



**INTERNATIONAL CONFERENCE ON NEW HORIZONS IN EDUCATION**

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## 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.

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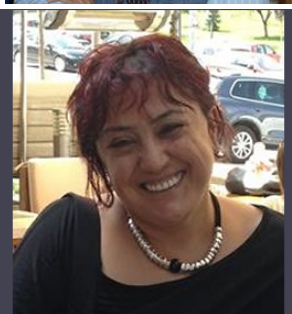
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## THE EFFECTS TO STUDENT SUCCESS USING MATHEMATICAL GAMES FOR TEACHING GEOMETRY OBJECTS IN THE SECONDARY SCHOOL 5<sup>TH</sup> CLASS

Döndü YILMAZ

Institute of Educational Sciences, Gazi University

[ddndylmz@hotmail.com](mailto:ddndylmz@hotmail.com)

Gülay KORU YÜCEKAYA

Division of Elementary Education, Department of Mathematics

[gkoru@gazi.edu.tr](mailto:gkoru@gazi.edu.tr)

Ayşe ALTIN

Department of Mathematics, Hacettepe University

[ayse@hacettepe.edu.tr](mailto:ayse@hacettepe.edu.tr)

### ABSTRACT

This research was carried out to investigate the effect of using math games on students' achievement. This study was conducted on 48 students studying at a secondary school of Çankaya district of Ankara Province in 2013-2014 academic year. In this study, experimental methods containing pre-test, post-test control group have been applied. There are 24 students in the experimental group and in the control group, there are 24 students. Teaching with games method was used on the experimental group. In the control group, traditional teaching method was applied. Achievement test prepared by the researcher was used as a means of data collection. Achievement test was applied two times on experimental and control groups as prior to application (pre-test) and after the application (post-test). The obtained data were analyzed with SPSS 20.0 program. As a result of data analysis, between the experimental group that teaching with games method was used on and the control group that traditional teaching method was used on, there is a significant difference in favor of experimental group as a means of academic achievement.

As a result, it has been shown that the use of math games in teaching of geometric objects increased the 5<sup>th</sup> grade students' achievement in Math.

**Keywords:** Mathematics Teaching, Teaching with Games, Game; Achievement, Teaching Method .

### INTRODUCTION

People have been in an effort to discover and get nature, universe and their secret under control since the existence. People who can not cease their impulses on worry and research have chosen a way to systematize their knowledge in order to transfer their learning to those who come after them and also not to have the same difficulties in each of new learning effort. That they have systematized on knowledge have brought to discuss on them and to interpret on them. People who seek definiteness on points that are dubious or do not reflect the same thing have provided that math which is queen of all sciences have occurred and this thrilling long-termed adventure started (Uğurel, 2003). Since its existence, math has affected closely on science and technology and has been going on affecting them. That math has gained such an importance has increased the importance of math teaching also. The traditional math teaching has bothered students during lessons. This case causes that students are to be failure in math lessons, not to get math-know-how. The approaching of students and their viewpoint have got an important place to be successful in math teaching and to solve problems (Uğurel, 2003). Students at the level of secondary school prefer to reflect themselves with games. It is necessary to make math games a part of students' life to inspire math passion as they perceive their life as a game (Baykul, 2003).

The teaching method has got an important place in that students are to be successful in math lesson. Thus, math teaching method which is used will have got affect on the students' success on math lesson ( Baykul, 2003). The use of a game in teaching math and the change in their success status are the main subject of this study.

Within the scope of this subject, the determination on the effect of math games' usage on students' success in teaching geometric solids of Secondary school 5.grade math course constitutes the problem of this research. The study's problem statement is " Is there any significant differency in the success of students as a result of lessons which are processed with the use of math games in teaching geometric solids of Secondary school 5.grade math course? ". The goal of this research is to inform on " the effect of math games' usage on student's success in teaching geometric solids of Secondary school 5.grade math course". For the goal of this research, the following

cases was searched ; answers of the question "how did a change occur in students' success towards math course as a result of math courses processed through game? and the contribution of teaching with game on success during the course.

## METHOD

### RESEARCH MODEL

This research that the determination of teaching applications' effect with game in teaching secondary school's math on the success during the course of math was conducted by experimental methods. In order to get a general estimation on aforementioned situation, a sample which was thought to represent the population was studied. Research model can be stated as the controlled pre-test and post-test experimental model. In this model, there have been two model which were constituted by an objective assignment. One of these group was assigned as experiment and the other was assigned as control group. Pre-test and post-test measurements were made for each of groups. Pre tests which were applied in the model have helped to determine on groups' similarity degrees and accordingly to maintain pre test results. The symbolic view of model has been given at Table 1 (Karasar, 2002,p.97).

Table 1. Experiment Model Used in Research

Groups	Pretest	Experimental Procedure	Post Test
Experiment	Test 1.1	Teaching with Game	Test 1.2
Control	Test 2.1	Traditional Teaching	Test 2.2

### POPULATION AND SAMPLE

In this research, as an experimental model has been used to support a theoretic teaching model, Secondary schools in Çankaya in Ankara have been accepted as the study's population. The sample of research consists of 5.grade students of a private school in Çankaya in Ankara. This research has been done in math correspondents with 48 students during 4-week term in second part of 2013-2014 education -training year. Number of students has been given on Table 3. Two equal groups in terms of success and number have been done as students' last educational year's point average has been considered in the research. With the objective assignment, one of these two groups has been selected as experiment group and the other one has been selected as control group.

Table 2. Number of Experimental and Control Groups' Students by Gender

Groups	Female	Male	Total
Experimental	12	12	24
Control	12	12	24

### TOOLS TO GATHER DATA

Necessary data to test those who were to be tried for research were obtained by four-option multiple choice " Math Success Test Themed with Geometric Solids " which was developed by the researcher. The success test was used in two times as to be pre-test and post-test towards students at the beginning and end of experimental procedures. During the preparation of success test, A pre-test form was prepared as a multiple choice four questions at least in the event that each demanded objective and behaviour to be measured were to be tested. Pre test consists of total 45 questions. Pre test was applied to 6. Grade's total 225 students who took training at Mehmet Akif Ersoy Secondary School in Sincan, Ankara. As a result of the statistical solutions, Item difficulty indexes, Item discrimination indexes, average of test and reliability coefficient (KR-20) were calculated. Test's reliability coefficient was found as 90. According to data from pre test, item which would be taken to the last form of test were determined with the negotiations made with assessment and evaluation specialists and experienced math teachers. Items which had a discrimination value under 20 were excluded and items over 30 were tested. As its result, 20-item " Math Success Test Themed with Geometric Solids " was done. During the formation of games to be used in experiment group, it was studied with math teacher of the school where the application was conducted. Before the test works towards experiment and control groups " Math Success Test Themed with Geometric Solids " (pre test) was applied. Course plans which were proper to traditional teaching method for control group and to teaching with game for experiment group. Teacher conducted the course proper to subjects of course plans prepared by teaching method with with game in the experimental group, to course

plans prepared by traditional method in the control group. As experimental studies were restricted with the duration of subject "Geometric solids" and "Math Success Test Themed with Geometric Solids (post test)" to control groups.

### TECHNIQUES TO ANALYZE

The collected data were entered to SPSS 20.0. Shapiro-Wilk test was done to determine on whether data reflect a normal distribution or not before data analyses were made. Shapiro-Wilk test is a normality test used in the case which sample size is under 50 (Buyukozturk, 2011). Pre application data of success test ( $N=48$ , Statistic = .953,  $p=.05=.05$ ) and last application data of success test ( $N=48$ , Statistic = .944,  $p=.02 < .05$ ) reflect normal distribution. As a result of these findings, descriptive statistics and non-parametric tests were used during the analysis of data (Mann-Whitney U Test and Wilcoxon's signed Rank test).

### FINDINGS AND INTERPRETATION

On this section of research, tables belonging to findings which were gotten as a result of data's statistical solutions from the result of research and explanations related to these tables were presented and interpretations on findings were involved. In order to test equality of experimental and control group, U test was applied to compare pre test results.

Table 3. Results of U Test by N-Test Results' Groups

Group	n	Average of Rank	Total of Rank	U	P
Experimental	24	25,08	602,00	274,00	,77
Control	24	23,92	574,00		

According to Mann-Whitney U test, there were not found any significant difference between pre-post test results for experiment and control group  $U=274$ ,  $p>.05$ . This case indicates that experiment and control groups are equal to each other before the study.

U test was applied to compare post test of experiment and control groups.

Table 4. Results of U Test by Post-Test Results' Group

Group	n	Average of Rank	Total of Rank	U	P
Experimental	24	36,17	868,00	8,00	,00
Control	24	12,83	308,00		

According to results of Mann-Whitney U test, the difference between pre-post tests for experiment and control groups are significant one  $U=8$ ,  $p<.05$ . When average of Rank was considered, it was concluded that students from experiment group would be more successful.

Results of pre and post tests were analyzed for experiment and control groups. As a result of analyses, the following findings were gotten.

Is there any significant difference between pre and post test points of experimental group which math teaching was made by game?

Table 5. Results of Wilcoxon's Signed Ranks Test to Pre and Post Applications for Experimental Group's Success Test

Posttest- Pretest	n	Average of Rank	Total of Rank	Z	p
Negative Rank	0	,00	,00	4,302*	,00
Positive Rank	24	12,50	300,00		
Equal	0				

\*Based on negative ranks



According to results of Wilcoxon's signed rank test, it was concluded that there were a significant difference between experiment group's students' success points on pre and post  $z=4.302$ ,  $p<.05$ . When rank average and total of difference points were considered, the observed difference is seen in favor of positive rank and namely, post test's point. Namely, success of experiment group students increased.

Is there any significant difference between pre and post test points of control group that traditional teaching method was made?

Table 6. Results of Wilcoxon's Signed Rank Test Related to Pre and Post Applications for Control Group's Success Test

Posttest- Pretest	n	Average of Rank	Total of Rank	Z	p
Negative Rank	0	,00	,00	4,305	,00
Positive Rank	24	12,50	300,00		
Equal	0				

*\*Based on negative ranks*

According to Wilcoxon's signed rank test, it was concluded that there was a significant difference between control-group students' pre and post experiment success points  $z=4.305$ ,  $p<.05$ . When rank average and total of difference points were considered, it was seen that the observed difference was in favor of positive ranks and namely, post test point. Namely, success of control group students increased after the application.

## CONCLUSION

As a result of these findings, it was concluded that there was a significant difference between pre test points of experiment group that math teaching was made with game and control group which a training was made in a traditional learning setting. These results indicate that experiment and control groups were to be equal with each other before the study. When post test points of experiment group which math teaching was made with game and control group which training was made in a traditional learning setting were considered, a significant difference was found for the experiment group. When rank average was considered, it was concluded that students in experiment group were to be more successful than others. (Experiment Group =868, Control Group=308). These results indicate that teaching method with game applied in the experiment group was more effective to increase students' academic successes than the traditional teaching method applied in the control group. Teaching method with game increased the academic success positively. These results indicate that academic success of students who took training in a learning method where teaching with game was made increased at the end of this study, they got advanced in the subject. It was concluded that there were a significant difference between pre and post test points of control group that training was made in a traditional learning method and namely, students' success increased after the traditional learning method that control group's students took it. But when this improvement was compared with experiment group, it was little not to be considered. It was observed that academic success increased as students were active in the course in math teaching with game and the course became more entertaining. Many students stated that playing game in the course is quite enjoyable and they look forward to math courses. It can be stated that this study has an important place to provide that students learn in an easier way, they gather their attention, they attend actively in courses as involving entertaining and training events such as game having an important place in children's life in order to reduce afraid and worries of students towards math course. When studies related to math teaching and game were studied, it can be said that teaching with game affected positively on the success of math course. For example, in the study of Cuha (2004), he searched the effect of educational-game-supported teaching in the processing of "Fractions" unit of elementary school 6.grade in math course on success, academic identity, achievement motivation and permanent-trace behavioural change. As a result of research, it was found that student's success situation affected positively on the application of educational-game-supported teaching in elementary school 6.grade math course. Moreover, the effect of math course with game and puzzles on elementary school's 8.grade students' success and permanence level were searched on the research which was made by Songur (2006). It was indicated that teaching with game affected positively on the success, on findings from this research. The result occurred that teaching with music-added math games affected on academic success in math course of elementary school's second grade that Dincer made it (2008). As a result of the research made by Gokcen (2009), it was seen that teaching method with game affected positively on student's math success in the elementary school's 6.grade math course. On a research which was made by Aksoy (2010), positive data were obtained in terms of students' success with game-supported learning approach in fractions unit of elementary

school 6.grade math course. In consideration with data, it is possible to give some suggestions for researchers and teachers; studies related to math teaching with game can be done on other subjects of math and geometry. This research revealed that math teaching with game affected positively on students' academic success. Teachers can use teaching method with game in their lessons as getting benefit from this research. In order to do student-centered teaching, teaching method with game can be used in different teaching situations. This research was made with secondary school's students but this study can be applied in each age from preschool and at each level.

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## THE FABLE AS A RELATIONAL KEY

Gabriella ARMENISE  
University of Salento, Italy  
gabriella.armenise@unisalento.it

### ABSTRACT

In a research project, still ongoing, we started from the concept of communicative approach, to observe the importance of the tale/fable as a relational “key” in the teacher – learner connection. For the educational establishment it is crucial to pursue the goal of cognitive socialization. After all, school life is marked by a series of decisions that the teacher has to take, he has the task to lead the class group to the achievement of precise goals through actions or behaviours to be prescribed and/or suggested. Often teachers confine themselves to tell a subject or a class group what they must, should, or could do; in this case it is a one-way communication network, being limited to the situation for which the information and/or specific instructions were given, whereas the action of decision making, with an obvious connection to the target to be achieved, is a prerogative of the teacher/educator with the power of being an “expert”; it is very likely that in this case communication has the immediate impact of total passiveness, adjustment or resistance from the students' side.

### INTRODUCTION

The communication network in the classroom framework is linked to the notion of asymmetric interaction, that from the pedagogical point of view, must be reduced. The modes of communication chosen by the teacher can have an impact on the students' behaviour and their school performance; that is when it becomes important to consider the option of a transition from asymmetric modes of communication to more flexible ones, in which the teacher may act as a moderator, rather than a director and where the conditions can be created to build an educational relationship focused on the dialogue and on the processes of shared knowledge building (Titone, 1998; Pontecorvo, 2005; Orletti, 2005; Avanzini, 2008, De Leo, 2012), to establish relations, interact with the class group, transmit one's issues in a more efficient way and wittingly. The teacher is not always able to adequately get the quality or quantity of interpersonal relations that are established in the class group and the cause that affects negatively both the creation of the teacher – learner connection and the primary learning process can be found right in the gap between the actual *status* of the student and teaching staff. The inadequate elaboration of emerging needs as well as the poor quality of the educational relationship, affect the learning of abilities and expertise in the different fields of knowledge, but the same teachers were not always able to acquire means useful to monitor, handle, evaluate and boost the quality of the educational relationship. By simply observing a standard, frontal, lesson, you will see a strictly asymmetric interaction, with predictable situations and stereotypical roles (Ciliberti & Pugliese & Anderson, 2006); after all, the focus on communication or on relations is not part of the educational curriculum of the teacher, it is in fact an ambitious target that some teachers aim for with the few resources and self-education tools available. Sometimes the expected behaviours are far from the actual behaviours of the students and when in the school environment a progressive decay of the relational fabric takes place, when communication is no longer effective or simply the sensitive connection teacher – learner plunges into crisis, not only the student will feel discomfort but also the teacher, because he will find it difficult to identify in the teaching practice a possible way of personal and or professional fulfillment. At this point the role of the educator appears first of all to the teacher and secondly to society, useless or meaningless (Salvatore & Scotto di Carlo, 2005, p. 89 ff.). Therefore we need to aim at recovering the resources that typically belong to the teacher's role, usually implemented primarily (if not exclusively) discipline-wise, focusing on the educational relationship between teacher and learner. There again the social or cognitive aspects of learning are closely linked to different forms of communication or cooperation, existing in the classroom framework and between teaching staff and students. Every school class must be seen as a separate community, in which the interconnected individuals build some language and communication tools, following shared (or sharable) rules developed by the teacher (to produce or to be able to understand every single speech event). The school class then must be considered as a potential analytical unit where communication can be expressed and studied; here the role of speech cannot be seen only as an instrument to exchange some information and/or disciplinary subjects. Communication in educational environments clearly helps creating a particular teaching situation whose structure can be set up in a shared time and space by the interested parties (students and teachers) and this space-time fabric cannot underlie the inter-subjectivity that, precisely in the decentralisation of views, allows the full construction of a relational network. Obviously every teacher during the process of interacting with his students, using the reflection technique (which underpins repetition/rephrasing of questions, already expressed by another member of the group), shall provide behavioural patterns in order to make sure that knowledge is unleashed, but also the proper interpretative tools to encourage critical thinking and receptivity towards other people's ideas, promoting every form of discussion and debate, while not losing sight

of one's role as a mediator. After all the mediation activity typical of the teacher expresses the cognitive activity of the students and makes them aware of it, providing them with the tools to build conscience and self-regulation instruments, that they will seize little by little. Therefore the role of the teacher, consists of coordinating activities and planning them, encouraging and promoting the exchange as well as collaboration and discussion, creating in the classroom a true "learning community" able to open up to the outside world; and in this process, during an educational path with the focus on primary education, the educational use of the tale in its various forms can be certainly functional (fables, examples, short stories, myths and parables), and can be seen as a preferential "relational key" (various authors, 1980; Id., 1986; Id., 1990; Id. 2001). The tales and in general children's literature (Sacchetti, 1962; Marrone 2002; Barbieri, 2008; Bacchetti, 2009; Nobile & Giancane & Marini, 2011), are a very useful tool to get to know and reprocess the countless stresses that get to the child in a fragmented way, helping to make sense of and interpret a constantly changing reality in the chaos of multi-media society, providing a form of knowledge that is able to guide you through the instability of our time (Beseghi, 2002; Barsotti, 2008). Tales can express conflict situations and a possible solution among many; so they can be considered as a form of group psychotherapy and of understanding of the meaning of reality (Ancona & Scarpellini, 1977, p. 10). Tales, by reminding the reader that everything has a beginning and an end, help the little ones understand the value of endurance towards the hardship in life (Marcoli, 1999, p. 54). Moreover, since they use archetypes that are a permanent facet of the psyche, they suggest solutions or conclusions that are more appropriate than the ones a child on his own could find (Marcoli, 1999). Furthermore it is an induction to learning emotions and feelings. By using the language of imagination the educator can release the trapped energy in the child that was locked due to his inner fears, the educator can strengthen the mindset and educate him to grow up creatively (Ghidelli, 1992). The tale and the fable can be seen as a pass "key" to the relational connection teacher-student, they are used by educators to allow children to learn the vital rules of co-existence within the community. Furthermore the unconscious processes inside the child may become clearer through images that are directly aimed at the unconscious and the depictions called to mind by tales in general have this effect (Bettlheim, 2001, p. 14). They are useful for the internalisation of conflicts, usually existing during childhood, and the solution to conflicts can be found in the processing of life experiences (Ghidelli, 1992). Such Barsotti says: Children need tales because they answer some questions they ask themselves facing the outside world and offer them a path to follow (Barsotti, 2008, p. 95). Parafrasing Beseghi and Barsotti: The wonder and curiosity of children, their continuous, spontaneous and precocious questions about the thousand mysteries of life recall an original need for philosophy, or even a close link between childhood and philosophy (Beseghi, 2002, p. 75). Children's thirst for knowledge with their endless "whys" is very similar to the philosopher's one, but with an extra something that we lose when we grow up: "the childlike sense of wonder towards discovering something new" (Beseghi, 2002, p. 75; Barsotti, 2008, p. 95). Such Barsotti says: The same link exists between philosophy and tales. In tales the main themes of existence are brought to life. Because the tale contains the great questions of mankind (on destiny, on the meaning of life, on the value of time, etc.), the tale is a crossroads where philosophical thinking becomes storytelling. Philosophy is seen mainly as speech able to recall the quest for knowledge and truth. It allows you to put yourself out there changing your language in order to unveil the hidden meanings and resonance of terms (Barsotti 2008, p. 95). The modes of expression of tales along with the philosophical-literature like narrative, may be used to explore reality/truth in a playful-creative and imaginative way, providing the tools to get a critical approach that is useful to question all the daily things, but also to face the unknown and to reject every form of prejudice (Armenise, 2016). Tales are a constant portrayal of human beings' dreams, a sort of encyclopedia of objects of desire, fear, happiness, a rich heritage of symbols that touch the deepest existential questions; that is why they keep on engaging with public imagination, it gives a meaning in a changing world (Barsotti 2008). They talk about the facts of life, about envy, evil, poverty, unfairness, but they also give hope, they promote the creation of a better world, they let you believe that at the end of a journey the farmhand will become a wealthy landowner, the dragon will be defeated and the prince will marry the princess. Tales and fables show life as it is under all aspects, even the least enjoyable; there is unfairness, there is evil, there is death, but despite all that, they teach us that real life is worth living (Cicogna, 1912; Cambi, 2002; Id. et al. 2006; Mannucci, 2004; Barsotti, 2008, pp. 95-6).

The function/modernity of tales, in their different forms, is to always show new models of mankind and society, promoting the liberation of thought, to know the truth through language and fantasy worlds, the stimulation of creativity, imagination, critical thinking and the need for discussion. These are aspects that educators have to bear in mind when choosing the tale to tell their little students in a process that is considered with an educational function, message and meaning-wise. The children can exploit tales on several levels. After all the fantasy elements allows them to put themselves in the shoes of a character who doesn't have to be necessarily the main character, but can also be picked on the basis of one's psychological functions, whereas it's obvious that the storytelling shows continuous links to reality and guide the child to researching and exploring life. The function of storytelling seen as a preferential language to walk the child through life while he's growing up is clear, but also through the tasks of discover-experiment or reprocess-fantasize (Monti & Crudeli, 1999, p.

85). The teacher can follow some strategies to choose properly or “identify the right tale”. First of all we must not surrender to the temptation to isolate the symbolic meaning, because only the context can help us understand what it means in that particular tale; and the interpretation is satisfactory when it's related to the whole story that was told (Palomba, 2011). To identify the right tale we always need to ask ourselves what is the goal of the storytelling and what the meaning of the single images is within the global structure. Once we have identified the meanings in the tale opening and once we have recognized a particular problem in the main characters and identified the main narrative path, it is definitely useful to think about the targets achieved by the hero and about what these may represent for the reader (educator or child *in fieri*). (Palomba, 2011, p. 90).

The main features of the fable (Marcialis, 1982; Rodler, 2007), in particular, are simple and with the same structure repeated over and over again. A first typical aspect is to have animals as main characters, sometimes replaced by natural elements, that behave as men do, representing their vices and virtues. A second characteristic is that there are few main characters, often only two. A third characteristic is that fables are short: they show an initial situation that introduces the main characters, then they develop into a part with dialogues, that is also the central part, to conclude in the end with one of the main characters that wins. A last typical aspect are the explicit moral points, that build up a closure that is always valid (it's rare that morals are implied and so that the readers have to find them out by themselves) (Rodia, 2012, p. 28).

In Aesop's fable *The Ant and the Grasshopper*, also adapted by Jean de la Fontaine (La Fontaine, 1983), for example, there are immediate moral points: the one who never does anything, never gets anything. The plot is simple: during summer the ant is working hard, laying up food for the winter, whereas the grasshopper is doing nothing but singing all day long. When winter comes, the ant has the food it needs, since it collected it in the summer. The grasshopper, starting to feel the hunger pains goes to the ant to ask for something to eat. It got a retort by the ant, that tells it that it had toiled to get the food, while the grasshopper had sung and now it could go on and dance. Children can be told this fable to have the chance to identify the global structure, acknowledge a problem in the main characters, think about the morals and trigger exploration and research. After asking the children to crop the pictures and having them write under each one the short corresponding sentence, you can propose some cards with sentence completion exercises in order to encourage children to notice similarities and differences between the characters. This is also aimed at making comparisons and therefore turn on their imagination, giving this type of storytelling the right function, to accompany the little boy through growing up, but also through the difficult task of discover-experiment or reprocess-fantasize (Filosa 1952; Aesop, 1992; Barbieri & Contini 2005). In the past the literary genres of fable and tale used to catch on among communities, adapting to local traditions and beliefs; nowadays the tale and fable, told through the mass media, crosses every border remaining unchanged. These literary genres, in their complexity, turn out to be potential educational tools able to encourage the creation of crossroads for different cultures, facilitating multiple depictions of reality maintaining their hard-core differences. The discovery of *fables and tales from here and elsewhere*, encourages the discussion, the knowledge of ethical-cultural traditions, different worlds and realities, triggering curiosity in the reader towards openness to diversity besides critical thinking and further attention (Ducharme, 1967; Snodgrass, 1998; De Fontenay, 1998). *The problem of four*, in Bencivenga's fable, that can be proposed also in the form of comics (to take another example), brings up on the other hand, the topics of the theory of numbers and of the Pythagorean triples, starting from an existential crisis of number 4, that, tired of being an even number and of his little chair-like shape, wants to become a long and complicated number. The Great Mathematician invites it to take a seat and explains to it its peculiarity and uniqueness in the world of numbers. This gives rise to the creation of mental and concept maps. After all in the communicative approach that is established between student and teacher, an exchange of information takes place, but also an exchange of semantic, grammatical, pragmatics categories, and linguistic duties.

#### **THE TALE AND THE COMMUNICATIVE ACTION**

For a teacher it is crucial to identify some appropriate communicative actions to manage the class group. From the point of view of communication based on the use of tales, also in the form of fable particularly, mentioned here, the style used by the teacher concerning communicative action becomes crucial in order to achieve the objectives set: educational, liberating, interpretative use of the tale in the school environment. The role of language must not be seen as a simple exchange of information from the teacher to the learner. In fact communication makes a particular situation real, whose structure must be created in time and space with the other interlocutors, in order to set ground for an intersubjectivity that, in turn, is based on the decentralization of points of view, that ideal fertile ground for the construction of the communicative universe to be based on discussion and individual differences. Such differences then become functional to the process of building the knowledge if discussed and commented on by the teacher, who has the responsibility of making the child's cognitive action explicit and aware. Tale and fable in their educational application can then become useful tools to build a relational connection teacher-learner. They can in a different and complementary way, contribute to the development of the personality and ability to think, can accompany the children throughout their growth

path, encourage the exploration of the world and allow both the little ones and the adults to enjoy the magic and charm of *the elsewhere world*.

The communicative approach contributes to the development of a notion of language and communication and, obviously, the communicative relationship becomes exchange of contents, but also of semantic categories. This outlook acquires the value of relationship, requires and suggests the relationship, creates room for thought and shared responsibility among interlocutors, right there where it takes place. In order to get a real understanding of language we need to dive into its actual use, in the semantic shift that the different interlocutors give to terms. The origins of meaning are no longer to be found in a cognitive structure, nor in a socially isolated individual. The meaning can be found in an intersubjective area, through a continuous process, that is discovery and multiplicity of meanings. So we give meaning a depth that is linked to existence, being influenced by the contexts, by the internalised social resources, by intersubjectivity in communication. It's from this angle that it becomes important to look at the context, at the internalised social resources, at the conceptual meaning of words, besides the emotions that storytelling and words convey. We then have to consider that words can be experienced as "things" to break, appealing to metaphors, considered functional to interpret "blanks" between the lines. Besides, there is a resemblance between the word and philosophy and even more between philosophy and fables (or tales). Philosophy after all is seen essentially as speech able to recall the quest for knowledge and truth. It allows you to put yourself out there changing your language in order to unveil the hidden meanings and resonance of terms. This way the aspiring philosopher can draw up sceneries, also imaginary ones, originated from outlooks and connections sometimes strange, but without any doubt original, because they are the result of inspiring ideas coming right from the semantics of words that we use everyday, but whose meaning has become over time more and more imprecise and ambiguous (Bencivenga, 2004; Id., 2010; Armenise, 2016). We agree with Bettelheim when he says that tales deep down are a magic mirror reflecting aspects of your inner world, but also the necessary steps to move out of immaturity. It embraces the soul's inner storms, along with the ways to obtain peace with yourself and the world and therefore to be rewarded for the victories achieved (Bettelheim, 1977, p. 296). The tale has in common with dreams the symbolic richness or structural complexity. Then it preserves the facet of immediate and broad understanding and we understand why the same story, with small changes, is appreciated by an audience without any distinction of age, social background or cultural level (Propp, 1966).

The educator besides "identifying the right tale", must be very careful with the language of the tale he introduces to his students so that it has a liberating and interpretative function, but above all an educational function. Words, vowels, phonemes, appear to be peculiar ways to interpret the world, from an analysis that considers not only the conceptual and terminal meaning of words, but also the *emotional sense*, giving importance to the communicative level, in which the signs are within themselves the meaning, and this is completely expressed by the practical gestures that can be found in the relationship between sender (teacher-educator) and receiver (class group). Every tale is characterized by shades or variations on a theme, because they go back to childhood experiences, changing them into an imaginary story set in distant places and in an unspecified time. With its structure the tale generates the following benefits: 1) it allows you to re-live negative experiences, but in a "protected" way: the hero, usually helpless and vulnerable, is close enough, whilst living different experiences in imaginary places; 2) it builds confidence and trust towards the world: obstacles, despite seeming insurmountable, can be overcome thanks to your own abilities and with the help of objects and of magical characters. The same tale can be interpreted in different ways and its text, at first glance simple, hides different meanings (Querzè & Ghinelli, 1994; Palomba, 2011). The working principle of sign systems of the language of tales, can convey a peculiar relationship with reality. The sign relationship in general, is *objectively* based on social relations of individuals with the outside world. To interpret the rules of the language of tales means to face the structure of expression with the frameworks of its development, but also with the reasons and rules of its origins, with the multiple environments in which experience assumes meaning. In this logic of arguments the communicative dimension needs to start from relations, from the dialogue, in order to build that space between interlocutors that leads to mutual understanding and to a possible harmony.

From the communication point of view, set on the use of tales, the teacher-educator, in particular, must bear in mind that the language of tales is mainly symbolic. Every tale describes a path that is known to the child, that is to say shifting from life experiences of omnipotence to ones of helplessness. Let us remember that every child, since his fourth month of life is stronger, because since he doesn't suffer from colics anymore, he enjoys the ability to influence his family and social reality through the expressiveness and seduction ability he possesses. In this framework, since there are no awareness of weakness or dependence that concern them first hand whatsoever, they live intensely the experiences of childhood omnipotence. Between the sixth and the twelfth month they undergo major changes that by the end of the first year of life cause them a crisis. Through the advances in the perception and cognitive development, gradually some awareness steps forward of the fact that



they are a subject different from adults who take care of them and whom they could even miss; this danger (lack of availability from the adult's side) is more easily perceived when the child is younger and depends on his parents' and therefore their presence is more fervently desired than the care itself that adults provide them with (Palomba, 2011). This is a painful acknowledgement, from the vast existential dimension, since the little one, until then omnipotent, understands in a relatively short time that: he is weak and defenceless. This is a painful acknowledgement, from the depending totally on adults in order to survive, that he can be abandoned and not loved. Clearly, these changes are not the ones that make the little one face the painful experience, but the sudden clarity of mind about his existential situation and that shows entirely in his mind, is. Every tale holds in itself a mixture of elements of childhood omnipotence and powerlessness, that the little one can perceive by listening. For example let's think about the talisman that allows you to mine treasures or to get very quickly to apparently unreachable places, but also about helper characters (who work side by side with the main characters) who have extraordinary powers that recall the omnipotence desire of children. Furthermore being abandoned in the woods, famine, hardship or defeats in general are nothing but the symbolic adaptation of children's sense of powerlessness. There are some characters usually in tales from all over the world that can influence this balance between omnipotence and powerlessness. The so called "villains", besides being functional to the development of the narrative plot, play a crucial role in polarising and in expressing the fears and distress of children (Ivi). The three main characters that fall into the "villains", (the stepmother, the witch and the monster), can be easily attributed to the child's primary needs: protection, autonomy, being fed, but also to the angst deriving from the needs not met. We must not forget that for every primary need (protection, autonomy, being fed), the child can live at the same time painful or fulfilling experiences, depending on how much the need has been met, summarized below (Palomba, 2011, pp. 82-90):

<i>"Villains" with whom the child becomes familiar at an early stage (because they are linked to his primary needs)</i>	
<i>Evil stepmother</i>	<i>The witch</i>
<p><i>Primary need: protection Experience: care vs abandonment</i></p> <p>In tales containing a stepmother a child's real pain caused by his mother's abandonment is expressed through the vicissitudes of the main characters: the fear of being alone, abandoned, the anguish for not being able to survive without any help; jealousy towards his siblings considered more cherished than them. The stepmother causes pain, loneliness, fear, but also rage and reaction capacity.</p>	<p><i>Primary need: autonomy Experience: shelter vs imprisonment</i></p> <p>The witch, more than the stepmother, is the symbol of a potentially destructive feminine. The main characteristic of the female polarity is to give shelter, nourish, hold, but in its exacerbated version the destructive mode ends up trapping, eating, swallowing up. All witches try to capture and imprison the heroes (sometimes to make them fat and then eat them).</p>

The symbolism of the witch in particular, often recalls the ways of the mother's womb that imprisons the child killing him: the uterus is a source of life and nourishment, besides being a protective container, a shelter, but if it doesn't allow to get out of it it becomes a death trap. The relationship witch-child depicts the risks of a far too long stay in a state of total dependence on one's mother. The child of the tale is trapped and eaten by the witch, whereas the one in real life finds obstacles to his development caused by his mother's oppressive possessiveness. The witch is hard to expose: she detains you and ties you to her tightly, kills with evil spells capable also of paralysing. You cannot get rid of her easily and she represents also the contact with the baffling strengths of the unconscious and the danger for conscience to be at the mercy of the destructive forces of the unconscious. The changes that the witch causes can be regressive, because they push you backward on the evolution scale (let's think about spells for example: the prince can turn into a frog or become Beast until a princess with her love breaks the spell and set him free). In his complicated and gradual process of adapting to the world, the child fights the "inner" dragon that has to be killed or tamed. Only when the dragon will be dead or tamed a new balance with the world will arise, it's a rebirth. And right there the monster symbolically is source of life, element of change, treasure keeper. Clearly the change is meant as death, but also as rebirth. All monsters (dragons, fantastic birds, etc.), devour for the sake of destroying (not for hunger). They are sexually

undifferentiated entities, blind and brutal. The fight against the dragon, according to the psychoanalytic school, is meant as a depiction of conscience fighting for differentiating itself from the darkness of chaos (which could swallow it up). Devouring and destroying are activities that the child has experienced, just like the sense of omnipotence and fantasies of aggression. The balance in tales is kept by a series of good characters, who allow the little one to keep on trusting that something or someone will help the main character of the story to overcome the difficulties: the good old men, the fairy, the prince or princess, the hero, the king or queen, the father, the wizard (Palomba, 2011, pp. 82-90; von Franz, 2007).

Tales in general, come up as a container, besides being a powerful processor of symbolic representations. In the collections of popular tales (consider for example Basile's *Lu cuntu de li cunti – Pentamerone* -, one of the most famous collections), some precise ways of life and of thinking are masterfully enclosed, but also taboos and aspirations, customs and fears. On the contents of classical and popular tales, above all in the past, some teachings were built and individual and collective fears were identified, mankind's wishes were expressed. The plots, essentially, have always held the stereotypes that every culture is bearer of and influenced by. For example, to enhance the vision of marriage as individual achievement, marriage is associated with a social progress or with a liberation of the female hero from a condition of pain and segregation, but also with a punishment for the one who caused the previous situation (consider for example the ogre, the dragon, the witch, the stepmother). The stepmother, in the relationship between women, provides insights into the image of a competitive relation, often marked by revenge and jealousy or even by suspect. In tales, stereotypes or archaic visions of relationships sum up, but it's also true that the variety of stories is huge and the oral tradition is mainly choral. That's why being able to report, have children learn, read and tell them tales in different coexisting versions, documented in different places and eras, allow educators to identify and convey different role models, finding alternative solutions for identical situations (Marini, 2016, pp. 92-5).

Re-writing, used very often in modern times, is based on traditional themes or methods in order to undermine and overturn them. The first person to pave the way to this approach was Gianni Rodari with *Grammatica della fantasia* (*The Grammar of Fantasy* - 1973). Its model is fundamental to proceed to convey an idea of school based on imagination and creativity, that needs supplementary educational tools, to be used along with mainly regular contents/information. With Rodari we have a concrete example of the educational possibilities provided by the *world of elsewhere*. Ironic rewriting of classical tales originates from here, this allows the beneficiary of the educational path to mix stories and characters, to overturn the contents of the story, to change the characterisation of characters, giving a new set of facets to an imaginary vision that through hybrids, also original ones, rewrites a different ending and provides in some cases also a moral objective. Therefore Rodari is the promoter of a systematic rewriting, in some cases more in some cases less free, of the classical tradition that has marked, significantly, the evolution of Italian literature for children of the last forty years, and that today can be picked up again and used in an always new and constructive way, through teaching techniques that can encourage, within communicative action typical of the teacher-learner relationship, the process of reprocessing, sharing and mediation (Rodari 1974; Corti, 1978; Crispiani, 1988; Nobile, 2004; von Franz, 2007; Nobile, 2015; Marini, 2016).

## ON THE EDUCATIONAL USE OF TALES

The constant element of the relationship between communicative action and context can be found, clearly in the observation of communication in privileged educational contexts (school, university, educational agencies outside of the school environment in general). The initial assumption is naturally based on the educational interaction that represents the creation of a common area in which you can generate and negotiate an agreement, result of the dialogue and relational ability among participants (Coppola, 2008a). In this context, communication is not only competence and speech event, but also building a shared meaning and, in a nutshell, *communicative action*. The dialogue perspective tends to give depth to things, it requires and suggests the interchange, the relationship. To put the dialogue at the basis of the process of teaching/learning means to make room within the lesson, for thinking and interlocutory joint responsibility. Paraphrasing Coppola: the communicative competence is required in every speech event, whereas the process of teaching/learning must be seen as active construction of theoretical-practical knowledge, of tools, values and ways of life, the result of meaning sharing and negotiating and reflection of ways of being, of complex social-cultural dynamics besides personal ones (Coppola, 2008b, pp. 33-44; 36). The teacher's communication style is reflected also by the choice of models (a choice oriented towards a plurality of regulations, with an eye on a competence of use in different contexts). We can easily assume that behaviour becomes a source of communication, while this influences one's actions (Habermas, 1997; Coppola, 2008b; De Leo, 2012).

Broadly speaking then, the conversational network is characterised by actions where the subjects involved are regularly led to: identify the shared targets to achieve; understand and validate the different actions completed;

understand and influence the communicative strategies according to cooperation; integrate the most common types of speech that bind the subsequent choices of the speaker; negotiate and re-negotiate purposes and targets with a view to the communicative exchange; coordinate mutual actions in order to maintain a balance in the interactions system; generate a change of the initial situation by changing the pre-existing interpretative schemes; develop new shared meanings (Patanè, 1961; Pontecorvo, 2005; De Leo, 2012).

The teacher-educator-master asks himself how to transpose communicative actions expressed during the educational activity and without a doubt promoting such communicative action must become for the teacher first of all a goal to achieve systematically and consistently, since he has to lead the class group. A leadership that, within the communicative framework mentioned above, represented by the educational use of tales, becomes mainly an actual task of animation of the class group, compared to which we determine the approaches that the teacher has to have when he has to deal with a student or with the group in order to get to the objectives he had set. In order to overturn the stereotypes belonging to most of the classical tales, the educator can start from telling the traditional tales, identifying a series of situations that may strike the students' imagination. More tales can be added to the ones already known by most of the class group, choosing more series of type situations in order to have for example a comprehensive framework of the genre stereotypes and to create a set of sentences to start from, to recreate the story (Marini & Franchi, 2016, pp. 100-1). At this stage the sentences that were used for detecting the situations considered by the educator more useful to stimulate the fantasy and research, of action aimed at developing new meanings (to be shared later with the other members of the educational path activated by the teacher), can be deconstructed. From the deconstruction of sentences some categories can be derived: the subject, the helper characters, the antagonist, attributes, actions, the states of mind. Following this deconstruction, reported for example on a deck of cards, you may re-invent a new tale, building it according to a combination parameter (Rodia, 2012, p. 95; Marini & Franchi, 2016, pp. 100-1). The combination of the situations or of the characters can happen also after attaching on a cardboard those illustrations (showing characters or situations) that the class group previously chose among a variety of stories (suggested by the educator and read by himself). What becomes truly important for the educator is to manage to engage in a creative way with the class group, collecting their thoughts, letting all the interlocutors be involved by the unexpected, to subvert the story ironically, undermining every possible stereotype, and inviting to respect others and cultural differences, but also to friendship, providing a valid tool to get out of a servile passiveness towards TV, cartoons or of everything that divides the masculine from the feminine. Then a fantasy and fictional game with possible contents is suggested where, the class group with the adult's help re-elaborate such contents by pooling them and mediating it, learning shared and acceptable rules of behaviour (what society would expect from them, what is better to avoid, what you can use to survive, etc.) according to representations and images that, despite being used in times and places definitely far away, still allow dictates and lessons of universal value (Rodia 2011; Marini, 2016, pp. 92-5).

In this process the educator builds the tasks, that is the construction, functional to the process of observation – thinking about situations. There it becomes crucial to bring out most of the implicit knowledge working on several levels. Every level of action must be autonomous in itself and consistent with all the other factors that build the whole educational action, organised around thematic and argumentative cores considered to be relevant. The path must be shared, the targets to achieve must be known because the group must feel the teacher's presence and always know clearly the expectations of the training module. The learner must know that reality is not obvious and therefore you cannot obtain a simple picture of reality, it is only a result of the encounter-confrontation that comes up between some portions of reality and the observer. In that case we must analyse, within an area of meaning, the different elements involved, to identify the quality of the relations of the cognitive mechanisms that have been activated, in order to observe more and more knowingly and intentionally. Obviously the interpretation of the object (be it a situation, a storytelling, an attitude) is explained in the implication of emotional aspects, of values and cognitive aspects, already present in the learners. From this angle the interpretation includes both the knowledge component and the relational one. The former, originated from the relationship with the object and from a series of points of view (offered by the class group, through dialogue and confrontation) must be negotiated in a dynamic way by the educator, to create bonds with the sphere of the mind, with the emotional one, but also with the cultural heritage from the past and personal facts of the learners *in fieri*. All this is necessary to get the student out of the borders of his interpretative reality, to encourage his mind openness, to push the construction of a relevant learning (that is that process that allows you to guide the cognitive development of an individual by gradually enlarging the proximal development area), to stimulate a correct argument, making sure that the learner identifies clearly his own point of view (recognising possible weak points and critical issues) and that he doesn't surrender to the unexpected (Bruner, 1992). And we totally understand at this stage, the educational value of the teaching homework assigned: to give relevance to a particular vision of external reality, integrating with the story that is being narrated and starting from precise interpretative models that have the function of regulating the communicative value of the message as much as

the meaning that the message will be given or the use that the teacher will be able to make of it during the educational activity he developed.

Through the educational use of tales the students can acquire a flexible observation or listening ability towards themselves but also towards the external reality, making a good use of the context, taking the position required by the teacher and acting consistently with the chosen position. The tale and the fable, encouraging the reflecting ability, along with the recovery of your inner space and of silence, allow to unleash creativity, help the development of human personality in every aspect and the growth of the different levels awareness, (from the human and social one to the ecological one, for example). The learner clearly acquires behaviours linked to precise lifestyles that cannot ignore the reference categories of values (often functional to the education of the good man and citizen) and that in some cases, perform also a cathartic function.

The tale in general focuses on the values functional to the ethics training of youngsters and its main characters cannot be classified a priori as negative models whereas fables respond to the process of infantilisation of the adult world that nowadays characterises post modern society, since the need / worry to escape everyday life to enter a freeing, parallel world is more and more evident; the fable then is ideal to reflect a primitive, natural or divine world, in which actions can take place that are great to be updated. Regardless of the reader's age, in tales and fables the access to the symbol becomes essential, a factor that can be exploited to enter an endless and timeless fantasy universe, in which needs become wishes and impulses can acquire an aesthetic or moral value. In the end the symbolic activity gives rise to an action and a world that have as common roots "a meaning", that they can be given, so at this point we find ourselves facing a level of knowledge that is always the expression of a contextualisation process in a wide universe of meanings. Here's where their contents instead of coming out as free fantastic expressions, can be seen as true forms of stabilisation of the experience. Through these forms children may acquire a competence concerning rules, moral teachings, rules that organise the world in which human beings act. Thanks to reflection the reader can detect some fundamental elements of storytelling (characters, action, goals, situations and meanings) and meanings in some cases are implied rather than evident. The reader is pushed to seek them, define and interpret them, exactly like reality that is not represented only from the outside, but also from the point of view coming from different depictions created both by the helper characters and by the main characters of the story being narrated. Hence the existence of multiple outlooks on reality. Every fable or tale, read or heard, leaves a mark, makes you acquire ethics-moral competences, can guide you and give reasons for action, suggest a world as it is, but also as it should be or as you would like it to be, highlighting its resemblance to a desirable, maybe possible, world. Then we can understand why also myths, art and action can become an essential matrix of conscience and of morals, besides being the most typical expression of a true universe of meanings that in the end is the foundation of individual conscience, but also of social coexistence itself (Paolicchi, 1994, p. 15, p. 19 ff., pp. 119-137; Barsotti, 2004; Armenise, 2016; De Leo, 2016).

