriyle ders kitaplarında kullanılan problemlerin çözüm yapısı ile ilgili türler arasında anlamlı olmayan bir ilişki olduğu anlaşılmaktadır. Ders kitaplarındaki problem türlerinin sınıf düzeylerinden bağımsız olup olmadığı ile ilgili yapılan istatistik sonucu χ^2(sd=54, n=3311)=132,079 ve p=0,000<0,05 olarak bulunmuştur. Sınıf düzeyleriyle ders kitaplarında kullanılan problem türleri arasında anlamlı bir ilişki olduğu görülmektedir.

TARTIŞMA ve SONUÇ

Ortaokul matematik dersi kitaplarında yer alan problem türlerini belirlemeyi ve kullanılan problem türlerinin sınıf düzeylerine bağlı olup olmadığını tespit etmeyi amaçlayan bu çalışmada, bulgulara dayalı olarak yapılan tartışma sonucunda aşağıdaki sonuçlara ulaşılmıştır:

Sınıf düzeyleriyle ders kitaplarında kullanılan problemlerin sunuş yapısı ile ilgili türler arasında anlamlı bir ilişki olduğu belirlenmiştir. Ayrıca, ortaokul matematik dersi kitaplarında sunuş açısından sözel, kısa ve çok sayısal veri içermeyen problem türlerinin tercih edildiği tespit edilmiştir. Bu sonuç, ders kitaplarındaki ünite ve konuların doğasının sözel problemlere daha uygun olduğu düşüncesini akla getirebilir. Ancak görsel olarak sunulan problemlerde öğrenci başarısının arttığı (Hembree, 1992) göz önüne alınırsa, ders kitaplarına görsel problemlerin de eklenmesinin yararlı olabileceği düşünülmektedir. Bu durum, öğrencilerin problem çözme becerilerinin gelişmesini sağlayabilir. Ayrıca, ders kitaplarında çok sayısal veri içermeyen ve kısa problem türlerine de sıklıkla yer verildiği anlaşılmaktadır. Kitap yazarları uzun ve çok sayısal veri içeren problemlerde öğrencilerin zorlanabilecekleri ve soruları yanlış anlayabilecekleri düşüncesiyle, ders kitaplarında kısa ve çok sayısal veri içermeyen problemleri kullanmayı tercih etmiş olabilirler. Ancak, öğrencilerin problem çözme becerilerinin gelişmesi adına ders kitaplarına çok sayısal veri içeren ve uzun problem türleri de eklenebilir.

Ders kitaplarındaki problem türleri içerik açısından ele alındığında; rutin, ilgisiz veri içermeyen, günlük yaşamla ilgili, eksik veri içermeyen ve program bağımlı problem türlerinin kitaplarda daha çok tercih edildiği ortaya çıkmıştır. Ayrıca, eksik veri içeren problem türüne ders kitaplarında rastlanmamıştır. Kitap yazarlarının rutin problemleri rutin olmayan problemlerden daha çok kullandıkları belirlenmiştir. Yazarların standartların dışındaki problemlerden yararlanmamalarında; Türkiye'deki eğitim sisteminin program bağımlı ve sınav merkezli olması veya farklı türde problem hazırlamaya yönelik tecrübelerinin ve bilgilerinin yeterli olmaması bu durumun ortaya çıkmasında etkili olabilir. Rutin olmayan problemlerin öğrencilerin problem çözme stratejilerini daha iyi öğrenebilmelerinde (Dönmez, 2002) ve farklı stratejiler geliştirmelerinde (Follmer, 2000) olumlu etkilerinin olabileceği göz önüne alınırsa, ders kitaplarında bu problemlere de yer verilmesi gerekli görülmektedir.

Kitaplardaki problem türleri çözüm açısından ele alındığında; kolay, bol işlem içermeyen ve farklı strateji gerektirmeyen problem türlerinin tercih edildiği görülmüştür. Literatürde (Özmen vd., 2012), matematik öğretmenlerinin de derslerde daha çok kolay ve bol işlem içermeyen problem kullandıkları belirtilmektedir. Ders kitabı yazarlarının öğrencilerin çok sayıda problem çözerek uygulama yapmalarına fırsat verecek problem türlerine ağırlık verdikleri anlaşılmaktadır. Türkiye'de sınav merkezli bir eğitim sisteminin olması bu durumun ortaya çıkmasında etkili olduğu düşünülmektedir. Öğrencilerin motive olmalarını sağlamak ve derse katılımlarını artırmak için onlara bir problemle ilgili farklı çözüm yolları sunmanın gerekli olduğu göz önüne alınırsa (Silver vd., 2005), ders kitaplarına farklı stratejiler kullanmayı gerektiren ve zorluk dereceleri farklı olan problem türlerinin de eklenmesi önerilmektedir.

Özetle, sınıf düzeyleri ile ders kitaplarında kullanılan problem türleri arasında anlamlı bir ilişki olduğu görülmektedir. Ayrıca, kitap yazarlarının ders kitaplarında sözel, kısa, rutin, kolay, program bağımlı, çok sayısal veri içermeyen, günlük yaşamla ilgili, bol işlem içermeyen, farklı strateji gerektirmeyen, ilgisiz ve eksik veri içermeyen problem türlerini daha çok kullandıkları anlaşılmaktadır. Öğrencilerin problemleri görsel olarak görebilmeleri ve daha somut tecrübeler kazanabilmeleri için ders kitaplarında sunuş bağlamında görsel, çok sayısal veri içeren ve uzun problem türlerine de yer verilmesi önerilmektedir. Bununla birlikte, öğrencilerin matematiksel düşünme becerilerinin artması ve karşılaştıkları problemlere farklı çözüm yolları geliştirebilmeleri için ders kitaplarında içerik bağlamında rutin olmayan, ilgisiz veri içeren, günlük yaşamdan uzak, eksik veri içeren ve programdan bağımsız problem türlerinin de kullanılması tavsiye edilmektedir. Öğrencilerin ileride iyi birer problem çözücü olmasını sağlamak ve farklı stratejiler geliştirebilmesine fırsat vermek için ders kitaplarında çözüm bağlamında bol işlem içeren, farklı stratejiler gerektiren ve zor problem türlerine de yer verilmesi gerektiği düşünülmektedir. Böylece, farklı problem türlerini içeren ders kitaplarını kullanan

 Copyright © International Conference on New Horizons in Education Conference (INTE)

öğretmenler matematiksel düşünebilen, akıl yürütme becerisi gelişmiş ve ilişkilendirme becerisi yüksek olan öğrenciler yetiştirebileceklerdir. Son olarak, diğer araştırmacılara ortaokul matematik kitaplarındaki çözümsüz problemleri sunuş ve içerik bağlamında incelemeleri ve ortaöğretim matematik kitaplarındaki çözümlü ve çözümsüz problemler için benzer çalışmalar yapmaları önerilmektedir.

KAYNAKÇA

Altun, M., Arslan, Ç., & Yazgan, Y. (2004). Lise matematik ders kitaplarının kullanım şekli ve sıklığı üzerine bir çalışma. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi, XVII*(2), 131- 147.

Arıkan, R. (2004). *Araştırma teknikleri ve rapor hazırlama*. Ankara: Asil Yayın Dağıtım.

Arslan, S., & Özpınar, İ. (2009). Evaluation of 6th grade mathematics textbooks along with the teacher opinions. *Dicle University Journal of Ziya Gökalp Faculty of Education, 12,* 97-113.

Beaton, A. E., Mullis, I. V. S., Martin, M. O., Gonzalez, E. J., Kelly, D. L., & Smith, T. A. (1996). *Mathematics achievement in the middle school years: IEA's third international mathematics and science study.* Chestnut Hill, MA, USA: TIMSS International Study Center.

Cansız Aktaş, M. (2014). Nitel veri toplama araçları. In M. Metin (Ed.), *Kuramdan uygulamaya eğitimde bilimsel araştırma yöntemleri* (ss. 337-371). Ankara: Pegem Akademi Yayıncılık.

Charles, R. T. (1985). The role of problem solving. *Arithmetic Teacher, 32,* 48-50.

Demir, C., Maskan, A., Çevik, Ş., & Baran, M. (2009). The investigation of the secondary school 9th class physics textbook by the evaluative criteria. *Dicle University Journal of Ziya Gökalp Faculty of Education, 13,* 125-140.

Duman, T., Karakaya, N., Çakmak, M., Eray, M., & Özkan, M. (2001). *Konu alanı ders kitabı incelemesi.* (Editör: Küçükahmet, L.). Ankara: Nobel Yayın Dağıtım.

Dönmez, N. (2002). *The level of problem solving strategies at the second and third grades students.* Unpublished Master's Thesis, Uludağ University, Social Sciences Institue, Bursa.

Erbaş, A. K., Alacacı, C., & Bulut, M. (2012). A comparison of mathematics textbooks from Turkey, Singapore, and the United States of America. *Educational Sciences: Theory & Practice, 12*(3), 2311-2330.

Follmer, R. (2000). *Reading, mathematics and problem solving: The effects of direct instruction in the development of fourth grade students' strategic reading and problem solving approaches to text based, nonroutine mathematics problems.* Unpublished Doctoral Thesis, University of Widener, Chester PA.

Gökçek, T., & Hacısalihoğlu Karadeniz, M. (2013). Reasons for choosing alternative sources instead of textbook at secondary education. *Turkish Journal of Computer and Mathematics Education, 4*(1), 20-31.

Hembree, R. (1992). Experiments and relational studies in problem solving: A meta-analysis. *Journal for Research in Mathematics Education, 23*(3), 242-274.

Huilt, W. G. (1992). Problem solving and decision making: Consideration of individual differences using the myers-briggs type indicator. *Journal of Psychological Type, 24,* 33-44.

Işık, C. (2008). The factors affecting the use of mathematics textbook of mathematics teachers at primary education (grades 6-8) and their expectations. *Kastamonu Education Journal, 16*(1), 163-176.

Kennedy, L. M. V. (1980). *Educational psychology: In theory and practice.* New York: Random House.

Kneeland, S. (2001). *Problem çözme* (Çev. N. Kalaycı). Ankara: Gazi Kitabevi.

Ministry of National Education [MoNE]. (2009). *Primary schools mathematics curriculum (6, 7, and 8th grades).* Ankara: MoNE Board of Education.

Ministry of National Education [MoNE]. (2013). *Middle school mathematics curriculum (5, 6, 7, and 8th grades).* Ankara: MoNE Board of Education.

Morgan, C. T. (1999). *Psikolojiye giriş* (Çev. Hüsnü Arıcı ve ark.). Ankara: Meteksan Yayınları.

National Council of Teachers of Mathematics [NCTM]. (1989). *Curriculum and evaluation standards for school mathematics.* Reston, Va: NCTM.

Özmen, Z. M., Taşkın, D., & Güven, B. (2012). Determining the types of problems used by 7th grade math teachers. *Education and Science, 37*(165), 246-261.

Schoenfeld, A. H. (1989). Explorations of students' mathematical beliefs and behavior. *Journal for Research in Mathematics Education, 20*(4), 338-355.

Silver, E. A., Ghousseini, H., Gosen, D., Charalambous, C. Y., & Font Strawhun, B. T. (2005). Moving from rhetoric to praxis: Issues faced by teachers in having students consider multiple solutions for problems in the mathematics classroom. *Mathematical Behavior, 24*(3-4), 287-301.

Şahin, S., & Turanlı, N. (2005). The evaluation of mathematics textbooks used for first year high school students. *Gazi University Journal of Gazi Educational Faculty, 25*(2), 327-341.

Ünsal, Y., & Güneş, B. (2004). Bir kitap inceleme çalışması örneği olarak MEB lise 1. sınıf fizik ders kitabının eleştirel olarak incelenmesi. *Türk Eğitim Bilimleri Dergisi, 2*(3), 305-321.

Yan, Z., & Lianghuo, F. (2002). Textbook use by Singaporean mathematics teachers at lower secondary school level. *Mathematics Education for a Knowledge-Based Era, 2,* 38-47.

Yıldız, C. (2016, May). *Investigation of mathematics teachers' views about improving problem solving skills*. International Conference on Education in Mathematics, Science, & Technology (ICEMST-2016), Ersan Resort & Spa, Muğla.
Yıldız, C., Hacısalihoğlu Karadeniz, M., & Göl, R. (2015). Contemporary approaches in education. Norley, K., Icbay, M. A., & Arslan, H. (Eds). *The usage of the biographies of mathematicians in elementary and secondary mathematics textbooks* (pp.193-207), Frankfurt am Main: PL Academic Research.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ORTAOKUL ÖĞRENCİLERİNİN EĞİTSEL BİLGİSAYAR OYUNLARINA YÖNELİK TUTUMLARI İLE YANSITICI DÜŞÜNME BECERİLERİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ

Mustafa KAHYAOĞLU
Faculty of Computer Education and Instructional Technologies Department
Siirt University
mustafa.kahyaoglu56@gmail.com

Mithat ELÇİÇEK
Faculty of Computer Education and Instructional Technologies Department
Siirt University
mithatelcicek@gmail.com

ÖZET
Bu çalışmanın amacı, ortaokul öğrencilerinin eğitsel bilgisayar oyunlarına yönelik tutumları ile yansıtıcı düşünme becerileri arasındaki ilişkiyi ortaya koymaktır. Araştırmanın modeli olarak korelasyonel araştırma modelinden yararlanılmıştır. Araştırmanın evrenini, Siirt il merkezde öğrenim gören ortaokul öğrencileri oluşturmaktadır. Veri toplama aracı olarak araştırmaya katılan öğrencilerin cinsiyet, sınıf, bilgisayar ve internette sahip olma durumu gibi değişkenlerin yer aldığı kişisel bilgi formu, Çankaya ve Karamete (2008) tarafından geliştirilen "*Eğitsel Bilgisayar Oyunları Tutum*" ölçeği ve Kızılkaya ve Aşkar (2010) tarafından geliştirilen "*Problem Çözmeye Yönelik Yansıtıcı Düşünme Becerileri*" ölçeği kullanılmıştır. Araştırma sonucunda, eğitsel bilgisayar oyunlarına yönelik tutumlar ile yansıtıcı düşünme becerileri düzeyleri arasında orta düzeyde, pozitif yönde anlamlı bir ilişkinin olduğu saptanmıştır.
Anahtar Kelimeler: Eğitsel bilgisayar oyunları, ortaöğretim öğrencileri, yansıtıcı düşünme, tutum

GİRİŞ
Eğitim teknolojisi alanında yaşanan gelişmeler öğretim sürecinde öğrenme ortamlarının öğrenci merkezli uygulamalara olanak verecek şekilde yeniden düzenlenmesini zorunlu kılmaktadır. Prensky (2002) 21. yüzyılda eğitime damga vuracak yeniliklerin eğitimi eğlenceli hale getirmekle mümkün olabileceğini belirtmiştir (akt: Tüzün 2006). Bu durum eğitsel bilgisayar oyunları ile kolaylıkla sağlanabilir. Eğitsel bilgisayar oyunları, öğrencilerin eğlenceli vakit geçirmesinin yanında kendisi için önemli olan bilgileri öğrenebileceği ortamlar sunmaktadır. Güngörmüş (2007)'e göre eğitsel bilgisayar oyunları; öğrencilere verilmek istenen ders içeriklerinin oyun formatında hazırlandığı yazılımlardır. Yağız (2007), eğitsel bilgisayar oyunlarının öğrencilerin akademik başarısı üzerine etkisini incelediği çalışmada, öğrencilerin akademik başarısı lehine anlamlı bir farklılık olduğunu belirtmiştir. Dolayısıyla eğitsel bilgisayar oyunları öğrencinin kendi bilgisini kendisinin oluşturduğu, bu bilgiler ile eski bilgiler arasındaki bağlantıları görebilen, bilgiyi örgütleyip yeni bilgiler üretebilen yapılandırmacı öğrenme yaklaşımını temel alan bir öğrenme çevresi oluştuğu belirtilmektedir (Bakar, Tüzün ve Çağıltay, 2008). Ayrıca eğitsel bilgisayar oyunlarının öğrencilerin yaratıcı ve yansıtıcı düşünme becerilerini geliştirdiği (Can ve Çağıltay, 2006), problem çözme ve yansıtıcı düşünme becerilerini geliştirmeye yardımcı olduğu vurgulanmaktadır (Demirel, Seferoğlu ve Yağcı, 2003). John Dewey (1993) yansıtıcı düşünmeyi, birbiriyle ilişkili bilgilerin sebep sonuç ilişkisine dayandığı etkin ve istendik öğrenme süreci olarak tanımlarken, Rodgers (2002) yansıtıcı düşünmeyi, deneyimlerin bir sonucu olarak ortaya çıkan analiz etmeye dayalı akıllı eylem hareketi olarak tanımlamaktadır. Dolayısıyla problem çözmeye yönelik yansıtıcı düşünme becerisinin geliştirilebilir bir beceri olduğu fakat bunun için bir takım destekleyici stratejilere ihtiyaç duyulduğu görülmektedir.

ARAŞTIRMANIN AMACI
Bu araştırmada, ortaokul öğrencilerinin eğitsel bilgisayar oyunlarına yönelik tutumları ile yansıtıcı düşünme becerileri arasındaki ilişkiyi belirlemek amacıyla gerçekleştirilmiştir.

YÖNTEM
Bu araştırmada, korelasyonel araştırma yöntemi kullanılmıştır. Araştırmanın evrenini, 2015-2016 eğitim öğretim yılı bahar döneminde Siirt il merkezde il Milli Eğitim Müdürlüğüne bağlı ortaokullarda öğrenim gören öğrenciler oluşturmaktadır. Örneklemi ise seçkisiz olmayan örnekleme yöntemlerinden uygun örnekleme yoluyla belirlenmiş dört okulda öğrenim gören toplam 653 öğrenci oluşturmaktadır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Veri Toplama Aracı
Araştırmada veri toplama aracı olarak öğrencilerin demografik bilgilerinin yer aldığı kişisel bilgi formu, Çankaya ve Karamete (2008) tarafından geliştirilen "*Eğitsel Bilgisayar Oyunları Tutum*" ölçeği ile Kızılkaya ve Aşkar (2010) tarafından geliştirilen "*Problem Çözmeye Yönelik Yansıtıcı Düşünme Becerileri*" ölçeği kullanılarak toplanmıştır.

Verilerin Analizi
Öğrencilerin eğitsel bilgisayar oyunlarına yönelik tutumları ve yansıtıcı düşünme becerilerinin cinsiyet, sınıf, evde bilgisayar ve internette sahip olma durumu değişkenlerine göre farklılaşıp farklılaşmadığını belirlemek için ise bağımsız gruplar t-testi ve tek yönlü varyans analizi (ANOVA) kullanılmıştır. Gruplar arası farklılığın kaynağını belirmek için ise Tukey-HSD testinden yararlanılmıştır.

BULGULAR
Ortaokul öğrencilerinin eğitsel bilgisayar oyunlarına yönelik tutum ölçeğinden aldıkları puanların aritmetik ortalaması 2.95 ve yansıtıcı düşünme beceri ölçeğinden aldıkları puanların aritmetik ortalaması 3.06 olarak bulunmuştur. Öğrencilerin yansıtıcı düşünme beceri alt boyutları aritmetik ortalamaları incelendiğinde ise nedeleme alt boyutu 2.96, sorgulama alt boyutu 3.12 ve değerlendirme alt boyutu 3.07 olarak tespit edilmiştir. Bu değerlerden öğrencilerin eğitsel bilgisayar oyunlarına yönelik tutumları ile yansıtıcı düşünme becerilerinin orta düzeyde olduğu görülmektedir.
Ortaokul öğrencilerinin eğitsel bilgisayar oyunlarına yönelik tutumları ile yansıtıcı düşünme becerileri düzeyleri (r=,698; p<.01) arasında pozitif yönde anlamlı bir ilişki olduğu belirlenmiştir. Öğrencilerin yansıtıcı düşünme becerisi alt boyutları olan nedenleme, sorgulama ve değerlendirme ile eğitsel bilgisayar oyunlarına yönelik tutumları arasında ilişki incelendiğinde ise nedenleme (r=.620; p<.01), sorgulama (r=.549; p<.01) ve değerlendirme (r=.609;p<.01) alt boyutları ile eğitsel bilgisayar oyunlarına yönelik tutumları arasında yine pozitif yönde orta düzeyde anlamlı bir ilişkinin olduğu tespit edilmiştir.
Yapılan regresyon analizi sonucuna göre ortaokul öğrencilerinin eğitsel bilgisayar oyunlarına yönelik tutumlarının yansıtıcı düşünme becerilerinin anlamlı bir yordayıcısı olduğu görülmüştür (R=0,698, R^2=0,488; p<.01). Buna göre öğrencilerin yansıtıcı düşünme becerilerine ilişkin toplam varyansın %48'nin eğitsel bilgisayar oyunlarına yönelik tutum ile açıklandığı tespit edilmiştir.
Araştırmaya katılan öğrencilerin cinsiyetlerine göre eğitsel bilgisayar oyunlarına yönelik tutum arasında erkekler lehine anlamlı bir farklılık olduğu (t=3,87; p<.05). Yine öğrencilerin evde internet bağlantısı olma durumuna göre eğitsel bilgisayar oyunlarına yönelik tutumları arasında "var" lehine anlamlı bir farklılık olduğu (t=-2,08; p<0.05) tespit edilmiştir. Buna karşın öğrencilerin bilgisayara sahip olma durumu ile eğitsel bilgisayar oyunlarına yönelik tutumları arasında anlamlı bir farklılık olmadığı belirlenmiştir (t=-0,08; p>0.05). Tablo-5'de görüldüğü gibi öğrencilerin yansıtıcı düşünme becerilerinin cinsiyet, bilgisayar ve internette sahip olma durumu değişkenlerine ilişkin t-testi sonuçları incelendiğinde ise cinsiyet değişkenine göre anlamlı bir farklılık olmadığı (t=-0,14; p>.05). Buna karşın öğrencilerin bilgisayar (t=-2,01; p<.05) ve internette (t=-2,08; p<.05) sahip olma durumuna göre "evet" lehine anlamlı bir farklılık olduğu tespit edilmiştir. Öğrencilerin sınıf değişkenine göre eğitsel bilgisayar oyunlarına yönelik tutumlarının aritmetik ortalaması 5. sınıf için 3.13, 6. sınıf için 2.78, 7. sınıf için 2. 77 ve 8. sınıf için 3.06 olarak tespit edilmiştir. Öğrencilerin sınıf değişkenine göre yansıtıcı düşünme becerileri düzeyi aritmetik ortalaması incelendiğinde ise 5. sınıf için 3.29, 6. sınıf için 2.85, 7. sınıf için 2.92 ve 8. sınıf için 3.14 olarak belirlenmiştir.
Ortaokul öğrencilerinin bulundukları sınıf düzeyi ile hem eğitsel bilgisayar oyunlarına yönelik tutumları (F=15,33;p<.01) hem de yansıtıcı düşünme becerileri (F=16,18;p<.01) arasında anlamlı farklılıklar olduğu belirlenmiştir. Anlamlı farklılığın kaynağını belirlemek için yapılan Tukey HSD testi sonucunda ise hem eğitsel bilgisayar oyunlarına yönelik tutum hem de problem çözmeye yönelik yansıtıcı düşünme becerilerinin 5. sınıf ile 8. sınıf ve 6 sınıf ile 7 sınıf arasında olduğu tespit edilmiştir.

TARTIŞMA VE SONUÇLAR
Araştırma sonucunda, araştırmaya katılan ortaokul öğrencilerinin eğitsel bilgisayar oyunlarına yönelik tutumları ile yansıtıcı düşünme becerileri arasında orta düzeyde ve pozitif yönde anlamlı bir ilişkinin olduğu görülmüştür. Bu durumda öğrencilerin eğitsel bilgisayar oyunlarına yönelik tutumlarının artırılması ile yansıtıcı düşünme becerilerinin artırabileceği şeklinde yorumlanabilir. Alan yazında yapılan benzer çalışmalar incelendiğinde; Donmuş ve Gürol (2015) tarafından yapılan araştırmada, eğitsel bilgisayar oyunlarının öğrencilerin kalıcılık ve erişi düzeylerine olumlu etkisinin olduğu belirtmiştir.
Çeşitli değişkenler açısından öğrencilerin eğitsel bilgisayar oyunlarına yönelik tutumları incelendiğinde ise internet bağlantısı ve cinsiyet değişkeninde erkek öğrenciler lehine anlamlı bir farklılık olduğu görülmüştür. Öğrencilerin evde internet bağlantısına sahip olmaları eğitsel bilgisayar oyunlarına yönelik tutumlarını artırabileceği ve erkek öğrencilerin tutumlarında daha yüksek bir artışın yaşanabileceği şeklinde yorumlanabilir. Çankaya (2007) tarafından yapılan araştırmada, öğrencilerin eğitsel bilgisayar oyunlarına yönelik tutumlarında

erkekler lehine farklılık oluşması ve Egenfeldt-Nielsen (2004) tarafından yapılan araştırmada internet bağlantısının öğrencilerin eğitsel bilgisayar oyunlarına yönelik tutumlarını etkilemesi bu araştırmanın bulgularıyla örtüşmektedir.

Yine araştırma kapsamında eğitsel bilgisayar oyunlarına yönelik tutumun yansıtıcı düşünme becerisinin anlamlı bir yordayıcısı olduğu görülmüştür. Bu durum eğitsel bilgisayar oyunlarının deneyime ve sorgulamaya dayalı etkinliklerin (Tüzün ve diğerleri, 2006) eğlence boyutuyla birlikte sunulmasından kaynaklandığı düşünülmektedir. Bu çerçevede yansıtıcı düşünme becerisinin çözümleme yaparak yanlış ve doğruların belirlendiği sorgulama temelli bir beceriye dayanması (Dewey, 1993) bu görüşü desteklemektedir.

KAYNAKÇA

Bakar, A., Tüzün, H., & Çağıltay, K. (2008). Öğrencilerin eğitsel bilgisayar oyunu kullanımına ilişkin görüşleri: Sosyal bilgiler dersi örneği. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *35*(35).

Can, G. ve Çağıltay, K. (2006). Turkish prospective teachers' perceptions regarding the use of computer games with educational features. *Journal of Educational Technologyve Society, 9*(1), 308.

Çankaya, S. (2007). Oran-orantı konusunda geliştirilen bilgisayar oyunlarının öğrencilerin matematik dersi ve eğitsel bilgisayar oyunları hakkındaki düşüncelerine etkisi.

Çankaya, S., ve Karamete, A. (2008). Eğitsel Bilgisayar Oyunlarının Öğrencilerin Matematik Dersine ve Eğitsel Bilgisayar Oyunlarına Yönelik Tutumlarına Etkisi. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, *4*(2), 115-127.

Dewey, J. (1933). *How We Think. A restatement of the relation of reflective thinking to the educative process*, Boston: D. C. Heath.

Donmuş, V., & Gürol, M. (2015). İngilizce öğrenmede eğitsel bilgisayar oyunu kullanmanın erişiye ve kalıcılığa etkisi. *Electronic Turkish Studies*, *10*(15).

Egenfeldt-Nielsen, S. (2004). Practical barriers in using educational computer games. *On the Horizon*, *12*(1), 18-21.

Güngörmüş, G. (2007). Web tabanlı eğitimde kullanılan oyunların başarıya ve kalıcılığa etkisi, Yüksek Lisans Tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.

Kızılkaya, G., & Aşkar, P. (2010). Problem çözmeye yönelik yansıtıcı düşünme becerisi ölçeğinin geliştirilmesi. *Eğitim ve Bilim*, *34*(154).

Rodgers, C. (2002). Defining reflection: Another look at John Dewey and reflective thinking. *Teachers college record*, *104*(4), 842-866.

Yağız, Ezgi (2007), *Oyun Tabanlı Öğrenme Ortamlarının İlköğretim Öğrencilerinin Bilgisayar Dersindeki Başarıları ve Öz-Yeterlik Algıları Üzerine Etkileri,* Yüksek Lisans Tezi, Hacettepe Üniversitesi Fen Bilimleri Enstitüsü, Ankara.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ORTAÖĞRETİM BRANŞ ÖĞRETMENLERİNİN ÖĞRENME-ÖĞRETME ORTAMLARINDA BİLİŞSEL FARKINDALIK STRATEJİLERİNİ KULLANMA DÜZEYLERİ

Pınar BİLASA
Gazi Üniversitesi, Endüstriyel Sanatlar Eğitim Fakültesi, Türkiye
pinarbilasa@gmail.com

ÖZET

Hızla değişen çağa ayak uydurmak, çağı takip edebilmek ve değişimleri en etkin şekilde yaşama adapte edebilmenin yolu eğitimden geçmektedir. Ülkeler ve kurumlar kadar bireyler de bu gelişmeleri yakından takip edebilmeli ve çağın yeniliklerinden haberdar olabilmek için kendilerini yetiştirmelidirler. Bilindiği gibi son yıllarda dünyada ve ülkemizde eğitime yönelik bilginin aktarımı şeklindeki bakış açısından uzaklaşılarak, bilginin üretilmesi ve bilginin etkin kullanımına önem veren bir anlayışa yönelinmiştir. Bireylerin kendi zihinsel süreçlerinin ve yeteneklerinin farkında olması, yeteneklerini ve kendi düşüncelerini desteklemesi çeşitli eğitsel yollarla daha mümkün olabilmektedir. Bireylerin öğrenme sürecinde öğretmenlerin çeşitli yöntem, teknik ve stratejiler kullanmaları; öğrencilerin bilişsel farkındalıklarının artmasına destek olmaktadır. Öğretmenler, eğitim-öğretim sürecinde kendi deneyimleri, bilgileri doğrultusunda geliştirdikleri yöntemlerle öğrencilerin öğrenmelerine yardımcı olmaktadırlar. Bundan dolayı öğretmenlerin sınıfta öğrencilere bilişsel farkındalıklarını arttırabilmeleri için öncelikle kendilerinin bilişsel farkındalık becerilerini ve buna yönelik öğrenme stratejilerini bilmeleri ve kullanmaları gerekmektedir. Bu araştırmada ortaöğretimde görev yapan öğretmenlerin öğrenme-öğretme ortamında bilişsel farkındalık stratejilerini kullanma düzeylerini belirlemek amaçlanmıştır. Betimsel özellikte olan bu araştırmada tarama modelinden yararlanılacaktır. Veri toplama aracı olarak; öğretmenlerin kişisel bilgileri ve öğrenme-öğretme ortamlarında bilişsel farkındalık stratejilerini kullanma düzeyleriyle ilgili maddelerden oluşan ve Nuray Yıldırım tarafından 2012 yılında hazırlanarak geçerlik-güvenirlik çalışmaları yapılan 44 maddelik ölçek kullanılacaktır. Araştırma verileri 21-25 Mart 2016 tarihinde Mersin'de ve 25-29 Nisan 2016 tarihinde Erzurum'da düzenlenecek olan hizmet içi eğitimlere katılacak ortaöğretim branş öğretmenlerinden elde edilecektir. Bu taramadan sonra verilerin analizi, bulguları, sonuçları ve araştırmaya yönelik öneriler boyutları yapılandırılacaktır. Türkiye'de bu alanda yapılan çalışmaların azlığı nedeniyle bu araştırmanın tüm yararlanıcılara katkı sağlayacağı düşünülmektedir.

Keywords: Bilişsel Farkındalık, Öğretmen, Öğrenme-Öğretme Ortamı

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ORTAÖĞRETİM ÖĞRENCİLERİNİN BEDEN EĞİTİMİ DERSİNE YATKINLIKLARININ ÇEŞİTLİ DEĞİŞKENLERE GÖRE İNCELENMESİ

Enes IŞIKGÖZ
Beden Eğitimi ve Spor Yüksekokulu
Batman Üniversitesi, Türkiye,
pdgenes@gmail.com

Erkan KONAÇ
Beden Eğitimi ve Spor Yüksekokulu
Batman Üniversitesi, Türkiye,
erkankonac@gmail.com

Hakan EKİN
Beden Eğitimi ve Spor Yüksekokulu
Batman Üniversitesi, Türkiye,
eknhkn@gmail.com

ÖZET
Bu çalışmanın amacı, çeşitli değişkenlere göre ortaöğretim öğrencilerinin beden eğitimi dersine olan yatkınlıklarının belirlenmesidir. Tarama modelinde olan çalışmanın grubunu, 2015-2016 öğretim yılı ikinci döneminde Batman il merkezi farklı lise türlerinde öğrenim gören 233 erkek, 175 kız olmak üzere toplam 408 lise öğrencisi oluşturmaktadır. Çalışmada veri toplama aracı olarak 2009 yılında Hilland ve ark. (2009)'nın geliştirdiği "The Physical Education Predisposition Scale" ölçeğinin Erbaş ve ark. (2016) tarafından geçerlik ve güvenirlik çalışması yapılarak Türkçeye uyarlanan ve iki alt boyuttan oluşan "Beden Eğitimi Dersi Yatkınlık Ölçeği" kullanılmıştır. Çalışma sonucunda lise öğrencilerinin beden eğitimi dersine yatkınlıkları, beden eğitimi dersine verilen değer alt boyutunda orta düzeyde, beden eğitimi dersine yönelik algılanan yetenek alt boyutunda ise iyi düzeyde çıkmıştır. Öğrencilerin beden eğitimi dersine yatkınlıkları cinsiyete göre değişmediği, okudukları lise türü, yaş ve sınıflarına göre anlamlı bir biçimde değiştiği sonucuna varılmıştır.

Anahtar Kelimeler: Beden Eğitimi, Spor, Ortaöğretim, Öğrenci, Yatkınlık.

GİRİŞ
Eğitimin bireyleri bedensel ve zihinsel yönünden sağlıklı, mutlu, üretken olarak yetiştirilmesinde önemli bir yere sahiptir. Kuşkusuz bireylerin bedensel ve ruhsal yönden sağlıklı ve mutlu olması, toplumsal kalkınmanın da önde gelen koşullarındandır (Taşmektepligil vd., 2006). Tarihsel süreç içerisinde de, toplumun ve bireylerin eğitiminde beden eğitimi ve spordan faydalanılması, bedensel gelişimin ve oyunun eğitim için temel bir öğe olduğu birçok eğitimci tarafından ileri sürülmüştür (Özbaydar, 1983). Her toplum fertlerini bu doğrultuda yetiştirmek için çaba sarf eder. Türk Milli Eğitiminin genel amaçlarından biri de Türk milletinin bütün fertlerini; *Beden, zihin, ahlak, ruh ve duygu bakımlarından dengeli ve sağlıklı şekilde gelişmiş bir kişiliğe ve karaktere, hür ve bilimsel düşünme gücüne, geniş bir dünya görüşüne sahip, insan haklarına saygılı, kişilik ve teşebbüse değer veren, topluma karşı sorumluluk duyan; yapıcı, yaratıcı ve verimli kişiler olarak yetiştirmek* olarak belirlenmiştir (1739 Sayılı Milli Eğitim Temel Kanunu). Eğitim sisteminde bu amacın gerçekleşmesi için okullara konulan beden eğitimi dersinin önemi büyüktür. Çünkü genel eğitim ile beden eğitimi amaçlan arasında amaç paralelliği bulunmakta (Karakuş ve Küçük, 1999) çocukluk ve gençlik boyunca okulda beden eğitimi, kişilerin yaşam boyu sağlıklı ve zinde olabilmelerine olanak sağlayan becerileri öğrenme ve pratik etme imkânını sunar.

Fiziksel etkinliklerin insan yaşamının önemli bir boyutunu oluşturduğu ve örgün eğitim sürecinin bir parçası olduğu kabul görmüş ve bilimsel olarak ortaya konmuştur. Beden eğitimi, eğitim programlarının bütünleyici bir

 Copyright © International Conference on New Horizons in Education Conference (INTE)

parçası olma özelliği dolayısıyla bireyin fiziksel aktiviteler aracılığıyla psikomotor, bilişsel, duyuşsal ve sosyal alanda gelişimine katkıda bulunur (MEB, 2009). Okuldaki beden eğitimi derslerinin, fiziksel aktivitelerle çocukların hareket yetenekleri arttırmakta, sağlık konularında yeni bilgi edinmelerinde, sosyal ve yaşam becerileri kazandırılmasında sayısız faydaları bulunmaktadır (Pangrazi & Beighle, 2009). Beden eğitimi dersleri aynı zamanda fiziksel aktivite yoluyla çağımızın en büyük sorunu olan çocukluk ve ergenlik döneminde oluşabilecek obezite riskini de azaltmada önemli rol oynamaktadır (Andrew vd., 2011). Beden eğitimi dersinin önemi uluslararası bir öneme sahiptir. Bütün Avrupa ülkeleri beden eğitiminin okullardaki önemini kabul etmekte, beden eğitimi dersi bütün Avrupa'da ilk ve alt ortaöğretim kademelerinde zorunlu olup, ana öğretim programının önemli bir parçası sayılmaktadır (Avrupa Komisyonu/EACEA/Eurydice, 2013). Birleşmiş Milletler Eğitim, Bilim ve Kültür Örgütü (UNESCO, 2006) da okulların beden eğitimi derslerinin verilmesi gereken temel yerler olarak vurgulamaktadır.

Ülkemizde beden eğitimi ve spor eğitimi, ilkokulda oyun ve fiziki etkinlikler, ortaokul ve ortaöğretimde beden eğitimi ve spor dersi adıyla eğitim sistemi içerisinde yer almıştır. İlkokul 1-4.sınıflar için oyun ve fiziki etkinlikler dersi öğretim programının amacı, öğrencilerin oyun ve fiziki etkinlikler yolu ile yaşamları boyunca kullanacakları temel hareketler, aktif ve sağlıklı yaşam becerileri, kavramları ve stratejileri ile birlikte bunlarla ilişkili yaşam becerilerini geliştirerek bir sonraki eğitim düzeyine hazırlanmaları olarak belirlenirken (MEB, 2012), ortaokul beden eğitimi ve spor dersi öğretim programının amacı; öğrencilerin, yaşamları boyunca kullanacakları hareket becerileri, aktif ve sağlıklı yaşam becerileri, kavramları ve stratejileri ile birlikte öz yönetim becerileri, sosyal becerileri ve düşünme becerilerini de geliştirerek bir sonraki eğitim düzeyine hazırlanmaları olarak belirlenmiştir (MEB, 2013). Ortaöğretimde verilen beden eğitimi ve spor dersinin genel amaçları ise şöyle belirlenmiştir; *Atatürk'ün ve Türk düşünürlerinin beden eğitimi ve spor ile ilgili düşüncelerini özümsemiş, millî bayram ve kurtuluş günlerinin anlam ve önemini kavramış dolayısıyla bu anlamdaki tüm etkinliklere katılmaya gönüllü, fiziksel etkinliklere katılım yoluyla, hareket bilgi ve becerilerini geliştiren ve bu becerileri alışkanlık hâline getiren, sportif etkinlikler yoluyla, spora özgü kuralları, bilgi ve becerileri uygulayabilen ve bu becerileri yaşantısında olumlu olarak kullanabilen, düzenli etkin katılım ile sağlığı güçlendirici bilgi ve becerileri yaşamında ve kişisel gelişiminde kullanabilen, spor organizasyonlarına katılım yoluyla, spor bilinci gelişmiş sosyal bireyler olarak yetiştirmektir* (MEB,2009).

Beden eğitimi derslerinin istenilen amaçlarına ulaşmasında fiziki olanaklar, öğretim programının yapısı, eğitim iş görenlerinin yeterliliği gibi etkenlerin yanı sıra öğrencilerin derse verdikleri değer ile sahip oldukları yeteneklerinin farkındalıkları da önemlidir. Çünkü beden eğitimi dersinin amacına ulaşabilmesi için, öğrencilerin dersi anlamalarını ve kabullenmelerini kolaylaştırarak aktif olarak hep birlikte derse katılmanın sevincini ve deneyimlerini kazanarak (Ulstad vd., 2016) onların olumlu tutum içerine girmelerini gerektirmektedir. Öğrencilerin beden eğitimi dersine ilişkin tutumlarının olumlu olması, derslerin etkili işlenmesini ve dersin amaçlarına daha kolay ulaşmasını sağlayarak gelecekteki çeşitli fiziki etkinliklere daha istekli katılmalarını sağlayabilmektedir (Silverman ve Scrabis, 2004). Aynı zamanda beden eğitimi dersine ilgisi ve tutumu fazla olan öğrencilerin akademik başarı motivasyonlarında da artış gözlemlenmektedir (Akandere vd., 2010).

Ortaöğretim öğrencilerinin beden eğitimi dersine yönelik ilköğretim döneminde edindikleri deneyimlerini, yetişkinlik döneminin önemli evresi olan ergenlik çağında bulundukları ortaöğretim kademesinde beden eğitimi dersine yansıtmaları da beklenmektedir. Lise öğrencilerinin beden eğitimi dersine karşı tutumlarını inceleyen değişik çalışmalar yapılmış bunların bir kısmı ölçek geliştirmeye dönük (Demirhan ve Altay, 2001; Güllü ve Güçlü, 2009; Doydu ve ark., 2013; Silverman ve Subramaniam, 1999; Özer ve Aktop, 2003; Pehlivan, 1998; Şentürk, 2012) çalışmalardır. Diğer çalışmaların ise öğrencilerin beden eğitimi dersine yönelik tutumlarını çeşitli değişkenler açısından belirlemeye dönük yapıldığı görülmüş (Li ve ark., 2014; Akandere ve ark., 2010; Güllü ve Korucu, 2005; Subramaniam ve Silverman, 2007; Ekici ve ark., 2011; Hünük, 2006; Şişko ve Demirhan, 2002; Gürbüz ve Özkan, 2012; Koca ve Aşçı, 2002; Yağcı, 2012; Uluışık, 2015; Özdemir, 2006; Deaner ve ark. 2012; Arslan ve Mendeş, 2002; Çelik ve Pulur, 2011; Silverman ve Scrabis, 2004; Erkmen ve ark., 2006; Alparslan, 2008) çalışmalar sonucunda, öğrencilerin genel olarak beden eğitimi dersine karşı olumlu tutum içerisinde oldukları, cinsiyet, yaş, okudukları lise türü ve sınıf değişkenlerinin tutumlarını etkilediği görülmektedir. Beden eğitimi dersinde lise öğrencilerine dönük yapılan çalışmaların daha çok tutum boyutunda yoğunlaştığı, öğrencilerin beden eğitimi dersine olan yatkınlıklarına ilişkin yerli çalışma ise Erbaş ve ark., (2015)' nın Türkçeye uyarladıkları, geçerlik ve güvenirlik çalışmasını yaptıkları Beden Eğitimi Dersi Yatkınlık Ölçeği [BEDYÖ] olduğu görülmüştür. Bu araştırmada ise ölçeğin ilk defa kullanılarak lise öğrencilerinin çeşitli değişkenler açısından beden eğitimi dersine yatkınlıklarının incelenmesi ilk çalışma olması açısından önemli görülmektedir. Bu çalışma ile ortaöğretimde okuyan öğrencilerin çeşitli değişkenler açısından beden eğitimi dersine yatkınlıklarının belirlenmesi amaçlanmıştır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

YÖNTEM

Bu çalışma, lise türlerine göre öğrencilerin beden eğitimi dersine yatkınlıklarını incelemeye dönük tarama modelinde bir çalışmadır. Çalışmanın grubunu 2015-2016 öğretim yılı bahar döneminde Batman il merkezinde bulunan lise türlerinden her birinin örnekleme girmesi için ulaşılabilirlik ve öğrenci potansiyeli dikkate alınarak Batman Anadolu Lisesi, Batman Fen Lisesi, Batman Spor Lisesi, Batman Anadolu İmam Hatip Lisesi ve Batman Endüstri Meslek Lisesi olmak üzere beş lise türünde öğrenim gören 233 erkek ve 175 kız olmak üzere toplam 408 öğrenci oluşturmaktadır. Araştırmaya dâhil okullarda anket çalışması için ilgili makamlardan gerekli izinler alınmıştır.

Çalışmada veri toplama aracı olarak 2009 yılında Hilland ve ark. (2009)'nın geliştirdiği "The Physical Education Predisposition Scale" ölçeğinin Erbaş ve ark. (2016) tarafından geçerlik ve güvenirlik çalışması yapılarak Türkçeye uyarlanan "Beden Eğitimi Dersi Yatkınlık Ölçeği" kullanılmıştır. Ölçek iki alt boyut ve 11 maddeden oluşmaktadır. Birinci alt boyut "beden eğitimi dersine verilen değer" boyutuyla 6 madde, ikinci alt boyut ise "beden eğitimi dersine yönelik algılanan yetenek" boyutuyla 5 maddeden oluşmaktadır. Ölçek beşli Likert tipinde, (1) Kesinlikle katılmıyorum, (2) Katılmıyorum, (3) Kararsızım, (4) Katılıyorum ve (5) Kesinlikle katılıyorum şeklinde puanlandırılmıştır. Ölçekte yer alan olumsuz maddeler ise tersten puanlanmıştır. Ölçeğin hesaplanan Cronbach Alfa güvenirlik katsayısı 0,71 olarak oldukça güvenilir bulunmuştur. Mevcut çalışmada ise ölçeğin Cronbach Alfa güvenirlik katsayısı 0,75 olarak hesaplanmıştır.
Verilerin analizinde betimsel istatistiki tekniklerin yanı sıra uygulanan tek örneklem Kolmogorov Smirnow normallik testi sonucunda verilerin normal dağılımdan farklı dağıldıkları görülmüştür ($z=0,11$; $p=.00 <. 05$). Bu sonuca göre verilerin demografik değişkenlere göre karşılaştırılmasında non parametrik testlerden Mann Whitney U ve Kruskall Wallis H testleri kullanılmıştır. Analizlerde anlamlılık düzeyi için $p<.05$ değeri ölçüt alınmıştır.

BULGULAR

Tablo 1. Öğrencilerin demografik özelliklerinin dağılımları

Cinsiyet	***n***	***%***
Erkek	233	57,1
Kız	175	42,9
Okul Türü	***n***	***%***
Anadolu İmam Hatip Lisesi	77	18,9
Spor Lisesi	55	13,5
Anadolu Lisesi	140	34,3
Fen Lisesi	76	18,6
Meslek Lisesi	60	14,7
Yaş	***n***	***%***
13-15 arası	140	34,3
16-18 arası	261	64,0
19 ve üstü	7	1,7
Sınıf	***n***	***%***
9. sınıf	129	31,6
10. sınıf	99	24,3
11. sınıf	102	25,0
12. sınıf	78	19,1
Toplam	***408***	***100,0***

Tablo 1' e göre öğrencilerin, 233' u (% 57,1) erkek, 175'i (%42,9) kızdır. Öğrencilerin 77'si (%18,9) İmam hatip Lisesi, 55'i (%13,5) Spor Lise, 140' ı (%34,3) Anadolu Lisesi, 76'sı (%18,6) Fen Lisesi, 60' ı (%14,7) Meslek Lisesi öğrencisidir. Yaş olarak öğrencilerin 140'ı (%34,3) 13-15, 261'i (%64,0) ve 7'si (%1,7) 19 ve üstü yaş grubundadır. Yine öğrencilerin 129'u (%31,6) 9. Sınıf, 99'u (%24,3) 10. Sınıf, 102'si (%25,0) 11. Sınıf, 78'i (%19,1) 12. Sınıfta okumaktadır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 2. Öğrencilerin beden eğitimi dersine verilen değer ve beden eğitimi dersine yönelik algılanan yetenek alt boyutlarında görüşlerinin betimsel istatistik dağılımları

		Beden eğitimi dersine verilen değer	*Beden eğitimi dersine yönelik algılanan yetenek*
N	*Geçerli*	408	408
	Boş	0	0
Ortalama		16,5980	18,4730
Standart Sapma		3,28053	6,21556
Minimum		6,00	5,00
Maximum		26,00	25,00

Tablo 2' ye göre öğrencilerin beden eğitimi dersine verilen değer alt boyutunda beden eğitimi dersine olan yatkınlıklarının orta düzeyde gerçekleştiği (X=16,59; sd=3,28), beden eğitimi dersine yönelik algılanan yetenek alt boyutunda ise yatkınlıklarının iyi düzeyde gerçekleştiği (X=18,47; sd=6,21) görülmüştür.

Tablo 3. Öğrencilerin beden eğitimi dersine verilen değer ve beden eğitimi dersine yönelik algılanan yetenek alt boyutlarında cinsiyet değişkenine göre yatkınlıklarının Mann Whitney U testi sonuçları

	Cinsiyet	*N*	*S.O.*	*S.T.*	*U*	*p*
1-Beden eğitimi dersine verilen değer	Erkek	233	208,76	48641,00		
	Kız	175	198,83	34795,00	19395,000	.39
	Toplam	408				
2-Beden eğitimi dersine yönelik algılanan yetenek	Erkek	233	211,40	49256,00		
	Kız	175	195,31	34180,00	18780,000	.16
	Toplam	408				

Tablo 3 incelendiğinde; beden eğitimi dersine verilen değer ile beden eğitimi dersine yönelik algılanan yetenek boyutlarında öğrencilerin beden eğitimi dersine olan yatkınlıklarının cinsiyete göre anlamlı bir şekilde farklılaşmadığı saptanmıştır (p>.05).

Tablo 4. Öğrencilerin beden eğitimi dersine verilen değer ve beden eğitimi dersine yönelik algılanan yetenek alt boyutlarında yaş grubu değişkenine göre yatkınlıklarının Kruskal Wallis H testi sonuçları

	Yaş Grup	*N*	*S.O.*	χ^2	*df*	*p*
1-Beden eğitimi dersine verilen değer	13-15 arası	140	221,16	5,263	2	.07
	16-18 arası	261	196,91			
	19 ve üstü	7	154,21			
	Toplam	408				
2-Beden eğitimi dersine yönelik algılanan yetenek	13-15 arası	140	230,13	10,369	2	**.00***
	16-18 arası	261	191,54			
	19 ve üstü	7	175,00			
	Toplam	408				

*p<.05

Tablo 4' e göre öğrencilerin beden eğitimi dersine olan yatkınlıklarının beden eğitimi dersine verilen değer alt boyutunda anlamlı olarak farklılaşmadığı (p>.05), ancak beden eğitimi dersine yönelik algılanan yetenek alt boyutunda anlamlı bir şekilde farklılaştığı görülmüştür (p<.05). Farkın hangi gruplar arasında gerçekleştiğini belirlemek için Mann Whitney U testi uygulanmış test sonucunda sadece 13-15 yaş aralığında olan öğrenci grubu ile 16-18 yaş aralığında olan öğrenci grubu arasında, 13-15 yaş aralığında olan öğrenci grubu lehine (U=14826,00; Z=-3,138;p=.00<.05), anlamlı bulunmuştur. Sıra ortalamalarına göre 13-15 yaş aralığında olan öğrenci grubunun (S.O.;225,60) 16-18 yaş aralığında olan öğrenci grubuna (S.O.;187,80) göre beden eğitimi dersine yönelik algıladıkları yeteneklerini daha olumlu görerek beden eğitimi dersine daha yatkın olduklarını belirtmişlerdir.

Tablo 5. Öğrencilerin beden eğitimi dersine verilen değer ve beden eğitimi dersine yönelik algılanan yetenek alt boyutlarında Lise türü değişkenine göre yatkınlıklarının Kruskal Wallis H testi sonuçları

	Lise Türü	*N*	*S.O.*	χ^2	*df*	*p*
1-Beden eğitimi dersine verilen değer	İmam hatip lisesi	77	200,06	23,612	4	***.00****
	Spor lisesi	55	261,08			
	Anadolu Lisesi	140	214,18			
	Fen lisesi	76	179,81			
	Meslek lisesi	60	167,03			

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	Toplam	408				
2-Beden eğitimi dersine yönelik algılanan yetenek	İmam hatip lisesi	77	209,30	13,919	4	***.00****
	Spor lisesi	55	251,44			
	Anadolu Lisesi	140	189,30			
	Fen lisesi	76	211,69			
	Meslek lisesi	60	181,68			
	Toplam	408				

*p<.05

Tablo 5' e göre öğrencilerin okudukları lise türüne beden eğitimi dersine olan yatkınlıklarının her iki alt boyutunda da anlamlı bir şekilde farklılaştığı görülmüştür (p<.05). Beden eğitimi dersine verilen değer alt boyutu ile beden eğitimi dersine yönelik algılanan yetenek alt boyutlarında farkın hangi okul türleri arasında gerçekleştiğini belirlemek için yapılan Mann Whitney U testi sonucunda; Spor Lisesinde okuyan öğrenci grubu ile diğer dört lise türünde okuyan öğrenci grupları arasında Spor Lisesinde okuyan öğrencilerin lehine anlamlı olarak farklılaştığı, Spor Lisesinde okuyan öğrencilerin okul doğalarının gereği her iki boyutuyla beden eğitimi dersine daha çok yatkın oldukları görülmüştür. Ayrıca sadece beden eğitimi dersine verilen değer alt boyutunda; Fen Lisesinde okuyan öğrenci grubu ile Anadolu Lisesinde okuyan öğrenci grubu arasında Fen Lisesi öğrencilerinin lehine, Anadolu Lisesinde okuyan öğrenci grubu ile Meslek Lisesinde okuyan öğrenci grubu arasında Anadolu Lisesi öğrenci grubu lehine anlamlı bir fark bulunmuştur (p<.05). Bu sonuca göre de, Fen Lisesi öğrencilerinin Anadolu Lisesi öğrencilerine göre, Anadolu Lisesinde okuyan öğrencilerin ise Meslek Lisesinde okuyan öğrencilere göre beden eğitimi dersine verilen değer alt boyutuyla beden eğitimi dersine daha yatkın oldukları söylenebilir.

Tablo 6. Öğrencilerin beden eğitimi dersine verilen değer ve beden eğitimi dersine yönelik algılanan yetenek alt boyutlarında okudukları sınıf değişkenine göre yatkınlıklarının Kruskal Wallis H testi sonuçları

	Sınıf	***N***	***S.O.***	χ^2	***df***	***p***
1-Beden eğitimi dersine verilen değer	9. sınıf	129	225,48	14,736	3	***.00****
	10. sınıf	99	197,11			
	11. sınıf	102	171,26			
	12. sınıf	78	222,64			
	Toplam	408				
2-Beden eğitimi dersine yönelik algılanan yetenek	9. sınıf	129	242,05	28,437	3	***.00****
	10. sınıf	99	215,35			
	11. sınıf	102	169,62			
	12. sınıf	78	174,24			
	Toplam	408				

*p<.05

Tablo 6' ya göre öğrencilerin beden eğitimi dersine olan yatkınlıklarının okudukları sınıflara göre her iki alt boyutta da anlamlı bir şekilde farklılaştığı görülmüştür (p<.05). Her iki alt boyutta farkın hangi sınıflar arasında gerçekleştiğini belirlemek için yapılan Mann Whitney U testi sonucunda; 9. Sınıfta okuyan öğrenci grubu ile 11. Sınıfta okuyan öğrenci grubu arasında 9. Sınıf öğrenci grubu lehine anlamlı olarak farklılaştığı belirlenmiştir (p<.05). Bu sonuç beden eğitimi dersine verilen değer ile beden eğitimi dersine yönelik algılanan yetenek boyutlarında bir üst sınıfa geçildiğinde beden eğitimi dersine olan yatkınlığın azaldığını göstermektedir. Aynı sonuç sadece ikinci alt boyut olan beden eğitimi dersine yönelik algılanan yetenek boyutunda 9. Sınıf öğrenci grubu ile 12. Sınıf öğrenci grubu arasında yine 9. Sınıfta okuyan öğrencilerin lehine, 10.sınıf öğrenci grubu ile 11. Sınıf öğrenci grubu arasında 10. Sınıfta okuyan öğrencilerin lehine gerçekleşmiştir (p<.05). Beden eğitimi dersine yönelik algılanan yetenek boyutu ile yine alt sınıflarda okuyan öğrencilerin beden eğitimi dersine kendilerini daha yatkın görmüşlerdir.

SONUÇ

Ortaöğretimde okuyan öğrencilerin çeşitli değişkenlere göre beden eğitimi dersine verilen değer ile beden eğitimi dersine yönelik algılanan yetenek boyutlarıyla beden eğitimi dersine olan yatkınlıklarının incelendiği bu çalışmada, öğrencilerin beden eğitimi dersine verilen değer alt boyutunda beden eğitimi dersine olan yatkınlıklarının orta düzeyde gerçekleştiği, beden eğitimi dersine yönelik algılanan yetenek alt boyutunda ise yatkınlıklarının iyi düzeyde gerçekleştiği sonucuna varılmıştır. Cinsiyet değişkenine göre öğrencilerin beden eğitimi dersine olan yatkınlıklarının anlamlı olarak değişmediği ancak yaş, okul türü ve okudukları sınıf değişkenlerine göre öğrencilerin beden eğitime dersine olan yatkınlıklarının anlamlı bir biçimde farklılaştığı görülmüştür.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Yaş değişkenine göre öğrencilerin beden eğitimi dersine olan yatkınlıklarının beden eğitimi dersine verilen değer alt boyutunda anlamlı olarak farklılaşmazken, beden eğitimi dersine yönelik algılanan yetenek alt boyutunda anlamlı bir şekilde farklılaşmaktadır. Ortaöğretime yeni başlamış 13-15 yaş aralığında olan öğrencilerin üst yaş grubu öğrencilere göre beden eğitimi dersine yönelik algıladıkları yetenekleri boyutuyla kendilerini beden eğitimi dersine daha yatkın gördükleri sonucuna ulaşılmıştır. Yine öğrencilerin okudukları lise türüne göre beden eğitimi dersine verilen değer ile beden eğitimi dersine yönelik algılanan yetenek alt boyutlarında, Spor Lisesi öğrencilerinin, Anadolu Lisesi, Fen Lisesi, İmam Hatip Lisesi ve Meslek Lisesi öğrencilerine göre her iki boyut itibarıyla beden eğitimi dersine daha yatkın oldukları görülmüştür. Sadece beden eğitimi dersine verilen değer alt boyutu ile Fen Lisesi öğrencilerinin Anadolu Lisesi öğrencilerine göre, Anadolu Lisesi öğrencilerinin ise Meslek Lisesi öğrencilerine göre beden eğitimi dersine daha yatkın oldukları saptanmıştır. Öğrencilerin beden eğitimi dersine olan yatkınlıklarının okudukları sınıflara göre her iki alt boyutta da anlamlı bir şekilde değiştiği tespit edilmiştir. Beden eğitimi dersine verilen değer ile beden eğitimi dersine yönelik algılanan yetenek boyutlarında bir üst sınıfa doğru geçildiğinde beden eğitimi dersine olan yatkınlıklarının azaldığı, alt sınıflarda okuyan öğrencilerin kendilerini beden eğitimi dersine daha yatkın gördükleri görülmüştür. Bu sonuç incelenen yaş değişkeni ile de uyumlu görülmektedir.

Alanyazında ortaöğretim öğrencilerinin beden eğitimi dersine yönelik yatkınlıkları ile ilgili çalışmaya rastlanmazken, öğrencilerin beden eğitimi dersine yönelik tutumları üzerine bir kısmı ölçek geliştirme çalışmaları olmak üzere çalışmaların yapıldığı görülmüştür. Güllü ve Korucu (2005) ilköğretim ikinci kademe öğrencilerinin beden eğitimi derslerine ilişkin görüşlerini inceledikleri çalışmalarında, öğrencilerin beden eğitimi dersine yönelik tutumlarının genel olarak olumlu olduğunu saptamışlardır. Erkmen ve ark. (2006) özel ilköğretim okullarında öğrenim gören öğrencilerin çeşitli değişkenlere göre beden eğitim dersine yönelik tutumlarını belirledikleri çalışmalarında, öğrencilerin derse karşı tutum ve görüşlerinin olumlu olduğunu belirtmişlerdir. Çalışmamızda elde edilen sonuçlar da bu yöndedir. Şişko ve Demirhan (2002) ilköğretim sekizinci sınıf ve lise birinci sınıflarında öğrenim gören kız ve erkek öğrencilerin beden eğitimi ve spor dersine ilişkin tutumlarını inceledikleri çalışmasında, ilköğretimde öğrenim gören kız öğrencilerin tutum puanlarının lise birinci sınıfta azaldığı, erkeklerin tutum puanlarının ise yükseldiği görülmüştür. Üst sınıflara doğru çıkıldıkça öğrencilerin beden eğitimi ve spor dersine olan tutumlarının azalması bir yönüyle araştırma sonucumuzla da örtüşmektedir. Gürbüz ve Özkan (2012) İlköğretim İkinci Kademe Öğrencilerinin Beden Eğitimi ve Spor Dersine İlişkin Tutumlarının Belirlenmesi konulu çalışmalarında, cinsiyete ve sınıf değişkenine göre öğrencilerin beden eğitimi dersine yönelik tutumlarında anlamlı bir farklılığın olmadığını rapor etmişlerdir. Bu sonuç cinsiyet değişkeni bağlamında çalışmamızı destekler niteliktedir.

Yağcı (2012) tez çalışmasında, ortaöğretim öğrencilerinin beden eğitimi derslerine yönelik tutumlarının çok iyi düzeyde olduğunu, Öğrencilerin okul türlerine ve sınıflarına göre beden eğitimi dersine ilişkin tutumlarında istatistikî açıdan bir farklılık görüldüğünü, öğrencilerin beden eğitimi derslerine ilişkin tutumları, öğrenim gördükleri sınıflara bağlı olarak değiştiğini, 11 ve 12. sınıf öğrencilerinin beden eğitimi ders tutum puanlarının düşük çıktığını saptamıştır. Uluışık (2015) ortaöğretim öğrencilerinin beden eğitimi dersine yönelik tutumlarını incelediği çalışmasında, öğrenim görülen sınıf değişkenine göre, 9. ve 10.sınıff öğrencilerinin beden eğitimi dersine yönelik tutum puanlarının 11. ve 12.sınıf öğrencilerinden daha yüksek olduğunu, ortaöğretim öğrencilerinin sınıf düzeyinin arttıkça beden eğitimi dersine yönelik tutum puanlarının azaldığını ancak sınıflar arasında görülen tutum farklılıkların istatistiksel olarak manidar olmadığını, beden eğitimi dersine yönelik tutum puanları arasında cinsiyete göre ise anlamlı bir farklılığın olmadığını tespit etmiştir. Benzer sonuç Altay ve Özdemir'in (2006) çalışmalarında da görülmüş, sınıf düzeyi yükseldikçe öğrencilerin beden eğitimi dersine ilişkin tutumlarının azaldığı, cinsiyete göre ise değişmediği sonucuna ulaşılmıştır.

Deaner ve ark. (2012) takım sporlarına yönelik yaptıkları araştırmalarında, spor ve egzersize katılım oranlarının yaş ile birlikte değiştiğini, takım sporlarına katılımın genç bireylerde çok daha yüksek olduğunu aktarmışlardır. Bu sonuçlarında çalışmamızın sonuçlarıyla benzerlik gösterdiği görülmektedir. Çelik ve Pulur (2011) Ortaöğretim öğrencilerinin beden eğitimi ve spora ilişkin genel tutum puanlarının yüksek olduğunu, tutumların cinsiyete göre erkek öğrencilerin lehine değiştiği, okul türüne göre ise anlamlı bir farklılık göstermediğini belirtmişlerdir. Öğrencilerin beden eğitimi dersine yönelik genel tutumların olumlu çıkması çalışma sonucumuzla paralellik gösterirken, cinsiyet ve okul türü değişkenine göre ise örtüşmemektedir. Yine sınıf değişkenine göre çalışma sonucumuzu destekler nitelikte olan benzer çalışmalarda da (Erkmen ve ark., 2006; Koca ve Aşçı, 2006) öğrencilerin üst sınıflara geçişinde beden eğitimi dersine ilişkin tutum puanlarında azalma meydana geldiği görülmektedir.

Ortaöğretim öğrencilerinin beden eğitimi dersine yatkınlıklarının incelendiği bu çalışmanın ve alanda yürütülen benzer çalışmaların sonuçları birlikte değerlendirildiğinde, öğrencilerin bilişsel, duyuşşsal ve psikomotor yönden

 Copyright © International Conference on New Horizons in Education Conference (INTE)

gelişimlerini bir arada sağlayan beden eğitimi dersinin önemi bir kez daha ortaya çıkmaktadır. Öğrencilerin derse daha yatkın olabilmeleri, derse karşı olumlu tutum geliştirmeleri derse atfedilen önemi de göstermektedir. Elde edilen bulgular doğrultusunda şu öneriler geliştirilmiştir;

1-Ortaöğretimde akademik başarıya dönük çalışmaların yanına akademik başarıyı da destekleyecek bir biçimde öğrencilerin ilgi ve ihtiyaçlarına göre beden eğitimi ve spor etkinliklerine daha fazla önem verilmelidir.

2-Üst sınıflara doğru çıkıldıkça öğrencide oluşan sınav kaygısı nedeniyle beden eğitimi dersine olan yatkınlığın azalmasının önlenmesi için, spor ve fiziki etkinliklerin aynı zamanda moral ve motivasyonu arttırarak depresif olguları da bertaraf ettiğine ilişkin öğrencilerde daha fazla bilinç oluşturulabilir.

3-Araştırma daha geniş bir örneklem grubu üzerinde yapılarak daha başka değişkenlere göre (sosyo ekonomik, aile, çevre vb.) öğrencilerin beden eğitimi dersine yatkınlıkları incelenebilir.

KAYNAKÇA

Akandere, M. & Özyalvaç, N.T. ve Duman, S. (2010). Ortaöğretim öğrencilerinin beden eğitimi dersine yönelik tutumları ile akademik başarı motivasyonlarının incelenmesi (Konya Anadolu Lisesi örneği), *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 24, 1-10.

Alparslan, S. (2008). *Ortaöğretim öğrencilerinin beden eğitimi öğretmenlerinin sergilediği öğretim davranışlarına ilişkin algıları ve öğrencilerin bu derse karşı geliştirdikleri* tutumları. Yayımlanmamış Yüksek Lisans Tezi, Abant İzzet Baysal Üniversitesi, Bolu.

Altay, F. & Özdemir, Z. (2006). Ankara ili merkez ilçelerindeki ilköğretim 1.kademesinde öğrenim gören 4. ve 5. sınıf öğrencilerin beden eğitimi ve spora ilişkin tutumlarının karşılaştırılması, *9. Uluslararası Spor Bilimleri Kongresi, 3-5 Kasım Muğla Üniversitesi*, Muğla.

Andrew, P.H.,1 Lars, B.A. & Nuala, M.B. (2012). Physical activity and obesity in children, *Br J Sports Med*, 45, 866–870, doi:10.1136/866 bjsports-2011-090199

Arslan, C. & Mendeş, B. (2002). Orta dereceli okullarda beden eğitimi dersine yönelik öğrencilerin ilgi ve tutumlarının araştırılması (Elazığ Örneği). *Ege Üniversitesi Performans Dergisi*; 8(1-2), 30-47.

Avrupa Komisyonu/EACEA/Eurydice, (2013). Avrupa'daki Okullarda Beden Eğitimi ve Spor, Eurydice Raporu. Lüksemburg, AB Yayın Ofisi, doi:10.2797/54693, Retrieved May 26, 2016, from http://eacea.ec.europa.eu/education/eurydice

Çelik, Z. & Pulur, A. (2011). Ortaöğretim öğrencilerinin beden eğitimi ve spora ilişkin tutumları, *Ulusal Beden Eğitimi ve Spor Öğretmenliği Kongresi, 25-27 Mayıs 2011, Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi Özel Sayısı*,115-121.

Deaner, R.O., Geary, D.C., Puts, D.A., Ham, S.A., Kruger, J., Fles, E., Winegard, B. & Grandis, T. (2012). A sex difference in the predisposition for physical competition: males play sports much more than females even in the contemporary U.S, *PLOS,* 11(14), doi:10.1371/journal.pone.0049168

Demirhan, G. & Altay, F. (2001). Lise birinci sınıf öğrencilerinin beden eğitimi ve spora ilişkin tutum ölçeği-2, *Hacettepe Spor Bilimleri Dergisi*, 12(2), 9-20.

Doydu, İ., Çelen, A. & Çoknaz, H. (2013). Spor Eğitimi modeli'nin öğrencilerin beden eğitimi ve spora karşı tutumuna etkisi, *e-İnternational Journal of Educational Research*, 4(2), 99-110.

Ekici, S., Bayraktar, A. & Hacıcaferoğlu, B. (2010). Lise öğrencilerinin beden eğitimi dersi tutumlarının değerlendirilmesi, *Uluslararası İnsan Bilimleri Dergisi*, 8(1), 829-839.

Erbaş, M.K., Ünlü, H. & Varol, Y.K. (2015). Turkish conformation of the physical education predisposition scale: a validity and reliability study, *Eğitim Bilimleri Araştırmaları Dergisi*, 5(1), 115-126, doi:/10.12973/jesr. 2015.51.7

Erkmen, G., Tekin, M. & Taşğın, Ö. (2006) Özel ilköğretim okullarında öğrenim gören öğrencilerin çeşitli değişkenlere göre beden eğitim dersi hakkındaki tutum ve görüşleri. *9. Uluslar Arası Spor Bilimleri Kongresi, 3–5 Kasım, Muğla Üniversitesi*. Muğla.

Güllü, M. & Güçlü, M. (2009) Ortaöğretim öğrencileri için beden eğitimi dersi tutum ölçeği geliştirmesi, *Niğde Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, 3(2), 138-151.

Güllü, M. & Korucu, G. (2005). İlköğretim ikinci kademe öğrencilerinin beden eğitimi derslerine ilişkin görüşlerinin incelenmesi, *4. Ulusal Beden Eğitimi ve Spor Öğretmenliği Sempozyumu, 10-11 Haziran*, Bursa.

Gürbüz, A. & Özkan, H. (2012). İlköğretim ikinci kademe öğrencilerinin beden eğitimi ve spor dersine İlişkin tutumlarının belirlenmesi (Muğla il örneği), *Pamukkale Journal of Sport Sciences*, 3(2), 78-89.

Hünük, İ. (2006). *Ankara ili merkez ilçelerindeki ilköğretim ikinci kademe öğrencilerinin beden eğitimi dersine ilişkin tutumlarının sınıf düzeyi, öğrenci cinsiyeti, öğretmen cinsiyeti ve spora aktif katılımları açısından karşılaştırılması.* Yayımlanmamış Yüksek Lisans Tezi, Hacettepe Üniversitesi Sağlık Bilimleri Enstitüsü, Ankara.

Kangalgil, M., Hünük, D. & Demirhan, G. (2006). İlköğretim, lise ve üniversite öğrencilerinin beden eğitimi ve spora ilişkin tutumlarının karşılaştırılması, *Hacettepe Spor Bilimleri Dergisi*, 17(2), 48-57.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Karakuş, S. & Küçük, V. (1999). Eğitimin bütünlüğü içerisinde orta dereceli okullarda beden eğitimi ve spor etkinlikleri, Dumlupınar Üniversitesi Sosyal Bilimler Dergisi, 1, 279,293.

Koca, C. & Aşçı, F.H.(2002). Lise birinci sınıf öğrencilerinin beden eğitimine yönelik tutumları ve atletik yeterlik düzeyleri. *7. Uluslararası Spor Bilimleri Kongresi,* 27-29 Ekim, Antalya.

Li, F., Chen, J. & Baker, M. (2014). University Students' attitudes toward physical education teaching, *Journal of Teaching in Physical Education*, 33, 186-212, doi:/10.1123/jtpe.2012-0187

MEB (2009). Ortaöğretim beden eğitimi dersi öğretim programı (9–12. Sınıflar), Ortaöğretim Genel Müdürlüğü Ankara.

MEB (2012). Oyun ve fiziki etkinlikler dersi öğretim programı (1-4. Sınıflar), Temel Eğitim Genel Müdürlüğü, Ankara.

MEB (2013). Ortaokul beden eğitimi dersi öğretim programı (5-8. Sınıflar), Temel Eğitim Genel Müdürlüğü Ankara.

Özbaydar, S. (1983). *İnsan Davranışlarının Sınırları ve Spor Psikolojisi*, İstanbul. Altın Kitaplar Yayınevi.

Özer D. & Aktop A.(2003). İlköğretim öğrencileri için hazırlanmış bir beden eğitimi dersi tutum ölçeğinin adaptasyonu. *Hacettepe Spor Bilimleri Dergisi*, 14(2), 67-82.

Pangrazi, R. P., & Beighle, A. (2009). Dynamic physical education for elementary school children. Boston San Francisco, MALA: Allyn & Bacon Benjamin Cummings.

Pehlivan, Z. (1998). Beden eğitimi dersi için tutum ölçeği geliştirme, 5. Uluslararası Spor Bilimleri Kongresi, 5-7 Kasım, Hacettepe Üniversitesi, Ankara.

Silverman, S. & Scrabis, K.A. (2004) A review of research on ınstructional theory in physical education 2002-2003. International Journal of Physical Education, 41, (1), 4-12.

Silverman, S. & Subramaniam, P.R. (1999). Student attitude toward physical education and physical activity: a review of measurement ıssues and outcomes. *Journal of Teaching in Physical Education*. 19, 97-124.

Subramaniam, P.R. & Silverman, S. (2007). Middle school students' attitudes toward physical education. *Teaching and Teacher Education*, 23(5), 602-611, doi:10.1016/j.tate.2007.02.003

Şentürk, H. (2012). Spora yönelik tutum ölçeği: geliştirilmesi, geçerliliği ve güvenirliği, *CBÜ Beden Eğitimi ve Spor Bilimleri Dergisi*, 7(2), 8-18.

Şişko, M. & Demirhan G. (2002). İlköğretim okulları ve liselerde öğrenim gören kız ve erkek öğrencilerin beden eğitimi ve spor dersine ilişkin tutumları, *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 23, 205-210.

Ulstad, S. O., Halvari, H., Sørebø, Ø., & Deci, E. L. (2016). Motivation, learning strategies, and performance in physical education at secondary school. *Advances in Physical Education*, 6, 27-41, doi:10.4236/ape.2016.61004

Uluışık, V. (2015). Ortaöğretim öğrencilerinin beden eğitimi dersine yönelik tutumlarının sınıf ve cinsiyet değişkenlerine göre incelenmesi, *Uluslararası Multidisipliner Akademik Araştırmalar Dergisi*, 2(3), 45-53.

UNESCO (2006). Dünya Genelinde Okul Çocuklarına-Gençlerine Kaliteli Beden Eğitimi Programı Retrieved April 10, 2016, from www.ichpersd.org

Yağcı, İ. (2012). *Ortaöğretim öğrencilerinin beden eğitimi dersine ilişkin tutumlarının incelenmesi* (Afyonkarahisar İli Örneği), Yayımlanmamış yükseklisans tezi, Afyon Kocatepe Üniversitesi Sağlık Bilimleri Enstitüsü, Afyon.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ÖĞRETMEN ADAYLARININ AKADEMİK ERTELEME DAVRANIŞLARI

Sevilay YILDIZ,
Abant İzzet Baysal Üniversitesi Eğitim Fakültesi, Bolu, Türkiye
sevil_yil@yahoo.com

Meriç TUNCEL,
Abant İzzet Baysal Üniversitesi Eğitim Fakültesi, Bolu, Türkiye
merictuncel@hotmail.com

Kaya YILDIZ,
Abant İzzet Baysal Üniversitesi Eğitim Fakültesi, Bolu, Türkiye
kaya_yildiz@hotmail.com

Nermin KARABACAK,
Recep Tayyip Erdoğan Üniversitesi Eğitim Fakültesi, Rize, Türkiye
nermin.karabacak@erdogan.edu.tr

Özlem YALÇIN
50.yıl İzzet Baysal Ortaokulu, Bolu, Türkiye,
ozlemyalcin77@hotmail.com

ÖZET

Yaşamın sürdürülebilmesinde önemli değişkenlerden birisi de sorumluluk duygusudur. Farklı alanlardaki sorumlulukları bilme ve sorumluluk alabilme davranışı başarıyı da beraberinde getirebilmektedir. Okulöncesi dönemden yükseköğretime kadar eğitimsel süreçte bireyler, birçok sorumluluk gerektiren durumlarla karşı karşıya gelmektedirler. Akademik sorumluk, bu sorumluluk alanları içerisinde oldukça önemli bir yer tutmaktadır. Meslek edinme süreci içerisinde olan öğretmen adaylarının sorumluluklarının farkında olup bu sorumluluklarını yerine getirebilmeleri ya da getirememe durumları önemli bir sorunsalı karşımıza çıkarmaktadır. Akademik erteleme davranışı, öğretmen adayları ve diğer öğrenciler için zamanlarını etkili ve verimli olarak kullanmalarının önünde önemli bir engel olarak durmaktadır. Alınan sorumluluğu ya da bir görevi icra etmeyi zamanında değil de bir sonraki zamana bırakma olarak tanımlanabilecek erteleme davranışı bireylerde huzursuzluk, gerginlik gibi duygulara yol açabilmektedir. Bu bağlamda, bireyler bazen özsaygılarını korumak, haz alınmayan bir işten kaçmak ya da heyecan arayışı gibi sebeplerle erteleme eğilimi içerisine girebilmektedirler. Her ne sebeple olursa olsun erteleme ve akademik erteleme davranışları öğrencilerin akademik anlamda performanslarını olumsuz yönde etkilemektedir. Bu bağlamda, öğretmen adaylarının özellikle de sınıf öğretmeni adaylarının akademik erteleme düzeylerinin tespiti gelecekte öğrencilere model olma, mesleki başarı, kendini geliştirme gibi sebeplerle incelenmesinin alana katkı sağlayacağı düşünülmektedir. Betimsel nitelikte olan bu araştırmada tarama modellerinden nedensel karşılaştırma yöntemi kullanılmıştır. Araştırmanın çalışma grubunu, 2015-2016 akademik yılında Abant İzzet Baysal Üniversitesi Eğitim Fakültesi, Sınıf Öğretmenliği Anabilim Dalında öğrenim gören toplam 124 dördüncü sınıf öğrencisi oluşturmaktadır. Öğrencilerin %71'i kız ve % 29'u erkektir. Araştırma verileri, Çakıcı (2003) tarafından geliştirilen "Akademik Erteleme Ölçeği" ile toplanmıştır. Akademik Erteleme Ölçeği (AEÖ), öğrencilerin ders çalışma, sınavlara hazırlanma, proje hazırlama gibi öğrenim yaşantılarındaki erteleme eğilimlerini ölçmektedir. Ölçek 12 olumsuz ve 7 olumlu olmak üzere toplam 19 maddeden oluşmaktadır. Bu ölçek, 5'li likert tipinde derecelendirilmekte olup akademik erteleme içeren ifadeye "beni hiç yansıtmıyor" diyenler 1, "beni tamamen yansıtıyor" diyenler 5 puan alacak biçimde tek yönlü puanlanmaktadır. Bu çalışma için ölçeğin Cronbach alpha güvenirlik katsayısı .86 olarak hesaplanmıştır. Araştırmada kullanılan ölçeğe ilişkin düzeylere ait betimsel istatistiklerden (ortalama, standart sapma, frekans vb.) yararlanılmıştır. Verilerin analizinde $p<.05$ güvenirlik düzeyi kabul edilmiştir. Öğretmen adaylarının merak ve keşfetme düzeylerine yönelik görüşleri normal dağılım göstermediğinden bu çalışmada nonparametrik testler kullanılmıştır. Merak ve keşfetme düzeyleri arasındaki farklılığın cinsiyete ve yaş değişkenine göre analiz edilmesi amacı ile Mann Whitney U Testi yapılmıştır. Araştırmaya katılan öğretmen adaylarının akademik erteleme algılarının yüksek düzeyde olduğu sonucuna ulaşılmıştır. Araştırmada elde edilen bu sonuç alanyazındaki diğer araştırmaların sonuçları (Morkoç ve Erdönmez, 2011, Uzun Özer 2009; Uzun Özer, Demir ve Ferrari, 2009; Solomon ve Rothblum, 1984; Damacela, Tindale ve Balcazar, 2000 ve Hill, Hill, Chabot ve Barral, 1978) ile tutarlılık göstermektedir. Öğretmen adaylarının cinsiyeti ile akademik erteleme

 Copyright © International Conference on New Horizons in Education Conference (INTE)

algıları [U=1387,5, z=-1,083 p>0,05] arasında anlamlı bir fark bulunamamıştır. Alan yazınında, akademik erteleme davranışlarının bireysel özelliklerle ilişkisine yönelik oldukça fazla çalışma olmasına ve bu araştırma ile tutarlı sonuçlar bulunmasına karşın, akademik erteleme davranışı ile demografik değişkenler ilişkisini anlamaya yönelik çalışmalarda tutarlı sonuçlar bulunmadığı görülmektedir. Bu bağlamda, akademik erteleme davranışının cinsiyet değişkeni ile olan ilişkisini açıklayabilecek yeni çalışmalara gereksinim olduğu görülmüştür. Değişik kültürel yapılar ve örneklemler üzerinde yapılacak olan yeni çalışmaların cinsiyet ve akademik erteleme eğilimi arasındaki ilişkiye açıklık kazandırabileceği düşünülmektedir. Cinsiyet değişkenine göre akademik erteleme düzeylerinde anlamlı fark çıkmamasına rağmen kız öğrencilerin erkeklere göre akademik erteleme düzeylerinin daha yüksek çıkması kültürel süreçler bağlamında düşünülebilir. Türk toplumunda cinsiyete göre başarı beklentilerinin değişmesi bu sonuca yol açmış olabilir. Yapılan analizler sonucunda öğretmen adaylarının yaşları ile akademik erteleme algıları [U=1675, z=-0,616 p>0,05] arasında anlamlı bir fark bulunamamıştır. Bu araştırma sonuçları bağlamında yapılabilecek öneriler şunlardır: Öğretmen adaylarına zaman yönetimi eğitimleri ile zamanı etkili kullanma ve verimli ders çalışma teknikleri konusunda beceri geliştirmelerini sağlama ve akademik ertelemenin duyuşsal ve bilişsel boyutlarını düşünerek bu alanlardaki eksikler konusunda destekleyici örtük ya da açık eğitimler verme gibi önlemlerle akademik erteleme sorununun önüne geçilebileceğidir. Ayrıca akademik ertelemeyi yordayan değişkenler üzerinde çalışılabilir; erteleme eğilimi düzeyinin azaltılmasına etkili olabileceği düşünülen strateji, yöntem ve tekniklerin etkililiğine ilişkin deneysel çalışmalar yürütülebilir; farklı bölümlerin öğrencilerinden oluşturulacak örneklemlerle de karşılaştırmalı çalışmalar yapılabilir; akademik erteleme üzerine daha derinlemesine verilerin elde edilmesini sağlayacak nitel araştırmalarla desteklenmiş karma yöntem araştırmaları yapılabilir; akademik erteleme durumları kesitsel ya da boylamsal araştırmalarla analiz edilebilir.

Anahtar kelimeler: Akademik Erteleme, Öğretmen Adayları, Sınıf Öğretmen Adayı

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ÖĞRETMEN ADAYLARININ MESLEKI KAYGI DÜZEYLERININ ÇEŞITLI DEĞIŞKENLER AÇISINDAN İNCELENMESI

Osman ÇEPNİ
Edebiyat Fakültesi, Coğrafya Bölümü,
Karabük Üniversitesi,Türkiye
ocepni@karabuk.edu.tr.

Bahadır KILCAN
Eğitim Fakültesi, İlköğretim Bölümü,
Gazi Üniversitesi, Türkiye
bahadir@gazi.edu.tr

Ali Çağatay KILINÇ
Karabük Üniversitesi, Edebiyat Fakültesi,
cagataykilinc@karabuk.edu.tr.

ÖZET
Bu çalışmada, öğretmen adaylarının mesleki kaygı düzeylerinin çeşitli değişkenler açısından incelenmesi amaçlanmaktadır. Gazi Üniversitesi Gazi Eğitim Fakültesi İlköğretim Bölümü'nde öğrenim gören öğretmen adayları araştırmanın çalışma grubunu oluşturmaktadır. Nicel araştırma deseninde gerçekleştirilen çalışmada tarama modeli kullanılmıştır. Araştırmada veri toplama aracı olarak Cabı ve Yalçınalp (2013) tarafından geliştirilen "Öğretmen Adayı Mesleki Kaygı Ölçeği" kullanılmıştır. Uygulama sonrasında elde edilen verilerde t-testi ve tek yönlü varyans analizi (ANOVA) kullanılmıştır.
Sonuç olarak; öğretmen adaylarının, genel olarak mesleki kaygı düzeyleri cinsiyet ve pedagojik formasyon açısından yeterlik düzeyleri değişkenleri açısından anlamlı farklılık oluşturduğu görülürken, mezun olunan bölüm, mezun olduklarında öğretmenlik yapmayı düşünüp düşünmedikleri ve ailelerinde öğretmen olup olmadığı değişkenleri üzerinde ise herhangi bir farklılığa rastlanılmadığı ortaya çıkmaktadır.

Anahtar Kelimeler: Mesleki kaygı, öğretmen adayları, ilköğretim

EXAMINING THE LEVEL OF PROSPECTIVE TEACHERS' PROFESSIONAL ANXIETY ACCORDING TO VARIOUS VARIABLES

ABSTRACT
This study aimed at examining the level of prospective teachers' professional anxiety according to various variables. The population of the study consisted of prospective teachers studying in Gazi University Gazi Faculty of Education Department of Elementary Education. This quantitative study was a descriptive one and used "Prospective Teacher Professional Anxiety Scale" developed by Cabı ve Yalçınalp (2013) to gather data. The data of the study were analyzed by performing t-test and one-way ANOVA. Results of the study revealed that prospective teachers' level of professional anxiety differed significantly according to gender and competency level in pedagogical formation variables while did not differ significantly according to the department that they graduated, whether they plan to teach after graduation and whether there is teacher in the family variables.
Keywords: Professional anxiety, prospective teachers, elementary education

GİRİŞ

Öğretmenlik mesleği, bilgi toplumunun gerektirdiği insan gücünü yetiştirme sorumluluğunu üstlenmesi açısından günümüzün en temel mesleklerinden biri olarak nitelendirilmiştir (Goodson ve Hargreaves, 2005). Bir ülkenin geleceğinde öğretmenler önemli roller üstlenmektedir. Öğretmenlerin

Copyright © International Conference on New Horizons in Education Conference (INTE)

üstelendiği en önemli rol ise, ülkenin geleceğini inşa edecek bireyleri yetiştirmesidir (Özden, 1999). Türkiye'nin gelişmiş ülkeler arasında yer alabilmesi için iyi yetişmiş, nitelikli insan kaynağına sahip olması gerekmektedir (Atmaca, 1999).

Öğretmen, eğitim durumlarını düzenleyen ve uygulayanlardan biridir. Onun konu alanını çok iyi bilmesi, eğitim ve öğretimle ilgili bilgi, beceri tutumlarla donamış olması gerekir. Öğretmendeki eksiklikler, tutarsızlıklar eğitim ortamını olumsuz yönde etkileyebilir. Öğretmenin tutum ve davranışları eğitim ortamını dolayısı ile öğrencilerin tutum ve davranışlarını da etkileyebilir (Kurtuldu ve Ayaydın, 2010). Öğretmenlik mesleği açısından olumlu tutumun meslek açısından önemi göz önüne alındığında, tutumları iyi seviyeye taşı-mak ve olumsuz tutum oluşturabilecek etkilerin tespit edilerek ortadan kaldırılmak önemli görülebilir. Yapılan çalışmalar tutumu etkileyen önemli faktörlerden birinin kaygı olduğunu ortaya koymuştur (Baloğlu, Koçal ve Zelhart, 2007; Doğan ve Çoban, 2009; DeVaney, 2010).

Kaygı, nedeni bilinmeyen bir korku durumudur. İnsan her an belirsiz bir tehlike ya da bir felaket ile karşılaşacağını düşünüp kendini tedirgin, gergin, sıkıntılı bir bekleyiş içine sokmasıyla oluşmaktadır (Börü, 2000). Davranışçı ekole göre kaygı; koşullanma ve genellemeler sonucu oluşurken, bilişsel ekole göre bilişsel faktörlerin bir sonucudur. Kişi durumu ne kadar kontrolü dışında ve kapasitesi üstünde algılıyorsa, o kadar kaygı yaşamaktadır (Sazak ve Ece, 2004) Ülgen'e (1995:273) göre; kaygı belirsiz bir korkunun ya da kötü bir şey olacağı duygusunun, sürekli baskın olduğu durumdur. Meslek ise insanlara yararlı mal ve hizmet üretebilmek ve karşılığında para kazanmak için yapılan, belli bir eğitimle edinilen sistemli bilgi ve becerilere dayalı, kuralları toplumca belirlenmiş etkinlikler bütünü, insanların belli bir süre eğitim aldıktan sonra kendi hayatlarını sürdürebilmeleri amacıyla iş yaptıkları uğraşı alanı olarak tanımlanmıştır (Yılmaz, 2007).

Bazı eğitimciler, öğretmenlerin sınıf içinde davranış yansımalarının, ruh sağlığı ve kişilik yapısının; öğretim tekniği ve öğretmen bilgisinden daha önemli olduğunu ifade etmişlerdir (Chotas and Thoresen, 1976) Literatür taramalarında öğretmen adayı mesleki kaygısı ile ilgili olarak açık bir tanıma rastlanmamakla birlikte, öğretmen adaylarının mesleğe ilişkin kaygılarının belirli zamanlarda belirli noktalarda yoğunlaştığı ve üç alt bölümü olduğu belirtilmiştir (Çabı ve Yalçınalp, 2013). Fuller (1969), Fuller ve Bown (1975) ve Katz'ın (1972) kaygı üzerinde yaptıkları çalışmalar sonucunda öğretmenlik mesleğine yönelik kaygıyı, "ben merkezli kaygılar", "görev merkezli kaygılar" ve "öğrenci merkezli kaygılar" olmak üzere üç alanda toplamak mümkün olmuştur (akt. Saban, Korkmaz, Akbaşlı, 2004). Cabı ve Yalçınalp (2009), öğretmen adaylarının öğretmenlik mesleğine yönelik kaygılarının belirlenmesi amacıyla yaptıkları nitel bir çalışmada öğretmen adaylarında öğrenci ile iletişim, iş bulma, okul yaşantısı, ekonomik yaşantı, mesleki kabul ve çevre ile ilgili kaygılar olduğunu tespit etmişlerdir. Diğer taraftan, öğretmen adaylarını, mesleğe karşı olumsuz yönde etkileyen nedenlerden biri de Kamu Personeli Seçme Sınavıdır (KPSS). Eğitimini tamamlamış ve iş yaşamına adım atacak olan üniversite gençliğinin önemli bölümünü oluşturan öğretmen adayları mezun olduktan sonra girecekleri KPSS nedeniyle psikolojik sorunlar yaşamakta ve zorlanmaktadırlar. Bu zorlanmalar depresyon, kaygı ve umutsuzluk düzeyini büyük oranda arttırmaktadır (Tümkaya, Aybek ve Çelik, 2007).

Öğretmenler, uzmanlık eğitimi aldıkları üniversite döneminde, teorik ve uygulamalı olarak branşa özgü derslerin yanı sıra, öğrenciye nasıl yaklaşacakları konusunda bilgi sunulan öğretmenlik formasyonuna dair dersler de almaktadırlar. Ancak öğretmen adaylarının kendi duygusal durumlarına yönelik bir yönlendirme yani rehberlik yapılmamaktadır. Bu açıdan bakıldığında; üniversite eğitiminin tamamlanması aşamasında öğretmen adaylarının mesleğini yürütme ile ilgili endişeleri, yani mesleğe yönelik duygularından olan mesleki kaygının sorgulanmasının önemli olduğu düşünülmüştür. Bu nedenle ilköğretim bölümlerinde öğrenim gören öğretmen adaylarının mesleklerine yönelik ne düzeyde kaygı taşıdıkları ve bu kaygı üzerinde hangi değişkenlerin etkili olduğu araştırılmıştır.

Copyright © International Conference on New Horizons in Education Conference (INTE)

YÖNTEM

Model

Bu araştırma, tarama modelinin kullanıldığı betimsel bir çalışmadır. Tarama modelinde tasarlanan araştırmalarda, mevcut bir durum olduğu biçimiyle betimlenmeye çalışılır (Karasar, 2010). Bu çalışmada, betimsel bir yaklaşım kullanılarak öğretmen adaylarının mesleki kaygı düzeylerinin demografik değişkenlere göre farklılığı incelenmiştir.

Çalışma Grubu

Araştırmanın çalışma grubunu Gazi Üniversitesi Gazi Eğitim Fakültesi İlköğretim Bölümü'nde 2015-2016 eğitim-öğretim yılında öğrenim gören toplam 397 öğretmen adayı oluşturmaktadır. Bu öğretmen adaylarından 164'ü erkek (%) ve 233'ü kadındır. Çalışma grubunu oluşturan adayların 84'ü (%21.1) 1. sınıf öğrencisiyken 134'ü (%33.7) 2., 129'u (%32.5) 3. ve 107'si (%26.9) de 4. sınıf öğrencisidir. Mevcut araştırmaya katılan öğretmen adaylarının 107'si (%26.9) sınıf öğretmenliği bölümünde okurken, 105'i sosyal bilgiler öğretmen adayı (%26.4), 97'si ilköğretim matematik (%24.4), 88 öğretmen adayı ise (%22.1) fen bilgisi öğretmenliği bölümünde öğrenim görmektedir.

Tablo 1. Katılımcılara ait bazı demografik bilgiler

Değişkenler	Demografik özellikler	f	%
Cinsiyet	Kadın	233	58.7
	Erkek	164	41.3
	Toplam	**397**	**100**
Anabilim Dalı	İlköğretim Matematik Eğitimi	97	24.4
	Fen Bilgisi Öğretmenliği	88	22.1
	Sosyal Bilgiler Eğitimi	105	26.4
	Sınıf Eğitimi	107	26.9
	Toplam	**397**	**100**
Sınıf Düzeyi	1. Sınıf	84	21.1
	2. Sınıf	134	33.7
	3. Sınıf	129	32.5
	4. Sınıf	50	12.6
	Toplam	**397**	**100**

Veri Toplama Aracı

Bu araştırmada öğretmen adaylarının mesleki kaygı düzeylerini belirlemek amacıyla Cabı ve Yalçınalp (2013) tarafından geliştirilen "Öğretmen Adayı Mesleki Kaygı Ölçeği" kullanılmıştır. Kullanılan ölçek 45 maddeden oluşmuş olup, *Cabı ve Yalçınalp* (2013) tarafından ölçeğin cronbach alfa güvenilirlik katsayısı 0.95 olarak hesaplanmıştır.

Verilerin Analizi

Araştırmada verilerin analizi SPSS 22.0 programı kullanılarak yapılmıştır. Cinsiyet, mezun olunduğunda öğretmenlik yapmayı düşünüp düşünmeme ve ailede öğretmen olup olmama durumu değişkenlerine göre öğretmen adaylarının mesleki kaygı düzeylerinin farklılığının analizinde bağımsız gruplar için t-testi; sınıf düzeyi, anabilim dalı ve pedagojik formasyon konusunda kendini yeterli görüp görmeme durumu değişkenlerine göre farklılığın test edilmesinde tek yönlü varyans analizi (ANOVA) yapılmıştır. Analizlerde hata payı .05 olarak alınmıştır.

Copyright © International Conference on New Horizons in Education Conference (INTE)

Bulgular

Tablo 2. Katılımcıların Mesleki Kaygı İle İlgili Toplam Puanlarının Cinsiyet Değişkenine Göre t-Testi Sonuçları

Cinsiyet	N	$\overline{X}$	S	sd	t	p
Kadın	233	129,01	37,50	395	2,644	.009
Erkek	164	119,23	34,50			

Tablo 2' deki analiz sonuçlarına göre, katılımcıların mesleki kaygı ile ilgili toplam puanlarının cinsiyet değişkenine göre anlamlı bir farklılık göstermektedir [$t_{(395)}$=2,644; p<,05]. Kadınların mesleki kaygı ile ilgili toplam puanları aritmetik ortalaması ($\overline{x}$ =129.01) iken, erkeklerin mesleki kaygı ile ilgili toplam puanlarının aritmetik ortalaması ($\overline{x}$ =119,23)'dür. Aradaki sayısal fark istatistiksel açıdan anlamlı bir farklılık oluşturmaktadır. Bu bulgu katılımcıların cinsiyetlerinin mesleki kaygılarında bir etmen olduğu şeklinde yorumlanabilir.

Tablo 3. Katılımcıların Mesleki Kaygı İle İlgili Toplam Puanlarının Sınıf Düzeyi Değişkenine Göre Farklılığı İçin Tek Yönlü Varyans Analizi (ANOVA) Sonuçları

Değişken				N	$\overline{X}$		S
Sınıf	1. sınıf			84	120,19		41,54
	2. sınıf			134	123,01		37,15
	3. sınıf			129	130,75		34,05
	4. sınıf			50	123,34		31,10
	Varyansın Kaynağı	**KT**	**sd**	**KO**	**F**	**p**	**Fark**
	Gruplar Arası	6876,491	3	2292,16	1,724	,161	--
	Gruplar İçi	522486,2	393	1329,48			
	Toplam	529362,6	396				

Tablo 3'deki analiz sonuçlarına göre, katılımcıların mesleki kaygı düzeylerine yönelik görüşleri ile ilgili toplam puanları ile sınıf düzeyi değişkeni arasında anlamlı bir farklılık gözlenmemiştir [$F_{(3-393)}$= 1,724; p>,05]. Bu bulgu sınıf düzeyi değişkeninin katılımcıların mesleki kaygılarında herhangi bir etkiye sahip olmadığı şeklinde yorumlanabilir

Tablo 4. Katılımcıların Mesleki Kaygı İle İlgili Toplam Puanlarının Eğitim Görülen Bölüm Değişkenine Göre Farklılığı İçin Tek Yönlü Varyans Analizi (ANOVA) Sonuçları

Değişken				N	$\overline{X}$		S
Eğitim Görülen Bölüm	Matematik			97	128,94		35,54
	Fen Bilgisi			88	119,74		41,84
	Sosyal			105	121,08		35,65
	Sınıf			107	129,50		33,07
	Varyansın Kaynağı	**KT**	**sd**	**KO**	**F**	**p**	**Fark**
	Gruplar Arası	7727,940	3	2575,98	1,941	,122	--
	Gruplar İçi	521634,7	393	1327,31			
	Toplam	529362,6	396				

Tablo 4'deki analiz sonuçlarına göre, katılımcıların mesleki kaygı düzeylerine yönelik görüşleri ile ilgili toplam puanları ile eğitim görülen bölüm değişkeni arasında anlamlı bir farklılık

gözlenmemiştir [$F_{(3-393)}$= 1,941; p>,05]. Bu bulgu eğitim görülen bölüm değişkeninin katılımcıların mesleki kaygılarında herhangi bir etkiye sahip olmadığı şeklinde yorumlanabilir.

Tablo 5. Katılımcıların Mesleki Kaygı İle İlgili Toplam Puanlarının Öğretmenlik Yapmayı Düşünme Değişkenine Göre t-Testi Sonuçları

Mezun Olduğunuzda Öğretmenlik Yapmayı Düşünüyor musunuz?	**N**	$\overline{X}$	**S**	**sd**	**t**	**p**
Evet	360	123,96	36,03	395	1,718	.087
Hayır	37	134,78	40,65			

Tablo 5' deki analiz sonuçlarına göre, katılımcıların mesleki kaygı ile ilgili toplam puanlarının öğretmenlik yapmayı düşünme değişkenine göre anlamlı bir farklılık göstermemektedir [$t_{(395)}$=1,718; p>,05]. Mezun olduklarında öğretmenlik yapmayı düşünenlerin mesleki kaygı ile ilgili toplam puanları aritmetik ortalaması ($\overline{x}$ =123,96) iken, öğretmenlik yapmayı düşünmeyenlerin mesleki kaygı ile ilgili toplam puanlarının aritmetik ortalaması ($\overline{x}$ =134,78)'dir. Aradaki sayısal fark istatistiksel açıdan anlamlı bir farklılık oluşturmamaktadır. Bu bulgu katılımcıların öğretmenlik yapmayı düşünüp düşünmemelerinin mesleki kaygılarında bir etmen oluşturmadığı şeklinde yorumlanabilir.

Tablo 6. Katılımcıların Mesleki Kaygı İle İlgili Toplam Puanlarının Pedagojik Formasyon Açısından Yeterlik Düzeyi Değişkenine Göre Farklılığı İçin Tek Yönlü Varyans Analizi (ANOVA) Sonuçları

Değişken			**N**	$\overline{X}$		**S**
Pedagojik Formasyon Açısından Yeterlik Düzeyi	(1)Yeterliyim		155	115,69		37,85
	(2)Biraz Yeterliyim		196	128,19		34,47
	(3)Yetersizim		46	142,52		32,47
	Varyansın Kaynağı	**KT**	**sd**	**KO**	**F**	**p**	**Fark**
	Gruplar Arası	29555,44	2	14777,7	11,64	,000	3-2
	Gruplar İçi	499807,2	394	1268,54			3-1
	Toplam	529362,6	396				2-1

Tablo 6'deki analiz sonuçlarına göre, katılımcıların mesleki kaygı düzeylerine yönelik görüşleri ile ilgili toplam puanları ile pedagojik formasyon açısından yeterlik düzeyi değişkeni arasında anlamlı bir farklılık gözlenmiştir [$F_{(2-394)}$= 11,649; p<,05]. Bu farklılığın hangi gruplar arasında olduğunu görmek için Scheffe çoklu karşılaştırma testi yapılmıştır. Bu sonuçlara göre (3) pedagojik formasyon açısından kendisini yetersiz bulan katılımcılar ile (2)pedagojik formasyon açısından kendisini biraz yeterli bulan katılımcılar ve (1)pedagojik formasyon açısından kendisini yeterli bulan katılımcılar arasında pedagojik formasyon açısından kendisini yetersiz bulanların lehine, (2)pedagojik formasyon açısından kendisini biraz yeterli bulanlar ile (1)pedagojik formasyon açısından kendisini yeterli bulanlar arasında kendisini biraz yeterli bulanların lehine anlamlı bir farklılık bulunmuştur. Bu bulgu; pedagojik formasyon açısından kendisini yetersiz ve biraz yeterli bulan katılımcıların yeterli bulanlara mesleki kaygılarının daha yüksek olduğu şeklinde yorumlanabilir.