## CONCLUSIONS

The educator should plan and coordinate suitable educational activities in order to promote dialogue and exchange of ideas, but also discussion and constructive debate. In this sense, the fable can become an effective tool to create a communicative approach which helps the growth of a class group intended as a community of learners able to exchange their views with the external world. Among the different literary genres addressed to children, the educator can resort to the fable because it has always had a didactic meaning and an educational value. The activity of mediation typical of teaching makes the child's cognitive action explicit and conscious. The teacher's role therefore consists of planning and coordinating the activities, encouraging exchanges, discussion, and a support for one idea of communicative approach is to be found in the tale. In research project, still ongoing, the tale has been the aim by modeling of the teaching task. The tale has been an example to train the teacher about educating to critical-analogical-divergent thought and in tale *The Ant and the Grasshopper*, for example, there are functional factors for skills of thought to find similarities and differences for comparing, but also for classify and make interferences, make conceptual and mind maps. The teacher can use several strategies to choose or better still "to centre" the fable. First of all, it is necessary to resist the temptation of isolating the symbolic circumstance because only the context can help us understand the meaning of a situation in a given fable; and the interpretation is fulfilling when it corresponds to the entire sequence of events. The function of narration becomes clear. It is seen as the preferred language to accompany the child's growth but also to guide his learning-experiencing and processing-fantasizing activity. Along with the literary-philosophical issue, the way of giving voice to fables can be used to explore the reality/truth in a creative, imaginative and playful manner. This will provide the tools to acquire the ability to face the unknown and reject all forms of prejudice. In this way, it is possible to offer alternative models of humanity where philosophy, children's literature and ethics can contribute in an argumentative way to the promotion of the authentic release of human thinking.

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# THE FACTORS AFFECTING THE DISSEMINATION OF INFORMATION TO RURAL COMMUNITIES: A LITERATURE REVIEW

Ambar YOGANINGRUM  
Center for Scientific Documentation and Information  
Indonesian Institute of Sciences, Indonesia  
ambaryoganingrum@gmail.com

## ABSTRACT

This study aims to identify the factors affecting the dissemination of information to rural communities. We conduct comprehensive literature review, based on journal and conference proceeding article indexed by Scopus published in 2007 - present. The articles are categorized into three factors affected the dissemination of information to rural communities, namely information, provider, as well as communication channel and media. The result research has significance as guidance for the stakeholders to conduct deeper study on those factors, thus the objectives to be achieved in the dissemination of information would be successful. The contribution of this paper is a thinking that it needs to conduct comprehensive approach to effective dissemination of information to rural communities.

Keywords: dissemination of information, rural area, literature review, information provider, content, information and communication media, target user.

## INTRODUCTION

Dissemination of information is a part of information services, which is to be a collaboration job among information professions and researchers. In Indonesia this research field is emerging since there are demands from the government that the research outcomes should reach the end user. The dissemination of information should reach any kind of user, wherever they live, for example rural, urban, coastal, small islands, the border, forests and so on; whatever their profession such as researchers, fishermen, businessmen, teachers, students, policy makers, industrialists, and so forth; any information needs e.g. environmental, economic, social, cultural, political, health and so on; regardless of their age such as children, adolescents, adults and the elderly; regardless of their educational level including not educated and any amount of their income.

The dissemination of information for people in rural especially in developing country becomes critical since generally they have limited information literacy competency. However all people righteously have access to information including who rely on oral and other non-written sources for information. (Lieberman, Posner, & Tsai, 2014) found that the provision of certain information for people in rural areas had no discernible impact on their individual or collective action. They suggested a framework for assessing the results of information delivery. Let's take a look back to the cycle structure of information, which consists of 4 (four) aspects, namely sender (or provider), information (or content), channel of communication, and receiver (or user) uhegbu. Based on the research conducted by (Yoganingrum, Maryati, Rezaldi, & Soeprihantoro, 2015) (Collins & Champion, 2014) (Ugwoke Cln, 2014) (Shimamoto, Yamada, & Gummert, 2015) (Maryati & Yoganingrum, 2015) (Ravallion, van de Walle, Dutta, & Murgai, 2015) (Powe, 2015) (Mills, Francis, McLeod, & Al-Motlaq, 2015) (Salim0, 2013) (Logsdon, Mittelberg, & Myers, 2015) (Chen & Liu, 2013) (Messer, Parnell, Huffaker, Wooldredge, & Wilkin, 2012), it assumed that the provider, content, and channel of communication including media information and communication would be affecting in disseminating information.

The government or other information providers should make an effort to provide information needed available in any variety of media and convey via any communication channel for people in rural, although there may be constraints technically and higher costs to make it. This study aims to identify the factors, which is affecting the dissemination of information for rural communities. This paper helps to achieve a better understanding of those factors and provide specific directions for making this endeavour worthwhile and sustainable in the long run.

## THE STUDY

Uhegbu (2001) showed that the pattern of communication in rural areas is based on an input and feedback mechanism, which is shown in Fig. 1. It is consist of information itself or content, the sender of the information or provider, the channel or medium of communication and the final consumer or end user. The information or content is



what sent by the provider to the user, which consist of various fields. The providers are institutions or organizations, which develop information services to a individual or group of user. Providers can be individual, who convey the information to other individuals. The channel or medium of communication is how the information conveyed to the end user. Those three factors developed as a part of information dissemination, which has certain objectives such as improving information literacy capacity (Maryati & Yoganingrum, 2015), changing behavior (Lieberman et al., 2014), combating poverty (Ravallion et al., 2015), increasing awareness (Das, 2016) etc.

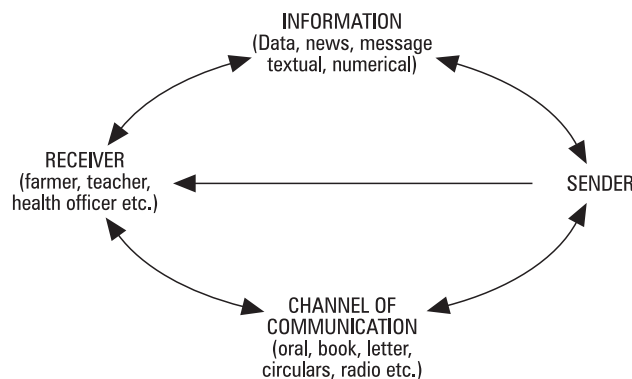


Figure 1. Structure of the community information cycle (Uhegbu, 2001)

We collected references published in the last 10 (ten) years 2007-2016 in Scopus database by combining queries 'rural' and 'information' and ('provision' or 'dissemination' or 'services') in article title. We obtained 57 articles consisting of journal and conference proceeding articles. Scopus is included in the largest abstract and citation databases of peer-reviewed scientific journals and conference proceedings. Using Scopus to review a certain subject is expected gaining a comprehensive overview of the subject.

Furthermore we analyzed 57 articles categorized based on entities in cycle structure of information conveyed by Uhegbu (2001). We categorized the articles become 3 (three) factors, namely sender (or provider), information (or content), as well as channel and medium of communication.

## FINDING

### Information

Kinds of information needed by user are varied. Commonly the need is depend on the age, occupation, sex, and kind of problems faced. Parents are interested in information about exercise and dietary changes to help their obesity child lose weight (McGrath Davis, James, Curtis, Felts, & Daley, 2008). Meanwhile rural people in Bangladesh need information on the field of Agriculture, Current trends, Government programmes, Recreation/entertainment, Environmental issues, Extension activities, Health and nutrition, Income generation, Indigenous knowledge, Business/investment, Local/national issues, Religion and ethics, Adult literacy, and Student projects (Md Shariful Islam & Ahmed, 2012a). Furthermore rural people need information in related the various occupational concerns and daily life problems for example farmers need information climate, soil, monsoon rain, irrigation facilities, seeds, fertilizers and pesticides, credit, prices of agricultural commodities, dairy development, cultivation of vegetables, etc (Md Shariful Islam & Ahmed, 2012c).

### Provider

The provider's entities affected information dissemination for people in rural consist of fascilities, collaboration, policy and program, research and budget. The following is an explanation.

#### *Fascilities*

The facilities provided for people in rural determine the successful of information dissemination. The fascilities commonly consist of the library/information center, Information Technology (IT) and Internet, application, training program, etc. The following are the explanations:

- The libraries/ information center

People in rural need a library or information center to access information. In Edo and northern states of Nigeria, the community gets information from town criers, neighbours and newspapers. Accordingly the establishment of a library and information centre in Ewatto, Edo states is highly recommended (Idiegbeyan-ose, Adekunjo, Ilo, & Odion, 2015). It is reported that library network built by Non Government Organizations in Bangladesh have a tremendous impact on the rural communities (M. Sirajul Islam & Grönlund, 2010). Meanwhile Multipurpose Community Telecenters (MCTs) become a hub that is narrowing the digital divide and contributing to the socio-economic development of rural Bangladesh (Rahman & Bhuiyan, 2016). Furthermore Union Information and Service Centre (UISC) is a facility for rural communities to access ICT. UISC has potential to empower rural communities by providing information access in various fields including agriculture, education, healthcare, and law (Hoque & Sorwar, 2014a). In the meantime Community Information Centres (CICs) for rural people are suggested to be established, and state public libraries should refer to CICs via the Local Government Information Units in disseminating information (Daudu & Mohammed, 2014). India established Drug Information Center (DIC), which provides drug information to healthcare professionals. It is reported that nurses is the highest user in using the service (Bhavsar, Zachariah, Thomas, & Kannan, 2012).

- Application  
Researchers in China built the information service system of the rural labor migration (RLMISS) then they trained the rural labor in using information technology in order to enhance their ability in getting and processing information (Ren & Luo, 2009). Meanwhile researchers in India built The Service-Oriented Rural Information Grid (SORIG) to facilitate "one-stop" access to various services of the Government (Patra & Das, 2007). They also developed a new approach to provide geo-information service to the rural extension community, using open source Geospatial Information Communication Technology (GeoICT) tools (Sudharsan, Adinarayana, & Tripathy, 2009).
- Information technology  
Information Technology infrastructure is the main factor for the difference of development level of urban and rural integrated information service system (Yang, Yin, & Ma, 2008). It is the reason people in urban is easier in accessing information. Meanwhile Union Information and Service Centre (UISC) provides ICT infrastructure to empower rural communities therefore the communities could access information in the various fields (Hoque & Sorwar, 2014a).
- Training/workshop  
Library network built by non-governmental organizations in Bangladesh provides great benefits for rural communities. It is due to the facilities provided by the library such as organizing workshops and training for youth and SMEs (Md Shariful Islam & Ahmed, 2012b) (Md Shariful Islam & Ahmed, 2012c).

#### *Collaboration*

Collaboration is one of factors should be established by the provider. Collaboration with concerned local community in running library are conducted by the non-governmental organization (NGO) in Bangladesh. NGO BRAC established rural libraries called *Gonokendra Pathagar*, which has three characteristics, namely general, woman and small. The library has general collection, operated by women and most members are woman, and the library is located in economically backward areas. The community provides a room about 500-600 square feet free of cost to be a library. They form local committee to organize the library activities. The library is operated with a self-managed, registered with a relevant government department, and develops an "endowment fund" obtained through community contributions to finance the library. It is reported that the library has a great impact on the rural communities in Bangladesh (Islam & Ahmed 2012b). In the meantime East Tennessee State University Quillen College of Medicine Library (ETSUQCOML) developed a training program to yield health information providers by collaborating with public libraries, public health departments, and rural hospitals in obtaining trainees. The project provides troubleshooting by providing persons who has capacity in finding health information (Carter & Wallace, 2007).

#### *Policy and Program*

Government policy would be an exit for the problems on information services in rural, for example promoting the supply of information service in rural areas (X. Wu, Huang, & Fu, 2009), establishing a center for accessing information and technology (Hoque & Sorwar, 2014b), answering the consumer question based on reference collection (Flaherty, 2013) and providing information services in rural setting (Briggs et al., 2012). Program development by the information provider will encourage the successful of information dissemination. The program

could be consisting of offering training to youth to become self-employed such as computer, fisheries, agricultural nurseries, etc. (Islam & Ahmed 2012a) (Islam & Ahmed 2012b) and conveying the knowledge with effective communication strategies regarding sexual health to young men (Char, Saavala, & Kulmala, 2011). Facilitation-increasing access to education in short and middle term would be empowering rural people in using information and knowledge. (Maghsoudi, Mirdamadi, Hosseini, & Hosseini, 2010). Meanwhile information market supplies mechanism provided by the government to the countryside can enhance the efficiency of utilizing and allocating information resources for the government. It is also as a shape of government responsibility in information service supplies for the countryside (Huang, 2010).

### *Researches*

A provider should conduct researches even though a simple one for successful information dissemination to people in rural. Several researches conducted for following objectives:

- Promotion  
Research is conducted to promote library role and services (Mole & Dim, 2012) (Shaifuddin, Ahmad, & Mokhtar, 2011). Information service in Nigeria is not effective and useful for rural inhabitants because the library has not been recognized and empowered (Harande, 2009).
- User characteristic  
The research about user characteristics commonly consist of information need and information seeking behavior. The research to study the need of user is urgent before implementing any rural library project (Md Shariful Islam & Ahmed, 2012d). Studying user information need are to overcome the lack of timely and relevant information in information services (R. Hussain & Tait, 2015). Furthermore due to the importance of effective information service delivery to rural communities, researcher conducted studies about designing rural-oriented, practical and replicable models for the effectiveness of rural information delivery (Uzuegbu, 2016). In the meantime Hoq (2015) conducted literatur review among others to study the information need and and information seeking behavior to better understanding on this subject. Actually utilization of family planning information was greatest among respondents. The data provide information regarding the influence of the use of family planning services (Etukudo, 2015). Meanwhile household income is one of significantly factor associated with intention of user to use of health information (Lee & Hong, 2015). Reporting that general practitioners (GPs) are interested in the library services. This research provide data regarding GPs perception toward information services in Cornwall Health Library and their information need (Oak & Gegg, 2008) ( Ollerenshaw 2009).
- History  
Qu & Li (2009) studied the history and several typical modes of the Rural Information Service (RIS) in China as a suggestion to accelerate the development of rural information service in the future.
- Information workforce  
Srinivasan (2010) stated that operators of kiosk have a critical role in asses perceived differently of the village community in the context of information provision. In the meantime competency of leaders are one of important factors significantly contributing towards telecentre success (Bashir et al., 2011).
- Application  
(Sudhof et al., 2013) studied the use of data management application for evidence-based decision making.

### *Budget*

Budget is an important factor that can run information services for people in rural. *Gonokendra Pathagar*, a networking of rural libraries in Bangladesh could be established because of funded from NGO BRAC (Islam & Ahmed 2012b). The government should support with financial therefore the Internet and multi-media classrooms could be enjoyed by people in rural (Ren & Luo, 2009).

### **Channel and medium of communication**

Information and Communication Technology (ICT) is a channel and medium that most studied by researchers for conveying information services in rural. ICT in information services for rural would be bridging the Digital Divide (Chaklader, Alam, Islam, & Sabbir, 2013). ICT is also a solution to overcome spatial barriers in accessing healthcare

(Schooley, Horan, Lee, & West, 2010). In addition farmers could operate IT- based services, which is simple and functional practicality (L. Wu, 2012). Furthermore information services for people in rural utilizes following advance technology: (1) TD-SCDMA-based framework for rural information service system. The advantages of TD-SCDMA system is stable, low cost, and highly interactive (Jian, Wang, & Guo, 2011) (2) SORIG (Service-Oriented Framework for Rural Information Grid) to fulfil the information needs of the rural population of India (Patra & Das, 2007) (3) An Application of big data for rural comprehensive information service (Guo, Wang, & Xie, 2015) (4) cloud computing information sharing platform design (Xu et al., 2012) (Geng & Zhou, 2015) (5) a mobile based multimedia social networking platform-GappaGoshti™ (Lobo, Doke, & Kimbahune, 2010).

Telephon cellular (Poncel) is an important communication channel to provide information for rural. Poncel is suggested as a tool for farmer to access market and general information in rural Kenya (Wyche & Steinfield, 2016), Bangladesh (M. Sirajul Islam & Grönlund, 2010), India (Lobo et al., 2010) and Uganda (Futterman & Shuman, 2010). In Kenya, poncel also is suggested for providing pre- and post-natal information for women (Thomas, Mibuari, Rankin, & Tuta, 2011). Short message system also could be effective in providing off-farm employment services for rural labors (Ren & Luo, 2009).

Another communication channel that effective and higher acceptability in providing information is television (F. Hussain & Tongia, 2009). Wu (2011) also shows that television and agriculture website are two main sources of getting agriculture information service in rural. An audio visual is also a media of choice for elderly people to get healthy and medical information products (Zhou, 2014). Furthermore Das (2016) reported that video media broadcasted in television is more effective in bringing behavioral change compared to newspapers and radio. Nevertheless newspaper are still popular in India rural (Md Shariful Islam & Ahmed, 2012a). Meanwhile the majority of farmers in Gujarat India stated that they prefer receiving information from the scientists (Patel et al., 2012).

## CONCLUSIONS

What is evident from the foregoing discussion is that to successfull disseminating information to people in rural need three factors, which is categorized in information, provider and communication channel and media. Those factors have been identified and discussed in the literatures review in this paper. The contribution given by this paper that it needs to conduct comprehensive approach to effective dissemination of information to rural communities. The disseminated information should be appropriate to the user need consequently the provider should develop the fascilites so people could access the information, draft policy and programs, establish collaboration with local people and other providers, conduct researches, and provide budget. The provider also should convey the information via communication channel and medium of user choice.

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## THE FEELING OF HOPELESSNESS IN PHYSICAL EDUCATION AND SPORTS TEACHERS (THE CASE OF IZMIT)

Elif KARAGÜN

Kocaeli Üniversitesi

College of Physical Education and Sports, Turkey

Elif.karagun@gmail.com

### ABSTRACT

Although Physical Education and Sports course has become a current issue with the discourses such as removal of the course from schools and reduction of the course hours, it is also considered as an important means in socialization, personality development and acquisition of physical and mental health. However, it is seen that studies where the feelings of Physical Education teachers, implementing such an important course in socialization, personality development and acquisition of physical and mental health, are researched are limited. Based on these evaluations, the level of teachers who are experts in teaching the course of Physical Education and Sports, each individual takes compulsorily, in terms of being a model, work planning and the feeling of hopelessness/despair which is considered important in view of life was wondered. For this purpose, after taking permission from Kocaeli Provincial Directorate of National Education in the academic year of 2012-2013, scales were randomly distributed to the Physical Education teachers in the province and when the scales filled in by voluntary teachers were taken into consideration, no significant results were found in terms of gender, marital status, whether they had children or not, whether they did sports in their leisure time or not, whether they received a treatment or not, age, income status, type of the school where they work and the facilities the school have, whereas significant results were found in terms of no participation of teachers in leisure time activities and the activity type in favor of those engaged in sports and music.

**Key Words:** Hopelessness, Physical Education, Teachers, Sports

### INTRODUCTION

World Health Organization (WHO) defines health as a state of completely physical, mental and social well-being, and based on this definition, various models have been developed in order to assess health. Among these models, according to one developed by Wolinsky and Zusman, it is stated that physical health is measured from a medical perspective, social health from the viewpoint of tasks and role performance, and mental health from the viewpoint of the evaluation of general feelings of the individuals, particularly of their happiness (Somunoğlu, 1999). World Health Organization states that, deaths are mostly related to life styles no matter they occurred in underdeveloped or developed countries (Dickey & Janick 2001). While the incidence rate of infections, problems with physical health, health problems caused by natural conditions, and lack of technology were high in the past, the existence of the diseases based on psychological conditions such as stress is known today. Most important approach to be followed for the prevention of diseases is to carry out preventive works. Particularly, one thing that needs to be done to protect social and mental health is the programs to be prepared for children and young people. The implementations to be carried out for children and young people within the education programs in schools are important in terms of health protection and improvement. High number of courses and intensity of the course subjects and importance of school success being a critical issue in the society, and academic concerns along with fast paced lessons lead to an education system based on rote-learning. In all this intensity, Physical Education and Sports (PE) lesson is important as a supportive alternative in eliminating problems and negative feelings that can arise in the fields of coping with academic concerns, socialization and personality development. In order for PE lesson to be supportive in solving emotional problems, it is important for PE teachers, who conduct and manage this course, to be psychologically in a completely good mood and creative in problem solution. One of the elements that supports the creativity of PE teachers is the mood they are in. Among the feelings they have, particularly “expecting greater than zero for the future”, that is, being hopeful is supportive for some plannings and fictions. Having no future expectations is also defined as the feeling of hopelessness (Dilbaz & Seber, 1998). Hope is reported to be a way-out and make an individual believe that s/he can make a change in his/her life and develop a kind of positive feeling (Herth & John, 2002), whereas hopelessness is reported to be an important phenomenon that needs to be investigated since it triggers severe mental problems affecting labor productivity such as depression and exhaustion, and is the basis of the degree of pessimistic future expectations (O'Connor & Sheey, 2000) and human life (Beck et al. 2003). Due to the nature of the lesson in which role models and counseling roles are actively used and allows educators to make observation and students to express themselves and also is also voluntarily participated by most students, PE teachers are seen as key people in eliminating hopelessness which is reported to show symptoms such as lack of concentration, coordination disorder, decrease in self-respect that can cause lack of motivation and sorrow, and even low level of energy that can lead to suicidal ideation (Abela & Payne, 2003).



In this study, the hopelessness level of PE teachers that can be supportive in helping individuals develop a living habit to protect their mental health was tried to be found out. In this context, the hopelessness level of PE teachers in Kocaeli was investigated. The study is important because it considers the feelings of hopelessness of PE teachers who are expected to be a role model to help others to be healthy, and grabs attention to the issue.

## METHOD

**Study Group:** In order to determine the level of hopelessness of PE teachers who work in Kocaeli, a scale was administered to a total of 70 PE teachers, 28 of whom were female and 42 of whom were male and who voluntarily participated in the study at the end of the 2013-2014 academic year. During the controls after the administration of the scale, the scales which were filled by 25 female and 41 male teachers were found to be complete, so totally 66 scales were taken into consideration.

**Data Collection Tools:** In order to determine the socio-demographic characteristics of the teachers, a 6-question "Personal Information Form" and the Beck Hopelessness Scale, which was developed by Beck, Lester and Trexler in 1974 and whose validity and reliability were tested by Durak (1993), were used. The fact that the scores of the hopelessness scale, a 20-item "yes or no" scale in which each response is assigned a score of 0-1, are high means that hopelessness level is high.

**Data Collection:** To collect data, approval was obtained from the Directorate of National Ministry to apply the scale to PE teachers who worked in Kocaeli during the seminars carried out at the end of 2013-2014 academic year and the list of the schools in which seminars were carried out was received, and schools randomly selected from the list were included in the study. Before the seminar started, necessary explanations were made to the PE teachers, and after that the scales were distributed to those who voluntarily wanted to participate in the study. After a 15-minute period to fill in the scales, they were collected back by the researcher.

## FINDINGS

No significant difference was found in terms of the hopelessness scale scores of PE teachers according to the variables including gender, marital status, having a child, off-the-job exercise, having a gym at the school in which they work or not, having equipment for the course or not, facilities they have, having had a treatment for anything or not. The hopelessness scale scores for those who did not participate in leisure time activities were found to be significantly high [Table 1].

**Table1:** Results of the Mann Whitney U Test for the Hopelessness Scale in terms of Socio-demographic Characteristics of PE Teachers

Variables		N (%)	Rank average	Sum of ranks	U	Z	P
<b>Gender</b>	Female	25 (37,9)	34,16	854,0	496	-,219	,827
	Male	41(62,1)	33,10	1357			
<b>Marital Status</b>	Married	49 (74,2)	31,64	1550,50	325,50	-1,340	,180
	Single	17(25,8)	38,85	660,50			
<b>Children</b>	Yes	41(83,7)	23,48	962,50	101,50	-1,701	,091
	No	8 (16,3)	32,81	262,50			
<b>Off-the-job exercise</b>	Yes	40 (60,6)	33,40	1336	516	-,053	,958
	No	26 (39,4)	33,65	875			
<b>Leisure time activity</b>	Yes	42 (63,6)	29,19	1226	323	-2,424	<b>,015</b>
	No	24(36,4)	41,04	985			
<b>Gym at School</b>	Yes	29 (43,9)	33,17	962	527	-,123	,902
	No	37 (56,1)	33,76	1249			
<b>Equipment</b>	Yes	51 (77,3)	33,26	1696,50	370,50	-,184	,854
	No	15 (22,4)	34,30	514,50			
<b>Facilities</b>	Sufficient	44 (68,8)	31,07	1367	377	-,917	,359
	Insufficient	20 (31,3)	35,65	713			
<b>Having a treatment before</b>	Yes	5 (7,6)	45	225	95	-1,400	,172
	No	62 (92,4)	32,56	1986			

While the results were statistically non-significant in terms of PE teachers' age, income level, type of school they work in, working year, weekly off-the-job exercise hours, the place where PE course is held, the hopelessness scale scores for those who do sports and are interested in music as a leisure time activity were found to be significant [Table 2].

**Table 2:** Results of the Kuruskal Wallis Test for the Hopelessness Scale in terms of Socio-demographic Characteristics of PE Teachers

	Variables	N (%)	Sum of Ranks	sd	$\chi$	P
<b>Age</b>	29 yrs and below	6 (9,1)	27,67	5	3,726	, 589
	30-35 yrs	23(34,8)	36,00			
	36-40 yrs	18 (27,3)	31,14			
	41-45 yrs	5(7,6)	38,20			
	46-50 yrs	5(7,6)	23,10			
	51+ yrs	9(13,6)	38,89			
<b>Income</b>	1501-2000tl	2 (3,0)	33,25	4	1,935	,748
	2001-2500tl	17 (25,4)	34,56			
	2501-3000tl	6(9,1)	26,67			
	3001-3500tl	30(45,5)	35,95			
	3501tl and+	11(16,7)	28,95			
<b>School They Work in</b>	Elementary	30 (45,5)	32,68	2	,729	,694
	Normal high school	27 (40,9)	32,72			
	Vocational School	9(13,6)	38,56			
<b>Working Year</b>	1-5year	15 (22,7)	29,90	4	5,715	,222
	6-10 yıl	20 (30,3)	38,73			
	11-15 year	15 (22,7)	29,93			
	16-20 year	3(4,5)	16,00			
	21 year and +	13 (19,7)	37,77			
<b>Off-the-job Exercise Hours</b>	1-2 hrs	10 (25,6)	19,05	4	1,652	,799
	3-4 hrs	15(38,5)	20,53			
	5-6 hrs	7(17,9)	16,71			
	7-8 hrs	3(7,7)	20,83			
	9-10 hrs	4(10,3)	25,50			
<b>Leisure time activity</b>	Sport	11 (26,2)	29,50	3	8,014	,046
	Music	2(4,8)	27,75			
	Dance	3(7,1)	18,52			
	Other	26 (61,9)	13,83			
<b>Place where the course is held</b>	School Garden	30 (45,5)	19,00	2	,739	,691
	Classroom	5(7,6)	17,10			
	School Field	1(1,5)	10,50			
	Gym	30(45,5)				

## RESULTS

Considering the data in this study, in which the hopelessness levels of PE teachers were determined, when the hopelessness levels of PE teachers were compared in terms of gender, although the hopelessness levels of the female teachers were found to be slightly higher than those of the male teachers, they were seen to be statistically nonsignificant. When the literature was considered, it was seen in contrast to the studies that support the findings of our study (Tümekaya, 2005; Doğan, 2012; Ersoy et al. 2010) that there were studies which found significant differences in favor of men in terms of gender (Oğuztürk, Akça & Şahin, 2011; Yıldırım, 2015). When taken into consideration with the information that PE courses are active and PE teachers are active all day, this activeness is the equal in terms of both male and female teachers, light exercises have a positive effect on the mood, being active in performing the job is thought to have an effect on these results.

When considered in terms of marital status, although the result was not significant, the hopelessness average of single teachers was seen to be higher than married teachers. When the studies carried out were examined, it was seen that there were studies similar to our study. Although the other studies did not show any significant differences in terms of marital status as well, in contrast to the findings of our study, the hopelessness scores of married teachers were found to be higher than those of single teachers (Özben & Argun 2003; Yıldırım, 2015). However, in our study, the hopelessness scores of single teachers were found to be higher, but the results were not found statistically significant.

When it was considered whether being married with children was a factor to increase hopelessness, the hopelessness scores of those who were married without children were found to be higher but insignificant.

When it was considered in terms of whether PE teachers did off-the-job exercise, it was seen that doing or not doing off-the-job exercise and the time spent on the exercise, if done, had no effect. However, when participating in leisure activities was considered, it was found that the hopelessness level of those who did not participate in a leisure activity was considerably high and this difference was statistically significant. This result showed the importance of individuals' participation in leisure activities. The studies conducted also showed that taking up hobbies is important to eliminate the feeling of hopelessness (Yerlikaya, 2006).

In addition, it is quite interesting that the hopelessness level of those who participated in a sport activity as a leisure activity was found to be significantly high. Considering the course equipment in the school they work in, the place where the course is held, whether there is a gym for practice and the course equipment is found enough by teachers, the results were found to be insignificant. In order to prevent teachers to get desperate and get quality education service from teachers, it was stated that they needed to be provided with quality working environment and facilities as a requirement for quality education and that expecting quality education from teachers without providing them with quality working environment and facilities would lead to lack of solution (Taner, 2008). In order to provide quality education, improving working conditions for hopeful and efficient teachers was considered to be important (Doğan, 2012). In the light of such information, considering that questioning of teachers in terms of their teaching environment and equipment would be suitable, some related questions were added to the information form. However, as seen in the tables, no significant results were seen. No significant result was found in terms of whether PE teachers had had any treatments before, either.

In our study, no significant result was found in terms of age. When the studies carried out were examined, it was found in contrast to our study that there was a statistically significant difference between age and hopelessness levels (Doğan & Akçöltekin, 2012). The reason for the statistically significant difference between the mean scores of future feelings and expectations according to the age groups was that these individuals were in the last stage of their profession and had experienced all problems. It was interpreted that these individuals might have faith that they would experience positive developments related to their profession (Yıldırım, 2015). Moreover, low self-awareness and hopelessness were correlated for those who were 50 and over (Duberstein et al. 2003).

No significant difference was seen in terms of income levels in this study. When the literature was considered, it was found out that decrease in income was an important factor for the emergence and increase of hopelessness (Haatainen et al. 2003), and social and economic problems could turn the fears of educators into the feeling of hopelessness in the future (Doğan, 2012). When the findings of our study were considered in this context, it was thought that there was no difference in terms of the income levels of the teachers since the amount of the salaries of all teachers was similar.

Considering whether there is a change in the hopelessness levels depending on the school type they work in (elementary, vocational or general Anatolian or general high school), no significant difference was seen.

Considering the working year, no significant difference was found in the findings of the study. When the literature findings were examined, it was found out that there were similar results to our findings and that there was no significant difference in terms of years of seniority and hopelessness (Taner, 2008; Yıldırım, 2015). In contrast to these results, there are studies that show statistically significant differences between professional seniority and hopelessness levels of classroom teachers in favor of beginning teachers (Doğan & Akçöltekin, 2012).

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## THE FRAMEWORK OF UNIVERSITY SOCIAL RESPONSIBILITY INITIATIVES: THE CASE OF SICHUAN UNIVERSITY

Deng HONG

International office, Sichuan University, China

Gong TING

International office, Sichuan University, China

Song-yan WEN

Research center for development, Sichuan University, China.

### ABSTRACT

The increasing competitive environment of culture, society, technology has led to higher education institutes making some change of their traditional roles. There are a lot of research emphasis the importance of fulfilling the social responsibility of higher education institutes. Social responsibility is considered as an intrinsic aspect of the higher education system. There is a growing consensus that universities should play a key role in performing social responsibility (SR). University social responsibility integrates social need and human development into the universities education and research.

Sichuan University is one of China's key universities, it is committed its endeavors in enhancing multiple social obligations. Sichuan University has a three-dimension social responsibility system that is aimed to address the special needs of the society: education-oriented initiatives, research-oriented initiatives, local community-oriented initiatives.

This article will first review the literature on social responsibility and their applications in higher education institutions, then provide introductory information about the Sichuan University. The next section will use six cases of the university's service learning programs that have been successful to illustrate our understanding of university social responsibility. Finally, a discussion of the findings and some concluding remarks will be presented.

**Key Words:** University Social Responsibility (USR), Sichuan University, initiatives

### INTRODUCTION

Universities are institutions whose fundamental tasks are teaching, engaging in basic and applied research, assisting the professional development of their faculty members and the character development of their students (Reed, 2004).

Sichuan University is one of China's key universities, located in Chengdu, a famous historic and cultural city. Sichuan University has a comprehensive range of disciplines covering 12 categories, 31 colleges, including a postgraduate college and an overseas education college. Sichuan University has 44 disciplines authorized by the state to grant doctoral degrees. Altogether, the university offers 349 doctoral programs, 443 master programs, 32 professional master's programs, 133 undergraduate programs, and 37 post-doctoral research stations. It also has 46 national key disciplines and 4 national key cultivated disciplines. In the mission statement of SCU, it is stated that: "cultivate elite members of the society with profound humanity, solid expertise, strong sense of innovation and broad international worldview". The statement also indicates SCU's enthusiasm for generating a knowledge-based society, and for assisting in the improvement of the local community.

This paper intends to summarize the initiatives of Sichuan University in promoting social responsibility and social service by the following aspects: encouraging its faculties and students to go beyond the wall of the university, assuming their own responsibilities to serve the society; fulfilling university's social obligations by establishing global research institute, science and technology transfer platform; providing services for the communities and citizens to lead a healthy, secure and happy life.

### LITERATURE REVIEW

When searching the study about the social responsibility, most of them are focusing on the corporate social responsibility (CSR). This section will present a review of previous research findings on social responsibility and the application to higher education institutions.

In 2009 the University Social Responsibility Alliance held the first University Social Responsibility

International Conference to discuss and explain the new concept of University Social Responsibility (USR) to all interested universities (Sawasdikosol, S. 2010).

Reiser, J (2007) defines the USR concept as "a policy of ethical quality of the performance of the university community (students, faculty, and administrative employees) via the responsible management of the educational, cognitive, labor and environmental impacts produced by the University, in an interactive dialogue with society to promote a sustainable human development". We can suggest that USR is the accountability of establishing and maintaining an ethical approach of the management of university, strengthening societal citizenship and commitment to society and providing services to local community.

Today, many universities offer courses related to social responsibility in business ethics and corporate social responsibility with the aim to teach their students the concepts and theories of corporate social responsibility. With such a background, students who are the corporate leaders of the future are expected to set corporate standards that will benefit the well being of the society (Angelidis and Ibrahim, 2002).

Apart from studies investigating the responsibilities of universities for teaching corporate social responsibility, some studies argue that universities have an obligation to promote corporate responsibility in relation to their local communities. One of these studies, carried out by Hill (2004), examines the corporate social responsibility program of the University of South Florida St. Petersburg, by describing the case of the community outreach program of the College of Business in a downtown neighborhood.

Dima (2013) proposed a model of social responsibility in universities of Romanian and identified six dimensions of USR which are: "Alumni-oriented projects, Inter-university cooperation, University-high-school Cooperation, University-business Cooperation, International cooperation and Socio-cultural and ecological projects".

Literature review shows that much research conducted focusing on the social responsibility of higher education institutes specially universities in developed countries. These universities usually adopted principles of social responsibility in their declarations. However there is a lack of research in this issue in developing countries. Therefore, this paper attempts to present the practices of SCU undertaking socially responsible activities.

### **THE STUDY: EXPLORING THE SOCIAL RESPONSIBILITY INITIATIVES OF SCU**

The social responsibility initiatives of SCU can be grouped under three main headings: educational initiatives, research initiatives and community services

#### **Education-oriented Initiatives**

Students need to be aware of the university social responsibility, to learn their role and to acquire the necessary skills to engage in job market and develop community. SCU integrates social responsibility in the curriculum of different faculties. Faculties also need to add some courses in their education programs to address topics related to social responsibility and sustainability such as sustainable development, social justice, green building construction and recycling industries.

There are also some traditional culture forums to guide the students to study seriously the major issues concerning about the long-term interests of the state, society and school, so that they can find out the entry point of their future work adapting to the society. Apart from teaching courses to its students, the university aims to generate growth in its students' individual and collective sense of social responsibility by serving others, and encourages them to practice what they have learned in courses and participate in the performance of the initiatives of the university by taking an active role in the process.

With "based on the campus, serve the society" as its guiding ideology, the volunteer association of SCU has developed the spirit of volunteer service—"dedication, friendship, mutual aid and progress." More and more excellent young people have been attracted to take part in volunteer activities.

The Career Development Center of SCU is an important center for the development of competencies of students and new graduates to be involved in the job market. It provided training of career development such as entrepreneurship, English language, communication skills and CV writing to encourage students to build their competencies and prepare qualified graduates who are able to adapt to the needs of the labor market.

Starting in 2012, the UIP was developed from 45 invited foreign professors, 54 English courses increased almost three times at 2014 to 140 foreign teachers, 183 English courses. The aim of this initiative is to provide an opportunity for students and professors from different countries to share their perspectives on business ethics, corporate social responsibility and developmental issues in the international arena, and to supplement existing business ethics or related courses using real life case studies. Moreover, UIP provides the opportunity for people from various cultural backgrounds and from different socioeconomic levels to share their ideas about the social responsibility.

#### **Research-oriented Initiatives**

There are a lot of researches focus on issues related to various disciplines in the area of environment and social issues, SCU sought to improve the performance of faculty members, assistants, and the system of scientific

research by signing agreements with various universities of the world and the exchange of researchers and cooperate with international universities and funding bodies in research projects.

**SiChuan University-Hong Kong Polytechnic University Institute for Disaster Management and Reconstruction (IDMR)**

Sichuan University- Hong Kong Polytechnic University Institute for Disaster Management and Reconstruction is committed to grooming top-notch talents in the field of post-disaster reconstruction and management, undertaking related scientific research, and fostering academic development and innovation to enhance capacity and services in disaster prevention and reduction, minimizing disaster-prone economic and human losses for sustainable development of the society. In the initial stage, the Institute set up 6 departments and 3 research centers based on the core strength of related disciplines from the two universities

With the experience and practice of Wenchuan post-disaster reconstruction, the multi-disciplinary strength of both universities and focused effort on personnel training, scientific research and social service activities. IDMR aims to become an international social service platform to confront the challenges of global major disasters and crisis of the whole world and all the human beings.

**The Institute of New Energy and Low-Carbon Technology (INELT)**

The Institute of New Energy and Low-Carbon Technology (INELT) was established in November 2011 in response to propel the development of low-carbon economy and to contribute to national needs of constructing a resource-saving and environment-friendly society. Drawing upon Sichuan University's multi-disciplinary resources and expertise, INELT aims to become the first-class research platform that integrates environmental science and engineering, chemical engineering, chemistry, materials science and engineering, life sciences, hydrology and hydropower engineering, civil engineering, economics and management sciences.

INELT emphasizes the "original innovation" and "introducing and absorption" in its research efforts and strives to form distinct characteristics in the theoretical, technological, and industrial aspects. INELT aims to gradually develop into a solid low-carbon economics and technology research base with international influence. INELT's overall mission is to realize ecological civilization and to promote the coordinated development of humans, society, and nature.

### **Local Community-oriented Initiatives**

Apart from contributing to the educational improvement of its students, faculties, SCU also plays an important role in the improvement of the local community's education and other concerns.

**Intensive Language Training Center (ILTC)**

The Intensive Language Training Center (ILTC) Sichuan University is one of the 11 language training centers directly under the auspices of the State Ministry of Education. ILTC has developed into the largest official language training center in the south-western part of China with top teaching quality and most varied kinds of language training programs in English, Japanese, German, Russian, French, Korean and Spanish. Since 1979, ILTC has trained tens of thousands of students sent by the State Ministry of Education and those sent by various enterprises and organizations, some of whom have become leaders at various levels and core members in their fields.

In June 2002, with the ILTC as its base, College of International Studies (CIS) Sichuan University was founded, and has ever since become a well-known center for jointly-run programs with foreign universities such as Glasgow University, UK, Victoria University etc.

Since 2002, through jointly-run programs with foreign universities, CIS has sent hundreds of students to some famous foreign universities for further studies. CIS has provided top quality training and has a high passing rate in foreign language tests. CIS /ILTC has earned a reputation of 'an excellent base for international education and foreign language training and a solid bridge to the outside world.

**West China School of Medicine / West China Hospital of Sichuan University**

When the Wenchuan earthquake of 8.0 on the Richter scale hit Sichuan Province in 2008, WCH, as the regional healthcare center closest to the epicenter, acted as a "Diagnosis and Treatment Center for Earthquake-wounded Persons and Patients with Difficult and Complicated Diseases", as a "Technical Supporting Center for Hospitals in the Affected Areas", and as a "Logistics Support Center for Medical Rescue Teams from Other Provinces". WCH ranked at the top among hospitals nationwide for the number of severely wounded persons treated and the rate of patient survival, achieving several miracles in the history of medical rescue efforts. After the earthquake, WCH was referred as the "backbone" of the medical rescue efforts by the media.

A 7.1-magnitude earthquake hit Yushu in China's Qinghai Province on April 14, 2010. West China Hospital sent a medical team to the disaster area, then donated medical supplies worth 5.5 million yuan to aid relief work in the area. Meanwhile, the hospital treated more earthquake victims than any other hospitals outside Qinghai Province.

It strives to uphold the motto of the hospital – "Morals, distinction, knowledge, truth, innovation and excellence" by serving its homeland with selfless dedication. At the same time, university hospitals provide health services for all staff members, employees, students and citizens.

#### Volunteer Activities

Our volunteers serve the community needs as response to the state's appeal. "SCU Youth Volunteers Training Camp" creates professional volunteers by providing training of medical aid, community building, caring for the old and disabled and other special knowledge. These initiatives give the volunteers a chance to make contribution and improve themselves in practice.

A lot of welcomed service work has been continuously carried out in areas like campus services, helping the poor, community building, unpaid blood donation, helping the elderly and the disabled, 5 • 12 earthquake disaster relief, post- earthquake reconstruction and environmental protection. For example, there are "College Students Volunteer Service in the Western Region", the community college for the old, unpaid blood donation education and volunteer service, "Young and Old", caring for the elderly, "Benefit the People and Create Harmony" community service, "1 +1 Mutual Learning " quality improving class, cultural activities for the disabled, medical guide service by southwest china Hospital, campus electrical appliance maintenance, and so on.

In addition to these student-practiced projects, the university also provides employment opportunities for local residents, who are hired as drivers, cooks, and security personnel, and so on.

#### FINDINGS

In the implementation process of social responsible activities, three main parties are presumed to be affected by these initiatives: the local community, the students of SCU who have taken part in these initiatives and the university.

Most of the socially responsible projects are developed and implemented by the university's students, the students can gain a lot from these initiatives. Firstly, those who take social responsibility courses are expected to develop a critical approach in evaluating the ethical behavior of organizations in relation to corporate social responsibility, and thus to promote more responsible behavior in the corporate world. The second benefit for students who actively participate in such social responsibility projects might be the improvement of their ability to face real-life problems, getting the first-hand experience.

A university can not operate as an institution isolated from its social environment and should commit itself to reinvest in society. As for the University, these initiatives of SCU will lead to an increased willingness of the faculty and students to be affiliated with the university. The outcomes of these activities for the university might be the formation of a positive image among the university's stakeholders, the possible gain of a competitive advantage and, in the long term, a possibly more favorable reputation.

Most universities tend to focus only on teaching social responsibility in terms of corporate social responsibility initiatives and do not go beyond this by attempting to improve their communities. A university has to integrate with the social community to create a synergy for social and cultural development. The communities have improved at different aspects such as the citizens personal development, the health problems and so on.

#### CONCLUSION

This paper reveals an example of the integration of social responsibility within a particular university setting. SCU has continually reform their role to society promoting social cooperation and cohesion and change values and practices toward society. Although SCU increasingly recognizes its social responsibility role, it has yet to adopt a clear framework to manage practices. Managing USR requires the use of appropriate measures and human resources for these measures. It needs to integrate multidimensional approach that focuses on cooperation and involvement of different stakeholders of the university.

For further research, the authors may consider designing a study that aims to measure the benefits attained from these initiatives by the involved parties, and so a better understanding can be developed regarding the promotion of other commitments to these local communities.