Tablo 7. Katılımcıların Mesleki Kaygı İle İlgili Toplam Puanlarının Ailede Öğretmen Bulunma Değişkenine Göre t-Testi Sonuçları

Ailenizde Öğretmen var mı?	N	$\overline{X}$	S	sd	t	p
Evet	170	125,88	37,96	395	,426	.670
Hayır	227	124,30	35,55			

Tablo 7' daki analiz sonuçlarına göre, katılımcıların mesleki kaygı ile ilgili toplam puanlarının ailede öğretmen bulunma değişkenine göre anlamlı bir farklılık göstermemektedir [$t_{(395)}$=,426; p>,05]. Ailelerinde öğretmen olanların mesleki kaygı ile ilgili toplam puanları aritmetik ortalaması ($\overline{x}$=125,88) iken, ailelerinde öğretmen olmayanların mesleki kaygı ile ilgili toplam puanlarının aritmetik ortalaması ($\overline{x}$=124,30)'dur. Aradaki sayısal fark istatistiksel açıdan anlamlı bir farklılık oluşturmamaktadır. Bu bulgu katılımcıların ailelerinde öğretmen olup olmama değişkeninin mesleki kaygılarında bir etmen oluşturmadığı şeklinde yorumlanabilir.

SONUÇ VE ÖNERILER

Çalışma grubundan elde edilen veriler ışığında ilköğretim bölümü öğretmen adaylarının mesleki kaygılarının; cinsiyet ve pedagojik formasyon açısından yeterlik düzeyleri değişkenleri açısından anlamlı farklılık oluşturduğu görülürken, mezun olunan bölüm, mezun olduklarında öğretmenlik yapmayı düşünüp düşünmedikleri ve ailelerinde öğretmen olup olmadığı değişkenleri üzerinde herhangi bir farklılığa rastlanılmadığı ortaya çıkarılmıştır.

Saban ve arkadaşları (2004), Tümerdem (2007) ve Taşğın (2006)'ın da yapmış oldukları çalışmalarda kız öğrencilerin kaygı düzeylerinin, erkek öğrencilerin kaygı düzeylerinden daha yüksek olduğunu tespit etmişlerdir. Kaygı ile cinsiyet arasındaki ilişkilere yönelik araştırmalarda psikiyatrik örneklemler alındığında, kadınlarda kaygı düzeyinin erkeklere oranla daha yüksek olduğu; öğrenci grupları ele alındığında ise cinsiyetler arasında bir farklılık olmadığı görülmüştür (Gençtan, 1993; Öner, 1977). Yapılan bu çalışmalar araştırmamızın cinsiyet değişkeninin ortaya çıkardığı sonucu destekler niteliktedir. Bu çalışmada da kız öğrencilerin mesleki kaygılarının, erkek öğrencilere göre daha yüksek olduğu ve bu farklılığın istatistiksel açıdan anlamlı bir farklılık oluşturduğu görülmektedir.

Öğretmen adaylarının mesleki kaygı düzeylerinin tespit edildiği bu çalışma toplumu oluşturan bireylerin yetiştirilmesinde görev alacak olan öğretmen adaylarının, öğrencilikleri devam ettiği süre içerisinde; mesleki kaygı düzeylerinin saptanıp gerekli önlemlerin alınması ve mesleki kaygıların giderilmesine ilişkin yönlendirmelerle destekleyici olunması, yine öğretmen yetiştiren kurumların konu ile ilgili olarak farkındalıklarının arttırılması ve mesleki kaygının azaltılmasında önleyici çalışmaların yapılması açısından önemli görülebilir. Buradan hareketle yapılan bu araştırmada ilköğretim bölümlerinde öğrenim gören öğretmen adaylarının mesleki kaygı düzeylerinin belirlenmesi ve mesleğe ilişkin kaygılarının çeşitli değişkenler açısından incelenmesi amaçlanmıştır.

Öğretmen adaylarının hizmet öncesi eğitimlerinde mesleklerine yönelik kaygılarının ortaya çıkarılması, bu kaygıların giderilmesine dönük eğitimlerin verilmesinde etkili olabilir. Diken'e (2004) göre, öğretmen yeterliğine dönük olarak yapılan yerli ve yabancı çalışmalarda, öğretmenlerin kendine güven duyması veya kendi yeterlikleri hakkında olumlu algılamaları/görüşleri ile öğrencilerinin başarı düzeyi, güdülenmesi ve öğrencilerinin yeterlikleri arasında pozitif ilişkiler olduğu savunulmaktadır. Bu çalışmalar, öğretmenlerin yeterliklerine yönelik görüşlerinin, öğretmenlerin öğretme yeterliklerini yordayıcı, öğretmene ait en önemli faktörlerden biri olduğuna inanıldığını göstermektedir.
Öğretmen adaylarının mesleğe yönelik kaygılarının bu çalışmadakilerin dışında "alana yönelik geliştirilen tutum" gibi daha farklı değişkenler açısından da incelenmesi önerilebilir. Ayrıca benzer çalışmalar diğer alanlarda da yapılabilir. Böylelikle kaygının eğitim-öğretim sürecine olan etkisi sebep-sonuç ilişkisi içinde daha sağlıklı değerlendirilebilir. Bu değerlendirmeler neticesinde, eğitimin

her aşamasında her türlü kaygıya karşı ihtiyaç duyulabilecek psikolojik desteği sağlayacak birim ve uzmanlar daha aktif hale getirilmelidir.

Alana katkı getirebileceği düşünülen bu çalışmanın ülke genelinde yalnızca Gazi Üniversitesi'nin ilköğretim bölümlerinde öğrenim gören öğretmen adayları ile sınırlandırılmış olması ve çalışma grubunun nispeten küçük olması sonuçların genellenmesini önlemektedir. Araştırmanın, bu bağlamda ileride yapılacak çalışmalara ışık tutacağı düşünülmektedir. Bu nedenle, farklı örneklemlerde yapılacak benzer alan çalışmalarına gereksinim olduğu ifade edilebilir.

KAYNAKLAR

Atmaca, H. (1999). Almanca, Fransızca ve İngilizce öğretmenliği bölümlerinde okuyan öğretmen adaylarının mesleki kaygıları. *Turkish Studies, 8*(10), 67-76.

Baloğlu M, Koçak R. ve Zelhart P. F. (2007). The relationships between statistics anxiety and attitudes toward statistics. *Ankara University Faculty of Educational Sciences Journal, 40*(2), 23-39.

Börü, A. (2000). *Üniversite giriş sınavlarında öğrencilerin yaşadığı kaygı ve nedenleri* (Yayımlanmamış Yüksek Lisans Tezi). Anadolu Üniversitesi, Eskişehir.

Cabı, E. ve Yalçınalp, S. (2013). Öğretmen adaylarına yönelik mesleki kaygı ölçeği (MKÖ): Geçerlik ve güvenirlik çalışması, *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 44*, 85-96

Cabı, E., ve Yalçınalp S. (2009). Öğretmen adaylarının mesleki ve eğitim teknolojilerini kullanma kaygı düzeylerine yönelik görüşleri, *9th International Educational Technology Conference,* Ankara. s. 579-584.

Chotas, T. J. ve Carl E. T. (1976). Teacher anxiety: A Review with recommendations. *Rewiew of Educational Research*, *46*(2), 159-184.

DeVaney T. A. (2010). *Anxiety and attitude of graduate students in on-campus vs. online statistics courses*. *Journal of Statistics Education*, *18*(1), 1-15.

Diken, İ. H. (2004). Öğretmen yeterlik ölçeği Türkçe uyarlaması, geçerlik ve güvenirlik çalışması. *Eğitim Araştırmaları Dergisi*, *16*, 102-112.

Doğan T. ve Çoban A. E. (2009). The investigation of the relations between students' attitude toward teaching profession and anxiety level in faculty of education. *Education and Science, 34*(153), 157-168.

Gençtan, E. (1993). *Psikanaliz ve Sonrası (5. Baskı)*. Ankara: Remzi.

Goodson I. ve Hargreaves A. (2005). Series editors' preface. In A. Harris ve D. Muijs. Improving schools through teacher leadership. New York: Open University Press.

Karasar, N. (2010). *Bilimsel araştırma yöntemi*. (21. Baskı). Ankara: Nobel.

Kurtuldu M. K. ve Ayaydın A. (2010). Güzel sanatlar eğitimi bölümü öğrencilerinin mesleki kaygı düzeylerinin incelenmesi. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, Sayı: 28, 111-118.

Öner, N. (1977). *Durumluk ve sürekli kaygi envanterinin türk toplumundaki geçerliliği* (Yayınlamlanmış Doktora Tezi). Ankara Üniversitesi, Ankara.

Özden, Y. (1999). *Eğitimde dönüşüm eğitimde yeni değerler*. Ankara: Pegem.

Saban, A. Korkmaz İ. ve Akbaşlı S. (2004). Öğretmen adaylarının mesleki kaygıları. *Eğitim Araştırmaları Dergisi*. 17, 198-209.

Sazak, N. ve Ece A. S. (2004). Bolu Anadolu güzel sanatlar lisesi öğrencilerinin öss ve özel yetenek sınavlarına yönelik kaygıları. *1924-2004 Musiki Muallim Mektebinden Günümüze Müzik Öğretmeni Yetiştirme Sempozyumu*. Süleyman Demirel Üniversitesi. Isparta.

Copyright © International Conference on New Horizons in Education Conference (INTE)

Taşğın, Ö. (2006). Beden eğitimi ve spor yüksekokulunda okuyan öğretmen adaylarının mesleki kaygı düzeylerinin bazı değişkenler açısından incelenmesi. *Kastamonu Eğitim Fakültesi Dergisi, 14*(2), (679-686).

Tümerdem, R. (2007). Dicle üniversitesi eğitim fakültesi ve fen-edebiyat fakültesi kimya son sinif öğrencilerinin kaygilarini etkileyen etmenler. *Elektronik Sosyal Bilimler Dergisi*, *6*(20), 32-45.

Tümkaya, S., Aybek, B. ve Çelik, M. (2007). Kpss'ye girecek öğretmen adaylarındaki umutsuzluk ve durumluk-sürekli kaygı düzeylerini yordayıcı değişkenlerin incelenmesi. *Kuram ve Uygulamada Eğitim Bilimleri* (KUYEB), *7*(2), 953-974.

Ülgen, G. (1995). *Eğitim psikolojisi*. Ankara: Lazer Ofset Matbaa Tesisleri.

Yılmaz, E. (2007). Bir meslek olarak öğretmenlik. 12. Bölüm. Ed. Emin Karip. Eğitim bilimine giriş (317- 336). Ankara: Pegem A Yayıncılık.

Copyright © International Conference on New Horizons in Education Conference (INTE)

ÖĞRETMEN ADAYLARININ SOSYAL MEDYA KAVRAMINA İLİŞKİN ALGILARININ DEĞERLENDİRİLMESİ: BİR METAFOR ANALİZİ ÇALIŞMASI

Esen TURAN ÖZPOLAT
Eğitim Fakültesi, Eğitim Bilimleri Bölümü
Adıyaman Üniversitesi, Türkiye

Hakkı KONTAŞ
Eğitim Fakültesi, Eğitim Bilimleri Bölümü
Adıyaman Üniversitesi, Türkiye

ÖZET
Bu çalışmanın amacı öğretmen adaylarının "sosyal medya" kavramına yönelik sahip oldukları algıları metaforlar aracılığıyla ortaya çıkarmaktır. Araştırmanın amacı belirlenirken sosyal medyanın yaygın kullanımı dolayısı ile eğitim alanında da geniş yer bulmasının faydalı olabileceği düşüncesinden hareket edilmiştir. Bunun için ise eğitimin başat unsurlarından öğretmenlerin hizmet öncesi eğitim sürecinde bu durumun farkında olmasını sağlamanın önemli olduğu düşünülmüştür. Araştırmada nitel araştırma yöntemlerinden metafor tekniği kullanılmıştır. Araştırmanın çalışma grubunu, Adıyaman Üniversitesi Eğitim Fakültesi'nde öğrenim gören 243 öğretmen adayı oluşturmaktadır. Araştırmanın verileri öğretmen adaylarının "sosyal medya…gibidir/-e benzer; çünkü…" ifadesini tamamlamasıyla elde edilmiştir. Verilerin analizinde içerik analizi tekniği kullanılmıştır. Araştırmanın sonucunda, araştırmaya katılan öğretmen adaylarının %41,38'inin sosyal medya ile ilgili nötr bir algıya sahip olduğu, %39,66'sının bu konuda olumsuz metaforlar geliştirdiği ve %18,97'sinin ise olumlu metaforlar geliştirdiği tespit edilmiştir. Tüm bu algıların yanı sıra araştırmada tüm öğretmen adaylarının sosyal medya konusuna hakim olduğu ve bu konuda fikir sahibi olduğu sonucuna da ulaşılmıştır. Araştırma sonuçlarına dayanarak öğretmen adaylarının sosyal medya algılarının olumlu yönde değişmesine katkı sağlanması, sosyal medya ile eğitim arasında bir ilişki kurulması ve sosyal medyanın eğitim alanında daha etkin ve verimli bir şekilde kullanılması konusunda çeşitli önerilere yer verilmektedir.
Anahtar Kelimeler: Sosyal Medya, Öğretmen Adayları, Metafor

GİRİŞ
İnsanların sosyal medya ile tanışması, internetin hayatımıza girmesi ile gerçekleşmiştir. Sosyal medya, kullanıcıların ağ teknolojileri kullanarak onların etkileşimini sağlayan araç, hizmet ve uygulamaların bütünü olarak ifade edilmektedir (Öztürk ve Talas, 2015:101).İnternet yoluyla bilgi paylaşımı zamanla facebook (fotoğraf, video ve mesaj paylaşımı), twitter (fotoğraf, video ve mesaj paylaşımı), myspace (fotoğraf, video ve mesaj paylaşımı) linkedn (fotoğraf ve doküman vs. paylaşımı), instagram (fotoğraf ve video paylaşımı), flicker (fotoğraf paylaşımı), photobucket (fotoğraf paylaşımı), youtube (video paylaşımı), engadget (haber kaynağı), digg (Sosyal imleme servisleri) vs. gibi pek çok sosyal paylaşım forumlarında, daha çok sosyo-kültürel ve entelektüel anlamda duygu ve düşünceleri içeren paylaşımlar şeklinde gerçekleşebilmektedir. Bu sosyal medya türlerinden bazıları (facebook, youtube vs.) son zamanlarda birçok ülkede eğitim amacı ile de kullanılmaktadır (Metropolitan State University of Denver, 2016,TRT Okul-İngilizce Dersleri, 2016). Bu ortamlarda bireyler aynı amaçla bir araya gelerek ilgilendikleri alan, konu ya da durum üzerinde paylaşımlarda bulunmaktadırlar. Bu durumun etkililiği ve faydası üzerine de düşünceler giderek artmaktadır (Sarıgül, 2014, Edudemic.com, 2015; Egitimpedia, 2016). Ayrıca sosyal medyanın çok büyük bir güç olduğu belirtilerek bu gücü doğru kontrol etmeyi beceren kişi ve firmaların gelecek 5 yıl içerisinde çok büyük başarılar elde edecekleri de iddia edilmektedir (Sarıgül, 2014).

İnternet ortamında ve özellikle sosyal medyada eğitimsel faaliyetlerin yer almasının eğitimi birçok yönden verimli hale getirdiği ve aktif katılımlar ile kalıcı öğrenmelere yol açabileceği belirtilmektedir (Ananda, 2015; Eğitimpedia, 2016). Yine sosyal medyanın öğrenciler, personeller, veliler ve potansiyel velilerle daha iyi iletişim kurma ihtiyacının artık daha çok önem kazanmasından dolayı okul yöneticileri tarafından da kullanılabileceği önerilmektedir (Stribbell, 2014). Hal böyle iken aslen "internette geniş bir kitleye sahip olan sosyal medyaya eğitsel faaliyetleri entegre edebilme düşüncesi"nden hareketle bu çalışmada, öncelikle öğretmen adaylarının sosyal medyaya yönelik algılarını anlamak için onların sosyal medyayı neye benzettiklerini ve nasıl tanımladıklarını bilmenin önemli olacağı düşünülmüştür. Bu bilgiye ulaşmak için ise öğretmen adaylarının bu konuda geliştirecekleri metaforlardan yararlanılabileceği düşünülmüştür. Metafor kelime anlamı olarak mecaz anlamında ifade edilmektedir (TDK, 2016). Morgan (1998:14) kurguladığımız metaforun, genel olarak dünyayı kavrayışımız neticesinde oluşan düşünce biçimi ve görme biçiminden ileri geldiğini belirtmektedir. Saban (2008b:460) bu yönüyle metaforları; bir bireyin yüksek düzeyde soyut, karmaşık veya kuramsal bir olguyu anlamada ve açıklamada işe koşabileceği güçlü bir zihinsel araç olarak açıklamaktadır. Shuell (1990, s. 102) de metaforların gücünü vurgulamak üzere bu konuda "şayet bir resim bin sözcüğe denk ise, bir metafor da bin

 Copyright © International Conference on New Horizons in Education Conference (INTE)

resime denktir" şeklinde ifadeye yer vermiştir. Bunu açıklarken ise yazar, "zira, bir resim yalnızca statik bir imge sunmakta iken, bir metafor ise bir olgu hakkında düşünmek için zihinsel bir çerçeve sunabilmektedir." demektedir. Yine metafor düşünce ile ilişkilendirilerek bu defa bilgi ve duygu arasında bir köprü olarak da açıklanabilmektedir (Modell, 2009:6). Mutlu **(**1998:106) ise metaforun benzetme kavramıyla yakın bir anlam taşıdığını ve bilinmeyeni bilinene aktarmak suretiyle açıklamak ya da nitelikleri bir gerçeklik düzleminden bir başkasına aktarmak suretiyle iş gören bir söz ya da görüntü aracı" olduğunu belirtmektedir. (Akt: Aydın, 2010:1295). Dolayısıyla metafor; bir durumu belirli özellik ya da özellikler bakımından benzer nitelik taşıyan diğer durumlarla açıklayabilme amacıyla yararlanılan bir tür ifade olarak tanımlanabilir. Metaforla düşünme süreci "özne" ve "araç" şeklinde iki bölümden oluşmaktadır. Özne; açıklanan ya da açıklanması istenen durum, olgu ya da kavram olarak, araç ise metaforik olarak kullanılan terim ya da terimler olarak açıklanmaktadır (Balcı, 1999:33). Burada bahsedilen özne veri toplama aracının "…. gibidir/-e benzer" kısmına; araç ise "çünkü…" kısmına karşılık gelmektedir.

Örneğin; "Sosyal medya gazete gibidir/-e benzer, çünkü bütün haberlere ulaşılabiliyor."
Özne *Araç*

Bu araştırma kapsamında da yukarıdaki örnekteki cümle yapısı kullanılmış ve bu şekilde katılımcılardan veriler elde edilip sonuçlara ulaşılmaya çalışılmıştır.

Araştırmanın Amacı:

Bu araştırmanın genel amacı, öğretmen adaylarının "sosyal medya" kavramına yönelik sahip oldukları algıları metaforlar aracılığıyla ortaya çıkarmaktır. Bu amacı gerçekleştirmek için aşağıdaki sorulara cevap aranmıştır:

1. Öğretmen adayları "sosyal medya" kavramına yönelik sahip oldukları algıları hangi metaforlarla açıklamaktadır?
2. "Sosyal medya" kavramına yönelik öğretmen adaylarının ileri sürdüğü metaforlar hangi kategoriler altında toplanabilir?

YÖNTEM

Araştırmanın Modeli:

Araştırmada nitel araştırma yöntemlerinden metafor yöntemi kullanılmıştır. Araştırmada elde edilen verilerin analizi aşamasında ise içerik analizi yönteminden yararlanılmıştır. İçerik analizi yoluyla veriler tanımlanır ve verilerin içinde saklı olabilecek gerçekler ortaya çıkarılmaya çalışılır. İçerik analizinde temelde yapılan işlem, birbirine benzeyen verileri belirli kavramlar ve temalar çerçevesinde bir araya getirmek ve bunları okuyucunun anlayabileceği şekilde organize ederek yorumlamaktır (Yıldırım ve Şimşek, 2003:162).

Araştırmanın Çalışma Grubu:

Araştırmanın çalışma grubu, amaçlı örneklem türlerinden maksimum çeşitlilik yönteminden yararlanılarak seçilmiş olup 2015-2016 eğitim-öğretim yılında Adıyaman Üniversitesi Eğitim Fakültesi'nde öğrenim gören 279 öğretmen adayından oluşmaktadır. Ancak analiz sürecinde 36 öğretmen adayının geliştirmiş olduğu metaforların gerek anlamsız oluşları gerekse özne-araç uyumsuzlukları nedeniyle iptal edilmesi uygun görülmüştür. Sonuç itibariyle çalışma 243 öğretmen adayına ait veriler ile sonuçlanmıştır. Çalışma grubunun cinsiyet dağılımı aşağıdaki gibidir:

Tablo1. Çalışma grubunun cinsiyet dağılımı

Cinsiyet	f	%
Kız	188	77,37
Erkek	55	22,63
Toplam	243	100

Tablo 1'de görüldüğü gibi araştırmaya katılan öğretmen adaylarının %77,37 (188)'ini kız öğrenciler, %22,63 (55)'ini de erkek öğrenciler oluşturmaktadır. Çalışma grubundaki öğretmen adayları öğrenim gördükleri programlar bakımından da farklılık göstermektedir. Çalışma grubunun öğrenim gördükleri program dağılımı aşağıdaki gibidir:

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 2. Çalışma grubunun öğrenim gördükleri programa göre dağılımı

Program	f	%
Sınıf Öğretmenliği	25	10,29
Matematik Öğretmenliği	28	11,52
Fen Bilgisi Öğretmenliği	29	11,93
Sosyal Bilgiler Öğretmenliği	23	9,47
Türkçe Öğretmenliği	31	12,76
Arap Dili Eğitimi	39	16,05
Okul Öncesi Öğretmenliği	40	16,46
Rehberlik ve Psikolojik Danışmanlık	28	11,52
Toplam	243	100

Verilerin Toplanması:
Verilerin toplanması amacıyla, 2015-2016 eğitim-öğretim yılında Adıyaman Üniversitesi Eğitim Fakültesi'ndeki farklı bölümlerde öğrenim gören öğretmen adaylarından "Sosyal medya …gibidir; çünkü …" cümlesini tamamlamaları istenmiştir. Böylece "sosyal medya" kavramına yönelik öğretmen adaylarının sahip oldukları metaforlar belirlenmiş ve daha sonra da bu metaforlar kategoriler haline getirilerek öğretmen adaylarının "sosyal medya"ya yönelik algıları belirlenmiştir.

Verilerin Analizi:
Bu aşamada, öğretmen adaylarının ürettiği metaforların analiz edilmesi ve yorumlanması süreci dört aşamada gerçekleştirilmiştir: 1. Adlandırma aşaması 2. Eleme ve arıtma aşaması 3. Derleme ve kategori geliştirme aşaması ve 4. Geçerlik ve güvenirliği sağlama aşaması (Saban, 2008a:428).

Adlandırma aşamasında, elde edilen metaforların sayısal olarak büyükten küçüğe doğru bir sıra ile geçici bir listesi yapılmış ve öğretmen adaylarının açık ve anlaşılır bir şekilde metaforu ifade edip etmediğine karar verilmiştir. Eleme ve arıtma aşamasında, öğretmen adaylarının geliştirdiği metaforlar tekrar incelenerek metafor kaynağı oluşturmayan ya da açıklaması bulunmayan 36 form elenmiş ve geçerli sayılabilen metaforlara ulaşılmıştır. Derleme ve kategori geliştirme aşamasında, elde edilen metaforlar "sosyal medya" kavramına yönelik sahip oldukları ortak özellikler açısından olumlu, nötr ve olumsuz olmak üzere üç ana kategoriye ayrılmış ve her bir ana kategori ise yine ortak özellikler bakımından farklı kategorilere ayrılmıştır. Bu kategoriler olumsuz kategori için 11, nötr için 10 ve olumlu kategori için 4 adettir. Araştırmada geliştirilen metaforların yanı sıra bu metaforlara yönelik örnek öğretmen adayı açıklamaları da sunulmuştur.

Geçerlik ve güvenirliği sağlamak için ise, elde edilen kategoriler kapsamında bulunan metaforların mensubu olduğu kategoriyi temsil edip etmediğini ortaya çıkarmak amacıyla uzman görüşüne başvurulmuştur. Bu amaçla, iki adet liste iki uzmana verilmiştir. Listeler;
1. Öğretmen adayları tarafından belirtilen toplam 173 metaforun tekrar sayısının büyükten küçüğe doğru sıralandığı liste,
2. Araştırmacı tarafından oluşturulmuş olan 3 ana kategori ile bunlara ait kategorilerin özelliklerini kapsayan listedir.

Uzmanlardan bu iki listeden yararlanarak metaforlarla kategorileri eşleştirmesi istenmiş ve son olarak araştırmacıların ve uzmanların yaptığı listeler karşılaştırılmıştır. Bu karşılaştırmalar sonucunda araştırmacılar tarafından "Görüş Birliği" ve "Görüş Ayrılığı" olan maddelerin sayısı belirlenmiştir. Güvenirlik belirlenirken Miles ve Huberman'a (1994:64) ait formülden (Güvenirlik=görüş birliği/görüş birliği+görüş ayrılığı) yararlanılarak hesaplama sonucunda P = % 93 değeri bulunmuş ve bu değer, yazarların da belirttiği gibi "araştırmacı ve uzman değerlendirmeleri arasındaki uyum %90 üzerinde olduğu takdirde araştırmanın güvenilir kabul edilebilmesi" sebebiyle bu araştırmanın güvenilir olduğunu açıklamaktadır.

BULGULAR:
Araştırmanın bu bölümünde, araştırmaya katılan öğretmen adaylarının "sosyal medya" kavramına yönelik geliştirdikleri metaforlar ile bu metaforların analiz sonucu yorumlanması söz konusudur.

Öğretmen Adaylarının "Sosyal Medya" Kavramına Yönelik Belirttikleri Metaforlar
Bu alt bölümde öğretmen adaylarının olumlu, nötr ve olumsuz ana kategorilerinde belirttikleri metaforlar kodlar başlığı altında olup her metaforun kaç kez ifade edildiğini belirten sayı (f) ve yüzdeler (%) sayısal olarak büyükten küçüğe doğru sıralanarak ait oldukları kategoriler ile sunulmaktadır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 3."Sosyal medya" kavramına yönelik geliştirilen metaforların olumlu, nötr ve olumsuz ana kategorilerine ait sayısal durum

Ana Kategoriler	f	%
Olumlu	33	19,08
Nötr	72	41,62
Olumsuz	68	39,31
Toplam	173	100

Tablo 3 incelendiğinde az sayıda öğretmen adayının (%19,08) sosyal medyaya yönelik olumlu metafor geliştirdiği, daha çok nötr (41,62) ve olumsuz (39,31) bir algıya sahip oldukları görülmektedir. Ayrıntılı bakılacak olduğunda tablo 4, 5 ve 6'da öğretmen adaylarının bu konuda paylaşmış oldukları ifadeler yer almaktadır. tanesi (%41,62) nötr, 68 tanesi (%39,31) olumsuz ve

Tablo 4. "Sosyal medya" kavramına yönelik geliştirilen olumlu metaforlar ve bu metaforların frekans ve yüzde dağılımları

Ana Kategori	Kategori	Kod	Metaforun Tekrarını Temsil Eden Sayı ve Yüzdeler	
			f	%
Olumlu	**1. İHTİYAÇ**	**1** İletişim	3	7,5
	İHTİYAÇ (2)	**2** Dünya	3	7,5
	FİZYOLOJİK İHTİYAÇ	**3** İhtiyaç	2	5
	UYKU	**4** Gazete	2	5
	SU	**5** Faydalı	2	5
	OKSİJEN	**6** Ahtapot	1	2,5
	YAKIN ARKADAŞ	**7** Fizyolojik ihtiyaç	1	2,5
	EĞLENCE	**8** İnstagram	1	2,5
	ZAMAN	**9** Eğlence	1	2,5
	MUTLULUK	**10** Nöronlar	1	2,5
	CAN	**11** Pazar yeri	1	2,5
	OYUN	**12** İletişim aracı	1	2,5
	SEVGİLİ	**13** Mutluluk	1	2,5
	2. DANIŞMAN	**14**Twitter	1	2,5
	GÜZİN ABLA	**15** Gündem	1	2,5
	3. İLETEN/YANSITAN	**16** Kültür bankası	1	2,5
	İLETİŞİM (3)	**17** Ayna	1	2,5
	GAZETE (2)	**18** Güneş	1	2,5
	DÜNYA (1)	**19** İnternet	1	2,5
	TWİTTER	**20** Pizza	1	2,5
	İNSTAGRAM	**21** Nehir	1	2,5
	İNTERNET	**22** Büyüteç	1	2,5
	GÜNDEM	**23** Okyanus	1	2,5
	NÖRONLAR	**24** Güzin abla	1	2,5
	BÜYÜTEÇ	**25** Can	1	2,5
	AYNA	**26** Yakın arkadaş	1	2,5
	GÜNEŞ	**27** Uyku	1	2,5
	4. KAPSAMLI	**28** Su	1	2,5
	DÜNYA (2)	**29** Zaman	1	2,5
	FAYDALI (2)	**30** Oksijen	1	2,5
	KÜLTÜR BANKASI	**31** Aşure	1	2,5
	OKYANUS	**32** Oyun	1	2,5
	NEHİR	**33** Sevgili	1	2,5
	PAZAR YERİ			
	AHTAPOT			
	PİZZA			
	AŞURE			
Toplam	4	33	40	100

Tablo 4'e bakıldığında sosyal medya kavramına ilişkin toplam 33 olumlu metafor geliştirildiği ve metaforlar arasında sıklıkla bahsedilenlerin iletişim (f=3 / %7,5), dünya (f=3 / %7,5), ihtiyaç (f=2 / %5), gazete (f=2 / %5)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ve faydalı (f=2 / %5) metaforları olduğu görülmektedir. Genel olarak ise metaforların öğretmen adayları tarafından gerek yaklaşım gerekse içerik olarak farklı anlamlandırılması sebebiyle ihtiyaç, danışman, ileten/yansıtan ve kapsamlı olmak üzere 4 farklı kategori altında toplandığı görülmektedir. Ayrıca bu tabloda iletişim (ileten/yansıtan kategorisi), ihtiyaç (ihtiyaç kategorisi), gazete (ileten/yansıtan kategorisi) ve faydalı (kapsamlı kategorisi) metaforları öğretmen adaylarının belirttiği gerekçelerin ortaklığı sebebiyle sadece birer kategoride yer alabilmekte iken, toplam 3 kez belirtilen dünya metaforunun öğretmen adaylarının belirttiği gerekçenin farklılığı itibariyle farklı kategoriler altında (kapsamlı kategorisinde 2 ve ileten/yansıtan kategorisinde 1 adet olmak üzere) yer aldığı görülmektedir. Ayrıca bu tabloda en fazla metafor çeşidinin 12 metafor ile "ihtiyaç" kategorisinde toplandığı görülmektedir.

Sosyal medyayı ihtiyaç kategorisinde öğretmen adaylarından birisi (ÖA-39), *"Sosyal medya ihtiyaç gibidir. Çünkü herhangi bir sorunla karşılaştığımızda sosyal medyaya başvururuz.*"; diğer öğretmen adayı (ÖA-188), "*Sosyal medya uyku gibidir. Çünkü uyumadan duramayız; sosyal medya da hayatımızın bir parçası gibi olmuş*"; bir diğer öğretmen adayı ise (ÖA-218), "*Sosyal medya oksijen gibidir. Çünkü yaşamımız o olmazsa devam etmiyor gibi. Yani bir nevi yaşam kaynağı.*" şeklinde ifade etmiştir. Bu durumda sosyal medya kavramının "ihtiyaç" kategorisinde daha çok yaşam kaynağı, yaşama ilişkin, onu etkileyen bir olgu olarak belirtildiği anlaşılmaktadır.

Danışman kategorisinde bir öğretmen adayı sosyal medya için (ÖA-158),*"Sosyal medya Güzin Abla gibidir. Çünkü her türlü konuda danışabiliriz, kısmetimizi de açar."* şeklinde görüş bildirmektedir. İleten/yansıtan kategorisinde ise bir öğretmen adayının (ÖA-1) *"Sosyal medya iletişim gibidir. Çünkü insanlarla daha rahat iletişim kurabileceğimiz, onlara daha kolay ulaşabileceğimiz, yeni arkadaşlar edinebileceğimiz bir yerdir.*"; diğerinin (ÖA-8) "*Sosyal medya gazete gibidir. Çünkü okunur, bilgi alınır."*; bir diğerinin ise "*Sosyal medya ayna gibidir. Çünkü toplumun aynasıdır, onu yansıtır."* şeklinde görüş bildirerek sosyal medyayı; hayatta olan bitenleri ileten, insanlar arasında iletişim sağlayan ve durumları yansıtan olarak algıladıkları anlaşılmaktadır.

Son olarak kapsamlı kategorisinde bir öğretmen adayı (ÖA-176),*"Sosyal medya dünya gibidir. Çünkü istediğin her şeye, her an ulaşabilirsin."*; diğer öğretmen adayı (ÖA-49), "*Sosyal medya faydalı gibidir. Çünkü çok yönlüdür.*", diğer öğretmen adayı (ÖA-222), "*Sosyal medya aşure gibidir. Çünkü tek cins değil, çok cins malzemeden oluşur. A'dan Z'ye her şey bulunur.";* diğer öğretmen adayı (ÖA-23), *"Sosyal medya ahtapot gibidir. Çünkü tek bir noktadan birden çok kola bağlanıp onları kontrol edebiliriz sosyal medyada."* ve bir başka öğretmen adayı ise (ÖA-180), *"Sosyal medya pazar yeri gibidir. Çünkü ne ararsanız var."* şeklinde açıklama yapmıştır. Bu kategoride de öğretmen adaylarının sosyal medyayı dünya, pazar yeri, ahtapot ve faydalı gibi geniş, kapsamlı ve çok yönlü olarak açıkladıkları görülmektedir.

Tablo 5. "Sosyal medya" kavramına yönelik geliştirilen nötr metaforlar ve bu metaforların frekans ve yüzde dağılımları

Ana Kategori	Kategori	Kod	Metaforu Temsil Eden Öğretmen Adayı	
			f	%
	1. BAĞLAYICI	**1** Hayat	6	6.38
	SİGARA (3)	**2** Bağımlılık	4	4.26
	BAĞIMLILIK (4)	**3** Ayna	4	4.26
	VİRÜS	**4** Deniz	3	3.19
	UYUŞTURUCU	**5** İlaç	3	3.19
	TELEVİZYON	6 Sigara	3	3.19
	SALGIN	**7** Örümcek ağı	2	2.13
	UYKU	**8** Aşk	2	2.13
	SAKIZ	**9** Facebook	2	2.13
	ÇİKOLATA	**10** Bıçak	2	2.13
	HAYAT (1)	**11** *Ağaç/ağaca su vermek*	2	2.13
	AŞK (1)	**12** Sevgili	1	1.06
	2. YANSITICI	**13** Haber	1	1.06
	AYNA (4)	**14** Arı	1	1.06
	BIÇAK (1)	**15** Su	1	1.06
	AĞAÇ (1)	**16** Kabak	1	1.06
	AŞK (1)	**17** Söz	1	1.06

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	ÖĞRETMEN	**18** Boş sayfa	1	1.06
	BUKALEMUN	**19** Vitamin	1	1.06
Nötr	BEBEK	**20** Avokado	1	1.06
	3. YÖNLENDİRİCİ/ŞEKİLLENDİRİCİ	**21** Melek ve şeytan	1	1.06
	YÖNLENDİRİCİ	**22**Apandist	1	1.06
	HİPNOZ	**23** Film	1	1.06
	HAMUR	**24** Bebek	1	1.06
	SATILAN BİR OYUNCAK	**25** Öğretmen	1	1.06
	SİYASET	**26** Zaman	1	1.06
	ÖZNEL DÜŞÜNCELER	**27** Narkoz	1	1.06
	4.İLETEN	**28** Boş zaman	1	1.06
	FACEBOOK (1)	**29** Bataklık	1	1.06
	KALP	**30** Madalyonun iki yüzü	1	1.06
	HABER	**31** Dünya	1	1.06
	UÇAK	**32** Hipnoz	1	1.06
	EMİR KULU	**33** Öznel düşünceler	1	1.06
	5. KAPSAMLI	**34** Anıt defteri	1	1.06
	HAYAT (2)	**35** Yemek	1	1.06
	ÖRÜMCEK AĞI (2)	**36** Mide	1	1.06
	FACEBOOK (1)	**37** Aslan	1	1.06
	RENKLİ ŞEKERLER	**38** Tansiyon	1	1.06
	FİLM	**39** Hamur	1	1.06
	EV	**40** Aşı	1	1.06
	NEW YORK	**41** Yönlendiren araç	1	1.06
	YEMEK	**42** Ateş	1	1.06
	PAZAR YERİ	**43** Kalp	1	1.06
	MİDE	**44** Televizyon	1	1.06
	ANIT DEFTERİ	**45** Uyku	1	1.06
	MERAKLI MELAHAT	**46** Pazar yeri	1	1.06
	6. İKİ UÇLU	**47** Beslenme	1	1.06
	İLAÇ (3)	**48** Emir kulu	1	1.06
	DENİZ (3)	**49** Virüs	1	1.06
	HAYAT (1)	**50** Bukalemun	1	1.06
	BIÇAK (1)	**51** Balon	1	1.06
	MELEK VE ŞEYTAN	**52** Uyuşturucu	1	1.06
	AVOKADO	**53** Sakız	1	1.06
	VİTAMİN	**54** Siyaset	1	1.06
	APANDİST	**55** Elma kurdu	1	1.06
	ZAMAN	**56** Renkli şekerler	1	1.06
	SU	**57** Uçak	1	1.06
	*AĞAC*A SU VERMEK (1)	**58** Gül	1	1.06
	BESLENME	**59** Uçurum	1	1.06
	BALON	**60** Okyanus	1	1.06
	UÇURUM	**61** Tuz	1	1.06
	PANZEHİR	**62** Kahvehane	1	1.06
	SEVGİLİ	**63** Panzehir	1	1.06
	BOŞ ZAMAN	**64** Haşhaş	1	1.06
	HAŞHAŞ	**65** Yönlendirici	1	1.06
	ARI	**66** Ütopya	1	1.06
	KABAK	**67** Salgın	1	1.06
	NARKOZ	**68** New York	1	1.06
	YÖNLENDİREN ARAÇ	**69** Ev	1	1.06
	ATEŞ	**70** Satılan bir oyuncak	1	1.06
	TANSİYON	**71** Çikolata	1	1.06
Nötr	ELMADA KURDU	**72** Meraklı melahat	1	1.06
	OKYANUS			
	GÜL			
	DÜNYA			

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	TUZ SÖZ ASLAN MADALYONUN İKİ YÜZÜ BATAKLIK **7. BULUŞMA YERİ** HAYAT (1) KAHVEHANE **8. SANAL ORTAM** ÜTOPYA **9.DEĞİŞEN** HAYAT (1) **10. DİĞER** BOŞ SAYFA			
Toplam	10	72	94	100

Tablo 5'e bakıldığında sosyal medya kavramına ilişkin 72 nötr metafor geliştirildiği görülmektedir. Bu metaforlar arasında sıklıkla bahsedilenler hayat (f=6 / %6,38), bağımlılık-ayna (f=4 / %4,26), deniz-ilaç-sigara (f=3 / %3,19), örümcek ağı-aşk-facebook-bıçak-ağaca su vermek (f=2/ %2,13) metaforlarıdır. Genel olarak ise metaforların bağlayıcı, yansıtıcı, yönlendirici/şekillendirici, ileten, kapsamlı, iki uçlu, buluşma yeri, sanal ortam, değişen ve diğer olmak üzere 10 farklı kategori altında toplandığı görülmektedir. Ayrıca bu tabloda da birden çok kez belirtilen bazı metaforlar gerekçelerinin farklılıkları sebebiyle farklı kategorilerde yer almaktadır. Bu metaforlar hayat, aşk, bıçak, facebook ve ağaçtır. Öğretmen adayları tarafından toplam 6 kez belirtilen "hayat" metaforunun belirtilen gerekçelerin farklılığı itibariyle farklı kategoriler altında (bağlayıcı-1, kapsamlı-2, iki uçlu-1, buluşma yeri-1 ve değişen kategorilerinde-1 adet olmak üzere) yer aldığı görülmektedir. Aynı sebeple aşk metaforunun hem bağlayıcı (1) hem de yansıtıcı (1) kategorilerinde, bıçak metaforunun yansıtıcı (1) ve iki uçlu (1) kategorilerinde, facebook metaforunun ileten (1) ve kapsamlı (1) kategorilerinde ve ağaç metaforunun ise yansıtıcı ve iki uçlu kategorilerinde yer aldığı görülmektedir.

Tabloda yine birden çok kez belirtilen ve gerekçeleri benzer olması sebebiyle sadece birer kategoride yer alan metaforlar bulunmaktadır. Bu metaforlar bağımlılık (bağlayıcı kategorisinde), ayna (yansıtıcı kategorisinde) ve örümcek ağıdır (kapsamlı kategorisinde). Ayrıca bu tabloda en fazla metafor çeşidinin 33 metafor ile "iki uçlu" kategorisinde toplandığı görülmektedir.

Sosyal medyayı bağlayıcı kategorisinde öğretmen adaylarından birisi (ÖA-3), *"Sosyal medya bağımlılık gibidir. Çünkü ondan uzaklaşamıyoruz.*"; diğer öğretmen adayı (ÖA-186), "*Sosyal medya sigara gibidir. Çünkü içine çekersen bağımlılık yapar*"; bir diğer öğretmen adayı ise (ÖA-6), "*Sosyal medya salgın gibidir. Çünkü her girdiğin sayfa bir diğerine girme isteği uyandırıyor, kısa sürede sarar her yanını.*" şeklinde ifade etmiştir. Bu durumda sosyal medya kavramının "bağlayıcı" kategorisinde daha çok bağımlılık ve alışkanlık yaratan bir olgu olarak belirtildiği anlaşılmaktadır.

Sosyal medyayı yansıtıcı kategorisinde öğretmen adaylarından birisi (ÖA-210), *"Sosyal medya ayna gibidir. Çünkü insanın dünyasını yansıtır.*"; yine sosyal medyayı aynaya benzeten başka bir öğretmen adayı (ÖA-185), "*Sosyal medya ayna gibidir. Çünkü sen sosyal medyaya nasıl bakarsan ve onu nasıl kullanırsan bu durum sana hemen yansır*." şeklinde açıklamaktadır. Başka bir öğretmen adayı (ÖA-193), *"Sosyal medya bukalemun gibidir. Çünkü durumdan duruma göre biçim değiştirir.*"; bir diğer öğretmen adayı ise (ÖA-91), "*Sosyal medya bebek gibidir, Çünkü nasıl büyütürsen, nasıl bakım yaparsan; öyle olur.*" şeklinde ifade etmiştir. Bu durumda sosyal medya kavramı için "yansıtıcı" kategorisinde, ona nasıl yaklaşılırsa insanlara o şekilde yansıdığı, tepkide bulunduğu ve farklı durumlara göre farklı hal aldığı vurgulanmıştır.

Yönlendirici/şekillendirici kategorisinde bir öğretmen adayı sosyal medya için (ÖA-124), *"Sosyal medya hipnoz gibidir. İnsanlara kendi düşüncelerini aşılar ve istediğini söyletir.";* diğer öğretmen adayı (ÖA-209), "*Sosyal medya satılan bir oyuncak gibidir. Çünkü satılan bir oyuncak kimin elindeyse veya tekelinde ise o, oyuncağı istediği gibi oynar, oynatır ve oynatmakta!*"; bir diğer öğretmen adayı ise (ÖA-204), "*Sosyal medya siyaset gibidir. Çünkü kişilerin ve kurumların siyasi görüşlerini savunmak için haber yapılıyor. İnsanları etkilemek düşüncesi hakim"* şeklinde görüş bildirerek sosyal medyayı; insanları etkileyen, yönlendiren, fikir empoze etmeye ve şekillendirmeye çalışan olarak algıladıkları anlaşılmaktadır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

İleten kategorisinde bir öğretmen adayı sosyal medyayı (ÖA-69),"S*osyal medya facebook gibidir/e benzer. Çünkü insanlar arasındaki en büyük iletişim aracıdır."* şeklinde açıklarken bir başka öğretmen adayı (ÖA-213), "S*osyal medya uçak gibidir. Çünkü söylenilen ve yapılan her şeyi hızlı yayar."*; bir diğer öğretmen adayı *"*S*osyal medya emir kulu gibidir. Çünkü sadece kendisine verileni istendiği gibi sunuyor."* ve yine başka bir öğretmen adayı ise (ÖA-165) *"*S*osyal medya kalp gibidir. Çünkü toplumda veya çevremizde yaşananları herkese ulaştırır."* şeklinde ifade etmiştir. Bu durumda "ileten" kategorisinde sosyal medya herhangi bir olayı, haberi diğer insanlara ileten niteliğinde olarak açıklanmıştır.

Kapsamlı kategorisinde bir öğretmen adayı sosyal medyayı (ÖA-36)*"Sosyal medya örümcek ağı gibidir. Çünkü sosyal medya birbiri ile bağlantılıdır."* şeklinde açıklarken bir başka öğretmen adayı(ÖA-50), *"Sosyal medya hayat gibidir. Çünkü insana her türlü durum ve olayı görme imkanı sağlar. İyi, kötü bütün insanların tüm yönlerini görmeyi sağlar.";* bir diğer öğretmen adayı (ÖA-172), *"Sosyal medya New York gibidir. Çünkü içinde her şeyi bulabilirsiniz.";* diğer öğretmen adayı ise (ÖA-85), *"Sosyal medya film gibidir. Çünküiçinde bir filmde olan, olabilecek her türlü aksiyon bulunabilmektedir."* şeklinde ifade etmiştir. Bu durumda sosyal medya içerisinde pek çok olay, durum ve kişi barındırması sebebiyle bu kategoride örümcek ağı, hayat, film vs. kapsamlı olan diğer olgulara benzetilmiştir.

En fazla metafor çeşidini bulunduran "iki uçlu" kategorisinde ise öğretmen adaylarının sosyal medyanın durumlara göre iki zıt özelliği barındırabildiğini ileri süren pek çok benzetme yer almıştır. Örneğin bir öğretmen adayı (ÖA-181), *"Sosyal medya ilaç gibidir. Çünkü dozunda kullanırsan iyi olursun, dozunda kullanmazsan ölürsün. En iyi ihtimal zehirlenirsin.";* diğer öğretmen adayı (ÖA-189), "*Sosyal medya hayat gibidir. Çünkü hayatımızda hem olumlu hem olumsuz olaylar var. Sosyal medya da hayatımızdan kesitler sunar.";* bir başka öğretmen adayı (ÖA-75), "*Sosyal medya melek ve şeytan gibidir. Çünkü içinde şeytanın bile aklına gelmeyen her türlü kötülük de olabilir, melek kadar iyilik yapmayı sağlayan etkinlikler olaylar, yardımlar vb. faydalı şeyler de olabilir.";* bir başka öğretmen adayı (ÖA-26), "S*osyal medya bıçak gibidir. Çünkü doğru tutarsan zararsızdır, elini kesmez. Ama yanlış tutarsan elini bir anda parçalayabilirsin.*"; bir başka öğretmen adayı (ÖA-74), "*Sosyal medya avokado gibidir. Çünkü avokado yemeden de yaşanabilir. Sosyal da benim hayatımda önemli bir yere sahip değil. Olmasa da olur.";* bir başka öğretmen adayı (ÖA-73), "*Sosyal medya vitamin gibidir. Çünkü insan için yararlı olan bilgileri verdiği gibi fazla alındığında, aşırıya kaçıldığında olumsuz etkiye yol açar.";* bir başka öğretmen adayı (ÖA-79), "*Sosyal medya apandist gibidir. Çünkü olsa da olur olmasa da. Nasıl ki apandistimiz patladığında yaşamaya devam ediyorsak sosyal medyasız da yaşayabiliriz.";* bir başka öğretmen adayı (ÖA-236), "*Sosyal medya haşhaş gibidir. Çünkü doğru kullanırsan yararlı, yanlış kullanırsan zararlıdır."*; bir başka öğretmen adayı ise (ÖA-37), "*Sosyal medya arı gibidir. Çünkü ısırdığında canımızı yaksa da faydalı yönleri de vardır."* şeklinde benzetmeler yapmıştır.

Buluşma yeri kategorisinde bir öğretmen adayı sosyal medyayı (ÖA-12) *"Sosyal medya hayat gibidir. Çünkü birçok insanın vakit geçirdiği bir yerdir."* şeklinde açıklarken diğeri ise (ÖA-231) "*Sosyal medya kahvehane gibidir. Çünkü akşam ya da gündüz mahallenin erkekleri kahvehanede buluşur. Sohbet eder ve zaman geçirirler. Bu yönüyle sosyal medya da kahvehaneye benzer."* şeklinde açıklayarak sosyal medyayı daha çok insanların bir arada bulunduğu, vakit geçirdiği bir alan olarak betimlemektedir.

Sanal ortam kategorisinde sadece bir öğretmen adayı sosyal medyayı (ÖA-228) sanal bir ortama benzeterek *"Sosyal medya ütopya gibidir. Çünkü sosyal medya nesnel olarak var olmayan ancak varlığını kabul edip içinde yaşadığımız bir dünyadır."* şeklinde açıklamıştır. Yine farklı bir kategori olan değişen kategorisinde de sadece bir öğretmen adayının (ÖA-43) benzetmede bulunduğu ve bu durumu *"Sosyal medya hayat gibidir. Çünkü her an ne olacağı belli olmaz. Değişimlere açık, doğruları ve yanlışları olan bir şeydir. Gelişen ve sürekli değişen bir mekanizmadır.*" şeklinde açıkladığı görülmüştür.

Son olarak hangi kelime ile kategorileştirileceği bilinemeyen ancak metafor ve gerekçesi uygun olan bir benzetme ise yine farklı bir öğretmen adayı (ÖA-21) tarafından yapılmıştır. Bu kategori diğer adı altında olup *"Sosyal medya boş sayfa gibidir. Çünkü ne yazacağını bilemezsin"* şekilde açıklanmıştır. Bu ifade ile sosyal medyanın her şey ile doldurulabileceğini ancak ne yazılacağı hakkında tereddüt edilebildiği veya başka bir bakış açısıyla bakıldığında, yazılabilecek o kadar çok şeyin olduğu ve ne yazılacağı konusunda şaşkınlık yaşanabildiği anlaşılmaktadır.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 6. "Sosyal medya" kavramına yönelik geliştirilen olumsuz metaforlar ve bu metaforların frekans ve yüzde dağılımları

Ana kategori	Kategori	Kod	Metaforu Temsil Eden Öğretmen Adayı	
			f	%
Olumsuz	**1. BAĞLAYICI**	**1** Uyuşturucu	9	8.18
	UYUŞTURUCU (9)	**2** Sigara	7	6.36
	SİGARA (7)	**3** Bataklık	6	5.45
	BATAKLIK (6)	**4** Örümcek	4	3.64
	BAĞIMLILIK (4)	**5** Bağımlılık	4	3.64
	KARADELİK (3)	**6** Dedikodu kazanı	4	3.64
	ALKOL (3)	**7** Zaman kaybı	3	2.73
	VİRÜS (2)	**8** Alkol	3	2.73
	AŞK (2)	**9** Çöp konteynırı	3	2.73
	MİKROP YUVASI (1)	**10** Kara delik	3	2.73
	YASA	**11** Kadın	3	2.73
	PRANGA	**12** Karanlık kuyu	2	1.82
	MIKNATIS	**13** Mikrop yuvası	2	1.82
	KENE	**14** Aşk	2	1.82
	KAN EMİCİ	**15** Virüs	2	1.82
	EROİN	**16** Dedikodu mekanı	1	0.91
	NİKOTİN	**17** Hakaret	1	0.91
	TUTKAL	**18** Boşluk	1	0.91
	KANSER	**19** Mıknatıs	1	0.91
	ELEKTRİKLİ SÜPÜRGE	**20** Kötü	1	0.91
	BULAŞICI HASTALIK	**21** İkinci bir hayat	1	0.91
	2. HAPSEDİCİ	**22** Korkusuz korkak	1	0.91
	ÖRÜMCEK (4)	**23** Boş bilgi ansiklopedisi	1	0.91
	KARANLIK KUYU (1)	**24** Yasa	1	0.91
	KAFES	**25** İtici	1	0.91
	GİRDAP	**26** Su	1	0.91
	BOŞLUK	**27** Uygunsuz	1	0.91
	SARMAŞIK	**28** Facebook	1	0.91
	ASOSYAL HAYAT	**29** İki yüzlü insan	1	0.91
	3. İNCİTİCİ ORTAM	**30** Bulaşıcı hastalık	1	0.91
	KARANLIK KUYU (1)	**31** Canlı bomba	1	0.91
	HAKARET	**32** Şeytan	1	0.91
	4. GEREKSİZ	**33** Hastalık	1	0.91
	ÇÖP KONTEYNIRI (3)	**34** Şekerli bir zehir	1	0.91
	ZAMAN KAYBI (3)	**35** Çürük bilgi	1	0.91
	BOŞ BİLGİ ANSİKLOPEDİSİ	**36** Maske	1	0.91
	BİLGİ ÇÖPLÜĞÜDÜR	**37** Fitne	1	0.91
	GEREKSİZ	**38** Algı diktatörü	1	0.91
	HIRSIZ	**39** Yürek yemiş insanlar ortamı	1	0.91
	ZURNANIN SON DELİĞİ	**40** Köpek	1	0.91
	ÇÜRÜK BİLGİ	**41** Hırsız	1	0.91
	5. DEDİKODU ORTAMI	**42** Bilgi çöplüğü	1	0.91
	DEDİKODU KAZANI (4)	**43** Kafes	1	0.91
	KADIN (3)	**44** Girdap	1	0.91
	MAHALLE	**45** Göz yanılması	1	0.91
	DEDİKODU MEKANI	**46** Elektrikli süpürge	1	0.91
	6. YAŞAMI OLUMSUZ ETKİLEYEN	**47** Bukalemun	1	0.91
	İKİNCİ BİR HAYAT	**48** Çikolata	1	0.91
	FARKLI BİR DÜNYA	**49** Bakteri	1	0.91
	KÖTÜ	**50** Pranga	1	0.91
	FİTNE	**51** Zurnanın son deliği	1	0.91
	DÜŞMAN	**52** Nikotin	1	0.91
	ÇİKOLATA	**53** Duvar	1	0.91

 Copyright © International Conference on New Horizons in Education Conference (INTE)

	ŞEKERLİ BİR ZEHİR	**54** Gereksiz	1	0.91
	ELMA KURDU	**55** Yalancı çoban	1	0.91
	ŞEYTAN	**56** Kapitalizm	1	0.91
	BAKTERİ	**57** Düşman	1	0.91
	UYGUNSUZ	**58** Asosyal hayat	1	0.91
	HASTALIK	**59** Arap saçı	1	0.91
Olumsuz	FACEBOOK	**60** Kanser	1	0.91
	DUVAR	**61** Kene	1	0.91
	SU	**62** Kan emici	1	0.91
	7. DEĞİŞKENLİK SAĞLAYAN	**63** Elma kurdu	1	0.91
	KÖPEK	**64** Farklı bir dünya	1	0.91
	MASKE	**65** Sarmaşık	1	0.91
	GÖZ YANILMASI	**66** Mahalle	1	0.91
	YÜREK YEMİŞ İNSANLAR ORTAMI	**67** Eroin	1	0.91
	KORKUSUZ KORKAK	**68**Tutkal	1	0.91
	İKİ YÜZLÜ İNSANLAR			
	ARAPSAÇI			
	8. ALGI YÖNLENDİRİCİ			
	ALGI DİKTATÖRÜ			
	CANLI BOMBA			
	YALANCI ÇOBAN			
	9. TARAFLI			
	MİKROP YUVASI (1)			
	KAPİTALİZM			
	10. İTİCİ			
	İTİCİ			
	11. GÜVENİLİR OLMAYAN			
	BUKALEMUN			
Toplam	11	68	110	100

Tablo 6'ya bakıldığında sosyal medya kavramına ilişkin 68 olumsuz metafor geliştirildiği görülmektedir. Bu metaforlar arasında sıklıkla bahsedilenler uyuşturucu (f=9 / %8,18), sigara (f=7 / %6,36), bataklık (f=6 / %5,45), örümcek-bağımlılık-dedikodu kazanı (f=4/ %3,64), zaman kaybı-alkol-çöp konteynırı-karadelik-kadın (f=3 / %2,73), karanlık kuyu-mikrop yuvası-aşk- virüs (f=2 / %1,82) metaforlarıdır.

Genel olarak ise metaforların bağlayıcı, hapsedici, incitici ortam, gereksiz, dedikodu ortamı, yaşamı olumsuz etkileyen, değişkenlik sağlayan, algı yönlendirici, taraflı, itici, güvenilir olmayan olmak üzere 11 farklı kategori altında toplandığı görülmektedir. Ayrıca yine bu tabloda da birden çok kez belirtilen bazı metaforlar gerekçelerinin farklılıkları sebebiyle farklı kategorilerde yer almaktadır. Bu metaforlar karanlık kuyu ve mikrop yuvasıdır. Öğretmen adayları tarafından toplam 2 kez belirtilen "karanlık kuyu" metaforunun belirtilen gerekçelerin farklılığı itibariyle farklı kategoriler altında (bağlayıcı kategorisi-1 ve incitici ortam kategorisi-1 adet olmak üzere) yer aldığı görülmektedir. Aynı sebeple mikrop yuvası metaforunun hem bağlayıcı (1) hem de taraflı (1) kategorilerinde yer aldığı görülmektedir.

Tabloda yine birden çok kez belirtilen ve gerekçeleri benzer olması sebebiyle sadece birer kategoride yer alan metaforlar bulunmaktadır. Bu metaforlar uyuşturucu, sigara, bataklık, bağımlılık, karadelik, alkol, virüs, aşk (bağlayıcı kategorisindeler), örümcek (hapsedici kategorisinde), çöp konteynırı ile zaman kaybı (gereksiz kategorisindeler) ve dedikodu kazanı ile kadındır (dedikodu ortamı kategorisindeler). Ayrıca bu tabloda en fazla metafor çeşidinin 20 metafor ile "bağlayıcı" kategorisinde toplandığı görülmektedir.

Sosyal medyayı olumsuz ana kategorisinin bağlayıcı kategorisinde öğretmen adaylarından birisi (ÖA-95), *"Sosyal medya uyuşturucu gibidir. Çünkü uyuşturucu alan bir kişinin onu bırakması çok zor olur. Sosyal medyada da bu durum geçerlidir, çok fazla bağımlılık yapar.";* diğer öğretmen adayı (ÖA-132), "*Sosyal medya sigara gibidir. Çünkü bağımlılığa neden oluyor ve bırakması çok zor, insan hayatını da olumsuz etkiliyor.*"; bir diğer öğretmen adayı (ÖA-197), "*Sosyal medya bataklık gibidir. Çünkü insan bir kez sosyal medya bataklığına dalınca bir daha içinden çıkamaz. Çektikçe çeker seni, kurtulamazsın. Bağımlılık yapar.*"; diğer öğretmen adayı (ÖA-102), "*Sosyal medya bağımlılık gibidir. Çünkü sürekli bakma merakı uyandırır.";* diğer öğretmen adayı (ÖA-11), "*Sosyal medya kara delik gibidir. Çünkü bir defa girdiğinde çıkmak imkansızdır.";* diğer öğretmen adayı (ÖA-2), "*Sosyal medya alkol gibidir. Çünkü bağımlılık yapar ve bırakmak çok zordur.";* diğer öğretmen adayı (ÖA-164), "*Sosyal medya virüs gibidir. Çünkü bağımlılık yapar. Sürekli girmek ister insan.";* diğer

 Copyright © International Conference on New Horizons in Education Conference (INTE)

öğretmen adayı (ÖA-139), "*Sosyal medya aşk gibidir. Çünkü bir kez bağlanınca, kurtulamazsın.";* diğer öğretmen adayı ise (ÖA-148), "*Sosyal medya mikrop yuvası gibidir. Çünkü bulaşınca kolay kolay üzerinden atılması zordur."* şeklinde ifade etmiştir. Bu durumda sosyal medya kavramının "bağlayıcı" kategorisinde daha çok bağımlılık ve alışkanlık yaratan, bir süre sonra istenmese dahi yapmış olduğu bağımlılık sebebiyle kurtulmanın kolay olamadığı bir olgu olarak belirtildiği anlaşılmaktadır.

Hapsedici kategorisinde ise sosyal medyayı öğretmen adaylarından birisi (ÖA-156), "*Sosyal medya örümcek gibidir. Çünkü girdiği her yeri, benliğimizi, yaşamımızı bir ağ gibi sarmaktadır.";* diğer öğretmen adayı (ÖA-148), "*Sosyal medya karanlık kuyu gibidir. Çünkü sosyal medyaya kapılan insanlar çevresini unutur ve sadece sosyal medyaya dalar.";* diğer öğretmen adayı ise (ÖA-46), "*Sosyal medya boşluk gibidir. Çünkü bir içine düştünüz mü kaybolursunuz."* şeklinde açıklamıştır. Bu durumda sosyal medya kavramının bu kategoride daha çok kişileri kavrayan, onları saran, sarmalayan, hapseden niteliğinde bir olgu olarak belirtildiği anlaşılmaktadır.

İncitici ortam kategorisine bakıldığında sosyal medya hakkında öğretmen adaylarından birisinin (ÖA-211), "*Sosyal medya karanlık kuyu gibidir. Çünkü attığın her taşın kimi acıtacağı veya kimi üzeceğini bilemezsin."* ve bir başka öğretmen adayının ise (ÖA-45), *"Sosyal medya hakaret gibidir. Çünkü insanların birbirine hakaret ettiği, düşmanlıklarını pekiştirdiği bir ortam haline gelmiş durumda. Geniş bir hakaret sahası olarak görüyorum"* şeklinde görüş bildirdiği görülmektedir. Bu durumda sosyal medya kavramının bu kategoride genel olarak insanların birbirini yaptıkları paylaşımlar ile incittiği, üzdüğü, düşmanlıklar sergileyebildiği bir alan olarak tasvir edildiği görülmektedir.

Gereksiz kategorisine bakıldığında sosyal medya hakkında öğretmen adaylarından birisinin (ÖA-240), *"Sosyal medya çöp konteynırı gibidir. Çünkü bilgi kirliliğinden başka hiçbir işe yaramıyor."*; diğer öğretmen adayının ise (ÖA-84), "*Sosyal medya zaman kaybı gibidir. Çünkü insanlar bunu olumlu, iyi şeyler için kullanacağına, oldukça boş ve saçma işler için kullandığı için gereksiz ve zaman kaybı gibi düşünüyorum.*" şeklinde açıkladıkları görülmektedir. Bu durumda sosyal medya kavramının bu kategoride öğretmen adayları tarafından faydasız, gereksiz, zaman kaybettiren bir olgu olarak ifade edildiği görülmektedir.

Dedikodu ortamı kategorisine bakıldığında sosyal medya hakkında öğretmen adaylarından birisinin (ÖA-199), *"Sosyal medya dedikodu kazanı gibidir. Çünkü kim, nerede, ne yapmış hepsini belirtir. Kimi sorsak bulur."* ve diğer öğretmen adayının (ÖA-109), *"Sosyal medya kadın gibidir. Çünkü sürekli bir şeyler yaymaya çalışır."* şeklinde açıkladıkları görülmektedir. Bu durumda sosyal medya kavramının bu kategoride öğretmen adayları tarafından dedikoduya imkan sağlayan, haberleri yayılmasını sağlayan bir ortam olarak belirtildiği anlaşılmaktadır.

Yaşamı olumsuz etkileyen kategorisine bakıldığında sosyal medya hakkında öğretmen adaylarından birisinin (ÖA-157), "*Sosyal medya ikinci bir hayat gibidir. Çünkü normal yaşama devam ederken aklımız ikinci hayat alanımızda kalır ve sosyal yaşamımız olumsuz etkilenebilir. Sosyal medya da bir nevi hayatımız gibidir.";* diğer bir öğretmen adayının (ÖA-38), "*Sosyal medya farklı bir dünya gibidir. Çünkü insanlar asosyal oluyor sosyal medya içerisinde.";* diğer öğretmen adayının *(*ÖA-68*), "Sosyal medya uygunsuz gibidir. Çünkü kişinin mahremiyetini teşhir eden bir yapıya sahip olup özel hayatı olumsuz etkiler."* ve bir başka öğretmen adayının ise (ÖA-17), "*Sosyal medya hastalık gibidir. Çünkü insanları çözümü olmayan hastalıklara götürüyor."* şeklinde açıkladıkları görülmektedir. Bu durumda sosyal medya kavramının bu kategoride öğretmen adayları tarafından insanların hayatını olumsuz etkileyen, çevreleriyle iletişimlerine engel olabilen ya da sosyal hayata ket vurabilen bir olgu olarak belirtildiği anlaşılmaktadır.

Değişkenlik sağlayan kategorisinde sosyal medya hakkında öğretmen adaylarından birisinin (ÖA-117), "*Sosyal medya köpek gibidir. Çünkü kim önüne kemik atar, beslerse ona hizmet eder.";* bir başka öğretmen adayının (ÖA-130), "*Sosyal medya göz yanılması gibidir. Çünkü hiçbir yayın gerçeği yansıtmıyor. Her yayın kendi inanç ve görüşüne göre yayın yapmaktadır.";* diğer bir öğretmen adayının (ÖA-116), "*Sosyal medya yürek yemiş insanlar ortamı gibidir. Çünkü insanlar gerçekte olamadıkları kadar cesur ve daha insancıl oluveriyorlar. Yalan dünyalarında cesur takılıyorlar.";* bir başka öğretmen adayının ise (ÖA-212); *"Sosyal medya arap saçı gibidir. Çünkü sosyal medyada herkes kafasına göre yazar, paylaşır."* şeklinde görüş bildirdiği görülmektedir. Bu durumda sosyal medya kavramının bu kategoride kişilerin sosyal medyada değişebildiği, farklı özellik ve fikirler yansıttığı, gerçekte sahip olduklarından çok daha farklı davranışlarda bulunabildikleri bir ortam olduğu şeklinde açıklandığı anlaşılmaktadır.

Algı yönlendirici kategorisinde sosyal medya hakkında öğretmen adaylarından birisinin (ÖA-115), "*Sosyal medya algı diktatörü gibidir. Çünkü ülkede olan bir olayda, halkın büyük bir kısmının, yani edilgen kısmının algısını, devletine ya da ülkesine bakış açısını sosyal medya belirler.";* bir başka öğretmen adayının (ÖA-16),

 Copyright © International Conference on New Horizons in Education Conference (INTE)

"*Sosyal medya canlı bomba gibidir. Çünkü insanları olur olmadık, asıllı ya da asılsız doldurup gaza getirebiliyor."* ve bir diğer öğretmen adayının ise (ÖA-198), "*Sosyal medya yalancı çoban gibidir. Çünkü kuzuları kurt kaptı der, halkı kandırır, yönlendirir."* şeklinde görüş bildirdiği görülmektedir. Bu durumda sosyal medya kavramının bu kategoride aktif ve güçlü haldeki kitlelerin, pasif durumdaki diğer kitleleri "görüş" bakımından etkileyebildiği bir alan olarak açıkladığı anlaşılmaktadır.

Taraflı kategorisinde sosyal medya hakkında öğretmen adaylarından birisinin (ÖA-225), "*Sosyal medya mikrop yuvası gibidir. Çünkü tüm haberler çarpıtılır, taraflı davranır, belirli bir tarafa hizmet eder." ve* bir başka öğretmen adayının (ÖA- 136), "*Sosyal medya kapitalizm gibidir. Çünkü sosyal medya zenginlere hitap eder. Sosyal medya rant sağlayan zenginlere hitap eder."* şeklinde görüş bildirdiği görülmektedir. Bu durumda sosyal medya kavramının bu kategoride daha çok belirli bir taraf ya da gruba hitap eden, hizmet eden bir olgu olarak açıklandığı anlaşılmaktadır.

İtici kategorisinde sosyal medya hakkında öğretmen adaylarından birisinin (ÖA-82), *"Sosyal medya itici gibidir. Ben şahsen sosyal medya kullanmadığım için bana oldukça itici geliyor. Bu yüzden çok beğenmiyorum."* şeklindeki açıklamasıyla bu olgunun, kendisi kullanmadığı için ona uzaktan uzağa itici geldiğini belirttiği görülmektedir.

Son olarak güvenilir olmayan kategorisinde sosyal medya hakkında öğretmen adaylarından birisinin (ÖA-133), *"Sosyal medya bukalemun gibidir. Çünkü her renge girebilmektedir. Bir öyle bir böyle, bu yüzden inandırıcılığı azdır."* şeklindeki açıklamasıyla sosyal medyanın değişiklik göstererek inandırıcılığını kaybettiği ve dolayısıyla güvenilir olmadığını anlatmak istediği anlaşılmaktadır.

TARTIŞMA, SONUÇ VE ÖNERİLER:

Bu araştırmanın esas amacı, öğretmen adaylarının "sosyal medya" kavramına yönelik sahip oldukları algıları metaforlar aracılığıyla ortaya çıkarmaktır. Bu doğrultuda öğretmen adaylarından, "Sosyal medya…gibidir/-e benzer. Çünkü …" şeklinde yöneltilen cümlede boşlukları kendi fikirleri yönünde doldurmaları istenmiştir. Bunun sonucunda toplam 173 metafor üretilmiştir. Bu metaforlar, ağırlıklı olarak nötr (hem olumlu hem de olumsuz yönleri olan) şeklinde nitelendirilen benzetmelerden oluşmuştur. Ancak bunun yanı sıra olumsuz nitelendirilen metaforların da nötr metaforlara çok yakın bir değerde olduğu sonucuna ulaşılmıştır. Sonuç olarak bakıldığında metaforların 72 tanesi (%41,62) nötr, 68 tanesi (%39,31) olumsuz ve 33(%19,08) tanesi de olumlu yönleri olan benzetmelerdir. Bu durumda öğretmen adaylarının sosyal medyaya ilişkin algılarının az sayılabilecek değerde olumlu yönde olduğu, daha çok nötr ve olumsuz bir yargıya sahip oldukları görülmektedir. Ayrıca sonuçlar arasında öğretmen adaylarının verdiği cevaplar doğrultusunda sosyal medya kavramı ile özellikle facebook, twitter ve instagram sayfalarını algıladıkları görülmektedir.

Sosyal medya konusu tarih itibariyle çok eski zamana dayanmaması sebebiyle, bu konuda yapılan araştırmaların sayıca sık olduğu söylenemez. Eğitim ile sosyal medya ilişkisi konusunda ise sınırlı sayıda yapılmış olup (Onyebuchi, 2009; Genç, 2010, Koç ve Karabatak, 2011; Yıldırım ve Özmen, 2011, Pollara ve Zhu, 2011; Ekici ve Kıyıcı, 2012; Lepi, 2012; Yaros, 2012; Toğay ve ark., 2013; Kilis, Rapp ve Gülbahar, 2014; Öztürk ve Talas, 2015; Gülbahar, Kalelioğlu ve Madran, t.y.) özellikle de sosyal medya ile eğitimin esas temsilcisi niteliğindeki öğretmen veya öğretmen adayları üzerinde bu konuda literatürde yok denilebilecek kadar az sayıda araştırmalar yapılmıştır (Lepi, 2012; Kilis, Rapp ve Gülbahar, 2014; Aydın ve Güleli, 2016; Çakmak, Bulut ve Taşkıran, 2016; Keçe, Ataç, Polat ve Poyraz, 2016).

Lepi (2012) öğretmenlerin sosyal medyayı eğitime entegre edebildiği 25 yoldan bahsetmektedir. Ona göre, neredeyse tüm sosyal ağlar eğitimde son derece önemli rol oynayabilmektedir. Çalışmada istatistiklere göre tüm fakültelerin 2/3'ünün ders süresince sosyal medya kullanmakta oldukları, 20 yıldır öğretim yapan fakültelerdeki öğretmenlerin bile diğer öğretmenler gibi sosyal medya sitelerinin farkında oldukları ve fakültelerdeki öğretmenlerin 90%'ının sosyal medyayı sınıflarında ya da mesleki kariyerleri için kullandıklarından bahsedilmektedir. Ayrıca çalışmada fakültelerde sosyal medyanın derste ve öğrencilerin ev ödevi için kullanımının istatistiği ile sosyal medyanın derste nasıl kullanılabildiği hakkında bilgiler sunulmaktadır. Bunun yanı sıra çalışmada fakültelerin sosyal medya kullanımının kişisel ve mesleki olarak hangi sitelerde nasıl yoğunlaştığını belirten istatistiksel bilgilere de yer verilmektedir.

Kilis, Rapp ve Gülbahar (2014) çalışmalarında Türkiye ve Almanya'da yükseköğretim düzeyindeki eğitmenlerin sosyal medyaya karşı algısını belirlemek ve bu şekilde iki ülke arasındaki kültürel farklılıkları ortaya çıkarmayı amaçlamıştır. Çalışmada eğitmenlerin sosyal medyanın eğitim odaklı potansiyelinin farkında olduğu ancak yeterli seviyede bilinçli olmadıkları, bazı eğitmenlerin eğitimle sosyal medya araçlarının bütünleştirilmesinde sorun yaşadıkları sonucuna ulaşılmıştır. Ayrıca çalışmada Türkler'in, bu sorunların genel olarak mevcut

altyapının yetersizliği ve eğitsel rehberlik edici kılavuzların eksikliğinden kaynaklandığını belirttiği görülmüştür. Almanların çoğunun konu hakkında pozitif görüşe sahip olduğu sonucuna ulaşılmıştır. Genel olarak ise her iki ülkede de eğitim kurumlarının bir strateji ya da plana sahip olmamasının büyük bir sorun olduğu görülmüştür. Ayrıca aynı çalışmada, kurumların eğitimde sosyal medya araçlarının kullanımına yönelik eğitmenleri teşvik edici herhangi bir politikası ya da stratejisi olmadığı sonucuna varılmıştır.

Aydın ve Güleli (2016) çalışmalarında günümüzün en fazla ziyaret edilen sosyal medya araçlarından birinin Facebook olduğunu ileri sürerek, bu ağın ülkemizde de son derece yaygın bir kullanıcı kitlesine sahip olduğunu ve her kesimden ve yaştan insanın uğrak yeri olduğunu ifade etmektedir. Ayrıca insanların Facebook'ta fazlaca zaman geçirdiği ve diğer insanlarla sanal bir etkileşim içine girdiği, her gün pek çok insanın pek çok içerik paylaştığından bahsetmektedir. Çalışmada Sosyal Bilgiler öğretmen adaylarının alan bilgisi, meslek bilgisi ve genel kültür temelinde facebooktaki paylaşımlarının incelenmesi amaçlanmıştır. Çalışma nitel olup katılımcı grubunu Çanakkale On Sekiz Mart Üniversitesi Eğitim Fakültesi Sosyal Bilgiler Eğitimi lisans programının 3. ve 4. sınıflarında okuyan on sekiz öğretmen adayı oluşturmaktadır. Verilerin toplanmasında araştırmacılar tarafından geliştirilen "Facebook Paylaşım Sınıflandırma" formu kullanılmış ve öğrencilerle 4-5 kişilik gruplar halinde odak grup görüşmeleri yapılmıştır. Çalışma sonuçlarının ise henüz ulaşıma açık halde olmadığı görülmektedir.

Çakmak, Bulut ve Taşkıran (2016) sözlü bildiri niteliğindeki çalışmalarında sosyal bilgiler öğretmen adaylarının sosyal medya kullanım durumları ile kültürlerarası duyarlılıkları arasındaki ilişkiyi incelemeyi amaçlamıştır. Çalışma, Fırat Üniversitesi ve Muğla Sıtkı Koçman Üniversitesi Eğitim Fakültesi Sosyal Bilgiler öğretmen adaylarından 2016 bahar döneminde okuyan toplam 320 katılımcıya ait veri üzerinden yürütülmüştür. Çalışma sonuçlarının ise henüz ulaşıma açık halde olmadığı görülmektedir.

Keçe ve arkadaşları (2016) youtube, facebook, twitter ve instagram gibi video ve sosyal paylaşım sitelerine yönelik öğretmen görüş ve düşüncelerini belirlemeyi amaçladıkları nitel çalışmalarında, Isparta ve Konya ilinde görev yapan fen bilgisi ve sosyal bilgiler branşlarından olmak üzere toplam 44 öğretmen yer almaktadır. Öğretmenlerin görüşleri doğrultusunda sosyal medya kullanımına ilişkin "pasif kullanıcıyım" şeklinde cevap veren öğretmenlerin sayısının daha fazla olduğu, bunun nedeni olarak da zaman kaybı olduğunu düşünen öğretmen sayısının oldukça fazla olduğu sonucuna ulaşılmıştır. Öğretmenlerin video ve sosyal paylaşım sitelerinin kullanım amaçlarına ilişkin soruya "eğitim ve bilgi amaçlı kullanıyorum" şeklinde cevap veren öğretmenlerin daha fazla olduğu, sosyal medyanın toplumsal hayata olumlu ve olumsuz etkileri sorulduğunda ise olumlu cevabı veren öğretmen sayısının daha fazla olduğu sonucuna ulaşılmıştır. Sonuç olarak bu çalışmada teknolojinin hayatın ayrılmaz bir parçası olması ve hızla gelişmesi sebepleriyle öğretmenlerin teknolojiye ilişkin tutumlarında olumlu yönde değişikliklerin olduğunun söylenebileceği ve öğretimin daha etkili olması için sosyal paylaşım uygulamalarının gerekli olduğuna inandıkları belirlenmiştir. Çalışmada ayrıca Facebook'un dünya çapında en yaygın olan sosyal ağ olması sebebiyle, eğitim ve öğretim ortamı olarak da çoğunlukla Facebook'un tercih edildiği ileri sürülmektedir.

Bu çalışmada ise sosyal medya hakkında öğretmen adaylarının daha çok nötr ve olumsuz bir algıya sahip oldukları ve bunun yanı sıra çalışmaya katılan tüm öğretmen adaylarının sosyal medyayı herhangi bir varlığa, olguya ya da duruma benzetebilecek kadar sosyal medyadan haberdar oldukları sonucuna ulaşılmıştır. Bu durum öğretmen adaylarının algılarının olumlu yönde değişmesine yol açabilecek şekilde sosyal medya ile eğitim arasında bir ilişki kurulması ve sosyal medyanın eğitim alanında daha etkin ve verimli bir şekilde kullanılması düşüncesini akla getirmektedir. Bu şekilde hem öğretmenlerin hem de öğrencilerin daha verimli çalışabileceği, birbirleri ile etkileşimde bulunabilecekleri ve öğrenciler için çoklu zeka unsurlarından olan hem sözel, hem görsel, hem işitsel, hem de sosyal yönden gelişmeyi destekleyebilecek ortamların da sağlanabileceği öngörülmektedir.

Öğretmenlerin video ve sosyal paylaşım sitelerine yönelik görüşlerini inceleyen çalışmada (Keçe ve ark., 2016) ise öğretmenlerin bu sitelere yönelik tutumlarının olumlu yönde olduğu ve ayrıca öğretmenlerin öğretimin daha etkili olması için sosyal paylaşım uygulamalarının gerekli olduğuna inandıkları belirlenmiştir. Şahin (2014) de çalışmasında bu çalışmanın öngördüğü amaca uygun bir amaçla, facebook ile eğitim amaçlı kitap paylaşımları, uygulama ve ödevlerin paylaşımı ile gruplar ve kulüpler halinde tartışma ortamları oluşturularak öğrencilerin hem öğretmenleri hem de birbirleri ile iletişimi sağlanabileceğinden bahsedilmektedir. Ekici ve Kıyıcı'nın (2012) çalışmalarının sonucunun da bu durumu desteklediği görülmektedir. Çalışmada katılımcılardan deney ve kontrol grupları olmak üzere iki grup oluşturularak "Öğretim ilke ve Yöntemleri" dersine yönelik geliştirilen facebook uygulamasını deney grubu kullanırken, kontrol grubunun ise bu dersi geleneksel yöntemle işlemesi sağlanmıştır. Araştırmacılar tarafından geliştirilen başarı testi aracılığıyla ölçümler gerçekleştirilmiş, uygulama 4

 Copyright © International Conference on New Horizons in Education Conference (INTE)

hafta sürmüş ve sonuçta sosyal ağ tabanlı uygulamayı kullanan deney grubu öğrencilerinin, geleneksel yöntemli öğrenim gören kontrol grubu öğrencilerine göre akademik olarak daha başarılı oldukları sonucuna ulaşılmıştır. Yıldırım ve Özmen (2011) video paylaşım sitelerinin eğitsel amaçla kullanımı konulu çalışmalarında, bilgi ve iletişim amaçlı kullanılan videoların kalıcı öğrenme sağlayan ve öğrencilere zengin bir öğrenme ortamı sunan teknolojik araçlar olduğu, ayrıca karmaşık bilgilerin zihinde canlandırılması ve kavranmasının yanı sıra öğrencilerin ilgisini çekme ve motivasyonunu artırma konusunda da pozitif etkilerinin bulunduğunu belirtmektedir. Ayrıca çalışmada günümüzde, videolara internet üzerinden hızlı bir şekilde erişilebildiği ve videoların paylaşımının kolay bir şekilde gerçekleştirilebildiği ifade edilmektedir. Bunun yanı sıra mobil teknolojilerin de hızlı gelişimiyle videolara istenilen zamanda ve istenilen yerden erişimin gerçekleştirilebildiği ve video paylaşımı yapılabildiği belirtilmektedir. Çalışmada youtube ve dailymotion gibi popüler video paylaşım sitelerinin eğitsel bağlamda kullanımlarına ilişkin yapılan araştırmalara ve önerilere yer verilmiştir.

Görüldüğü gibi gerek bu çalışma, gerekse yapılmış olan başka araştırmalarda araştırmalarda sosyal medya kapsamında yer alan paylaşım sitelerinin insanlar üzerinde etkililiği ve eğitim ile ilişkilendirilmesinin faydalı olabileceğinden bahsedilerek bu durumun önemi vurgulanmaktadır. Bu çalışmada öğretmen adaylarının birtakım olumlu, olumsuz ya da nötr algıların yanı sıra tüm öğretmen adaylarının sosyal medya konusuna hakim olduğu ve fikir sahibi olduğu görülmektedir. Dolayısıyla her eğitsel uygulamada olduğu gibi sosyal medya ile eğitim entegrasyonu kapsamında gerçekleşebilmesi söz konusu uygulamada da temel unsurlardan biri olan öğretmenlerin, bu konuda farkındalık sahibi olmalarının önemli adımlardan biri olabileceği söylenebilir.

Her olumlu, faydalı değişimin beraberinde ortama getirebileceği riskleri de göz önünde bulundurmak önemlidir elbette. Bu konuda Oswald (2016) teknolojinin eğitime entegre edilmesi durumunun faydasını vurgulamanın yanı sıra, yeni fırsatların yeni tehlikeler doğurabildiğini de ifade etmektedir. Bunu açıklarken Oswald (2016), öğretmenlerin öğrencilerin dijital medya ile çok fazla etkileşirken, siber zorbalık riskinin arttığını ileri sürdüklerini ifade etmektedir. Siber zorbalığı ise ister belge ve e-mail, ister web site ve sosyal medya içinde olsun, elektronik olarak yer alan tüm zorbalıkları kapsayan geniş bir tanıma sahip olarak açıklamaktadır. Hatta doğrudan zorbalık bir yana, siber zorbalığın sahte sosyal medya profilleri, rızai olmayan foto paylaşımı ve çevrimiçi dedikodu biçimi alabileceğinden de bahsetmektedir. Bu nedenle her yenilikte olduğu gibi bu konuda da ilgili kurumların ancak sosyal medya ile eğitim entegrasyonunu, bu gibi tehlikelerden arınık hale getirerek uygulamaya hazır etmesi sonucunda amaçlanan verimin tümüyle sağlanabileceği söylenebilir.

ÖNERİLER

Bu konuda öneriler şöyle sıralanabilir:

- Milli Eğitim Bakanlı tarafından sosyal medyanın eğitime entegrasyonu sağlanarak öğretim sürecinde işe koşulması amacıyla, oluşabilecek risk faktörleri de göz önünde bulundurularak gerekli planlamalar yapılmalı.
- Öğretmenlerin sosyal medyayı öğretim sürecine dahil etmeleri amacıyla bilgilendirilmesini sağlayan hizmet içi eğitimler düzenlenmeli.
- Okullarda her öğrencinin yararlanabileceği şekilde bilgisayar ve internet erişimi sağlanmalıdır.
- Evde öğrencilerin bu sosyal ağlara veli gözetiminde erişebilmelerini sağlamak amacıyla velilerle işbirliği oluşturulmalı.

KAYNAKÇA

Ananda, R. (2015). 6 ways social media can change your classroom http://www.edudemic.com/twitter-college-lecture/ (22.02.2016)

Ankara Üniversitesi. (2016). Ankara üniversitesi (twitter hesabı). https://twitter.com/AnkaraUni?lang=tr (19.01.2016)

Aydın, F. (2010). Ortaöğretim öğrencilerinin coğrafya kavramına ilişkin sahip oldukları metaforlar. *Kuram ve Uygulamada Eğitim Bilimleri: Teori&Uygulama,* 10 (3), Yaz, ss.1293-1322.

Aydın, M. ve Güleli, R. (2016).*Sosyal Bilgiler Öğretmen Adaylarının Facebook Paylaşımlarının İncelenmesi.* 5. Uluslararası Sosyal Bilgiler Eğitimi Sempozyumu, 28-30 Nisan, Pamukkale Üniversitesi, Denizli.

Balcı, A. (1999). *Metaphorical Images of School: School Perceptions of Students, Teachers and Parents from four Selected Schools (in Ankara)*. (Unpublished doctoral dissertation). University of Middle East Technical/The Degree of Doctor of Educational Science, Ankara, 33.

Çakmak, Z., Bulut, B. ve Taşkıran, C. (2016). *Sosyal Bilgiler Öğretmen Adaylarının Sosyal Medya Kullanım Durumları İle Kültürlerarası Duyarlılıkları Arasındaki İlişkinin İncelenmesi.* 5.Uluslararası Sosyal Bilgiler Eğitimi Sempozyumu, 28-30 Nisan, Pamukkale Üniversitesi, Denizli.

Egitimpedia (2016). Sosyal medya sınıfımızı nasıl değiştirebilir? http://www.egitimpedia.com/sosyal-medya-sinifinizi-6-sekilde-degistirebilir/ (22.02.2016)

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Ekici, M. ve Kıyıcı, M. (2012). Sosyal ağların eğitim bağlamında kullanımı. *Uşak Üniversitesi Sosyal Bilimler Dergisi,* 5(2), 156-167.

Genç, Z. (2010). *Web 2.0 Yeniliklerinin Eğitimde Kullanımı: Bir Facebook Eğitim Uygulama Örneği*. Akademik Bilişim'10 - XII. Akademik Bilişim Konferansı, 10 - 12 Şubat, Muğla Üniversitesi, Muğla, ss. 237-242.

Gülbahar, Y., Kalelioğlu, F. ve Madran, O. (t..y.). *Sosyal ağların eğitim amaçlı kullanımı.*http://s3.amazonaws.com/academia.edu.documents/3471019/sosyal_aglarin_egitim_amacli_kullanimi.pdf?AWSAccessKeyId=AKIAJ56TQJRTWSMTNPEA&Expires=1466430386&Signature=CnP02CV8E2PeAkeumH9FRcuMZ8k%3D&response-content-disposition=inline%3B%20filename%3DSosyal_Aglarin_Egitim_Amacli_Kullanimi.pdf (21.05.2016)

Keçe, M., Ataç, H., Polat, E. ve Poyraz, A. (2016). *Video ve Sosyal Paylaşım Sitelerine Yönelik Öğretmen Görüşlerinin Belirlenmesi*. 5.Uluslararası Sosyal Bilgiler Eğitimi Sempozyumu, 28-30 Nisan, Pamukkale Üniversitesi, Denizli.

Kilis, S, Rapp, C. and Gülbahar, Y. (2014). Eğitimde sosyal medya kullanımına yönelik yükseköğretim düzeyindeki eğitmenlerin algısı: Türkiye-Almanya örneklemi. *Öğretim Teknolojileri & Öğretmen eğitimi Dergisi (JITTE),* 3(3), pp. 20-28.

Koç, M. ve Karabatak, M. (2011).*Sosyal Ağların Öğrenciler Üzerindeki Etkisinin Veri Madenciliği Kullanılarak İncelenmesi.* 5.Uluslararası Bilgisayar ve öğretim Teknolojileri Sempozyumu*,* 22-24 Eylül, Fırat Üniversitesi, Elazığ.

Lepi, K. (2012). 25 Ways teachers can integrate social media intoeducation. http://edudemic.com/2012/07/a-teachers-guide-to-social-media/ (12.05.2016).

Metropolitan State University of Denver. (2016). Facebook page of Metropolitan State University of Denver. https://www.facebook.com/install/unity.php?fb_source=search&ref=ts&fref=ts&app_id=357704261026079 (18.01.2016)

Miles, M. B. ve Huberman, A. M. (1994). An Expanded Sourcebook Qualitative Data Analysis. Thousand Oaks, California: Sage Publications.

Morgan, G. (1998). Yönetim ve Örgüt Teorilerinde Metafor (Çev. Gündüz Bulut). BZD Yayıncılık, İstanbul.

Onyebuchi, E. E. (2009). *Making sense of web 2.0 technology: Do European students use the social media applications for educational goals?* Master's Thesis in Communication Studies. http://essay.utwente.nl/59499/1/scriptie_E_Eze.pdf (11.05.2016)

Oswald, M. (2016). Play nice! How to promote digital inclusion and stop cyberbullying. http://www.edudemic.com/play-nice-promote-digital-inclusion-stop-cyberbullying/(25.05.2016)

Öztürk, M. F. ve Talas, M. (2015). Sosyal Medya ve Eğitim Etkileşimi. Zeitschriftfürdie Welt der Türken-Journal of World of Turks, 7(1):101-120.

Pollara, P. and Zhu, J. (2011). *Social Networking and Education: Using Facebook as an Edusocial Space.* Proceedings of Society for Information Technology & Teacher Education International Conference, pp. 3330-3338. Chesapeake, VA: AACE.

Saban, A. (2008a). İlköğretim birinci kademe öğretmen ve öğrencilerinin bilgi kavramına ilişkin sahip oldukları zihinsel imgeler. *İlköğretim Online.* 7(2), 421-455. http://dergipark.ulakbim.gov.tr/ilkonline/article/view/5000038255/5000037112 (18.02.2016)

Saban, A. (2008b). Okula ilişkin metaforlar. *Kuram ve Uygulamada Eğitim Yönetimi*, 55, 459- 496.

Sarıgül, Y. E. (2014). Sosyal medya nedir? http://www.sosyalpedia.com/sosyal-medya-nedir-1/ (06.04.2016)

Shuell, T. J. (1990). Teaching and learning as problem solving. *Theory into Practice,* 29 (2), 102–108.

Stribbell, H. (2014). Engaging your school community through social media.
http://www.edutopia.org/blog/engaging-school-community-social-media-howard-stribbell (22.01.2016)

Şahin, V. (2014). Sosyal ağların uzaktan eğitimde kullanımı.http://docplayer.biz.tr/5079873-Sosyal-aglarin-uzaktan-egitimde-kullanimi.html (13.05.2016)

TDK. (2016). Güncel Türkçe sözlük. http://www.tdk.gov.tr/index.php?option=com_gts&kelime=METAFOR adresinden (28.02.2016)

Toğay, A., Akdur, T. E., Yetişken, İ. C. ve Bilici, A. (2013). *Eğitim Süreçlerinde Sosyal Ağların Kullanımı: Bir MYO Deneyimi.* Akademik Bilişim Konferansı, 23-25 Ocak, Akdeniz Üniversitesi, Antalya. http://ab.org.tr/ab13/bildiri/302.pdf (12.5.2015)

TRT Okul-İngilizce Dersleri - 1 - (1). (2013) https://www.youtube.com/watch?v=MA_OJDyu_6I (10.04.2016)

Yaros, R. A. (2012). *Social Media in Education: Effects of Personalization and Interactivity on Engagement and Collaboration.* Social Media Usage and Impact. Noor Al-Deen, H. S. And Hendricks, J. A. (Ed.), UK: Lexington Books.

Yıldırım, A. ve Şimşek, H. (2003). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*. Tıpkı Basım 3. Baskı, Ankara: Seçkin Yayıncılık.

Yıldırım, N. ve Özmen, B. (2011). *Video Paylaşım Sitelerinin Eğitsel Amaçlı Kullanımı.* 5. Uluslar arası Bilgisayar ve Öğretim Teknolojileri Sempozyumu, 22-24 Eylül, Fırat Üniversitesi, Elazığ.

ÖĞRETMENLERİN HİZMETİÇİ EĞİTİM İHTİYACINA İLİŞKİN GÖRÜŞLERİNİN BAZI DEĞİŞKENLER AÇISINDAN İNCELENMESİ

Mehmet ŞAHİN
Karatekin Üniversitesi, Edebiyat Fakültesi Öğretim Üyesi
mehmetsahin_38@hotmail.com

ÖZET
Bu araştırma öğretmenlerin hizmetiçi eğitim ihtiyacına ilişkin görüşlerinin bazı değişkenler açısından incelenmesi amacıyla yapılan bir çalışmadır. Araştırmada betimsel tarama yöntemi kullanılmıştır. Bu araştırmanın çalışma grubunu Ankara (100), İstanbul (55), Çankırı (160) ve Muş (111) ilinde görev yapan toplam 426 öğretmen oluşturmaktadır. Ülkemizdeki büyük illeri temsil etmek üzere Ankara ve İstanbul, küçük illeri temsil etmek için Çankırı ve Muş seçilmiştir. Adı geçen illerdeki okul ve öğretmenlerin seçiminde random yöntemi kullanılmıştır. Araştırmanın verilerini toplamak amacıyla üç bölümden oluşan veri toplama aracı geliştirilmiştir. Birinci bölümünde kişisel bilgileri kapsayan, cinsiyet, çalıştığı kurum, hizmet süresi, çalıştığı okul, görevli olduğu yer ve katıldığı hizmet içi eğitim sayısı ile ilgili bilgiler yer almaktadır. İkinci bölümde ise hizmetiçi eğitim ihtiyacı ile ilgili yeterlilikleri kapsayan on soruluk beşli likertten oluşan ölçek ve üçüncü bölümde ise hizmetiçi eğitim ihtiyacı ile ilgili çoktan seçmeli 3 sorudan oluşan anket yer almaktadır.

Öğretmenlerin hizmetiçi eğitim ihtiyacı ile ilgili görüşleri cinsiyet, hizmet süresi ile katıldıkları hizmetiçi eğitim etkinlikleri sayısına göre yönünden anlamlı bir farklılık göstermemektedir. Ancak öğretmenlerin hizmetiçi eğitim etkinlikleri ile ilgili görüşleri çalıştığı kurumlara (özel veya resmi okul), görev yaptığı illere (küçük il veya büyük il) ve çalıştığı okula ((ilkokul, ortaokul ve lise) göre anlamlı farklılıklar göstermektedir. Özel okulda çalışan öğretmenler resmi okulda çalışan öğretmenlere göre, büyük illerde çalışan öğretmenler de küçük illerde çalışan öğretmenlere göre daha çok hizmetiçi eğitime ihtiyaç duydukları ortaya çıkmaktadır. Lisede çalışan öğretmenler ilkokulda çalışan öğretmenlere göre, ortaokulda çalışan öğretmelerde lise de çalışan öğretmenlere göre hizmetiçi eğitime daha çok ihtiyaç duydukları anlaşılmaktadır. Eğitim ihtiyacı belirleme sürecinde dikkate alınacak ölçütlerin başında öğretmenlerin eğitim ihtiyaçlarının belirlenmesi görüşü benimsenmiştir. Öğretmenler hizmetiçi eğitim ihtiyacının belirlenmesinde kendi isteklerinin dikkate alınmasını en önemli yöntem olarak görmektedirler. Öğretmenler görev değişikliğini hizmetiçi eğitim ihtiyacının en önemli gerekçesi olarak belirtmişlerdir.

Anahtar Sözcük: Hizmetiçi eğitim, eğitim ihtiyacı, eğitim planlaması

THE EXAMINATION OF SOME VARIATIONS RELATED TO THE CONCEPTION OF THE REQUIREMENT TO THE TEACHERS IN-SERVICE TRAINING

ABSTRACT
The main aim of this research was the examination of some variations related to the conception of the requirement to the teachers in-service training. Descriptive scanning was applied for the research. The working group involved 426 teachers in total, Ankara (100), Istanbul (55), Çankırı (160), and Muş (111). Ankara and Istanbul are representative of the big cities, Çankırı and Muş of the small cities. The random method was used to select sample. To collect data of the research a data collecting tool has been developed in three part. First of all, the first part consist in, personal information, gender, the institution of their works, period of the mission, the school works, place of duty and the number of the *in-service* training. Secondly, regarding the requirement to the in-service training including qualifications ten questions of the Likert scale and finally there is a survey including three questions.

The conception of the requirement to the teachers' in-service training, the gender, and the period of the mission and relative to the numbers of the activities in-service training they attend has not really changed. On the other hand, the conception of the teachers in-service training concerning the activities, reveal a significant differences due to their works institutions, works cities and their works schools. It emerge that, the private schools teachers compared to the officials schools teachers, and the teachers in a big cities compared to the teachers in a small cities needs more in-service training. Furthermore the high school teachers compared to the primary school teachers, and the middle school teachers compared to the high school teachers needs more in-service training. In the process of identifying the training needs, the adopted opinion about the most

 Copyright © International Conference on New Horizons in Education Conference (INTE)

important criterions are the identification of training needs of teachers. The teachers'requirement *in-service* training indicate that the major method is pay attention to their claim. At last they specify that the duty of change to the requirement in-service training is the most important justification.

Keywords: In-service training, training needs, educational planning.

GİRİŞ

Eğitim yaşam boyu devam eden bir süreç, hizmetiçi eğitim ise bu sürecin bir parçasıdır. Yaşam boyu eğitimin bir gereği olarak hizmet içi eğitim, çalışanlara mesleklerinde daha başarılı, üretici ve mutlu olmasını sağlayacak bilgi, beceri ve tutumlar kazandırır (Atay, Gider, Karadere ve Şenyüz, 2009). Hizmetiçi eğitim bireylere iş yaşamlarında gerekli mesleki bilgi, beceri ve tutumları kazandırmak amacıyla düzenlenen eğitimdir (Orhan ve Akkoyunlu, 1999). Başka bir ifadeyle hizmetiçi eğitim, çalışanların işindeki verimliliklerinin artırılması, bilgi, beceri ve tutumların geliştirilmesi için planlı olarak düzenlenen ve kurumların genel çalışma düzeni ve verimliliğini etkileyen bir eğitimdir. Hizmetiçi eğitim, çalışanların eğitim ihtiyacını karşılamak, kurumun saptanmış amaçlarına ulaşmak ve insan kaynaklarından beklenen verimliliği elde etmek üzere planlanır ve uygulanır (Öztürk ve Kılıç, 2014)

Hizmetiçi eğitim, bireyi değişime hazırlayıp örgütün sürekliliğini sağlar ve yeni bilgiler üreterek örgütün değişen koşullara uyumunu kolaylaştırır. Ayrıca hizmetiçi eğitim, insan kaynağının etkili kullanımına ve geliştirilmesine de katkıda bulunarak kurumlarda verimliliğin ve etkinliğin arttırılmasını, yapılan hizmette kalitenin yükselmesini sağlar (Özcan ve Bakioğlu, 2010). Hızmetıçı eğitim hizmet öncesi eğitimde bireyin kazanmış olduğu bilgi ve becerilerin, çalışma alanlarındaki değişme ve gelişmeler karşısında yetersiz kalmasının engellenmesi ve alan dışından kurumda çalışan personele mesleğin gerektirdiği bilgi ve becerilerin kazandırılması bakımından önemlidir. Hızmetıçı eğitim pek çok ülkede hizmetin kalitesini artırma stratejisi olarak ele alınmaktadır. Bu bağlamada hizmetiçi eğitim, belli bir kurumda çalışan bireyin işe başladığı ilk günden ayrılıncaya kadar geçen surede mesleğe uyum, meslekte ilerleme ve gelişme gereksinmelerini karşılayan her turlu etkinliklerdir (Vuran, Çolak ve Şürşür, 2003).

Dünyada yaşanan yoğun rekabet, bilgi ve teknolojideki hızlı gelişmeler, hizmet öncesi eğitimle alınan bilgilerin zamanla iş ortamında yetersiz kalmasını doğurmuştur (Öztürk ve Sancak, 2007). Değişim ve gelişime uyum sağlayabilecek meslek üyelerinin yetişmesi o alandaki eğitimin sürekliliği ile mümkündür. Çünkü bir meslek üyesi değişim ve gelişimleri mesleki çalışmalarına yansıtabileceği sürece mesleğinin varlığını devam ettirebilir (Atay, Gider, Karadere ve Şenyüz, 2009). Hizmetiçi eğitim, çalışanlara işiyle ilgili bilgi, beceri ve tutumlar kazandırdığı için mesleki eğitim niteliği de taşımaktadır (Öztürk ve Kılıç, 2014). Bir kurumda hizmetiçi eğitim etkinliklerinden beklenen faydaların sağlanabilmesi için hizmetiçi eğitimin planlı olarak yapılması zorunludur (Ozan ve Dikici, 2001). Hizmetiçi eğitimin planlanmasında, hizmetiçi eğitim gereksiniminin, ulaşılması istenen hedeflerin, içeriğin, insan kaynaklarının, öğretim yöntemlerinin, uygulama yen, zamanı ve suresinin ve değerlendirmenin nasıl yapılacağının belirlenmesi gerekir (Taymaz, 1981).

Hizmetiçi eğitim, aslında, meslek öncesindeki zorunlu eğitimin ötesinde yetişkinlere dönük, ürün ve hizmet üretiminde nitelik ve verimi artırıcı amaçları içerecek bir yapıda olmalıdır. Bu amaca yönelik olarak öğretim programları tasarımlanmalı, öğretmenlerin katılımına, çok yönlü etkileşime yer verecek biçimde etkinlikler uygulanmalıdır (Ersoy, 1996). Etkili ve verimli hizmetiçi eğitim belirli zamanlarda bir araya toplanan belirli sayıdaki bir öğretmen grubuna belirli uzmanlar tarafından belirli bilgilerin aktarılması ile sınırlı tutulamaz. Hizmetiçi eğitim etkinliklerinin mevcut merkeziyetçiliğin aksine yerel olarak düzenlenerek iş başında eğitimin uygulanabileceği ve öğretmenlerin mesleki gelişimlerinin daha yakından izlenebileceğini bir sistem geliştirilmelidir (Akar, 2006).