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## THE IDENTIFICATION OF LIFE-WIDE LEARNING HABITS OF PRE-SERVICE TEACHERS VIA PERSONAL DEVELOPMENT MAPS

Buket Aslandağ SOYLU

Niğde University, Faculty of Education, Department of Curriculum and Instruction.  
buketaslandagsoylu@gmail.com

Tuğba Yanpar YELKEN

Mersin University, Faculty of Education, Department of Curriculum and Instruction  
tyanpar@gmail.com

### ABSTRACT

Nowadays, higher education institutions in Europe have charged various roles in order to keep track of new educational changes in our ever-changing world. In such a reconstruction period, a lot of qualities which an undergraduate will need in his future life have emerged. As such, universities are to change the understanding of the concept of teaching/learning and personal development in higher education. With the advent of Bologna Process, the educators working at universities have become aware of the fact that future societies will be in need of graduates who are well development in both personal and professional domains. At this point, life-wide learning habits of undergraduates have great importance, which will lead their future. Life-wide learning, a brand new topic within life-long learning paradigm, has a complex notion underlying the importance of the development of cognitive, affective, social, technical and cultural domains related to undergraduates. This study introduces the idea of life-wide learning and it has also been aimed to present the results of a scientific study including a scale and personal development maps applied on undergraduates attending faculties of education. In the study, the life-wide learning habits of participants have been analyzed after taking part in various trans-disciplinary activities. Depending on the data collected the life-wide learning habits of university students have been discussed, and some suggestions have been offered to overcome some difficulties in organizational changes in higher education. This study have been expected to contribute from a certain perspective to ongoing debate on higher education policy.

### 1. INTRODUCTION

#### *1.1 The Recent Changes in Higher Education Institutions*

Today it has been difficult to pursuit individuals' preferences, choices and expectations as the modern world has made them confront with various challenges never before encountered. Globalization and industrialization have led universities and other educational institutions to internalize educational reforms in the twenty-first century. These inevitable trends have made universities transform themselves in order to keep track of new ideas and developments in social, economic, cultural, etc. dimensions of life in the liquid age. As Altbach and Knight (2010) pointed out, international activities of universities dramatically expanded in volume, scope, and complexity during the past two decades. These activities range from study-abroad programs, allowing students to learn about other culture, to providing access to higher education in countries where local institutions cannot meet the demand. Furthermore, other activities such as skills of students, enhancing foreign language programs and providing cross-cultural understanding have been emphasized in the last two decades.

In Europe these outstanding reforms have been come out by Bologna Process that has been going on over a decade. The process can be seen as an educational restructuring process that is outlined a European level to be implemented in the nations of Europe and the other nation's part of the process (Fejes, 2006, p: 203). In the face of continuously changing circumstances it is possible to outline a lot of policies and agreed implications that have well known impact on Higher Education institutions. Among the agreed implications there are a lot of reforms to help achieve the "Europe of Knowledge" which can be seen the greatest dream of Bologna Process. Moreover lifelong learning is constructed as a central part of this knowledge-based society and as a way to create the employable citizen, which is a way to compete with the surrounding world. It is also argued that a Europe of lifelong learning will empower citizens to become more mobilized, and to make Europe more democratic, inclusive and tolerant (Fejes, 2006). There have been exhaustive attempts of higher education institutions related to lifelong learning.

#### *1.2 Life-wide Learning*

Nowadays the work of universities is getting hard and complex, as they are expected to achieve many different goals in various fields of the life. The most significant dilemma in today's societies is to handle constantly changing status of information and technology, which makes it compulsory to keep track of new ideas and

developments in all domains. As Baumann (2006) stated universities have become part of a 'liquid life'. Instead of being enclosed and inner-directed, they are today becoming outer-directed and liquid. Accordingly, life-long learning competencies have been indispensable principles for higher education.

Life-long learning can be simply defined as "all learning activities taken throughout life" (European Commission 2002:9). While life-long learning describes what an individual learns throughout the entire lifespan, life-wide learning represents the fact that learning can take place in all fields of the life such as work, family, travelling, volunteering, etc. Life-wide learning concept is not totally novel (Jackson, 2011; Clark, 2005). Dewey argued that to provide education that was effective in preparing people for life we must relate education much more closely to life. He also argued that before educators designed educational experiences they must first understand the nature of human experience. Armed with this theory of the role of experience in learning, educators could set about organizing subject matter in a way that took account of students' past experiences and provided them with new experiences to stimulate their development, which can be seen in philosophical underpinning for life-wide learning and education (Jackson, 2011).

It is operational to set time, place and people in the concept of life-wide learning. In other words, the coordination of time, place and people can be adapted for individuals, their needs, interests, etc. As Yip (2002) stated life-wide learning is a breakthrough of the limitations, so that it enables students to have a special feeling and motivation. There are various scopes for students to enhance their learning without any borders for time, place and people.

Today Higher Education Institutions are expected to present a leading education to provide students with whole development. Life-wide learning is directly related to personal development of individuals, which is a desirable feature for today's graduates. Furthermore it enables people to improve themselves cognitively, socially and personally. Life-wide education makes it possible to train graduates well developed both in their own courses and in different ways of life- sports, art, travel, parental issues, etc. Students themselves have become "learning nomads", increasingly inhabiting all kinds of social and economic situations that afford different kinds of learning (Barnett, 2011). In a rapidly changing world, it is important for students to have a lot of experience and knowledge in various parts of life. Hence, universities ought to provide their students with effective settings in various scopes. An undergraduate student should reach a lot different places to develop herself in various fields. Barnett (2011:26) stated some learning activities and processes a student may be involved such as within a course-accredited or not; voluntary courses, courses unrelated to students' own fields. Therefore, it has been so significant for academicians to be good role-models for their students attending universities. In order to enhance their point of view in the every aspect of the life, they should lead their path in various domains.

## 2. METHOD

The mixed method was used in the study. In the qualitative part of the study personal development maps were used in order to collect data regarding undergraduates' life-wide learning habits. On the other hand, a life-wide learning habits scale was used for the quantities part of it.

### 2.1 Life-Wide Learning Habits Scale

In this study, the developed scale was conducted to 296 undergraduate students attending the Faculty of Education at Mersin University in 2012-2013 academic years in order to identify the life-wide learning habits of teacher candidates and to determine the effects of some variables on such habits (gender, department, socio-economic situation). The population of the research consisted of 203 females and 93 males attending the departments of Turkish Language Teaching, Science Education, Maths Education, Primary Education, English Language Teaching, Preschool Education, Psychological Counseling and Guidance.

The analysis of the present study is carried out with the statistical program "Spss 16.0 for Windows" For the examination of the data, "descriptive analysis" method was used, and the data obtained in this study was analyzed by using Kolmogorov-Smirnov, Levene's test of homogeneity, independent t-test and one way ANOVA. The data obtained accordingly were summarized and interpreted.

### 2.2 Personal Development Maps

In the research, personal development maps were adapted from Jackson (2011). They were applied to 14 undergraduates attending the Faculty of Education at Mersin University. Figure 1 shows the personal development map used in the research.

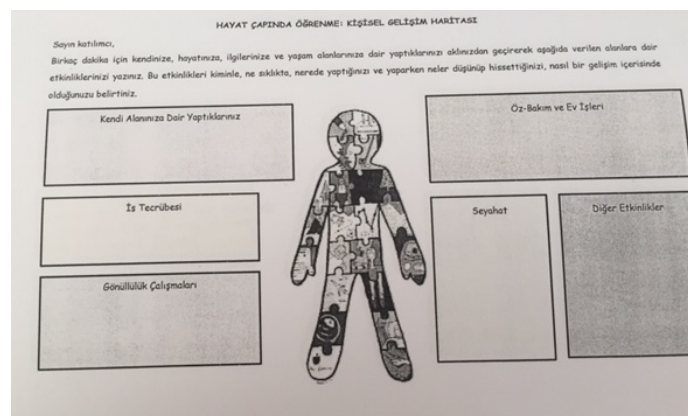


Figure 1 Personal Development Map (adapted from Jackson)

### 3. FINDINGS AND DISCUSSION

#### 3.1 Findings Related to the Scale

Table 1 indicates the minimum and maximum scores, means and standard deviations students got for the whole scale and its dimensions.

**Table 1** Minimum and Maximum Scores, Means and Standard Deviations of Students

	N	Min.	Max.	$\bar{X}$	Sd
<b>The Whole Scale</b>	296	58.00	188.00	141.21	18.21
<b>1.Dimension: Personal Development</b>	296	35.00	130.00	103.17	13.77
<b>2.Dimension: Care-Based Habits</b>	296	4.00	20.00	14.17	3.03
<b>3.Dimension: Professional Habits</b>	296	7.00	35.00	17.37	6.31
<b>4.Dimension: Leisure Habits</b>	296	3.00	14.00	6.50	2.49

As it can be seen in Table 1, the minimum score is 58 and the maximum score is 188. The mean of students' scores is 141,21, which means that students have high levels of life-wide learning habits as their mean is higher than the scale's mid-point.

Depending on the data gathered from Kolmogorov-Smirnov test, the data of the study was found normally distributed for both females and males ( $p = .601$ ). Moreover, the homogeneity of variances assessed by Levene's Test for Equality of Variances was calculated as .443. As these values were higher than .05, the data was accepted as normally distributed and homogeny. As such, independent t-test as a parametric test was applied to the data in-question. As regards independent t-test results, no significant difference was observed in participants' life-wide learning habits respected to their gender variables. Table 2 shows the independent t-test results showing the difference of students' life-wide learning habits regarding their genders.

**Table 2** Independent t-Test Results Showing the Gender Difference

Gender	N	$\bar{X}$	Sd	T	P
<b>Female</b>	203	141.66	18.25	.616	.539
<b>Male</b>	93	140.26	18.18		

While female students tended to have such habits slightly more than male students, there was no significant gender difference in average scores on the life-wide learning habits ( $t = .616, p > .05$ ).

Depending on the data gathered from Kolmogorov-Smirnov test, the data of the study was found normally distributed for all departments ( $p > .05$ ). Moreover, the homogeneity of variances assessed by Levene's Test for Equality of Variances was calculated as .053. As these values were higher than .05, the data was accepted as normally distributed and homogeny. As a result, one way ANOVA as a parametric test was applied to the related data. ANOVA results showed that no significant difference was found in participants' life-wide learning habits respected to their departments.

**Table 3** ANOVA Results Showing the Department Difference

ANOVA	Sum of Squares	sd	Mean Square	F	P
<b>Between Groups</b>	1905,082	6	317,514		
<b>Within Groups</b>	96294,554	290	332,050	,956	,455
<b>Total</b>	98199,636	296			

p&lt;0,05

Concerning the data gathered from Kolmogorov-Smirnov test, the data of the study was found normally distributed for all departments ( $p>.05$ ). Moreover, the homogeneity of variances assessed by Levene's Test for Equality of Variances was calculated as .839. As a result of ANOVA analysis no significant difference was found in participants' life-wide learning habits respected to their Socio-economic situations.

Table 4 shows the ANOVA results the socio-economic difference.

**Table 4** ANOVA Results Showing the Socio-Economic Difference

ANOVA	Sum of Squares	sd	Mean Square	F	P
<b>Between Groups</b>	187,601	2	93,801		
<b>Within Groups</b>	98012,035	294	333,374	,281	,755
<b>Total</b>	98199,636	296			

p&lt;0,05

### 3.2 Findings Related to the Personal Development Maps

The findings related to the personal development maps were given table 5 below.

**Table 5** Pre-Personal Development Maps' Results

Themes	Codes	Pre-Frequencies
<b>Activities Related to Undergraduates' Department</b>	Reading Books	3
<b>Job-Experience</b>	Restaurant	1
	Tutoring	2
	Visiting Nursing Homes	2
<b>Volunteering</b>	Collecting Books	1
	Cleaning	5
<b>Self-Caring &amp; House Work</b>	Self-Caring	4
	Caring with Others	2
<b>Travel</b>	To Hometown	11
	Sports	4
<b>Others</b>	Playing a Musical Instrument	2

14 undergraduate students depending faculty of education were applied to personal development maps. After they took it, they attended a course named "Introduction to University Life". The course consisted of various activities ranging from going to the concerts to sports activities for 14 weeks. After the course finished, the undergraduates were applied post-personal development maps in order to test the changes in the frequencies of the maps. Table 6 shows the findings related to the post-personal development maps.

The findings related to the personal development maps were given table 5 below.

**Table 6** Post-Personal Development Maps' Results

Themes	Codes	Pre-Frequencies
<b>Activities Related to Undergraduates' Department</b>	Reading Books	5
	Activities in the Department	6
	Conferences& Seminars	2
<b>Job-Experience</b>	Restaurant	2
	Tutoring	3
<b>Volunteering</b>	Visiting Nursing Homes	4
	Collecting Books	1
	Visiting Orphanage	1
	Donating Blood	1
<b>Self-Caring &amp; House Work</b>	Cleaning	6
	Self-Caring	5
	Caring with Others	2
	Shopping	1
	Money Management	2
<b>Travel</b>	To Hometown	13
	Other Cities	11
<b>Others</b>	Sports	6
	Playing a Musical Instrument	3
	Theatre	1
	Concerts	3
	Students' Groups	2

When compared to the Table 5, the number of the codes in each theme increased in Table 6, which supported the fact that after the course "Introduction to University Life", the life-wide learning habits of pre-service teachers became varied as well. Besides, the frequencies of each code went up. Namely, the number of the pre-service teachers increased for a lot of the activities.

## CONCLUSION

In this study, the life-wide learning habits of pre-service teachers attending faculty of education at Mersin University were assessed at a high level both via the life-wide learning scale and the personal development maps.

Depending on the data assessed by comparing the mean scores of the participants, it can be identified that participants join activities related to life-wide learning. In this research, it has been found that the average scores of students got from "Life-wide learning habits scale" are a bit higher than the scale's medium scores. Therefore, the life-wide learning habits of undergraduate students are on average. As the whole development of higher education students is an indispensable principle for life-wide education, students should be presented opportunities in all domains of life.

The results of the analysis presented in the current study provide support to the hypothesis gender does not have a significant and positive impact on life-wide learning habits of pre-service teachers. It, however, appears that gender can be accepted as an effect on the life-wide learning habits of participants in the component of activity. This finding illustrates the significance of considering multiple dimensions of learning for both genders when investigating the benefits of learning in various settings. Moreover, there was no significant difference found among the students in relation to their departments. Such a finding can be interpreted as the departments of the faculty have similar student profiles, so the scale can be applied to different departments of various faculties.

The study also has tried to highlight the significance of empirically investigating the effects of well-being on life-wide learning habits of pre-service teachers. It is perhaps not surprising that there is no significant difference among the participants in line with their life-wide learning habits, since the concept of life-wide education

consists various activities in its all dimensions. However by considering a broader notion it can be accepted that apart from participants' levels of incomes the social behaviour of students can have an important effect on their habits.

As it comes to the analysis of pre and post development maps, it can easily be noticed that after the course "Introduction to University Life", the life-wide learning habits of pre-service teachers became varied as well. Besides, the frequencies of each code went up. Namely, the number of the pre-service teachers increased for a lot of the activities. All these findings signal the need for further empirical research that seeks to investigate the causal relationships among the multiple dimensions of life-wide learning, since learning is a dynamic and continuous process.

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## **The importance of EE (Environmental Education) in LLE (Lifelong Education)**

Teresa PAIVA <sup>1</sup>, Rosa TRACANA <sup>1,2</sup>, Pedro TADEU <sup>1</sup>

<sup>1</sup> UDI-Research Unit for Inland Development, IPG-Polytechnic of Guarda, Portugal

<sup>2</sup> CIEC, IE, University of Minho, Portugal

### **ABSTRACT**

This article pretends to illustrate the needs of information and knowledge regarding on how adults have to behave accordingly with their environmental concerns. It is important to practice Environmental Education (EE) in all age groups for the understanding of contemporary dilemmas that exist in the environment. Society in general, and adults in particular, must be prepared for understanding the existing environmental problems. EE has been focusing on a young target forgetting the necessity of immediate changing behaviour on adults, environmental concern behaviour can be more effective in this group and the consequences of human behaviour are minimize and the ability of adopting news ways of living adapting ourselves to different environmental conditions is possible to carry out. The posture of dependence and lack of responsibility of the population comes mainly from misinformation, a lack of environmental awareness and a deficit of community practices based on participation and involvement of citizens to propose a new culture of rights based on motivation and the co-participation of the environmental management of cities (Jacobi, 2003). The research presented here identifies the information and knowledge needs of adults and designs a path for lifelong learning on environmental education.

**Keywords:** environmental education; lifelong learning; environmental information

### **INTRODUCTION**

Classroom discourse has been recognized as important to the educational experience of students. *“Speech makes available to reflection the processes by which they [students] relate new knowledge to old. But this possibility depends on the social relationships, the communication system, which the teacher sets up”* (Cazden, 1986, p. 432). Vygotskian concepts concerning semiotics and the mediation of higher mental



The concept of Environmental Education (EE) has had a remarkable evolution in meaning over time. In the beginning the concept of Environmental Education assumed a naturalist concept whereas currently it means a balance between the natural and man, with a view of building a future of sustainable development. Thus, environmental education should be seen as a key instrument contributing for changing values, mentality and attitudes to create a deep and abiding awareness in society of the problems associated with environmental issues (Morgado et al., 2000).

William B. Stapp and his colleagues (1969) have defined and proposed two major objectives of EE focused on (1) community environment and its associated problems, and (2) the role of the citizens of all ages in working towards the solution of these problems. Although the concept of EE varies slightly under different conditions and in response to local situations, in general it focuses on (1) awareness and sensitivity about environmental and environmental challenges; (2) knowledge and understanding of environmental issues at a variety of levels, ranging from local to global and including understanding of different influences, either natural or human ones; (3) attitudes towards the concern for the environment and the systems of values underlying such attitudes, helping to maintain the environmental quality; (4) skills to mitigate and solve the environmental problems; and (5) active participation in existing environmental-related programmes (Palmer, 2003). In 1987, the United Nations World Commission on Environment and Development issued the Brundtland report, "Our Common Future", which proposes some advances towards sustainability, i.e. sustainable development (SD), or development that meets "*the needs of the present without compromising the ability of future generations to meet their own needs*" (WCED, 1987, p. 12). It includes three dimensions (environmental responsibility, economic return, and social development) and five areas for SD: (1) economic growth; (2) equity, i.e. a fair allocation of resources to sustain growth; (3) more democratic systems; (4) adoption of lifestyles within the planet ecological means; and (5) population levels within the productive potential of ecosystems. Despite its commendable objectives, the Brundtland Report (WCED, 1987) has been subject to some criticism from those who claim that development is too often associated to economic growth, assuming the economic development cannot be allowed to go on degrading the environment (Lélé, 1991). Environmental education nowadays intends to provide people with an understanding of their natural and cultural environment and to enable the development of new rules, practices, and values, encouraging the sustainable use and development of natural

resources and the improvement of quality of life for all living beings (Obara et al., 2009).

## THE STUDY

Jacobi (2005) states that the relationship between the environment and education assumes nowadays even a more challenging process than last century. We notice a new emerging knowledge to grasp complex social processes and environmental risks that are increasing every day. The same author indicates that EE adopts the form of an intellectual active process, based on dialogue and interaction in a constant recreation and reinterpretation of information, concepts and meanings. We need to state two important issues about EE, they were originate from learning in the classroom, while we were students, and from our personal experience in daily life.

So several studies had tried to analyse the impact of education learning process about the environmental problems, focus on the way that we are teaching future society members to deal with this problem. The study on "Attitudes of Portuguese teachers about environment and environmental problems", developed by Borges, Duarte & Silva (2007), concluded that teachers present attitudes which may consider pro-environment, because the answers given an undeniable environmental valuation and concerns with their degradation. According to that we state previously EE is a long process, never finished, always need to be update constantly, either the student, or the teacher in the education process are in a constant adaptation. The adults learn while they were students and from their normal interaction in society, so the practice of a proper EE communication it's very important. Currently this communication is connected to the international concern with the environmental degradation that has been happening in recent decades. This social awareness and worry about the preservation of the environment are forcing many organisations to incorporate environmental messages in its proposals and communication strategies. We as investigators need to check if process like these are being succeeded or not. Mazzarino, Munhoz Keil (2012), state that the school, is organized under the logic of disciplinary knowledge, every teacher is working with its contents alone, while the eco pedagogic perspective determines that it is necessary to understand the complex relationships between biological aspects, geographical, historical, economic, social and cultural rights. Belizário & Silva (2013) claim that are a wide range of cross-cutting themes that can be used as a set of educational content and activity in school, not directed linked to any particular matter, it

can be considered common to all. So, with the cross-over seeks a new constant dialogue in the classroom and beyond, where teachers, students and community create a joint education environment with the purpose of develop an intense EE.

All strategies that are used have a common point, incorporate the need of a long life learning throughout the different ages with the different stages of the population.

So our study pretends to access young adults needs in environmental education throughout their lives. Especially we pretend to know if young adults that already received some environmental education in their early years of teaching still need more educational support since this thematic is continuing evolving. In this way we may also access the effectiveness of the environmental education given in the primary and secondary level. It is not our goal to evaluate the methodology applied in that environmental education in this paper.

So our research goals are:

- ☐ Access the level of knowledge of young adult in environmental subject;
- ☐ Willingness of received more information;
- ☐ Design a path for lifelong education on environmental education.

The methodology adequate to the objectives designed for this research consists on launching a written survey to collect the data needed to answer the questions raised within this investigation. The survey was designed accordingly with the different subjects that characterize the green consumer behaviour (Paiva and Proença, 2011). The survey is consequently structured in six sections to obtain information of the environmental knowledge of consumer consequences in behaviour in an environmental friendly way and two sections more to access preferences in information channels and respondents characterization .

We pretend the survey to be very objective to avoid opinions and collect objective answers pertinent to the research objectives, so the survey is short, with closed questions, easy to understand. Some questions to permit the individuals characterization were include in a way that permitted enrich the analyses and some differentiation of the answers could be identified accordingly with diverse social and demographic characteristics of the individuals asked.

The surveys were launched trough several volunteers that individually filled the questionnaires. The main target of this survey was adult population that had environmental education in primary school. That's why we choose HEI students because in 2015 all of them had experience environmental education experience in

primary and secondary school. The sample was a convenient one and the total number of answers needed was determined to achieve a precision of 5% within a trust interval of 95% (Kinnear and Taylor, 1991). So the sample should reach at least 384 individuals of both sexes and adults. Since we wanted to collect answers in spite of the courses learning areas and years of study in a normal three year bachelor degree we achieved 400 questionnaires collected without altering the statistics level of precision and the interval of trust. The collected data was coded and introduced in *software* SPSS (*Statistical Package for Social Sciences*, v. 21) in which all the statistics analyses was developed. The initial data collected was verified so we could eliminate the outliers' data and the survey was validated obtaining a Cronbach Alpha of 0,736 which means that is an acceptable scale (Kinnear and Taylor, 1991). The statistics analyse technique used was descriptive univariate and bivariate so it also permitted some cross results.

## RESULTS AND DISCUSSION

The majority of the respondents that answered the survey were women (60.3%), with ages between 18 and 27 years old and with residence in urban areas of the Centre of Portugal.

In general the level of knowledge about the different subjects of environment preservation and protection are good but we noticed some inconsistencies between what they think they know and the specific knowledge asked.

The biggest percentage (69.5%) of the answers of if the respondents know how to recycle residues but, in spite of only 55.5% of them really make it, and that 76.6% of them states they know what to put in the yellow bin, 59.8% put also there the food oil residues and only 16.85 knows that can put the Styrofoam residues in that bin.

The need of more information about recycling is not felt (64.3% don't want more information) but 62.3% is curious on knowing about the residues destination and 41.8% wants to know what can be made with them.

In terms of saving resources (water, energy and reuse of goods) the majority of the respondents were more homogenous in their answers since it's a common worry. But also here, when questioned about what they have at home to save those resources we observed that there is a good knowledge of what they can do to save energy and that the reuse of goods (clothes and electronical reparations) is a very positive behaviour to preserve the environment, but in terms of saving water the respondents seem not to do the most common suggestions and home practices (double reservoir in the toilet; low

pressure taps). The respondents seem to be eager to receive more information saving resources and reuse of goods as they stated (55.8% and 66.5% respectively).

Accordingly with the data collected they stated a good knowledge on pollution and they are not very willing to receive more information on data, but they want to know more about food and food processing (58%) and they seem to be needed on that also since 41.3% don't know if pre-cooked food uses more resources or not and 39% don't believe that meat can also be bio meat. However, in general, they know that biological food is better for the environment due to the pollutions consequences of the use of chemicals and pesticides, and the benefits of integrated food production and origin products registered regions in agriculture. They showed eager to receive about bio food (58%) and about the integrate food production (50.5%).

In what concerns to the nature preservation we may also observe some knowledge inconsistencies between the overall knowledge of the importance of nature preservation and altering the natural territory in which the animals and flora live in, and the specific knowledge of the animal that are in danger of extinction in Portugal (they only know one specie in extinction danger, the most talked in the social media) or the recognition of the importance of the urban plan in the nature preservation.

Due to the results of the data collection expressed here we may say that there is still a lack of knowledge in environmental preservation and protection that may be a barrier for behaviour adoption.

One important aspect that we need to pay attention is that most of the population of the study when asked state that they are more informed about environmental education from television and internet. This last issue should make us, as knowledge providers, to redefine the EE strategy used until now.

## CONCLUSIONS

In spite of all the wide range of studies that were conducted during the last years from different approaches related to EE, we decided to analyse this specific range of population and not all the population in general, why? The lifelong aspects of EE that will emerge on the future will be deal by the young of today. It's urgent to seek the EE knowledge of the student to determine the path and pave the way adapted to the reality. Our initial goals were accomplish, we were able to determinate the level of knowledge of young adult in environmental subject and their willingness to received more

information. While doing this we gather several indicators that will allow us to design a path for lifelong education on environmental education.

Charles Saylan and Daniel Blumstein write in 2011 in the introduction of their book, *The Failure of Environmental Education (And How We Can Fix It)*,

*For decades, scientists have warned of the potentially devastating consequences of climate change, and although it has become a highly politicized issue, serious problems still loom in earth's near future. A conservative approach would dictate that our societies act expediently to mitigate these potential threats. But that is not happening. Instead, we are all paralyzed by indecision, argument, misplaced politicization of the issues, and a widespread lack of commitment to change. The pace of environmental degradation, however, is not slowing.*

It's time for the investigators and educators start getting the hands on this, our study shows that clearly, environmental education need to be integrated on the curriculum more openly and not like a underground subject.

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## **THE IMPORTANCE OF MODERN OF TECHNOLOGIES AND PLAYING COMPUTER GAMES FOR GRAMMAR SCHOOL PUPILS IN THE CZECH REPUBLIC**

Lenka JANSKÁ, Jan WOSSALA  
Department of Technical Education and Information Technology  
Faculty of Education  
Palacký University in Olomouc  
Czech Republic  
lenka.janska01@upol.cz

### **ABSTRACT**

The article presents the results of a survey focused on the use of information and communication technologies by students of grammar schools in the Czech Republic. It also presents the results relating to whether and how often grammar-school students play computer games. We focused on establishing how many minutes per day grammar-school students used modern technologies to search for information, search for education-related information, prepare materials for school, visit social networks, chat, write e-mails, watch films and TV series, listen to music, work with pictures, download data from the Internet etc. All this information may lead to the division of students into the so-called digital natives and immigrants.

### **INTRODUCTION**

The present-day generation is surrounded by many modern technologies. We have computers, smartphones, and the ever-present Internet connection; even cars are becoming smart. All these possibilities can make our lives easier. We have an unlimited access to information, we can use hypertext, and we can communicate with people who are thousands of miles away from us at any place and at any time, in real time. All this affects many things, especially the perception of the world, globalisation as well as the ICT skills of different generations. Whereas older generations have come to live in this modern world in the course of their lives, younger generations were born into it. In what way may this fact influence the present-day youth? This article will try to give at least a partial answer to that.

The article describes the research of the influence of information and communication technology on the learning of students. The research deals with the effects which distinguish the group of students affected by ICT and the group of students not affected by ICT. The group affected by ICT should be characterised by a different approach in more areas (managing more activities at once, fast orientation and searching information on the Internet, the ability to quickly and effectively evaluate data sources, assessing the attitudes and opinions of other network users, critical thinking, preferring activity over static learning, preferring team work, sharing information and personal details in virtual social networks, requiring an immediate reaction to every one of their activities etc.). The research focuses on students of grammar schools in the Czech Republic.

### **THEORY OF DIGITAL NATIVES AND DIGITAL IMMIGRANTS**

Marc Prensky (2001) speaks of the generation of digital natives, i.e. children who were growing up under the influence of ICT and who do not have any problems with working and navigating in the virtual environment. The fact that such people were born in an era full of digital technologies, which surrounded them all the time and which they have used from an early age, means that the people think and process information in a completely different way than members of the previous generations, who grew up in an “analogous world”. These differences are much more profound than most parents and teachers realise. Digital natives expect immediate and rapid contact with both technologies and people. They are in contact with technologies all the time and prefer text messages over voice communication. According to Prensky, the conventional learning method based on textual content is no longer sufficient to the generation of digital natives, and is not motivating enough for them. Digital natives are people who were growing up in an environment rich in modern technologies, such as computers, digital music players, video cameras, web cameras, mobile phones etc., from early childhood. The main difference between the generations lies in different ways of thinking and processing information. Digital natives are used to obtaining information very fast, prefer parallel activities and multi-tasking, prefer graphic depiction over text, prefer play over “serious” work, and favour network cooperation and random access to information (hypertext). They expect immediate praise and frequent appreciation of their work. They see computers, mobile phones, the Internet etc. as integral parts of their lives rather than modern digital technologies.



On the other hand, the so-called digital immigrants belong in the generation of users who were not growing up using digital technologies, only acquired ICT skills in their adulthood, and do not see ICT as a natural phenomenon and part of their day-to-day activities affecting their learning strategies and ways of thinking and obtaining information. This generation is still experiencing certain doubts concerning technologies, the people do not actively use such technologies unless forced to do so by circumstances, and the way in which they obtain information and think consists in traditional models, such as linear reading. The people prefer textual information over multimedia, prefer traditional ways of communication, use the Internet only as a secondary source of information (the primary source being printed documents), study instructions on how to use programs instead of using programs intuitively, print e-mail communication and documents, call other people to ask whether they have received their e-mail messages etc. Digital immigrants do not use the possibilities and methods of work like natives do. They do not believe that digital natives can learn anything while watching TV or listening to music because that is not what the immigrants used to do.

J. S. Brown (2002) takes up Prensky's research and establishes four basic theoretical dimensions of characteristics which define and identify the group of digital immigrants. One of the characteristics of the network generation is the ability to multi-task in an intuitive and effective manner. The other three characteristics form a complex of coherent cognitive skills.

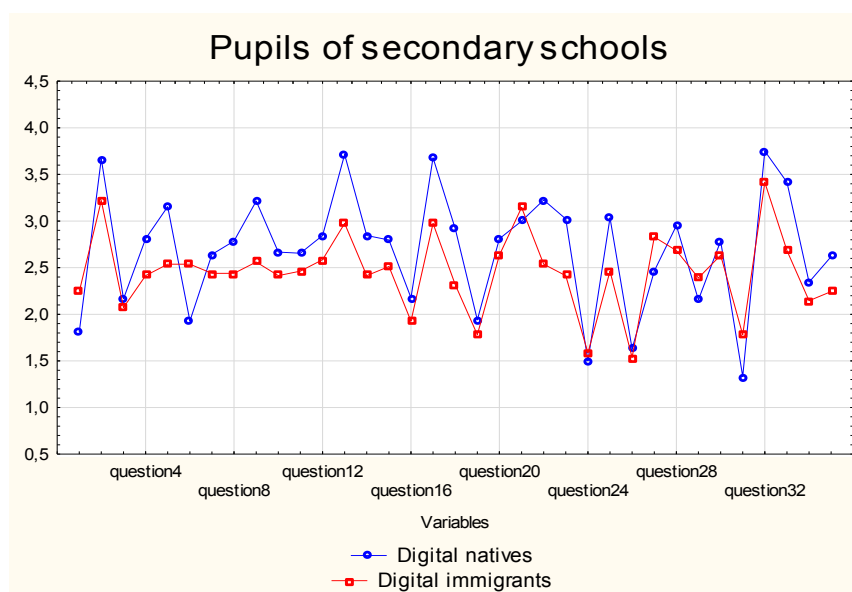
### DESCRIPTION OF THE RESEARCH

The research was focused on 2<sup>nd</sup>- and 3<sup>rd</sup>-year grammar school students. The research was conducted at grammar schools in the Moravia-Silesia, Olomouc and South Moravia Regions in the Czech Republic in May 2016. We used our own questionnaire as the research method. The following methods were used to process the data: analysis of variance and correlation.

The questionnaire was mostly based on a four-grade scale, where the pupils selected the degree of agreement with various statements. The questionnaire statements were for example the following: I cannot imagine my life without the Internet, I understand graphically depicted information better than text, I listen to music while I am studying etc. Furthermore, the questionnaire tried to establish other characteristics of pupils that might affect their association with the assumed typical group of digital natives, e.g. whether they had a computer, a TV and a mobile phone at home and whether they used such technologies on a regular basis.

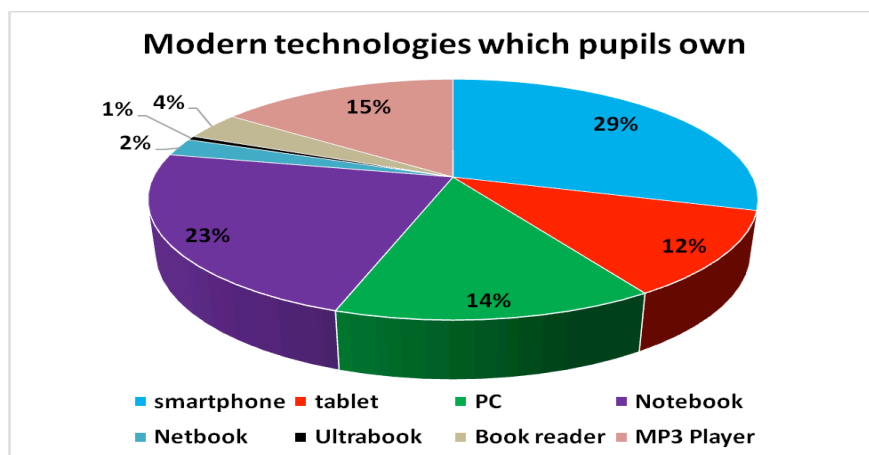
### RESULTS OF THE RESEARCH

A total of 415 grammar-school students aged 17-18 years took part in the survey. Of these students, 256 were women and 159 were men. The replies proved the existence of a group of digital natives at Czech grammar schools. This group can be characterised as follows: they promote multitasking, prefer graphic depiction over text, expect immediate praise and frequent appreciation of their work, use the Internet as the primary source of information, consider modern technologies as an integral part of their lives, prefer online communication (online all the time) and are better acquainted with modern technologies not only than most older people but also than most of their peers.



**Chart 1:** Division of grammar schools students into digital natives and digital immigrants according to their replies to the specific questions in the questionnaire.

In the survey, we were trying to establish what modern technologies grammar-school students in the Czech Republic owned. Most frequently, grammar-school students own smartphones (a total of 383 students), 299 students stated that they owned a laptop, 198 students own MP3 or MP4 players, 186 students have their own PCs, 150 students own tablets, 48 students have book readers, 31 students own netbooks and 7 students also have ultrabooks. For more details see the following chart with a percentage division of students owning particular modern technologies.



**Chart 2** shows the numbers of pupils who own a particular modern technologies.

We also asked the grammar-school students whether they had access to the Internet and whether they had mobile Internet. 100 % of the grammar-school students said that they had access to the Internet, i.e. at home, at school, in the library or elsewhere. 50 % of the students said that they had mobile Internet on their smartphones or tablets. It is therefore obvious that grammar-school students cannot do without the Internet access nowadays. The students were then supposed to define what they did on their computers, tablets or phones, and for how long they pursued such activities each day. Most frequently, the grammar-school students spend their time on social networks (92 %); 90 % of the students stated that they regularly listened to music, and 89 % of all the respondents said that they chatted to their friends. A total of 88 % of the respondents stated that they regularly used modern technologies to search for information, 85 % of the students regularly search for education-related information, 73 % of the students prepare materials for school using modern technologies, 59 % of the students communicate via e-mail, 75 % of the students regularly watch films and TV series, 44 % of the students work with pictures, 54 % of the students download films and TV series from the Internet, and 55 % of the respondents regularly play games. The following table indicates how many minutes per day the grammar-school students pursue the individual activities.

Activity	Searching for information	Searching for information for school	Preparing documents for school	Social networks	Chatting with friends	E-mail communication	Watching movies and TV series	Listening to music	Working with pictures	Downloading movies and music	Playing games
Average no. of minutes per day	26	21	20	64	114	4	61	84	10	19	42

**Table** of activities of pupils and students using modern technologies; indicates the average number of minutes per day

## CONCLUSIONS

The survey proved the existence of a group of the so-called digital natives at Czech grammar schools. As expected, not all grammar-school students belong in this group. We also determined the characteristics of the group. We further established what modern technologies grammar schools students owned. Most often, students own smartphones, MP3 players, laptops, PCs and tablets. And most frequently, they use these modern

technologies to chat with friends, listen to music and play games. The survey followed a pre-research conducted in 2015 that was focused on 15-year-old pupils of primary schools and 18-year-old students of secondary schools. The 2015 pre-research showed very similar results to this survey. The results of this survey were published at the INTE 2015 Conference and the contribution was entitled “*EXISTS A GROUP OF DIGITAL NATIVES AT SECONDARY SCHOOLS IN THE CZECH REPUBLIC?*”

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## NOTES:

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## THE IMPORTANCE OF PRACTICAL TRAINING IN TOURISM EDUCATION

Tulen SANER

School of Tourism and Hotel Management  
Near East University, North Cyprus  
tulen.saner@neu.edu.tr

Nesrin Menemenci BAHCELERLI

School of Tourism and Hotel Management  
Near East University, North Cyprus

Serife Zihni EYUPOGLU

Department of Business Administration  
Near East University, North Cyprus  
serife.eyupoglu@neu.edu.tr

### ABSTRACT

Tourism education plays a major role in preparing students to gain professional and practical skills required by the tourism industry. Given that the tourism industry is a labor-intensive sector, it is undeniable that practical training is as important as theoretical training. In tourism education practical training is necessary for students to find the opportunity to apply what they have learned into practice and to develop personal skills and abilities. In this study, it is aimed to reveal the importance of practical training in tourism education.

A qualitative research model was used to collect in-depth data from students through semi-structured interviews, self-reports and discussions via social media. The multiple data was analyzed thematically. The study group consisted of 20 senior students from Near East University, School of Tourism and Hotel Management. Practical training is an important part of tourism education programmes in which the students figure out their role as a potential employee in the real workplace as well as gain skills and abilities in the tourism industry.

**Key Words:** Practical training, tourism industry, tourism education.

### INTRODUCTION

The rapid growth of the tourism industry creates large numbers of jobs. As tourism plays an important role in the economy, there is a need to examine tourism education in relation to employment. Tourism is a multidisciplinary field, characterized by a large number of small and medium-sized businesses (Thomas, 2000; Ayres, 2006)

Tourism education is closely related to employment and careers in the industry. Like any form of vocationally orientated education, tourism education has to balance three imperatives: the need to promote individual development, the need to advance knowledge, and the need to be practical and relevant to industry (Riley et al., 2002).

The practical courses are the grounds for a proper liaison between academia and the industry through which the students learn how to perform professionally. Students can integrate learning through the academic foundation in a business setting.

Higher education in tourism provide technical skills and practical experiences and requires operational training and facilities (Alexander, 2007). Tourism industry's demand is increasing for well-qualified labors with a range of skills (Robinson, Barron & Solnet, 2008). This is the reason why tourism students prefer concrete and active learning styles rather than theory (Zagonari, 2009). This provides a deeper understanding of what and how to educate new graduates who are highly skilled and ready to face the challenges of increased competition. This will enable the tourism industry to be more competitive, more effective and more innovative.

Indeed, practical training courses are the experiential learning process that students supports knowledge creation and develop competence and skills through practice and living experience within the sector. The practical training courses are very significant for the undergraduate students because they gain future experience of work for work success. In this study, the importance of the experiential learning process for future success, and the role of dialogue and interaction for experience and social learning are highlighted. The principles of digital age, social networking sites provides platform for interaction, connectivity and access that foster interaction and socially negotiated experience as a base for the social learning. In this respect, collaborative thinking, argumentation and reflection in order to achieve interconnected knowledge and experience becomes important.

Given the labor intensive nature of the tourism industry, during the tourism education, practical training courses in tourism education is of great importance to gain responsibilities, personal leadership skills and problem solving abilities.

The literature stresses that social interaction and experience are an important part of education (Fernandez, 2006; Pankhurst, 2010). Individuals have the opportunity to communicate with each other through the social media at any time. An important advantage is that this communication builds two-sided interaction. Thus, among the users themselves information, documents and ideas are shared. Facebook is a social network software, its users use to connect with their friends, join groups and share resources (Gonzales and Vodicka, 2010). Facebook allows collaborative communication among students, helps to increase the student's interest in the lesson and to increase their performance, and allows for communication with students and faculty (Roblyer et al., 2010; Tuncay et al., 2010; Hoffman, 2009; Laire et al., 2012). Kosik 2006 indicates that studies have emerged in regards to reaching out to students and classmates through the use of Facebook to receive information and for academic purposes. In this context, the importance of the use of social networking for educational purposes is emphasized. Practical-based courses conducted through the social network allows for communication to be established with the student that enables for quicker feedback related to the course and allows for more efficient processing of the course thus enabling continuous interaction.

The purpose of this study was to reveal the importance of practical courses in tourism education. Furthermore, this research aimed to assess the skills and capabilities of students within the scope of practical training courses. It aims to reveal the evaluations of students about the practice learning and experience with the support of social networking site as regards the openness, diversity, interaction and autonomy principles.

## METHODOLOGY

In this study, qualitative action research method used to collect data. Action research was employed where skill development of learners through online social platforms and digitally integrated learning, teaching context were created. Based on learning cycle of the action research, systematic inquiry was implemented to practice novel learning environment. It is evaluative tool that provides improving professional practice through diversified activities. The study was implemented in 3 stages to 20 students. First, semi structured interview was implemented to the students about their perceptions related to tourism sector. Secondly, self-reports were used to collect information about the skills and job experience that students gained throughout practical learning courses. Final stage involved observation. Throughout the study Facebook group was formed as a platform for students' discussions and arguments. Therefore, multiple qualitative data collection techniques were used in this research namely semi-structured interviews, self-reports and discussions via internet were used in order to examine importance of practical training courses.

Content - thematic - analysis was used to interpret self-reports by considering the key themes. These key themes were categorized as;

- ☐ Perception of students towards practical training courses
- ☐ Perception of sector towards students engaging in practical training courses
- ☐ Evaluation of practical training courses

## FINDINGS AND RESULTS

In this study, 20 students from the School of Tourism and Hotel Management, enrolled for practical training courses voluntarily contributed to the study.

Findings were categorized as in 3 key themes;

- ☐ Perception of students towards practical training courses
- ☐ Perception of the sector towards students engaging in practical training courses
- ☐ Evaluation of practical training courses

### Perception of Students towards Practical Training Courses;

It is significant how students perceive the impact of practical training courses for their learning. Students reported that learning is not an individualistic attempt but requires self-discipline. Almost all students reported that practical learning platform is effective for learning, additionally they reported that they have developed leadership skills as they explored the nature of learners as leaders within practical training courses ;

**Table 1.** Perceptions of Students towards Practical Training Courses

The data obtained from expression	Generated headings	Total number of opinion
Taking on responsibility and being able to identify possible problems and gain work experience in order to be one step ahead	Carefully analyzing the issues and being different from others	6
Making a difference through observation and experience. Setting goals and objectives	Creative and creator of vision and mission	4
Taking on responsibility, solving problems, gaining confidence through dialogue with customers	Self-confident, self-motivation, persuasive and generate social abilities	8
Being disciplined and organized at work	Control mechanism, discipline and stability	2

Also, if students' views on the use of Facebook on the practical learning courses is to be examined;

Student 9 stressed that “Everyone is available anytime therefore exchange of information is more instant and effective”.

Student 17 stated that “I believe we can interact better with colleges who work at different departments”

#### **Perceptions of the Sector towards Students engaging in Practical Training Courses;**

The skilled personnel demand is increasing and the tourism sector will have to improve the supply of a skilled workforce in order to be able to meet the specialized demands of this rising tourism activity. And the sector prefers to attract highly qualified workers with the skills and knowledge necessary to meet the requirements of employers in the tourism sector (Wang, 2008). Therefore, the qualities of graduates in terms of skills and abilities, which is the very important consideration for the tourism sector (Pearce, 2005).