Bilindiği gibi, bir eğitim sisteminin en önemli öğesi öğretmendir. Eğitim sisteminin başarısı temelde, sistemi işletip uygulayacak olan öğretmenlerin ve diğer eğitim personelinin niteliklerine bağlıdır. Hiç bir eğitim modeli o modeli işleyecek personelin niteliğinin üzerinde hizmet üretemez. Bu nedenle, "bir okul, ancak, içindeki öğretmenler kadar iyidir" denilebilir. (Karagözoğlu, 1987; Kavcar, 1987; Kaya ve Böyük, 2011). Hizmetiçi eğitim her meslek mensubu için gerekli ve zorunlu bir eğitim süreci olmakla birlikte öğretmenler için ayrı bir önem taşımaktadır. Öğretmen toplumdaki her bireyin ve her meslek mensubunun eğitimden sorumludur. Bu nedenle öğretmenlere planlı, etkin ve fonksiyonel bir hizmetiçi eğitim uygulanması gerekir. Çünkü sürekli bir biçimde öğrenmeyen bir öğretmenin günün koşullarına uygun eğitim yapması beklenemez (Özyürek 1981; Taymaz 1981). Nitelikli bir hizmet öncesi eğitiminden geçen öğretmenlerin bile mesleki yaşantıları sırasında kendilerini geliştirmeleri ve çağın gerekliliklerine uyum sağlamaları kaçınılmaz bir durumdur. Öğretmenler sürekli olarak yenilikleri takip etmeli ve kendilerini yenilemelidirler. Bu durum

 Copyright © International Conference on New Horizons in Education Conference (INTE)

öğretmenlerin mesleki yaşantılarının belirli dönemlerinde hizmeti içi eğitim faaliyetlerine katılmalarını gerekli kılmaktadır (Ayvacı, Bakırcı ve Yıldız, 2014).

Öğretmen, kendine verilen imkânları belli bir ölçüde örgütleyip işe koşarak ülke hedefleri doğrultusunda öğrenciye istendik davranışları kazandırma gibi önemli bir görevi yerine getirmekle yükümlüdür (Budak, 1997). Eğitimin ve okulun başarısı öğretmenlerin bireysel ve grup olarak gelişmesine ve başarısına bağlıdır. Öğretmenlerin mesleklerini etkili bir şekilde yürütebilmelerinde deneyim önemli olmakla birlikte tek başına yeterli değildir. Bu nedenle hizmetiçi eğitim etkinliklerinin öğretmenlerin kişisel ve mesleki gelişimlerini olumlu yönde etkileyecektir (Önen, Mertoğlu, Saka ve Gürdal, 2009) Öğretmenler, öğretimi uygulamada ve değişen toplumsal gereksinimler doğrultusunda bireyler yetiştirmede önemli rol ve sorumluluklara sahiptirler. Bu nedenle, öğretmen yetiştirmede hizmet öncesi eğitim kadar hizmet içi eğitim de önemlidir (Demir, Böyük ve Erol, 2012; Saban, 2000). Öğretmenler, hizmet öncesinde ne kadar iyi yetiştirilirse yetiştirilsinler, onların mesleklerinde başarılı olabilmeleri için hizmetiçinde de sürekli eğitilmeleri gerekmektedir. Dolayısıyla, hizmetiçi öğretmen eğitimi, hizmet öncesi eğitimin tamamlayıcısı ve mesleğe ilişkin yeni bilgi ve beceriler edinmenin önemli bir yolu olarak görülmektedir (Gültekin, Çubukçu ve Dal, 2010).

Hizmetiçi eğitimin amacı, bireylere mesleklerinde daha başarılı ve mutlu olmalarını sağlayacak gerekli bilgi, beceri ve tutumlar kazandırmaktır. Tüm mesleklerde olduğu gibi öğretmenlerin de sıkça yaşanan değişimler karşısında güncel gereklerine uygun olarak hizmet vermelerini sağlamak için yeni nitelikler ve yeterlikler kazanmaları gerekmektedir. Gültekin, Çubukçu ve Dal, 2010). Öğretmenlerin mesleki gelişimleriyle ilgili olarak hizmetiçi eğitim etkinliklerinin düzenlenmesi; öğretmenlerin değişimlere, yeni görevlere uyumu ve verimlilikleri açısından olumlu katkılar sağlayacaktır. Teknolojik gelişmelerin çok hızlı yaşandığı ve eğitime yansımalarının olduğu günümüzde eğitimde teknoloji kullanımıyla ilgili olarak öğretmenlere mesleki gelişimleri konusunda destek sağlanması bir ihtiyaçtan öte zorunluluk haline gelmiştir (Yıldız, Sarıtepeci ve Seferoğlu, 2013). Ülkelerin ihtiyacı olan nitelikte insan gücünü yetiştirme sorumluluğunu yüklenen öğretmenlerin, eğitim kurumlarında daha verimli çalışmaları için kısa veya uzun süreli eğitim görmeleri ve mesleklerinde yeterli olmaları gerekmektedir (Kaya ve Böyük, 2011). Son yıllarda mesleki gelişim çalışmalarının yeniden yapılandırılmasına yönelik girişimler okul tabanlı sürekli hizmetiçi eğitim etkinliklerinin düzenlenmesine katkıda bulunmuştur (Akar, 2006).

Hizmet içi eğitim etkinliklerinin öğretmenlerin bilgi, beceri ve tutumlarını artırmada başarılı olduğu saptanmıştır. Bu başarının elde edilmesi için hizmetiçi eğitim sürecinin planlama, uygulama ve değerlendirme aşamalarında katılımcıların (kursiyerler) etkin olması ve sürecin her aşamasında onların görüşlerinin dikkate alınması gerekir (Nartgün, 2006). Hizmetiçi eğitim etkinliklerinin başarılı olması ve beklentileri karşılaması öncelikle, hedef kitlenin gereksinimlerinin belirlenmesine, belirlenen amaçlar doğrultusunda uygun programların hazırlanmasına ve programlarda nitelikli insan gücünün görev ve sorumluluk yüklenmesine bağlıdır (Gültekin, Çubukçu ve Dal, 2010). Özellikle hizmetiçi eğitimin etkili olması için katılımcıların eğitim ihtiyacının güncel ve gerçek ihtiyaçlara uygun olarak belirlenmelidir (Şahin, 1996). Bu kapsamda öğretmenlerin hizmetiçi eğitim ihtiyacı, yalnızca eğitimcilerin ve yöneticilerin öngörüsüyle değil, aynı zamanda öğretmenlerin de görüşleri alınarak belirlenmesi beklenir. Öğretmelere yönelik hizmetiçi eğitim etkinliklerinin üstün yönleri gibi sınırlı yönleri de bulunmaktadır. Öğretmenlere yönelik hizmetiçi eğitim etkinliklerinin en zayıf yönünün eğitim ihtiyacının belirlenmemesi olarak saptanmıştır (Gökmenoğlu, 2013). Buna göre, hizmetiçi eğitim gereksinimini saptama, nitelikli bir hizmetiçi eğitim programının ilk aşamasını oluşturmaktadır. Gültekin, Çubukçu ve Dal, 2010).

Öğretmenlerin eğitim ihtiyaçlarının belirlenebilmesi eğitim kurumunun önemli bir görevi olarak algılanmalıdır. Kısacası, okulun işlevinin beklenen düzeyde gerçekleşmesi öğretmenlerin gelişmeleri yakından izlemesi ve benimsemesiyle yakından ilişkilidir. Kısa dönemde hizmetiçi eğitim ihtiyacı olarak ele alınan bir konu, uzun vadede temel eğitimin dinamikleri arasına konabilir (Budak ve Özcan, 2003). Hizmet içi eğitim ihtiyacı bir kurumda çalışan kişi için, işin yerine getirilmesinde bilgi, beceri, tutum ve davranış bakımından duyulan eksiklik ya da gereklilik sonucu önem kazanmıştır (Şen, 2011). Eğitim ihtiyacı belirlemeye dayanak oluşturan araçların hazırlanabilmesi için ölçütler takımına gereksinim vardır. Ancak ülkemizde öğretmenlere yönelik dinamik bir hizmetiçi eğitim ölçütler takiminin varlığından söz edilemez. Dolayısıyla, yerinde yapılan gözlemlere göre Milli Eğitim Bakanlığı, yönetici görüşlerine dayalı bir yaklaşımla eğitim ihtiyacı belirlemektedir (Budak ve Özcan, 2003). Ülkemizdeki eğitim sistemi merkeziyetçi bir yapıda olması nedeniyle düzenlenen hizmet içi uygulamalarda öğretmenlerin görüş ve beklentilerine yeterince yer verilmediği görülmektedir (Şahin, 1996; Pehlivan, 1997;Aytaç, 2000) . Öğretmen kendi görüşlerine başvurulmadan düzenlenen hizmetiçi eğitim etkinliklerine gönülsüz katıldıkları için uygulamaların yeterince etkili olmadığı söylenebilir (Ayvacı, Bakırcı ve Yıldız, 2014).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Kurum ve kuruluşlardaki eğitim birimlerinin önemli bir kısmı kendi ihtiyaç ve imkânlarına göre değişik türlerde hizmet içi eğitim programları hazırlamakta ve uygulamaktadır. Ancak bazı gözlemler, görüşmeler ve incelemelerle elde edilen bulgular, hizmet içi eğitim etkinliklerinde birçok sorun nedeniyle amaca tam olarak ulaşılamadığını göstermektedir (Ayvacı, Bakırcı ve Yıldız, 2014; Şen, 2011; Sarıgöz, 2011). Bu sorunların başında eğitim ihtiyacının belirlenmemesi ve işlevsel olmaması yer almaktadır. Diğer yandan kamu kemsinde kısa süreli ve teorik yanı ağır basan hizmet içi eğitim programlarının sıklıkla uygulanması nedeniyle sürecin verimli olmadığını göstermektedir (Pehlivan, 1997). Bu sonuçlar hizmet içi eğitim programlarına, büyük para, insan kaynağı ve zaman harcanmasına rağmen, beklenen yararın alınamadığını göstermektedir (Gökmenoğlu, 2013). Öğretmenlerin mesleki gelişimlerini sağlamaya yönelik hizmetiçi eğitim uygulamalarının yeterli olmadığı için bu süreçte birçok sorunun yaşandığı dikkati çekmektedir. Ayrıca birçok araştırmada hizmetiçi eğitim etkinliklerinin arttırılmasına ihtiyaç duyulduğu sonucuna varılmıştır (Gönen ve Kocakaya, 2006).

Başta Milli Eğitim Temel Yasası olmak üzere birçok yasa yönetmelik, hükümet programı, kalkınma planı ve icra planlarında iş başındaki öğretmenler için hizmetiçi eğitimin yasal bir zorunluluk haline gelmiştir. Ülkemizde öğretmenlere yönelik planlanan hizmetiçi eğitim etkinlikleri merkezi olarak Milli Eğitim Bakanlığınca, mahalli hizmet içi eğitim ihtiyacını karşılamaya dönük hizmetiçi eğitim etkinlikleri ise, il ve ilçe milli eğitim müdürlüklerince yıllık olarak planlanıp uygulanmaktadır. Bakanlıkça merkezi olarak planlanıp uygulanan hizmetiçi eğitim etkinliklerin farklı alanlarda sınırlı sayıda öğretmenin katılımına yönelik olduğu görülmektedir. Ayrıca ülkenin değişik bölgelerinde, farklı fiziksel ve sosyal koşullardaki okullarda çalışan öğretmenlerin bunlardan yararlanması güç ve hatta imkânsız hale gelmektedir. Sınırlı sayıda düzenlenen hizmetiçi eğitim etkinliklerinin öğretmenlerin eğitim ihtiyaçlarına yönelik olmadığı da gözlenmektedir. Kurumlardaki eğitim altyapısının yetersizliği, işgücünün temel eğitimindeki eksiklikler, finansman zorlukları, kaynak kullanımında yarar-maliyet analizlerinin yapılmaması Türkiye'de hizmet içi eğitimin önündeki en önemli engeller olarak ortaya çıkmaktadır (Şahin, 1996; Özdemir, 1997; Taymaz, Sunay ve Aytaç, 1997; Aytaç, 2000, Kaya, Çepni ve Küçük, 2004).

Eğitimin başarısı başta öğretmen olmak üzere, eğitim kurumlarındaki tüm çalışanların başarısına bağlıdır. Çalışanların ve kurumun ihtiyacını karşılayabilmek için etkin ve fonksiyonel bir hizmetiçi eğitim uygulamak her kurumun olduğu gibi Milli Eğitim Bakanlığı'nın da önemli bir görevidir. Hizmetiçi eğitim faaliyetlerinin etkili olabilmesi için çalışanların eğitim ihtiyaçlarının saptanması bir zorunluluktur. Bu nedenle öğretmenlere yönelik hizmetiçi eğitim ihtiyaçları ile ilgili araştırmalara gereksinim duyulmaktadır. Hizmetiçi eğitimi günün koşullarına uygun olarak planlayabilmek için eğitim ihtiyaçlarının saptanması sürecinde yaşanan sorunların belirlenmesi ve gerekli önlemlerin alınması büyük önem taşımaktadır. Bu araştırmanın temel amacı, öğretmenlerin hizmetiçi eğitim ihtiyacına ilişkin görüşlerinin bazı değişkenler açısından incelenmesidir. Araştırmanın bu temel amacına ulaşmak için aşağıdaki sorulara cevap aranmıştır.

1. Öğretmenlerin hizmetiçi eğitim ihtiyacına ilişkin görüşleri kişisel bilgilere göre farklılık göstermekte midir?
2. Öğretmenlerin hizmetiçi eğitim ihtiyacının belirlenmesine ilişkin görüşleri nelerdir?

YÖNTEM

Bu araştırma öğretmenlerin hizmetiçi eğitim ihtiyacına ilişkin görüşlerinin bazı değişkenler açısından incelenmesi amacıyla yapılan bir çalışmadır. Araştırmada betimsel tarama yöntemi kullanılmıştır.

Çalışma Grubu

Bu araştırmanın çalışma grubunu Ankara (100), İstanbul (55), Çankırı (160) ve Muş (111) illerinde görev yapan toplam 426 öğretmen oluşturmaktadır. Ülkemizdeki büyük illeri temsil etmek üzere Ankara ve İstanbul, küçük illeri temsil etmek için Çankırı ve Muş seçilmiştir. Adı geçen illerdeki okul ve öğretmenlerin seçiminde ulaşılabilir ve uygulanabilir örnekleme yöntemi kullanılmıştır. Bu büyüklükteki homojen bir çalışma grubu, 0.95 güvenirlik düzeyinde öğretmenleri temsil edeceği varsayılmıştır (Yazıcıoğlu ve Erdoğan, 2004).

Veri Toplama Aracı

Araştırmanın verilerini toplamak amacıyla üç bölümden oluşan veri toplama aracı geliştirilmiştir. Birinci bölümünde kişisel bilgileri kapsayan, cinsiyet, çalıştığı kurum, hizmet süresi, çalıştığı okul, görevli olduğu yer ve katıldığı hizmet içi eğitim sayısı, ikinci bölümde ise hizmetiçi eğitim ihtiyacı ile ilgili yeterlilikleri kapsayan on soruluk beşli likertten oluşan ölçek ve üçüncü bölümde ise, hizmetiçi eğitim ihtiyacı ile ilgili çoktan seçmeli 3 sorudan oluşan anket yer almaktadır. Veri toplama aracını geliştirmek için ilgili literatür

 Copyright © International Conference on New Horizons in Education Conference (INTE)

taranmıştır. Ayrıca veri toplama aracının kapsam geçerliliğini belirlemek amacıyla MEB hizmetiçi eğitimi biriminde çalışan üç uzmanın görüşü alınmıştır. Uzmanlardan alınan görüşler sonucunda sorular ve seçeneklerde gerekli düzenlemeler yapılmıştır. Uzmanların tamamı veri toplama aracındaki tüm sorulara "uygun/geçerli" görüşünü verdikten sonra veri toplama aracına son şekli verilmiştir. Öğretmenlerin hizmetiçi eğitim ihtiyacı ile ilgili yeterliklere yönelik görüşleri hiçbir zaman (1), çok az (2), ara sıra (3), sıkça (4), her zaman (5) seçenekleriyle ölçülmüştür.

Verilerin Toplanması ve İşlem

Veri toplama aracı çalışma grubunu oluşturan öğretmenlere isteğe bağlı olarak cevaplanması sağlanmıştır. Araştırmada elde edilen veriler, kodlanarak bilgisayara yüklenilmiş ve "SPSS (statistical package program for social sciences) 16,0 for Windows" istatistik programı kullanılarak çözümlenmiştir. Verilerin, yüzde (%), frekans (f), iki bağımsız değişken için t testi üç bağımsız değişken için anova, gruplar arası farklılığı belirlemek için de ikili grup karşılaştırmalarından birisi olan Scheffe uygulanmıştır. Ayrıca üçüncü bölüm için betimsel istatistik analizleri yapılmıştır. Elde edilen bulgular, yorumlanarak raporlaştırılmıştır. Verilerin istatistiksel analizinde hata payı üst sınırı 0.05 kabul edilmiştir. Veri toplama aracının güvenirliğe ilişkin "Cronbach Alpha" ve yapı geçerliliği ile ilgili açıklayıcı (açımlayıcı) faktör analizine ilişkin değerler değerleri tablo 1'de sunulmuştur.

Tablo 1. Veri toplama aracına ilişkin Güvenirlik ve Faktör Analizi Değerleri (p=0.95)

BÖLÜM 2	KMO	BKT	AKV	MFY	MAİ	CAK
Hizmetiçi eğitim ihtiyacı (HİE)	0.90	2171.01	49,46	0,40-0,84	0,45-0,70	0,89

Tablo 1'de de görüldüğü gibi veri toplama aracının ikinci bölümü için geçerlik ve güvenirlik çalışması yapılmıştır. KMO (0.90) ve Bartlett (2171.010, p=0.00) testleri açımlayıcı faktör analizinin yapılabileceğini göstermiştir. Açımlayıcı faktör analizi sonucunda ölçeğin tek faktörden oluştuğu görülmektedir ve bu faktör ölçeğe ilişkin toplam varyansın %49,46'sını açıklamaktadır. Ölçek maddelerine ilişkin faktör yükleri ise 0.40 ile 0.84 arasında değişmektedir. Ölçekte yer alan maddelerin madde ayırt edicilik indekslerine bakıldığında da 0.45 ile 0.70 arasında olduğu görülmektedir. Ölçeğin güvenirlik çalışmaları kapsamında yapılan analizler sonucunda, Cronbach Alfa iç tutarlılık katsayısı 0.89 olarak hesaplanmıştır. Bu sonuçlardan yola çıkarak bu ölçeğin mevcut araştırma kapsamında kullanılabilecek geçerli ve güvenilir bir ölçme aracı olduğuna karar verilmiştir.

Verilerin İstatistiksel Analizi

Araştırmada elde edilen veriler değerlendirilirken veri toplama aracının birinci bölümünde yer alan bağımsız değişkenler için frekans, aritmetik ortalama, standart sapma, yüzdelik oran hesaplamaları yapılmıştır. Veri toplama aracının ikinci bölümündeki her bir maddenin ağırlıklı ortalaması hesaplanırken (5-1=4 4/ 5 = 0.8) formülü uygulanmış her bir seçeneğin puan aralığı 0,8 olarak bulunmuştur. Böylece "hiçbir zaman" seçeneğinin puan aralığı 1.00-1.80, "çokaz" seçeneğinin puan aralığı 1.81-2.60, "ara sıra" seçeneğinin puan aralığı 2.61-3.40, "sıkça" seçeneğinin puan aralığı 3.41-4.20, "her zaman" seçeneğinin puan aralığı ise 4.21-5.00 olarak belirlenmiştir. Elde edilen bulgular buna göre yorumlanmıştır. Öğretmenlerin veri toplama aracında yer alan maddelere verdikleri yanıtların cinsiyet, çalıştığı kurum ve görev yeri değişkeni için farklılık gösterip göstermediğini belirlemek için t testi, hizmet yılı, çalıştığı okul ve hizmetiçi eğitim sayısı değişkenine göre farklılık gösterip göstermediğini belirlemek için ise anova testi uygulanmıştır. Verilerin istatistiksel analizinde hata payı üst sınırı 0.05 kabul edilmiştir.

BULGULAR

Araştırmanın bulguları; katılımcıların kişisel bilgileri, hizmetiçi eğitim ihtiyacı ile ilgili yeterlikler ve hizmetiçi eğitimin planlanması yönünden analiz edilerek tablolar halinde sunulmuştur. Araştırmaya katılan öğretmenlerin kişisel bilgileriyle ilgili frekans ve yüzdelik dağılımları Tablo 2'de sunulmuştur.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 2. Kişisel Bilgilerle İlgili Frekans ve Yüzde Değerleri

Değişkenler	Alt gruplar	f	%
Cinsiyet	Kadın	246	57,6
	Erkek	180	42,4
Çalıştığı kurum	Özel	103	24,2
	Resmi	323	75,8
Hizmet yılı	1-10	171	37,5
	11-20	135	29,6
	21 ve üstü	120	26,3
Çalıştığı okul	İlkokul	68	18,3
	Ortaokul	128	30,0
	Lise	220	51,6
Görev yeri	İl (küçük il)	271	63,7
	Büyük şehir	155	36,4
HİE sayısı	1	56	13,1
	2	94	22,1
	3 ve üstü	276	64,8

Tablo 2 incelendiğinde, çalışma grubunda yer alan 426 öğretmenin 246'sı (%57.6) kadın 180'i (%42.4) erkek öğretmenlerden oluşmaktadır. Öğretmenlerin 103'ü (%24.2) özel okullarda, 323'ü (%75.8) resmi okullarda çalışmaktadırlar. Öğretmenlerin 171'i (%37.5) 1-10 arasında hizmet yılına, 135'i (%29.6) 11-20 arasında, 120'si (%26.3) 21 ve üstü hizmet yılına sahiptir. Öğretmenlerin 68'i (%18.3) ilkokulda, 128'i (%30) ortaokulda, 220'si (51.6) lisede çalışmaktadırlar. Öğretmenlerin 271'i (%63.4) küçük illerde, 155'i (36.4) büyük illerde görev yapmaktadırlar. Öğretmenlerin 56'sı (%13.1) 1 defa, 94'ü (%22.1) 2 defa, 276'sı (64.8) 3 ve daha fazla sayıda hizmetiçi eğitime katılmıştır. Öğretmenlerin hizmetiçi eğitim ihtiyacına yönelik görüşlerinin cinsiyet, çalıştığı kurum ve görev yeri değişkenlerine göre görüşlerinin anlamlı bir farklılık gösterip göstermediğine ilişkin bulgular tablo'3'de sunulmuştur.

Tablo 3. Öğretmenlerin Hizmetiçi Eğitim İhtiyacına İlişkin Görüşleri İle İlgili T Testi Sonuçları

Değişkenler	Alt gruplar	N	$\bar{x}$	ss	t testi		
					t	sd	p
Cinsiyet	Kadın	245	33.85	9.01	1.63	423	0.87
	Erkek	180	33.99	8.6			
Çalıştığı Kurum	Özel	103	37.92	6.03	5.46	423	0,00*
	Resim	323	32.64	9.19			
Görev Yeri	İl	271	32.89	8.85	3.21	423	0,00*
	Büyükşehir	155	35.72	8.51			

*P<0.5

Öğretmenlerin hizmetiçi eğitim ihtiyacı ile ilgili görüşleri cinsiyet değişkenleri yönünden anlamlı bir farklılık göstermemektedir. Bu bulgulara göre öğretmenlerin cinsiyeti hizmetiçi eğitim etkinliklerinin planlanması ve uygulanmasına yönelik görüşlerini etkilemediği anlaşılmaktadır. Öğretmenlerin hizmetiçi eğitim etkinlikleri ile ilgili görüşleri çalıştığı kurumlara (özel veya resmi okul) ve görev yaptığı illere (küçük il veya büyük il) göre anlamlı farklılıklar göstermektedir. Özel okulda çalışan öğretmenler resmi okulda çalışan öğretmenlere göre, büyük illerde çalışan öğretmenler de küçük illerde çalışan öğretmenlere göre daha çok hizmetiçi eğitime ihtiyaç duydukları ortaya çıkmaktadır. Öğretmenlerin hizmetiçi eğitim ihtiyacına yönelik görüşlerinin hizmet süresi, çalıştığı okul ve katıldığı hizmetiçi eğitim sayısına göre anlamlı bir farklılık gösterip göstermediğine ilişkin bulgular tablo'4'de sunulmuştur.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 4. Öğretmenlerin Hizmetiçi Eğitim İhtiyacına İlişkin Görüşleri İle İlgili Anova Testi Sonuçları

Değişkenler	Alt grup	N	$\bar{x}$	ss	Var.K.	KT	sd	KO	F	*p*	$Sh_{\bar{x}}$ (Analamlı fark)
Hizmet Süresi	1-10	171	35.1	8.46	G.A	463.88	2	231.94	3	0.05	Gruplar arasında anlamlı fark yok.
	11-20	135	33.8	8.42	G.İ	32641.41	423	77.17			
	20 ve üstü	120	32.45	9.59	T	33105.28	425				
Çalıştığı Okul	İlkokul	78	31.6	8.66	G.A	1137.21	2	568.60	7.52	0,01*	İlkokul-lise ve ortaokul -lise
	Ortaokul	220	35.93	9.40	G.İ	31968.07	423	75.75			
	Lise	128	33.74	8.28	T	33105.28	425				
HİE Sayısı	1	56	33.80	8.19	G.A	316.83	2	158.42	2.04	0.13	Gruplar arası analmalı fark yok
	2	94	35.52	8.02	G.İ	32788.46	423	77.51			
	3 ve üstü	276	33.40	8.82	T	33105.29	425				

*P<0.5

Öğretmenlerin hizmetiçi eğitim ihtiyacına yönelik görüşleri, hizmet süresi ile katıldıkları hizmetiçi eğitim etkinlikleri sayısına göre anlamlı bir farklılık göstermemektedir. Bu bulgular öğretmenlerin hizmet süresi ile katıldıkları hizmetiçi eğitim etkinliklerinin hizmetiçi eğitim ihtiyacına yönelik görüşlerini etkilemediğini göstermektedir. Öğretmenlerin hizmetiçi eğitim etkinliklerine yönelik görüşleri çalıştığı okula ((ilkokul, ortaokul ve lise) göre anlamlı farklılıklar göstermektedir. Lisede çalışan öğretmenler ilkokulda çalışan öğretmenlere göre, ortaokulda çalışan öğretmelerde lise de çalışan öğretmenlere göre hizmetiçi eğitime daha çok ihtiyaç duydukları anlaşılmaktadır. Öğretmenlerin hizmetiçi eğitim ihtiyacı belirleme ölçütlerine yönelik görüşlerine ilişkin bulgular tablo 5'te sunulmuştur.

Tablo 5. Öğretmenlerin Hizmetiçi Eğitim İhtiyacı Belirleme Ölçütlerine Yönelik Görüşleri

Soru no		Öğretmenlerin eğitim ihtiyacı	Öğretmenin çalıştığı kurumun ihtiyacı	Veli ve çevrenin beklentileri	Bilimsel ve teknolojik gelişmeler	Mevzuatın öngördüğü konular	TOPLAM
1	f	172	38	45	135	36	426
	%	40,4	8,9	10,6	31,7	8,5	100

Öğretmenlerin hizmetiçi eğitim ihtiyacı belirleme ölçütleri ile ilgili görüşleri incelendiğinde öğretmenlerin eğitim ihtiyacı (% 40,4) en önemli ölçüt olarak görülmektedir. Bunu sırasıyla bilimsel ve teknolojik gelişmeler (% 31,7), velinin ve çevrenin beklentileri (%10,6), öğretmenin çalıştığı kurumun ihtiyaçları (% 8,9) ve mevzuatın öngördüğü konular (% 8,5) izlemektedir. Bu bulgulara göre ihtiyaç belirleme ölçütü olarak öğretmenlerin eğitim ihtiyacı en çok, mevzuatın öngördüğü konuların ise en az düzeyde gerekli görülmüştür. Öğretmenlerin hizmetiçi eğitim ihtiyacı belirleme yöntemlerine yönelik görüşlerine ilişkin bulgular tablo 6'da sunulmuştur.

Tablo 6. Öğretmenlerin Hizmetiçi Eğitim İhtiyacı Belirleme Yöntemine Yönelik Görüşleri

Soru no		Teftiş ve gözlem sonuçları incelenmeli	Okul / kurum yöneticileri önermeli	Öğretmenin kendi isteği dikkate alınmalı	Bilimsel araştırma sonuçlarına bakılmalı	Öğrenci ve veli görüşleri esas alınmalı	TOPLAM
2	f	40	26	207	132	21	426
	%	9,4	6,1	48,6	31,0	4,9	100

Öğretmenlerin hizmetiçi eğitim ihtiyacını belirleme yöntemi ile ilgili görüşleri incelendiğinde öğretmenin kendi isteği (%48,6) en önemli eğitim ihtiyacı belirleme yöntemi olarak görülmektedir. Bunu sırasıyla bilimsel araştırma sonuçları (%31), teftiş ve gözlem sonuçları (%9,4), okul ya da kurum yöneticilerinin önerisi (%6,1), öğrenci ve veli görüşleri (%4,9) izlemektedir. Bu bulgulara göre öğretmenlerin yaklaşık yarısı hizmetiçi eğitim ihtiyacı öğretmen görüşlerine göre belirlenmesi görüşünde birleşmişlerdir. Öğretmenler

 Copyright © International Conference on New Horizons in Education Conference (INTE)

hizmetiçi eğitim ihtiyacının belirlenmesinde öğrenci ve veli görüşlerinin dikkate alınması yöntemini en az düzeyde tercih etmişlerdir. Öğretmenlerin hizmetiçi eğitim ihtiyaçlarının gerekçelerine yönelik görüşlerine ilişkin bulgular tablo 6'da sunulmuştur.

Tablo 7. Öğretmenlerin Hizmetiçi Eğitim İhtiyacının Gerekçelerine Yönelik Görüşleri

Soru no		Görev değişikliği	Üst görevlere hazırlanma	Öğretim teknolojilerinde ki yenilikler	Okula ve çevreye uyum sağlama	Eğitimle ilgili mevzuatın sıkça değişmesi	TOPLAM
3	f	12	29	226	87	72	426
	%	2,8	6,9	53	20	17	100

Öğretmenlerin hizmetiçi eğitimin gerekçelerine yönelik görüşleri incelendiğinde görev değişikliği (%31,9) hizmetiçi eğitimin en önemli gerekçesi olarak görülmektedir. Bu gerekçeyi sırasıyla üst görevlere hazırlanma (%25,6), okula ve çevreye uyum sağlama (17,6), öğretim teknolojisindeki yenilikler (%16,9) ve eğitimle ilgili mevzuatın sıkça değişmesi (%8) gerekçesi izlemektedir. Bu bulgulara göre görev değişikliği ilk sırada, eğitimle ilgili mevzuatın sıkça değişmesi son sırada gerekçe olarak görülmektedir

TARTIŞMA

Bu araştırma, öğretmenlerin hizmetiçi eğitim ihtiyacına yönelik görüşlerinin bazı değişkenler açısından incelenmesi amacıyla yapılmıştır. Araştırmanın bulgularına göre öğretmenlerin hizmetiçi eğitim ihtiyaçlarına yönelik görüşleri cinsiyete, hizmet sürelerine ve katıldıkları hizmetiçi eğitim etkinliği sayısına göre anlamlı bir farklılık göstermemektedir. Buna karşın öğretmenlerin hizmetiçi eğitim ihtiyaçlarına yönelik görüşleri öğretmenlerin çalıştığı kuruma, görev yaptığı okula ve görev yaptığı ile göre anlamlı farklılık göstermektedir. Özel okulda çalışan öğretmenler resmi okullarda çalışan öğretmenlere oranla, büyük illerde görevli öğretmenler küçük illerde görevli öğretmenlere oranla hizmetiçi eğitime daha çok ihtiyaç duymaktadırlar. Lisede görevli öğretmenler ilkokulda görevli öğretmenlere göre, ortaokulda görevli öğretmenler de lisede görevli öğretmenlere oranla hizmetiçi eğitime daha çok ihtiyaç duydukları ortaya çıkmaktadır.

Gültekin, Çubukçu ve dal (2010) yaptıkları araştırmada, ilköğretim öğretmenlerinin eğitim-öğretimle ilgili olarak birçok yeterlik alanlarında eğitime ihtiyaç duydukları sonucuna ulaşmışlardır. Bu yeterliklerin başında öğrenciyi tanıma, öğretimi planlama, materyal geliştirme, öğretim yapma, öğretimi yönetme, başarıyı değerlendirme, rehberlik yapma, temel becerileri geliştirme, özel gereksinimi olan öğrencilere hizmet etme, yetişkinleri eğitme, ders dışı etkinliklerde bulunma, kendini geliştirme, okulu geliştirme, okul-çevre ilişkilerini geliştirme yer almaktadır. Ayrıca, aynı araştırmada ilköğretim öğretmenlerinin kimi yeterlik alanlarına yönelik hizmetiçi eğitim gereksinimlerinin cinsiyet, branş, yönetim görevine sahip olma ve daha önce hizmetiçi eğitim alma değişkenine göre farklılık göstermediği; kıdem değişkenine göre farklılık gösterdiği ortaya çıkmıştır. Gönen ve Kocakaya (2006) yaptıkları araştırmada fizik öğretmenlerin büyük çoğunluğunun hizmet içi eğitimi gerekli buldukları ortaya çıkmıştır. Bu araştırma sonuçları mevcut araştırma sonuçlarını doğrulamaktadır.

Özel okullarda görevli öğretmenlerin hizmetiçi eğitime daha çok ihtiyaç duymaları kendilerini geliştirici ortamı yeterince bulamadıklarını düşündürebileceği gibi, öğrencilerin ya da veli beklentilerinin öğretmeni daha çok öğrenmeye yönelttiğini de düşündürmektedir. Aynı şekilde büyük illerde görevli öğretmenlerin hizmetiçi eğitime ihtiyaç duyma oranlarının yüksekliği rekabet gücünün yüksekliği dolayısıyla daha çok öğrenme ihtiyacını ortaya çıkardığını düşündürmektedir. Ortaokulda görevli öğretmenlerin lisede görevli öğretmenlere oranla daha az ihtiyaç duymaları oldukça düşündürücüdür. İlkokulda görevli öğretmenler ortaokul ve lisede görevli öğretmenlere oranla hizmetiçi eğitime daha az ihtiyaç duymaktadırlar. Bunun nedeni eğitim sürecinin ilk 4 yılını oluşturan ilkokulda görevli öğretmenlerin mesleği sadece bilgi düzeyi olarak algıladıklarını düşündürmektedir.

Akar (2006) yaptığı bir araştırmada çalışmaya katılan öğretmenlerin mesleki gelişim, deneyim ve ihtiyaçları arasında okul düzeyinde anlamlı farklılıklar olduğu sonucuna varmıştır. Yine Akar'ın (2007) yaptığı başka bir araştırma sonuçları, daha az sayıda etkinlik düzenlenen Güneydoğu Anadolu, Doğu Anadolu ve Karadeniz bölgelerinde görevli öğretmenlerle diğer bölgelerde görev yapan öğretmenlerin hizmetiçi eğitim deneyim ve ihtiyaçları arasında farklılıklar bulunduğuna işaret etmektedir. Birçok araştırmada hizmetiçi eğitime katılma sayısı öğretmenlerin eğitim ihtiyacına yönelik görüşlerini anlamlı ölçüde etkilemediği görülmekle birlikte Akar'ın (2007) yaptığı araştırmada bu sonuç farklı şekilde ortaya çıkmıştır. Nartgün

(2006) İlköğretim okulu öğretmenlerinin hizmetiçi eğitim programlarının etkileri üzerine düşüncelerini araştırmıştır. Araştırmanın sonuçlarına göre, ilköğretim okulu öğretmenleri hizmetiçi eğitim programlarının yararlı ve gerekli gördüğü sonucu ortaya çıkmıştır. Bu araştırma sonucunda hizmetiçi eğitime en çok ortaokulda görevli öğretmenler en az düzey de ise ilkokulda görevli öğretmenlerin ihtiyaç duyduğu ortaya çıkmıştır. Bu araştırmalar öğretmenlerin kişisel bilgileri ve deneyimlerine göre hizmetiçi eğitim ihtiyacına yönelik görüşlerinin de değişeceğini göstermektedir.

Cinsiyete göre hizmetiçi eğitim ihtiyacının önemli ölçüde değişmemesi, kadın ve erkek öğretmenlerin hizmetiçi eğitime aynı düzeyde ihtiyaç duyduklarını göstermektedir. Aynı şekilde öğretmenlerin hizmet süresi ve katıldıkları hizmetiçi eğitim sayıları hizmetiçi eğitim ihtiyacı ile görüşleri önemli ölçüde etkilemediği söylenebilir.
Kaya ve Böyük (2011) yaptıkları bir araştırmada, cinsiyete ve hizmetiçi eğitime katılma durumuna göre öğretmenlerin öz-yeterlik puanları arasında istatistiksel olarak anlamlı farklılık oluşmadığı sonucuna ulaşmışlardır. Budak ve Özcan (2003) yaptıkları bir araştırmada hizmetiçi eğitime katılmış ve katılmamış öğretmenler arasında eğitim ihtiyacı açısından her iki grup arasında anlamlı bir fark gözlenmemiştir. Baştürk (2012). İlköğretim okulu öğretmenlerin katıldıkları hizmetiçi eğitimle ilgili beklentileri branş ve cinsiyet yönünden anlamlı bir farklılık oluşturmadığı tam aksine benzer görüşte oldukları saptanmıştır. Önen, Mertoğlu000,00, Saka ve Gürdal, (2009). Verilerin değerlendirilmesi sonucunda; eğitimden önce öğretmenlerin sınıflarında en çok soru-cevap, düz anlatım ve deney yöntemlerini kullandıkları belirlenmiş; kıdemlerine ve alanlarına bağlı olarak her hangi bir farklılık bulunmamıştır. Görüldüğü gibi bir çok araştırmada başta cinsiyet olmak üzere bazı kişisel değişkenlerin öğretmenlerin hizmetiçi eğitim ihtiyacını değiştirmediği ortaya çıkmıştır. Bazı araştırmalarda bu sonuçların tersine sonuçlara da rastlanmaktadır. Örneğin Baştürk (2012) yaptığı araştırmada öğretmenlerin alanlarına, cinsiyetlerine ve diğer demografik özelliklerine göre hizmetiçi eğitimden beklentilerin farklılaştığı sonucuna ulaşmıştır.

Hizmetiçi eğitim planlama sürecinin ilk aşamasını eğitim ihtiyacı belirleme oluşturmaktadır. Öğretmenler eğitim ihtiyacının belirlenmesinde öğretmenlerin eğitim ihtiyacının öncelikli ölçüt olarak alınmasında birleşmişlerdir. Öğretmenlerin önemli bir kısmı da hizmetiçi eğitim ihtiyacının belirlenmesinde bilimsel ve teknolojik gelişmelerin dikkate alınması görüşünü belirtmişlerdir. Bunların dışındaki seçenekler olan öğretmenlerin çalıştığı kurumun ihtiyacı, veli ve çevrenin beklentisi, mevzuatın öngördüğü konuların hizmetiçi eğitim ihtiyacının belirlenmesinde önemli bir ölçüt olarak görülmemiştir. Öğretmenler kendi mesleki ihtiyaçlar ile bilimsel ve teknolojik gelişmeleri önemsemişlerdir.

Birçok araştırmada benzer sonuçlar ortaya çıkmıştır. Yalın'ın (2001) çalışmasında, 493 MEB personelinin %40'ının katıldıkları programların amaçları, eğitim ihtiyaçları ve öğretim faaliyetleri arasında hiç tutarlılık olmadığı sonucuna ulaşılmıştır. Fizik öğretmenlerine yönelik hizmetiçi eğitim programlarının etkinliğini saptamayı amaçlayan bir başka araştırmada Kanlı ve Yağbasan (2002), programların öğretmen ve alanda uzman kişilerin görüşleri alınarak ve gerçek ihtiyaçlar belirlenerek düzenlenmesi gerektiğini belirtmektedir. Azar ve Karaali de (2004) fizik öğretmenlerinin hizmetiçi eğitim ihtiyaçlarını belirlemeyi hedefleyen araştırmalarında, hizmetiçi eğitim faaliyetlerinin düzenlenmesi ve katılımcıların seçiminde öncelikle öğretmenlerin ihtiyaçlarının göz önünde bulundurulması gerektiğini vurgulamaktadırlar.

Öğretmenlerin yaklaşık yarısı hizmetiçi eğitim ihtiyacı belirlenirken öğretmenlerin kendi isteklerinin dikkate alınması görüşünde birleşmişlerdir. Öğretmenler bilimsel araştırma sonuçlarının dikkate alınması görüşünü de önemli ölçüde kabul etmişlerdir. Ancak, öğretmenlere göre, hizmetiçi eğitim ihtiyacının belirlenmesinde teftiş ve gözlem sonuçları, okul /kurum yöneticilerinin önerileri, öğrenci ve veli görüşleri önemli ölçüde kabul görmemiştir. Bazı araştırma sonuçları bu bulguları desteklerken bazı araştırma sonuçları ise farklı bulgular ortaya koymaktadır. Ayvacı, Bakırcı ve Yıldız'ın (2014) yaptıkları araştırma sonuçlarına göre öğretmenler ağırlıklı olarak bilim ve teknolojide meydana gelen değişimlerin eğitimdeki yansımalarına uyum sağlanabilinmesi için hizmet içi eğitim faaliyetlerinin düzenli ve belirli aralıklarla yapılması gerektiğini belirtmişlerdir. Bunun yanı sıra, öğretmenlerin bir kısmı; hizmet içi eğitim faaliyetlerinin gereksiz olduğunu ve zaman kaybına neden olduğunu ifade etmiştir. Özen'in (2005) yaptığı araştırmada da hizmetiçi eğitim programlarında kalitenin artırılması çerçevesinde hizmetiçi eğitim programlarının planlanması sırasında öğretmenlerin hizmetiçi eğitim gereksinimlerinin ilgili alanının uzmanları tarafından belirlenmesi gerektiği görüşü ortaya çıkmıştır.

Öğretmenlerin yaklaşık yarısı hizmetiçi eğitim ihtiyacının gerekçeleri arasında görev değişikliği ile üst görevlere hazırlanmayı önemli görmüşlerdir. Buna karşın öğretim teknolojilerindeki yenilikleri, okul ve çevreye uyum sağlamayı, eğitimle ilgili mevzuat değişikliğini hizmetiçi eğitim ihtiyacının önemli bir gerekçesi olarak görmemişlerdir. Bu durum öğretmenlerin hizmetiçi eğitim etkinliklerinin gerekçelerinde öğretimsel konulardan çok yönetsel konuların daha önemli görüldüğünü göstermektedir.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

SONUÇ VE ÖNERİLER

Öğretmenlerin hizmetiçi eğitim ihtiyacı ile ilgili görüşleri cinsiyet, hizmet süresi ile katıldıkları hizmetiçi eğitim etkinlikleri sayısına göre yönünden anlamlı bir farklılık göstermemektedir. Ancak öğretmenlerin hizmetiçi eğitim etkinlikleri ile ilgili görüşleri çalıştığı kurumlara (özel veya resmi okul), görev yaptığı illere (küçük il veya büyük il) ve çalıştığı okula ((ilkokul, ortaokul ve lise) göre anlamlı farklılıklar göstermektedir. Özel okulda çalışan öğretmenler resmi okulda çalışan öğretmenlere göre, büyük illerde çalışan öğretmenler de küçük illerde çalışan öğretmenlere göre daha çok hizmetiçi eğitime ihtiyaç duydukları ortaya çıkmaktadır. Lisede çalışan öğretmenler ilkokulda çalışan öğretmenlere göre, ortaokulda çalışan öğretmelerde lise de çalışan öğretmenlere göre hizmetiçi eğitime daha çok ihtiyaç duydukları anlaşılmaktadır.

Eğitim ihtiyacı belirleme sürecinde dikkate alınacak ölçütlerin başında öğretmenlerin eğitim ihtiyaçlarının belirlenmesi görüşü benimsenmiştir. Bunu sırasıyla bilimsel ve teknolojik gelişmeler, velinin ve çevrenin beklentileri, öğretmenin çalıştığı kurumun ihtiyaçları ve mevzuatın öngördüğü konular izlemektedir. Öğretmenler hizmetiçi eğitim ihtiyacının belirlenmesinde kendi isteklerinin dikkate alınmasını en önemli yöntem olarak görmektedirler. Bunu sırasıyla bilimsel araştırma sonuçları, teftiş ve gözlem sonuçları, okul ya da kurum yöneticilerinin önerisi, öğrenci ve veli görüşleri izlemektedir. Öğretmenler görev değişikliğini hizmetiçi eğitim ihtiyacının en önemli gerekçesi olarak görmüşlerdir. Bunu sırasıyla üst görevlere hazırlanma, okula ve çevreye uyum sağlama, öğretim teknolojisindeki yenilikler ve eğitimle ilgili mevzuatın sıkça değişmesi izlemektedir.

Öğretmenlerin hizmetiçi eğitim ihtiyaçlarının günün koşullarına uygun olarak karşılanması için bilimsel araştırmalara önem verilmelidir. Araştırmalar farklı zamanlarda farklı gruplar üzerinde periyodik aralıklarla yapılmalıdır. Öğretmenlerin hizmetiçi eğitim ihtiyacına yönelik araştırmalar öğretmenlerin demografik özelliklerine göre analiz edilerek gerekli öneriler geliştirilmelidir.

KAYNAKLAR

Akar, Ebru Öztürk (2006). Farklı Türde Okullarda Çalışan Biyoloji Öğretmenlerinin Mesleki Gelişim Deneyim ve İhtiyaçları. *Eğitim Fakültesi Dergisi,* 30, 174-183

Öztürk Akar, E. (2007). Biyoloji Öğretmenlerinin Hizmet İçi Eğitim Deneyim ve İhtiyaçları: Bölgesel Farklılıklar. *Eğitim ve Bilim*, 32(143), 68-78

Atay, Selma, Gider, Duygu, Karadere, Gülsiye ve Şenyüz Pınar (2009). Hastanede Çalışan Hemşirelerin Hizmet İçi Eğitime Yönelik Görüşleri. Uluslar arası İnsan Bilimleri Dergisi, 6(1), 84-93

Aytaç, Tufan. (2000). Hizmet içi Eğitim Kavramı ve Uygulamada Karşılaşılan Sorunlar, *Milli Eğitim*, 147, 66-69.

Ayvacı, Hakan Sevki, Bakırcı, Hasan ve Yıldız Mehmet (2014). Fen Bilimleri Öğretmenlerinin Hizmetiçi Eğitim Uygulamalarına İlişkin Görüşleri ve Beklentileri. *Amasya Üniversitesi Eğitim Fakültesi Dergisi,* 3(2), 357-383

Azar, Ali. ve Karaali, Şenol. (2004). Fizik öğretmenlerinin hizmetiçi eğitim ihtiyaçları. *Milli Eğitim Dergisi*, 162

Baştürk Ramazan (2012). İlköğretim Öğretmenlerinin Hizmetiçi Eğitime Yönelik Algı ve Beklentilerinin İncelenmesi. Hacettepe Üniversitesi, Eğitim Fakültesi Dergisi. 42, 96-107

Budak, Yusuf. (1997). Öğretmen Yetiştirmede Almanya, Fransa ve Türkiye Örneği. *Çağdaş Eğitim Dergisi.* 22, 18-22.

Budak, Yusuf ve Demirel, Özcan (2003). Öğretmenlerin Hizmetiçi Eğitim İhtiyacı. *Kuram ve Uygulamada Eğitim Yönetimi.* 33, 62-81

Demir, Semra, Böyük, Uğur ve Erol, Mustafa (2012). Fen ve Teknoloji Öğretmenlerinin Laboratuvar Uygulamalarına Yönelik Hizmet İçi Eğitim Programı: Mobilim Eğitim. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 9(19) 359-375

Ersoy, Yaşar (1996). Hizmetiçi Eğitim ve Yetiştirme kursunu Geliştirme – I Amaçlar ve Matematik Öğretmenlerinin Görüşleri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi.* 12,*151-160*

Gökmenoğlu, Tuba (2013). İlköğretim Öğretmelerinin Hizmetiçi Eğitim Gereksinimlerini Belirlemeye Yönelik Bir Ölçek Geliştirme Çalışması. *Öğretmen Eğitimi ve Eğitimciler Dergisi*. 2(1), 31-52

Gönen, Selahattin ve Kocakaya, Serhat (2006). Fizik Öğretmenlerinin Hizmet İçi Eğitimler Üzerine Görüşlerinin Değerlendirilmesi. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 19(1), 37-44.

Gültekin, Mehmet, Çubukçu Zuhal ve Dal, Sibel (2010). İlköğretim Öğretmenlerinin Eğitim Öğretimle İlgili Hizmetiçi Eğitim Gereksinimleri. *Selçuk Üniversitesi Ahmet Keleşoğlu Eğitim Fakültesi Dergisi,* 29, 131-152

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Kanlı, Uygar ve Yağbasan, Rahmi. (2002). 2000 Yılında Ankara'da Fizik Öğretmenleri İçin Düzenlenen Hizmetiçi Eğitim Yaz Kursunun Etkinliği. *Milli Eğitim Dergisi*, 153, 37-47

Karagözoğlu, Galip (1987). "Yüksek Öğretime Geçişte Öğretmenlik Mesleğine Yönelme" Öğretmen Yetiştiren Yüksek Öğretim Kurumlarının Dünü Bugünü Geleceği Sempozyumu, *Bildiri Özetleri*, Ankara

Kavcar, Cahit (1987). "Yüksek Öğretmen Okulu'nun Öğretmen Yetiştirmedeki Yeri", Öğretmen Yetiştiren Kurumların Dünü Bugünü Geleceği Sempozyumu, *Bildiri Özetleri*, Ankara

Kaya, Ali, Çepni, Salih ve Küçük Mehmet (2004)**.** Fizik Öğretmenleri için Üniversite Destekli bir Hizmet içi Eğitim Model Önerisi. The Turkish Online Journal of Educational Technology – TOJET ISSN: 1303-6521 volume 3 Issue 1 Article 15, 112-119

Kaya, Hasan ve Böyük, Uğur (2011). Fen Bilimleri Öğretmenlerinin Laboratuar Çalışmalarına Yönelik Yeterlikleri. Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi. 27(1), 126-134

Nartgün, Şenay Sezgin (2006). "İlköğretim Okulu Öğretmenlerinin Hizmetiçi Eğitim Programlarının Etkileri Üzerine Düşünceleri (Bolu İli Örneği). *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi,* 6 (1), 157–178

Orhan, Feza, Akkoyunlu, Buket (1999). Uzaktan Eğitim Yaklaşımında Temel Eğitim I. Kademe Öğretmenlerinin Video Destekli Hizmetiçi Eğitimi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi 16-17,* 134 - *141*

Ozan, Mukadder Boydak ve Dikici, Abdullah (2001). Hizmetiçi Eğitim Programlarının Etkililiğinin Değerlendirilmesi. *Fırat Üniversitesi Sosyal Bilimler Dergisi,* 11 (2), 225-240

Önen, Fatma, Mertoğlu, Hatice, Saka, Mehpare, Gürdal, Ayla (2009). Hizmetiçi Eğitimin Öğretmenlerin Öğretim Yöntem Ve Tekniklerine İlişkin Bilgilerine Etkisi: Öpyep Örneği. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi 10*(3), 9-23

Özcan, Şafak, Bakioğlu, Ayşen (2010). Bir Meta Analitik Etki Analizi: Okul Yöneticilerinin Hizmetiçi Eğitim Almalarının Göreve Etkisi**.** *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 38, 201-212

Özdemir, S. (1997). Her Organizasyon Hizmet içi Eğitim Yapmak Zorundadır, *Milli Eğitim*, 133, 17-19

Özen, Raşit. (2005). MEB Personelinin hizmet içi eğitim programlarında kalitenin artırılmasına ilişkin görüşleri. *XIV. Ulusal Eğitim Bilimleri Kongresi.* 28-30 Eylül 2005. Denizli: Pamukkale Üniversitesi, Eğitim Fakültesi.

Öztürk, Aslı ve Kılıç İlknur (2014). Sekreterlerin Hizmet İçi Eğitim Öncesi ve Sonrası Mesleğe Bakış Açılarının Değerlendirilmesi: Adalet Bakanlığı Örneği. *Electronic Journal of Vocational Colleges* - BÜROKON Özel Sayısı, 340-349

Öztürk, Mustafa, Sancak, Süleyman (2007). Hizmet İçi Eğitim Uygulamalarının Çalışma Hayatına Etkileri. *Journal of Yasar University,* 2(7), 761-794

Özyürek, Leyla (1981). *Öğretmenlere Yönelik Hizmetiçi Eğitim Programlarının Etkinliği.* A.Ü. Eğitim Bilimleri Fakültesi Yayınları, No: 102

Pehlivan, İnayet (1997). Türkiye'de Ulusal Kalkınma ve Kurumsal Verimliliğin En Önemli Araçlarından Biri Hizmetiçi Eğitimdir, *Milli Eğitim*, 133, 26-28.

Saban, Ahmet (2000). Hizmet İçi Eğitimde Yeni Yaklaşımlar, *Millî Eğitim Dergisi,* 145, 25-27.

Sarıgöz, Okan (2011). İlköğretim Öğretmenlerinin Hizmetiçi Eğitim faaliyetleri İle İlgili Görüşlerinin Değerlendirilmesi. 2nd International Conference on New Trends in Education and Their Implications 27-29 April, 2011 Antalya-Turkey

Şahin Mehmet. (1996) Öğretmen Eğitiminde Hizmetiçi Eğitimin Yeri ve Önemi. *Çağdaş Eğitim Dergisi*. 226, 17-19

Şen, Buket (2011). Okul Öncesi Öğretmenlerinin Mesleki Doyumları ve Hizmet İçi Eğitim İhtiyaçları Üzerine Bir Araştırma (Uşak İli Örneği). *Yayınlanmamış Yüksek Lisan Tezi*, Konya Selçuk Üniversitesi, Sosyal Bilimler Enstitüsü

Taymaz, Haydar. (1981). *Hizmetiçi Eğitim.* A.Ü. Eğitim Bilimleri Fakültesi Yayınları, No:91

Taymaz, A. Haydar, Sunay, Yasemin ve Aytaç, Tufan (1997). Hizmet İçi Eğitimde Koordinasyon Sağlanması Toplantısı, *Milli Eğitim*, 133, 13-17.

Vuran Sezgin, Çolak Aysun ve Şürşür Hasan, (2003). Davranış Kontrolü ve Beceri Öğretimi Konusunda Hizmetiçi Eğitime Katılanların Programa İlişkin Görüşleri. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi, Özel Eğitim Dergisi,* 4 (1) 1-17

Yalın, Halil İbrahim (2001). Hizmetiçi Eğitim Programlarının Değerlendirilmesi. *Milli Eğitim Dergisi,* 150

Yazıcıoğlu, Yahşi. ve Erdoğan, Samiye (2004). SPSS Uygulamalı Bilimsel Araştırma Yöntemleri. Ankara, Detay Yayıncılık

Yıldız, Hatice, Sarıtepeci, Mustafa ve Seferoğlu, Süleyman Sadi (2013). Fatih Projesi Kapsamında Düzenlenen Hizmet-İçi Eğitim Etkinliklerinin Öğretmenlerin Mesleki Gelişimine Katkılarının ISTE Öğretmen Standartları Açısından İncelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, Özel Sayı (1), 375-392

ÖĞRETMENLİK MESLEĞİNİ ALGILAMA BİÇİMLERİ ÖLÇEĞİ GEÇERLİK-GÜVENİRLİK ÇALIŞMASI

Engin DEMIR
Karabük Üniversitesi, Türkiye
edemirakademik@gmail.com

Cennet Göloğlu DEMIR
Milli Eğitim Bakanlığı, Türkiye
gologlu.cennet@gmail.com

ÖZET
Bu çalışmada, sınıf öğretmenlerinin öğretmenlik mesleğini algılama biçimlerini ölçmek amacıyla bir ölçek geliştirilmesi amaçlanmıştır. Öğretmenlik mesleğini algılama biçimleri ölçeği alan uzmanları ve sınıf öğretmenlerinin görüşleri doğrultusunda hazırlanmıştır. Ölçek 26 maddeden oluşan likert tipi bir ölçektir. Ölçeğin geçerlik ve güvenirliği tesadüfi örnekleme yöntemiyle seçilen 306 sınıf öğretmeninden elde edilen veriler üzerinde yapılmıştır. Ölçeğin yapı geçerliliğini belirlemek amacıyla yapılan faktör analizi sonucunda ölçek maddeleri faktör yüklerinin 0.479-0.852 arasında değiştiği, Kaiser-Meyer Olkin (KMO) değerinin .743, güvenirlik çalışması için hesaplanan iç tutarlık katsayı (Cronbach alpha) değerinin α=.786 olduğu görülmüştür. Geçerlik ve güvenirlik çalışmalarına ilişkin bulgular, ölçeğin geçerli ve güvenilir bir yapıya sahip olduğunu göstermektedir.

ABSTRACT
In this study, establishment of a scale to measure primary school teachers' perceptions of the teaching profession is aimed. Teachers' perceptions of the teaching profession scale is created on the opinions of the field experts and primary school teachers. The scale is a likert type scale consisting of 26 items. The validity and the confidence of the scale is based upon the data obtained from 306 primary school teachers selected via random sampling method. The result of the factor analysis which is performed to determine the structure validity of the scale, it is seen that, the factor veights of the scale items vary between 0.479 and 0.852, Kaiser Meyer Olkin (KMO) value is, .743, the value of the inner consistency multiple (cronbach alpha) is α=,786 the findings about the studies for the validity and the confidence indicate that the scale has a valid and a confident structure.

GİRİŞ

Bir toplumun kalkınması ve yapılandırılmasını sağlayan en önemli kişiler öğretmenlerdir. Öğretmenlerin eğitim-öğretim aracıyla bireyleri etkileme gücüne sahip olmaları hem öğretmenleri hem de öğretmenlik mesleğini önemli kılmaktadır. Öğretmenlerin, öğretmenlik mesleğinde başarılı olmaları ise aldıkları eğitime, mesleğe yönelik tutumlarına, mesleğe yönelik motivasyonları gibi unsurlara bağlıdır. Genel olarak bakıldığında ise öğretmenlerin mesleklerini algılayış biçimleri oldukça önemlidir. Çünkü öğretmenlerin mesleklerini algılayış biçimleri dolaylı ya da doğrudan eğitim-öğretimin kalitesini etkileyecektir. Nitekim öğretmen motivasyonunu etkileyen faktörlere yönelik yapılan araştırmalarda öğretmenlik mesleğinin sosyo-ekonomik statüsü, çalışma koşulları, iş güvenliği, aile için zaman ayırma gibi mesleki algılarla ilişkili birçok unsurun öğretmen motivasyonunu etkilediği ortaya konulmuştur (Alam,2011;Al-Habsi 2009; Akar,2012). Öğretmenlerin meslekleri hakkındaki düşünceleri ve algıları birçok araştırmacı için önemli görülmektedir. Nitekim yurt içinde ve yurt dışında öğretmenlerin mesleklerine yönelik algılarının belirlenmesi amacıyla yapılmış çeşitli araştırmalara rastlanılmıştır.

Tok (1997) tarafından öğretmenlik mesleğinin, öğretmenlerin, a) ücret ve çalışma koşulları (b) saygınlık ve bağımsızlık (c) toplumsal ilişkiler ve ait olma (d) güvenlik (e) kendini gerçekleştirme alanlarındaki gereksinimlerini ne ölçüde karşıladığı belirlenmiştir. Araştırmanın dikkat çeken bulguları şu şekildedir: öğretmenler, yapılan işe göre verilen ücret ile sosyal yardımların (çocuk yardımı, kira yardımı) yetersiz olduğunu belirtmektedirler. Öğretmenler mesleklerinin çevrede saygınlık uyandıran bir iş olmadığını düşünmektedirler. Mesleklerini ise sıkıcı bulmamaktadırlar. Özbek, Kahyaoğlu ve Özgen (2007) tarafından öğretmen adaylarının öğretmenlik mesleğine yönelik görüşleri değerlendirilmiştir. Araştırma sonucunda öğretmen adaylarının öğretmenlik mesleğine yönelik "Öğretmenliğin toplum kalkınmasında önemli olduğu", "Öğretmenliğin sorumluluk gerektiren bir meslek olduğu", "Öğretmenliğin fedakârlık gerektiren bir meslek olduğu" ve "öğretmenliği zorunlu olmazsam yapmam" görüşlerine yüksek düzeyde katıldıkları; "öğretmenlik idealimdeki meslektir" görüşüne ise katılmadıkları ortaya konulmuştur. Karaman (2008) tarafından, öğretmenlerin mesleklerini algılama biçimleri ve gelecekten beklentilerini tespit etmeye yönelik araştırma yapılmıştır. Araştırma sonucunda bayan öğretmenlerin mesleği algılama biçimlerinin ve gelecekten beklentilerinin daha

 Copyright © International Conference on New Horizons in Education Conference (INTE)

olumlu olduğu gözlenmiştir. Öğretmenlerin mesleklerini algılamalarına yönelik olumlu ve olumsuz düşünceleri ise şunlardır: Öğretmenler mesleklerinin; güvenilir olduğunu, toplumun gelişmesine katkı sağladığını, mesleki statülerinin düşük olduğunu, yıpratıcı bir meslek olduğunu, toplumun mesleklerine yeterince saygı duymadığını ve meslekten kısmen doyum sağladıklarını belirtmişlerdir. Murat, Ünişen ve Kanadalı (2010) tarafından eğitim fakültesine yeni başlayan öğrencilerin öğretmenlik mesleğini algılayışları ve öğretmenlik mesleğine ilişkin tutumları ortaya çıkarmak amacıyla nitel bir araştırma yapılmıştır. 16 katılımcı ile gerçekleşen araştırma sonucunda, katılımcılardan sadece ikisi severek ve isteyerek bu mesleği tercih ettiklerini belirtmiş diğerleri ise öğretmenlik mesleğini öğrenci seçme sınavı, iş bulma kolaylığı, çevrenin ve dershane rehberlik servisinin yönlendirmesi, rahatlığı, ailenin yönlendirmesi, tatillerinin bolluğu, üniversiteye hazırlanacak maddi imkân ve zamanının kısıtlı olması, mesleğin manevi değeri, itibarı ve cinsiyetine en uygun meslek olması sebeplerinden seçtiklerini söylemişlerdir. Katılımcılardan sadece iki kişi öğretmenliği ideal bir meslek olarak görmekte diğerleri ise hukuk, tıp, eczacılık gibi meslekleri toplumsal itibarı ve maddi getirisinden, sanatla ilgili meslekleri ise ruhi tatminden dolayı ideal meslek olarak görmekte olduklarını belirtmişlerdir. Küçük ve diğerleri (2013) tarafından toplumun öğretmenlik mesleğini algılama düzeyini belirlemek amacıyla araştırma yapılmıştır. Çalışmada, öğretmenlik mesleği hakkında, diğer meslek gruplarında çalışanların ne düşündüklerinin öğrenilmesi amaçlanmıştır. Araştırma sonucunda katılımcıların, yaklaşık %86'sı öğretmenlik mesleğinin sevilen ve beğenilen bir meslek olduğunu, yaklaşık %80'i öğretmenlerin sözüne güvenilir, alçak gönüllü, sorumluluk sahibi kişiler olduğunu ve yaklaşık %32'si öğretmenliği zor ve sorumluluk isteyen bir meslek olduğunu ifade etmişlerdir. Bunların dışında katılımcılar öğretmenlerle ilgili olarak, "tatili çok fazla yaptıklarını, öğrencilere eğitim vermediklerini, aldıkları maaşı hak etmediklerini, derse geç girdiklerini, öğrencilerle fazla ilgilenmediklerin ve dersleri biter bitmez okuldan ayrıldıklarını" ifade etmişlerdir. Karaman ve diğerleri (2013) tarafından "öğretmenlik mesleğinin statüsü ve saygınlığı" konusunda Sakarya ilinde farklı okul türlerinden 20 öğretmen ile yapılandırılmış görüşme gerçekleştirilmiştir. Öğretmenler mesleğin statüsünün, lisans mezuniyeti gerektiren diğer mesleklerle karşılaştırıldığında düşük olduğunu düşünmektedirler. Mesleğin saygınlığı konusunda ise toplumun gözünde hala saygın bir meslek olarak göründüğünü, fakat son yıllarda mesleğin saygınlığının büyük ölçüde azaldığını belirtmişlerdir. Öğretmenler mesleğinin saygınlığını ve statüsünü etkileyen unsurları, MEB tarafından öğretmenlerle ilgili olarak yapılan olumsuz açıklamalar, televizyon dizilerindeki olumsuz öğretmen karakterleri, atanamayan öğretmenler, olumsuz tutum sergileyen aday öğretmenler, öğretmen ve öğrencileri karşı karşıya getiren düzenlemeler, maaşların düşük olması vb. olarak belirtmişlerdir.

Öğretmenlik mesleğine yönelik algılar konusunda yurt içinde yapılan araştırmalarda, topluma katkı sağlama, sevilen bir meslek olması, çalışma saatlerinin uygunluğu ve tatillerinin fazla olması, iş güvencesinin olması araştırmalarda ortaya çıkan olumlu görüşler arasındadır. Öğretmenlik mesleğin statüsünün, saygınlığının ve itibarının az olması; ücretlerin düşük olması, zor, yıpratıcı, sabır ve özveri isteyen, stresli bir iş olması ise ortaya çıkan olumsuz görüşler arasındadır. Bununla birlikte az sayıda da olsa öğretmenlerin mesleklerini sürdürmek istememesi ve kadınlar için daha uygun bir iş olarak görülmesi mesleğin geleceği açısından üzerinde durulması gereken önemli hususlar arasındadır (Doğan,2004;Çermik, Doğan ve Şahin, 2010; Semerci ve diğerleri, 2012).

Öğretmenlerin öğretmenlik mesleği yönelik algılarının belirlenmesi amacıyla yurt dışında yapılmış çalışmalara rastlanılmaktadır. Page ve Page (1981) tarafından öğretmen adaylarının ve öğretmenlerin öğretmenlik mesleğine yönelik algılarını belirlemek amacıyla araştırma yapılmıştır. Araştırmaya katılanların %96'sı heveslerini kıran en önemli faktör olarak öğretmenlerin ücretleri olduğunu belirtmiştir. Diğerleri ise disiplin problemleri ve çalışma koşullardır. Katılımcılar kendilerini teşvik eden faktörler olarak, topluma katkı sağlama, iş güvencesi ve ek olanaklar olarak belirtmiştir. Bununla birlikte öğretmenliği bayanlar için iyi bir meslek olarak görmektedirler. Öğretmenlerin %70 'i yetenekli öğrencileri öğretmenlik mesleğini tercih etmesi için özendireceğini belirtirken, sadece %49'u kızını ve %28'i oğlunu öğretmenlik mesleği için destekleyeceğini belirtmiştir. Young (1995) tarafından lisansüstü eğitim alan öğretmen adaylarının gelecek kariyer planlarını, iş algılarını ve programı tercih sebeplerini belirlemek amacıyla araştırma yapılmıştır. Araştırma sonucunda öğretmen adayları mesleği tercih sebeplerini, "çocuklarla çalışma, geleceği şekillendirme, toplumsal katkı, mesleği bilme ve hoşlanma, model olma, konu alanından hoşlanma, çalışma saatleri ve tatiller" olarak belirtmiştir. Öğretmen adaylarının sonuçları deneyimli öğretmenlerle karşılaştırıldığında, öğretmen adayları deneyimli öğretmenlerle karşılaştırıldığında iş güvencelerinin daha az olduğunu düşünmektedirler. Öğretmen adayları işlerini, statüsünün düşük ve ücretinin az olduğu şeklinde algılamaktadırlar. Oliver (2005) göreve yeni başlayan öğretmenler ile deneyimli öğretmenlerin öğretmenlik mesleği hakkındaki algılarını karşılaştırmak amacıyla araştırma yapmıştır. Araştırmanın öğretmenlik mesleğine yönelik algı ve tutumlarıyla ilgili önemli görülen bulgularından bazıları şunlardır: Öğretmenler, öğretmenlik mesleğini seçtikleri için mutlu olduğunu, öğretmenliğin kendileri için uygun olduğunu, diğer meslek sahipleri tarafından saygı duyulduğunu hissettiklerini belirtmekte iken yaklaşık %21'i gelecek 5 yıl içerisinde öğretmenliği bırakmayı planladığını belirtmiştir. Buchanan (2010) tarafından "öğretmenlerin mesleklerinden niçin ayrıldıkları" araştırmıştır. Araştırma mesleklerini bırakan 21 öğretmenle

 Copyright © International Conference on New Horizons in Education Conference (INTE)

yürütülmüştür. Araştırma sonucunda, öğretmenler görevlerini bırakma sebebi olarak ücret, iş yükü, çalışma koşulları, sınıf yönetimi, destek ve iş prestiji olarak belirtmişlerdir. Gonzalez, Brown ve Slate (2008) tarafından öğretmen olarak bir yıl çalıştıktan sonra meslekten ayrılan öğretmenlerin, baskın ayrılma sebeplerinin neler olduğu araştırılmıştır. Araştırma Teksas Eyaletin'de bir yıl öğretmenlik yaptıktan sonra görevi bırakan sekiz öğretmenle görüşme yapılarak yürütülmüştür. Araştırma sonucunda en etkileyici üç faktör olarak; idari desteğin eksikliği, öğrenci disiplinindeki zorluklar ve düşük ücret düzeyleri çıkmıştır. Kamwengo (2010) tarafından Zambiya'da lise öğretmenlerinin bir meslek olarak öğretmenliğe yönelik algıları ve algılarını etkileyen faktörler araştırılmıştır. Araştırmanın önemli bulguları şu şekildedir: Öğretmenlerin yaklaşık yarısı mesleklerini değiştirmeyi düşünmektedir. Bunun sebepleri arasında da ücret, yıpranma, kötü çalışma koşulları, prestijin az olması, bulunmaktadır. Öğretmenlerin mesleki algılarını etkileyen faktörler ise konaklama yetersizliği, ücret, kötü çalışma koşulları, öğretmenin yıpranması, özerklik eksikliği, bürokrasi ve öğretmen eğitimidir.

Öğretmenlik mesleğine yönelik algılar konusunda yurt dışında yapılan araştırmalar incelendiğinde, ücret, statü, çalışma koşulları, toplumsal katkı konularında yurt içinde yapılan çalışmalarla benzerlik göstermektedir. Yurt dışında mesleki algı ile mesleği sürdürme konusunun birlikte ele alınması da dikkat çekmektedir. Bununla birlikte öğrenci disiplin problemleri yurt içindeki çalışmalarda ortaya çıkmayan fakat yurt dışındaki araştırmalarda oldukça fazla ortaya çıkan bir hususturdur.

Sonuç olarak ilgili alan yazın incelendiğinde, öğretmenliğin meslekleşmesi, öğretmenlik mesleğinin çalışma koşulları, iş yükü (zorluğu, tatilleri, iş güvencesi vb.), öğretmenliğin nasıl bir meslek olduğu (kutsal, sabır gerektiren, sıkıcı, yorucu, özveri ve fedakarlık gerektiren), öğretmenlik mesleğinin sorunları, öğretmenlerin meslekten uzaklaşması ve ayrılması, öğretmenlik mesleğinin tercih edilme sebepleri, öğretmenlik mesleğinin statüsü ve statüsünü etkileyen etmenler öğretmenlik mesleğine yönelik algılarla ilgili unsurlar olarak karşımıza çıkmaktadır. Öğretmenlerin meslekleriyle ilgili bu unsurlara yönelik düşünceleri, onların davranışlarını ve mesleği icra etme yönündeki başarılarını etkileyecektir (Akyüz, 1997). Bu bağlamda öğretmenlerin öğretmenlik mesleğini algılama biçimlerinin belirlenmesi için geçerli ve güvenilir bir ölçme aracının alan yazına kazandırılması önemli görülmektedir. Geliştirilecek olan ölçek sadece öğretmenlerin öğretmenlik mesleğini algılama biçimleri belirlemekle sınırlı kalmayıp farklı konulardaki araştırmalarda, mesleki algının o konu üzerindeki etkisi de araştırılabilecektir.

YÖNTEM

Sınıf öğretmenlerinin öğretmenlik mesleğini algılama biçimlerini ölçmede kullanılabilecek bir ölçek geliştirmeyi amaçlayan bu araştırmada tarama modeli kullanılmıştır. Bu bölümde araştırmanın çalışma grubu, ölçme aracının geliştirilmesi ve verilerin analizinde kullanılan tekniklere değinilmiştir.

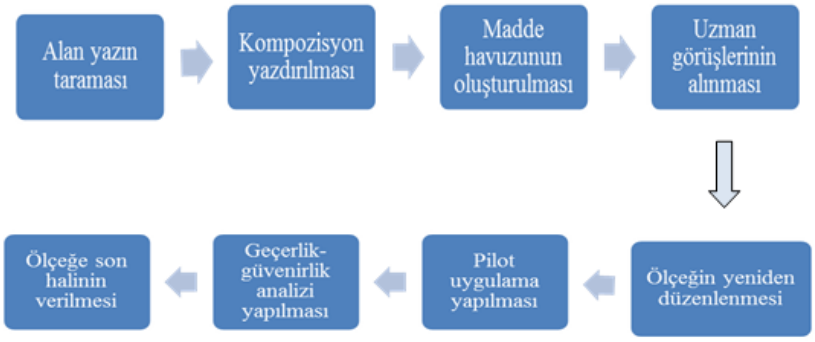
Çalışma Grubu

Araştırmanın çalışma grubunu 306 sınıf öğretmeni oluşturmaktadır. Faktör analizi sonuçlarının güvenirliği örneklem büyüklüğünden etkilenmektedir (Field, 2005). İlgili alan yazında örneklem büyüklüğü için farklı görüşler yer almaktadır. Tabachnick ve Fidell'e (2007) göre örneklem büyüklüğünün en az 300 olması gerekmektedir. Madde başına 10 ya da 15 katılımcının analize dahil edilmesi (Field, 2009; Nunnaly, 1978) veya madde başına 5 katılımcının dahil edilmesi de (Gorsuch, 1974) diğer görüşler arasındadır. Dolayısıyla ölçek geliştirme amacıyla ulaşılan 306 kişi gerekli analizlerin yapılması için uygun görülmektedir.

Ölçme Aracının Geliştirilmesi ve Verilerin Analizi

Öğretmenlik mesleğini algılama biçimleri ölçeği geliştirilmesinin ilk aşamasında 25 öğretmenden öğretmenlik mesleği hakkındaki düşüncelerini açıklayan bir kompozisyon yazmaları istenmiştir. İkinci aşamada hem öğretmen görüşleri hem de literatüre dayalı 76 maddeden oluşan madde havuzu hazırlanmıştır. Daha sonra uzman görüşleri doğrultusunda gerekli düzeltmeler yapılmış ve 31 maddelik ölçek hazırlanmıştır. Ölçeğe yönelik pilot uygulama sonucunda elde edilen veriler (SPSS) programı aracılığıyla bilgisayar ortamına aktarılmış, olumlu cümleler "Tamamen Katılıyorum", "Büyük Ölçüde Katılıyorum", "Kısmen Katılıyorum", "Katılmıyorum" ve "Hiç Katılmıyorum" skalasına 5,4,3,2,1 şeklinde puanlanırken olumsuz cümleler bunun tam tersi 1,2,3,4,5 şeklinde puanlanmıştır. Veri yığınının bilgisayar ortamına aktarılmasından sonra 31 maddeden oluşan ölçeğin faktör yapısı belirlenmeye çalışılmıştır. Bu belirleme işlemi bir faktör analizi tekniği olan Temel Bileşenler Analizi kullanılarak yapılmıştır. Madde analizi ise düzeltilmiş madde-toplam korelasyonu ve t testi kullanılarak üst ve alt %27'lik dilimlerin madde ortalamaları arasındaki ortalama farkların anlamlılığıyla incelenmiştir. Ölçeğin güvenirliğinin belirlenmesinde ise Cronbach alfa iç tutarlık katsayısı dikkate alınmıştır. Bu şekilde ölçeğe son hali verilmiştir. Şekil 1'de ölçeğin geliştirilme aşamaları verilmektedir:

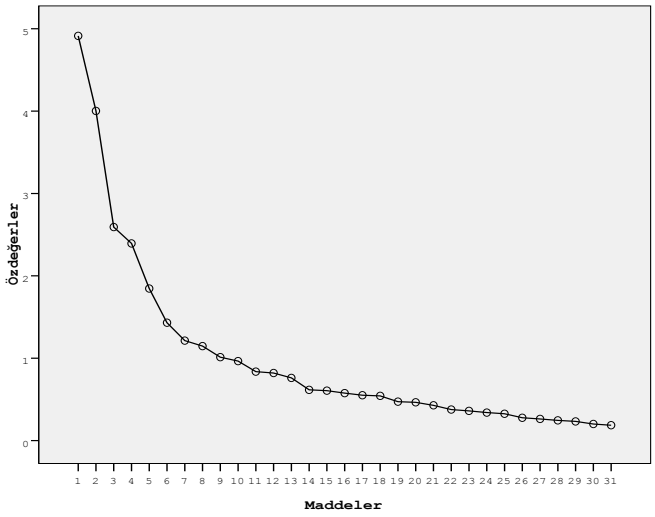
 Copyright © International Conference on New Horizons in Education Conference (INTE)



Şekil 1: Öğretmenlik mesleğini algılama biçimleri ölçeği geliştirilme aşamaları

BULGULAR

Temel bileşenler analizinde Kaiser-Meyer Olkin (KMO) örneklem yeterliliği ,743 olarak bulunmuştur. Dolayısıyla faktör analizi yapabilmek için örneklem büyüklüğünün "iyi düzeyde" yeterli olduğu değerlendirmesi yapılabilir (Hutcheson&Sofroniou, 1999, Akt:Field, 2009). Ayrıca Bartlett küresellik testi sonuçları incelendiğinde elde edilen sonuçların anlamlı olduğu görülmüştür ($\chi^2_{(465)}$ =3713,629, p<.01). Elde edilen sonuç değişkenler arasında yüksek korelasyonların bulunduğunu, başka bir deyişle veri setinin faktör analizi için uygun olduğunu göstermektedir (Kalaycı,2006). Yapılan faktör analizinde, faktör sayısına; her ilave faktörün toplam varyansın açıklanmasına katkısı %5'in altına düştüğünde maksimum faktör sayısına ulaşıldığını kabul eden toplam varyansın yüzdesi yöntemi ile karar verilmiştir (Dunteman 1989:16, Akt: Kalaycı,2006). Bu şekilde ölçeğin 5 faktörlü yapıya sahip olduğu görülmüştür.



Şekil 2: Özdeğer-Bileşen Grafiği

Ölçeğin birbirinden bağımsız alt faktörlerini belirlemek için varimax (dik) döndürme yöntemi kullanılmıştır. Faktör yüklerinin alt kesme noktası olarak 0.45 değeri ölçüt olarak alınmıştır. Yapılan analizde 3., 16., ve 17. maddelerin faktör yüklerinin .45 altında olması, 9., maddenin ise birden fazla faktörde yüksek ve birbirine yakın yük değerine sahip olmasından dolayı bu maddeler ölçekten çıkarılmıştır. Toplanabilirlik özelliğinin bozulmaması için soru ile bütün arasındaki korelasyon katsayılarının negatif olmaması ve en az 0.25 değerinden büyük olması gerekmektedir (Kalaycı 2006). Bu sebeple ölçeğe madde-toplam puan korelâsyonları katsayısı 0.30'dan büyük olan maddeler dâhil edilmiştir. Bu doğrultuda ölçekte, bir madde (madde 14) bu kritere uymadığı için ölçekten çıkarılmıştır. Yapılan değerlendirme sonucunda 31 maddelik deneme ölçeğinin 5 maddesinin: *3. madde (Duygusal yönü yoğundur)*, *9.madde (Özlük hakları iyidir, 14. madde (İş faaliyetleri çok çeşitlidir),16. madde (Herkesin yapabileceği bir iştir)* ve *17. madde(Sevilen bir meslektir)* ölçekten çıkarılarak son durumda nihai ölçekte 26 madde kaldığı görülmüştür. Bu aşamadan sonra kapsam geçerliliği için tekrar uzman görüşü alınmıştır ve 26 maddelik ölçeğin uygun olduğu belirtilmiştir.

Ölçeğin güvenirliğin bir göstergesi olarak alfa iç tutarlık katsayısı hesaplanmıştır. Ölçeğin iç tutarlık katsayısı (Cronbach Alpha) .786 olarak bulunmuştur. α değerinin $0.60 \leq \alpha \leq 0.80$ arasında olması ölçeğin oldukça güvenilir olduğunu göstermektedir (Kalaycı,2006). Üst %27 ve alt %27'lik grupların her bir maddeye verdikleri

 Copyright © International Conference on New Horizons in Education Conference (INTE)

cevaplar ilişkisiz t testi ile karşılaştırılmıştır. Yapılan bu karşılaştırma sonucunda maddelerin t değerlerinin $p<0.05$ düzeyinde alt %27 ve üst %27'lik gruplarda anlamlı farklılık gösterdiği tespit edilmiştir. Aşağıdaki tablo 1'de faktör analizi, güvenirlik analizi, madde-toplam korelasyonları ve t-testi sonuçlarına ilişkin değerler birlikte yer almaktadır.

Tablo 1. *Öğretmenlik Mesleğini Algılama Biçimleri Ölçeği Geçerlik- Güvenirlik Analizi Sonuçları*

FAKTÖRLER	Faktör Ortak Varyans	Varimax Faktör Yükleri	Madde Toplam Korelasyon	Eigen Değeri	Faktör Açıklanan Varyans %	Cronbach alpha	t değeri
Faktör 1:Mesleğin Niteliği ve Gereksinimlerine Yönelik Algılar				4,553	17,474	,806	
20. Zevkli bir meslektir.	,461	,463	,397				-4,614
23.Kutsal bir meslektir	,330	,479	,412				-3,995
24. Heyecan verici bir meslektir.	,317	,543	,397				-4,451
25.Sabırlı olmayı gerektirir.	,334	,521	,443				-3,338
26.Sorumluluk sahibi olmayı gerektirir.	,368	,577	,453				-3,797
27.Araştırmacılık vb. pek çok beceriyi gerektirir	,634	,772	,643				-6,759
28. İdealist olmayı gerektirir.	,679	,810	,675				-5,163
29.Sürekli kendimizi geliştirmeyi gerektirir	,661	,764	,635				-6,608
30.Uzmanlık gerektirir.	,594	,753	,623				-5,479
31. İşbirliği gerektirir.	,274	,502	,346				-3,061
Faktör 2: Mesleğin Sosyo-Ekonomik İmkanlarına Yönelik Algılar				3,638	13,992	,830	
4. Geliri yeterlidir	,617	,746	,603				-7,540
5.Sosyal imkanları yeterlidir (öğretmenevleri, kamplar vb.)	,678	,805	,700				-9,996
6.Ekonomik imkanları yeterlidir(müze kartları, indirimli biletler vb.)	,726	,846	,680				-6,093
7.Sosyal yardımları yeterlidir (Eş, çocuk yardımı vb.)	,665	,797	,659				-9,752
Faktör 3:Mesleğin Olumsuz Yönlerine Yönelik Algılar				2,309	8,881	,768	
13. İş yükü yoğun bir meslektir.	,455	,626	,418				-5,198
18. Yıpratıcı ve yorucu bir meslektir.	,730	,828	,697				-9,358
21. Stresli bir meslektir.	,666	,807	,641				-6,641
22. Zor bir meslektir.	,518	,685	,542				-9,051
Faktör 4:Mesleğin Olumlu Yönlerine Yönelik Algılar				*2,190*	*8,422*	*,710*	
10.Çalışma koşulları iyidir.	,516	,656	,496				-7,397
11. Haftalık çalışma saatleri rahattır.	,473	,577	,387				-3,196
12. Tatilleri uzundur	,631	,743	,593				-11,284
15.İş güvencesi yüksektir	,482	,682	,462				-6,438
19.Güvenli bir meslektir.	,441	,631	,405				-5,255
Faktör 5:Mesleğin Toplumdaki Yeri ve Kariyerine Yönelik Algılar				*1,587*	*6,103*	*,688*	
1. Statüsü yüksektir.	,769	,852	,567				-6,801
2.Saygınlığı yüksektir.	,627	,756	,570				-7,179
8. Kariyer fırsatları vardır.	,621	,531	,394				-17,593

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Tablo 1 incelendiğinde ölçeğin 5 faktörlü bir yapıda olduğu ve toplam varyansın %54,871 ini açıkladığı tespit edilmiştir. Bu durumun ölçeğin hazırlanmasında gözetilen öğretmenlik mesleğini algılama biçimine yönelik beş yapıyı (Mesleğin Niteliği ve Gereksinimlerine Yönelik Algılar, Mesleğin Sosyo-Ekonomik İmkanlarına Yönelik Algılar, Mesleğin Olumsuz Yönlerine Yönelik Algılar, Mesleğin Olumlu Yönlerine Yönelik Algılar, Mesleğin Toplumdaki Yeri ve Kariyerine Yönelik Algılar) yansıttığı düşünülmüştür. Yapılan analiz sonucunda nihai ölçekte yer alan faktör yük değerlerinin, .479 ile .852 arasında yüksek düzeyde değiştiği görülmektedir. Beş faktörlü olarak saptanan ölçeğin her bir alt faktör için madde toplam korelasyonlarının; I. Faktör için .346 ile .675; II. Faktör için .603 ile .700; III. Faktör için .418 ile .697, IV. Faktör için ,387 ile ,593 arasında değiştiği ve V. Faktör için ,531 ile ,852 olduğu görülmüştür. Ölçeğin alt faktörlerden elde edilen iç tutarlık katsayıları sırasıyla .806, .830, .768, .710 ve ,688 olarak belirlenmiştir. Bu bulgular Kalaycı'nın (2006) belirtmiş olduğu $0.60 \leq \alpha \leq 0.80$ ise ölçek oldukça güvenilir, $0.80 \leq \alpha \leq 1.00$ ise ölçek yüksek derecede güvenilir, şeklinde yorumlandığında sonuçlar ölçeğin oldukça güvenilir olduğunu göstermektedir

SONUÇ ve ÖNERİLER

Bu araştırmada, sınıf öğretmenlerinin öğretmenlik mesleğini algılama biçimlerinin belirlenmesinde kullanılmak üzere beşli likert tipi öğretmenlik mesleğini algılama biçimleri ölçeği geliştirilmiştir. Başlangıçta 31 maddeden oluşan deneme ölçeğinin 306 sınıf öğretmenine uygulanmasından sonra yapılan analizler sonucunda ölçeğin 5 maddesi çıkartılarak toplam 26 maddelik ölçek elde edilmiştir. Bu maddelerin öğretmenlerin, öğretmenlik mesleğini algılama biçimlerinden "Mesleğin Niteliği ve Gereksinimlerine Yönelik Algılar", " Mesleğin Sosyo-Ekonomik İmkanlarına Yönelik Algılar", "Mesleğin Olumsuz Yönlerine Yönelik Algılar", "Mesleğin Olumlu Yönlerine Yönelik Algılar" ve "Mesleğin Toplumdaki Yeri ve Kariyerine Yönelik Algılar" olmak üzere 5 boyutu yansıttığı görülmüştür. Öğretmenlik mesleğini algılama biçimleri ölçeğinin farklı zamanlardaki kullanımlarında geçerlik ve güvenirlik çalışmalarının yapılması ölçme araçlarının daha geçerli ve güvenilir bir yapıya kavuşmasına yardımcı olacaktır. Bununla birlikte öğretmenler dışındaki gruplarla çalışma yapmadan önceden yeniden geçerlik ve güvenirlik analizlerine ihtiyaç duyulabilir.

KAYNAKLAR

Alam, M. T. (2011). Factors Affecting Teachers Motivation. *International Journal of Business and Social Science, 2*(1), s. 298-304.

Al-Habsi, S. K. (2009). Motivating teachers in times of chnage. *Research perspectives on education in Oman*, 227-245. (M. Wyatt , & J. Atkins, Dü) Ministry of Education, Sultanate of Oman.

Akar, Ö. E. (2012) Motivations of Turkish pre-service teachers to choose teaching as a career. *Australian Journal of Teacher Education, 3*7(10)

Akyüz, Y. (1997). *Türk Eğitim Tarihi: Başlangıçtan 1997'ye*. İstanbul Kültür Üniversitesi Yayınları.

Buchanan,J. (2010). May ı be excused? Why teachers leave the profession. *Asia Pacific Journal of Education,30*(2), 199-211

Çermik; H., Doğan, B. Ve Şahin, A. (2010). Sınıf öğretmenliği öğretmen adaylarının öğretmenlik mesleğini tercih sebepleri. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 2* (2), 201-212

Doğan ,C. (2004). Sınıf öğretmenlerinin mesleklerine ilişkin düşünceleri: (Üsküdar Kadıköy Ümraniye ve Maltepe örneği). http://journals.istanbul.edu.tr/iusoskon/article/download/1023006047/1023005571adresinden 27 Mart 2014 tarihinde alınmıştır.

Field,A.(2009). *Discovering statistics using SPSS.* Third Ed. London: Sage

Gonzalez L.E., Brown M.S., & Slate J.L.(2008). Teachers who left the teaching profession: a qualitative understanding. *The Qualitative Report* (13),1-11

Gorsuch, R. L. (1974). Factor analysis. Philadelphia: Saunders.

Kalaycı,Ş.(2006).*Spss uygulamalı çok değişkenli istatistik teknikleri*. 2.Baskı. Ankara, Asil yayın Dağıtım,

Kamwengo, M., M (2010). *Perceptions of teaching as a profession as held by practicing teachers in selected high schools of Lusaka District.*Unpublished doctoral dissertation, The University of Zambia, Lusaka

Karaman, N. (2008). *Öğretmenlerin mesleklerini algılama biçimleri ve gelecekten beklentileri nelerdir?* Yüksek Lisans Dönem Projesi. Trakya Üniversitesi, Sosyal Bilimler Enstitüsü, Edirne.

Karaman, M., Acar, A., Kılıç, O.,Buluş, U. ve Erdoğan, Ö. (2013*). Sakarya ilinde görev yapan öğretmenlerin gözüyle "öğretmenlik mesleğinin statüsü ve saygınlığı".* VI. Ulusal Lisansüstü Eğitim Sempozyumu, Sakarya.

Küçük, S., Ürker, A.,Adıgüzelli, F.,Adıgüzellik, Y., Safa, M.ve Göktürk, T. (2013). Toplumun Öğretmenlik Mesleğini Algılama Düzeyi. *The Journal of Academic Social Science Studies,6*(1), 1033-1045

Murat, M., Ünişen, A. ve Kanadalı S.(2010). Eğitim fakültesine yeni başlayan öğrencilerin öğretmenlik mesleğini algılayışları ve öğretmenlik mesleğine ilişkin tutumları. *Elektronik Sosyal Bilimler Dergisi, 9* (33),226-244

Nunnally, J. C. (1978). Psychometric Theory (2nd ed.). New York: McGraw-Hill.

Oliver, J. (2005). *A comparison of the perceptions between novice and veteran teachers about the teaching profession in elementary and middle schools in sevier county, tennessee*. Unpublished doctoral dissertation. East Tennessee State University, United States

Özbek R., Kahyaoğlu M. ve Özgen N. (2007). Öğretmen adaylarının öğretmenlik mesleğine yönelik görüşlerinin değerlendirilmesi. *Afyon Kocatepe Üniversitesi Sosyal Bilimler Dergisi,9*(2), 221-231

Page,J.& Page,F. (1981).Pre-service and in-service teachers' perceptions of the teaching profession. A Research Project, Georgia Southern Collage

Semerci,Ç., Sermerci, N., Eliüşük, A., ve Kartal, S.(2012) .Öğretmenlik mesleğinin gündemine ilişkin öğretmen görüşleri (Bartın İli örneği). *Bartın Üniversitesi Eğitim Fakültesi Dergisi 1*(1), 22-40,

Tabachnick, G. G., ve Fidell, L. S. (2007). Experimental Designs Using ANOVA. Belmont, CA: Duxbury

Tok, T.N.(1997). Öğretmenlik mesleğinin öğretmenlerin gereksinimlerini karşılama düzeyleri. *Eğitim Yönetimi Dergisi,2,* 251-167

Young, B. (1995). Career plans and work perceptions of preservice teachers. *Teaching & Teacher Education,* 11,(3), 281-292

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ÖRGÜTSEL SİNİZM VE KİŞİSEL BAŞARI ARASINDAKİ İLİŞKİ

Esef Hakan TOYTOK
Siirt Üniversitesi, Eğitim Fakültesi, Eğitim Billimleri Bölümü
hakantoytok@hotmail.com

Eda ÇELEPÇIKAY
Siirt Üniversitesi, Eğitim Fakültesi, Eğitim Billimleri Bölümü
eclpcky@hotmail.com

ÖZET
Gerek günlük sosyal hayatımızda, gerekse iş hayatımızda hemen hemen her insanın temel istekleri arasında başarılı olmak yatmaktadır. Hatta günümüzde değişen ve zorlaşan şartlarda daha tutunaklı kalabilmek için başarı göstergeleri oldukça önem arz etmektedir. Bu gün popüler bir kavram haline gelen başarı hemen hemen her platformda bireylerde aranan temel kişisel özelliklerden biri olarak karşımıza çıkmaktadır. Genel anlamıyla başarı istenilen bir sonuca ulaşma yönünde ilerleme olarak kabul edilmektedir. Başarı güdüsü bireylerin amaçları peşinde koşmalarını sağlayan temel nedenlerden birisidir. Başarılı olmak ve bu ihtiyacını tatmin etmek isteyen bireylerin, örgüt amaçları doğrultusunda yönlendirilmeleri daha kolay olduğu görülmektedir. Örgütsel sinizm ise başarının tersine negatif bir tutumu ifade eden bir kavramdır. Örgütsel sinizm kavramı kısaca bireyin çalıştığı örgütün dürüstlükten yoksun olduğuna dair inancı ve çalıştığı örgüte yönelik negatif tutumu olarak tanımlanmakta ve samimiyet, adalet, dürüstlük gibi temel beklentilerin yerine getirilmemesi sonucu ortaya çıkmaktadır. Bu anlamda örgütsel sinizm işgörenlerin çalıştığı örgüte karşı uygulanan politika ve uygulamalarına karşı bir tepki olarak yorumlanmaktadır. Araştırmanın temel amacı iki önemli kavram olan örgütsel sinizm ve kişisel başarı arasındaki ilişkiyi ve düzeyini ortaya koymak ve bu anlamda örgütlere etkililik adına bir bakış açısı kazandırmaktır. Araştırmada nicel bir yol izlenerek betimsel ilişkisel tarama modeli kullanılmıştır. Araştırmanın evrenini İstanbul ili Üsküdar ilçesi oluşturmaktadır. Araştırmanın çalışma grubunu Üsküdar'ın Yavuz Türk Mahallesindeki ortaokullar oluşturmaktadır. Araştırmada elde edilen veriler R 3.3.0 ve SPSS 21,00 paket programlarında analiz edilerek elde edilen bulgular tablolaştırılarak yorumlanmıştır. Araştırma sonucunda elde edilen verilere göre kişisel başarı ile örgütsel sinizm arasında negatif yönde, anlamlı ve düşük düzeyde bir ilişkinin olduğu görülmüştür.
ANAHTAR KELİMELER: Örgüt, Sinizm, Öğretmen, Kişisel başarı

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ÖZEL EĞİTİM DERSİNİN ÜNİVERSİTE ÖĞRENCİLERİNİN YETERSİZLİĞİ OLAN BİREYLERE YÖNELİK TUTUMLARI ÜZERİNE ETKİSİNİN İNCELENMESİ

Asya ÇETİN
Çocuk Gelişim Bölümü
Karabük Üniversitesi
cetin.asya@gmail.com

Nadire Ferah YAVUZ
Çocuk Gelişim Bölümü
Karabük Üniversitesi
ferahyavuz@karabuk.edu.tr

Arzu ÖZYÜREK
Çocuk Gelişim Bölümü
Karabük Üniversitesi
a.ozyurek@karabuk.edu.tr

ÖZET

Bu çalışmada Özel Eğitim dersinin üniversite öğrencilerinin yetersizliği olan bireylere yönelik tutumları üzerindeki etkisini incelemek amaçlanmıştır. Çalışma grubunu, çalışmaya katılmaya gönüllü 100 Sağlık Yüksekokulu lisans bölümü öğrencisi oluşturulmuştur. iki dönem Özel Eğitim dersi alan Çocuk Gelişimi öğrencileri deney grubunu (n=62) oluştururken böyle bir ders almayan Ebelik bölümü öğrencileri (n=38) kontrol grubunu oluşturmuştur. Öğrencilerin yetersizliği olan bireylere yönelik tutumlarını değerlendirmek amacıyla "Özürlülere Yönelik Tutumlar Ölçeği" ön test-son test olarak kullanılmıştır. Verilerin analizinde parametrik testlerin kullanılmasına karar verilmiş ve ilişkili örneklem t-Testi kullanılmıştır. Sonuç olarak; deney ve kontrol grubu ön test verileri arasında anlamlı bir fark yokken, son test sonuçlarında ÖYTÖ eğitim ortamları alt boyutu puanında deney grubu lehine anlamlı bir fark bulunmuştur. Yine, deney grubunun son test puanlarının ön test puanlarına göre anlamlı düzeyde artış olduğu belirlenmiştir ($p<0,001$). Verilen özel eğitim dersinin, öğrencilerin yetersizliği olan bireylere yönelik tutumlarını olumlu yönde etkilediği sonucuna varılmıştır.

Anahtar Kelimeler: Özürlüler, özürlülere yönelik tutum, özel eğitim, üniversite öğrencileri.

EXAMINATION OF EFFECTS OF 'SPECIAL EDUCATION' ON ATTITUDES OF UNIVERSITY STUDENTS TOWARDS INDIVIDUALS WİTH DISABILITIES

ABSTRACT

The aim of this study is to examine the effects of 'Special Education' on attitudes of university students towards individuals with disabilities. Study group was composed of 100 volunteer undergraduate students of School of Health Science. Students of Child Development department who attended the 'Special Education' course for two terms were included in the study group (n=62) whereas the control group was composed of Midwifery students who did not attend the course (n=38). In order to evaluate the attitudes of students towards individuals with disabilities, "Attitudes towards Individuals with Disability Scale" pre-test and post-test was used. Parametric tests such as related samples t-test were used in order to analyze the data. According to our results, there was no significant difference between pre-test scores of study and control groups whereas education subscale scores of the scale were significantly higher in study group compared to control group. Similarly, post-test scores of the study group significantly increased compared to pre-test scores of the study group ($p<0,001$). Conclusively, 'Special Education' course positively affected the attitudes of students towards individuals with disabilities.

Key Words: Disability, attitudes towards individuals with disabilities, special education, university students.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

GİRİŞ

Her çocuğun benzer özelliklerinin yanı sıra bedensel, zihinsel, sosyal, duygusal açıdan kendine özgü farklı özellikleri de bulunmaktadır. Bazıları uzun boylu, bazıları zayıf; bazıları girişken ya da çekingen, bazıları daha kolay öğrenen bazıları ise daha geç öğrenen özellikler gösterebilirler (Yıldırım Doğru ve Durmuşoğlu Salatalı, 2009, s.33; Aral ve Gürsoy, 2011, s.24). Ancak akranlarına kıyasla anlamlı farklılık gösteren ve bu farklılıklardan yaşamsal işlevleri etkilenen çocuklar "farklı gelişim gösteren çocuklar, özel gereksinimli çocuklar, özel eğitim gerektiren çocuklar, öğrenme farklılığı olan çocuklar, gelişim farklılığı olan çocuklar, özel gereksinimli bireyler" gibi çeşitli şekillerde tanımlanmaktadır (Baykoç Dönmez, 2011, s.19).

Tutumlar inançlar, duygular, değerler ve insanların çeşitli durumlar hakkındaki düşüncelerinin yönünü belirleyen özel eğilimleridir (Aiden & McCarthy, 2014, s.6). Tutum bir bireyin belli bir kişiye, gruba, nesneye, durum ve olaya ilişkin pozitif ve negatif yönde düşünmesine, hissetmesine ve davranmasına neden olan eğilimleridir (Budak, 2000). Farklı özelliklere sahip kişilere yönelik toplumsal tutumlar genellikle bir anlayış eksikliği, bilinmeyene duyulan korku ve diğerlerinden edinilen kalıplaşmış bilgilerden etkilenmektedir (Thompson, Emrich ve Moore, 2003, s.27; Lifshitz, Glaubman ve Issawi, 2004, s.172). Yetersizliği olan bireylerin önce insan ve daha sonra gereksinimleri farklı olan insan olarak görülmesi, onlara karşı olumlu tutumların sergilenmesini sağlar. Bunun tam tersi yöndeki bakış açısı ise yetersizliği olan bireylere ilişkin olumsuz tutumların sergilenmesine neden olabilir (Özyürek, 2010, s.21).

Yetersizliği olan bireyin ailesi, aile çevresi, aile dışındaki çevresi, içinde yetiştiği kültür ve ülke politikalarında meydana gelen değişimler onun yaşam döngüsünü oluşturmaktadır. Bu yapıların birbirleriyle etkileşimleri, yetersizliği olan bireyin gelişimi doğrudan etkiler. Aile içi ve aile dışı destekler, yetersizliği olan bireylerin gelişimi ve eğitimine katkıda bulunacaktır (Cavkaytar, 2010, s.15). Yetersizliği olan bireylerin topluma uyumunda en önemli koşul, diğer bireylerin bu bireylere yönelik tutumlarının niteliğidir (Özyürek, 2010, s.24). Yetersizliği olan bireylere yönelik çalışmalara bakıldığında, farklı bulgulara rastlamak mümkündür. Avramıdıs ve Norwich (2002) yaptıkları çalışmada öğretmen tutumlarını etkileyen ve gerçek öğretme stillerini etkileyen faktörlerden birisinin öğretmenlerin inançları olduğunu belirlemişlerdir. Berryman, (1989) çalışmasında yetersizliği olan bireylerle olan deneyimler ile tutumlar arasında pozitif yönde anlamlı bir ilişki olduğunu saptamıştır. Ancak bunun aksi yönde sonuçların elde edildiği çalışmalar da mevcuttur ((Avramidis vd., 2000; Stephens and Braun, 1980). Sucuoğlu ve Kargın (2014)'e göre yetersizliği olan bireylerin eğitimsel ihtiyaçlarını gidermek için öğretmenlerin tutarlı bir plan dahilinde eğitilmeleri gerekmektedir. Bunun gibi pek çok çalışmada öğretmenlerin bilgi eksiklikleri nedeniyle yetersizliği olan bireylere ve kaynaştırma eğitimine yönelik olumsuz tutumlara sahip oldukları sonucu saptanmıştır (Batu, 1997; Diken, 1998; Familia-Garcia, 2001).