Expectations of the sectors from students;

- Communication skills
- Problem solving abilities
- Loyalty
- Sufficient professional knowledge
- Innovative behaviour
- Teamwork
- A positive attitude
- Hygiene
- Punctuality
- Ability to apply knowledge to different fields

#### **Evaluation of Practical Training Courses;**

When students were asked about their perceptions towards practical training courses students 8 and 17 stressed that “The interest in Facebook is very high, therefore communication via Facebook is easily established”. Students also agreed that they can share problems and their solutions with each other via Facebook.

The outcomes of experiential learning can be categorized as: performance development

- saving time with self-discipline
- learning with self-organization
- learning with a comfort
- sharing knowledge
- expressing ideas
- obtaining knowledge

- obtaining information
- learning by doing

## CONCLUSION

This study yielded the contributions of the practical training learning environment. Students engaging in experiential learning in a practical training learning environment supported by online applications provides a positive impact on awareness, reflection and leadership during the self-organization of learning. This study indicates that the practical training learning with the discussion platform in online context supported intellectual flexibility and reconstruction of meanings. Engaging students in a real life experience with practical training learning (working in the sector), discussions and negotiation of learning process with peers in online context helps students develop their problem solving abilities. Furthermore, online social learning fosters collaborative discourse for internalization. Online social learning also plays a vital role for collaborative and self-learning environments.

Practical training courses are important in many ways. First of all students gain experience and knowledge through actually doing the job. Students also gain the ability to look forward and ability to communicate effectively.

In professional work life, it is important to ensure continuous training, with the ability to query participants, prone to group work, collaborative, ethical values, cultivating individuals who have developed their social responsibilities demanded by the sector.

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## THE INFLUENCE OF CULTURAL ART EXPERIENCE ON THE EMOTIONAL AND SOCIAL DEVELOPMENT OF KOREAN CHILDREN IN POVERTY

Hwan-Joong KIM

Woosuk University, Department of Occupational therapy, Professor, South Korea  
kimhj@woosuk.ac.kr

Mi-Suk LEE

Woosuk University, Graduate School, Department of Educational & Cultural Contents Development,  
Doctoral Student, South Korea  
mslee80582@naver.com

Nattakarn RADTEE

Woosuk University, Graduate School, Department of Educational & Cultural Contents Development,  
Master Student, South Korea  
nattakarn\_n-y@hotmail.com

Ho-Kyung CHOI

Woosuk University, Graduate School, Department of Educational & Cultural Contents Development,  
Master Student, South Korea  
chk4148@naver.com

Jae-Eun LEE

Woosuk University, Graduate School, Department of Educational & Cultural Contents Development,  
Master Student, South Korea  
zzen0208@hanmail.net

### ABSTRACT

The aim of this study was to investigate the influence of cultural art experiences on the emotional and social development of Korean children living in poverty. A survey was conducted and 286 elementary school children were participated. The results are as follows:

First, the young children with regular cultural art experience reported more positive emotional and social development than that of those do not. Second, high frequency of learning in culture art activities had a higher score of emotional and social development than low frequency. Third, high frequency of culture art appreciation had a higher score of emotional development than low frequency. Moreover, high frequency of culture art appreciation had a higher score of social development than middle frequency and low frequency. As a result of comparing sub-factors of appreciation of cultural art, a significant difference was reported on the emotional development in regards to music. And there was a significant difference on the emotional and social development in regards to the appreciation of culture art: acting/musical. The results of this study suggest that political support and overall solution are needed in order to expand the opportunities for children to appreciate culture art.

**Key words:** culture art experiences, learning in culture art activities, appreciation of culture art, poverty children, children's emotional development, children's social development

### I. INTRODUCTION

Culture art refers to artwork, music, dance, film, entertainment, traditional music, photography, architecture, and painting (Article 2 of Culture and Arts Industry Promotion Act.). Human culture and art plays a major role in leisure life and good life (Park, 2014). Culture and arts develop emotional well-being and self-confidence. Culture and art help people to develop a positive attitude and self-esteem in their social and academic lives (Jeong & Jo, 2012). In addition, it can be utilized to help people integrate into society through the development of sensitivity and social integration (Kim & Lee, 2014). Humans understand satisfaction, pleasure, happiness

and compassion through culture and arts, and this can help them empathize with others who have similar emotional experiences. Moreover, culture and art activities have been effective in helping children with social problems, self-control issues, and in decreasing stress (Im, Yoon, Jeong, Kim & Yang, 2012).

According to Wang (2006), art activities provide children with opportunities for self-expression, help in the formation of self-motivation, and aid in anger management. Baek (2005) also explains that art activities can have a positive effect on maladjusted young people. Kwan and Woo (2007) point out that discussion theater programs help alleviate depression and improve self-image. Moreover, Brown, Benedett, and Armistead (2010) pointed out that culture and arts have a positive effect of self-satisfaction, decrease feelings of alienation, and increase feelings of achievement and self-efficacy.

A variety of government agencies, such as the Korean Ministry of Health and Welfare, support the use of art activities, such as playing instruments, to develop a child's sensitivity, creativity, and self-esteem. In Korea, financial resources, time, and initiative are needed by parents in order for their children to experience cultural art. However, because of this, children living in poverty are only able to experience a limited amount of cultural art in comparison to their peers.

Traditionally, Korea has been an ethnically homogenous society, wherein subsequent generations provide social welfare for their families and etiquette governs social mores. However, since the IMF crisis in 1997, unemployment has increased, divorce rates have risen, and there is greater necessity for dual income for Korean families (National Policy Committee 2011). As a result, the form of the Korean family has changed, with grandparents raising children in the absence of parents, a rising number of multicultural families, single-parent families, and dual income families. Many housewives who were the mothers in the past have to go out for work, but often lack the necessary skills. In the past, children received emotional stability from their mothers. However, after Korean mothers began entering the workforce, this reduced the emotional support for their children. The change in family make up has increased the amount of children at risk of social development issues and confusion in self-worth.

Most vulnerable children showed a delay in social development due to a lack of physical and environmental stimulation as well as a lack of language skills, cognition and physical ability. The possibility for developmental delays is higher for children in these situations. Furthermore, most of these children struggle academically, are socially outcast, experience bullying, and have higher incidents of school violence as they mature. Recently, there have been greater incidents of disobedience, problems of violence, and rampant bullying in Korean society that lies beyond the authority of school administration. This has become a major issue in Korean society, and the government should make efforts to take control of these issues. These issues show the seriousness of youth issues in schools. Gottfredson and Hirschi (1990) explain that self-control skills are associated with impulse control, and the lack of these often result in crime and misbehavior. These issues occur due to lack of self-control and the inability to control momentary impulses or their emotional response is a major issue for adolescents.

Most of these adolescents have self-esteem and self-confidence issues. As a result, they lose interest in school, show lower levels of learning achievement, and have difficulties adapting to academic life (Park, Kim, & Kim, 2007; Chung & Cho, 2012). Gweon and Yang (2007) point out that adolescent's adaptation to school life and the emotions associated with this have the greatest length of explanation, and they underscore the importance of emotion. Kim, Jeong, and Lee (2014) point out that the formation of emotion takes a relatively long amount of time to form, and if there are no changes in this formation, emotional stability is maintained until adolescence. In order to solve these issues, focus should not be paid solely to emotional issues during adolescence. Attention to the emotional development of young children is also necessary. Not only this, it is also important to provide opportunities to reinforce the emotional functions, such as self-control, self-esteem, and self-confidence, during childhood.

One of such suggested reinforcements is cultural art activities. Cultural art activities have an influence on the development of self-esteem and proper emotional function as well as a positive influence on interpersonal relationships (Winkley, 1996). Cultural art activities have a positive impact on emotional aspects of a child, such as emotional stability, aggression, self-esteem, and self-efficacy (Gang, 2001; Go, 2004; Lee, 2007; Jeong, 2010). Moreover, a great deal of overseas research shows that cultural art has a positive influence on the formation of individuality and the process of socialization, providing the foundation for a child to develop a healthy social role as a member of a group (Aktinson & Robson, 2012; Jermyn, 2001; Lowem, 2000; Matarasso, 1997; McCarty, 2004).

However, despite the plethora of research showing the positive influence of cultural art experiences on the emotional stability of children, much of this research has focused on the higher elementary grades through middle school. It is especially difficult to find research that focuses on young elementary children in poverty and their isolation as a result of their social and economic conditions. This research focuses on young children in poverty and the influence of culture art experiences on a child's emotional and social development. Furthermore, this research takes into consideration the importance of emotional and social development, the problems that arise from negative emotional and social development, and provides policy recommendations and basic data regarding the issue at hand. The research questions are as follows:

First. What is the influence of cultural art experiences on the emotional development of the children living in poverty?

Second. What is the influence of cultural art experiences on the social development of the children living in poverty?

Third. What is the influence of learning in cultural art activity on the emotional and social development of the children living in poverty?

Fourth. What is the influence of appreciation of cultural art on the emotional and social development of the children living in poverty?

## □ . RESEARCH METHOD

### 1. Participants

This research is aimed at 286 elementary school students in poverty in Chollabukdo. It is collected that 11 local children centers and 4 elementary schools located in Jeon-ju, Ik-san, and Wan-ju. The researcher directly visited there and explained the purpose and necessity of this research and then handed in the questionnaire to the people in charge. The participants directly read and answered the questionnaires and the researcher gathered them in person. Sometimes the person in charge collected and passed them to the researcher. 305 questionnaires were totally collected, and 19 questionnaires (6.2%) were not accepted owing to the inadequate answers, the same answers, the duplicate answers, and the unfinished answers. Therefore, 286 questionnaires (93.8%) were analyzed. The distribution of the final chosen participants is shown on the <Table 1>.

<Table 1> The distribution of the participants

Division	cultural art experience		learning in cultural art activity		appreciation of cultural art		Total
	Yes	No	Yes	No	Yes	No	
Boy	93	48	89	52	47	94	141
Girl	109	36	103	42	56	89	145
Total	202	84	192	94	103	183	286
2 year student	67	28	64	31	34	61	95
3 year student	69	29	65	33	36	62	98
4 year student	66	27	63	30	33	60	93
Total	202	84	192	94	103	183	286

## 2. Research Tools

### 1) The test of the emotional development

In order to measure emotional development of the participants, Emotional Intelligence test from Salovey and Mayer (1990) which was standardized in Korea by Moon (1997) was adopted. The subordinate variables of emotional development are emotional awareness, emotional expression, emotional empathy, and emotional control.

### 2) The test of the social development

In order to measure social development, Social Skills Diagnostic Screening test from Fort McMurray School District (1993) was adopted and revised by the researchers. The subordinate variables of social development are personal relation, responsibility, cooperation, and diligence.

### 3. Research procedure

#### 1) Research design

For this research, the subordinate variables about emotional development and social development were decided after collecting the data through the advanced researches during March 14<sup>th</sup> to May 25<sup>th</sup> in 2016. The subordinate variables of emotional development are emotional awareness, emotional expression, emotional empathy, and emotional control. Each subordinate variables has five questions. So the questionnaire has 20 questions.

The subordinate variables of social development are personal relation, responsibility, cooperation, and diligence. Each subordinate variables has five questions. So the questionnaire has 20 questions. Each question has 4 choices of Likert scale and the variables and the number of the questions are shown on the <Table 2>.

<Table 2> The variables and items of the emotional and social development

Variables	Subordinate variables	Total No.	Question No.
emotional development	emotional awareness	5	1, 6, 12, 16, 20
	emotional expression	5	2, 9, 13, 17, 19
	emotional empathy	5	3, 5, 10, 15, 18
	emotional control	5	4, 7, 8, 11, 14
Total		20	
social development	personal relation	5	1, 5, 7, 11, 17
	responsibility	5	2, 6, 12, 15, 19
	cooperation	5	3, 8, 13, 18, 20
	diligence	5	4, 9, 10, 14, 16
Total		20	

#### 2) Validity analysis

The validity analysis was conducted two times from March 28<sup>th</sup> and April 8<sup>th</sup> in 2016. The first validity analysis was conducted by 2 elementary school teachers and 2 students of the doctoral course from March 28<sup>th</sup> to March 31<sup>th</sup> in 2016. The researcher focused on the decision of the subordinate variables, the appropriacy of the questions, and the composition method of the questionnaire, the method of inspection, and the time required through this. The modified and renewed items are shown in <Table 3>.

After that, the second validity analysis was conducted by the professor of the early childhood special education, the professor of the education, and 2 elementary school teachers. During this analysis, it was discussed that the appropriacy of the questions, the occurring errors when answering the questions, and the level of the questions for the participants. The suggested items are modified and renewed. The corrected items are shown in <Table 4>.

<Table 3> Modified and renewed items through primary contents validity

Suggestions for Modification	Corrections
► Suggestion of dividing 20 questions into 4 sections	Modification based on the discussed opinion has been done
► Suggestion of the necessity for the explanation of the cultural art experience	Showed the division of the cultural art experience into the learning in cultural art activities and appreciation of cultural art in the questionnaire
► Suggestion of the removal of the etc. part in the subordinate variables among the learning in cultural art activities and appreciation of cultural art in the questionnaire.	Showed the 4 subordinate variables after removing etc. part as suggested opinions

### 3) Main research

This research was conducted by 11 local children centers and 4 elementary schools located in Jeon-ju, Ik-san, and Wan-ju and the participants were the lower elementary school students. They are in poverty such as grandparents raising children without their parents, multicultural families, single parent families and low dual-income families.

The distribution and collection of the questionnaire were done from April 18<sup>th</sup> to April 29<sup>th</sup> in 2016 for 10 days. The research directly visited there and explained the questionnaire to the person in charge. It took 15~20 minutes for the participants to answer the questionnaire and it was done anonymously.

<Table 4> Modified and renewed items through secondary contents validity

Suggestions for Modification	Corrections
▶ Suggestion of the including movies to acting in the learning in cultural art activities	Modification based on the discussed opinion has been done
▶ Suggestion of the modification for 'nothing' among choices of the learning in cultural art activities into 'never learned'	Modification based on the discussed opinion has been done
▶ Suggestion that the sub-ordinate variables in the appreciation of cultural art has to be more precise	Modified the words to music, art, dance, acting and or musical '

### 4. Data analysis

The aim of this research was to investigate the influence of cultural art experience on the emotional and social development of Korean children living in poverty. For this research, the collected data was analyzed by SPSS 22.0. *t*-test was conducted in order to know the difference of the emotion and social development of children in poverty through the experience of the cultural art. In addition, *F*-test and *Scheffe* for post hoc test were conducted in order to know the difference of the emotion and social development of the children in poverty through the frequency of learning in cultural art activity and appreciation of cultural art.

## III. RESEARCH RESULTS

### 1. The influence of cultural art experience on the emotional development of the children

In order to know the influence of cultural art experience on the emotional development of the children in poverty, the researcher compared the average of the two groups which were divided through the experience of the cultural art. T-test was conducted to compare the average of the two groups-one group has the experience and the other doesn't. The verification result through the experience of cultural art is shown in < Table 5>.

<Table 5> Emotional Development according to Regularity of Cultural Art Experiences

Subordinate variables	Yes (N= 80)	No (N= 206)	<i>t</i>
	M(SD)	M(SD)	
Emotional development	3.24(.41)	3.04(.50)	2.46*
Emotional awareness	3.39(.46)	3.17(.57)	2.45*
Emotional expression	3.24(.48)	3.06(.53)	2.06*
Emotional empathy	3.16(.54)	2.92(.59)	2.34*
Emotional control	3.20(.51)	2.92(.64)	2.46*

\**p*<.05

Through the result of the analysis of the general emotional development, the significant difference was reported on the emotional development of children according to the experience for cultural art ( $t=2.46$ ,  $p<.05$ ). The children with regular cultural art experience reported more positive emotional development than that of those do not. The statistically significant difference were shown in result of all subordinate variables which are the emotional awareness ( $t=2.45$ ,  $p<.05$ ), emotional expression ( $t=2.06$ ,  $p<.05$ ), emotional empathy ( $t=2.34$ ,  $p<.05$ ), and emotional control ( $t=2.46$ ,  $p<.05$ ).

## 2. The influence of cultural art experience on the social development of the children

In order to know the influence of cultural art experience on the social development of the children in poverty, the researcher compared the average of the two groups which were divided through the experience of the cultural art.  $t$ -test was conducted to compare the average of the two groups-one group has the experience and the other doesn't. The verification result through the experience of cultural art is shown in the <Table 6>.

<Table 6> Social Development according to Regularity of Culture Art Experience

Subordinate variables	Yes (N= 80)	No(N= 206)	<i>t</i>
	M(SD)	M(SD)	
Social development	3.20(.41)	3.01(.46)	2.29*
Personal relation	3.35(.48)	3.20(.46)	1.64
Responsibility	3.14(.47)	3.04(.50)	1.07
Cooperation	3.24(.42)	2.93(.60)	2.93**
Diligence	3.07(.55)	2.84(.56)	2.25*

\* $p<.05$ , \*\* $p<.01$

Through the result of the analysis of the general social development, the significant difference was reported on the social development of children according to the experience for cultural art ( $t=2.29$ ,  $p<.05$ ). The children with regular cultural art experience reported more positive social development than that of those do not. The statistically significant difference were shown in the result of the subordinate variables like cooperation ( $t=2.93$ ,  $p<.01$ ) and diligence ( $t=2.25$ ,  $p<.05$ ) except for the personal relation and responsibility.

## 3. The influence of learning in cultural art activity on the emotional and social development of the children

### 1) The influence of learning in cultural art activity on the emotional development

In order to know the influence of learning in cultural art activity on the emotional development of the children in poverty, overall frequency of learning in cultural art activity can be divided into high, middle, and low frequency and compared the mean of the 3 groups using  $F$ -test and *Scheffe* for post hoc tests. The verification result through overall frequency of learning in cultural art activity is shown in the <Table 7>.

<Table 7> Emotional Development according to frequency of Learning in Cultural Art Activities

Subordinate variables	High		Middle		Low		<i>F</i>	<i>Scheffe</i>
	N	M(SD)	N	M(SD)	N	M(SD)		
Learning in cultural art activities	42	3.42(.39)	47	3.22(.41)	197	3.08(.46)	5.18**	H > L
Musical Instruments	97	3.38(.39)	76	3.14(.41)	113	3.10(.44)	6.51**	H > M,L

Art (Drawing etc)	50	3.41(.42)	78	3.26(.40)	158	3.11(.43)	5.40**	H > L
Dance	7	3.46(.47)	11	3.19(.48)	268	3.14(.44)		
Acting/Musical	5	3.45(.49)	6	3.21(.45)	275	3.09(.42)		

\*\* $p < .01$

Through the result of the comparison of the emotional development of the children in poverty who are divided into 3 groups of high, middle, low frequency, the significant difference was reported on the emotional development of children in poverty ( $F=5.18$ ,  $p < .01$ ). The high frequency ( $M$ =learning in cultural art activities) had a higher score of emotional development than low frequency. A significant difference was reported on the emotional development in regards to the kinds of learning in cultural art activities: musical instruments ( $F=6.51$ ,  $p < .01$ ) and art ( $F=5.40$ ,  $p < .01$ ). The high frequency in musical instrument had a high score significantly more than the middle and low frequency. The high frequency in art had a high score significantly more than the low frequency.

## 2) The influence of learning in cultural art activity on the social development

In order to know the influence of learning in cultural art activity on the social development of the children in poverty, overall frequency of learning in cultural art activity can be divided into high, middle, and low frequency and compared the mean of the 3 groups using  $F$ -test and *Scheffe* for post hoc tests. The verification result through overall frequency of learning in cultural art activity is shown in the <Table 8>.

<Table 8> Social Development according to frequency of Learning in Cultural Art Activities

Subordinate variables	High		Middle		Low		$F$	<i>Sheffe</i>
	N	M(SD)	N	M(SD)	N	M(SD)		
Learning in Cultural Art Activities	42	3.39(.37)	47	3.14(.41)	197	3.03(.45)	5.41**	H > L
Musical Instruments	97	3.27(.37)	76	3.13(.47)	113	3.05(.44)	3.80*	H > L
Art(Drawing etc)	50	3.39(.45)	78	3.21(.36)	158	3.04(.43)	7.75**	H > L
Dance	7	3.32(.43)	11	3.15(.47)	268	3.07(.44)		
Acting/Musical	5	3.25(.49)	6	3.15(.51)	275	3.10(.42)		

\* $p < .05$ , \*\* $p < .01$

Through the result of the comparison of the social development of the children in poverty who are divided into 3 groups of high, middle, low frequency, the significant difference was reported on the social development of children in poverty ( $F=5.41$ ,  $p < .01$ ). The high frequency ( $M=3.39$ ,  $SD=.37$ ) learning in cultural art activities had a higher score of social development than low frequency ( $M=3.03$ ,  $SD=.45$ ). A significant difference was reported on the emotional development in regards to the kinds of learning in cultural art activities: musical instrument ( $F=3.80$ ,  $p < .01$ ) and art ( $F=7.75$ ,  $p < .01$ ). The high frequency in musical instrument and art had a high score significantly more than the low frequency.

## 4. The influence of appreciation of cultural art on the emotional and social development of the children

### 1) The influence of appreciation of cultural art on the emotional development

In order to know the influence of appreciation of cultural art on the emotional development of the children in poverty, overall frequency of appreciation of cultural art can be divided into high, middle, and low frequency and compared the mean of the 3 groups using *F*-test and *Scheffe* for post hoc tests. The verification result through overall frequency of appreciation of cultural art is shown in the <Table 9>.

<Table 9> Emotional Development according to frequency of Appreciation of Cultural Art

Subordinate variables	High		Middle		Low		<i>F</i>	<i>Sheffe</i>
	N	M(SD)	N	M(SD)	N	M(SD)		
Appreciation of Cultural Art	38	3.51(.30)	32	3.28(.38)	216	3.13(.46)	5.49**	H > L
Music	97	3.45(.35)	68	3.23(.37)	121	3.14(.45)	5.18**	H > L
Art(Drawing etc)	7	3.48(.49)	12	3.47(.44)	267	3.19(.43)		
Dance	6	3.50(.48)	16	3.44(.51)	264	3.18(.41)		
Acting/Musical	43	3.48(.29)	69	3.26(.25)	174	3.14(.46)	5.92**	H > L

\*\* $p < .01$

Through the result of the comparison of the emotional development of the children in poverty who are divided into 3 groups of high, middle, low frequency, the significant difference was reported on the emotional development of children in poverty ( $F=5.49, p < .01$ ). The high frequency ( $M=3.51, SD=.30$ ) of appreciation of cultural art had a higher score of emotional development than low frequency ( $M=3.13, SD=.46$ ). A significant difference was reported on the emotional development in regards to the kinds of appreciation of cultural art: music ( $F=5.18, p < .01$ ) and acting/musical ( $F=5.92, p < .01$ ). The high frequency in music and acting/musical had a high score significantly more than the low frequency.

## 2) The influence of appreciation of cultural art on the social development of the children in poverty

In order to know the influence of appreciation of cultural art on the social development of the children in poverty, overall frequency of appreciation of cultural art can be divided into high, middle, and low frequency and compared the mean of the 3 groups using *F*-test and *Scheffe* for post hoc tests. The verification result through overall frequency of appreciation of cultural art is shown in the <Table 10>.

<Table 10> Social Development according to frequency of Appreciation of Cultural Art

Subordinate variables	High		Middle		Low		<i>F</i>	<i>Sheffe</i>
	N	M(SD)	N	M(SD)	N	M(SD)		
Appreciation of Cultural Art	38	3.49(.32)	32	3.18(.39)	216	3.07(.44)	7.10**	H > M,L
Music	97	3.38(.41)	68	3.21(.37)	121	3.13(.43)	2.71	-
Art (Drawing etc)	7	3.50(.42)	12	3.33(.42)	267	3.14(.43)	-	-
Dance	6	3.50(.36)	16	3.33(.44)	264	3.12(.43)	-	-
Acting/Musical	43	3.47(.31)	69	3.14(.31)	174	3.08(.44)	7.63**	H > M,L

\*\* $p < .01$

Through the result of the comparison of the social development of the children in poverty who are divided into 3 groups of high, middle, low frequency, the significant difference was reported on the social development of children in poverty ( $F=7.10, p < .01$ ). The high frequency ( $M=3.49, SD=.32$ ) of appreciation of cultural art had a



high score of social development significantly more than the middle ( $M=3.18$ ,  $SD=.39$ ) and the low frequency ( $M=3.07$ ,  $SD=.44$ ). A significant difference was reported on the emotional development in regards to the kinds of appreciation of cultural art: acting/musical ( $F=5.92$ ,  $p<.01$ ). The high frequency in acting/musical had a high score significantly more than the middle and the low frequency.

#### IV. DISCUSSION

This study examined the influence of culture art experiences on the emotional and social development of children in poverty, and the results and conclusion are as follows. First, children living in poverty with culture art experiences had significantly higher score of emotional and social development in comparison to children without. This suggests that culture art experiences have a positive impact on the emotional and social development of children living in poverty.

There is a variety of existing literature on the subject, and a variety of this research focuses on the effectiveness of culture art experiences. Kim & Jo (2010) discuss the positive influence that integrated culture and art education programs have on the creativity and social development of children. Jo (2009) also highlights the positive influence that art activities have on the creative development of children. Moreover, the Seoul Foundation for Arts and Culture (2010) and Jeong (2011) have shown the positive influence of music, art, dance, and other forms of art education – integrated culture art education - have on the creativity and social development of young elementary children. Research shows that culture art experiences and cultural art activities, especially, have a positive impact on emotional stability, self-esteem, self-efficacy, aggression and other emotional factors (Gang, 2001; Ko, 2004; Gweon & Woo, 2007; Baek, 2005; Wang, 2006; Lee, 2007; Jeong, 2012; Choi & Cha, 2007). This research is consistent with that of the Seoul Foundation for Arts and Culture (2010) as well as the Jeong (2011), although the research participants of these studies were elementary students in the lower grades. Though the conditions of the research studies vary, the research among the various authors concurs and shows that culture art experiences have a positive impact on the emotional and social development of children (Gang, 2001; Ko, 2004; Gweon & Woo, 2007; Baek, 2005; Wang, 2006; Lee, 2007; Jeong, 2012; Choi & Cha, 2007). However, despite the positive influences of culture art experiences and the plethora of research on the subject, there is little research with young children as the focus of research. There are many positive effects of culture art experiences on young children and more research is needed for consideration.

Moreover, extensive financial resources and greater initiative by the parents leads to greater access to culture art experiences. In this regard, children in economically and environmentally impoverished situations are limited in their exposure to continuous culture art experiences. Therefore, support for culture art should be treated as a subject in the school curriculum in order for the children to have continuous and regular exposure. Second, the emotional and social development score for children with high frequency of learning in culture art activities was significantly higher than that of those with low frequency. Most existing research on the subject has used two groups – with and without experience - for consideration. However, this study, unlike previous research, divided culture art experience into three groups, - high, middle, and low frequency - and each group showed a difference of effect on emotional and social development.

In addition, among the sub-factors learning in culture art activities, playing a musical instrument and art showed a significant difference, whereas the number of people in the high and middle frequency groups in sub-factors dance and acting was too small, and therefore could not be compared. In Korean society, playing an instrument and art activities are typically valued. In the future, however, a variety of culture art activities should be developed, that are suitable to the interests and capabilities of the children. Third, in regards to culture art appreciation, both the emotional and social development scores for the high frequency group were significantly higher than that of the low frequency group. Further analysis can be conducted because greater experience of culture art appreciation results in a more positive impact.

Among the sub-factors of culture art appreciation, music showed a significant difference in emotional development, while acting showed a significant difference in emotional and social development. The number of people in the high and middle frequency appreciation groups in sub-factors art and dance was too small, and therefore could not be compared. This suggests that Korean society places too much importance on music and acting appreciation, and there are fewer opportunities to appreciate works of art and dance. Greater opportunities for dance and art appreciation should be provided during school hours and in the local community, and support for such activities should be actively promoted. In addition, in order to expand culture art appreciation, access to displays and performances should be expanded, and national level political support and solutions are needed for consideration.

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## THE INFLUENCE OF IMAGERY TRAINING ON THE VISUAL PERCEPTION DEVELOPMENT OF CHILDREN WITH DISADVANTAGED BACKGROUND

Hye-Ran JEON

Woosuk University, Graduate School, Department of Educational·Cultural Contents Development,  
Doctoral student, South Korea  
haeran1010@naver.com

Jung-Nam IM

Woosuk University, Graduate School, Department of Educational·Cultural Contents Development,  
Master Student, South Korea  
94760661@naver.com

Hye-Jin CHOI

Woosuk University, Graduate School, Department of Early Childhood Special Education,  
Doctoral Student, South Korea  
star09kr@gmail.com

Hwan-Jung KIM

<sup>1</sup> Woosuk University, Department of Occupational Therapy, Professor, South Korea  
kimhj@woosuk.ac.kr

### ABSTRACT

The purpose of this study was to investigate the effects of ‘*Imagery Training*’ on the visual perception of young children from disadvantaged backgrounds. An experimental study was conducted for 6 months (From September in 2015 to February in 2016) and an intervention program consisting of 48 sessions was provided. 117 young children living in impoverished, multi-culture family, single parent, grand-parent house hold, were participated and assigned randomly to the experimental (N=57) or control (N=60) group. The researchers measured the visual perception level of the participants before the experiment was conducted. The Self-Imagery Training Program (SIT), which was developed by Koo, Kim, Shin, Park, & Lee (2002), was utilized for the experiment. The results of the study indicated a significant different after the research treatment in *general visual perception*, *visual-motor integration*, and *motor-reduced visual perception*. However, there was not a significant difference between the pre and post-tests in the control group. This study confirms the positive influence of imagery training, and may have a positive impact on the development of young children.

**Keywords:** imagery training, visual perception, visual-motor, motor-reduced visual perception

### 1. INTRODUCTION

Many medical studies regarding the brain’s plasticity have reported that early screening and intervention may reduce the impact of disabilities caused by damage to the central nervous system. There has been a lot of interest in this topic in Korean in recent years, and the focus of these studies has expanded. Tjossem (1970) emphasized the potential for early normalization through the early detection of disabilities and intervention programs. This suggests role environment plays in human development and the positive effects of early education programs.

With this in mind, it can be reasoned that environment may play a role in the development of disabilities, even if a child is born non-disabled. For this reason, it is important for children to be monitored for potential maladaptive behaviors that may be otherwise over looked.

Scheffer (2002) and Bornstein (2012) show the importance of early education programs in this regard. Their studies with young, grade school aged children show that early education is important as it sets the foundation for subsequent development. They also point out that it is important address these developmental issues as early as possible in order avoid a chain reaction. This bolsters attention to environmental risks faced by children with confirmed disabilities (e.g. Down syndrome) that may exacerbate developmental issues. This shows the importance of considering environmental risks, especially for children living in poverty or with challenging home-life circumstances.

These problems have grown more prevalent with the economic downturn during the mid 2000s and ongoing wars in a variety of countries. Children raised in war-torn environments have nutritional problems that may lead to developmental problems, despite having a relatively stable familial situation. Such circumstances, certainly, produce serious psychological trauma that impact normal maturation. The case of South Korea provides insight into this issue. Though the country experienced rapid growth over the past 60 years, the middle class of the country collapsed as a result of the 1997 IMF foreign exchange crisis that lasted through 2003. This increased the amount of children living in socially, risk prone environments. The effects of the crisis were particularly potent in rural areas. Urban flight has caused young people and women to move to the cities, leaving a larger percentage of single men in the countryside. In response to this, many of these men have turned to private agencies to facilitate marriages with women from developing countries., giving rise to the 'multi-culture family.' These marriages often face greater economic and marital issues, increasing the amount of economically and socially vulnerable families.

There has been growing research in Korea regarding this phenomenon and the potential developmental issues faced by children in these more socially vulnerable families. Kwon (2005) shows that these children are at an elevated risk of developmental disabilities, despite being born without them. Koo and Choi (2012)s' also shows the potential cognitive issues that may arise from such circumstances. The adverse economic and social environment faced by these children in rural areas, such as cultural differences with peers, psychological trauma, or emotional deprivation may cause a variety of emotional and behavioral problems (Kim, 1997).

Analysis of the environment of a child and in a given time period is important to understand sensory limitations of a child. Kientz and Dunn (1997) show that repeated environmental stimuli that accommodates a variety of senses increases sensory-perceptual development. Put differently, activities that incorporate language, cognitive, emotional control, and social skills simultaneously stimulate different areas of the brain, and the connections formed between these various areas may increase a child's ability to respond to a variety of situations (Ayres, 1989). Sensory perception is an amalgam of basic senses working in tandem with each other, and expanding connections between the various areas in the brain enable a person to perform more complex tasks. This is learned through repetition and experience and begins during early childhood (Park, 1987).

Research also shows that children in vulnerable environments are limited in their exposure to sensory stimuli. Montessory (2004) explains that it is important to provide a nurturing environment that provides rich sensory experiences to improve the cognitive learning ability of children. Koo & Choi (2012) and Choi (2013) show that the children of impoverished families and children from multi-culture families in rural communities have lower levels of visual perception.

Linkage problems, not only issues in individual regions of the brain, are cause for concern that have a great impact on the development of sensory perception. Humans rely on visual perception 580 times more than on auditory perception, which makes it the most important aspect of sensory perception (Choi, 2007). Environmental stimuli help infants to develop language, cognitive, emotional, and social skills (Park, 1995). Children who experience difficulties in visual perception, regardless of character, have issues in distinguishing visual cues and often struggle academically. In such a situation, visual perception emphasized intervention is necessary to reduce the impact of this impairment early on (Yeo, 2002).

It can be seen that children from disadvantaged backgrounds have less environmental stimulation and engagement in comparison to their peers, and as a result, they tend to have lower visual perception capabilities. The most effective method for intervention is one that addresses familial issues and is provided repeatedly by the primary caretaker. Often times, however, this is much more convoluted considering the diversity of disadvantaged circumstances that are present in Korea. Thus, the most effective method of intervention to address these issues is something a child must be keen in partaking.

Researchers have made concentrated effort to develop training programs to help children visualize images in their head from external stimulation (Kim, 2008; Song, 2008; Campos, Amor, & Gonzalez, 2002; Carney & Levin, 2001). Murphy (1994) also explains that it is possible to provide imagery training without external stimulation, relying solely upon a child's psychological operation. Imagery training, therefore, is an individual process in which a child visualizes an action prior to performing that action (Koo, 2010; Corbin, 1967; Tess, Hutchinson, Treloar, & Jenkins, 1999). Children who develop their language, cognitive, and behavioral skills are also able to learn effective learning strategies to be used later in their development (Son, 2007; Corbin, 1967).

Despite the positive effects of self-imagery training on the development of visualization capabilities, research in Korea on the issues has focused primarily on the issue during early childhood. This research, however, takes into consideration disadvantaged backgrounds such as environmental risks, poverty, multi-culture families, and families led by single parents, and evaluates the impact self-imagery training on their visual perception development.

## II. RESEARCH METHOD

### 1. Participants

A total of 117 children from multi-culture families, single parent households, households led by grandparents, or children living in poverty participated in this study. The participants were assigned randomly to the experimental group (N=57) or the control group (N=60).

A summary of the participants' demographics is listed below <See the Table 1>.

<Table 1> Participants' demographics

Table 1: Participants' demographics							
	experimental			control			Total
	Age						
	4	5	6	4	5	6	
Male	13	17	7	13	17	7	74
Female	4	16	0	4	16	3	43
Total	17	33	7	17	33	10	117

### 2. Research Materials

#### 1) Measurement

The Korean Developmental Test of Visual Perception (K-DTVP-2) was used to visual perception of the control and experimental groups before and after the experiments. The test was standardized in 1993 by Hammill. It was developed originally by Pearson & Voress DTVP-2 (Developmental Test of visual perception). In 2005, Mun, Yeo, Cho updated the measure and the Developmental Test of Visual Perception (K-DTVP-2) became standard. The Korean version of this test is only available for children aged 4-8. The purpose of the test is to determine the level of development of the visual perception of infants and toddlers by screening a defective visual perception and provide evidence for potential disorders. K-DTVP-2 is divided into two parts visual perception (MRP), visual-inspection integration (VMI). The general visual perception (GVP) index measures visual perception under a time limit. Information related to the contents and the test items are shown in <Table 2>.

<Table 2> K-DTVP-2 test content

Classification	Factors	Content
(GVP) General Visual Perception	Hand-eye Coordination	Ability to draw precisely, straight or curved, depending on the visual boundaries
	Copying	The characteristics of the proposed figure and ability to draw in accordance with a provided image
	Spatial relations	The ability to connect the dots to create a shape
	Visual-Motor speed	Agility which can appear in a certain specific picture
	(MRP) Position in space	According to common features the ability to mate two pictures

Motor- Reduced Visual Perception	Figure-Ground	Ability to find a particular picture hidden in a confusing and complex background
	Visual Closure	Incompletely drawn the ability to completely re-stimulation Pictures The ability to build one or more distinctive characteristics of a pair mutation picture (depending on the size, position, shading, etc.)
	Form Constancy	Incompletely drawn the ability to completely re-stimulation Pictures The ability to build one or more distinctive characteristics of a pair mutation picture (depending on the size, position, shading, etc.)

## 2) Experimental Tool

The Experimental Tool was adopted from Koo (2012), which was developed by Koo and her colleagues and patented as A Battery for Self-Imagery Training of young children. Image training is a deliberate effort to visualize the learning content in the mind, and this helps improve cognitive ability, concentration, and even vocabulary development (Murphy, 1994; Son, 1986). The images are essentially drawn head. The researchers provide stimuli to help a child draw a mental image, which helps train their minds to learn and to remember information. This can be later applied by the child in other settings. SIT (Self-Imagery Training) program was designed by Koo (2011) for imagery training and is composed of three steps. Starting with the concentration step training through the training phase representational and symbolic imagery training amounting to step. The SIT program has a tool for creating scripts and a variety of subject cards (numbers, shapes, objects, double stimulation, face). These tools are used to promote concentration and interest for the child. A variety of adjectives, onomatopoeia, mimetic words, and other descriptive words (shape, color, length, size, etc.) are used in the provide stories to help a child create mental images.

## 3. Research procedure

### 1) Regarding the Duration

An experimental study was conducted for a period of 6 months from September 2015 to February 2016. The intervention was provided 48 times. Children from multi-culture families, single parent households, households led by grandparents, or children living in poverty participated in this study. The participants were assigned randomly to the experimental group (N=57) or the control group (N=60). The experimental group was trained to draw images through SIT program in their minds, and this administrated lasted for six months. After 6 months, a follow-up inspection was carried out. Both the experimental group and a control group were measured using the Korean Developmental Test (K-DTVP-2).

### 2) Inspector training

Prior to the administration of the visual perception development test (K-DTVP-2), administrators were trained. Administrators of the test consisted of students at a four-year college majoring in early childhood special education, mathematics, education, child welfare, and infant development-related education. Graduate students majoring in education received certification after a written test. Test administrators were all from the Jeollabuk-do area. Test administrators were trained for a total of 10 hours.

### 3) Inspection

An experimental study was conducted for a period of 6 months from September 2015 to February 2016. The intervention programs were provided 48 times. The experimental group was trained to perform image through SIT program for six months. After 6 months follow-up inspection was carried out using the experimental group and a control group each using the Korean Developmental Test (K-DTVP-2). Trained administrators conducted separate examinations for the subjects. The average time spent on the test was 20-30 minutes. The data collected in this test was used for analysis.

### 4) Data analysis

SPSS 22.0 was used to analyze the data. First, the means and standard deviations from the experimental group and the control group were calculated after completion of the pre-test. T-test confirmed the homogeneity of the

two groups. After performing an experiment image of training aid in order to verify the effect of the experiment on the experimental and control groups prior environmental risk infants were analyzed by independent sample *t*-test and post-test paired sample *t*-test.

### III. RESULTS

#### 1. General Visual Perception

The general visual perception scores before and after of the SIT program application are listed in the <Table 1>. The pre-test results showed no significant difference between the two groups. However, the post-test experimental group ( $M=13.77$ ,  $SD=1.68$ ) showed a statistically significant difference ( $t=8.59$ ,  $p<.001$ ) from the control group ( $M=10.27$ ,  $SD=2.64$ ).

<Table 1> Between the experimental and control groups independent samples *t* test

variables	group	pre-test		post-test	
		M(SD)	<i>t</i>	M(SD)	<i>t</i>
General Visual Perception	experimental	10.24(2.69)	.27	13.77(1.68)	8.59***
	control	10.11(2.43)		10.27(2.64)	

\*\*\*  
 $p<.001$

After the image training, analysis paired *t* test for within-group differences before and after SIT program conducted to investigate the effect of improving the general visual perception upon the degree of environmental risk infants are presented in the <Table 2>.

<Table 2> Experimental and Control groups paired *t* test

variables	group	experimental		control	
		M(SD)	<i>t</i>	M(SD)	<i>t</i>
General Visual Perception	pre	10.24(2.69)	-9.39***	10.11(2.43)	-.62
	post	13.77(1.68)		10.27(2.64)	

\*\*\*  
 $p<.001$

A significant difference ( $t=-9.39$ ,  $p<.001$ ) was reported on general visual perception in the experimental group between the pre-tests ( $M=10.24$ ,  $SD=2.69$ ) and the post-tests ( $M=13.77$ ,  $SD=1.68$ ). No significant differences were found in the control group between the pre-tests ( $M=10.11$ ,  $SD=2.43$ ) and the post-tests ( $M=10.27$ ,  $SD=2.64$ ).

This showed that image training has a positive effect on improving the general visual perception of children from disadvantaged backgrounds.

#### 2. Visual-Motor Integration

To investigate the effects of imagery training on visual-motor integration of young children showed difference between group before and after of the SIT programs conducted independent samples *t* test are presented in the <Table 3>.

<Table 3> Visual-Motor Integration between experimental and control group

variables	group	pre-test		post-test	
		M(SD)	<i>t</i>	M(SD)	<i>t</i>
Visual-Motor Integration	experimental	10.37(3.66)	-.09	14.11(2.00)	6.70***
	control	10.43(3.23)		10.49(3.64)	

\*\*\*  
 $p<.001$



In the pre-test results showed no significant difference between the two groups. However, the post-test experimental group ( $M=14.11$ ,  $SD=2.00$ ) is found to have statistically significant difference ( $t=6.70$ ,  $p<.001$ ) from the control group ( $M=10.49$ ,  $SD=3.64$ ). Image training of environmental risk infants the results of the within-group differences before and after SIT program conducted to examine the effects of the improved visual-motor integration degree analysis of paired sample  $t$  test are presented in the <Table 4>.

<Table 4> Visual-Motor Integration within the experimental and control group

variables	group	experimental		control	
		M(SD)	$t$	M(SD)	$t$
Visual-Motor Integration	pre	10.37(3.66)	-7.90***	10.43(3.23)	-.22
	post	14.11(2.00)		10.49(3.64)	

\*\*\*  $p<.001$

A significant differences ( $t=-7.90$ ,  $p<.001$ ) was reported on Visual-Motor Integration Experimental groups between the pre-tests ( $M=10.37$ ,  $SD=3.66$ ) and the post-tests ( $M=14.11$ ,  $SD=2.00$ ). But there are no significant differences was showed in control group between the pre-tests ( $M=10.43$ ,  $SD=3.23$ ) and the post-tests ( $M=10.49$ ,  $SD=3.64$ ). This showed that the images training that have a positive effect on improving the visual-motor integration of environmental risk during early childhood.

### 3. Motor-Reduced Visual Perception

To investigate the effects of imagery training on the motor-reduced visual perception of young children showed difference between group before and after of the SIT programs conducted independent samples  $t$  test are presented in the <Table 5>.

<Table 5> Motor-Reduced Visual Perception between experimental and control group

variables	group	pre-test		post-test	
		M(SD)	$t$	M(SD)	$t$
Motor-Reduced Visual Perception	experimental	10.10(2.43)	.73	13.43(2.06)	8.18***
	control	9.79(2.25)		10.04(2.40)	

\*\*\*  $p<.001$

In the pre-test results showed no significant difference between the two groups. However, the post-test experimental group ( $M=13.43$ ,  $SD=2.06$ ) is found to have statistically significant difference ( $t=8.18$ ,  $p<.001$ ) from the control group ( $M=10.04$ ,  $SD=2.40$ ). After the image training, analysis paired  $t$  test for within-group differences before and after SIT program conducted to investigate the effect of improving the motor-reduced visual perception upon the degree of environmental risk infants are presented in the <Table 6>.