Yetersizliği olan bireylerle temas halinde bulunacak meslek elemanlarından biri de sağlık çalışanlarıdır. Sağlık çalışanlarının yetersizliği olan bireylere yönelik tutumlarını etkileyen durumları belirlemek, bu tutumların olumlu yönde değişmesini sağlamaya yönelik çalışmalara ışık tutacaktır. Bu nedenle çalışma, lisans eğitiminde verilen Özel Eğitim dersinin üniversite öğrencilerinin yetersizliği olan bireylere yönelik tutumları üzerindeki etkisini incelemek amacı ile yapılmıştır.

YÖNTEM

Araştırma Modeli

Çalışma betimsel tarama modelinde tasarlanmıştır. Karabük Üniversitesi Sağlık Yüksek Okulu'nda öğrenim gören ve çalışmaya katılmaya gönüllü olan, hem ön test hem de son teste ölçeği cevaplayan 3'ü erkek olmak üzere 100 öğrenci katılmıştır. Katılımcılardan 62'si iki dönem boyunca Özel Eğitim dersi alan Çocuk Gelişimi bölümü öğrencileri ve 38'i böyle bir ders almayan Ebelik bölümü öğrencilerinden oluşmaktadır. Çalışma grubundaki öğrencilerin 49'u ailesinde veya yakın çevresinde yetersizliğe sahip engelli bir birey bulduğunu belirtmişlerdir.

Veri Toplama Yöntemi

Verilerin toplanmasında Başbakanlık Özürlüler İdaresi Başkanlığı (2008) tarafından yapılan "Özürlülük Eğitimi: Toplum Özürlülüğü Nasıl Anlıyor Temel Araştırması" kapsamında, 18 yaş üstü ve özürlü olmayan bireylerin özürlülere yönelik tutumlarını değerlendirmek amacıyla geliştirilen "Özürlülere Yönelik Tutumlar Ölçeği-ÖYTÖ" kullanılmıştır. Toplam altı alt boyut ve 43 maddeden oluşan ölçek Eğitim Ortamı (3 madde), Kişilerarası İlişkiler (9 madde), Aile Yaşamı (3 madde), Kişisel Özellikler (7 madde) Çalışma Yaşamı (9 madde) ve Yetkinlik-Bağımsız Yaşam (12 madde) alt boyutlarından oluşmaktadır. Tamamen katılıyorum, katılıyorum,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

kararsızım, katılmıyorum ve hiç katılmıyorum şeklinde 5'li likert tipindedir. Ölçekten alınan yüksek puan olumlu tutumu ifade ettmektedir Güvenirlik çalışmalarında, ölçeğin Cronbach Alpha iç tutarlılık katsayıları 0.56 ile 0.83 arasında bulunmuştur.

Veri toplama aracı, çalışma grubuna öğretim yılı başında ön test olarak uygulanmıştır. Çocuk Gelişimi öğrencileri iki dönem boyunca Özel Eğitim dersini almışlar ve bu ders kapsamında 30 saat teorik eğitim ve yaklaşık 40 saat özel eğitim kurumunda gözleme dayalı uygulamalı eğitim görmüşlerdir. Ebelik bölümü öğrencileri ise böyle bir ders almamışlardır. Öğretim yılı ikinci dönemi sonunda, veri toplama aracı öğrencilere son test olarak yeniden uygulanmıştır.

Verilerin Analizi

Çalışma grubundan elde edilen veriler SPSS 20 paket programı kullanılarak bilgisayar ortamına girilmiştir. Hem ön test hem de son teste katılan öğrencilerin verileri değerlendirmeye alınmıştır. Verilerin Kolmogorow Smirnov testi sonucunda normallik dağılımlarına bakılmış ve buna göre, deney ve kontrol grubu ön test karşılaştırmalarında ve deney grubunun ön test-son test karşılaştırmasında ise Eşleştirilmiş Örneklem t-Testi, deney ve kontrol grubu son test karşılaştırmalarında Mann-Whitney U Testi (Eymen, 2007: 114) kullanılmıştır. Tutum Ölçeği ile elde edilen verilerin Özel Eğitim dersi alıp olmama durumuna göre tutumların farklılaşıp farklılaşmadığı incelenmiştir. İstatistiksel anlamlılık için $p<0,05$ düzeyi benimsenmiştir.

BULGULAR VE TARTIŞMA

Bu bölümde deney ve kontrol grubu ÖYTÖ ön test-son test puanı karşılaştırmalarına ilişkin bulgular ve yorumlara yer verilmiştir.

Tablo 1. Deney ve Kontrol Grubu Ön-Test Puanları Ortalama, Standart Sapma ve t-Testi Sonuçları

ÖYTÖ Alt Ölçekler	Grup	N	Kesme Noktası	$\overline{X}$	ss	t	p
Eğitim Ortamları	Deney	62	9	3,89	1,34	-0,757	0,451
	Kontrol	38		4,10	1,48		
Kişilerarası İlişkiler	Deney	62	27	14,98	4,25	1,373	0,173
	Kontrol	38		13,71	4,87		
Çalışma Yaşamı	Deney	62	27	16,74	4,17	-0,339	0,735
	Kontrol	38		17,18	8,79		
Aile Yaşamı	Deney	62	9	7,40	2,19	1,557	0,123
	Kontrol	38		6,71	2,10		
Kişisel Özellikler	Deney	62	21	13,83	3,63	0,976	0,331
	Kontrol	38		13,10	3,67		
Yetkinlik-Bağımsız Yaşam	Deney	62	36	22,85	5,13	1,522	0,131
	Kontrol	38		21,21	5,41		
Toplam	Deney	62	129	79,70	16,19	1,023	0,309
	Kontrol	38		76,02	19,39		

Tablo 1'de, çalışma grubunda yer alan deney ve kontrol grubunun ÖYTÖ ön test sonuçları arasında anlamlı bir fark yoktur ($p>0,05$). Hem deney hem de kontrol grubunda yer alan üniversite öğrencilerinin, ÖYTÖ alt boyut ve toplam ön test puanlarının kesme noktalarının altında yer aldığı ve puanlar arası farkın anlamlı olmadığı görülmektedir. Alınan puanların aynı zamanda, genel olarak öğrencilerin yetersizliği olan bireylere yönelik tutumlarının olumsuz yönde olduğunun göstergesi söylenebilir.

Tablo 2. Deney ve Kontrol Grubu Son-Test Puanları Ortalama, Standart Sapma ve Mann-Whitney U Testi Sonuçları

ÖYTÖ Alt Ölçekler	Grup	N	Kesme Noktası	$\overline{X}$	ss	M.W.U	P
Eğitim Ortamları	Deney	62	9	14,40	0,98	983,5	0,117
	Kontrol	38		12,89	3,82		
Kişilerarası İlişkiler	Deney	62	27	39,00	4,28	1156,5	0,878
	Kontrol	38		36,78	9,66		
Çalışma Yaşamı	Deney	62	27	38,29	3,92	1068,5	0,436
	Kontrol	38		36,81	8,86		

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Aile Yaşamı	Deney	62	9	10,83	2,28	1030,0	0,289
	Kontrol	38		11,23	2,60		
Kişisel Özellikler	Deney	62	21	29,00	3,51	1082,5	0,496
	Kontrol	38		28,13	6,99		
Yetkinlik-Bağımsız Yaşam	Deney	62	36	50,06	5,09	1172,5	0,969
	Kontrol	38		47,71	11,40		
Toplam	Deney	62	129	181,6	163,2	1116,3	0,662
	Kontrol	38		173,5	404,8		

Tablo 2'de, çalışma grubunda yer alan deney ve kontrol grubunun ÖYTÖ son test puanları arasında anlamlı bir fark yoktur (p>0,05). Buna rağmen hem deney hem de kontrol grubunda yer alan üniversite öğrencilerinin, ÖYTÖ alt boyut ve toplam son test puanlarının kesme noktalarının üstünde yer aldığı görülmektedir. Aradan geçen zaman içerisinde çalışma grubunda yer alan tüm öğrencilerin yetersizliği olan bireylere yönelik tutumlarının olumlu yönde değiştiği söylenebilir.

Tablo 3. Deney Grubu ÖYTÖ Ön Test-Son Test Puanları Ortalama, Standart Sapma ve t-Testi Sonuçları

ÖYTÖ Alt Ölçekler	Deney Grubu	$\overline{X}$	ss	t	p
Eğitim Ortamları	Ön Test	3,89	1,34	-41,966	0,000***
	Son Test	14,40	0,98		
Kişilerarası İlişkiler	Ön Test	14,98	4,25	-26,097	0,000***
	Son Test	39,00	4,28		
Çalışma Yaşamı	Ön Test	16,74	4,17	-26,143	0,000***
	Son Test	38,29	3,92		
Aile Yaşamı	Ön Test	7,40	2,19	-19,743	0,000***
	Son Test	10,83	2,28		
Kişisel Özellikler	Ön Test	13,83	3,63	27,216	0,000***
	Son Test	29,00	3,51		
Yetkinlik-Bağımsız Yaşam	Ön Test	22,85	5,13	1,415	0,000***
	Son Test	50,06	5,09		
Toplam	Ön Test	79,70	16,19	-29,566	0,000***
	Son Test	181,60	16,32		

***p<0,000

Tablo 3 incelendiğinde, deney grubunun ÖYTÖ ön test-son test tüm alt ölçekler ve ölçek toplam puanları arasında anlamlı ölçüde fark olduğu görülmektedir (p<0,001). Ön test puanları ile karşılaştırıldığında deney grubunun ÖYTÖ tüm puanlarının son testte kesme noktalarının üzerinde ve ön testten anlamlı düzeyde yüksek olduğu dikkat çekmektedir. Buna göre, iki dönemlik Özel Eğitim dersinin deney grubunda yer alan üniversite öğrencilerinin yetersizliği olan bireylere yönelik tutumlarını olumlu yönde değiştirmelerine anlamlı düzeyde katkı sağladığı söylenebilir.

Yetersizliği olan bireylere yönelik olarak, bireylerin farkındalıklarının artırılması önemli görünmektedir. Araştırma bulgularına bakıldığında (Tablo 2 ve Tablo 3), verilen eğitim programının üniversite öğrencilerinin yetersizliği olan bireylere yönelik bakış açılarını olumlu yönde etkilediği görülmektedir. Eğitim ortamları konusunda, deney grubu puanının kontrol grubu puanından anlamlı düzeyde daha yüksek olması ise öğrencilerin özel eğitim kurumlarında gözleme dayalı uygulamalar yapmasından kaynaklanıyor olabilir.

Haring 1956 yılında, engelliliğin yapısını anlayan, özel öğretim yöntem ve teknikleri hakkında daha önce eğitim almış olan ve bu konuda deneyimi olan öğretmenlerin özel gereksinimli öğrencilerle daha kolay etkileşim kurabildiklerini ifade etmiştir. Şahin ve Güldenoğlu (2013), üniversite öğrencilerine özel eğitim ve kaynaştırma konularında verilen bir eğitim programının onların engelli bireylere yönelik tutumları üzerindeki etkililiğinin belirlemek amacıyla yapmış oldukları çalışmalarında, uygulanan eğitim programının katılımcıların genel anlamda engelli bireylere yönelik tutumlarına ilişkin olumlu etkileri olduğu sonucuna ulaşmışlardır. Benzer şekilde yapılan bu araştırmanın sonuçlarını destekleyecek nitelikte olan, öğretmen ya da öğretmen adaylarının yetersizliği olan bireylere ilişkin bilgi düzeylerinin artması ve bu konuda deneyim edinmelerinin bu bireylere yönelik tutumlarına olumlu yönde etki ettiğine dair pek çok çalışmaya rastlanılmıştır (Orel, Zerey ve Töret, 2004; Jordan vd., 2009; Avramidis ve Norwich, 2002; Artan ve Balat, 2003; Hwang ve Evans, 2011; Zambelli ve Bonni, 2004).

Yetersizliği olan bireylerle çalışacak olanların hem yetersizliği olan bireyler hakkında bilgi edinebilecekleri, hem de farkındalık kazanarak olumlu tutumlar kazanabilecekleri en önemli yerlerden biri lisans eğitimi aldıkları fakültelerdir (Sözer, 1996). Bu nedenle Özel Eğitim dersini alan üniversite öğrencilerinin yetersizliği olan

 Copyright © International Conference on New Horizons in Education Conference (INTE)

bireylerin özellikleri ve gereksinimlerine ilişkin bilgisi arttıkça, beklentilerini daha gerçekçi düzeyde tutabileceği ve olumlu tutum sergileyebileceği söylenebilir.

SONUÇ VE ÖNERİLER

Özel Eğitim dersinin üniversite öğrencilerinin yetersizliği olan bireylere yönelik tutumları üzerine etkisinin incelendiğin bu çalışmada, verilen teorik ve uygulamalı özel eğitim dersinin öğrencilerin yetersizliği olan bireylere yönelik tutumlarını anlamlı ölçüde olumlu olarak değiştirmede etkili olduğu belirlenmiştir.

Yetersizliği olan bireyler toplumun bir parçasıdır ve normal gelişim gösteren bireylerin yetersizliği olan bireylere yönelik farkındalıklarının artırılması gerekmektedir. Aynı zamanda, yetersizliği olan bireylerin dışlamak yerine yetersizlikleri ile kabul ederek buna yönelik tutumlar sergilemeleri beklenmektedir. Bu amaçla, ülke politikası olarak eğitim öğretimin her kademesinde yetersizliği olan bireylerin özelliklerine ilişkin derslerin müfredata dahil edilmesi önerilebilir.

Yetersizliğe yönelik farklı bir okula gidiyor olmaları hem normal gelişim gösteren çocukların hem de ailelerinin, bu bireyleri ötekileştirmelerine neden olabilir. Yetersizliği olan bireylere yönelik özel okullar yerine, bu bireylerin de normal gelişen akranları gibi okul yaşı geldiğinde normal gelişim gösteren akranları ile aynı okula devam etmesi şeklinde kaynaştırma uygulamalarına öncelik verilmesi sağlanabilir.

KAYNAKÇA

Aiden, H. & McCarthy, A. (2014). Currint attitudes towards disabled people, *Scope About Disability*.[Erişim:http://www.scope.org.uk/Scope/media/Images/Publication%20Directory/Current-attitudes-towards-disabled-people.pdf?ext=.pdf].

Aral, N. & Gürsoy, F. (2011). Özel eğitim gerektiren çocuklar ve özel eğitime giriş. Ankara: Morpa Yayıncılık

Artan, İ., & Balat, G. U. (2003). Okul öncesi eğitimcilerinin entegrasyona ilişkin bilgi ve düşüncelerinin incelenmesi. Kastamonu Eğitim Dergisi, 11(1), 65-80.

Avramidis, E. & Norwich, B. (2002). Teachers' attitudes towards integration / inclusion: a review of the literature. European Journal of Special Needs Education, 17(2), 129-147.

Budak, S. (2000). Psikoloji Sözlüğü. Ankara: Bilim ve Sanat Yayınları.

Baykoç Dönmez, N. (Ed.). (2011). Özel gereksinimli çocuklar ve özel eğitim, Ankara: Eğiten Kitap.

Cavkaytar, A. (2010). Toplum ve Aile (Ed. Atilla Cavkaytar). Özel eğitimde aile eğitimi ve rehberliği. Ankara: Maya Akademi

Eymen, U. E. (2007). *SPSS 15.0 Veri Analiz Yöntemleri SPSS Kullanma Kılavuzu*, İstatistik Merkezi Yayını No:1. www.istatistikmerkezi.com.

Haring, N. G. (1958). Attitudes of educators toward exceptional children (Vol. 3). Syracuse, NY: Syracuse University Press.

Hwang, Y. S., & Evans, D. (2011). Attitudes towards inclusion: gaps between belief and practice. International Journal of Special Education, 26(1), 136-146.

Jordan, A., Schwartz, E., & McGhie-Richmond, D. (2009). "Preparing Teachers for Inclusive Classrooms". Teaching and Teacher Education, 25 (2009) 535–542.

Lifshitz, H., Glaubman, R., & Issawi, R. (2004). Attitudes towards inclusion: The case of Israeli and Palestinian regular and special education teachers. 19, 2(171-190).

Orel, A.,Zerey. Z., & Töret, G. (2004). Sınıf Öğretmeni Adaylarının Kaynaştırmaya Yönelik Tutumlarının İncelenmesi. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi. 5:23-33.

Özyürek, M. (2010). Engellilere yönelik tutumların değiştirlmesi. Ankara: Kök Yayıncılık.

Sözer, E. (1996). Üniversitelerde Öğrenim Gören Öğretmen Adaylarının Öğretmenlik Mesleğine Yönelik Tutumları. Anadolu Üniversitesi Eğitim Fakültesi Dergisi. 6 (2):7–21.

Yıldırım Doğru, S. &Durmuş Salatalı, N. (2009). Erken çocukluk döneminde özel eğitim. Ankara: Maya Akademi.

Şahin, F., & Güldenoğlu, B. (2013). Engelliler konusunda verilen eğitim programının engellilere yönelik tutumlar üzerindeki etkisi. Amasya Üniversitesi Eğitim Fakültesi Dergisi, 2(1), 214-239.

Thompson, T. L. C., Emrich, K., & Moore, G. (2003). The effect of curriculum on the attitudes of nursing students toward disability. Rehabilitation Nursing,28(1), 27-35.

T.C.BAŞBAKANLIK ÖZÜRLÜLER İDARESİ BAŞKANLIĞI. Özürlülük Eğitimi:Toplum Özürlülüğü Nasıl Anlıyor Temel Araştırması, Toplum Özürlülüğü Nasıl Anlıyor, T.C. Başbakanlık Özürlüler İdaresi Başkanlığı, Ankara, (…).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Yoon-Suk, H. (2010) Attitudes towards inclusion: gaps between belief and practice. International Journal of Special Education. *26*(1), 136-146

Zambelli, F., & Bonni, R. (2004). Beliefs of teachers in Italian schools concerning the inclusion of disabled students: A Q-sort analysis. European Journal of Special Needs Education, 19(3), 351-364.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

PECULIARITIES OF INDIRECT TRANSLATION FROM ENGLISH INTO KAZAKH VIA RUSSIAN LANGUAGE

Aigul K. Zhumabekova
Kazakh National University named after Abai
Almaty, Kazakhstan
aigzhum@mail.ru

Leila Yu. Mirzoyeva
Suleyman Demirel University
Almaty, Kazakhstan
mirzoeva@list.ru

ABSTRACT
Nowadays, it is quite obvious that Russian language works as a mediator in the process of translation from Kazakh into English and vice versa. There were many reasons for that, and one of the most important conditions is the long-standing tradition of Kazakh-Russian and Russian-Kazakh translation. It is necessary to point out, that significant contribution of the Russian culture as an intermediary in the process of rendering English texts into Kazakh also took place. From one hand, Russian has become the second language for most of the Kazakh people; also it was considered as a second source for getting information which was not available in Kazakh at that period of time. K. James stated that "it is further explained that parallels in culture often provide a common understanding despite significant formal shifts in the translation" (James, 2010). On the basis of this approach, it is possible to explain the fact that contemporary Kazakh translators choose the Russian versions of the English literary texts as a source both from language and cultural point of view; so that we can investigate this aspect of Russian language and culture in Kazakhstan as one of the models of its functioning. The study of the different characteristics of indirect translation from English into Kazakh via Russian, and the corresponding cultural peculiarities are at the core of our research. In the process of research, the **qualitative method** represented by different techniques (i.e. preliminary text analysis, lingua-cultural interpretation of the texts) has been used.

INTRODUCTION

In contemporary translation studies, the phenomenon of indirect translation is one of points for discussion. Traditionally, it is considered as "translation based on a source (or sources) which is itself a translation into a language other than the language of the original, or the target language" (Kittel and Frank, 1991, 3). In the Republic of Kazakhstan, all problems related to indirect translation (especially in the field of literary translation) are really topical, because Russian language as an inter-mediator is involved into the process of translation from English into Kazakh and vice versa. There are many specific reasons which predetermined that situation in the aforementioned sphere; and one of the most important factors is the long-standing tradition of the Russian-Kazakh/Kazakh-Russian literary translation. Also, it is necessary to take into account that the status of Russian language in Kazakhstan as well as its fruitful contacts with Kazakh language and Kazakh culture is very specific. Thus, for most of Kazakh people, Russian may be considered rather as 'a second native language' than as a foreign language. On the other hand, Russian culture has also been playing a part of European culture inter-mediator for a very long period of time, and has been functioning as a source of information unavailable in Kazakh language during that period. So that, in our research we treat Russian language as a bridge between European (English) and Asian (Kazakh) cultures accomplishing two different functions as source or target languages. On the basis of this approach, the authors make an attempt to explain indirect translation peculiarities; actually, the process of indirect translation is different from "first-hand" translation from source into target language. Nowadays, indirect translation as linguistic and cultural phenomenon is not studied in details. Thus, there are no scientific works dealing with role of indirect translation in multi-lingual societies when one language can be treated both as a target language and as a source one. Moreover, as it will be shown below, even the term '*indirect translation'* is really ambiguous, and there are some synonyms for it (e.g. 'mediated translation).

RESEARCH QUESTIONS

In order to find out key characteristics of indirect translation in Kazakhstan as well as its peculiarities in literary translation, we have used the following research questions:
- how to identify the traces of the Russian version of the English text in its Kazakh re-translation?
- What are pros and cons of indirect translation in case of use Russian language as an inter-mediator between English and Kazakh culture?

 Copyright © International Conference on New Horizons in Education Conference (INTE)

- How to develop a model of indirect translation which represents specific Kazakhstani conditions in the field of literary translation? On the basis of the aforementioned research questions, the authors got the opportunity to find out the most important characteristics of indirect translation.

LITERATURE REVIEW

While studying definitions of indirect translation, it becomes obvious that there is no standard approach to that phenomenon. Of course, most of scholars consider it as "translation into Language C based on a translation into Language B of a source text in Language A" (Clifford, 2001, p. 134). On the other hand, Gutt, E. (1988) analyzed the given phenomenon from the point of view of the "ostensive-inferential communication"; that is why, he underlined that "the situation changes significantly when the receptor language stimulus is not presented in its own right, but as a representation of an original source language stimulus. In such instances the translator begins to figure as a communicator separated from its original source…". Also, it is necessary to take into account Toury's emotional utterance about "second-hand translation" which "is not some kind of disease to be shunned, as has long been the dominant attitude" (Toury, 1995). So, Toury define it as any translation based on a source (or sources) which is itself a translation into a language other than the language of the original, or the target language.

As we can see, scholars' attitude to indirect translation is rather negative than positive; in our opinion, this was the reason for a kind of terminological disorder. Thus, Ringmar, M. in his work *Roundabout Routes. Some remarks on indirect translations* (2011) stated that there are at least 7 terms in English which denote the given concept (e.g. Toury (1995) preferred the term *indirect translation;* Dollerup (2000) used such word combination as *relay translation*; Ingo (1991) introduced such term as*chain translation* whereas Edström (1991) and Lindqvist (2002) spoke about *double translation* and *secondary translation* respectively, etc. Sometimes such terms as *mediated translation* (Kittel (1991), Toury (1995), and *retranslation/retraduction* are also used.

There is no doubt that terminological variability in the field of Indirect Translation is predetermined by cautious attitude represented in most of works in Translation Studies. Thus, pointing out advantages of indirect translation ("certain classic works of world literature would not have found their way into languages of limited diffusion had it not been for indirect translation; at the very least their appearance would have been delayed"), Landers (2001) also focused on their limitations: "Pitted against this advantage are several negatives. First and most important, any error or misinterpretation in the first-generation translation (T1) will inevitably be reproduced in T2 (the second generation) with no chance of correction through comparison with the SL. Thus T2 is automatically further removed from denotative fidelity than T1, even if T2 introduces no further errors into the translation. But because such second-stage errors are likely to occur, a degrading of meaning sets in, and something akin to the Xerox effect takes place: a copy of a copy of a copy looses sharpness and detail with each successive passage through the process" (Landers 2001:134). As a result, Landers concluded that indirect translation should be avoided if possible (ibid.). Speaking on "secondary communicative situation" Gutt (1988) also underlined that "it has run into various difficulties". Ringmar (2011) underlined that "the widespread suspicion towards ITr is reflected e.g. in the following UNESCO recommendation: "[…] as a general rule, a translation should be made from the original work, recourse being had to retranslation [i.e. ITr] only where absolutely necessary".

On the other hand, Pieta, H., and Assis Rosa, A., focused on vital necessity of indirect translation in contemporary world: "As regards its importance, recent research into indirect translation appears fairly significant, inasmuch as it yields insights into the historiography of intercultural relationships and the complex role of intermediary centres in the cross-cultural transfer between peripheries. Yet, despite the concentration of research on indirect translation since at least the late 2000s, many areas remain to be explored or await more systematic study" (Pieta, H., Assis Rosa, A. (2015).

In conclusion, it should be noted that despite ambiguous status of ITr phenomenon, in our specific conditions we cannot avoid it, especially in the field of literary translation. Nowadays, Russian is not replaced in Kazakhstan by another language which will function as an intermediary, or bridge, between European and Asian cultures in the process of translation. There is no doubt that Soviet tradition of translation is really highly-developed and rich; also, there are many Russian versions of classical English literary works, in particular – of Shakespeare's plays, poems and sonnets which can be treated as source texts for indirect translation from English into Kazakh via Russian.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

RESEARCH METHODOLOGY

In accordance with the purposes of our study, authors used ***qualitative method*** represented by such research techniques as pre-translation analysis and lingua-cultural interpretation of the text. Also, we chose "Hamlet" tragedy and its Russian/Kazakh versions as a material for our investigation because this text is treated traditionally as one of the key cultural symbols of the English culture. In the process of study we used Russian version of Shakespeare's "Hamlet" (translated by B. Pasternak from English into Russian in the XX century), and its Kazakh version (translated by Kh. Yergaliyev from English into Kazakh via Russian, also in the XX century).

First of all, the methodology of our research is based on specific functions performed by Russian language as an inter-mediator; so we analyzed particular cases and situations existing because of indirect way of literary text translation.

KEY ASPECTS OF INDIRECT TRANSLATION: INFLUENCE OF INTERMEDIARY CULTURE, OR PREDOMINANCE OF NATIONAL WORLD VIEW?

RENDERING OF REALIA IN INDIRECT TRANSLATION

As a matter of fact, problems related to realia rendering tend to be unresolved. In case of indirect translation, they become much more complicated because there are different realias in source language, intermediary language and target language, and that variability should be taken into account. Thus, realias of material world in source, intermediary and target languages may be (1) absolutely different; (2) also, they can correspond to each other in source and intermediary languages; (3) clear correspondence between realias in intermediary and target languages takes place, too; (4) finally, there are some cases where realias in target language are closer to similar phenomena in source language than in intermediary one. See:

The head is not more native to the heart,
The hand more instrumental to the mouth,
Than is the ***throne of Denmark*** *to thy father.*
What wouldst thou have, Laertes?

In some Russian versions, e.g. in translation done by Polevoy and Pasternak, the word 'throne' is represented, whereas in famous translation done by Lozinsky, there is nothing like a throne. Kazakh version is based mostly on Pasternak's translation from English into Russian, but throne does not exist in Kazakh text. Some of factors which determined the loss of such realia, are related to peculiarities of Kazakh nomadic culture. This is the specific type of adaptation of Shakespeare's tragedy to Kazakh national world view.

In is quite obvious that there are no nunneries (or monasteries) in Kazakh culture as well as churches (*the Muslim mosque* and *the church* cannot be treated as equal concepts). But in Russian version of the following passage the recipient can find such word as *monastery / nunnery* which corresponds to similar English word. In Kazakh version, translator used the word *church* instead of *nunnery,* because for Kazakhs it seems to be much clearer than *nunnery:*

I have heard of your paintings too, well enough;
God hath given you one face, and you make yourselves another: you jig, you amble, and you lisp,
and nickname God's creatures, and make
your wantonness your ignorance. Go to,
I'll no more on't; it hath made me mad.
I say, ***we will have no more marriages:***
those that are married already, all but one,
shall live; the rest shall keep as they are.
To a nunnery, go…

Besides, it should be underlined that in the original text as well as in its Russian version Hamlet said generally: ***we will have no more marriage*** whereas in Kazakh version he stated that he would not marry Ophelia; so the Kazakh recipient faced to specific case and collision instead of generalized one.

There are no such flowers as a violet, in Kazakh steppes; so that Kh. Yergaliyev used generalization (i.e. *small flower* instead of *violet*) in order to make the text clear for Kazakh recipients: *A* ***violet*** *in the youth of* ***primy nature****,*

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Forward, not permanent – sweet, not lasting;
The perfume and suppliance of a minute;
No more

Also, there no such characteristics of violet as *not permanent, not lasting* represented both in original text and its Russian version; in our opinion the Kazakh translator omitted those characteristic in order to provide his target audience with the general picture instead of specific one. Such kind of perception of the given phenomenon also corresponds to Nomadic world view.

On the other hand, there are specific culture symbols related to Kazakh culture, and such plant as *wormwood* (botanic *sage,* folk *Old Uncle Henry*) symbolizes Kazakh steppes (prairies); because of its positive meaning for Kazakh recipients (which does not exist both in English and Russian cultures) Kazakh translator Kh. Yergaliyev avoided its use with negative connotations. Thus, while translating the situation of Claudius examination done by Hamlet, anad Hamlet's remark *Wormwood, wormwood!* Kh.Yergaliyev used generalized concept of 'bitter grass' instead of the certain 'wormwood'. That association is based on peculiarities of language symbolism which corresponds just to Kazakh national world view whereas for Russian and English recipients *wormwood* is not correlated with anything positive. Summarizing all aforementioned facts as well as 21 other cases of realias rendering we can come to the conclusion about minor cultural influence of intermediary language on presentation of material world in target text. Thus, we can see such influence in 6 passages of 21 only; so that in this field the translator followed rather national world view, customs, traditions, than peculiarities of intermediary text and intermediary culture.

DIFFERENCES IN SOCIAL AND INTELLECTUAL LIFE AND THEIR REPRESENTATION IN INDIRECT TRANSLATION

As it was stated before, Russian language and culture are considered as mediators in representation of various details of European culture and way of thinking. In our opinion, existence of centuries-old culture links between Russians and Kazakhs influences rendering of social and intellectual life representation while translating literary text from English into Kazakh via Russian. Using comparative analysis of the original text of Shakespeare's play and its Russian and Kazakh versions we found 47 examples related to (a) nominations of social status; (b) terms of kinship; (c) intellectual life phenomena (i.e. various types of superstitions); (d) emotional colour of the text.

Thus, Horatio and Marcellus denoted themselves as
Friends to this ground.
And liegemen to the Dane where *liegemen* means 1. (formerly) the subject of a sovereign or feudal lord; vassal 2. a loyal follower (Collins (2016).

In Russian version, we found the analogue of *servant* rather than *vassal*; the noun with the same meaning is represented in Kazakh translation, too. So, in that case as well as in 13 similar examples, we have clear correspondence between target and intermediary texts in social life phenomena representation whereas both of them differ dramatically with the source text.

Concerning terms of kinship, it is possible to state that there are some differences presupposed by the distance between source, intermediary and target cultures. Indeed, rendering the following passage *Your hands, come: the appurtenance of welcome is fashion and ceremony: let me comply with you in this garb; lest my extent to the players, which I tell you must show fairly outward, should more appear like entertainment than yours.*
You are welcome: but ***my uncle-father***
and aunt-mother are deceived,

All Russian translators used the corresponding words for the English ***uncle*** and ***aunt***; besides, in Kazakh language there are specific terms for *sister-in-law* (they are different for elder and smaller brothers' wives). So, there are not so much contradictions in Kazakh version of that passage than in corresponding part of Shakespeare's text as well as in its Russian version. For 4 terms of kinship represented in "Hamlet" we found total correspondence between source, intermediary and target texts; concerning 3 other terms, we may say without impropriety that there are key differences between Shakespeare's text and its Russian version, on one side, and its Kazakh version on the other.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

In our opinion, representation of the intellectual life phenomena in indirect translation is of the outmost interest because there are a lot of peculiar features in this field in source, intermediary and target cultures. E.g., one of key Hamlet's phrases

To be, or not to be, *- that is the question:*
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune
Or to take arms against a sea of troubles,
And by opposing end them?

Is rendered into Kazakh much more directly: *to live, or to die? to stay here, or to pass away?* So the influence of intermediary text is obvious in that case because meaning of *death* (instead of *not to be)* is also represented in two Russian versions of the monologue. Indeed, in target text as well as in the intermediary one, we can see the analogues for the English *battle, fight* which are much more active than the English *to take arms against.* In contrast, for the target audience it is impossible to translate directly such passage as *What should such fellows as I do crawling between* ***earth and heaven?***

We are arrant knaves, all; believe none of us. While translating it, Kh. Yergaliyev adapted the source text to Kazakh national world view; thus, for Kazakh religious viewpoint, there is no semantic opposition between ***earth and heaven***; it is perceived rather as a contrast between two worlds, and it is represented in such way in Kazakh version of "Hamlet" tragedy.

Also, there are many examples in "Hamlet" and its Russian/Kazakh versions related to superstitions as a part of intellectual life as well as a substructure of national world view. See: *It faded* ***on the crowing of the cock.***
Some say that ever, 'gainst that season comes
Wherein our Saviour's birth is celebrated,
The bird of dawning singeth all night long*;*
And then, they say, no spirit dare stir abroad,
The nights are wholesome, then no planets strike,

For Kazakhs, such signs as **crowing of the cock**, symbolic meaning of the certain time of day (so-called wee) is not reliable; that is why the translator just gave equivalents for corresponding Russian words without taking into account their symbolism in European culture. On the contrary, the following passage was reproduced in accordance with its original version from English into Russian: *Queen.*
Alas, how is't with you,
That you do bend your eye on vacancy,
And ***with the incorporal air do hold discourse?***
Forth ***at your eyes your spirits wildly peep****; whereas in Kazakh translation it is stated that the Queen could see nothing except things (in Russian and English, it was underlined that the ghosts could be felt just by people whom they visited).*

Consequently, the key role of Russian version of the most brilliant Shakespeare's work in representation of peculiarities of social and intellectual life in its Kazakh translation is self evident. Most of cases (19 of 27) show the clear correspondence between intermediary and target texts whereas the divergence between source and target texts in most of cases is quite obvious. On the basis of the aforementioned fact, it is possible to state that it is reasoned by cultural differences.

TRANSLATORS' COMMENTS IN INDIRECT TRANSLATION

The impact of the intermediary language and Russian version of Shakespeare's tragedy on its Kazakh translation could also be seen in translators' comments. There are 60 comments written by A. Smirnov which explain ambiguous passages of Shakespeare's texts for Russian recipients; at the same time, we could state that in its Kazakh version Kh. Yergaliyev translated just 26 of them. 9 of those comments were simplified whereas 17 of them were translated literally from Russian into Kaz

CONCLUSION

As a result of our study, we propose the following model of interaction between source, intermediary and target texts for the situations of indirect translation from English into Kazakh via Russian:

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Source (English)Text (Language, Culture)	Intermediary (Russian) Text (Language, Culture)	Target (Kazakh) Text (Language, Culture)

At the same time, the impact of Russian text as an intermediary one first of all took place in the field of social and intellectual life and their representation; thus, in 32 cases of 47 the clear correspondence between intermediary and target texts took place whereas in 12 cases only we could find the similarity between source, intermediary and target texts. Besides that, influence of intermediary language in course of rendering realias in the process of indirect translation was considered as a minor one: we can see such influence in 6 passages of 21 only; so that in this field the translator followed rather national world view, customs, traditions, than peculiarities of intermediary text and intermediary culture. Thus, modeling of interaction between source language/culture and target language/culture via intermediary ones should be studied as a significant phenomenon. In our viewpoint, such study is important not only for research in literary translation, but also in the frame of investigation of language with specific status (as Russian language in Kazakhstan). Nowadays, the intermediary function of Russian language as a means of indirect translation is understudied and underestimated. The model proposed in our research represented an attempt of generalized approach to that phenomenon as well as contribution to the study of linguistic situations that determine peculiarities of Russian language functioning in Kazakhstan.

REFERENCES

James, K. (2010). *Cultural Implications for Translation*. [Available at: URL http://bokorlang.com/journal/22delight.htm 05.10.2015]

Kittel, H. and Frank, A. P. (1991). *Interculturality and the historical study of literary translations*. Berlin: Erich Schmidt Verlag.

Clifford, E. L. (2001). *Literary Translation: A Practical Guide*. Multilingual Matters, 219 p.

Dollerup, C. (2000). Relay and support translations. In A. Chesterman et al. (Eds.), *Translation in Context*, Amsterdam/Philadelphia: John Benjamins, pp.17-26.

Edström, B. (1991). The transmitter language problem in translations from Japanese into Swedish. *Babel* 37:1, pp.1-13.

Shakespeare, W. (2008). *The Tragedy of Hamlet Prince of Denmark*. Sibirskoye universitetskoe izdatel'stvo.

Toury, G. (1978, revised 1995). The Nature and Role of Norms in Translation. In: Venuti, L. *The Translation Studies Reader*. London: Routledge. Volume 6, No. 4, October 2002.

Hamlet. - Audargan Hamit Ergaliev//Shekspir U. Otello. Asauga tusau. Hamlet. Romeo men Dzhul'etta. Korol' Lir. Sonetter. – Astana: Audarma, 2004. - S.232-361.

Morozov, M. M.Shekspir v perevode Borisa Pasternaka [Электронный ресурс. Режим доступа: URL http://az.lib.ru/m/morozow_m_m/text_0340.shtml - дата обращения 05.10.2015]

Gutt, E.-A. (1988). From translation to effective communication. *Notes on Translation*, vol. 2, no. 1. pp. 24-40.

Toury, G. (1995). *Descriptive Translation Studies - and beyond.* Amsterdam-Philadelphia: John Benjamins Publishing Company.

UNESCO. Recommendation on the Legal Protection of Translators and Translations and the Practical Means to improve the Status of Translators. Available at: http://portal0.unesco.org/en/ev.php-URL_ID=13089&URL_DO=DO_TOPIC&URL_SECTION=201.html

Pieta, H., Assis Rosa, A. (2015). *Indirect translation: exploratory panel on the state-of-the-art and future research avenues.* Available at: http://www.fb06.uni-mainz.de/est/51.php

Collins English Dictionary Online. Available at: http://www.collinsdictionary.com/dictionary/english/liegeman.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

PEOPLE WITH DISABILITIES AND THEIR QUALITY OF LIFE

Zuzana BRUNCLÍKOVÁ
Faculty of Education
Comenius University in Bratislava,Slovakia
brunclikova@fedu.uniba.sk

Katarína CABANOVÁ
Faculty of Education
Comenius University in Bratislava,Slovakia
cabanova@fedu.uniba.sk

Dana ĎURIŠOVÁ
danaduris@yahoo.co.uk

ABSTRAT
Thesis is focused on human values of people with disabilities. The thesis is divided into a theoretical and an empirical part. The purpose of the thesis is to describe and analyse the life goals and values from the perspective of people with disabilities compared with intact individuals. The research evaluated qualitatively with semi-structured interview. The survey sample consists of 14 participants, 7 intact individuals and 7 people with disabilities, a total of 8 women and 6 men. Based on the responses of our participants we have described and analysed the life goals and values of people with disabilities compared with intact individuals.

Keywords: disability, quality of life, life goals, values, sense of life

INTRODUCTION

People with disabilities are often characterized by what they miss and not what they have. They are often not considered equal to the others and their abilities are many times ignored, even through their emotions (Andreánska, 2007). Many of them do not get opportunities which their intact peers consider a matter of course, such as good upbringing, education, active social life and especially respect of their human dignity. All this dehumanizes not only a person, but also the society which allows it. (UNICEF. 2016). Křivohlavý (2001, in: Heretík et al., 2007, p. 48) limits the definition "health is the overall (bodily, psychic, social, and mental) state of a human which allows him to achieve the optimal life quality and is not an obstacle for the similar effort of the others. Hartl (2000, p. 345) defines disease as „reactions of organism to the stability failure between the organism and environment, or stability failure of physiological and mental factors and their mutual interaction in physical and social environment." WHO (1948, in: The United Nations, 2003-4) defines disability as „restriction or deprivation of ability to perform activities to such extent which is considered normal for a human". It also describes functional restrictions or performance restrictions caused by disability. Disabilities are descriptions of deficiencies on a human level. In connection with the term disability, the frequently used notions are for example: impairment, disability, handicap, which were defined by WHO.

THE STUDY

Impairment is any loss or abnormality in mental, physiological or anatomic structure or function.
Disability any loss or deficiency of ability caused by a malfunction which disallows a person to perform some routine activities.
Handicap defines a certain restriction which disallows a person to perform particular social functions and to fit into the social roles (Repková, 1998).
From the psychological point of view, Heretik et al. (2007) defines a person (individual) with disability as a human with a signature organ deficit or a deficit of its function, which modifies processes of perception, gaining social abilities in genesis, dynamics and human structure. Vančová (2014) and Smoľjaninov – Vančová (2011) claim that gaining of social abilities of individuals with disabilities is one of the important aspects of opportunities in their special education. Vernarcová states (2005) that adolescents' difficulties with social skills that might exist as a result

 Copyright © International Conference on New Horizons in Education Conference (INTE)

of disability usually affect one's perception of quality of life. Šramová (2007, 2015) brings to an attention the importance of increasing of the social competencies in teachers training not only for the people with disabilities but also for the ones without any disability. Křivohlavý (2001) characterizes the quality of life in regards to the satisfaction of the person with meeting his/her goals which determine the direction of their life. Opinion on the quality of life can change, in other words, opinion on satisfaction, happiness, health can change according to experience, circumstances, and time. According to Blaško (2008, in: Góra, 2011), various factors such as material deficit of an individual, health, privacy, efficiency, safety, social acceptation, and emotional fullfilment have an impact on subjective living of good life. Subjective life quality is about tranquility, good life feeling as well as sastisfaction with the things around us. As Vancu (2014) states encouraging the development of positive body image in young girls and boys can have a significant impact on their wellbeing and health. Poor body image can significantly affect health and wellbeing and is an obstacle to effective learning, participation, aspirations and attainment.

FINDINGS

The aim of our work is to analyse quality of life from the point of view of adolescents with disabilities in comparison to inactive individuals. For our research, we have chosen semi-structured interview, which is more flexible and adaptive then the structured one. The content framework and the field of questions were already prepared but the questions may adjust to the flow of the interview, which we consider an advantage.

The research group consisted of 14 participants, 7 inactive individuals and 7 people with disabilities. Total of 8 women and 6 men from Bratislava and surroundings. We have chosen participants according to the availability.

Quality of life from the point of view of the intact individuals:

When we define the quality of life, we should bear in mind various factors which influence it. The intact individuals understand the quality of life as something essential for everyday functioning and they consider it as a matter of course. Those are the things such as good education, work, healthy family, friends, enough free time for resting and hobbies. After the analysis, we have found out what the intact individuals consider the most important when it comes to a quality life. We have divided the answers into 3 groups which have been mentioned the most:

1. Quality and contented life
2. What we have achieved and appreciate it
3. Active use of free time

Quality and contented life – this statement could be found in the all 7 responses of the intact individuals. We can assume that the intact individuals are satisfied with their life, they have a good quality of life and everything needed for proper functioning, especially education, job, healthy family, friends and, of course, enough free time for resting and hobbies.

They have also stated that the important thing is to develop and enhance their life. We appreciate the responses of the intact group that despite the fact that they consider some things as a matter of fact, on the other hand they appreciate most those which they have achieved by themselves, which may also contribute to better quality life. Into this group of responses, we have also included the opinions which were of high importance, such as finishing the school, health, good family relationships, partner, job. These results correspond with the Hamranová (2003, 2015) results. Last but not least, a part of the majority of the responses was family independence.

Active free time use – we have included into this category all activities which are connected with relax, positive emotions and hobbies. We have found out that the participants use their free time actively. It mainly includes sport, tourism, walks, traveling, trips and new experiences. When it comes to the active use of free time, it is needed to state that the majority of the participants look for the company of close contacts and friends and spend their free time with them. Close contacts, such as family, partner, friends, or colleagues are an important part of their life.

Quality of life from the point of view of people with disabilities:

After analysing the interviews, with the people with disabilities, we have found out that besides the above responses, there have been two new categories:

 Copyright © International Conference on New Horizons in Education Conference (INTE)

1. Harder life
2. Joy from little things

Into the category "Harder life", we have put the participants' opinions which have been mentioned "different" quality of their life, less active relax and hobbies. Despite the mentioned facts, the participants try to overcome their difficulties and to live a life of healthy people. Despite some of the responses of the people with disabilities who have mentioned that they like to travel, relax in the nature, take a walk, we have found out that they prefer less difficult activities (physically) because of their health condition. We have also found out that despite spending enough time with their close contacts, they need to have some time just for themselves. Even Harčaríková (2011) stresses out this fact regarding to special pedagogy and education for people with disabilities.

CONCLUSION

Considering the above results of our research, we have come to the identification of the differencies of the opinions on the quality of life between the intact individuals and people with disabilities. We have come to a conclusion that people with disabilities consider their life harder, have a joy from small things, consider their disability as an obstacle but despite all that they want to fight and not give up. Besides the other values, they add some other values to their own ones, such as fairness, frankness, veracity, equality – not judging people at the first sight. They see their future rather optimistically and see the quality of their life in living full.valued life, which implies also help to others.

According to Vernarcová (2015) schools have great position to support adolescent girls and boys in positive wellbeing, higher self-esteem and body confidence. Our school curriculum and school environment offers the possibility to promote the development of positive body image, what leads to effective learning about healthy lifestyles.

This paper was supported by VEGA 1/0620/16

REFERENCES

Andreánska, V. (2007). *Telesné postihnutie.* In: Klinická psychológia. - Nové Zámky : Psychoprof, 2007. (pp. 648-654).

Góra, Z. (2011). Kvalita života v kontextech vzděláváni. Vedecká monografie. *Vydavatelství Zielonogórské univerzity,* 2011. (p. 259). ISBN 978-83-7481-402-7. [online]. Available at: http://www.wpsnz.uz.zgora.pl/erasmus/files/ksiazka_cz.pdf.

Hamranová, A. (2015). Values and value orientation of high school students. In *The Turkish Online Journal of Educational Technology, 2015, Special Issue 2.(pp. 718-721*). [online]. Available at:

http://www.tojet.net/special/2015_7_2.pdf

Hamranová, A. (2003). Intervenčný program vo výchovno – vzdelávacom procese. In *Slovenské školstvo v Kontexte európskej integrácie*. Zborník prednášok z medzinárodnej konferencie. Nitra : UKF.

Harčaríková, T. (2011). *Pedagogika telesne postihnutých, chorých a zdravotne oslabených – teoretické základy*. Bratislava : IRIS.

Hartl, P. (2000). *Psychologický slovník*. Praha : Portál. (p.776).

Heretík, A. et al. (2007). *Klinická psychológia.* Nové Zámky : Psychoprof. (p. 815).

Lopúchová, J. (2010). *Reedukácia a komplexná rehabilitácia zraku u jednotlivcov so zrakovým postihnutím*. Bratislava : IRIS.

Křivohlavý, J. (2001*). Psychologie zdraví*. Praha : Portál. (p. 279).

Šramová , B. (2015). Social-inclusive competencies among Slovak teachers and future teachers. *Turkish Online Journal of Educational Technology*. Special Issue. August (2015). (pp. 477-480).

Šramová, B. (2004). Cognitive training - Teacher's help. *Studia psychologica*,46 (3). (pp. 203-210).

The United Nations. (2003-04). *The United Nations and Disabled Persons – The First Fifty Years*,

 Copyright © International Conference on New Horizons in Education Conference (INTE)

What is a disability? New York. [online]. Available at: http://www.un.org/esa/socdev/enable/dis50y10.htm.

World Health Organization. (2013). *Univerzal eye health: a global action plan 2014-2019.* WHO Press. [online]. Available at: http://www.who.int/blindness/actionplan/en/.

Vancu, E. (2014). *Influence of Disability on the Coping Strategies and Personality Structure in Early Adolescence.* Journal of Health Science, 2. (pp. 63-74).

Vančová, A. (2014). The impact of neurodynamic intervention on motor and social development of children with cerebral palsy and mental retardation . In: *Osobliva ditina : navčannia i vichovannia : Exceptional child : teaching and upbringing.* Roč. (69), č. 1. (pp.79-95).

Smoľjaninov, G.A., Vančová, A. (2011). *Hand – Gehirn.* Praha : Knihy nejen pro bohaté. (p. 98).

Vernarcová, J. (2015). *Body image and self-esteem through the school curriculum*. Turkish Online journal of Educational Technology. Special Issue, September (2015). (pp. 96-99).

Vernarcová, J. (2005). Sociálna a pedagogická psychológia. Nitra : SPU. (p. 102).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

PERCEIVED INSTRUMENALITY OF EDUATIONAL SCIENCES COURSES BY PROSPECTIVE TEACHERS

Ali ARSLAN
Bülent Ecevit University, TURKEY
arslan54tr@yahoo.com
Ali SICAK
Bülent Ecevit University, , TURKEY
alisicak@gmail.com
Elif Akdemir
Bülent Ecevit University, TURKEY
akdemirelif@gmail.com
Esma N. Karameşe
Bülent Ecevit University, TURKEY
esmanurkarameşe@gmail.com

ABSTRACT
Teacher training is regarded as a fundamental mechanism for developing pedagogical content knowledge of teachers' and emerging training applications to reach high standards. The purpose of this study is to investigate views of faculty of education students' and pedagogical formation training certificate program students' about perceived instrumentality of educational sciences courses. The cross-sectional study was used to investigate the research questions. Data were collected from 415 teacher candidates using the Perceived Instrumentality of Educational Sciences Courses Survey. Results revealed that faculty of education students' opinions towards the functionality of educational sciences courses were more positive than pedagogical formation training certificate program students' opinions.
Keywords: educational science courses; perceived instrumentality; prospective teachers

INTRODUCTION

Teacher training is regarded as a fundamental mechanism for developing pedagogical content knowledge of teachers' and emerging training applications to reach high standards. In this process, both pedagogical content knowledge of teachers and their teaching skills have a strong influence on success of students. Several studies were conducted to investigate the issue (Atik Kara, 2012; Kartal and Afacan, 2013; Kılıç ve Acat, 2007; Yüksel, 2009).

Kılıç ve Acat (2007) conducted a study determine the essentiality and job-utility levels of the courses offered in elementary school teacher education programs. The data were collected by a survey developed by the researchers. 296 senior students attending on the education faculty participated in the study. The order of the job-utility and essentiality of the courses within groups and across all courses were determined. The result of study indicated that pedagogy courses are viewed as essential and useful by the students. However, students indicated that subject area courses are not as useful as pedagogy courses for their prospective profession.