<Table 6> Motor-Reduced Visual Perception within the experimental and control group

variables	group	experimental		control	
		M(SD)	$t$	M(SD)	$t$

Motor-Reduced Visual Perception	pre	10.10(2.43)	-8.20***	9.79(2.25)	-.73
	post	13.43(2.06)		10.04(2.40)	

\*\*\* $p < .001$

A significant difference ( $t = -8.20$ ,  $p < .001$ ) was reported on Motor-Reduced Visual Perception in experimental groups between the pre-tests ( $M = 10.10$ ,  $SD = 2.43$ ) and the post-tests ( $M = 13.43$ ,  $SD = 2.06$ ). But no significant differences was showed in control group between the pre-tests ( $M = 9.79$ ,  $SD = 2.25$ ) and the post-tests ( $M = 10.04$ ,  $SD = 2.40$ ). This showed that the images training that have a positive effect on improving the motor-reduced visual perception of environmental risk during early childhood.

#### IV. DISCUSSION

A total of 117 children from multi-culture families, single parent households, households led by grandparents, or children living in poverty participated in this study. The participants were assigned randomly to the experimental group or the control group. An experimental study was conducted for a period of 6 months from September 2015 to February 2016. The intervention programs were provided 48 times. The mean and standard deviation were calculated from the experimental group and the control group messages of each pre-test results, it was confirmed that the two groups are homogeneous groups through t-test. After performing an experiment image training aid in order to verify the effect of the experiment on the experimental and control groups prior environmental risk infants were analyzed by independent sample t-test and post-test paired sample t-test. Discussion of the results obtained from this data is as follows:

First, research results, the experimental group of children in at risk environments children are showed significantly increased that visual-motor integration, motor-reduced visual perception than that of the control group after receiving image training. The experimental group also showed significantly increased that general visual perception than the control group after receiving image training. This suggests that imagery training can be used to improve visual-motor integration of children.

Second, this study found that imagery training can be used to facilitate new learning experiences for children from disadvantaged backgrounds. Imagery training helps children create their own images, and removes their learning from strictly existing, physical imagery.

Third, children who received imagery training were able to discern real world and make believe stimuli. This suggests that imagery training may have a positive impact on a child's creative skills development. Further research is needed to determine further implications of this finding.

Fourth, imagery training has a positive impact on motor coordination skills. Imagery training has been previously used in athletics, but this research suggests that imagery training can be used in circumstances that require motor skills, but are not athletic in nature. Therefore, imagery training programs should be further developed and researched in order to maximize the benefits of the practice.

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## THE INFLUENCE OF KOREAN POPULAR CULTURE ON THE IDENTITY OF KOREAN ADOPTEES

Hyo-Jin KOO

Woosuk University, Department of Education and Cultural Contents Development  
hjk28cam@woosuk.ac.kr

Hyo-Jin JU

Catholic Kwandong University, Department of Medical Humanities  
[jhj@cku.ac.kr](mailto:jhj@cku.ac.kr)

Cory LEMKE

University of Arizona Department of International Security Studies, Master Student  
corylemke@email.arizona.edu

Jin-Kyung LEE

Woosuk University, Graduate School, Department of Education and Cultural Contents Development,  
Doctoral student  
jkhooray@woosuk.ac.kr

### ABSTRACT

The purpose of this research was to analyze the influence of Korean popular culture on the identification of overseas Korean adoptees. The participants of the study consisted of 51 overseas Korean adoptees. Snowballing sampling was used. A survey was conducted with a questionnaire adapted from Kim (2015) and Choi, Lee, Han (1986). The data was analyzed utilizing SPSS 22.0. The results of this study indicate that Korean popular culture has a significant influence on the identification of Korean adoptees. Moreover, the findings of this study suggest that Korean popular culture may be useful in the formation of self-identification of overseas Korean adoptees. It is suggested that policies be initiated and research expanded to increase the accessibility of Korean cultural content for Korean adoptees living abroad. Further research is needed to determine whether Korean popular culture consumption has a significant impact on the self-identification of other groups in the Korean diaspora.

**Keywords:** Korean adoption, Korean popular culture, Hallyu, Self-identification

### I. INTRODUCTION

The Japanese occupation and the Korean War have had social and cultural ramifications that have not been considered in the political and economic development of Korea. Thousands of mixed race children were born during this time period. However, a combination of economic, political, and cultural circumstances in Korea at the time strongly discouraged such, and this resulted in the development of a systematic adoption apparatus. In the decades that followed, both mixed race and full ethnic Korean children flowed out of the country in a process that has sent roughly 160,000 children to the United States, Western Europe, and Australia.

Until recently, the mass media of Western Europe and the United States have held a dominant position in the world (Rodin & Topić, 2012), perhaps commensurate with their dominant economic and political status. The increase of Asian immigrants to these countries has resulted in the portrayal of Asian people as an ominous and cunning threat. Asian people are generally portrayed within two stereotype paradigms, the *yellow peril* and *model minority* stereotypes (Ono & Pham 2009; Xie, 2007). The *yellow peril* paradigm portrays Asian people as a threat to Western society, and this has manifested in the desexualization of Asian men and the hyper-exoticization of Asian women. The desexualization of Asian men psychologically mitigates the perceived threat of Asia while hyper-eroticization objectifies Asian women and relegates them to a position of subservience. Under this ideology, Asian people are often depicted as *perpetual foreigners* that are unable to integrate into Western society. This stereotype is commonly utilized in Europe, where Asian people are often depicted as recent immigrants (Kamali, 2008). The latter paradigm highlights the success of Asia, broadly defined, and uses it as a standard to perpetuate ideologies of racial categorization against other minority groups. This works against Asian people, as well, since it reinforces the system of White dominance. The ubiquity of Western media has served as a tool to propagate this ideology of racial categorization.

Since the Korean War, however, South Korea has developed into the world's 11<sup>th</sup> largest economy. One of the most visible aspects of Korea's economic ascent is the relative success of its popular culture on the world stage. Korean cultural content production totaled 280 billion dollars (USD) in 2015 (Korea Trade - investment Promotion Agency, 2015). The spread of Korean popular culture is commonly referred to as *hallyu* – Korean Wave. This has led to a surge of general interest in Korea. Academicians have come to refer to this phenomenon as *Corenism*, which is defined as the positive acceptance of Korean culture. This has provided Korea an opportunity to challenge the dominant discourse in a variety of fields.

The gender roles of Asian men and women portrayed in Korean dramas and cinema show a change (Kim, Kim, Jeon, Ahn, Kim, Shin & Lim, 2013). Men are portrayed as romantic, gentle, and involved in family affairs, while women are portrayed as modest and independent minded. Both of these depictions challenge traditional Asian gender roles, and this has great appeal in a rapidly modernizing Asia. Moreover, these portrayals of men and women in Korean popular culture challenge Western depictions of Asian people. Men are not deprived of romantic drive as in Western media, and the independent, often strong willed woman in Korean media directly contrasts with the docile and eroticized depictions in the West. While popular Korean music (colloquially referred to as K-pop) has largely mimicked Western music trends, it has relied largely upon sex appeal to make it internationally marketable, in effect sexualizing the Asian body. While it may be argued that further sexual objectification of Asian women enhances Western eroticization, it positions Asian women as the primary actors in the process, challenging the submissive nature of Western depictions. Taken together, this process also challenges the perpetual foreigner and model minority stereotypes. The emulation of Western gender roles utilized in visual media and adaption of Western popular music styles provides metaphorical evidence that Asian people are not only able to adopt Western culture but are also capable of transfiguring it to fit their specific needs. Korean popular culture replaces Western popular culture with its own values and characteristics. Ultimately, this enables Korean popular culture to impugn Western cultural hegemony and the Western ideology of racial categorization, which stands as the root of the model minority stereotype.

This has implications for Korean adoptees abroad. Studies suggest that transracial adoptees are no more likely to experience maladjustments or self-esteem issues in comparison to the general population or inracial adoptees (Lee, 2003; Feigelman, 2000). This suggests that adoption, in and of itself does not promote mental health issues, as may be initially assumed. Previous research suggests that higher levels of stress due to racism play a major role in the mental health of racial minorities (Wei, Heppney, Ku, & Liao, 2010; Liang et al., 2007; Noh et al., 1999; Noh & Kaspar, 2003; Yoo & Lee, 2005), and this provides an explanation for maladjustments in oversea Korean adoptees and other transracial adoptees. As members of predominantly White societies that have traditionally portrayed Asian people as inferior, the effects of institutionalized racism in the media may be more forthcoming for Korean adoptees. This is compounded by the fact that most Korean adoptees are adopted into White families, who often lack the experiences required to help their minority children develop coping strategies for discrimination. Indeed, Bergquist, Campbell & Unrau's study (2003) questions the efficacy of White parents' ability to teach such strategies when a majority of such parents minimize and even deny the racial experience of their transracially adopted children. Parents are commonly the primary role models for their children, and the racial difference between Korean adoptees (transracial adoptees) and their parents creates an additional challenge that may induce identity crisis. Feigelman's (2000) study confirms that discomfort about racial appearance among transracial adoptees may lead to an increase in issues during the identity formation process. Failure to develop a unique identity during adolescence, establish individual values, and self-confidence may lead to increased levels of anxiety in later stages of development (Koo, Cheong, & Chang, 2011).

Korean popular culture may have an influence on the physical and psychological perceptions of beauty throughout the world. 297,000 foreign visitors from over 188 nations came to Korea specifically for the purpose of cosmetic surgery (Ministry of Health and Welfare, 2015). Korea's rising status within the beauty industry has enabled it to promote its interpretations of beauty throughout the world, and this may have an impact on identity formation within the Korean diaspora. The popularization of Korean culture and its relatively high availability via the internet, television, and other forms of media has provided greater exposure to the Korean diaspora worldwide, and specifically to Korean adoptees, a population within the Korean diaspora that possesses greater barriers in accessing Korean culture, values, and perceptions. Therefore, this study aims to explain the influence of Korean popular culture on the identification of Korean adoptees and contextualize the social and cultural responsibility of

Korean popular culture producers. The research questions are as follows:

1. Does Korean popular culture have an influence on the identification of Korean adoptees?
2. Does Korean popular music have an influence on the identification of Korean adoptees?
3. Does Korean film have an influence on the identification of Korean adoptees?
4. Does Korean drama have an influence on the identification of Korean adoptees?
5. Does Korean cuisine have an influence on the identification of Korean adoptees?

## II. METHOD

### 1. Participants

51 adoptees from the USA, France, Denmark, Sweden, Netherlands, Belgium, and Australia participated in the study. Snowball sampling was used. Researchers were introduced to adoptees via other adoptees, and this is how the subjects were selected. 51 questionnaires were collected, and the demographic information of the sample is listed in the <Table 1>.

<Table 1> Demographic information for the participants

No.	Country	Gender		Age		Experience in Korean popular Culture	
		M(%)	F(%)	20s	30s	Yes	No
1	USA	4(7.8)	15(29.4)	16(31.4)	3(5.9)	12(23.5)	7(13.7)
2	France	4(7.8)	5(9.8)	6(11.8)	3(5.9)	7(13.7)	2(3.9)
3	Denmark	2(3.9)	3(5.9)	3(5.9)	2(3.9)	2(3.9)	3(5.9)
4	Sweden	1(2.0)	3(5.9)	2(3.9)	2(3.9)	3(5.9)	1(2.0)
5	Netherlands	3(5.9)	4(7.8)	6(11.8)	1(2.0)	5(9.8)	2(3.9)
6	Belgium	2(3.9)	0(0)	1(2.0)	1(2.0)	1(2.0)	1(2.0)
7	Australia	3(5.9)	2(3.9)	3(5.9)	2(3.9)	3(5.9)	2(3.9)
Total		51(100%)					

### 2. Research Tools

#### 1) Experience with Korean popular culture.

This study utilized Kim's (2015) questionnaire, originally designed for Chinese consumers, to assess a subject's experience with Korean cultural contents. The questionnaire consists of 3 items 12 questions, which are K-Pop, K-Film and K-Drama. For this research the questionnaire consists of 4 items. 4 of the original 16 questions were used. The answers were measured on 5 likert scale from 1 'never' to 5 'always'. The measure was translated from Korean to English by the authors.

#### 2) Identification.

Choi, Lee and Han's (1986) identity measure was utilized to observe the identity of overseas Korean adoptees. It modified by Cho(1996) and the cho's questionnaire were used in this study. The 7 sub-items include sense of distinctiveness, future plans, social nature, proprioception, autonomy, social adaptability, and self-value. 28 questions were used from the original measure. The answers were measured on a scale from 1 '*not at all*' like that to 5 '*very much*' like that. The measure was translated from Korean to English by the authors.

### 3. Procedure

#### 1) Questionnaire.

During May 2016, the sub-factors were selected. Based on literature, the sub-factors (K-pop, K-film, K-drama and K-cuisine) were determined and a questionnaire consisting of 14 questions and 4 sub-factors. The sub-factors for identity were uniqueness, future plans, sociality, self-acceptance, autonomy, social adaptation, and sense of value. 28 questions from the original measure were used. Responses were recorded using a 5 point Likert scale. The breakdown of the variables and questions about Korean popular culture and identification are as follows <see the Table 2>.

<Table 2> Number of variables and questions about Korean popular culture and identification

Division	Variable	Question	No.
Korean popular culture	K-Pop	4	1,5,9,13
	K-Film	4	2,6,10,14
	K-Drama	4	3,7,11,15
	K-Cuisine	4	4,8,12,16
Total	16 items		
Identification	Distinctiveness	5	1,4,20,24,28
	Future plans	4	2,8,13,26
	Social nature	4	5,11,16,18
	Proprioception	4	10,17,23,27
	Autonomy	4	6,15,21,3
	Social adaptability	3	9,14,19
	Self-value	3	7,12,22
Total	28 items		

#### 2) Validity verification.

In May 2016 after the questionnaire was conducted, two validity tests were conducted. From May 2<sup>nd</sup> until May 4<sup>th</sup> in 2016, the first post content validity test was conducted by two adoptees living in South Korea and two psychology Ph.D candidates. Through post first content validity verification, the sub-factors selected, the appropriateness of the questions was gauged, survey forms were configured, test methods developed, and progress on the project was discussed. The first modifications and supplementations are listed below <see the Table 3>.

A professor of international relations, a professor of social welfare, and two adoption agency workers conducted a second post-content validity test. The appropriateness of the questions, potential errors in the questionnaire, and the level of conformity were reviewed. The modifications and supplementations were made according to the suggestions and are listed below in <see the Table 4>.

<Table 3>First content validity test, modifications and supplementation

No.	Suggestion	Modification/Supplementation
1	The adoptee's level of education is not relevant for the purposes of the study	Modification made according to the suggestion
2	Information regarding teenagers is not necessary	Modification made according to the suggestion
3	Change the order of the questions for the variables required	Modification made according to the suggestion



&lt;Table 4&gt; Second content validity test, modifications and supplementation

No.	Suggestion	Modification/Supplementation
1	Ethnic self-identification rather than identification comments are more suitable	Modification made according to the suggestion
2	Change the questions from negative to positive wording	Modification made according to the suggestion
3	Interval measurement tools not consistent with the comments	Modification made according to the suggestion
4	Add Korean cuisine into the questionnaire	Modification made according to the suggestion
5	Asked for comment on the appropriateness of the information during survey adoptees	Modification made according to the suggestion

### 3) Post test.

From May 11<sup>th</sup> to June 30<sup>th</sup> in 2016, a post-test using the snowball sampling method was conducted, and a total of 51 adoptees from the United States, France, Denmark, Sweden, Netherlands, Belgium and Australia participated. The researchers met the adoptees in order to explain the procedure and purpose of the study. The total time required for participation was roughly 15 minutes. The results were collected by email.

### 4. Analysis.

The data was analyzed in SPSS 22.0. In order to examine the identification of Korean adoptees based on their experiences with Korean popular culture, an independent sample t-test was performed. In addition, F-test was carried out to investigate the identification of Korean adoptees in accordance with the 4 sub-variables.

## III. RESULTS

### 1. Korean Popular Culture

This study observed the influence of Korean popular culture on the identification of Korean adoptees. The adoptees were divided into two groups based on the experience of consumption. An independent sample t-test was performed to compare the mean of the two groups, and the consumption of Korean popular culture by Korean adoptees is listed in the <Table 5>.

Korean adoptees who have experienced Korean popular culture came out as ( $M=3.92$ ,  $SD=.55$ ) and those without experience came out as ( $M=3.03$ ,  $SD=.41$ ). There was a significant difference in the overall consumption of Korean popular culture between the two groups ( $t=5.95$ ,  $p<.001$ ).

&lt;Table 5&gt;Identification according to consumption of Korean popular culture

Subordinate variables	Yes(N=33)	No(N=18)	<i>t</i>
	M(SD)	M(SD)	
Identification	3.92(.55)	3.03(.41)	5.95***

\*\*\* $p<.001$

### 2. Popular Music

This study observed the influence of Korean popular music on the identification of Korean adoptees. The adoptees were divided into three groups based on the frequency of consumption. F-test was performed to compare the mean of the three groups, and the frequency of Korean popular music by Korean adoptees is listed in the <Table 6>.

&lt;Table 6&gt; Identification according to frequency of Korean popular music consumption

Subordinate variables	More than 2or3times a week (N=17)		2or3times per month (N=15)		Rarely or never (N=19)		<i>F</i>	<i>Scheffe</i>
	M	SD	M	SD	M	SD		
Identification	3.74	.68	3.80	.66	3.17	.49	7.23***	A,B>C
Distinctiveness	3.64	.97	4.12	.94	3.12	.77	4.29**	B>C
Future plans	3.38	1.33	3.38	1.21	2.71	1.00	2.83*	
Social nature	3.65	1.09	3.87	1.19	3.36	1.17	2.55	
Proprioception	3.58	1.02	3.62	1.06	3.41	.89	.31	-
Autonomy	3.70	1.07	3.82	1.10	3.34	.98	1.07	
Social adaptability	4.04	1.06	3.89	.87	3.21	.97	3.07*	
Self-value	4.17	.79	3.89	1.29	3.07	1.06	5.65**	A>C

\* $p<.05$ , \*\* $p<.01$ , \*\*\* $p<.001$

Korean adoptees who listen to Korean popular music more than 2 or 3 times a week came out as ( $M=3.74$ ,  $SD=.68$ ), those who listened 2 or 3 times per month came out as ( $M=3.80$ ,  $SD=.66$ ), and those who never listen to Korean popular music came out as ( $M=3.17$ ,  $SD=.49$ ). There was a significant difference in the overall consumption of Korean popular music among three groups ( $F=7.23$ ,  $p<.001$ ). Korean adoptees who listen to Korean popular music more than 2 or 3 times a week came out as ( $M=4.12$ ,  $SD=.94$ ), those who listened 2 or 3 times per month came out as ( $M=3.12$ ,  $SD=.77$ ), and those who never listen to Korean popular music came out as ( $M=3.12$ ,  $SD=.77$ ). There was a significant difference in overall identification and the identification sub-factor of distinctiveness ( $F=4.29$ ,  $p<.01$ ). The sub-factors future plans ( $F=2.83$ ,  $p<.05$ ) and social adaptability ( $F=3.07$ ,  $p<.05$ ) showed a significant difference, but the post verification result was not statistically significant. Lastly, Korean adoptees who listen to Korean popular music more than 2 or 3 times a week came out as ( $M=4.17$ ,  $SD=.79$ ), and those who never listen to Korean popular music came out as ( $M=3.07$ ,  $SD=1.06$ ). There was a significant difference in the overall identification and the identification sub-factors of self-value between the two groups ( $F=5.65$ ,  $p<.01$ ).

### 3. Film

This study observed the influence of Korean film on the identification of Korean adoptees. The adoptees were divided into two groups based on the frequency of consumption. An independent sample t-test was performed to compare the mean of the two groups, and the consumption of Korean film by Korean adoptees is listed in the <Table 7>.

There was not a significant difference in overall identification, but there was a significant difference in identification sub-factors of distinctiveness and proprioception. First, Korean adoptees who watched Korean film more than 2 or 3 times per month came out as ( $M=3.83$ ,  $SD=.92$ ) and those who never watch to Korean film came out as ( $M=3.30$ ,  $SD=.87$ ). There was a significant difference in the overall consumption of Korean film between the two groups ( $t=2.04$ ,  $p<.05$ ). Second, Korean adoptees who watched Korean film more than 2 or 3 times per month came out as ( $M=3.77$ ,  $SD=.86$ ) and those who never watch to Korean film came out as ( $M=3.21$ ,  $SD=.97$ ). There was a significant difference in the overall consumption of Korean film between the two groups ( $t=2.14$ ,  $p<.05$ ).

&lt;Table 7&gt; Identification according to frequency of Korean film consumption

Subordinate variables	More than 2or3times per month (N=31)		Rarely or never (N=20)		<i>t</i>
	M	SD	M	SD	
Identification	3.68	.57	3.48	.78	1.01
Distinctiveness	3.83	.92	3.30	.87	2.04*
Future plans	3.29	1.24	3.10	1.19	.54
Social nature	3.80	1.10	3.60	1.25	.59
Proprioception	3.77	.86	3.21	.97	2.14*
Autonomy	3.53	1.09	3.83	1.05	-.95
Social adaptability	3.74	.95	3.65	1.05	.31
Self-value	3.82	1.12	3.65	1.27	.49

\* $p < .05$  - There were less than 15 people in daily/weekly group.

#### 4. Drama

This study observed the influence of Korean drama on the identification of Korean adoptees. The adoptees were divided into three groups based on the frequency of consumption. F-test was performed to compare the mean of the three groups, and the frequency of Korean drama by Korean adoptees is listed in the <Table 8>.

Korean adoptees who watch to Korean drama more than 2 or 3 times per month came out as ( $M=3.86$ ,  $SD=.61$ ), and those who never watch to Korean drama came out as ( $M=3.17$ ,  $SD=.55$ ). There was a significant difference in the overall consumption of Korean drama between two groups ( $F=5.00$ ,  $p<.01$ ). Korean adoptees who watch to Korean drama more than 2 or 3 times per month came out as ( $M=3.93$ ,  $SD=.91$ ), and those who never watch to Korean drama came out as ( $M=3.08$ ,  $SD=.71$ ). There was a significant difference in overall identification and the identification sub-factor of distinctiveness ( $F=3.67$ ,  $p<.05$ ). The sub-factor social nature showed a significant difference, but the post verification result was not statistically significant ( $F=3.08$ ,  $p<.05$ ). Lastly, Korean adoptees who watch to Korean drama more than 2 or 3 times per month came out as ( $M=4.29$ ,  $SD=.64$ ), and those who never watch to Korean drama came out as ( $M=3.02$ ,  $SD=1.23$ ). There was a significant difference in overall identification and the identification sub-factor of self-value ( $F=4.89$ ,  $p<.01$ ).

&lt;Table 8&gt; Identification according to frequency of Korean drama consumption

Subordinate variables	More than 1or2times a week (N=16)		2or3times per month (N=17)		Rarely or never (N=18)		<i>F</i>	<i>Scheffe</i>
	M	SD	M	SD	M	SD		
Identification	3.83	.60	3.86	.61	3.17	.55	5.00**	B>C
Distinctiveness	3.90	.98	3.93	.91	3.08	.71	3.67*	B>C

Future plans	3.19	1.31	3.41	1.27	2.97	1.09	.84
Social nature	4.08	.79	4.03	.99	3.10	1.32	3.08*
Proprioception	3.76	.78	3.63	1.09	3.32	.87	.66
Autonomy	3.91	1.22	3.75	.78	3.33	1.15	.85
Social adaptability	3.90	.94	3.94	1.00	3.34	.94	1.42
Self-value	4.06	1.07	4.29	.64	3.02	1.23	4.89** B>C

\* $p<.05$ , \*\* $p<.01$

### 5. Cuisine

This study observed the influence of Korean cuisine on the identification of Korean adoptees. The adoptees were divided into two groups based on the frequency of. An independent sample t-test was performed to compare the mean of the two groups, and the consumption of Korean cuisine by Korean adoptees is listed in the <Table 9>.

<Table 9> Identification according to the frequency of Korean cuisine consumption

Subordinate variables	More than 2 or 3 times per month (N=29)		Rarely or never (N=22)		<i>t</i>
	M	SD	M	SD	
Identification	3.76	.61	3.36	.67	2.17*
Distinctiveness	3.72	.92	3.46	.95	.99
Future plans	3.20	1.22	3.24	1.11	-.10
Social nature	3.85	1.01	3.53	1.34	.98
Proprioception	3.87	.82	3.05	.91	3.36**
Autonomy	3.85	1.00	3.33	1.12	1.76
Social adaptability	3.78	1.03	3.59	.92	.70
Self-value	4.02	.91	3.34	1.42	1.93*

\* $p<.05$ , \*\* $p<.01$  - There were less than 15 people in daily/weekly group.

Korean adoptees who consumed Korean cuisine more than 2 or 3 times per month came out as ( $M=3.76$ ,  $SD=.61$ ) and those who rarely consume Korean cuisine came out as ( $M=3.36$ ,  $SD=.67$ ). There was a significant difference in the overall consumption of Korean cuisine between the two groups ( $t=2.17$ ,  $p<.05$ ). Korean adoptees who consumed Korean cuisine more than 2 or 3 times per month came out as ( $M=3.87$ ,  $SD=.82$ ), and those who rarely consume Korean cuisine came out as ( $M=3.05$ ,  $SD=.91$ ). There was a significant difference in the overall consumption of Korean cuisine and the identification sub-factors of proprioception between the two groups ( $t=3.36$ ,  $p<.01$ ). Lastly, Korean adoptees who consumed Korean cuisine more than 2 or 3 times per month came out as ( $M=4.02$ ,  $SD=.91$ ), and those rarely consume came out as ( $M=3.34$ ,  $SD=1.42$ ). There was a significant difference in the overall consumption of Korean cuisine and the identification sub-factors of self-value

between the two groups ( $t=1.93, p<.05$ ).

#### IV. DISCUSSION

The purpose of this study was to figure out the influence of Korean popular culture on the identity of Korean adoptees. The results of the study are as follows. First, higher consumption of Korean popular culture was commensurate with higher levels of identification. This is consistent with Koh's (2005) findings, who studied the psychosocial adjustment of adoptees. Greater cultural exposure among Korean adoptees showed a higher sense of collective identity, and this is consistent with the results of this study. Further research is needed to determine whether racial differences between Korean adoptees and their adoptive parents results in greater consumption of Korean popular culture.

Second, it is suggested for South Korean culture content creators and policy makers to increase the accessibility to Korean popular culture products. This is a relatively inexpensive way for international Korean adoptees, as well as other members of the Korean diaspora, to experience Korean culture outside of Korea. It is necessary to establish a training program operated in tandem with culture content creators in South Korea. This also suggests that Korean cultural content can help Korean adoptees develop their self-identification. As such, culture content creators in South Korea must be more conscientious of social responsibility and duty.

Third, adopted children may have conflicts of identification as a result of their adoption, especially those adopted at a young age. The differences in appearance from their parents, families, and peers may result in cultural confusion or identity clash. This is consistent with Yoo's (2015) study about the obstacles faced by international adoptees, such as prejudice and social obstacles, in both their birth and adopted countries. Many adoptees in Western countries are familiar with these circumstances. However, the results of this study indicate that connection to the culture of the birth country may help mitigate identity crisis. Put differently, it is becoming increasingly necessary to have a specific legal and political support to influence the potential impact of Korean cultural content. This also reflects Koh's (2005) findings. With this in mind, greater attention must be paid to the potential psychosocial effects of cultural content, and access must be expanded to maximize potential benefits. This validates Yoo's argument that the South Korean government must strengthen its research and development of cultural programs.

Lastly, greater research is needed to monitor the identification of Korean adoptees, and the scope of this research should be expanded to greater amounts of psychological and sociological factors. Further research on the subject should take an inter-disciplinary approach in order to increase the applicability of the findings.

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## THE INFLUENCE OF SPORTS ACTIVITIES ON BURNOUT AND RESILIENCE OF KOREAN ADOLESCENTS

Sang-Jin CHOL

Woosuk University, Department of Taekwon-do, Professor, South Korea  
tkddocchoi@daum.net

Tae-Han OH

Woosuk University, Graduate School, Department of Sports & Taekwon-do, Master Student, South Korea  
kukushoot@naver.com

Keun-Ho LEE

Woosuk University, Graduate School, Department of Educational-Cultural Contents Development,  
Master Student, South Korea  
star09kr@gmail.com

### ABSTRACT

The purpose of this research was to investigate the influence of sport activities on the burnout and resilience of adolescents. 708 middle school students (1st grade N=78, 2<sup>nd</sup> grade N=430, 3<sup>rd</sup> grade N=200) were participated in South Korea. A survey was conducted for this study and the results of this study are as follows: Regarding '*burnout*', there was no significant difference, overall, between adolescents who regularly participated in sports activities and those who did not. In regards to '*resilience*', significant differences were observed overall in addition to its sub-factors: adolescents who were regularly involved in sports activities showed a higher level of resilience than those who were not. Moreover, significant differences were reported in the sub-factors of resilience in '*self-regulation*', '*interpersonal relationship*', and '*positivity*' according to the frequency, duration, types of involving sports activities. In addition, there was a significant difference in regards to the kinds of sports: adolescents who were regularly involved in walking (individual exercise) and football (group exercise) showed a higher level of resilience and a lower level of burnout compared to that of others. Because of the competitive nature of the Korean education system, the time allotted for sports activities has been reduced overall in the favor of mathematics and English education, and this should be reconsidered. The results of this study suggest that greater time be given to sports education. Moreover, it is important to increase the duration of sports education, in gym class for example, to reduce the stress levels of adolescents in Korea.

**Key words:** burnout, resilience, sports participation, adolescents

### I. INTRODUCTION

Like many other countries in the ongoing issue, South Korea over the past decade is becoming an increasingly serious problem of deviant youth. The quantitative increases in deviant behavior of teenagers going in addition to qualitative deterioration beyond simple educational problems extended to the overall issue of South Korea (Lee, 2005). In South Korea, many researchers are looking for the role of schools that require unusual not only help a holistic development of youth academy growth as a circle biggest cause of stress for the students. Students are exposed to continuous stress due to school being focused on a plan for admission rather than external growth operations. In addition, many researchers reported that problems of adolescents from various factors. There is no peer relationship, school adjustment problem in the short-term was the cumulative long-term as the overlap with characteristic neurobiological factors of the secondary sexual characteristics that expressed on the outside out of control (Gwak, Lee, 2004; Kim, 2002).

As a solution to these problems, Kim and Yang (2008) said that adolescents are proposing sensitive time because regular sports activities are an important time than a strong desire for vigorous physical activity. Because it relates to the secondary sexual characteristic problems. In addition, Nash also needs physical activities more than 3 hours per day in the adolescent that flourishing psychological desire. There could be controlled through a variety of emotional and behavioral adjustment of them (Kim, 2010, Jae). As such physical activity of young people is so important to help them adjust to stress, peer relationships, physiological needs high school at the same time, and the interest in physical activities in global youth (Cho, 2005).

Despite global is interested in physical activities of youth and sports activities, it means that the time for Korea's education relate to the environment that they can do physical education time the most. But in many cases of physical education, a lower priority compared to other subjects for the reasons of admission. It is being replaced by the reality of the Korea Institute of Korean language classes, English, and mathematics. For specifically

about the importance perception of physical education 5th course in position ranking from 6 of 12 subjects, the sixth case of the training course was 5 ranking among the 11 subjects 7th curriculum, the lowest rank to rank nine of the 13 subjects to date. (Kim, Kim, Kim & Son, 2010). Also, look to analyze the current situation of the youth separate from the physical education Involved in individual sports clubs, in the case of Australia, while the 86%, Germany 78%, USA 69% of our country is very low as 30% (WHO, 2000). For this phenomenon, Na (2013) has been reported that low participation in sports activities using the physical education or free time, not only to increase the prevalence of physical deterioration, obesity but also impact to their schools and social. It does not relieve, as can be seen standing in this ongoing youth academic problems, peer relationship problems of accumulating and physiological needs, such as the connection to the severe stress and eventually easy reach far psychological exhaustion (Kim, 2015; Park, 2013; Sin, Lee 2009; Lee, Lee, Lee, 2014; Brenner, 2008). Emotional exhaustion means individuals feel psychologically exhausting, excessive work, emotional exhaustion and psychological suffering associated with such negative attitude lethargy. (Lee, 2010; Yun, Jeong, 2011). Especially, Young people in South Korea are likely to experience about intense mental and emotional exhaustion that comes from pressures such as academics, admission. (Seo, Kim, Cho, 2012). Cherniss (1980) reported when adolescents face emotional exhaustion, they can often feel tired or discouraged such as negative attitude towards life and self-loss. In addition, psychological exhaustion is also a negative factor for individuals but it needs to strengthen the strategic foundation to minimize management because there are negatively affect interactions.

A number of researchers as a way to improve the problem of the exhaustion of such a psychological young people present resilience (Hong, 2006). This resilience will overcome and adapt to changing environment and human ability for use when faced with difficult (Kim, 2011). In contrast, Lee (2012) presented resilience to emotional exhaustion and reduced sense of accomplishment loss directly alleviates the psychological factors due to exhaustion. The maximize subject well-being when high resilience (So, 2014), deal with the disturbing risk factors for the development as a healthy member of society (Yun, 2007). Overall able to positively interact with the individual's life there (Reivich & Shatte, 2003). In the youth about the significant of resilience, Lee (2012) said the meaning of resilience in our youth also reveals that resilience is an important factor to enhance the preventive and educational aspects of the problem deviant behavior.

Young people's resilience and recovery through self-control problems in a variety of situations and experiences that can radiate a positive energy which allows the recognition of their positive presence (Sin, Choi, Kim, 2009). Also, if resilience is created to exhibit the ability to cope in a healthy and productive manner in conflict situations and can not only solve the problem efficiently manage everyday stress to (Chu, 2014). In response, Choi (2014) was able to help restore elasticity and promote emotional and behavioral flexibility of youth can be a positive adaptive behavior. When viewed in this perspective, it is focused on the function of school college entrance exam such as Korea and according to the Korea adolescents spend another eight hours or more in addition to regular classes of the eight-hour day, etc. School to relieve mental exhaustion positively helping to increase the resilience has a very important task to celebrate a successful adulthood. For this reason, it's not only South Korea, but also all of adolescents of worldwide face this problem as well as a provision requiring different strategies that enhance the resilience of the crucial role to effectively reduce the psychological exhaustion as active measures for the world youth problems experienced by many teenagers (Im, Kwon, 2015).

Bae, Jeong and Won (2015) were offering sport activities as a way to increase the effective period for the effective period for the youth resilience through experimental research. Through sport activities, adolescents will be able to equip a consensus with the natural behavior norms for peers through the same process at the same time through it to learn the sportsmanship, such as caring for colleagues and opponents (Nam, 2002). Students who participate in team sport and sports activities in the private center also can increase the resilience to overcome themselves naturally through experience, the results resilience which involve middle school in regular sports activities has increased, it shows the results are improved positively for school (Kim, 2013). In addition, Kim (2015) said adolescents who participate in school sport club activities had a significantly lower violent behavior than adolescents who do not. Han (2013) and Im (2005) said that studied in physical activity, such as individual or team sports have a positive impact on reducing stress and stability for emotional of adolescents. Park (2000) reported that adolescent who participated in sports activities can adapt their life in school and can desire to resolve problem with reasonable and satisfactory conditions for relation to students, teachers and classroom life.

As indicated above, psychological exhaustion of adolescents, resilience, physical activities, i.e. are important linkages despite difficult case proceed to relate with study of adolescents. For this study was to investigate the influence of sport activities on the burn out and resilience of adolescents. Moreover, this study aimed to provide



a basis and re-emphasis for adolescents in physical education on the meaning and importance.

## II. RESEARCH METHOD

### 1. Participants

A survey was conducted with questionnaire based on nationwide in Republic of Korea. 708 middle school students were participated for two months and convenience sampling was adopted. The distribution of the participants is shown in the <Table 1>.

<Table 1> Korean Adolescents by Area, Gender, Age and Grade

Area													
N(%)	Seoul			Incheon			Kangwon			Busan			Total
	186(26.3)			178(25.1)			157(22.2)			187(26.4)			708(100)
Gender													
N(%)	Male		Female	Male		Female	Male		Female	Male		Female	Total
	92(13.0)		106(15.0)	84(11.9)		86(12.1)	74(10.5)		82(11.6)	80(11.3)		104(14.7)	708(100)
Grade													
N(%)	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Total
	6 (0.8)	192 (27.1)	0 (0)	2 (0.3)	6 (0.8)	162 (22.9)	56 (7.9)	104 (14.7)	24 (3.4)	78 (11.0)	430 (60.7)	200 (28.2)	708(100)

### 2. Measurement

#### 1) Regarding Burn-out

MBI(Maslach's Burnout Inventory) which was originally developed by Maslach & Jackson (1981) and standardized in Korean by Choi(2002) was adopted. The questionnaire consists with 17 questions under four sub-factors such like emotional exhaustion, mental exhaustion, impersonal anger, and personal accomplishment.

#### 2) Regarding Resilience

In order to measure the resilience of the participants, the resilience index test (Resilience Quotient Test: RQT, Reivich & Shatte, 2003) which was standardized by Sin, Kim, & Kim (2011) was used. ROT consists of 27 questions and includes three aspects of resilience such like self-regulation, positivity, and interpersonal relationship and has nine sub-factors. Self-regulation consists of emotional regulation, casual analysis, and impulse control. Moreover, Positivity includes self- optimism, life satisfaction, and auditing. In addition, Interpersonal relationship contains communication, empathy, and self-extension

#### 3) Content validity tests

In order to achieve the validity of this study, contents validity tests were conducted twice from the beginning of March to middle of April in 2016. One professor in physical education, one middle school football club instructor, and three post-graduate students in sports were involved. The suggested and modified items which based on the recommendations were presented in the <Table 2> and final questionnaire used for this study was shown in the <Table 3>.

### 3. Research Procedure

This study was conducted between middle of May and the end of June in 2016. 708 Korean middle school students were participated. Twelve middle school physical education teachers were involved over 12 middle schools in South Korea. Questionnaires were completed to respond to this questionnaire was mailed anonymously to researchers. The time required to create the questionnaire was about 10 minutes to 15 minutes.

&lt;Table 2&gt; Results of the first and second contents validity tests

Suggestions for Modification	Corrections
Regarding the term 'client' that used in some questions for Burn-out(item no. 4, 12, and 16) was asked to change to 'peers'.	The suggestion has been accepted and peer group was used for describing term.
Regarding the term 'people' that used in some questions for Burn-out(item no. 5 and 13) was asked to change to teachers and friends.	The suggestion has been accepted and peer group was used for describing term.
Regarding the term 'work' that used in some questions for Burn-out(item no. 6, 8, 10, 11, and 14) was asked to change to study and schooling.	The suggestion has been accepted and peer group was used for describing term.
Regarding the questions that have potentially lead misunderstanding of the participants were asked to remove	According to the suggestion, 5 items relate to emotional exhaustion, depersonalization, and reduced personal accomplishment,

&lt;Table 3&gt; Final used questionnaire for this study

Variables	Subordinate variables		Detailed contents	Number of items
Burn-out	emotional exhaustion		Continuous and emotional fatigue caused by excessive study burden	9
	depersonalization		It will be separated from the others or is indifferent, and for people like things, react mechanically.	3
	Reduced personal accomplishment		Not contributing in any more meaning in their schoolwork, I feel no longer able to fulfill what you want	5
Resilience	Self-regulation	Casual analysis	After identifying the situation determined MEASURES	3
		Emotional regulation	Maintain calm during stressful situations and negative emotions suppression	3
		Interpersonal control	Impulse response inhibition, self-control ability under the circumstances	3
	Positivity	Thankfulness	Positive emotions that the mind and body relaxed attitude that life and thanks to others	3
		Life Satisfaction	Happy for the whole life, satisfaction with life	3

		Self-optimism	Optimistic attitude to see yourself who looking into the advantages and strengths	3	
	Interpersonal relationship	Self-extension	The ability to understand oneself in relationship with others	3	9
		Communication	Maintaining smooth relationships and persuasiveness	3	
		Empathy	Psychological or emotional state of others, awareness and understanding	3	
Total				44 Items	

#### 4. Data Analysis

A survey was conducted with questionnaire between middle of march and the end of April. The used questionnaire for Burn-out was developed by Reivich & Shatte(2003). The questionnaire for Resilience was developed by Maslach & Jackson(1981). And then / the questionnaires revised by my colleagues and me for Korean Middle School students. The collected data was analyzed by SPSS 22.0/ and *t*-test, ANOVA / and Correlation Analysis was used.

### III. RESULTS

#### 1. The influence of sports activities for young adolescents on burn-out

This study observed the influence of sports activities for young adolescents on burn-out. The young adolescents were divided into two groups based on the regularity of consumption in comparison to the average of the population. An independent sample *t*-test was performed to compare the mean of the two groups, and the regularity of Sports activities by young adolescents on burn-out is listed in<Table-5>. But there wasn't a statistically significant difference in burn-out between young adolescents who regularly participated in sports activities and those who did not.

<Table 5> Result of Burn-out according to Regularity of Sports Activities

Subordinate variables	Yes (N=268)	No (N=440)	<i>t</i>
	M(SD)	M(SD)	
General Burn-out	2.25(.73)	2.21(.74)	.71
Emotional exhaustion	2.52(.74)	2.43(.75)	1.48
Depersonalization	2.15(.78)	2.12(.76)	.52
Reduced personal accomplishment	2.08(.86)	2.07(.89)	.08

#### 2. The influence of sports activities for young adolescents on resilience

This study observed the influence of sports activities for young adolescents on resilience. The young adolescents were divided into two groups based on the regularity of consumption in comparison to the average of the population. An independent sample *t*-test was performed to compare the mean of the two groups, and the regularity of Sports activities by young adolescents on resilience is listed in<Table 6>.

&lt;Table 6&gt; Result of Resilience according to Regularity of Sports Activities

Subordinate variables	Yes(N=268)	No(N=440)	<i>t</i>
	M(SD)	M(SD)	
General Resilience	3.88(.60)	3.70(.75)	3.52***
Self-regulation	3.79(.63)	3.58(.71)	3.87***
Emotion regulation	3.82(.73)	3.65(.80)	3.00**
Impulse control	3.67(.77)	3.46(.80)	3.46**
Causal analysis	3.88(.71)	3.68(.81)	3.51***
Interpersonal relationship	3.84(.67)	3.67(.85)	3.01**
Communication	3.71(.75)	3.56(.89)	2.43*
Empathy	3.90(.82)	3.74(.94)	2.60*
Self-extension	3.92(.82)	3.71(.96)	3.04**
Positivity	4.00(.73)	3.84(.86)	2.74**
Self-optimism	3.93(.79)	3.78(.93)	2.31*
Life Satisfaction	3.96(.81)	3.76(1.01)	2.88**
Thankfulness	4.11(.85)	3.97(.93)	2.08*

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Young adolescents who regularly participated Sports activities came out as ( $M=3.88$ ,  $SD=.60$ ), and those without participate came out as ( $M=3.70$ ,  $SD=.75$ ). There was a significant difference in the overall resilience according to regularity between the two groups ( $t=3.52$ ,  $p<.001$ ). Young adolescents who regularly participated Sports activities came out as ( $M=3.79$ ,  $SD=.63$ ), and those without participate came out as ( $M=3.58$ ,  $SD=.71$ ). There was a significant difference in the overall resilience and the resilience sub-factors of self-regulation between two groups ( $t=3.87$ ,  $p<.001$ ). Young adolescents who regularly participated Sports activities came out as ( $M=3.84$ ,  $SD=.67$ ), and those without participate came out as ( $M=3.67$ ,  $SD=.85$ ). There was a significant difference in the overall resilience and the resilience sub-factors of Interpersonal relationship between two groups ( $t=3.01$ ,  $p<.01$ ). Lastly, Young adolescents who regularly participated Sports activities came out as ( $M=4.00$ ,  $SD=.73$ ), and those without participate came out as ( $M=3.84$ ,  $SD=.86$ ). There was a significant difference in the overall resilience and the resilience sub-factors of Positivity between two groups ( $t=2.74$ ,  $p<.01$ ).

### 3. The influence to frequency of sports activities for young adolescents on burn-out

This study observed the influence to frequency of sports activities on burn-out of young adolescents. The young adolescents were divided into three groups based on the frequency of sports activities to the average of the population. F-test was performed to compare the mean of the three groups, and the frequency of Sports activities by young adolescents is listed in <Table 7>. But there wasn't a statistically significant difference.

&lt;Table 7&gt; Result of Burn-out according to frequency of Sports Activities

Subordinate variables	High (N=88)	Middle (N=143)	Low (N=37)	<i>F</i>	<i>Scheffe</i>
	M(SD)	M(SD)	M(SD)		
General Burn-out	2.22(.78)	2.28(.73)	2.31(.61)	.25	
Emotional exhaustion	2.46(.81)	2.58(.71)	2.53(.66)	.75	-
Depersonalization	2.14(.81)	2.16(.78)	2.25(.71)	.28	

Reduced personal accomplishment	2.06(.85)	2.10(.87)	2.14(.71)	.14
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#### 4. The influence to frequency of sports activities for young adolescents on resilience

This study observed the influence to frequency of sports activities on resilience of young adolescents. The young adolescents were divided into three groups based on the frequency of sports activities to the average of the population. F-test was performed to compare the mean of the three groups, and the frequency of Sports activities by young adolescents is listed in <Table 8>.

<Table 8> Result of Resilience according to frequency of Sports Activities

Subordinate variables	High (N=88) M(SD)	Middle (N=143) M(SD)	Low (N=37) M(SD)	<i>F</i>	<i>Scheffe</i>
General Resilience	3.92(.57)	3.89(.57)	3.44(.65)	10.29***	A,B>C
Self-regulation	3.86(.62)	3.79(.59)	3.20(.69)	16.07***	A,B>C
Emotion regulation	3.88(.71)	3.84(.66)	3.04(1.00)	20.07***	A,B>C
Impulse control	3.78(.72)	3.63(.66)	3.34(.98)	4.18*	A>C
Causal analysis	3.92(.75)	3.89(.69)	3.23(.94)	12.73***	A,B>C
Interpersonal relationship	3.86(.67)	3.87(.64)	3.41(.82)	7.49**	A,B>C
Communication	3.75(.75)	3.73(.75)	3.28(.82)	5.82**	
Empathy	3.88(.67)	3.93(.71)	3.43(1.11)	6.43**	A,B>C
Self-extension	3.96(.83)	3.95(.80)	3.50(.97)	4.67*	
Positivity	4.05(.66)	4.00(.73)	3.70(.77)	3.37*	A>C
Self-optimism	4.02(.67)	3.90(.79)	3.68(1.02)	2.52	-
Life Satisfaction	3.97(.79)	4.00(.78)	3.50(1.07)	5.41**	A,B>C
Thankfulness	4.16(.80)	4.10(.85)	3.91(.98)	1.10	-

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Young adolescents who participated everyday came out as ( $M=3.92$ ,  $SD=.57$ ), those who participated 2 or 3 times a week came out as ( $M=3.89$ ,  $SD=.57$ ), and those who 1 time per month came out as ( $M=3.44$ ,  $SD=.65$ ). There was a significant difference in the overall resilience according to frequency of Sports activities among three groups ( $F=10.29$ ,  $p<.001$ ).

First, young adolescents who participated everyday came out as ( $M=3.86$ ,  $SD=.62$ ), those who participated 2 or 3 times a week came out as ( $M=3.79$ ,  $SD=.59$ ), and those who 1 time per month came out as ( $M=3.20$ ,  $SD=.69$ ). There was a significant difference in the overall resilience and the resilience sub-factors of self-regulation between three groups ( $F=16.07$ ,  $p<.001$ ). Second, young adolescents who participated everyday came out as ( $M=3.86$ ,  $SD=.67$ ), those who participated 2 or 3 times a week came out as ( $M=3.87$ ,  $SD=.64$ ), and those who 1 time per month came out as ( $M=3.41$ ,  $SD=.81$ ). There was a significant difference in the overall resilience and the resilience sub-factors of interpersonal relationship between three groups ( $F=7.49$ ,  $p<.01$ ). Lastly, young adolescents who participated everyday came out as ( $M=4.05$ ,  $SD=.66$ ), and those who 1 time per month came out as

( $M=3.70$ ,  $SD=.77$ ). There was a significant difference in the overall resilience and the resilience sub-factors of self-regulation between two groups ( $F=3.37$ ,  $p<.05$ ).

### 5. The influence to duration of sports activities for young adolescents on burn-out

This study observed the influence to duration of sports activities on burn-out of young adolescents. The young adolescents were divided into three groups based on the duration of sports activities to the average of the population. F-test was performed to compare the mean of the three groups, and the duration of Sports activities by young adolescents is listed in <Table 9>. But there wasn't a statistically significant difference on burn-out.

<Table 9> Result of Burn-out according to Duration of Sports Activities

Subordinate variables	Over 1 year (N=106)	Between 6Ms and 1 Year (N=85)	Less than 6Ms (N=77)	<i>F</i>	<i>Scheffe</i>
	M(SD)	M(SD)	M(SD)		
General Burn-out	2.30(.71)	2.15(.72)	2.35(.74)	1.80	
Emotional exhaustion	2.53(.75)	2.44(.72)	2.63(.73)	1.32	
Depersonalization	2.22(.74)	2.05(.83)	2.21(.76)	1.39	
Reduced personal accomplishment	2.12(.86)	1.95(.80)	2.22(.90)	2.09	

### 6. The influence to duration of sports activities for young adolescents on resilience

This study observed the influence to duration of sports activities on resilience of young adolescents. The young adolescents were divided into three groups based on the duration of sports activities to the average of the population. F-test was performed to compare the mean of the three groups, and the duration of Sports activities by young adolescents is listed in the <Table 10>.

<Table 10> Result of Resilience according to Duration of Sports Activities

Subordinate variables	Over 1 year (N=106)	Between 6Ms and 1 Year (N=85)	Less than 6Ms (N=77)	<i>F</i>	<i>Scheffe</i>
	M(SD)	M(SD)	M(SD)		
General Resilience	3.90(.60)	3.97(.55)	3.60(.66)	8.92 <sup>***</sup>	A,B>C
Self-regulation	3.81(.53)	3.84(.65)	3.50(.74)	7.40 <sup>**</sup>	A,B>C
Emotion regulation	3.83(.68)	3.82(.77)	3.54(.90)	3.81 <sup>*</sup>	A>C
Impulse control	3.67(.64)	3.77(.86)	3.45(.83)	3.66 <sup>*</sup>	B>C
Causal analysis	3.92(.66)	3.94(.69)	3.50(.93)	8.80 <sup>***</sup>	A,B>C
Interpersonal relationship	3.85(.69)	3.95(.61)	3.59(.73)	6.15 <sup>**</sup>	A,B>C
Communication	3.69(.79)	3.80(.72)	3.52(.80)	2.78	-
Empathy	3.90(.76)	4.00(.67)	3.61(.88)	5.32 <sup>**</sup>	B>C
Self-extension	3.96(.79)	4.01(.81)	3.62(.91)	5.97 <sup>**</sup>	A,B>C

Positivity	4.04(.63)	4.11(.62)	3.73(.86)	6.88**	A,B>C
Self-optimism	3.94(.70)	4.08(.69)	3.68(.97)	5.21**	B>C
Life Satisfaction	4.05(.70)	3.93(.87)	3.71(.94)	3.74*	A>C
Thankfulness	4.13(.76)	4.33(.71)	3.78(1.02)	8.92***	A,B>C

\* $p<.05$ , \*\* $p<.01$ , \*\*\* $p<.001$

Young adolescents who participated over 1 year came out as ( $M=3.90$ ,  $SD=.60$ ), those who participated 6 month to less than 1 year came out as ( $M=3.97$ ,  $SD=.55$ ), and those who participated less than 6 month came out as ( $M=3.60$ ,  $SD=.66$ ). There was a significant difference in the overall resilience according to duration of Sports activities among three groups ( $F=10.29$ ,  $p<.001$ ). Young adolescents who participated over 1 year came out as ( $M=3.81$ ,  $SD=.53$ ), those who participated 6 month to less than 1 year came out as ( $M=3.84$ ,  $SD=.65$ ), and those who participated less than 6 month came out as ( $M=3.50$ ,  $SD=.74$ ). There was a significant difference in the overall resilience and the resilience sub-factors of self-regulation between three groups ( $F=7.40$ ,  $p<.01$ ). Young adolescents who participated over 1 year came out as ( $M=3.81$ ,  $SD=.53$ ), those who participated 6 month to less than 1 year came out as ( $M=3.95$ ,  $SD=.61$ ), and those who participated less than 6 month came out as ( $M=3.59$ ,  $SD=.73$ ). There was a significant difference in the overall resilience and the resilience sub-factors of interpersonal relationship between three groups ( $F=6.15$ ,  $p<.01$ ). Lastly, Young adolescents who participated over 1 year came out as ( $M=4.04$ ,  $SD=.63$ ), those who participated 6 month to less than 1 year came out as ( $M=4.11$ ,  $SD=.62$ ), and those who participated less than 6 month came out as ( $M=3.73$ ,  $SD=.86$ ). There was a significant difference in the overall resilience and the resilience sub-factors of positivity between three groups ( $F=6.88$ ,  $p<.01$ ).

### 7. The influence to types of sports activities for young adolescents on burn-out

This study observed the influence to types of sports activities on burn-out of young adolescents. The young adolescents were divided into three groups based on types of sports activities to the average of the population. F-test was performed to compare the mean of the three groups, and the types of Sports activities by young adolescents is listed in <Table 11>. But there wasn't a statistically significant difference on burn-out.

### 8. The influence to types of sports activities for young adolescents on resilience

This study observed the influence to types of sports activities on resilience of young adolescents. The young adolescents were divided into three groups based on types of sports activities to the average of the population. F-test was performed to compare the mean of the three groups, and the types of Sports activities by young adolescents is listed in the <Table 12>.

<Table 11> Result of Burn-out according to Types of Sports Activities

Subordinate variables	Group (N=60)	Interpersonal (N=83)	Individual (N=125)	<i>F</i>	<i>Scheffe</i>
	M(SD)	M(SD)	M(SD)		
General Burn-out	2.31(.64)	2.37(.70)	2.17(.78)	2.04	
Emotional exhaustion	2.56(.64)	2.65(.72)	2.44(.78)	2.24	
Depersonalization	2.23(.75)	2.29(.70)	2.05(.83)	2.63	
Reduced personal accomplishment	2.14(.71)	2.17(.86)	2.02(.91)	.92	

&lt;Table 12&gt; Result of Resilience according to Types of Sports Activities

Subordinate variables	Group (N=60)	Interpersonal (N=83)	Individual (N=125)	<i>F</i>	<i>Scheffe</i>
	M(SD)	M(SD)	M(SD)		
General Resilience	3.96(.61)	3.74(.57)	3.70(.59)	5.60**	A>B,C
Self-regulation	3.88(.61)	3.65(.62)	3.52(.69)	7.47**	A>B,C
Emotion regulation	3.90(.72)	3.65(.79)	3.54(.83)	5.20**	A>C
Impulse control	3.78(.71)	3.55(.80)	3.47(.85)	4.26*	A>C
Causal analysis	3.97(.70)	3.74(.75)	3.57(.89)	5.95**	A>C
Interpersonal relationship	3.92(.71)	3.74(.66)	3.67(.67)	3.21*	-
Communication	3.79(.76)	3.57(.76)	3.52(.79)	2.82	
Empathy	3.95(.73)	3.80(.80)	3.71(.83)	2.26	-
Self-extension	4.00(.88)	3.85(.81)	3.73(.80)	2.34	
Positivity	4.09(.70)	3.84(.71)	3.81(.73)	3.53*	A>B
Self-optimism	4.01(.75)	3.82(.86)	3.80(.79)	1.81	-
Life Satisfaction	4.05(.81)	3.84(.75)	3.74(.97)	3.33*	-
Thankfulness	4.22(.78)	3.86(.94)	3.78(.82)	4.64*	A>B

\* $p<.05$ , \*\* $p<.01$ 

Young adolescents who participated in group came out as ( $M=3.96$ ,  $SD=.61$ ), those who participated in interpersonal came out as ( $M=3.74$ ,  $SD=.57$ ), and those who participated individual came out as ( $M=3.70$ ,  $SD=.59$ ). There was a significant difference in the overall resilience according to types of Sports activities among three groups ( $F=5.60$ ,  $p<.01$ ). Young adolescents who participated in group came out as ( $M=3.88$ ,  $SD=.61$ ), those who participated in interpersonal came out as ( $M=3.65$ ,  $SD=.62$ ), and those who participated individual came out as ( $M=3.52$ ,  $SD=.69$ ). There was a significant difference in the overall resilience and the resilience sub-factors of self-regulation between three groups ( $F=7.47$ ,  $p<.01$ ). The sub-factors interpersonal relationship ( $F=3.21$ ,  $p<.05$ ) showed a significant difference, but the post verification result was not statistically significant. Lastly, young adolescents who participated in group came out as ( $M=4.09$ ,  $SD=.70$ ), and those who participated in interpersonal came out as ( $M=3.84$ ,  $SD=.71$ ). There was a significant difference in the overall resilience and the resilience sub-factors of positivity between two groups ( $F=3.53$ ,  $p<.05$ ).

### 9. Regarding the correlation between burn-out and resilience

Sports activities to understand the relationship of burn-out and resilience of adolescents was correlation analysis of the variables related to <Table 13>. The results overall burn-out and resilience ( $r=-.64$ ,  $p<.001$ ) showed a negative correlation. Looking at the associated information for each sub-area are as follows. First, the burn-out emotional exhaustion overall resilience ( $r=-.46$ ,  $p<.01$ .) And the resilience of self-regulation ( $r=-.39$ ,  $p<.001$ ), interpersonal relationship ( $r=-.40$ ,  $p<.001$ ), positivity ( $r=-.45$ ,  $p<.001$ ) showed a negative correlation with the. Secondly, burn-out of depersonalization is the overall resilience ( $r=-.39$ ,  $p<.01$ ) and the resilience of self-regulation ( $r=-.34$ ,  $p<.05$ ), interpersonal relationship ( $r=-.31$ ,  $p<.01$ ), positivity ( $r=-.40$ ,  $p<.01$ ) showed with the a negative correlation. Third, burn-out of reduced personal accomplishment is the overall resilience ( $r=-.44$ ,  $p<.01$ ) and the resilience of self-regulation ( $r=-.37$ ,  $p<.05$ ), interpersonal relationship ( $r=-.40$ ,  $p<.01$ ), positivity



( $r=-.44$ ,  $p<.01$ ) showed with a negative correlation.

<Table 13> Correlation between resilience and burn-out of Korean Adolescents

Division	1	1.1	1.2	1.3	2	2.1	2.2	2.3
1 General Burn-out	1							
1.1 Emotional exhaustion	.40**	1						
1.2 Depersonalization	.38**	.94***	1					
1.3 Reduced Personal Accomplishment	.36**	.94***	.75***	1				
2 General Resilience	-.64***	-.46**	-.39**	-.44**	1			
2.1 General Self-regulation	-.75***	.39***	-.34*	-.37*	.36***	1		
2.2. General Interpersonal Relationship	-.47***	-.40***	-.31*	-.40**	-.92***	.78***	1	
2.3 General Positivity	-.63***	-.45**	-.40**	-.44**	-.41**	.91***	.66***	1

\* $p<.05$ , \*\* $p<.01$ , \*\*\* $p<.001$

#### IV. CONCLUSION

The purpose of this study was to analyze the influence of experience sports activities on the resilience of youth and psychological exhaustion. The results are as follow;

First, the hypothesis resilience of youth sports activities, according to the experience would not have been affected. Kim (2015) has also had that reduced the positive perception of the violence, the school sports club recognized among the sub - factors of resilience of youth participatory empathy and positive is high, resilience is inherent in the study of resilience in Hong (2006). But there is naturally also have to overcome a certain resistance to stress generated after shows that this can increase resilience whereby it can be seen that the study results should match. Lee (2012) studied on a sub-area of the resilience control; positive, social skills and self-regulation both indicate a significant positive correlation of youth that match the results of this study. Second, the hypothesis was also supported that with or without experience of sporting activities does not affect the mental exhaustion of youth. These results can be interpreted as a regular sports activities experience on a direct positive impact in the self- regulation, self- affirmation and interpersonal relationships of adolescents. Lee (2012) reported that research instructor for exhausted child psychological factors qualifications, possession, academic background, career were reported that make difference. Choi (2002), Kim, Choi, Kwon (2010).

The result of this study, adolescents who participate in sports activities are an effective strategy for the individual's successful life and can be important factor for improving crucial to increase resilience. Lastly, in subsequent studies, the relevance of resilience and psychological exhaustion for the public, there is a need for such research because the situation is insufficient empirical researches of resilience program development and psychological path model development.

The results of this study suggest that Korean teenagers have a higher level of Burnout. And unlike the research results in other countries, Sports activities do not have a significant influence on Burnout of Korean adolescents. It could be assumed that the educational situation in Korea strongly effect to burnout of the teenagers. But sports

activities have a strong influence on resilience. And negative correlation between burnout and resilience. So, it could be suggested that even though sports activities do not have significant effect to reducing burnout, sports activities have a strong influence on resilience of adolescents and its effect to burnout of them. Second, it suggests that we must reconsider the importance of sports activities in national curriculum in terms of increasing the resilience for Korean adolescents and reducing burnout of them. Lastly, strong school policy has to be provided for prohibiting replacing sports times to other subjects.

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## THE INFLUENCE OF STYLING EDUCATION ON THE OUTWARD APPEARANCE SATISFACTION AND SELF-ESTEEM OF ADOLESCENTS

Hyo-Jin KOO

Woosuk University, Professor, Graduate School, Department of Educational & Cultural  
Contents Development, South Korea  
hjk28cam@woosuk.ac.kr

Seul-A KIM

Woosuk University, Graduate School, Department of Educational & Cultural Contents  
Development, Doctoral Student, South Korea  
sulnga14@naver.com

Ki-Bum KIM

Woosuk University, Graduate School, Department of Educational & Cultural Contents  
Development, Master Student, South Korea  
keysgonna@yahoo.co.kr

Soo-Kyung SUH

Woosuk University, Graduate School, Department of Educational & Cultural Contents  
Development, Master Student, South Korea  
pd2da@naver.com

Hye-young PARK

Woosuk University, Graduate School, Department of Educational & Cultural Contents  
Development, Master Student, South Korea  
hye8200@hanmail.net

### ABSTRACT

The purpose of this study was to investigate the influence of styling education on the appearance satisfaction and self-esteem of adolescents. A total of 139 middle school students participated in either the experimental group (N=69) or control group (N=70) in North Jeolla Province in South Korea. The collected data from the pre- and post-tests were analyzed in SPSS 22.0, especially t-test and paired t-test were adopted. The results of this study are as follows: Regarding 'appearance satisfaction', significant differences were observed overall in addition to its sub-factors: from the result of pre- and post-test, there was no significant differences in the control group, but the experimental group showed significantly different appearance satisfaction compare to pre-test. In regards to 'self-esteem', significant differences were observed overall in addition to its sub-factors: experimental group was higher levels than previous test. The results suggested that appearance and self-esteem have a significant meaning to adolescent at the stage of developmental period.

**Keywords:** styling program, self-esteem, appearance satisfaction

### 1. INTRODUCTION

The need for good physique and an attractive outward appearance has become a point of discussion around the world. In the case of many European countries, many adolescents imitate the trends set by famous people, and this can lead to distorted views of beauty. Mechanisms are being created by these societies to mitigate the effects of this, such as requiring idols and models to receive health checks from doctors. European societies are taking steps to help adolescents develop healthy notions of appearance (Women's News, 2016). However, adolescents in Korea have distorted notions of physique and outward appearance as a result of lookism. This is problematic, and even now, limited action has been taken in the country to address the issue.

Adolescence is a period of physical and psychological change. Adolescents become more sensitive to their physical features because of these changes, and as a result, there is a tendency for them to compare and judge their bodies to others (Lim, 2010). The growth of each person occurs at varying rates. Slow development may cause a person to feel a sense of inferiority when comparing their appearance with others (Park, 2000). This, in turn, may cause an adolescent to form a negative view of their outward appearance

(Jang and Song, 2004).

The feeling of inadequacy and disappointment in comparison to others is a source of anxiety for adolescents in the formation of their self-esteem, and this has potentially negative influences. Seo (2004) points out that low self-esteem in adolescents increases the risk of depression, and a diverse amount of issues can arise as a result of this during adolescence. Rosenberg (1985) also emphasizes this point that low self-esteem can increase negative emotional states and anxiety among adolescents. However, Leary and McDonald (2013) point out that high self-esteem results in positive relationships with friends and has a tendency to promote the development of a friendly, social personality. High self-esteem in adolescence leads to the development of positive and healthy attitudes towards life. Of the many contributing factors that comprise self-esteem, outward appearance satisfaction is greatly important. Seo (2003) and Kim (2001) point out that the higher outward appearance, the higher self-esteem in a person. If a person is satisfied with their outward appearance, they become more secure in their self-conception, and their self-conception becomes more defined. Lim (2001) also points out that during adolescence, it is important to form a satisfied view of one's physical form. The more satisfied a person with their outward appearance, the more positive conception they have of themselves overall.

In Korea, however, there is not a diverse conception of the standard of beauty, and there is a tendency for people to conform to societal standards (Ministry of Gender Equality and Family, 2008). Recently, adolescents imitate people on television, and adolescents think that a character's media image is somewhat of a reality. There is a strong tendency to follow and copy the style of these idols (Kim, 2010). Adolescents tend to copy the fashion and beauty trends of celebrities without making objective selection in their wardrobe and accessory choices (Jang and Park, 2003). Kim (2015) discusses this further, adolescents recognize their individuality and uniqueness, but there is a need for education regarding to help adolescents create a positive self-image.

Yoon and Wee (2010) also stress this point. There is a need to foster programs in the academic setting to increase the ability of adolescents to be objective and critical in their views, so they may understand how to care for their physical and emotional health.

Information about fashion within art education is largely focused on the connection between fashion and life, how to style, and physical characteristics. Fashion and self-expression activities comprise one to two pages of the curriculum. Moreover, there is a lack of research on fashion, and it has been largely neglected as a topic (Lim, 2010). Put simply, there is a discrepancy between the expectations of students for application in real life and the actual educational information provided.

Adolescents in Korea do not receive proper, systematic, and specialized styling education, nor are they able to find proper styling education that reflects caters to their unique physical characteristics. Furthermore, this curriculum does not look at the aspect of consumption, and thus adolescents do not learn about how to make wise consumer decisions. If students were to receive systematic styling education, adolescents may be able to find their own standards for outward satisfaction, have higher self-esteem, and maintain healthy attitudes towards life. This research looks at the relationship between outward appearance satisfaction and self-esteem, appearance satisfaction and depression, and the connection between psychological and emotional factors of adolescents. This study looks at the limitations and possibilities of styling education and how it influences outward appearance satisfaction and self-esteem.

## **II. RESEARCH METHOD**

### **1. Participants**

The researchers developed a questionnaire. 30 for middle school students participated in the reliability and validity verification tests prior to the start of the research. Initially, 142 middle school students were selected in North Jeolla province, Republic of Korea.

However, three students who did not wish to partake were excluded, as well as one student who was unable to participate. The final number of participants was 138, 69 students for experimental group and 69 students for the control group.

&lt;Table 1&gt; Participant Demographics

Variables	Experimental Group (N=69)				Control Group (N=69)			
Gender	Male		Female		Male		Female	
	35		34		34		35	
Grade	First Grade		Third Grade		First Grade		Third Grade	
	34		35		34		35	
Allowance	Less than 10,000 won.	10,000-20,000 won	20,000-30,000 won	More than 30,000 won	Less than 10,000 won.	10,000 - 20,000 won	20,000 - 30,000 won	More than 30,000 won
	5	25	22	17	2	10	331	26

## 2. Research Tools

### 1) Measurements

#### (1) Appearance satisfaction

The appearance satisfaction measure was initially developed by Mendelson and White (1993) and standardized in Korea by Lee (2005). The researchers modified this measure for the purposes of this study. The questionnaire includes 3 sub-factors: self-awareness, face-satisfaction, and physical-satisfaction. A 5-point Likert scale was used to record the responses. There were three content validity tests to verify the appropriateness of the questionnaire <see the Table 2>.

#### (2) Self-Esteem

Choi and Jeon (1993) and Park (2009) developed the original questionnaire to measure self-esteem. The questionnaire has 4 sub-factors: general-esteem, social-esteem, family-esteem, and academic-esteem.

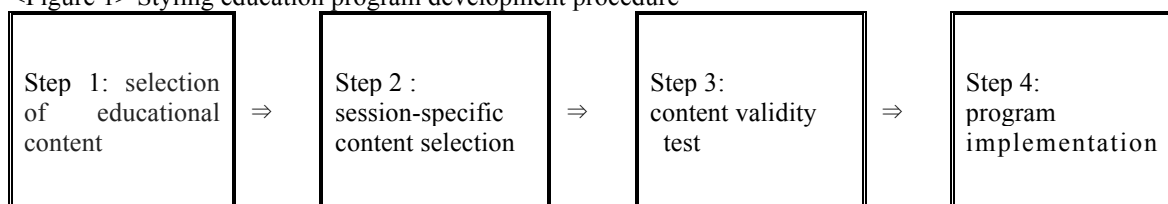
&lt;Table 2&gt; Results of the first content validity test

Test	Suggestion	Modification
1th	Lee (2005)'s study is not applicable because the subjects of the study were children	Revised in accordance to the suggestion
2th	Use language at the middle school level for the questionnaire	Revised in accordance to the suggestion
3th	A few of the sub-factors on the questionnaire about self-awareness are relative	Revised in accordance to the suggestion

### 2) Experimental Programs

A professor in the educational and cultural content development department, two doctoral students, and two styling experts developed the research tool. The <Figure 1> shows the development of the tool. Two middle school teachers and one parent conducted the second validity test. Test results are shown in the <Table 3>.

&lt;Figure 1&gt; Styling education program development procedure



The content validity tests provided important feedback and enhanced the styling training sessions, the details of which are detailed in the <Table 4>.

### 3. Procedure of the Experiment

Pre-tests were conducted for both the experimental and control group. The study lasted for a duration of two months. After the eight sessions, post-tests were taken by both groups.

<Table 3> Results of contents validity tests

Test	Suggestion	Modification
1th	<ul style="list-style-type: none"> <li>- The difficulty of proper attire depending on the situation</li> <li>- Information may cause adverse effects such as overconsumption and impulse buying</li> </ul>	<ul style="list-style-type: none"> <li>- The need for appropriate attire depending on the situation</li> <li>- Proposed a more cost effective method for styling (Using low-cost brands, making own materials)</li> </ul>
2th	<ul style="list-style-type: none"> <li>- The styling for the existing standardized training issues discussed</li> <li>- Use less difficult techniques for better application by the students</li> <li>- Too much explanation during the discussion</li> </ul>	<ul style="list-style-type: none"> <li>- Training was provided for higher quality information</li> <li>- The number of time was adjusted (15th→8th)</li> </ul>

<Table4> Program contents

Contents	Focusing Message
1. Make and Enjoy Your Style	Break stereotypes and create your own style
2. Make Use of the SPA Brand	Invest wisely into your style and how to enjoy it
3. How to Makeover Your Wardrobe	Repurpose your wardrobe for greater use
4. How to Care Your Skin and Hair	Learn skin and hair care tips
5. A Healthy Diet Program	Routine diet tricks that can be implemented at school
6. Exercise Routines	Discuss the importance of posture
7. Fashion Ideas Based On The Time, Place and Occasion	Consider the importance of attire in T.P.O
8. Love Your self	Build confidence and make your own style

<Table 5> Research design

	Pre-Test	Experiments	Post-Test
<b>Experimental Group</b>	<ul style="list-style-type: none"> <li>- Appearance satisfaction</li> <li>- Self-Esteem</li> </ul>	○	<ul style="list-style-type: none"> <li>- Appearance satisfaction</li> <li>- Self-Esteem</li> </ul>
<b>Control Group</b>	<ul style="list-style-type: none"> <li>- Appearance satisfaction</li> <li>- Self-Esteem</li> </ul>	×	<ul style="list-style-type: none"> <li>- Appearance satisfaction</li> <li>- Self-Esteem</li> </ul>

#### 1) Recruitment of participants

Participants for the study were recruited from March to May 2016. The purpose of the research was explained to the participants through a phone call or a direct visit to the middle school in which they attend. Permission to do so was granted by the principal and teacher.

Parental consent was required for participation. 69 students were selected for participation in the study.

## 2) Administering of the program

The styling program was administered by professional stylists, visual directors, or others working in the entertainment industry with more than five years of experience in their field. The authors conducted the pre- and post-tests. Training programs for the administrators was conducted five months prior to the administration. The content of this training included professional terms for styling education, information about the national art curriculum, and the middle school system in Korea.

## 3) Pre and Post Test

After obtaining parental consent, the tests were conducted for 10 to 15 minutes prior to the start of the school day. There were no significant differences in the homogeneity tests between the experimental and control group, indicating the applicability of the experiment. Post-tests were conducted after the last session during a separate time from the training. The post-test lasted on average 10 to 15 minutes.

## 4) Conducting the experiments

An experimental study was conducted for 8 times. The styling education programs were provided once a week for about 40 minutes. The Duration of the experiments were about 3months between middle of March and middle of May in 2016.

<Table 7> Homogeneity test

Subordinate variables	Experimental (N=69)	Control( N=69)	<i>t</i>
	M(SD)	M(SD)	
Appearance satisfaction	3.25(.500)	3.14(.478)	-1.226
Self-awareness	2.97(.697)	3.11(.557)	1.57
Face-satisfaction	3.46(.543)	3.31(.587)	-1.562
Physical-satisfaction	2.75(.697)	2.87(.714)	.993
Self-Esteem	3.25(.500)	3.14(.478)	-1.226
General-Esteem	3.46(.543)	3.31(.587)	-1.562
Social-Esteem	2.75(.697)	2.87(.714)	.993
Family-Esteem	2.75(.697)	2.87(.714)	.993
Academic-Esteem	2.75(.697)	2.87(.714)	.993

## 4. Data analysis

The collected data were analyzed by SPSS 22.0 especially frequency test, paired and independent *t*-test were utilized.

## III. RESEARCH RESULTS

### 1. Styling Education on Appearance Satisfaction

The <Table 8> shows a significant difference in 'appearance satisfaction' between the pre-test and post-test ( $t=3.45$ ,  $p<.001$ ;  $M=3.17$ ,  $SD=.46$  <  $M=3.49$ ,  $SD=.61$ ). Moreover, significant differences were reported in the sub-factors of appearance satisfaction: *self-awareness* ( $t=4.35$ ,  $p<.001$ ;  $M=3.23$ ,  $SD=.55$  <  $M=3.65$ ,  $SD=.71$ ) and *face-satisfaction* ( $t=3.53$ ,  $p<.001$ ;  $M=3.33$ ,  $SD=.68$  <  $M=3.64$ ,  $SD=.53$ ). However, there were no significant differences in physical-satisfaction.



&lt;Table 8&gt; Pre and post-test results for appearance satisfaction

Subordinate variables	Pre(N=69)	Post(N=69)	<i>t</i>
	M(SD)	M(SD)	
Appearance satisfaction	3.17(.459)	3.49(.618)	3.54***
Self-awareness	3.23(.551)	3.65(.713)	4.35***
Face-satisfaction	3.33(.682)	3.64(.534)	3.53**
Physical-satisfaction	3.36(.894)	3.46(.774)	.72

\*\*  $p < .01$ , \*\*\*  $p < .001$

## 2. Styling Education on Self-Esteem

<Table 9> shows a significant difference in 'self-esteem' between the pre-test and post-test ( $t = -2.95$ ,  $p < .05$ ;  $M = 3.51$ ,  $SD = .63$  <  $M = 3.76$ ,  $SD = .62$ ). Moreover, there were significant differences in the sub-factors self-esteem, general-esteem ( $t = -2.54$ ,  $p < .05$ ;  $M = 3.33$ ,  $SD = .68$  <  $M = 3.53$ ,  $SD = .71$ ), social-esteem ( $t = -3.67$ ,  $p < .001$ ;  $M = 3.46$ ,  $SD = .77$  <  $M = 3.85$ ,  $SD = .78$ ), and academic-esteem ( $t = -3.80$ ,  $p < .001$ ;  $M = 3.46$ ,  $SD = .68$  <  $M = 3.76$ ,  $SD = .70$ ). However, there were no significant differences in family-esteem.

&lt;Table 9&gt; Pre and post-test results for self-esteem

Subordinate variables	Pre(N=69)	Post(N=69)	<i>t</i>
	M(SD)	M(SD)	
Self-Esteem	3.51(.627)	3.76(.620)	-2.95*
General-Esteem	3.33(.682)	3.53(.710)	-2.54*
Social-Esteem	3.46(.774)	3.85(.777)	-3.67***
Family-Esteem	3.65(.713)	3.55(.765)	1.21
Academic-Esteem	3.46(.680)	3.76(.698)	-3.80***

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

## IV. DISCUSSION

For adolescents in Korea, there are lots of difficulties in forming individuality and outward appearance due to the focus on examination in education, standardized education practices, and blindly following of figures in the media. This is particularly characteristic for adolescents due to the rapid physical changes during adolescence and the judgments they make towards their own bodies. Until now, the styling education in existence has not focused on styling according to body type or unique physical features.

This research study, however, provides a styling program for adolescents that takes an adolescent's uniqueness into consideration. The results of the research are as follows.

First, the styling education applied to the participants had a positive influence on outward appearance satisfaction as a whole. The post-test measurement came out higher than the pre-test measurement in outward satisfaction. This suggests that styling education has a positive impact on the formation of image and outward appearance satisfaction. Second, the styling education applied to the participants had a

positive influence on overall self-esteem. In particular, there was a positive influence in the sub-factors social-esteem, academic-esteem, and general-esteem.

Overall, this suggests the need for a systematic, styling education program in Korea.

The research suggestions for future research are as follows. First, the foundation of the styling education program needs to be further developed. This research used the input of styling specialists. Further research should use a more diverse set of specialists, and more variables should be taken into consideration. Second, input from the students' principal and teachers should be utilized. Currently, there are only 2-3 pages of information regarding styling fashion and image identity formation for middle school students in Korea, and there should be more information beyond basic design. There is little information regarding day to day styling, and this is unhelpful for students.

There is a need for a higher quality curriculum in regards to styling. Third, this research study focused exclusively on middle school students, and thus, the results are only applicable to the age group under observation.

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# THE INSTITUTIONALIZATION OF ROMA TEACHING ASSISTANTS IN THE CZECH REPUBLIC

Lucie CVIKLOVA  
Charles University, Czech Republic  
lucie.cviklova@yahoo.com

## ABSTRACT

It could be said that the current actions of teachers and psychologists in the Czech Republic are a continuation of previous socialist practices under which a number of Roma children were unjustifiably consigned to special schools for children with learning disabilities. On the other hand, representatives of the European Union appreciated the fact that the Ministry of Education in the Czech Republic developed policies such as mainstream education and state support for Roma teaching assistants (RTAs). The methodological approach of the contribution draws on various national and international statistics concerning responses to the introduction of RTAs into Czech elementary schools: the first programs started in 1993, expanded in 1998 and became the object of new regulations in 2000. First, the fieldwork investigated attitudes of non-Roma students at elite Czech secondary schools regarding the importance of RTAs by means of a structured questionnaire, and second, in-depth interviewing of RTAs at Czech elementary schools in Prague was carried out. Despite the fact that – given the methodology of snowballing – information drawn from the research is not representative, the attitudes of students at Czech secondary schools as well as interviews with RTAs have highlighted many sensitive issues related to the influence of RTAs in the Czech educational system.

## INTRODUCTION

Current forms of discriminatory practices concerning Roma pupils at Czech elementary schools can be partially explained by the reproduction of cultural as well as social patterns from the so-called socialist area. Under the socialist conditions, social policies toward Romani people were determined by assimilation policies with roots in communist ideologies and were characterized by the unjustifiable placement of a number of Roma children into special schools for children with learning disabilities. These discriminatory processes embedded in the lowest level of the Czechoslovakian educational system contributed to a growing social distance and lack of bridging capital on the side of the Czech majority and the Roma minority and eventually to the enhanced mechanisms of multi-generational exclusion persisting under the current capitalist conditions.

For example, even today one can find Czech conservative psychologists and experts who have approved and justified the use of a large number of special schools that were originally introduced for children with learning disabilities and till today have been predominantly used for Roma children (Komárek, 2009; Rádl, 2013). Despite these discriminatory mechanisms of the former real socialist regimes, the abandonment of egalitarian assimilation policies changed the perception of Roma pupils. Common European social policies focused on the elimination of discrimination and particularly the promotion of social inclusion gradually led to the institutionalization of assistance aimed at Roma pupils, not only in the Czech Republic but also in other countries of the European Union.

**Table 1:** Roma Children in Remedial Special Schools in Ostrava, Czech Republic

**Table 1:** Roma Children in Remedial Special Schools in Ostrava, Czech Republic

School	Total Student body	Roma Pupils	%
Kapitána Vajdy	193	31	16,6
U Haldy	166	27	16,26
Čkalovova	191	49	25,65
Na Vizině	190	110	57,89
Karasova	156	121	77,56
Těšínská	159	135	84,9
Ibsenova	136	128	94,11
Halasova	169	161	95,26
Total	1360	762	56,03

Integration to the European Union brought about legal disputes criticizing discriminatory practices concerning the exclusion of almost half of Roma children from mainstream elementary schools and complaints were adjudicated not only at the national level but also at the level of the European Court of Human Rights (Sobotka, 2004). These strategic litigations, together with reports by various national, European and international non-profit organizations (Amnesty International, the European Network against Racism, People in Need, etc.) were important elements that contributed to

new power interplays between the Council of Europe and the Czech Republic concerning discrimination in Czech elementary schools (Devroye, 2009, pp. 81-101).

The most important measure striving for the elimination of discriminatory practices against Roma pupils in elementary schools has been the gradual institutionalization of RTAs. This measure can be considered as one of the most important attempts to change the system of separate Roma schooling and in particular the enrolment of a large majority of Roma children in special schools for the intellectually disabled. In the Czech Republic, the first programs started in 1993, expanded in 1998 and became the object of regulations in 2000, as the result of criticism regarding the persistent segregation of Roma in the Czech school system raised not only by representatives of non-governmental organizations, but also by experts and teachers. Directors of Czech elementary schools are entitled to claim funds or reimbursement from the Ministry of Education, Youth and Sports of the Czech Republic. In fact, the tasks of RTAs have varied and they have depended on agreements made between the directors of schools and Roma teaching assistants; they might prepare various teaching materials, assist teachers in the classroom, or help Roma children with their homework in the afternoon (Calin, 2006).

## THE STUDY

The study draws on the knowledge of various experts arguing either for or against the institutionalization and positive impact of RTAs. From a broader perspective, RTAs can be seen as concrete types of intercultural mediators who are held responsible for the amelioration of communication between the majority and various minorities. For example, in various European countries intercultural mediators with a knowledge of respective languages work with refugee children and are usually funded either by national ministries of education or directly from the state budget: they play a part in schools at the teacher's request and usually deal with tasks such as translation, working with teachers in the classroom on a regular basis or giving support when new pupils arrive. Similarly to cultural mediators working with various minorities, Czech RTAs do not work only in school but also facilitate communication between the schools and Roma families and help to settle some situations involving cultural misunderstanding. The actions of the RTAs and the transformation of their competences during the last twenty years provoked various types of justification claims as well as criticism in Czech public and scientific discourses, which have been presented either in the media or in educational journals.

1. It has been argued that the introduction of RTAs can be considered to be an important measure that corresponds to European and Czech social policies aiming at inclusion as well as the integration of Romani people. This argument has been substantiated by official statistics which show that the proportion of Roma children in the Czech Republic regularly placed in special schools for children with special needs has been much higher than in other European countries (for example forty times higher than in Scandinavian countries).

2. The participation of RTAs in elementary schools can also reduce and eliminate the spread of non-systemic and spontaneous clustering of Roma children in so-called 'Gypsy classes' and Czechs in so-called 'Czech classes' that occur in individual elementary schools in various regions of the Czech Republic: this type of segregation has been common practice and initiated by Czech parents on the one hand, and either demanded or approved by the passive attitude of Roma parents on the other.

3. It has been argued that the help of RTAs is particularly important for Roma children entering the first grade of elementary school because of differences in the preschool education of Czech children and Roma children. Firstly, these differences might concern cultural values such as understanding authority, including the roles of teacher and student, and secondly, they might also apply to language skills relating to spoken ethnolects and thirdly, they are related to distinct worldviews and lifestyles related to conceptions of space, time and other phenomena.

4. Criticism of the placement of RTAs has been made by RTAs themselves, who are very often of Roma origin, and the argument can be elucidated by the metaphors of 'buffer' and 'coconut'. To put it more concretely, RTAs consider themselves 'buffers' between teachers and the school administration on the one hand, and Roma parents on the other. They have also complained that they have been labeled 'coconuts' in the sense that they are 'dark' on the surface but have internalized the cultural values of 'white' people.

5. In the media, individual citizens, as well as various collective entities such as associations or representatives of elementary schools, have argued about the responsibility for paying for RTAs and the dispute goes on. When advocating Roma inclusion and integration, various segments of the Czech public space have more or less justified the financial support of the Ministry of Education, Youth and Sports or the state budget. Nevertheless, the majority of pupils' parents were against coverage of RTAs by the schools themselves and they have argued by material needs such as the purchase of new computers, interactive boards, etc.

6. Educational specialists have pointed to the fact that the actions of RTAs in elementary schools could contribute to the long-term deterioration of relations between Roma pupils as well as their parents and Czech pupils and their parents. To

put it more concretely, RTAs' help being provided only for Roma children could provoke resentment and envy in the Czech pupils because of the exclusive or special service and could also bring about justification claims raised by Czech parents.

7. Educational specialists have been critical of the legislative measures concerning the institutionalization of RTAs that relate to their qualifications. According to Czech regulations, the educational requirement for RTAs is completed primary/elementary education (nine grades) and special training exclusively focused on the prospective work of RTAs in Czech elementary schools. The training takes place over ten days (eighty teaching hours altogether) and does not involve a comprehensive examination.

Data analyzed in the study are the results of original empirical research rooted in two distinct research strategies: for this reason the first sample aimed at finding attitudes of mainstream society towards RTAs and the second strove to identify the experience and opinions of the RTAs themselves. Given these research strategies, the first set of data concerning the attitudes of students to the RTAs was collected at elite Prague secondary schools and the second excerpts of in-depth interviewing of RTAs at several Prague elementary schools were listed according to relevant issues. Information drawn from a structured questionnaire that was distributed at elite Prague secondary schools was part of broader research into the discrimination of Romani people in the Czech educational system, understanding cultural differences between Czech and Romani people, comparative perspectives regarding ethnic stereotyping in the Czech Republic and in the United States, an assessment of European as well as Czech social policies related to Romani people, and many other issues.

## FINDINGS

Two hundred students in the second and third grades at the elite Prague secondary school were asked for their opinions on the introduction and actions of RTAs at those secondary schools that have been attended by a substantial proportion of Roma students. The answers of the majority of teenagers (17 to 18 years old) corresponded to the answers in the questionnaire that dealt with issues of discrimination and segregation in the Czech educational system.

**Table 2:** Opinion on Introduction and Actions of Roma Assistants

The role of RTAs is to assist subnormal Roma pupils in the classroom and help them to do their homework after classes. Do you agree with the fact that according to Czech laws administration of elementary school has right to claim reimbursement for Roma teaching assistants?

Answer	Yes	More Yes	No	I don't know	Non-Response
Males	16	24	54	6	0
Females	20	20	57	3	0
Total %	18	22	55,5	4,5	0

The role of RTAs is to assist 'subnormal' Roma pupils in the classroom and help them to do their homework after classes. Do you agree with the fact that according to Czech laws the administration of elementary schools have the right to claim reimbursement for Roma teaching assistants?

During semi-structured interviewing four male RTAs (RTA1, RTA2, RTA3, RTA4) and four female RTAs (RTA5, RTA6, RTA7, RTA8) with long-term experience of Roma as well as of non-Roma origin, were interviewed (Wax, 1985). This paper presents only one part of the many issues that were addressed on the basis of existing knowledge in the field (Stevens and Görgöz, 2010, pp. 1350 - 1371; Tajfel 1995): the role of RTAs and its importance for Roma pupils, difficulties in assisting Roma pupils, issues concerning mastering the Czech language, and the living conditions and family background of Roma children.

### The Role of RTAs and its Importance for Roma Pupils

RTAs reported that the success of the learning process depends on the attitudes of Roma pupils and their parents to education as well as on the strategies of conduct of the teachers and RTAs at Czech elementary schools: their way of teaching, their character, their way of expressing themselves, emotional attachment to the Roma pupils, etc. Most of the RTAs are convinced that their conduct has to be guided by a constant balance between two elements: a friendly approach and authority/respect.

'The administration of our school employs four assistants for Roma pupils and one for a pupil with autism. I think that

the most important thing is that RTAs understand the Romani mentality and don't think that Romani people are a homogenous group. I have read many books about the cultural aspects of various Roma communities. I think that the work of RTAs motivates and inspires Roma pupils to do better at school. One boy told me that he wanted to become a Roma teaching assistant and help Roma pupils' [RTA7].

'An RTA should play the role of friendly uncle who can be approached by his pupils anywhere and anytime. Sometimes they knock on the door of my office and ask anything: What are you doing here? Are you pretending to be a little gadjo? Sometimes they approach me on the street and talk to me. My former Roma pupils come back to show me their new-born babies' [RTA5].

'We are one big family and I make efforts to be the friend of my Roma pupils. At the beginning of the school-year, Roma children don't know that I am of Roma origin and one day I start to speak Romani language. They are usually amazed and ask me if I understand them. I usually respond: Yes, I understand very well what you are talking about. By this informal conversation we establish a friendship that is important for mutual communication. Sometimes kids in the fourth or fifth grades come up and announce: We don't have money for snacks. So I give them money and they go to buy their sandwich. The following day they usually repay the money' [RTA1].