In a study Yüksel (2009) investigated the opinions of students about education courses. Participants were selected among the education faculty students of the Uludağ University and the Gazi University. 414 students participated in the study. The data for the study were collected through a survey. The result of the study revealed that students have positive opinions about the teaching profession and their instructors but their opinions about the education courses are not that much positive. Yüksel (2009) recommended a future investigation to investigate the reasons.

Atik Kara (2012) conducted a study to evaluate the subject area courses and pedagogy courses found in teacher training programs in terms of teacher candidates' competencies regarding the learning and teaching process. The qualitative research method was used in the study. Initially the Teaching Profession General Competencies were determined. Then the study investigated;

- How these indicators reflect upon the content and objectives of the Teaching Profession Knowledge courses,
- To what extent these Teaching Profession General Competencies courses help gain these performance indicators from the perspectives of faculty members and teacher candidates, and
- To what extent teacher candidates use these performance indicators in teaching-related applications.

Data for the study were collected from 7 faculty members from the Department of Educational Sciences 14 teacher candidates from seven different teaching programs of an education faculty in one public university. Structured and semi-structured interviews, observations, diaries and document analysis were used to collect data for the study. The descriptive analysis of the qualitative data was conducted for the data analysis.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

The results of the study revealed that the courses were taught rather on theoretical basis via direct instruction without the use of different methods, techniques or materials depending on the faculty members' views about the teaching of Teaching Profession General Competencies courses. It was also found that because of the work-load of the faculty members, the high number of the students and because of the fact that the teacher candidates found the courses unimportant, the faculty members and the teacher candidates were not able to fulfill responsibilities in an accepted level. Development and Learning (Educational Psychology) and Instructional Technologies and Material Development courses were identified as having the biggest contribution among the Teaching Profession General Competencies courses.

In a study Kartal and Afacan (2013) investigated the attitudes of prospective teachers who attended the pedagogy program. In this descriptive research homogeneous case sampling was used to select the participants. 135 prospective teachers who attended the pedagogy program offered by a state university involved in the study. The attitudes of prospective teachers who attended the pedagogy program were above the average. It was also found that participants of the study view themselves sufficient for the teaching profession.

It is important to reveal teacher-candidates' perceived instrumentality of educational sciences courses. The purpose of this study is to investigate views of faculty of education students and pedagogical formation training certificate program students' about perceived instrumentality of educational sciences courses. Following research questions were developed;

- Is there difference between the education faculty students' perceived instrumentality of educational sciences courses and the pedagogy program students' perceived instrumentality of educational science courses?
- Is there difference in students' perceived instrumentality of educational science courses for genders?
- Is there any relationship between students' perceived instrumentality of educational science courses and academic achievement?
- To what extent does the academic achievement of students explain the students' perceived instrumentality of educational science courses?

METHOD

The cross-sectional study was used to investigate the research questions. The perceived Instrumentality of Educational Sciences Courses Survey which was developed by the researchers was used in the study for the data collection purposes. The perceived Instrumentality of Educational Sciences Courses Survey has 7 items. It is one factor Likert type Survey with 5 choices. The factor loads of the survey range between 0.61 and 0.83. The Cronbach Alpha value of the survey is 0.83.

258 sophomore studying at the education faculty of the public university and 157 students attending the pedagogy certificate program offered by the education faculty of the public university participated in the study. Participants were selected among the ones completed the Introduction to Educational Sciences, Teaching Principles and Methods, Measurement and Evaluation, Classroom Management and Counselling courses.

ANALYSIS

For the analysis of the data, independent samples t-test was used to determine influences of independent variables on dependent variables. Also, Pearson's product-moment correlation and regression analysis were used to present relationship between students' perceived instrumentality of educational science and academic achievement.

FINDINGS

The first research question investigated whether there is a difference between the education faculty students' perceived instrumentality of educational sciences courses and the pedagogy program students' perceived instrumentality of educational science courses. The result of the independent t-test revealed that education faculty students' perceived instrumentality of educational science courses (X=4,20; ss=0,88) is significantly higher than the pedagogy program students' perceived instrumentality of educational science courses ((X=3,90; ss=0,88) (t(413)=3,86; p<0,05)) (Table 1). This result shows that education faculty students view education courses more beneficial than pedagogy program students.

Table 1: The Comparison of Education Faculty Students' View and Pedagogy Program Students' View

Groups	N	X	ss	sd	t	p
Education faculty students	258	4,20	0,88			
				413	3,86*	0,00
Pedagogy program students	157	3,90	0,88			

The second research question investigated whether there is a difference in students' perceived instrumentality of educational science courses for genders. The result of the independent t-test revealed that female education faculty students' perceived instrumentality of educational science courses (X=4,36; ss=0,81) is significantly higher than male education faculty students' perceived instrumentality of educational science courses (X=4,01;

 Copyright © International Conference on New Horizons in Education Conference (INTE)

ss=0,98) (t(256)=2,79; p<0,05)) (Table 2). On the other hand, The result of the independent t-test revealed that female Pedagogy Program students' perceived instrumentality of educational science courses (X=3,89; ss=0,87) is not significantly different from male Pedagogy Program students' perceived instrumentality of educational science courses (X=4,01; ss=0,93) (t(155)=0,89; p>0,05)) (Table 2).

Table 2: The Comparison of Students' View by the Gender

Groups	Gender	N	X	ss	sd	t	p
Education Faculty Students	Female	177	4,36	0,81	256	**2,79***	**0,00**
	Male	81	4,01	0,98			
Pedagogy Program Students	Female	117	3,86	0,87	155	0,89	0,37
	Male	40	4,01	0,93			

The third research question investigated whether there is any relationship between students' perceived instrumentality of educational science courses and academic achievement. The result revealed that there is low level significant relationship between education faculty students' perceived instrumentality of educational science courses and academic achievement (r=0,19; p<0,01). However, there is no significant relationship between pedagogy program students' perceived instrumentality of educational science courses and academic achievement (r=0,05; p>0,01) (Table 3).

Table 3: The Relationship Between Academic Achievement and Students' View

		Views
Education Faculty Students'	Achievement	**0,19****
Pedagogy Program Students	Achievement	0,05

The forth research question investigated the extent to which the academic achievement of students explains the students' perceived instrumentality of educational science courses. The result of the analysis revealed that education faculty students' perceived instrumentality of educational science courses explains the academic achievement of education faculty students (R2= 0,035, p<0,001) (Table 4).

Table 4: The Extent to Which the Academic Achievement of Students Explains the Students' Perceived Instrumentality of Educational Science Courses

Model	R	R^2	F	p
1	0,188	0,035	9,346	0,002

DISCUSSION AND CONCLUSION

This study has four findings to explain the views of faculty of education students' and pedagogical formation training certificate program students' view about perceived instrumentality of educational sciences courses. Initially it shows that education faculty students view education courses more beneficial than pedagogy program students. Also female education faculty students' perceived instrumentality of educational science courses is higher than male education faculty students' perceived instrumentality of educational science courses while female Pedagogy Program students' perceived instrumentality of educational science courses is not significantly different from male Pedagogy Program students' perceived instrumentality of educational science courses. Moreover, the result reveals that there is low level significant relationship between education faculty students' perceived instrumentality of educational science courses and academic achievement. Finally, this study indicates that education faculty students' perceived instrumentality of educational science courses explains the academic achievement of education faculty students. Kartal and Afacan (2013)'s study showed that the attitudes of prospective teachers who attended the pedagogy program are higher. Pedagogy courses are viewed as essential and useful by the students (Kılıç ve Acat, 2007). On the other hand, Yüksel (2009) found that students' opinions about the education courses are not that much positive. One possible reason for this can be the work-load of the faculty members and the high number of the students (Atik Kara, 2012). Even though there are areas that require future investment, prospective teachers who attended the pedagogy program view themselves sufficient for the teaching profession (Kartal and Afacan, 2013). Future qualitative data should be collected to explain the quantitative findings achieved in this study.

Note: This study was supported by the Bülent Ecevit University

REFERENCES

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Atik Kara, D. (2012). Öğretmenlik meslek bilgisi derslerinin öğretmen adaylarına öğrenme ve öğretme sürecine ilişkin yeterlikleri kazandırması yönünden değerlendirilmesi. Yayımlanmamış doktora tezi, Anadolu Üniversitesi, Eğitim Bilimleri Enstitüsü.

Kartal, T., Afacan, Ö. (2013). Examining Attitudes of Prospective Teachers Who Took Pedagogical Formation Education Towards Teaching Profession. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 24, 76-96.

Kılıç, A., & Acat, M. B. (2007). Essentiality and Job-Utility of The Courses Offered in Elementary Teacher Education Programs. Sosyal Bilimler Dergisi, 17, 21-37.

Yüksel, S. (2009). The Opinions of Education Faculty Students About Educational Courses. Ankara University, Journal of Faculty of Educational Sciences, 42(1), 435-455.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

PERCEPTION OF USE TOWARDS FREE TECHNOLOGICAL TOOLS IN TEACHING

Carlos Arturo TORRES-GASTELÚ
Faculty of Management
Veracruzana University
Mexico
ctorres@uv.mx

ABSTRACT
The objective of this research report was to analyze the perception of the use of the free tools in teaching, taking as example a group of students from the master's degree in education from the University Simon Bolivar in Veracruz, Mexico. It should be noted that all of this postgraduate students teach classes at primary and secondary level. This is a quantitative study by applying a survey of 19 students in a graduate course. The dimensions in the survey were: impressions on the use of selected technological tools, consideration of future use, feasibility of application of technological tools, interest to incorporate its use in teaching, and prior knowledge of the technological tools. To this end, it was selected a group of five free technological tools that are viable to be used in teaching at primary and secondary level. Those tools were: Gdoc, Dropbox, Google Scholar, Blogger and Educaplay. During one course the postgraduate students learned how to use these tools in teaching, and at the end of the course the survey was applied. Data processing was by descriptive statistics using SPSS software. The study results indicate that master´s students showed a positive attitude towards the use of free technological tools. Gdocs was considered a great tool that promotes collaborative work inside and outside the classroom. Meanwhile, the least popular tool was Google Scholar, which indicates the need to encourage online academic research both teachers and students. However, the most rated tool was Educaplay due to their facility to support teaching. In relation to the previous knowledge of master´s students on selected free technological tools were scarce, although these tools have long been on the market.

Keywords: Free technological tools, ICT, Teaching, Education, Mexico.

INTRODUCTION

The current generation of teachers now faces the challenge of using new Information and Communications Technology (ICT) so that students have the skills and knowledge necessary to be competent in the global labor market. Technologies should be incorporated into all levels of education and should be provided by trained teachers in the use of these technologies in order to support the teaching-learning process (García & Tejera, 2012). Training future qualified teachers for the pedagogical use of ICT has received priority attention in recent years. For over a decade researchers have studied ICT Competencies in teachers and also in students (Garcia-Valcarcel & Arras, 2011; NETS-T Standards, 2008; Godoy, 2006; Escudero, 2004). In this sense, the standards of teachers ICT competencies published by UNESCO (2008) offers a proposal for teacher training. However, in a previous study by Medina, Amado and Brito (2010) note that there is no interest in several of generic competencies studied in this document. Although there are pronouncements of international organizations in favor of continuous and effective use of ICT in educational processes (UNESCO, 2008) and also the development of generic competencies, the national education system of Mexico requires special attention due to their backlog. For this reason, the Mexican government has promoted a national plan of evaluation and training of teachers at primary and secondary level. Similarly, teachers of these levels have searched alternative additional training to enable them develop their generic competencies. In order to review how the generic competencies related with ICT are being developed in a postgraduate course, in this document is presented the perception of master´s students towards free technological tools previously selected to be implemented in teaching. Some of the generic competencies developed in master´s students who participated in this study were: (C2) Ability to apply knowledge in practice, (C8) Skills in the use of Information and Communication Technology, (C9) Research capacity, and (C11) Skills to search, process and analyze information from various sources. It should be noted that these master´s students are working as primary and secondary teachers in Mexican public education schools.

METHODOLOGY

The aim of this study was to determine the perception of master´s students towards free technological tools according to their use, consideration of future use, applicability, interest and prior knowledge. The type of study was quantitative. The selection criteria of the sample was the subject called "ICT as mediators of learning processes" belonging to the Master of Education from the University Simon Bolivar in the city of Veracruz, Mexico. In total, 19 master´s students participated in classroom mode. Of which 16 are female and 3 male.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Throughout the course were taught to master´s students five free technological tools (GDocs, DropBox, Google Scholar, Blogger and Educaplay) selected in relation to the needs and the content that should cover the course. For their perception was applied a survey that analyzes various dimensions of study (Using the tool, Consideration of Future Use, Applicability, Interest and Prior Knowledge). The Likert scale was used in the instrument with the following categories: Totally Disagree, Disagree, Neutral or indecisive attitude, Agreed and Totally Agree. The positive attitude of master´s students represents the sum of the responses selected by each statement of the categories "Totally Agree" and "Agree". While the negative attitude of master´s students, was obtained by the sum of the responses by each statement that selected "Disagree" and "Totally Disagree". For processing data the SPSS statistical software was used in its PASW version 21. The data analysis was done using descriptive statistics.

REVIEW OF SELECTED FREE TECHNOLOGICAL TOOLS

This research report focuses on five free technological tools that are useful for teaching-learning process and that were used in a course of the Master of Education. The main features of the selected tools are described below:

- **Google Docs** is a word processor is part of a web based software office suite offered by Google within its Google Drive service. The suite allows users to create and edit documents online while collaborating with other users in real-time. While Google Docs has been criticized for traditionally lacking the functionality of Microsoft Office, it has received praise for its simplicity, ease of collaboration and frequent product updates.
- **Google Scholar** is a freely accessible web search engine that indexes the full text or metadata of scholarly literature across an array of publishing formats and disciplines. The Google Scholar index includes most peer-reviewed online academic journals and books, conference papers, theses and dissertations, preprints, abstracts, technical reports and other scholarly literature, including court opinions and patents.
- **Blogger** is a blog-publishing service that allows multi-user blogs with time-stamped entries. Generally, the blogs are hosted by Google at a subdomain of blogspot.com. A user can have up to 100 blogs per account. A blog is a discussion or informational site published on the World Wide Web consisting of discrete entries ("posts") typically displayed in reverse chronological order (the most recent post appears first).
- **Dropbox** is a file hosting service that offers cloud storage, file synchronization, personal cloud and client software. Dropbox allows users to create a special folder on their computers, which Dropbox then synchronizes so that it appears to be the same folder (with the same contents) regardless of which device is used to view it. Files placed in this folder are also accessible via the Dropbox website and mobile apps.
- **Educaplay** is a web platform that enables the development of teaching materials using statements text, images and audio in a wide range of possibilities that facilitate interaction and are subject to export virtually as SCORM packages and integrated into other platforms or virtual classrooms, track, record and store activities grades obtained by students. It allows the creation of educational resources in 16 different types of activities.

RESULTS BY DIMENSIONS

DIMENSION: USE OF TOOLS

The dimension of use of free technological tools addresses issues on ease of use, amount of information with which account to use each tool as well as the usability of them. It aims to identify which tool is easier to use for master´s students. Table 1 shows the global results of each statement comprising the dimension of use of tools. It presents the values on the frequencies of the attitudes of master´s students (positive, neutral and negative), as well as some statistics data. The acceptable value obtained in the Cronbach's alpha was 0.894. While the expected minimum rate was 0.21.

Table 1. Dimension Use of Tools: Statistical Values

Description of statement	Positive Attitude F	Neutral Attitude F	Negative Attitude F	Pearson Chi Square	Asymptotic Significance (Bilateral)
Ease of use of the tools applied in collaborative work	82	9	4	14.013	.300
I think there is enough information available on the Internet for the proper use of the tool	76	16	3	12.655	.698
The tools are totally friendly	89	3	3	9.296	.504
Dimension: Use of Tools	247	28	10	29.212	.212

Regarding the first statement concerning "*Ease of use of the tools applied in collaborative work*", most respondents (86.3%) expressed a positive attitude. Meanwhile, 9.5% said they were undecided and only 3.2% chose a negative attitude. The second statement "*I think there is enough information available on the Internet (manuals, tutorials, videos, forums, etc.) for the proper use of the tool*", the results show that 80% of respondents

 Copyright © International Conference on New Horizons in Education Conference (INTE)

agree, 16.8% reported an attitude neutral and 3.2% disagree. Concerning the third point: "*The tools are totally friendly*", 93.6% indicated agree, while 3.2% are undecided. Meanwhile, 3.2% disagree.

Table 2. Dimension Use of Tools: Percentages by each tool

Type of Attitude	Gdocs	Dropbox	Google Scholar	Blogger	Educaplay
Negative Attitude	0,35	1,05	0,35	1,05	1,4
Neutral Attitude	1,05	1,75	4,91	1,05	1,05
Positive Attitude	18,6	17,2	14,74	17,9	17,55

Table 2 shows results of each statement in this dimension for each of the free technological tools in order to visualize the tool that is considered simpler and easier to use according to the perspective of master´s students. Finally, the global results of the dimension show that 86.6% of respondents declare that they agree to the use of these technological tools free. Meanwhile, 9.8% are undecided about their position. Finally, 3.6% chose to disagree.

DIMENSION: CONSIDERATION OF FUTURE USE

This dimension allows us to assess the possible future use of free technological tools on respondents, measures the level of consideration if they could be implemented in teaching. Table 3 shows the global results of each statement comprising the dimension of consideration of future use. It presents the values on the frequencies of the attitudes of master´s students (positive, neutral and negative), as well as some statistical data. The acceptable value obtained in the Cronbach's alpha was 0.919. While the expected minimum rate was 0.21.

Table 3. Dimension Consideration of Future Use: Statistical Values

Description of statement	Positive Attitude F	Neutral Attitude F	Negative Attitude F	Pearson Chi Square	Asymptotic Significance (Bilateral)
I think that would be helpful to use the tool in my work as a teacher in the future	88	4	3	11.546	.173
I consider important to implement the tool to improve my performance and that of my colleagues in the workplace	88	4	3	13.127	.360
I consider applying the tool in my work as a teacher in the future	89	4	2	13.430	.339
Dimension Consideration of Future Use	265	12	8	17.681	.343

The dimension called Consideration of Future Use consists of three statements. The first two statements share the same results in all three categories ("*I think that would be helpful to use the tool in my work as a teacher in the future*" and "*I consider important to implement the tool to improve my performance and that of my colleagues in the workplace*"). Most respondents expressed a positive attitude represented by 92.6%. Contrasting with 4.2% who remain undecided and 3.2% who indicated a negative attitude. Similarly, the third sentence "*I consider applying the tool in my work as a teacher in the future*" presents results similar to the above. 93.6% of respondents chose to agree, while 4.2% said they were undecided and 2.2% disagree.

Table 4. Dimension Consideration of Future Use: Percentages by each tool

Type of Attitude	Gdocs	Dropbox	Google Scholar	Blogger	Educaplay
Negative Attitude	1,06	1,41	0,35	0	0,35
Neutral Attitude	0	0,7	2,81	0	0,35
Positive Attitude	18,94	17,89	16,84	20	19,3

Table 4 shows results of each statement in this dimension for each of the free technological tools in order to visualize the tool that is considered more feasible to use in the future according to the perspective of master´s students. Finally, the global results of the dimension show that 92.98% of respondents declare that they agree to the consideration of future use of these free technological tools. Meanwhile, 3.85% are undecided about their position. Finally, 3.17% chose to disagree.

DIMENSION: APPLICABILITY

This dimension is related with the applicability of free technological tools in the educational context. It values the possible difficulty of application and the relevance of using these tools in teaching. Table 5 shows the global results of each statement comprising the dimension of applicability. It presents the values of the frequencies of

 Copyright © International Conference on New Horizons in Education Conference (INTE)

the attitudes master´s students (positive, neutral and negative), as well as some statistical data. The value obtained in the Cronbach's alpha was 0.792. While the expected minimum rate was 0.21.

Table 5. Dimension Applicability: Statistical Values

Description of statement	Positive Attitude F	Neutral Attitude F	Negative Attitude F	Pearson Chi Square	Asymptotic Significance (Bilateral)
I think this technological tool is difficult to implement in the educational context	36	13	46	27.867	.266
I believe that applying new technology tools is important in educational teaching	87	4	4	4.513	.808
Dimension Applicability	123	17	50	28.975	.312

The first statement of this dimension concerning "*I think this technological tool is difficult to implement in the educational context*" has a tendency divided respondents. On the one hand, 37.9% expressed agreement, while 13.7% were undecided. However, 48.4% expressed disagree. As can be inferred that technological tools can be difficult to apply in the context of education for some teachers. However, these values contrast with respect to the second statement "*I believe that applying new technology tools is important in educational teaching*" since 91.6% expressed agreement. While the other categories (neutral attitude and negative attitude) yielded as a result 4.2% each.

Table 6. Dimension Applicability: Percentages by each tool

Type of Attitude	Gdocs	Dropbox	Google Scholar	Blogger	Educaplay
Negative Attitude	5,8	5,28	4,22	5,28	5,8
Neutral Attitude	1,57	1,57	3,68	1,57	0,52
Positive Attitude	12,63	13,15	12,1	13,15	13,68

Table 6 shows results of each statement in this dimension for each of the free technological tools in order to visualize the tool that is considered the highest rate of applicability in the educational context according to the perspective of master´s students. Finally, the global results of the dimension show that 64.74% of respondents declare that they agree to the applicability of these free technological tools in the educational context. Meanwhile, 8.94% are undecided about their position. Finally, 26.32% expressed disagree.

DIMENSION: INTEREST

This dimension is referred on the interest shown by master´s students in their desire to learn more about these tools in order to use them in teaching. Table 7 shows the global results of each statement comprising the dimension of interest. It presents the values on the frequencies of the attitudes of master´s students (positive, neutral and negative), as well as some statistical data. The acceptable value obtained in the Cronbach's alpha was 0.902. While the expected minimum rate was 0.21.

Table 7. Dimension Interest: Statistical Values

Description of statement	Positive Attitude F	Neutral Attitude F	Negative Attitude F	Pearson Chi Square	Asymptotic Significance (Bilateral)
I would like to learn more about the tool	91	2	2	4.085	.665
I consider important to seek more information (tutorials, internet, videos, forums) to learn more about the tool	82	8	5	14.356	.424
Learning to use the tool, it provoked in me a great interest to learn more about the tool	90	3	2	7.060	.720
Dimension Interest	263	13	9	15.960	.595

Regarding the statement "*I would like to learn more about the tool*", 95.7% agree to be interested in learning more about tools, while 2.2% declare themselves undecided and 2.2% expressed no interest. Moreover, "*I consider important to seek more information (tutorials, internet, videos, forums) to learn more about the tool*", 86.3% agree to be interested in finding more information to support the use of tools. Meanwhile, 8.4% said they were undecided and only 5.3% showed no interest. For the statement "*Learning to use the tool, provoked in me a great interest to learn more about the tool*", the results show that 94.6% of respondents expressed a positive attitude, while 3.2% were evaluated as undecided and finally 2.2% denoted a negative attitude.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Table 8. Dimension Interest: Percentages by each tool

Type of Attitude	Gdocs	Dropbox	Google Scholar	Blogger	Educaplay
Negative Attitude	1,06	1,4	0,35	0,35	0
Neutral Attitude	0,7	0	3,5	0,35	0
Positive Attitude	18,24	18,6	16,15	19,3	20

Table 8 shows results of each statement in this dimension for each of the free technological tools in order to visualize the tool that is considered of major interest to learn more about her according to the perspective of master´s students. Finally, the global results of the dimension show that 92.3% of respondents expressed interest in learning more about these tools for use in their teaching. Meanwhile, 4.5% are undecided about their position. Finally, 3.2% showed no interest.

Dimension: Prior Knowledge

This dimension is related to the prior knowledge that had master´s students about each free technological tools. Table 9 shows the global results of each statement comprising the dimension of prior knowledge. It presents the values on the frequencies of the attitudes of master´s students (positive, neutral and negative), as well as some statistical data. The acceptable value obtained in the Cronbach's alpha was 0.862. While the expected minimum rate was 0.21.

Table 9. Prior Knowledge: Statistical Values

Description of statement	Positive Attitude F	Neutral Attitude F	Negative Attitude F	Pearson Chi Square	Asymptotic Significance (Bilateral)
I had previously used the tool	29	13	53	20.995	.397
I was aware of the existence of this tool	24	15	56	13.142	.783
I know tools that perform similar functions	31	19	45	17.892	.595
Dimension: Prior Knowledge	84	47	154	22.563	.658

The dimension consists of three statements. The first statement "*I had previously used the tool*" reflects several trends since 30.5% of respondents agree selected. While 13.7% chose to remain undecided. Finally, 55.8% indicated that they had not used the tool before. In relation to the second statement "*I was aware of the existence of this tool*", also presented similar results as 25.2% of respondents said they agree. Meanwhile, 15.8% of respondents were undecided. However, 59% said they had no knowledge of these tools. For the statement "*I know tools that perform similar functions*", the results show that 32.5% said they did know other similar tools. Meanwhile, 20% were undecided. While 47.5% said they did not know other tools with similar functions.

Table 10. Dimension Prior Knowledge: Percentages by each tool

Type of Attitude	Gdocs	Dropbox	Google Scholar	Blogger	Educaplay
Negative Attitude	11,23	11,58	8,77	10,17	12,98
Neutral Attitude	4,56	1,75	3,15	2,8	4,21
Positive Attitude	4,21	6,66	8,06	7,01	2,8

Table 10 shows results of each statement in this dimension for each of the free technological tools in order to visualize the previous knowledge that had master´s students about each free technological tools. Finally, the global results of the dimension show that 29.47% of respondents express a previous knowledge of free technological tools. Meanwhile, 16.50% are undecided about their position. However, most represented by 54.03% indicated that they had no prior knowledge of these tools.

CONCLUSIONS

In general, master´s students showed a positive attitude towards the use of free technological tools. It emphasizes a greater preference for Gdocs because this tool promotes collaborative work inside and outside the classroom. Meanwhile, the least chosen tool was to Google Scholar, which indicates the need to encourage online academic research both teachers and students. Referring to the consideration for future use of these free technological tools, master´s students recognized that all tools can be useful. However, three of these tools were considered more suitable for incorporation into the teaching process: Blogger, Educaplay and Gdocs. Again, it was found a lower degree of acceptance in the future use in teaching of the tool Google Scholar. Master´s students do not discern that the engine Google should be replaced by Google Scholar when so required, perhaps due to habit or lack of knowledge about how to incorporate it in teaching. Therefore it could be desirable to develop of school activities that promote research competence in students. Regarding the perception of master´s students on the applicability of free technological tools in the educational context they stated that it may be difficult to

 Copyright © International Conference on New Horizons in Education Conference (INTE)

incorporate them in their daily work, which contrasts with the positive attitude towards its use, because they are convinced but not find it easy due to their gaps in their technology or teaching skills. In relation to the preferences of master´s students towards a particular tool for your application, Educaplay out as the most heavily weighted stock, possibly by allowing the creation of learning activities. The next two better positioned tools were: Blogger and Dropbox. Referring to the interest of master´s students to learn more about these tools, similar preferences were also obtained. However, there was a general consensus to placed Educaplay as the preferred tool. Finally, most master´s students admitted they had no prior knowledge of the free technological tools used in the course. So, it reflects an opportunity to encourage training of teachers at primary and secondary level in Mexico, not only in terms of use of technology, but especially in the ways these tools could be exploited in the design of educational activities.

REFERENCES

Escudero, J. (2004). *La educación, puerta de entrada o de exclusión a la sociedad del conocimiento*, en F. Martínez y M. Prendes (coords.). Nuevas tecnologías y educación. Madrid: Pearson. pp. 25-57.

García, C. & Tejera, I. (2012). Resultados de la utilización de google docs en procesos de mentorizacion con alumnado de tercer ciclo. *Revista andaluza de relaciones laborales. 25/26.* Recuperado de: http://rabida.uhu.es/dspace/handle/10272/6910

García-Varcárcel, A. & Arras, A. (2011). *Competencias en TIC y rendimiento académico en la universidad. Diferencias por género.* México: Pearson Educación.

Godoy, C. (2006). Usos educativos de las TIC: Competencias tecnológicas y rendimiento académico de los estudiantes barineses, una perspectiva causal y comparada. *Educere. 10 (35).* Recuperado de http://www.saber.ula.ve/handle/123456789/20125

NETS-T-Standards (2008). The National Educational Technology Standards (NETS) for Teachers. Recuperado de http://people.umass.edu/pelliott/reflections/netst.html

UNESCO, (2008). Estándares de competencias en TIC para docentes. Recuperado de http://www.eduteka.org/EstandaresDocentesUnesco.php

 Copyright © International Conference on New Horizons in Education Conference (INTE)

PHILOSOPHICAL MEDIATION: "FIELD OF THOUGHT"

Daniela DE LEO
Docente di Filosofia Teoretica Facoltà di Scienze della Formazione Unisalento,Italy
daniela.deleo@unisalento.it

Today we are witnessing a race for the acquisition of skills in all fields especially in education and training .
To better understand this we can take a look at the Ministerial Circular of 13/02/2015 on "Guidelines for the certification of skills". This certification, accompanying the regulation for the assessment of students' learning and behavioral progresses, illustrates the outcomes of the training process.
"Competence is essentially what a person proves that they can do (also intellectually) efficiently , in relation to a specific goal , task or activity in a given subject area or field . The demonstrable and observable results of this competent behavior is the performance".

The aim of this paper is to draw the attention to the new meaning of competence which requires the school to rethink its modus operandi: leading the learner to acquire the so-called *world-making skills*, that is to say those abilities that allow to create the world or more precisely "*to undertake to understand the whole* because there are many different versions of this world"(N. Goodman,1988, p. 7).

Therefore, in the light of these varied chances – ways of world making – Philosophy plays a crucial role as mediator, – rational conceptualization and conscious reflection.
This is because Philosophy aims at clarifying and shed a light on some open issues which are still so controversial and indeterminate that no scientific investigation is equipped to deal with. Examples of these issues might be the concepts of truth , justice, beauty, individual and kindness. At the same time, with its neutral ways of investigation, philosophy tries to understand how our minds react to things we take for granted, so that we can pay attention to those aspects we have considered advantageous up to this moment or those we have always neglected. Whichever the subject, however, the purpose of philosophy is to cultivate the "excellence" in reasoning, and philosophers do this through a detailed analysis of reasoning in history, in music – in a few words "reasoning in subjects".

Philosophy can develop the following *competences*:
1.Problematizing the context
2. Building up a pathway from the logical-rational to the metaphorical
3. Personalizing the different ways of introducing and expressing concepts

But what philosophical concept are we making reference to?
That which defines Philosophy as phenomenological/hermeneutical/reflective.

Let's proceed step by step. What do we mean by Phenomenological Philosophy?
a. A dimension in which analyzing the world doesn't necessarily mean seeing it as a whole, reducing it to absolute categories, but seeing it as an establishing, not established, setting. A relational context which is not given nor acquired but open. In this view the relationship doesn't appear as a closed circle but as an open and developing process. The relationship we are taking into consideration is that between activity and passivity, on the basis of which we should rethink the ontology of the Whole as *hollow fullness*, a plurality of completed sharings.
The world is "already there" even before the analysis, as an inalienable presence, and the Husserl's notion urges us to "go back to things" as a way to move on from the Cartesian ideology typical of all the western tradition, especially modern. It means going back to investigating the intrinsic relational ways of the world, to uncover their connection with the sensitive sedimented substratum *of the world itself*, thus unveiling it as a "system of concurring equivalences" which is also "already there" before any explicit conception.
In other words it involves investigating those identities – as Merleau-Ponty suggests – that do not represent the finished product anymore , that is the whole forms of a relationship between those given elements which are themselves enclosed in the frame of a predetermined and separate individuality, but those identities that are born for and from the relationship with all the others.
Therefore the aforementioned "going back to the things themselves" means, not only observing an object but also, paraphrasing Merleau-Ponty, *experiencing it* and taking all things as *each is what others see of it*.
According to this phenomenological approach the philosophical thought can integrate problematic judgments (the word judgment is used by Kant as synonym of knowledge) into the knowledge of the world –where the synthesis is formulated on the basis of reasons that are not merely theoretical but historically and culturally justifiable.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Philosophy becomes mediation between reflection on the meaning and the search for meaning. Its aim is not meant as a goal to achieve, but rather as tension and movement toward change, in other words as the active process aiming at transforming the current situation. The goal overlaps with the course of action itself.
This is the way Philosophy can contribute to develop the ability to problematize reality which represents an indicator of the phenomenological approach: becoming aware of things themselves through experentiality. In this way philosophy comes into play not only as action but also as knowledge.
Knowing is the point of doing. Thinking is the method.
In Philosophy we set the goal of describing and explaining the processes that underlie the intending, the object re-teaches us how to look at our genetic-developmental path.
The world is the place where this object-oriented philosophical approach is contextualized.
"Even if we talk of *Hyperuranium*, the philosophical journeys don't lead outside the world, but rather they just show the distance between what is habitual and the world experienced from a philosophical point of view. Philosophy takes us outside the boundaries of our daily lives but not outside the world." (Figal, 2012).
This very thing has to me mediated just like what manifests and this mediation is to be considered phenomenological when it is developed through reflection on manifestation itself.
Every perception is "permeated" by an empty intentional horizon, in this there is the expectation of the whole thing, as a sort of *pre-delineation* which sets the rule for the passage to other new actualizing manifestations. Furthermore, every past perceptive experience has got horizons of new possibilities of perception, as such, that we could have if we activated the act of perception in a different way – like for example moving the eyes in a different way or changing the position of our body.
This fullness perceptive can be actualized in the space, it can even be defined as spatial: we use the perceptive approach to any new thing we come across and when we move around something driven by a sense of exploration and discovery, we fail to see the spatial element.
That escapes from is *distanced being*.
But the unseen is there anyway. The distance becomes more evident in the prospective view addressed to what it's perceived ; we can change view, and in doing this we come to realize that what the perceiver of the fact brings in to question is the view itself. Then everything is in relation to the distance, and the distance is in relation to the space.

Building this *space* will then appear like the real mission of Philosophy, after all there can't be understanding without space. By discussing the concept of space we reject the ambitious project of possessing knowledge.
Philosophy has the duty to encourage *inquiry*, the inquisitive thinking against any form of positivism aiming at reducing knowledge to a set of sterile dogmas. The object can't be possessed, it must be questioned.
Such a Philosophy becomes a method to analyze any kind of knowledge because it opens new possibilities for understanding . The possibility, renewed again and again and never the same, becomes the true goal of knowing. The concept of giving oneself a possibility is the essential model of philosophical research. Philosophy thus contributes to the development of thinking skills, as the investigations encouraged by this philosophical approach go in the direction of a hermeneutics for the search for meaning.

Why this openness to the hermeteutical dimension of philosophy?
a. Philosophical Hermeteutics:

The process of understanding starts with the interpretation of the object we examine, a perceptionof something going beyond what appears before our eyes, something that, be it an object or a text, doesn't have any intentions or aims. When the perception is confirmed by the rational expectations, we can say it is active and thus a representation takes shapes. This representation is nothing but a mediated presence of the object which the subject can now understand. It is then evident that the word "understanding" implies success, because if we understand something it basically means that it's been successful and has been completed. This is also true when we are successful in something that we understand; in this case success is expression of our ability. Succeeding implies the acquisition of specific skills. Understanding does not consist in the *immediate* grip of a foreign psychic life or *emotional* identification with mental intention.

Understanding is entirely *mediated* by the set of explanatory procedures that it precedes and accompanies.
The compensation for this personal appropriation is not something that can be *perceived* but its dynamic meaning released by explanation, that is its ability to describe the world.
The journey in philosophy as hermeneutics experience puts us in the middle of things , but we barely see them as we deal with ourselves .

We must therefore meet the challenge issued by the objects and understand our role in the world so that we can fill the hermeneutical place which is never safe and given once and for all but perpetually uncertain, searching for an anchor, an anchor uniquely represented by the objects of the world. In rejecting any response and what's more any ultimate answer, these very objects make men aware of their externality .

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Since the externality of life intensifies with them, they make us be open in the world and guide us in the incessant discovery of the meaning of contemplation and representation which comes into play in the life of every human being. It's a meaning that mediates which goes beyond what is solely human.
In this perspective, the task of philosophy , as wisdom of the world , appears, from time to time , inexhaustible and irreducible in its activities of ontological understanding, and this is not a final but a rather ongoing task .

Philosophy as hermeneutics leads us to a dialectical approach to not only the logical-rational syllogism but also to the morphological structures– (Ricoeur 2003).
This philosophical hermeneutics compares constantly with phenomenology. Since it actualizes what is distant and juxtaposes it to the same semantic space, such a juxtaposition is not a mere proximity but a sort of "linking", the creation of proportional relationships.
The philosophical hermeneutics is therefore of crucial importance for the cognitive process , and it is also worth bearing in mind that man is a living hermeneutic being since the peculiar aspect of human life lies in representing .
Philosophy as a hermeneutical space in which the reflection can be reconciled with the world without justifying it , keeping his paradoxes alive and painful and allowing the reinforcement of the logical - rational and metaphorical competences.
The philosophical thinking we have outlined so far is , therefore , that of an ontology questioning the world and, we might add, also the subject that questions.
Since knowing is equivalent to being able to do something with what we've learnt just like when we recite a text we can also say we act it out. It is a kind of Applied Knowledge, a knowing how and not a knowing that (Ryle) – which puts ourselves into play.
Here is the last piece to be recovered to create the identity of the philosophy that we need to " recover" today : the paradigm of a reflective thought .

b. Reflective Philosophy:
Reflection is not so much an epistemological justification , but also a re-appropriation of our effort to exist . Directing reflection towards realizing the existence , charges the reflection itself with a task that cannot be carried out the ground of immanence and the simple subject 's self-referentiality, but only on that of interpretation. This is because our act of existing cannot be "grasped" anywhere else but in the opaque , contingent and ambiguous signs , in which it is expresses or hides at the same time .
The ego *uncovers* by *uncovering itself*.

In summary , then, the answer to the question "what Philosophy today is to be recovered ?" can be the following: Phenomenological - hermeneutical - reflective Philosophy.

Pointing out that:
"Phenomenology is a clarification in the evidence and evidence in the clarification. A kind of evidence that clarifies, clarification that unfolds the evidence, this is the essence of the phenomenological experience. In this respect Phenomenology can only operate as Hermeneutics. (Ricoeur,2003).
The phenomenological dimension represents the trunk on to which the hermeneutical experience must be necessarily grafted. This dimension far from accepting consciousness as the transcendental starting point characterized by self-transparency and self-reflectivity conversely takes it as the mere result of a long journey of appropriation that develops through the interpretation of obscure and complex signs of which real life is always a part.
Its value is to be found in its fragmentary nature. Philosophy as a form of protest against that kind of philosophy that creates monologues.
A philosophy that, to a systematic philosophizing counter poses, with moderate radicalism the open "dialogue", which is always incomplete and where the supposed certainties are actually put into play.
And recovering the image of the "bricks" from Nietzsche's *Grundgedanke*: "the philosopher believes that the value of philosophy lies within himself, in the building he has created: posterity, instead, will find it in each element/brick he used to build it".
The concept of Philosophy we must recover is not that of a system but a *field of thought*, a fragmented space where the process of acquisition of knowledge represents an ongoing investigation .
Philosophy, integrated in the phenomenological-hermeneutical dimension, becomes research, ongoing investigation, dialogic continuity.
Open practice through logic, epistemology, ethics and aesthetics, not reduced to mere doctrine but influenced by life.
Philosophical thinking as ontology investigating itself and the world, and that, paraphrasing Merleau-Ponty, *replaces solution with fascination*.

BIBLIOGRAPHY
N. Goodman, *Ways of World-making*, Library of Congress Catalog 1988.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

G. Figal, *Oggettualità. Esperienza ermeneutica e filosofia*, a cura di Antonio Cimino, Milano, Bompiani, 2012 (Gegenständlichkeit, Das Hermeneutische und die Philosophie, Tubingen 2006).

P. Ricoeur, *Dal testo all'azione,* trad. it. di G. Grampa, Jaca Book, Milano 2003 (*Du texte à l'action. Essais d'herméneutique,* Ed. Seuil, Paris 1986).

M. Merleau-Ponty, *È possibile oggi la filosofia? Lezioni al Collège de France 1958-1959 e 1960-1961*, ed. it. e introd. a cura di M. Carbone, pref. C. Lefort, trad. it. di F. Baracchini e A. Pinotti, Raffaello Cortina, Milano 2003 (*Possibilité de la philosophie, Résumés de cours,* Gallimard, Paris 1968).

 Copyright © International Conference on New Horizons in Education Conference (INTE)

POINTS OF VIEWS ON THE TEACHING AND LEARNING OF GRAMMAR AS PART OF FRENCH AS A FOREIGN LANGUAGE IN A TECHNICAL UNIVERSITY

Cristina MĂLUȚAN
Technical University of Cluj-Napoca, Romania
cristina_buturca@yahoo.com

ABSTRACT
This paper is a report on the findings of a survey that has been conducted on one hundred students within the Technical University of Cluj Napoca, Romania. The survey's main objective was to analyse the attitude of students towards learning the grammar of a foreign language, particularly French. Findings indicate that students consider the proper acquisition of grammar quite important alongside the vocabulary and the oral communication skills which are the main ones. Their answers indicate that the grammar is an important tools they use when learning to speak a foreign language. Therefore grammar acquisition cannot be done without the right approach of the grammar structures in this target language. That is why teachers must not ignore the methodological teaching of grammar without monopolizing the class with grammatical exercises.

INTRODUCTION

Although the language teaching methodology focuses nowadays on the communicative approach no matter the level, teaching grammar remains a necessity one uses in order to be able to acquire the language competences listed by the Common European Framework of References (listening and understanding, reading, speaking and writing). One of the main objectives of the communicative approach is to help the learner to develop authentic communication skills in order for them to be able to manage in different real-life situations. However, learners cannot understand and communicate in a foreign language without a proper use of the grammar structures and they cannot speak the language in real-life situations without using the correct grammar structures of that target language.

THE STUDY

Due to the fact that nowadays the majority of students learn mainly by communicating, the necessity of applying teaching activities in favour of acquiring grammar structures, as well, is extremely important. Also, the students are capable of analysing and evaluating their own competences, their own ideas regarding the significance of grammar in the process of learning. That is why we applied a questionnaire focused on the main grammar issues of French as a foreign language to students who were enrolled in French courses within the Technical University of Cluj-Napoca, students with mainly technical background such as computer science, electronics, civil engineering, mechanics, materials and environmental engineering. As mentioned before, the survey's main objective was to analyse the quantity and quality of grammar teaching activities during the French courses so as the teacher could improve, if the case, the content of formal and informal grammar content and to diversify the methodology and materials used in teaching grammar. The survey's results were kept anonymous and they were purely used in statistical data as the feedback of the students is the most important because the students are always in the centre of the teaching process.

The questionnaire used in the survey has 10 questions. With the first question students had to choose from several specific grammar aspects that were mainly used in the technical field the point that seemed most difficult for them in learning French grammar. The second and third questions consisted of two grammar exercises where students had to deal with aspects that were totally opposed to their own native language grammar which is Romanian. For the following four questions, students had to choose from five aspects which were reading and pronunciation, vocabulary, written and oral documents, written and spoken communication and grammar – exercises, translations, orthography, the main three aspects that were most important for them and also to justify their choice. The four questions were pointed as: *" What points should the teacher focus on during technical French classes?"*, *"What aspects of the language would help you in your future engineering profession or in doing your job in a French enterprise ?"* and *" What language aspects would you like to further study in order to improve your French level ? "*. (translation from French). With questions no 8, students had to self- evaluate and justify their French language level referring specifically to their grammar competences as compared to their colleagues. The ninth questions asked for their own opinion regarding the grammar approach during the technical French course they were following and

 Copyright © International Conference on New Horizons in Education Conference (INTE)

the last question asked for their opinion about the grammatical aspect they would like to further study in the future and also to communicate a message regarding this aspect to their French teacher.

FINDINGS

The answers to the first question referring to the most difficult aspects of the French language were as follows: verbs' conjugation, spelling and phonetics. Around 35 % of respondents chose conjugation of verbs as being the most difficult and they justified their choice with simple answers such as: *"because there are a lot of endings for a lot of different tenses",* or "*because there is no rule regarding the 3rd group verbs at present tense"* or *"because there are a lot of exceptions with the present tense of verbs"* (translationfrom French). The reason why students gave these types of answers is the fact that the present tenses of verbs is usually studied/ taught at the beginning, at an A1 level (according to the Common European Framework of References). For the beginner student is very difficult to cope with an avalanche of different endings and also exceptions for the 3rd group verbs, therefore, teaching present tense of verbs should be done gradually in little bits and requires great patience. However, there are playful and interactive methods that can help students learn these endings for the 3rd group verbs and can dismiss the students' fear that they might never retain them.

The answers for the second and third question have shown that the grammar mistakes students made were due to the influence of their own native language. For example, the second question at point c, 68 students out of 100 chose the genre of « problème » as feminine like in their native language. In French this word's genre is masculine.
Another commun mistake made by the students is that they have forgotten to put a final "-s" at the end of the noun, as a sign of plural. The reason for this mistake can be found in their own mother tongue. In Romanian, the pronounced letters (of a word) are all written, situation that is not available for French. In French, the "-s" for the plural is not heard in the pronounciation, so if the letter isn't heard the Romanian students didn't write it (due to their native language).
All this kind of mistakes can be explained by the fact that people generally make mistakes because of their native language automatisms which reflect a logically and clear grammar system even if it's not identical with the grammar of a native interlocutor.
All this shows that the learners must react at the grammar structures they are about to acquire. They cannot learn a language while passively accumulating grammar rules and expressions, they must have an internal system of hypotheses based on the *interlanguage* phenomena. This development of interlanguage can be done through a continuously development and maintenance of the relations with the source language and the target language. Methodologists Henry Besse and Rémy Porquier (1984) considered interlanguage the "inner grammar" of the learner.

The answers to questions four to seven indicate that students consider grammar as an important help (alongside other aspects such as the written and oral communication activities and vocabulary) in their quest to improve their technical French level for a future engineering job within a French enterprise. They also gave different reasons for why their French teacher should approach grammar such as: *"Because communication, together with vocabulary and grammar are important for me and they represent the fundaments to speak correct French* " or " *In order to communicate correctly in a conversation"* (translation from French).
Regarding question no 8 which asked the student to self-evaluate their French language level, only 4 respondents out of 100 have evaluated their French grammar as excellent or very good as compared to their colleagues. They justified their answers with: *" Because I liked very much my high-school teacher "* (translation from French). It seems that learning a language depends very much on the learner's attitude towards the language itself and the teacher who is teaching the language.

At questions no 9 and 10, the majority of students replied that they considered that grammar was covered well during the course and that they would like to further study the things they found most difficult: the conjugation of verbs, particularly the present tense of verbs because it is very often used in technical French or scientific texts. Apart from that, one student had a very strong opinion about how grammar should be left out completely and the course's focus should be on cultural aspects such as the civil engineering in France and in French colonies.

CONCLUSION

Students who have done the survey were at an elementary level (A1 or A2) with the exception of 26 respondents who were somewhere between A2 and B1 level. The beginner students haven't shown their interest in studying more

 Copyright © International Conference on New Horizons in Education Conference (INTE)

grammar during classes as opposed to students with a more intermediate level who wanted to include more grammar in their language courses. For the beginner level students (with a few exceptions) the most important thing was to acquire as many words as possible in order for them to be able to get involved in an authentic communication. At the beginning of their learning, they ignored the fact that it is not enough just to communicate (simply say what they were thinking) in a foreign language, but it is also important to do it correctly and no one can do that without a proper knowledge of grammar structures in that target language.
Meanwhile, the more advanced students considered grammar very useful for their future profession. It seems that they have overcome that critical stage where they had to learn verbs endings at present tense and they began to love this language.

The results of the survey showed that the student's language level is directly linked to their interest in learning grammar. The higher the students' language level is the more they are interested in acquiring the correct grammar notions.

Regarding this commun mistake made by the majority of the students concerning the confusion between masculine or feminine (of the noun), the following conclusion can be draw: the gender of a word reveal the arbitrary. In this manner, some nouns will be feminine in Romanian and masculine in French or vice versa. In the following way, the mistakes that students had made in the exercises of the questionnaire are the result of a nativisation or a "calque" (from French) of the mother tongue towards the foreign language. A Romanian learner will bond his native langage to the foreign language. There is a transfer from the mother tongue to the french language.

The interest of every language teacher to teach grammar does not have to be monopolised by teaching other parts such as oral communication or writing during a language course. Applying a questionnaire called "La Grammaire en classe de langue" (our translation : The Grammar in a Language Class), the author Marie-Christine Fourgerouse proves the crucial part of grammar in a foreign language class. According to the declarations of the teachers, the time dedicated to grammar (during a class) varies between 20% and 70%. These results may vary, because only a teacher out of 5 declares that is teaching grammar between 60% - 70% of a class. These results give the impression of a french language teaching very relating to grammar. The dilemma: teaching or not teaching grammar during the class of a foreign language is directlly linked to the meaning of the action teaching grammar. The answer of this quandary is given by Jean Pierre Cuq who considers that to teach the grammar correctly, it's mandatory to develop a grammar conscience based on a grammatical conceptualisation of the linguistic notions. It seems that teaching grammar involves automatically teaching linguistics.

As a final conclusion, the following ideas must be emphasized. Learners are also aware that they need a proper knowledge and use of grammar alongside other skills when learning a language and that without speaking correctly a language they won't have many chances in their future profession. Teachers also need to acknowledge that teaching grammar needs to be done gradually without ignoring the general competences in every foreign language: reading, writing, listening and speaking.

REFERENCES

Besse, H. & Porquier, R. (1984). *Grammaires et didactique des langues*, Paris, CREDIF, Hautier/Didier.

Blanchet, Ph. (1998). *Introduction à la complexité de l'enseignement du français langue étrangère*, SPILL, Peeters Louvain-La-Neuve.

Boyer, H., Butzbach, M., & Pendaux, M. (1990). *Nouvelle introduction à la didactique du français langue étrangère*, Paris, CLE International.

Cormon, F. (1992). *L'enseignement des langues – Théorie et exercices pratiques*, Lyon, Collection Synthèse.

Cristea T. (1979). *Grammaire structurale du français contemporain*, Editura didactică şi pedagogică, Bucureşti.

Cuq, J. P. (1996). *Une introduction à la didactique du français langue étrangère*, Les Éditions Didier, Paris

Cuq, J.P. & Gruca, I. (2002). *Cours de didactique du français langue étrangère et seconde*, PUG (Presses Universitaires de Grenoble).

Fourgerouse, M.C. (2001). L'enseignement de la grammaire en classe de français langue étrangère In *Études de linguistique appliquée*, no. 122, avril- juin. , pp. 165-179.

Genesee, F. (1987*). Learning through two languages : studies of immersion and bilingual children*, Cambridge, MA : Newbury House.

Py, B. (1980). « Hétérogénéité et transgression dans le fonctionnement de l'interlangue » In *Encrages*, no. Spécial, Université de Paris VIII.

 Copyright © International Conference on New Horizons in Education Conference (INTE)

Porquier, R. (1977). L'analyse des errreurs. Problèmes et perspective, in *Études de Linguistique Appliquée*, no. 25, pp. 23-43.
Tagliante, C. (1994). *La classe de langue*. Paris : CLE International.

 Copyright © International Conference on New Horizons in Education Conference (INTE)