'I think I have a friendly relationship with my Roma pupils and Roma girls often come to me: I need this or I need that. Sometimes they are critical of this or that teacher and ask for help: Please tell her to let me be...she starts to pick on me' [RTA4].

'I maintain good relationships with my Roma pupils and I try hard so that they see me this way. Every day they come to see me for advice or for a chat. I think that authority and friendly behavior are crucial for good communication between RTAs and Roma pupils. I am not sure that this principle always works out but in most situations they consider me to be their friend. I don't teach them only one year and thus after several years of everyday contact we sometimes even touch each other or they grasp both my hands. The mutual relationship is constituted and fostered for years and finally they treat you as their nearest and dearest, as part of their family. They simply trust you and sometimes they confide in you things that you don't want to hear at all' [RTA2].

'I think RTAs should be prepared for the sensibility and temperament of Czech and Roma children being substantially different. I remember one little Roma boy who used to sit on my knee every break and we chatted. This does not happen at 'white' schools. Despite the fact that individual temperaments might differ, in general Roma children are more temperamental, more violent and more spontaneous. Of course they sense if you really like them and take them seriously' [RTA3].

### **Difficulties in Assisting Roma Pupils**

Most RTAs complained about the frequent absences of Roma pupils which can be explained by their upbringing in Roma families, and in many cases these families can be characterized as suffering such attributes as non-stimulating environments and social exclusion. They have also pointed to the fact that attempts to minimize the high absences of Roma pupils creates additional work for teachers, street workers and specialists in pedagogical and psychological counseling centers.

'I think that frequent absences of Roma pupils have been the most important issue. Roma children usually don't have a medical examination and only talk about their pains. For this reason I sometimes assume that they have either psychosomatic symptoms or are putting on their sufferings. Regardless of my hypotheses, other teachers as well as our headmaster think that excessive absences of Roma pupils are a serious problem that should be changed. Together with teachers, we keep records of all absences as well as of missed topics and give special homework to those Roma pupils who have been absent over a long period. Together with teachers we also try hard to explain missed topics to every individual child and this is particularly very demanding: every child has individual requirements since they are absent on different days' [RTA3].

'The school administration and teachers should prevent a common practice, according to which written excuses are elaborated by physicians only fourteen days after the child is back at school. Sometimes it comes out that the physician had never seen the child and was approached by the parent, who was threatening him. And in the spring and in the summer when it is warm, Roma parents don't send children to school. They go with them to have a swim at the outdoor swimming pool or they hang out in the streets. From what I have told you about the circumstances of the absences of Roma pupils, you can see the complexity of the problem' [RTA6].

'Every child of Roma as well as of non-Roma origin has some special educational needs that can be diagnosed either at our school or at a pedagogical and psychological counseling centre. In comparison to Czech pupils, the results of psychological tests given to Roma pupils are below-average and these second-rate scores are very often explained by attention deficit disorders and by concentration deficit disorders. At our school we have also Roma children with borderline personality disorders, behavioral disorders and social disadvantages. The success of the learning process is also complicated by our Roma pupils who attend school on the basis of individual study plans given to them as the result of some psychological disorder or on the basis of some medical recommendation. In addition, we have also to

assist pregnant Roma pupils and Roma pupils with high-risk pregnancies who don't regularly attend school, or Roma pupils on maternity leave...' [RTA2].

'I think that troubles with Roma pupils result from the fact that the lifestyle of their relatives, as well as the broader community, is very often characterized by pathological features such as drug addiction, gambling addiction, etc. In many Roma families and communities you can find druggies, with their disposable needles, and at the same time Roma children living with them. Czech pupils on average have experience of smoking cigarettes as well as of using crystal meth when they are sixteen and Roma ones on average have a similar experience when they are only thirteen. Sometimes we are even suspicious that the parents of our Roma pupils are cocaine or heroin addicts' [RTA1].

'I don't agree with the attitudes of those Roma parents who don't come to regular parent-teacher meetings organized by our school administration. They are not interested in periodical information regarding the performance of their children and present themselves once or only occasionally on the basis of a notice or at the end of the school year just before the issue of the certificate. Roma parents mostly come to those parent-teacher meetings that concern small children in the first stage and very rarely can be seen at those that are organized for their children who have been enrolled in the second stage' [RTA8].

'Roma parents have their own mentality and don't attach big importance to the school attendance of their youngsters. On the other hand, Roma kids accept their parents' demand that a common family lunch is more important than to be in class. 'White' parents regularly buy pencil cases and other school supplies for their children; they help them with their homework and remind their children to behave in a responsible way. If the parents of Roma children don't open their exercise-book and don't ask about what was going on at school, kids are not interested in thinking about school any more. If Roma parents paid attention to school matters at home, it could be much easier to work with Roma children at school. But under the condition of the parents' indifferent approach, the Roma child does not care whether the teacher reproaches him or not. In addition, when a Roma child doesn't want to go to school, his parents don't insist on the fulfillment of their obligation and let him stay at home' [RTA4].

### **Issues Concerning Mastering the Czech Language**

RTAs have more or less agreed with specialists in the field that the command of the Czech language of Roma pupils is not satisfactory and that the majority of them have problems with reading, comprehension and formal speech (Eckert, 2014, pp. 80 - 96). Therefore, not only teachers but also RTAs at elementary schools with a large percentage of Roma pupils should pay special attention to making themselves understood in the classroom.

'In the first grade a substantial number of Roma pupils don't cope with the foundations of the Czech language. Sometimes they are capable of reading one sentence properly, but they don't understand its content. They don't have anybody in their family or their broader social environment who can speak standard Czech, they simply don't hear it at home. On other hand, they understand me because I speak in a way they can deal with. Sometimes I say something they don't understand but it happens very seldom. They have serious problems with formal language and this is the issue...' [RTA5].

'Given the situation, I usually lend them one book and they can take it home. Sometimes I lend one copy to the whole group. Reading and comprehension has always been difficult for Roma pupils at our school and therefore I try hard to convince them that they should read newspapers and books at home. Qualified RTAs should be able to speak in a way Roma children understand and they should also be able to check the degree of Roma pupils' comprehension. Experienced RTAs also pay special attention to assigning written exams: it is absolutely necessary to explain what the assignment is about and what they require from their pupils. One cannot check the knowledge of the Czech language or of any other subject if Roma pupils don't understand the task and don't know what to do' [RTA4].

'After more than ten years' experience, I think that the difficulty for Roma pupils in mastering the Czech language is caused by the nature of speech at home. In many Roma families parents and children speak Romani as well as Czech. Moreover, I am convinced that in most families, the parents of my pupils talk Romani to their children. Sometimes when I stand in front of the school and smoke I can hear the mothers of my Roma pupils speaking Romani among themselves' [RTA7].

'There are differences, or at least distinctions, concerning knowledge of the Czech language among the Roma kids I used to assist. Familiarity with the Czech language depends on whether the children speak or don't speak Romani at home' [RTA2].

'The vocabulary of most of my Roma students lags behind and their grammar is bad. The situation can be ascribed to their parents' literacy: Roma parents' vocabulary is limited and they don't practice reading with their children at home. Nevertheless, in the majority of cases, Roma children can make themselves understood. To solve these issues we have organized catch-up classes at our school and I am held responsible for the third grade. We regularly read fairy tales together and in most cases Roma pupils have difficulties repeating them in their own words. Sometimes I have to speak Romani so that they understand the main points of the fairy tale' [RTA3].

'Sometimes it happens that some Roma schoolchildren are a hundred per cent sure that they speak Romani but they don't. In fact, they have got only an accent characteristic of the Romani language but they don't speak it' [RTA8].

'I have found out that a distinctive local Romani language is lacking and only a few Roma pupils can speak it. Most of them more or less use isolated Romani words but they don't construct whole sentences and don't speak Romani fluently. Sometimes children in my classes use some Romani phrase but they don't regularly chat in it. When I heard them tell one another off in Romani I told them that I understood them' [RTA1].

'According to my experience, the generation of my Roma pupils don't speak proper Romani and their manner of speech has been influenced by an influx of Czech words. When I listen to them I can identify an incomprehensible mixture of Czech and Romani words. I think that they have a rich passive Romani vocabulary and understand what their parents tell them at home but their active vocabulary has been marked by a mixing of a substantial amount of Czech words into the Romani language... My Vlach-Roma pupils have been exceptional cases since they have kept a good knowledge of their Vlach-Romani. They have been capable of distinguishing between their mother tongue (Vlach-Romani) and Czech. In the first grade of elementary school, all Vlach-Roma children have had problems with the Czech language since they have not known how to decline and conjugate, they have not had any Czech vocabulary, etc. They have simply not known anything...' [RTA6].

### **The Living Conditions and Family Background of Roma Children**

Almost all the RTAs were critical of the living conditions of their Roma pupils and they commented upon their components such as lifestyle, the financial security of the family and living standards: almost all of them were of the opinion that Roma pupils don't grow up in appropriate living conditions that could guarantee their healthy and natural development.

'When I visited the Roma family I saw many housing problems. First, eight people lived in a one-room apartment, second, electrical outlets were not working, third hot water was not running, fourth...' [RTA4].

'I think most of my Roma pupils don't have satisfactory living conditions at all. Many Roma pupils at our school have to stay with their parents in rooming houses where ten people live in one room and so it is clear that they cannot do their homework and that their living conditions are terrible...' [RTA7].

'I used to teach a little Roma boy who was always dirty and stank. Every Roma pupil who goes to our school has different living conditions and family background, some cannot even sleep at night and so we let them catch up on their sleep at school' [RTA1].

'I met one Roma girl who had living conditions that were comparable to those in 'white' families: homemade meals, clean dishes and bedding, she always had clean hair, etc.' [RTA2].

'Not all the families of the Roma pupils I used to assist at the many elementary schools where I was employed were poor or had housing problems. In some of the families of my Roma pupils the children had individual rooms and a high living standard. It depends on the family...' [RTA6].

'I think the school attendance of my Roma pupils has also depended on the whether their parents had money or not. If Roma parents don't have money for snacks they don't send their children to school. They send them only when they are paid or when they receive social benefits and on those days Roma children come to school with big snacks...' [RTA8].

'Roma kids don't go to school if their parents don't have money. Last year I used to assist three Roma brothers who never participated in sports or other school activities where parents had to financially contribute' [RTA3].

### **CONCLUSIONS**

The interpretation of data about students' perspectives at elite Prague secondary schools and interviewing RTAs has demonstrated substantial cleavages of awareness regarding the justification of RTAs actions by these two distinct groups of respondents. Most of the Czech female as well as male teenagers not only consider the introduction and activities of RTAs unnecessary but are also in favor of the segregation of Romani people in education and housing, tightening regulations concerning social benefits, etc. The RTAs themselves did not call into question the legitimacy of their profession and rather spoke about concrete items concerning the improvement of their working conditions.

Students' answers to the question on the source of their knowledge about Romani people related to subjects that were taught at their secondary school revealed that substantial support of racism and discriminatory mechanisms can be ascribed to a lack of appropriate intercultural education: 34% of students learnt about Romani people in history lessons, 22% in Czech language and literature lessons, 26% in Civics lessons (where intercultural communication is taught) and 18% in geography lessons.



Most RTAs are convinced that the success of their role and activities is mainly conditioned by familiarity with Roma culture, mentality and history as well as by a friendly approach and informal communication, including touching Roma children. Difficulties assisting Roma pupils are ascribed to their unexcused absences and thus the necessity of additional tutoring, the low performance of Roma pupils, attention deficit disorder, concentration deficit disorder, personality deficit disorder and other psychological malfunctions. The RTAs also mentioned the special education needs of pregnant Roma women, pathological features of their pupils' families, absences of Roma parents from regular parent-teacher meetings and other issues. According to the RTAs, the mastering of the Czech language by Roma pupils has been flawed because of an insufficient level of reading and comprehension, the lack of reading habits of Roma parents and their low literacy as well as the spoken ethnolects resulting from an influx of Czech words into the Romani language.

What were the suggestions of the RTAs - who, together with teachers, street workers and specialists at pedagogical and psychological counseling centers, are crucial insiders concerning Roma in the Czech educational system - for remedies regarding the fruitful integration of Roma pupils in the first and second stages of Czech elementary schools? Most of the RTAs were convinced that the problems and difficulties in assisting Roma pupils could be improved by the introduction of useful elements in Czech social policies: some referred to the Slovakian model where the allocation of social benefits is conditional on school attendance, most of them called for a reduction in the number of pupils in classes with a substantial number of Roma pupils, the necessity of ending the social exclusion and unemployment of the Roma population in the Czech Republic as well as the introduction of compulsory preschool education and preparatory classes for Roma children and, finally, the spreading of information about their professional mission in the national media.

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## THE INVESTIGATION OF DANGER PERCEPTIONS AND ANXIETY LEVELS OF ELECTRIC-ELECTRONIC ENGINEERING STUDENTS IN HIGH VOLTAGE LABORATORY ENVIRONMENT

**İbrahim GÜNEŞ**

Istanbul University, Engineering Faculty, Department of Electric-Electronic Engineering, Istanbul, Turkey  
gunesi@istanbul.edu.tr

**Zeliha ÖZSOY-GÜNEŞ**

Istanbul University, Hasan Ali Yücel Faculty of Education, Department of Science Education, Istanbul, Turkey  
ozsoyz@istanbul.edu.tr

### ABSTRACT

Laboratories are active learning environments where knowledge is formed with generalization. These environments enable us to gain designation, production, analyzing and testing skills and to solve the problems encountered. Emotional and social factors are affective as much as cognitive factors in learning. The most important factors among the affective determinants influencing student success in laboratory are attitude and anxiety. High level of anxiety result in disturbance of the individual, problem with focusing and less permanence of the acquired information. With this study were aimed the investigation of danger perceptions and anxiety levels of Electric-Electronic Engineering students in High Voltage Laboratory environment. This research is designed as relational scanning model. The samples of the study comprised 113 students from Electric-Electronic Engineering in Engineering Faculty. In the study; “High Voltage Laboratory Anxiety Scale” with three factors which is developed by Güneş and Özsoy-Güneş (2015) is used as tool of data collection. In order to analyze the data, SPSS 16.00, ANOVA, independent T-Test, Post-Hoc tests are used. As a result of the analysis of data; students were found to be aware of the dangers in the laboratory. It was determined that the student was a significant relationship between the level of anxiety with awareness.

**Keywords:** High voltage laboratory, Laboratory anxiety, Laboratory safety, Danger perceptions

## INTRODUCTION

Anxiety is a term that refers to feelings such as discomfort, wincing and unrest without a specific reason (İnanç, 1997). Anxiety is a universal feeling and experience students have just as many other people (Aral & Başar, 1998). There is a close relation between anxiety that affects all vital activities and learning. Even though the quality of this relationship is not known clearly, it is accepted that a certain level of anxiety is necessary for learning (Cüceloğlu, 1996).

Although there are cognitive, affective and kinaesthetic dimensions of learning, studies show that learning is generally limited with the cognitive dimension (Mintzes, Wandersee & Novak, 1998). However, besides social and emotional traits that affect learning, effects of positive and negative attitudes, students' requirements, interests, expectations and motivation shouldn't be disregarded. Among such negative feelings, anxiety plays an important role (Laukenmann vd, 2003).

Even though a certain amount of anxiety is helpful for learning, excess of anxiety is not convenient for learning, and so it is claimed to prevent learning. In high levels of anxiety, an individual loses its capability of abstract thinking, mental flexibility and fluidity. On the other hand, lack of anxiety may affect learning negatively as well (Baymur, 1994). So besides high level of anxiety, lack of anxiety can be regarded as a negative effect on an individual's academic performance (Okur & Bahar, 2010).

The success of the students in a laboratory environment is in connection with the positive behavior changes intended for the lessons Bloom et al. (Schibeci, 1983), stated that these behavioral changes occur in cognitive, psychomotor and affective fields. Therefore, laboratory learning includes affective factors like attitude, interest, anxiety besides cognitive and psychomotor factors (Demirbaş & Yağbasan, 2004; Yeşilkayalı, 1996). The most important factors among the affective determinants influencing student success in laboratory are attitude and anxiety. The study shows that the students with the higher anxiety have lower success.

People, throughout their lives, are concerned about various subjects and fields. The higher the level of anxiety in any subject is, the less successful the individual is at that subject. For all students who study at vocational schools, to be brought up as healthy, knowledgeable, and successful individuals, the anxieties regarding their occupations must be defined and the negativities must be minimized (Geoffrey & Behets, 1999).

## OBJECTIVE OF THE RESEARCH

With this study were aimed the investigation of anxiety levels and **opinions about High Voltage Laboratory safety** of Electric-Electronic Engineering.

## SUB PROBLEMS

1. What are the anxiety levels of students towards High Voltage Laboratory?
2. How do the anxiety levels of students towards High Voltage Laboratory vary according to the varieties of gender and age?
3. What are the opinions of students about High Voltage Laboratory safety?
4. Is there a connection between the anxiety levels and the opinions about laboratory safety of students?

## METHOD OF THE RESEARCH

In this study, quantitative research method and relational screening model has been used.

**Model of the Research:** Research model is relational screening. In this relational screening model in order to reach certain aims, the relation between special events are tried to be explained and the existence or the level of covariance between two or more variances are tried to be determined (Cohen, Manion and Morrison, 2000; Karasar, 2008).

**Sample of the Research:** The sample of this study is formed by 15 (13,3%) female and 98 (86,7%) male, a total of 113 senior students who have taken high voltage laboratory course of Electric- Electronic Engineering. The age range is between 20-27.

## DATA COLLECTION INSTRUMENTS

For research a two fold form has been created. In the first part, students were asked about their gender, age and to what extend they know about the effects of the equipment used in the laboratory on human health and what they know about the hazards within the laboratory environment. In the second part, "High Voltage Laboratory Anxiety Scale" developed by Güneş & Özsoy-Güneş (2015) was applied to the students in the survey to determine the anxiety levels.

### High Voltage Laboratory Anxiety (HVLA) Scale:

In the study; "High Voltage Laboratory Anxiety Scale" developed by Güneş & Özsoy-Güneş (2015) in order to measure the anxiety levels of students towards High Voltage Laboratory was used as the data collection tool. The scale is five-point Likert type. The Located 14 items in the scale are consisted from expressions supporting anxiety. The response range of the scale is from: "definitely disagree" (1); "disagree" (2); "uncertain" (3); "agree" (4); "completely agree" (5). High scores from factors of scale are indicating high anxiety and low scores are for low anxiety. The scale consists 3 factors. These factors are defined as; 1. Work and use of materials in the laboratory, 2.

Collaboration and data recording, 3. Time management. The first factor is made up of 6 items (1,4,5,8,12,173, the second factor of 5 (2,6,9,10,14) and the third of 3 (3,7,11). Cronbach reliability for the whole of the scale was found 0,887, related to first, second and third factors as 0,852, 0,856 and 0,698. The minimum and the maximum score that can be taken; from the total scale are between 14-70 points. After dividing the number of questions, the factor scores were multiplied by 10. In this way, the lowest value 10, and the highest value 50 standard scores are obtained.

### EVALUATION OF THE DATA

In this research, whether the data obtained displays normal distribution or not is understood by looking at Kolmogorov-Smirnov and Shapiro Wilk tests. When the number of data is less than 29, Shapiro Wilk test is used and when the number of data is over 29 or larger, Kolmogorov-Smirnov (Lilliefors) test is used (Kalaycı, 2010). In order to determine whether the data displays normal distribution or not, "One Group Kolmogorov- Smirnov Test" test has been applied to the data collected by the scale. The values attained is; the "High Voltage Laboratory Anxiety (HVLA) Scale" ( $Z=0,969$ ,  $p>,05$ ). All collected data have normal distribution with regards to all variables. SPSS 16.00 is used to analyze the data. One-way ANOVA, independent T-Test and Post-Hoc test techniques have been conducted to monitor the scores taken from the scale and factors in terms of demographic and other varieties. In all statistical processes significance at a level of ,05 has been sought.

### FINDINGS

The research findings are evaluated in the context of problems.

**Problem 1.** What are the anxiety levels of students towards High Voltage Laboratory?

The sample of this study is formed by 113 students from Electric- Electronic Engineering. The minimum and the maximum score that can be taken; from the total scale are between 14-70 points, from all factors are between 10-50. In this study, the taken total scale score was calculated as 27,0531. When scale factors are evaluated, it was found that students scored the highest in "Work and use of materials in the laboratory" factor, also they scored lowest in "Collaboration and data recording" (Table 1).

**Table 1.** The anxiety levels of students towards High Voltage Laboratory

Scale and Factors		X	SD	SE
Factors	Work and use of materials in the laboratory	21,4749	7,62707	.71749
	Collaboration and data recording	17,2035	6,80094	.63978
	Time management	18,5546	7,24947	.68197
Scale Total Score		27.0531	8,46088	.79593

**Problem 2.** How do the anxiety levels of students towards High Voltage Laboratory vary according to the varieties of gender and age?

As in table 2, as a result of Mann Whitney-U test applied to define whether the scores taken from the scale and factors differentiate according to the gender variable; for "Collaboration and data recording" factor score the difference between the arithmetic average of the groups have been found statistically significant. Male students' score average is significantly higher than the female students ( $p<,05$ ).

**Table 2.** The results of Mann Whitney-U Test of the scores taken according to the gender variable of students.

Scale and Factors		Group	n	X	M.R.	S.R.	U	z	p
Factors	Work and use of materials in the laboratory	Male	98	21,5646	57,24	5609,50	711,500	-,199	.842
		Female	15	20,8889	55,43	831,50			
	Collaboration and data recording	Male	98	17,7143	59,38	5819,00	502,000	-2,01	.045
		Female	15	13,8667	41,47	622,00			
	Time management	Male	98	18,8095	58,16	5699,50	621,500	-,973	.330
		Female	15	16,8889	49,43	741,50			
Scale Total Score		Male	98	27.4388	58,43	5726,00	595,000	-1,19	,236
		Female	15	24.5333	47,67	715,00			

As a result of Kruskal Wallis Test which is done in order to determine whether the scores taken from the scale and factors show a significant difference according to the age variable; the difference between the arithmetic average of the group has been found to be insignificant statistically (Table 3).

**Table 3.** The results of Kruskal Wallis Test applied to define whether the scores differentiate according to the age variable of students.

Scale and Factors	Group	N	X	Mean Rank	Chi Square	df	p
<b>Factors</b>	21 and younger	17	19,1176	47,38	4,349	3	.226
	Work and use of materials in the laboratory	22 years	22,5000	61,07			
		23 years	23,1313	64,06			
		24 and older	20,2381	51,76			
	Total	113	21,4749				
	21 and younger	17	15,1765	46,56	3,341	3	.342
	Collaboration and data recording	22 years	16,5000	54,23			
		23 years	18,1818	63,36			
		24 and older	17,8286	58,29			
	Total	113	17,2035				
	21 and younger	17	17,6471	51,26	1,025	3	.795
	Time management	22 years	18,8095	58,68			
		23 years	18,9899	60,23			
		24 and older	18,3810	55,40			
	Total	113	18,5546				
<b>Scale Total Score</b>	21 and younger	17	24.3529	46,41	3,506	3	.320
	22 years	28	27.3929	58,23			
	23 years	33	28.6667	63,97			
	24 and older	35	26.5714	54,59			
	Total	113	27.0531				

**Problem 3.** What are the opinions of students about High Voltage Laboratory safety?

The students who participated in the research were asked to what extend they know about the effects of the equipment that are used in high voltage laboratories. 35,4% of the participants expressed that they knew quite a lot, 56,6% expressed that they fairly knew about them and 8% expressed that they didn't know about it (Table 4).

**Table 4.** The level of information about High Voltage Laboratory equipments

	F	P
<b>I know very well</b>	40	35,4
<b>I know partially</b>	64	56,6
<b>I do not know</b>	9	8,0
<b>Total</b>	113	100,0

The students who participated in the research were asked about their danger perception in the laboratory environment. 47,8% replied as "very dangerous", 33,6% slightly dangerous, and 18,6% replied as not dangerous (Table 5).

**Table 5.** The danger perceptions of students towards High Voltage Laboratory

	F	P
<b>Very dangerous</b>	54	47,8
<b>Less dangerous</b>	38	33,6
<b>Not dangerous</b>	21	18,6
<b>Total</b>	113	100,0

**Problem 4.** Is there a connection between the anxiety levels and the opinions about High Voltage Laboratory safety of students?

As seen in table 6 as a result of Kruskal Wallis Test which is done in order to determine whether the scale and factors show a significant difference according to the level of information about High Voltage Laboratory equipments; for scale total score and all factors score the difference between the arithmetic average of the group has been found statistically significant ( $p < .05$ ). Following this process Post-Hoc analysis techniques are started to be applied.

**Table 6.** The results of Kruskal Wallis Test applied to define whether the scores differentiate according to the level of information about High Voltage Laboratory equipments.

Scale and Factors	Group	N	X	Mean Rank	Chi Square	df	p
<b>Factors</b>	Work and use of materials in the laboratory	I know very well	40	16,7083	36,55	27,180	.000
		I know partially	64	23,4635	65,75		
		I do not know	9	28,5185	85,67		
		Total	113	21,4749			
	Collaboration and data recording	I know very well	40	13,0000	36,55	26,728	.000
		I know partially	64	18,9062	66,34		
		I do not know	9	23,7778	81,44		
		Total	113	17,2035			
	Time management	I know very well	40	16,6667	49,25	6,259	.044
		I know partially	64	19,0104	58,91		
		I do not know	9	23,7037	77,83		
		Total	113	18,5546			
<b>Scale Total Score</b>	I know very well	40	21,5250	34,75	31,167	2	.000
	I know partially	64	29,2344	66,90			
	I do not know	9	36,1111	85,50			
	Total	113	27,0531				

After Kruskal Wallis Test; to determine how changed in scale among sub-groups, considering the level information about laboratory equipments of students, Mann Whitney-U test has been conducted as post-hoc analysis techniques. As a result of this test it has been stated that, scores of students said that “I do not know” are significantly higher than scores of students said that “I know very well” and “I know partially” for scale total scores ( $U=43,500$ ,  $z=-3,532$ ;  $U=168,000$ ,  $z=-2,017$ ,  $p<.05$ ); scores of students said that “I know very well” are significantly lower than scores of students said that “I know partially” and “I do not know” for scale total scores ( $U=526,500$ ,  $z=-5,41$ ;  $U=43,500$ ,  $z=-3,532$ ,  $p<.05$ ), Work and use of materials in the laboratory factor scores ( $U=616,000$ ,  $z=-4,450$ ;  $U=26,000$ ,  $z=-4,007$ ,  $p<.05$ ) and Collaboration and data recording factor scores ( $U=586,000$ ,  $z=-4,734$ ;  $U=56,000$ ,  $z=-3,387$ ,  $p<.05$ ).

As seen in table 7 as a result of Kruskal Wallis Test which is done in order to determine whether the scale and factors show a significant difference according to the danger perceptions of students towards High Voltage Laboratory; for scale total score and all factors score the difference between the arithmetic average of the group has been found statistically significant ( $p<.05$ ). Following this process Post-Hoc analysis techniques are started to be applied.

**Table 7.** The results of Kruskal Wallis Test applied to define whether the scores differentiate according to the danger perceptions of students towards High Voltage Laboratory.

Scale and Factors	Group	N	X	Mean Rank	Chi Square	df	p
<b>Factors</b>	Work and use of materials in the laboratory	Very dangerous	54	24,7840	71,46	26,828	.000
		Less dangerous	38	20,3070	51,87		
		Not dangerous	21	15,0794	29,10		
		Total	113	21,4749			
	Collaboration and data recording	Very dangerous	54	19,3704	68,48	20,710	.000
		Less dangerous	38	17,0000	55,05		
		Not dangerous	21	12,0000	31,00		
		Total	113	17,2035			
	Time management	Very dangerous	54	20,6790	66,36	12,593	.002
		Less dangerous	38	17,8947	54,63		
		Not dangerous	21	14,2857	37,21		
		Total	113	18,5546			
<b>Scale Total Score</b>	Very dangerous	54	30,7593	72,10	31,406	2	.000
	Less dangerous	38	26,0526	52,88			
	Not dangerous	21	19,3333	25,62			

Total	113	27,0531
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After Kruskal Wallis Test; to determine how changed in scale among sub-groups, considering the danger perceptions of students towards High Voltage Laboratory of students, Mann Whitney-U test has been conducted as post-hoc analysis techniques. As a result of this test it has been stated that, scores of students said that “Not dangerous” are significantly lower than scores of students said that “Very dangerous” and “Less dangerous” for scale total scores ( $U=132,000$ ,  $z=-5,139$ ;  $U=175,000$ ,  $z=-3,555$ ,  $p<,05$ ) and all factor scores ( $U=167,500$ ,  $z=-4,728$ ,  $U=212,500$ ,  $z=-2,967$ ;  $U=192,500$ ,  $z=-4,499$ ,  $U=227,500$ ,  $z=-2,833$ ;  $U=278,000$ ,  $z=-3,451$ ,  $U=272,500$ ,  $z=-2,051$ ,  $p<,05$ ); scores of students said that “Very dangerous” are significantly higher than scores of students said that “Less dangerous” and “I do not know” for scale total scores ( $U=645,500$ ,  $z=-3,022$ ,  $p<,05$ ), Work and use of materials in the laboratory factor scores ( $U=644,500$ ,  $z=-3,034$ ,  $p<,05$ ) and Collaboration and data recording factor scores ( $U=780,500$ ,  $z=-1,968$ ,  $p<,05$ ).

## RESULTS

Learning is defined as the regulation of one's cognitive structure (Ausubel, 1968; Mintzes, Wandersee and Novak, 1998). Emotional and social factors are affective as much as cognitive factors in learning. The most important factors among the affective determinants influencing student success in laboratory are attitude and anxiety. High level of anxiety result in disturbance of the individual, problem with focusing and less permanence of the acquired information.

High voltage issues is a key area for Electric-Electronic Engineering, as it is important for all engineering fields. The awareness of the students while entering to these laboratories and applying the steps accordingly have a crucial part for the safety of many people. At this point; in order to observe if the students' anxiety in this fields; in other words to measure the anxiety levels of the students, considering the level of the anxiety in these high voltage transmission laboratories can have an effect on success.

The scores that can be taken from high voltage transmission laboratory anxiety scale (HVLA) range from 14 to 70. In study, the taken total scale score was calculated as 27,0531. Considering this result, it can be suggested that students have low level of anxiety towards laboratory. When scale factors are evaluated, the highest level of anxiety is seen in Work and use of materials in the laboratory factor while the levels are lower in time management, Collaboration and data recording. It is possible to say that students must spend more time in laboratory environment and must know the equipment used better and have more information about them (Kırbaşlar, Özsoy-Güneş, Deringöl, 2008). Abendroth and Friedman (1983) indicated that undergraduate students have anxiety towards working in laboratory. Erökten (2010) indicated that in the beginning students have anxiety towards the laboratory and as they do experimentations they have less anxiety towards chemical laboratory. In another study conducted by Anılan and et al.(2009), Science and Math teacher candidates were found to give conflicting answers to questions about using laboratory equipment and chemical substances, to feel more comfortable while working with other students, to feel no discomfort about data collection in laboratory environment, also not to feel quite anxious about time management in laboratory environment. In Berber's study (2013), teacher candidates expressed that they had the highest levels of anxiety while they were using the equipment in the laboratory environment and while drawing tables of the experiments. These studies coincide with our studies.

The results show that there is no significant difference in total scores of scale in terms of gender variable. This result suggest that students' anxiety levels are not affected by their gender. While this result is consisted with the results of a related study indicating no significant relationships between teacher candidates' gender and their anxiety towards chemistry laboratory (Kaya & Çetin, 2012), another study conducted by Jegede (2007) shows higher anxiety levels of female students towards learning chemistry. In terms of the factors of scale; male students' Collaboration and data recording score average is significantly higher than the female students ( $p<,05$ ). Anılan et. al. (2009) similarly have found in their study that, while a task makes males anxious, it doesn't make females anxious.

The results show that there is no significant difference in total scores of scale and factors in terms of age variable. These results suggest that students' anxiety levels are not affected by their age. Kaya and Çetin (2012) indicated not to have found a significant statistical difference between the students' anxiety towards chemical laboratory and grade variable.

The students who participated in the study were also asked to what extend they know about the effects of the equipment used in high voltage laboratory on human health. Most of the participants expressed that they partly know about the effects. The students were asked about their danger perception in high voltage laboratory environment as well. Most of the participants expressed that it was very dangerous.

It was studied to what extend students know about high voltage laboratory equipment effects on human health and how this situation affects their laboratory anxieties. As a result analysis which is done in order to determine whether the scale and factors show a significant difference according to the level of information about High Voltage

Laboratory equipments; for scale total score and all factors score the difference between the arithmetic average of the group has been found statistically significant. As a result of this test it has been stated that, scores of students said that “I do not know” are significantly higher than scores of students said that “I know very well” and “I know partially” for scale total scores; scores of students said that “I know very well” are significantly lower than scores of students said that “I know partially” and “I do not know” for scale total scores, Work and use of materials in the laboratory factor scores and Collaboration and data recording factor scores. As a result; it was established that students who know about the effects of laboratory equipment on human health have significantly less anxiety levels in the laboratory environment in general, about working in laboratory environment, using the equipment and working in co-operation. This results shows us that students’ knowledge about the effects of the equipment used in the laboratory on human health and methods to prevent potential hazards decreases their levels of anxiety. Some studies have shown that students don’t have adequate knowledge about laboratory safety (Karaca, Uluçınar, Cansaran, 2006; Karapantsios, Boutsou, Touloupoulou, Mavros, 2008; Kırbaşlar, Özsoy-Güneş, Derelioğlu, 2010). So, it is possible to say that, informing the students about laboratory practices before laboratory use will decrease the anxiety. Informing the students about laboratory safety will increase effectiveness of the studies, besides decreasing the anxiety towards the environment.

As a result of analysis which is done in order to determine whether the scale and factors show a significant difference according to the danger perceptions of students towards High Voltage Laboratory; for scale total score and all factors score the difference between the arithmetic average of the group has been found statistically significant. As a result of this test it has been stated that, scores of students said that “Not dangerous” are significantly lower than scores of students said that “Very dangerous” and “Less dangerous” for scale total scores and all factor scores; scores of students said that “Very dangerous” are significantly higher than scores of students said that “Less dangerous” and “I do not know” for scale total scores, Work and use of materials in the laboratory factor scores and Collaboration and data recording factor scores. To sum up; it was found that students’ awareness about laboratory environment dangers in high voltage laboratories, increases their levels of anxiety towards the laboratory environment, working in the laboratory, using the equipment and working co-operatively. This results shows us that making the working place safer will decrease anxiety levels. It can be said that, laboratory safety practices affect students’ danger perception about the laboratory environment, and increasing security measures affect learning in the laboratory positively.

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## THE INVESTIGATION OF ORGANIZATIONAL IMAGE PERCEPTIONS OF SIIRT UNIVERSITY STAFF IN TERMS OF SOME VARIABLES

Esef Hakan TOYTOK

Education Faculty, Department of Educational Sciences  
Siirt University, Türkiye  
hakantoytok@hotmail.com

### ABSTRACT

Universities are the key organizations that have importance on the development of societies and the world. The effectiveness of these organizations are very important in this manner. One of the most fundamental factors that determine the effectiveness of an organization is the staff of that organization. The literature related to the staff performance showed that organizational justice, organizational climate, organizational culture and mobbing have effect on staff performance. Another effective variable is organizational image which can be defined as an opinion about the organization constructed by public and the staff. This opinion is the combination of the decision (s) of managers at the top and the behavior (s) of the staff at the lower levels. The powerful the organizational image, the powerful the sense of belongings of staff. Because of this reason, The basic aim of this study is to determine the organizational image perceptions of Siirt University staff and then determine the results in terms of some independent variables like gender, hometown, job, service period. A quantitative research is conducted with descriptive survey model. The population of the study is all academic and administrative staff working in the Siirt University Kezer campus. The sampling procedure is not applied because population was accessible. At the end of the study, findings indicated that the most perceptible sub-dimension of organizational image was "management quality" and the least one was "organizational ethic". Additionally, there are statistically significant difference in general and some sub-dimensions of organizational image in terms of the variables of gender, hometown and job type.

**KEY WORDS:** Organization, Organizational Image, Quality, Staff

### INTRODUCTION

Image is an originally French word as stated in Turkish Language Organization dictionary. While "image" is used for the concept in French, "imaj" is used in daily life in Turkish. There are many definitions about the concept of image. When these definitions are investigated, most of them focuses on the effect and impression of the appearance of the structure an individual or group; also we can see some definitions with the sum of belief, attitude and value (Dichter, 1985; Davies, Chun, Silva ve Roper, 2003; Schultz, 2007; Şişman, 2002; Kurtuldu ve Keskin, 2002; Gürbüz, 2008). Organizations also have their own beliefs, values and norms. They construct the culture of an organization, and then organizational culture construct organizational identity that is the most fundamental issue identify organizational image. While Dutton and Dukerich'e (1991) define organizational image as the beliefs of individuals in and out of the organization about how they see and how they affect; Gray and Balmer (1998) describe as a picture in the mind of an individual. This created picture is a structure that was constructing depend on individual, group, environmental and regional factors.

All organizations have an image in individuals mind. However, this image may not be image of organization aimed on individual (s) mind (Roberts, 2005). If there is a similarity between perceived and aimed image, this shows the identity of this organization was constructed. The higher the image of an organization in this case the employees' performance and organizational culture, commitment, citizenship is also known to affect so much (Hatch & Schultz, 1997; Karabey & İşcan 2007). In addition to these, organizational image is also effective on job seekers (Cable & Kang Yang, 2006). So, organizational image effect both available staff and qualified new human resources. Bromley (2001) mention four dimension that describe organizational image as staff, humanitarian aspects of organization, normative language and organizational identity. Staff behaviors has a big power to effect the organization in both positively and negatively. Humanitarian aspects of an organization, another property, have also an important affect on the integration of individual and organization. Normative language is another indicator of organization's communication power. At last, organizational identity is the property of how to show itself.

As a conclusion, organizational image concept has a dynamic structure that always changing and developing. Organizations should change their negative images and develop positive images. In this way, organizations have an important acceleration while improving their objectives.

The aim of this study is to determine the organizational image perceptions of Siirt University staff and then determine the results in terms of some independent variables like gender, hometown, job, service period.

## METHODS

A quantitative research is conducted with descriptive survey model. The population of the study is all academic and administrative staff working in the Siirt University Kezer campus. The sampling procedure is not applied because population was accessible. The demographic properties of the participants were demonstrated in Table 1.

Table 1. Participants' Demographic Properties

	N	%
Gender		
Female	39	19,0
Male	156	80,0
Duty Type		
Administrative Personnel	104	53,3
Academic Personel	91	46,7
Year of Service at the University		
0-3 year	65	33,3
4-7 year	58	29,7
8- over the years	72	36,9
Age		
25 and under	21	10,8
26-35 betwen	118	60,5
36 and over	56	28,7
Hometown		
Siirt	72	36,4
Other	123	63,1
Total	195	100,0

Organizational image inventory, which was originally developed by Polat (2011) and including 7 factors and 35 items, was used as a data collection tool. The data were analyzed by R 3.2.4 (R Core Team, 2016) and SPSS 21,00 statistical packet program. During confirmatory factor analysis of the inventory for construct validity, (DFA reference) "lavaan" library version 0.5-20 described "cfa" function was used (Rosseel, 2012). The relevance of model and data was tested by using Chi-square (Hu and Bentler, 1999), Comparative Fit Index (CFI) (Byrne, 1998; Kline, 2011), Tucker-Lewis Index (TLI) and Root Mean Square of Approximation (RMSEA) (Byrne, 1998). At the end of the analysis, DFA value was found as .52 and above and Fit Index was found as .86 and above. According to the reliability analysis for the inventory, Cronbach's Alpha was found as .96. Additionally, Anova statistic was also used while analyzing the inventory (Satorra, & Bentler, 2001).

## RESULTS

The average and standard deviation values, which were related to the variable "organizational image", were demonstrated in Table 2.

Table 2. Average values of organizational image perceptions

Dimensions	$\bar{X}$	S.s.
Dimension 1 Quality of Service	2,65	0,78
Dimension 2 Quality Management	2,38	0,92
Dimension 3 Financial Soundness	2,80	0,82
Dimension 4 Working Environment	2,60	0,83
Dimension 5 Social Responsibility	2,48	0,85
Dimension 6 Emotional Attractiveness	2,58	0,86
Dimension 7 Corporate Ethics	2,87	0,85
General	2,61	0,85

According to Table 2, the average value of organizational image perceptions of Siirt University staff was found in the region of agree ( $\bar{X} = 2,61$ ). When the averages of sub-factors were evaluated, "management quality ( $\bar{X} = 2,38$ ), social responsibility ( $\bar{X} = 2,48$ ) and emotional appeal ( $\bar{X} = 2,58$ )" sub-factors were found in the region of mostly agree. Maximum value was found in organizational ethic sub-factor ( $\bar{X} = 2,87$ ) and minimum value in management quality sub-factor ( $\bar{X} = 2,38$ ).

Additionally, significant difference between Siirt university staff organizational image perceptions were searched with respect to gender. The data were presented in Table 3.

Table 3. Analysis results with respect to gender independent variable

Gender		N	$\bar{X}$	S.s.	F	t	p
General	Female	39	2,38	0,720	1,642	-2,103	.040*
	Male	156	2,67	0,769			
Quality of Service	Female	39	2,49	0,742	0,302	-1,450	.150
	Male	156	2,69	0,787			
Quality Management	Female	39	2,05	0,781	2,708	-2,529	.010**
	Male	156	2,46	0,938			
Financial Soundness	Female	39	2,70	0,882	0,556	-0,883	.380
	Male	156	2,83	0,802			
Working Environment	Female	39	2,25	0,811	0,004	-3,011	.000***
	Male	156	2,69	0,819			
Social Responsibility	Female	39	2,34	0,792	0,663	-1,161	.250
	Male	156	2,52	0,861			
Emotional Attractiveness	Female	39	2,33	0,844	0,123	-2,042	.040*
	Male	156	2,64	0,850			
Corporate Ethics	Female	39	2,67	0,806	0,978	-1,651	.100
	Male	156	2,92	0,862			

Note: Significant for \*  $p \leq .050$ , \*\*  $p \leq .010$  and \*\*\*  $p \leq .001$ .

According to Table 3, the significant differences were found in gender independent variable on general organizational image perceptions (for  $p \leq .050$ ), in a sub-dimension of management quality (for  $p \leq .010$ ), working environment (for  $p \leq .00$ ) and emotional appeal (for  $p \leq .050$ ).

Significant difference on Siirt university staff organizational image perceptions with respect to job type were searched and the data were demonstrated in Table 4.

Table 4. Analysis results with respect to job type dependent variable

Duty Type		N	$\bar{X}$	S.s.	F	t	p
General	Administrative Personnel	104	2,445	0,736	0,189	-3,33	.001***
	Academic Personel	91	2,802	0,759			
Quality of Service	Administrative Personnel	104	2,510	0,748	0,249	2,705	.007**
	Academic Personel	91	2,808	0,790			
Quality Management	Administrative Personnel	104	2,227	0,862	2,855	2,435	.016*
	Academic Personel	91	2,545	0,962			
Financial Soundness	Administrative Personnel	104	2,575	0,784	0,075	4,306	.000***
	Academic Personel	91	3,059	0,783			
Working Environment	Administrative Personnel	104	2,508	0,801	1,405	-1,61	.109
	Academic Personel	91	2,700	0,863			
Social Responsibility	Administrative Personnel	104	2,320	0,805	0,804	2,886	.004**
	Academic Personel	91	2,665	0,864			
Emotional Attractiveness	Administrative Personnel	104	2,389	0,851	0,325	3,338	.001**
	Academic Personel	91	2,789	0,814			
Corporate Ethics	Administrative Personnel	104	2,623	0,827	0,1	4,491	.000***
	Academic Personel	91	3,148	0,802			

Note: Significant for \*  $p \leq .050$ , \*\*  $p \leq .010$  and \*\*\*  $p \leq .001$ .

According to Table 4, due to staff job type independent variable, significant difference were found general organizational perceptions (for  $p \leq .001$ ), and in some sub-dimensions like service quality (for  $p \leq .010$ ), management quality (for  $p \leq .050$ ), financial soundness (for  $p \leq .001$ ), social responsibility (for  $p \leq .010$ ), emotional appeal (for  $p \leq .001$ ) and organizational ethic (for  $p \leq .001$ ).

Significant difference on Siirt university staff organizational image perceptions with respect to hometown were searched and the data were demonstrated in Table 5.

Table 5. Analysis results with respect to hometown dependent variable

Hometown		N	$\bar{X}$	S.s.	F	t	p
General	Siirt	72	2,76	0,755	0,000	2,070	.040*
	Other	123	2,53	0,762			
Quality of Service	Siirt	72	2,85	0,781	0,361	2,764	.006**
	Other	123	2,53	0,759			
Quality Management	Siirt	72	2,59	0,928	0,057	2,475	.014*
	Other	123	2,25	0,899			
Financial Soundness	Siirt	72	2,82	0,774	0,173	0,276	.783
	Other	123	2,79	0,846			
Working Environment	Siirt	72	2,76	0,845	0,062	2,043	.042*
	Other	123	2,51	0,817			
Social Responsibility	Siirt	72	2,59	0,856	0,326	1,338	.183
	Other	123	2,42	0,842			
Emotional Attractiveness	Siirt	72	2,73	0,802	0,853	1,966	.051
	Other	123	2,48	0,876			
Corporate Ethics	Siirt	72	2,98	0,862	0,065	1,437	.152
	Other	123	2,80	0,847			

Note: Significant for \*  $p \leq .050$ , \*\*  $p \leq .010$  and \*\*\*  $p \leq .001$ .

According to Table 5, due to staff hometown independent variable, significant difference were found general organizational perceptions (for  $p \leq .001$ ), and in some sub-dimensions like service quality (for  $p \leq .010$ ), management quality (for  $p \leq .050$ ) and working environment (for  $p \leq .050$ ).

## DISCUSSION

The findings of this study, which was aimed to investigate the organizational image perceptions of Siirt university staff, indicated that there was a significant difference on gender independent variable. When the reason of that difference was investigated, it was seen that organizational image perceptions of male staff was higher than female's one. Especially the highest sub-dimension of this significant difference was found on working environment. The reason of that may be the small number of female staff in organization and higher expectations of females from their organization. When job type independent variable was searched, a significant difference was found between academic and administrative staff in favor of academic one. Especially in financial soundness and organizational ethic sub-dimensions, the organizational image perceptions of academic staff was higher than administrative staff. Lastly, on the independent variable of hometown, the significant difference was found between the staff whose hometown is Siirt and out of Siirt. The staff whose hometown is Siirt has higher organizational image perceptions than the staff whose hometown is out of Siirt. In the studies related to the organizational image perceptions of other universities and organizations; Tezişçi (2013) determined the different university education faculty students' organizational image perceptions, the significant differences on gender, age, grade level and department were found. Cerit (2006) found similar results in his study. Polat (2011) found that in addition to these, organizational image perceptions of students significantly predict the academic achievement. In other two studies (Karabey & İçcan, 2007; Bal, 2011), the staff who found attractive the external organizational image, more strongly identified the organization and positively effect organizational citizenship behaviors. This effect is not only on the working staff, but also on the new job applicants of the organization Cable & Kang Yang (2006).

## CONCLUSION

As a results of the study findings, the level of organizational image perceptions of Siirt University staff is not high, especially it is low on the management quality image perceptions. Due to some independent variables, when the significant differences were searched, significant difference were found on gender, job type and hometown independent variables. In terms of gender variable, there was a significant difference on the favor of

males. It was seen that organizational image perceptions of females were less than males. The reason of that may be the small number of female staff in organization and higher expectations of females from their organization. When job type independent variable was searched, a significant difference was found between academic and administrative staff in favor of academic one. Especially in financial soundness and organizational ethic sub-dimensions, the organizational image perceptions of academic staff was higher than administrative staff. The reason of that difference may be the supplementary payment of academic staff named "academic promote", there is no such a payment for administrative staff. In addition to these, another reason of this difference may be caused from an idea that during administrative staff appointments and assignments there were no objective assessment. Lastly, on the independent variable of hometown, the significant difference was found between the staff whose hometown is Siirt and out of Siirt. The staff whose hometown is Siirt has higher organizational image perceptions than the staff whose hometown is out of Siirt. The reason of that difference may be the retain from criticizing their own institutions.

As a conclusion, the organizational image perceptions of Siirt university staff were not on the desired level, this may negatively effect the organizational culture, identity and quality. The higher the organizational image perceptions for both internal and external factors, the easier to reach the organizational aims. So, organizations should develop strategic plans to increase the organizational image perceptions, often control these plans and revise them if necessary. All administrators in management process have important responsibilities to accomplish these plans.

## RECOMENDATIONS

Researchers related to organizational image, by determining image perceptions of organizations, make some experimental studies to improve these perceptions and by using the results of these studies, may search the effects of it on quality, satisfaction and culture.

For practitioners, necessary awareness about the future benefits of organizational image should be gained by giving a positive organizational image perception creation ways education.

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## THE INVESTIGATION OF SPORTS MANAGERS' SELF-EFFICACY LEVELS OF SPORTSMEN MANAGEMENT AND SPORTS CLUBS

Serap Colak

School of Physical Education and Sport, Department of Sports Management  
Kocaeli University  
srpelk@gmail.com

Zekiye Başaran

School of Physical Education and Sport, Department of Sports Management  
Kocaeli University

Tuncay Colak

School of Physical Education and Sport, Department of Sports Management  
Kocaeli University

Elif Aksu

School of Physical Education and Sport, Department of Sports Management  
Kocaeli University

### ABSTRACT

The objective of this research, is to investigate self-efficacy beliefs of sports managers, worked actively in 2015, concerning sports clubs and sportsmen management. 96 male (age:  $43,10 \pm 9,512$ ) who have been working in a variety of sports organizations and clubs attended to this study. Participants' age, country of origin, level of education and sports branch being in-charge of were noted. Afterwards, sports club and sportsmen management self-efficacy belief scale which consist of 15 questions was applied to the participants. With regards to the statistics obtained from the answers of the participants to this scale, a significant difference was found in terms of level of education specifically concerning the answer given to question "*I believe that I have sports and sports club management skills that meet my needs.*" ( $p < 0,05$ ). In addition, according to the statistical findings of scale questions with respect to age of participants, a significant difference was found ( $p < 0,05$ ) in three out of fifteen questions whereas no such difference was found in the other twelve questions. In our study, specifically education status and age are concluded to be important in terms of sports club and sportsmen management self-efficacy levels. In the light of this information, an opinion will be held about self-efficacy concerning sports leadership of sports managers and new training methods will be acquired to improve self-efficacy belief in sports management.

### INTRODUCTION

Nowadays, new sectors are developing very quickly depending on the sports and sports areas. These developments in sports have intruded into our lives at all areas such as health, media and management. New employment opportunities have began to occur especially in the area of sports and sports management. Nowadays, sports management is being accepted as a profession. The requirements for sports management are: specialization in their own field, take the various specific duties and responsibilities, knowledge and skills to perform these attributes (Güçlü, 1996; Sunay and Çaycı, 2008; Yetim, 1991). Self-efficacy belief is first defined by Bandura (1977). According to the researchers, self-efficacy belief is defined as coping skill when person encountered a problem (Bandura, 1977; Schunk, 1991). Individual's self-efficacy is related to how well implemented the actions required to solve the problem when individual encountered with a problem (Colak, 2013). Thus, self-efficacy is the individual's ability to perform and achieve a work. Self-efficacy is a concept which developed in the field of social psychology and can be customized in different disciplines (Colak, 2013; Akkoyunlu and Orhan, 2003; Lev, 1997). According to the social cognitive theory; there is a strong correlation between individual's self-efficacy levels and their performance (Wood and Bandura, 1989). Individuals who have higher self-efficacy beliefs in many areas are observed to be more eager and successful in the activities which are related to these areas (Akkoyunlu and Orhan, 2003; Hill, 1987; Colak, 2013). We can better understand that self-efficacy beliefs of sports management are very important on sports and sportsmen success when we think about sports' important place in our lives. There are some studies in various areas which investigate whether individual's self-efficacy belief is related with age, education level and the other factors (Akkoyunlu and Orhan, 2003; Miura, 1987; Murphy, 1989). Furthermore, there are studies about self-efficacy belief of managers having different profession groups (Okutan and Kahveci, 2012; Öneren and Çiftçi, 2013). In these studies; a positive correlation has been reported between high self-efficacy belief scale values and decision-making and problem-solving parameters concerning management. There are no studies encountered on



self-efficacy belief levels of sports manager. It is essential to know self-efficacy belief levels of sports management of the individuals who will be liable for sports club and sportsmen management. Purpose of the study is to investigate -according to the literature- sports club and sportsmen management self-efficacy beliefs of sports managers who have been working in a variety of sports areas. In addition, to investigate whether there is a significant difference between Sports Management Self-Efficacy Belief (SMSEB) values and age, education levels and hometown.

## MATERIAL AND METHOD

96 male (age average:  $43,10 \pm 9,512$ ) who have been working in a variety of sports organizations and clubs attended this study. Research data were collected from data collection survey and sports management self-efficacy belief scale. The reliability of survey questionnaire depends on consistency of measuring, being repeatable and balanced (Erdoğan, 1998). Within this context, self-efficacies for sports managers were prepared as articles, which were asked to acknowledged professionals' opinion and is named as SMSEB scale and this scale has been made ready for the implementation. Besides, validity and reliability tests of this survey have been performed. Demographic informations of sports managers (age, hometown and educational levels) were obtained in this survey. Sports Management Self-Efficacy Belief Scale (SMSEB Scale) scale which is a 15 items survey measuring sports management self-efficacy of sports managers, was defined by researchers. Each question was ranked between 1 to 5 points (1: Never, 2: Bit, 3: partly, 4: often, 5: always) (Colak, 2013).

The data were analysed using the SPSS package (SPSS for Windows V15.0, SPSS Chicago IL, USA). The means and standard deviations of all the measurements were calculated. The differences between group means were determined using a non-parametric test for independent samples (Mann-Whitney U test). A  $p$  value of 0,05 was considered statistically significant (Colak, 2013).

## RESULTS

All of 96 participants are male. While 63 participants indicated their ages (age average:  $43,10 \pm 9,512$ ), 33 participants didn't.

**Table 1: SMSEB averages of sports managers according to the geographical regions.**

Regions	Frequency	Percent (%)	SMSEB $\pm$ SD
Marmara	78	81,3	47,86 $\pm$ 12,166
Black Sea	1	1	44,00
Mediterranean	1	1	53,00
Unspecified	16	16,7	44,25 $\pm$ 10,54

While 81.3% (n:78) of the research group Marmara, 1% (n:1) Black Sea, 1% (n:1) Mediterranean indicated their geographical region, 16,7% (n:16) did not (Table 1).

**Table 2: SMSEB averages of sports managers according to the educational levels.**

Education levels	Frequency	Percent (%)	SMSEB $\pm$ SD
University	15	15,6	47,40 $\pm$ 7,008
High School	20	20,8	48,00 $\pm$ 9,240
Middle School	1	1,0	31,00
Primary School	2	2,1	59,50 $\pm$ 3,536
Unspecified	58	60,4	46,84 $\pm$ 13,490

While 15,6% (n:15) of the research group university, 20,8% (n:20) high school, 1% (n:1) middle school, 2,1% (n:2) primary school indicated their educational levels, 60,4% (n:58) did not (Table 2).

According to the SMSEB scale statistics obtained from the answers of the participants, a significant difference was found in terms of level of education specifically concerning the answer given to question "*I believe that I have sports and sports club management skills that meet my needs.*" ( $p < 0,05$ ).

**Table 3: Comparison of the 30 years ↓ and 30 years ↑ sports managers according to the responses given to SMSEB scale questions.**

Questions	30 years ↓	30 years ↑	P value
1	3,40 $\pm$ 1,692	4,00 $\pm$ 1,307	<b>0,002</b>
2	4,13 $\pm$ 1,539	4,30 $\pm$ 1,439	0,424

3	3,00±1,536	3,57±1,399	0,708
4	3,30±1,285	3,04±1,279	0,664
5	2,63±1,675	2,36±1,542	0,384
6	3,15±1,688	2,82±1,674	0,665
7	2,68±1,559	2,46±1,334	0,177
8	3,55±1,694	3,38±1,567	0,290
9	2,20±1,305	2,38±1,472	0,183
10	1,77±1,366	2,14±1,667	<b>0,043</b>
11	3,33±1,542	3,79±1,398	0,256
12	2,10±1,374	2,27±1,601	<b>0,021</b>
13	3,45±1,663	3,57±1,594	0,669
14	3,65±1,424	3,68±1,503	0,612
15	3,13±1,505	3,91±1,456	0,839

1: I feel safe while managing sports club, 2:It makes me happy when I learn new things about sports or sports club management, 3: I try to solve problems that encountered while managing sports or sports club myself, 4: I think it is easy to study with sportsmen, 5: I feel forced when I need to learn something new about sports or sports club management, 6:If I am obliged to related my job I feel trouble, 7: I often have trouble while managing sports or sports club, 8: I'm afraid of making mistakes can not be corrected while managing sports or sports club, 9: Sports or sports club management are too complicated issue for me, 10:If not required I don't want to be a sports manager, 11: I would say I was a good sports or sports club manager, 12:I would have panic when I manage the sports or sports club, 14: I believe everyone can learn to manage sports or sports club if they are willing to learn, 15: I believe I have the ability to meet my needs of management sports or sports club, 16:When I encounter a problem while making sports manager I would absolutely take help from someone

When we divide the sports managers into two groups (30 years ↓ and 30 years ↑), there is a significant statistical difference was found ( $p < 0,05$ ) in the first, tenth and twelfth questions between two groups ( $p < 0,05$ ) (Table 3).

## DISCUSSION

Sports has a very important role in people's lives in terms of healthy living and competition. Nowadays success in sports branches even reflects even the level of development of countries. Sports, especially branches like football and basketball, is being followed by millions of people. A field of such interest has been attracting huge investments under the economic perspective. Recently sportsmen transfer prices are very high. Clubs employing these sportsmen have enormous budgets. Competent sports managers are required to be able to manage such enormous budgets of clubs or foundations. Self confidence of these sports managers with regards to management is very important. In the light of above, it is aimed to establish sports management self-efficacy beliefs of sports managers.

Management self-efficacy studies have been performed on also other fields which require managerial skills (Öneren and Çiftçi, 2013, Okutan and Kahveci, 2012). In these studies, positive correlations have been advised in-between managers' high self-efficacy beliefs scale values and substantial parameters for managerial skills like decision-making and problem-solving. At each step of management activity an important decision making process occurs (Öneren and Çiftçi, 2013). Successful and unsuccessful experiences of managers affect self-efficacy (Okutan and Kahveci, 2012). In the end, managerial skill is a characteristic that reflect knowledge, ability and self-confidence. On the other hand, self efficacy is not the abilities people have, but is the belief to know what to be succeeded by using these abilities. These beliefs affect their behaviours and performances (Bandura, 1977). Per our findings it can be said that a significant difference exists between age and educational status of managers who are active in sports management field, In this manner, having an educational background in the field of sports management will have an important contribution to self-efficacy belief of sports managers.

There are a lot of studies on education concerning self-efficacy belief levels (Ipek and Acuner, 2011, Zimmerman, 2000, Colak, 2013). As per some studies, self-efficacy is one of the basic concepts of social learning theory (Bandura, 1977, Bozdoğan and Öztürk, 2008). The ability to implement the required actions to be able to resolve a problem, come across throughout peoples' lives, shows self-efficacy level. Self-efficacy belief level which is an advanced concept in the field of Sociology, can be implemented in different fields at different disciplines. (Akkoyunlu and Orhan, 2003, Lev, 1997, Karsten and Roth, 1998). Many studies have been performed on self-efficacy belief in the field of different educational managers. (Hacıfazlıoğlu, 2011; Wheatley, 2006; Afshari, 2009; Razik and Swanson, 2010). Sports managers are required to be self-confident when managing clubs with enormous budgets and many sportsmen. Manager of a club with a good level of self-

efficacy belief will be successful at the position held. Starting from this point we wanted to investigate SMSEB levels of sports managers.

The increment of pressure and sanctions on sports fields, sports clubs and sportsmen increases the competition between sportsclubs and sportsmen and therefore encumbers new roles and responsibilities on sports managers. After the integration of sports management training to every field of the sports, a role of leadership has started to be expected from the sports managers. (Afshari, 2009; Sunay and Çaycı, 2008).

Managerial skills are necessary for the people having high self-efficacy belief levels with regards to their profession, Sports managers should be having high self-efficacy belief levels, self-confident and the ones who are capable of decision-making as well as problem solving for the issues concerning the club, sportsmen and other employees.

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## THE MEDIA AND SCHOOL – A TEAMMATE OR AN OPPONENT?

Marcela GÖTTLICHOVÁ  
Faculty of Multimedia Communications  
Tomas Bata University in Zlín  
Czech Republic  
gottlichova@fmk.utb.cz

### ABSTRACT

The world shaped by the media devaluating and marginalizing personal experience of an individual relativize certainties and this often reflects in an unintentional acceptance of prefabricated values. Artificial contexts with a "constructed" reality enter the real environment, and it is advertising that draws the individual into the world of illusions with the preference of the consumerist way of life. The aim of the study is to find the answer to what system of values is preferred by current adolescents, but particularly what is the role of the authority of the school in this matter.

**Keywords:** authority of the school, the media, advertisement, the system of values and priorities, adolescent generation

### 1 INTRODUCTION

As the title of the article reads, the increasingly necessary task of school, presented by the strengthening and increasing position of the media with the growing impact especially on the adolescents, is to be able to find the answer to the question mapping the contemporary poor state reflecting in the preference of authorities in continuity with the destruction of the significant socialization factors (family and **school**), and that is whether **the media and school represent teammates or opponents in the current world**. The relativization of certainties often reflecting in the involuntary acceptance of prefabricated values, devaluation and marginalizing of personal experience of individuals, the increasingly frequent penetration of artificial contexts with their "constructed" reality, all of this presents itself in full by means of the media-shaped world. It is the virtual reality that contributes to the loss of certainties with the reflection in the growing need for demand of reinventing certainties as well as searching for charismatic authorities capable of producing the definite and unambiguous answers to all questions that lead to the suppression of feelings of uncertainty and anxiety stemming from the ever-changing state of knowledge. The consequence is often a mechanical acceptance of precast values offering ready solutions without long-term contexts. (Gillernová et al., 2011) And it is then especially advertising that draws individuals into the world of illusions with the preference of consumerism values.

### 2 THE STUDY

#### 2.1 Problem Formulation

As we mentioned in the introduction, today's hyped world allowing children and adolescents far more autonomy than they could reach earlier, plays increasingly more significant role in their lives. On one hand, it opens up the access to new information, as well as to new symbols, interpretations, and lifestyles that go beyond possibilities which may be provided by parents and teachers, whose important role in the socialization process (particularly during "problematic" adolescent period) may be suppressed considerably. On the other hand, the media, however, represent an efficient instrument for manipulation with the psyche of the adolescents, whom they submit their own description of the world, in their form of prescription they even "prescribe" or subliminally "dictate" what is necessary to accept, how to behave. It is the strong manipulative power that allows the media to shape attitudes and opinions of individuals, to generate their systems of values and priorities, to influence their lifestyles, and thus to become an influential source of model behavior. The adolescents then accept as well as actively search for the ready-made media contents, and they choose based on their current developmental requirements; at the same time, however, together with the reflection of the social and cultural environment influence. The media may then in the truest sense function as socialization factors, especially in the role of a "technological educator and teacher", they become a part of a family environment. Thus the traditional authoritative model becomes broken, the influence of family and school is lessened, and these then become one of many sources utilized by (children and) adolescents in their socialization. Numerous experts deals with the media influence, specification of the media, the effect of the media functions and typologies, among the leading ones for instance by: McLuhan, M. (1991), Kunczik, M. (1995), DeFleur a Ballová-Rokeachová (1996), Potter (1998), Burton and Jiráček (2001), Jiráček and Köpplová (2003), McQuail,

D. (2009) and more.

## 2.2 Conceptual Framework

"Since the media offer communication in such large quantities, and so easily accessible, they inspire in us the impression that through them we see the world in all its diversity, and the more we are exposed to the effects of the media, the stronger we feel that we are in some superior position within which we may understand how the world works." (Potter, 1998, p. 38) The already mentioned loss of parental and school's authority becomes then the reflex of the state, which later reflects in the increasing socialization power of the media who become an important and in the current society inherent factor for the socialization process, i.e. the transformation of a human being into a social being, in the process of accepting and learning values, norms and behavioral ways usual and accepted for the particular society. Adults (parents, teachers, elderly generation) have been losing the ability to prevent the influence of unintended stimuli and information, neither to estimate their ultimate impact. It becomes typical for the contemporary society that the intentional aspects of socialization are weakened at the expense of enhancing functional aspects, whereas we may consider the media as the representative of functional effects. (Šed'ová, 2007) With the growing power of the media, as well as of advertising, the authorities respected and recognized by the history have been pushed to the background (Sak, 2000, Sak and Saková, 2005) and their significant roles have been gradually taken by ideals (models) presented by the media. (Vysekalová, 2012)

The previous lines clearly prove that the media (especially the mass media) and media communications (with the media or with the support of the media) are essential parts of the society. The individual typical features allow the media to present historically contingent forms of social (specifically the public) communications. "Here belong: a) potential physical and mental (intellectual) availability and real use of their production by the unlimited number of recipients; b) facilitating the availability through disposing of technical, organizational and distribution facilities (e.g. signal spreading along large and populated areas); c) a wide offer of contents generally comprehensive and with a versatile application (e.g. learning, confirmation of a political opinion, creating one's own outlook, etc.); and d) the continuity or regularity of the production that changes and the effort to update it or make it more attractive." (Bednařík, Jiráček, Köpplová, 2003, p. 16) The effect of the media must always be conceived in continuity with the three main aspects, namely: the state of society (e.g. the development of communication, the level of education, etc.), media development (in the context of the new communication technology), and the development of knowledge of the society and of thinking about it (depending on development of sociological and psychological knowledge). (Jiráček and Köpplová, 2003, p. 154)

"Intentional effects of the media on the recipients of the message is based on the principle of achieving a certain pre-set condition in the attitudes and behavior of the recipient in various areas of their private and public life by the form of persuasion, manipulation, and suggestion." (Jiráček and Köpplová, 2003, p. 176). The identical principle, i.e. achieving a certain desirable type of behavior based on various types of messages, including the media messages, is used also by advertising. In comparison with other communiqués, we may claim that the intentionality of advertising communication here is too far escalated, even that very frequently the messages are not hidden or covert (except for sc. subliminal advertising). The effort to persuade or influence recipients of the message to bring them to a targeted effect is not covert either. The discourse of advertising is conceived being the most mass as well as the most aggressive and manipulative discourse of the contemporary postmodern world. For it could become an efficient discourse, the key aim should be to get attention of a target group to a fictive reality or fact which it serves (the attention is involuntary), to hold interest by its realization (the attention is voluntary), to arouse desire to obtain the presented (emotional aspect; rational decision), but particularly to obtain action, i.e. to be obedient and get the product. (Čmejrková, 2000, p. 20-21) The individual phases of this processual procedure make the AIDA model established by (1898) E. St. Elmo Lewis at the end of the 19th century. "It is thus obvious that we are exposed to the permanent effect of advertising in our public as well as private lives, and we are influenced by it whether we like it or not." (Čmejrková, 2000, p. 9) Advertising has become one of the essential and inherent components of our being, it surrounds us everywhere, through the media it penetrates into our homes. Erazim Kohák sees in advertising "the most powerful educational influence for forming a human being in today's postmodern world." (Kohák, 2004, p. 60) For its audience, advertising constructs the entire lifestyle, new reality, illusory facts, full of perfect things (and people); it even sells these aspects to its audience. The fundamental effort is to pull the recipient out of the real world and to enforce them a new reality. "Advertising offers its recipients a possibility to identify themselves, it offers positions to be entered. Advertising pretends to be tailored for them, but in fact, it creates their identity. It models their identity by suggesting the recipients share common features with the subject of the fictitious advertised world." (Čmejrková, 2002, p. 206)

A characteristic feature of the current advertising is its connection with the daily life of an individual. "It is not some outside curiosity, from which we would be separated, which we observe from the distance or from above. We are a part of it and it is a part of us." (Cook, 1992, p. 182) Advertising addresses human needs and instincts, ideas about our own selves as well as about the world, it tries to arouse desire and new needs. Komárková, Rymeš and Vysekalová (1998) propound their own arrangements of the needs from the consumer's perspective. When alphabetically ordered, out of human needs the first place is taken by affiliation (to belong to other people, to feel admired, ...); the need for acquisition (to own and gather things); the need for altruism (to help others, to be assistant to them); the need to experiment (to try new things, discover new possibilities, ...); the need to help (to control one's own life, to control others, ...); the need for prestige (to be acknowledged, to be better than others, to elicit respect, envy in others, ...); and the physical needs (health, physical beauty, the need to experience gastronomical bliss, relax, ...). From the perspective of appeals, we may classify advertising (advertising slogans) in the direction aiming at pride, certainty and security, thriftiness, beauty, strength, standard, social status, self-concept, solidarity, lifestyle, good feeling, fantasy, entertainment, as well as at lust, greediness, envy, or tendency to laziness. Advertising does not represent only a mere message on products and services, but also a social-cultural message on ourselves. McLuhan (1991) is even convinced that advertisements will one day be used by historians and archaeologists as the richest and most credible sources of knowledge of the life of a particular society.

In terms of commercial advertising, "socialization of socially harmful values", which advertising can strive to earn, may sound controversial, as consumers are purposefully led to adopt value attitudes desirable for consumption that are largely useless, in extreme cases even harmful. At the same time, also the impact on "pausing maturation processes", when in a confrontation with Maslow's hierarchy of needs, advertising emphasizes merely the fundamental human needs and the higher needs of a matured person become suppressed into the background. Likewise is presenting prejudices and stereotypes, accentuating manipulation of an individual. (Vysekalová and Komárková, 2002, p. 44) "The most suitable target group in terms of advertising effects are adolescents aged 13 to 18, when the first consumer habits are formed which may gradually be profiled even into a loyalty to certain brands." (Vysekalová and Mikeš, 2007, p. 51)

Speaking about the development, adolescence is one of the "newest" periods of our lives, as due to the newly formed social conditions it creates a bridge between childhood and adulthood when an individual undergoes a complex transformation of their personality. The changes relate to interests, behavior, attitudes and opinions, value orientation, motivation, new objectives or the area of social relations. (Taxová, 1987, p. 59) It becomes the key period for the development of one's personality, an independent area of scientific research. This developmental phase is often referred to as the storm and stress period (Hall, 1907), which is determined by the three essential milestones: conflicts with parents, mood disruptions, and risk behavior: damaging own health (drugs, alcohol, smoking), sexual risk behavior; survival instincts disorders (anorexia, bulimia, etc.); endangering the outer social environment (bullying, aggression, racism, etc.). Langmeier and Krejčířová (2006, p. 164) specify problems of adolescents from four basic perspectives: 1. discrepancy between the physical and social maturity; 2. discrepancy between the social role and status; 3. discrepancy between the values of the young and elderly generations; and 4. discrepancy between the family and outer society values.

These are the values and value orientation that play significant roles in particular periods. They relate to moral, religious, economic, healthcare, and other principles, which we assign different significance. Value orientation may be considered as a constitutive component of personality, as a psychological consequence of the changes in the relationship between the personality and environment, as a generalized inner and outer consequence of behavior and actions of a person, as a determinant of a certain decision in the situation of a choice. (Vláčil, 1977, p. 74) It represents the system of values influencing behavior, actions and decisions of an individual. Kučerová (1996, p. 72) then classifies values into: a) natural (vital) and social; b) civilizational; and c) spiritual. Sak (2000, p. 78) extends the value differentiation in terms of value orientations into: a) materially-egocentric; b) oriented on occupational development; c) reproductive; d) global; e) liberal; f) socially value-oriented (pursuit of one's own identity in the times of adolescence), and hedonistic. The value hierarchy individually differs, modifies in the course of a lifetime, and forms. The beginnings of forming a value system may be primarily encountered within families, later the significant role is taken by the school. And here we come to the same problem again as we can observe an increasingly strong external manifestations, manifestations coming from the social environment, friends, mass media, ..., a currently growing influence of advertising. The decline in the importance of values, ideas and traditional norms reflects itself in the "exchange" of authorities of the elderly generation for authorities of contemporary adolescents, which better correspond with pragmatism and hedonism of the postmodern society, and whose typical

features are linked particularly to medialization, economic success, i.e. with the consumer's lifestyle and mass culture.

On the other hand, it is a change in attitudes and values, rather than an immediate economic profit, representing the primary objective, i.e. **social advertising (non-profit advertising)**. That means satisfying some higher social needs relating to a certain target group (the need to help others, to be eco-friendly in one's actions, to be attentive of the elderly, to respect road safety rules, to do sports actively, to maintain a rational diet, to strengthen the awareness of the national defence, to attend cultural institutions, to educate oneself, to act actively in prevention of criminality, to realize charitable events, to actively prevent getting AIDS, etc.). Social advertising follows the acceptance of a certain idea, thought or behavioral pattern. Its function is to raise awareness, to educate and instruct; its function is to bring up delicate social issues. The above-mentioned list shows that the important aspect leading to the efficient fulfilment of the social advertising mission is to mobilize the public through the media to reflect on or to solve a particular social issue. The role of a contracting party is more and more frequently played by non-profit non-governmental organizations. (Kotler, 1979) They attract their attention towards issues such as improved nutrition, anti-smoking, prevention of alcohol and drug abuse, safer driving, and a myriad of other causes. (Kotler and Zalman, 1970) When spreading their message with the objective to change behavior, the attention should be also paid to "the choice of a particularly suitable type of the communication media, and to a careful consideration of the pre-set criteria and their impacts on the target groups." (Juříková, 2014)

American Marketing Association (AMA) defines social advertising as "advertising created to **educate or motivate** target audiences to undertake and accept social issues (i.e. to undertake socially desirable actions)", with which it emphasizes its awareness-raising, educational and instructive function. (AMA) It is "a persuasive process through which human behavior should be influenced, which does not relate to providing utility (especially material) values" (Hajn, 2002, p. 258), i.e. acceptance of a specific thought, idea or behavioral pattern. It is here where an appropriate platform to address the adolescent population gets established, in connection with enhancing the declining authority of the school.

### 2.3 Problem Solution

As shown by the previous lines, the destruction of the authority of the two most influential socialization factors (i.e. family and school) is one of the significant characteristic features of today, in continuity with the growing influence of the media (or advertising) reflecting in the setting of the system of values of the current youth. The aim of the study is to find answers not only to the question of what value system is preferred by the contemporary adolescents but particularly to what role is played by the authority of the school and at the same time whether advertising (the media) and school represent (or may represent) teammates or opponents. For this purpose, at the beginning of 2016, a large quantitative survey was carried out. The survey had a questionnaire form (153 open, semi-closed and closed questions) with the direct participation of the survey implementers and teachers of the appropriate study subject, i.e. social sciences. 27 secondary schools (SS) in 9 Czech regions (Northern Moravia, Southern Moravia, the Olomouc Region, the Zlín Region, Central Bohemia, The Hradec Králové Region, the Region of Vysočina, Prague) participated in the research survey. In total they were 1080 adolescents, i.e. 3 secondary school grades: vocational or technical SS - municipalities 360, countryside 360; grammar schools - 360 respondents; 561 girls + 519 boys. The methodology of the system of values and preferences worked with the battery of values, which the respondents assigned their comments with the use of a five-point scale, where point 1 corresponded to the value with the least importance, point 5 corresponded to the value with the greatest importance. For each value, indices were calculated as weighted arithmetic means based on the frequency, and a table was established based on the indices sizes.

### FINDINGS

With respect to the objectives of the study, the attention is focused on the presentation of the resulting values of the survey leading to the achievement of the objectives set.

As indicated in the following table (Table 1), the value marked health ranked first in students. In spite of the fact that the results show that adolescents realize that without health the other values would be pointless (N=1.074: 1/786, 2/153, 3/77, 4/19, 5/39), however, not always the same opinion prevails in the everyday reality (e.g. occasional experience with alcohol/smoking in 570/264 respondents, regular consumption of alcohol/regular smoking in 119/415, alcohol/smoking tried by 275/243 and no experience with alcohol/smoking only in 87/110, 29/48 respondents did not respond).



**Table 1:** An overview of the preferred values in the 3rd grade vocational SS and grammar school students

Values	Index	Rating
<b>Health</b>	<b>4.50</b>	<b>1</b>
<b>Friendship</b>	<b>4.42</b>	<b>2</b>
<b>Freedom</b>	<b>4.41</b>	<b>3</b>
True, knowledge	4.23	4/5
Developing of own personality	4.23	4/5
<b>Education</b>	<b>4.13</b>	<b>6/7</b>
Good salary	4.13	6/7
Success at work	4.10	8
Love	4.09	9
Family and children	4.07	10
Peace	4.03	11
Hobbies	3.96	12
Being useful for others	3.92	13
Environment	3.87	14
Good position in society	3.82	15
Property	3.79	16
God	2.29	17

*Source: Götlichová*

Further resulting values prove that **education** takes the boundary of the 6th and 7th place together with the preference of good salary. It was shown based on the extended responses that there occur differences in motivation to learn. A great significance is placed primarily on understanding the world, society, others and one's self. The preference of education is then related to the need for social prestige, for professional facilitation for the future in continuity with the possibility of a better role within the society and the labor market, at the same time, with the effort to become less manipulative. Education means for the respondents a mere instrument and serves to achieve own goals, which is also documented by the values such as good salary, success at work and the development of one's own personality. 400 students confirmed regular studying and revision for school, unlike 666 students who do not prepare for school regularly, and 14 students did not respond, while 920 students care about their study results, 144 respondents are not interested in their results and 20 respondents did not answer.

The question whether the students like attending school was positively answered by 58.4%, negative responses were recorded in 41.6%. Should we look at the responses justifying positive and negative attitudes to school, we will encounter with the current trend. For 52.6% of the respondents with the positive attitude to school it is friends with whom they link school; for 13.5% it is the idea of out-of-class entertainment; 9.3% enjoy learning new things; 8.0% connect school with the general idea of education; 5.1% with the fundamental knowledge and skills; for 3.8% school is better than being bored; 2.4% claim school is necessary for the future; **2.3% find school providing them with interesting study subjects; 2.1% like the pleasant teachers and 0.1% link school with a good ambience.** If we, on the other hand, look at the reasons justifying the students' negative attitude to school, we can see that for **22.0% of the students, school is boring and 2.3% recorded that the study subjects are boring,** likewise **15.1% of the respondents specified that they do not enjoy being at school,** which is close to the incomplete half of the responses. On the other hand, for 16.0% school means stress, 5.7% sees the plethora of tasks and learning as negative; 8.8% is afraid of being tested, orally or in written tests; and 2.3% is afraid of getting bad grades. Early getting up is a disadvantage for 17.44% of the respondents and 3.2% would rather go to work than school. Unpleasant teachers establish negative feelings in 7.7% of the students and 0.8% criticizes the educational system.

Even a brief example of an overall width of responses to the realized survey indicated that if school wants to protect its prestige and remain to be the significant authority of the socialization process, then it becomes appropriate for the educators to direct their activity towards finding new ways to address the contemporary adolescents and re-attract their attention so that the associations connected to school would not mean boredom or stress to them. The media has been mentioned several times, which has found their own way to attracting the attention of adolescents, in the same way as advertising managed to achieve. Despite 899 respondents said they do not like advertising, and on the

contrary, only 161 confirmed they enjoy advertising. 857 respondents stated that they take notice of advertising (and the products presented) in films (product placement); 181 had a negative answer to the same question. Advertising thus fulfils its purpose and people are aware of it consciously or unconsciously. Likewise, 606 respondents out of 857, ie. the entire 70.1%, with a good financial background, stated they will buy even things they do not need because they have seen it presented in an advertisement; and 135 respondents out of 184, ie. 73.0%, coming from the background with some financial troubles, will do the same, whereas only 167 respondents think advertising messages to be true, 595 to be false, 20 respondents did not reply to the question.

And so we could continue. For us, another form of advertising messages is important - **social advertising (non-commercial)**. Most respondents could not understand what constitutes social advertising and only based on having clarified the concept to them 496 respondents said that they notice this particular form of advertising; around the same number of respondents, ie. 521, then indicated a negative response. Although previous research in the field of social advertising document quite clearly a positive impact (eg. respecting the rules of road safety/ "You do not think? You pay for that!", prevention of cervical cancer, breast cancer, the project of the Safety Line), only 116 respondents are fully convinced and 81 partially convinced of the need for the particular forms of advertising, while 442 respondents regarded this advertising type as absolutely useless and unnecessary, 159 as partly necessary, 170 respondents took a neutral attitude to the question, and 68 did not provide any feedback. The most common answer to an open question of where can the respondents meet with social advertising, comprised of the following media types: television in the first place (419), the Internet in the second place (349), the print - newspapers and magazines (68), and as another type of advertising, the respondents mentioned advertising on cigarette packages (2), radio (16), and billboards (3).

**Table 2:** Social advertising may replace/complement the influence of school in the field of values and attitudes (Agree = 1)

	1	2	3	4	5
Replace	160	241	<b>378</b>	118	91
Complement	137	146	<b>408</b>	164	129

Source: Göttlichová

As shown in the table (Table 2), students prefer the option of using social advertising in the perspective of the representation of the school in the field of values and attitudes, as well as in terms of the possibility of supplemental learning. The largest representation is also evident in a neutral stance, and it depends on the school, whether it can use the particular state to its own advantage. Educators and teachers are still often unable to sufficiently and convincingly clarify sensitive issues associated with anorexia, alcoholism, smoking, drugs, AIDS prevention, and sexually transmitted diseases, domestic violence, and others. This may be due to the generation gap, as well as persistently too distant and strict theoretical form of teaching. Just as well as the actual application of social advertising in the educational process, with a negative outlook on advertising as such, although media literacy and media education are concepts that are gradually becoming a common terminology at many schools. As reported by Jiráček (2007), the concept of media literacy should combine basic skills, which are: information and content retrieval, understanding of their meanings, the ability to analyze messages and communiques, and compare them with previous experience, the ability to critically evaluate. And this definition is then reflected in the so-called **Framework educational programs** that define the school media education in the Czech Republic - extended by creative and production component. Inclusion of social advertising (campaigns) in the secondary schools curricula (and not just the subject of media education) with subsequent analysis of the given issues and creative solutions in the form of practical exercises resulting in proposals and possible implementations of subsequent social campaigns, will help students not only to identify with the issues and participate in their solutions, but also to introduce students to the mission of non-profit organizations with a possibility to take part in activities of these organizations, either as volunteers or interns, or even lead to their future professional orientation to the non-profit sector. For students it thus should be indisputable that they want to do good is for the most of them obvious, and it is social advertising that offers the opportunity to change something, even if only to a small extent.

## CONCLUSION

As indicated in this brief insight into the results of the survey, if school desires to keep their gradually fading authority and remain standing at the forefront of the significant socialization factors, educators must constantly seek new ways to their students. A necessity is to constantly focus on the attention to the development of media literacy and media education, not only in primary but also in secondary schools, and not only theoretically, but also by its application in practice. It is advertising which constitutes an integral part of the media world. The aim of commercial advertising is not just selling a product, but the direct satisfaction of internal needs as well as their deliberate invocation, with the use of all available knowledge about the human psyche, perception and communication, and often also in noncompliance with the Code of Ethics, or the deliberate application of incorrect procedures. However, it is **human behavior, i.e. changing attitudes and values**, which is the purpose of social advertising (non-profit advertising). On the one hand, it is promoting the idea with the primary goal to promote positive behavior (e.g. environmental maintenance); on the other hand, it is an effort to discourage negative behavior (alcohol, drugs). It "sells" the welfare and well-being of the society as a whole. As media literacy is a new dimension in education, we can speak about social advertising (still for many people) as about a new educational tool with the necessary foundation in the educational process. We may say that social advertising, when appropriately applied within the frame of the educational process, **retains the role of a teammate, rather than an opponent**.

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## THE OPINIONS OF PRE-SERVICE SOCIAL STUDIES TEACHERS REGARDING THE SOUP KITCHEN PROJECT

Kemal DAŞCIOĞLU  
Pamukkale University, Turkey  
kdascioglu@pau.edu.tr

Kudret AYKIRI  
Pamukkale University, Turkey  
kaykiri@pau.edu.tr

### ABSTRACT

The aim of this study is to investigate the opinions of pre-service social studies teachers regarding the soup kitchen project that they conduct. The study was carried out with the 3<sup>rd</sup> grade students enrolled at the department of social studies education at the education faculty of a state university in Turkey in 2015-2016 academic year. Food distribution activities were conducted by six teacher candidates for ten weeks in a foundation that provided soup kitchen services in the city centre where the university was located; and the opinions of the teacher candidates regarding the implementation were gathered. In this study, case study design, one of the qualitative research methods, was applied. Focus group interviews were used to collect data. Support was taken from the relevant literature and experts in the development of the interview questions. Descriptive analysis technique was applied on the collected data. The findings of the study are thought to be significant in terms of enlightening pre-service teachers who will conduct a soup kitchen project in the community service practices course about the problems encountered, solutions, benefits, and feedbacks. As a result of the research, it was revealed that the soup kitchen project had important contributions to pre-service social studies teachers, the most commonly experienced problem was related to the delays due to road works, pre-service teachers made significant recommendations to the people who would take part in the soup kitchen project or to the institutions associated with the soup kitchen project, the foundation reached the real destitute, and the corporate staff were in positive attitudes and behaviours. Considering these results, various recommendations were made.

**Keywords:** Soup Kitchen, Community Service, Social Project, Social Studies, Pre-service Teachers

### 1. INTRODUCTION

It is difficult to determine the appearance of the first soup kitchens in the world. Throughout history, societies have considered it as a moral obligation to provide food to the poor. However, it is accepted that the first modern soup kitchen was established by Sir Benjamin Thompson in the 1790s (URL1). In Turkish history, distributing food to the poor has existed with the sense of duty given to the ruler by the God since the establishment of the first Turkish states. There were traditions of doling out food to the community by laying tables in Karahanlı and Ghaznavid Empires called feast and banquet, which were the first examples in Central Asian Turkish states (İnal, 2013). It is observed that almshouses which are one of the most commonly used words in economic and social life in Muslim Turkish societies after Islamism and one of the leading charity institutions (Şeker, 2007) have existed as a concept since the Seljuk period. It can be stated that many structures with different functions such as mosques, madrasas, lodge, zawiya, shrine, hospital, inns, bathhouses, fortification walls, castles, and sometimes social complexes including a part of these types of structures are called almshouses in the Seljuk period (Ergin, 1939; as cited in Çakallı, 2010 ). The use of a almshouse in the meaning of a soup kitchen for the first time started with the “almshouse soup kitchen” established by Orhan Bey as his own foundation in İznik (Niceae) in 1336 (Şeker and Kazıcı, 1981; cited in Çakallı, 2010). Today, according to the definition of T. R. Directorate General of Foundations (n.d.), soup kitchen, that is almshouse, is a charity house that is established to distribute food to the poor. The term soup kitchen, as widely used in English, is defined as *"a place where free soup or other food is given to people with no money or no home"* by Cambridge dictionary (URL2); and as *"a place where free food is served to those who are homeless or destitute"* by Oxford dictionary (URL3). As in many countries throughout the world, there are soup kitchens in our country as well, and the services of these soup kitchens are carried out by Red Crescent, governorates, municipalities, public and private foundations, and charitable organizations. The services of the soup kitchen included in our research are conducted by a foundation affiliated to the directorate general of foundations.

When the relevant literature is examined, working in a soup kitchen, serving food to people who cannot come to the soup kitchen, and helping the staff about this issue are shown among the examples of activities done in the community service practices course (Sönmez, 2009). However, there are no studies on pre-service teachers'

working in a soup kitchen in the literature. Therefore, it was thought that getting the opinions of pre-service teachers who worked in a soup kitchen regarding this practice would be important.

### 1.1. Purpose of the Study

The purpose of this study was to investigate the opinions of the pre-service social studies teachers regarding the soup kitchen project that they conducted.

### 1.2. Significance of the Study

The findings of the study are considered to be significant in terms of enlightening pre-service teachers who will conduct a soup kitchen project in the community service practices course about the problems encountered, solutions, benefits, and feedbacks.

### 1.3. Sub-purposes

- What are the contributions of the soup kitchen project to the Pre-service Social Studies Teachers?
- What are the problems encountered by the pre-service teachers during the soup kitchen project?
- What are the recommendations of the pre-service teacher for soup kitchen project?
- What are the methods and criteria for the selection of the target audience in the soup kitchen project?
- How are the attitudes and behaviours of the soup kitchen staff?

## 2. METHOD

### 2.1. Research model

Qualitative research methods were used in the study in line with the purpose of the research. The reason for the use of qualitative research methods resulted from the reasons why qualitative research methods should be used and their basic properties. According to Creswell (2016), the moment when a problem or an issue must be discovered, the moment when we want to understand the context in which participants tackle a problem, and the moment when it is necessary to work on specific working groups are just a few of the times for the use of qualitative research. In this study, 'Soup Kitchen Project' was evaluated according to the opinions of pre-service social studies teachers. Within the scope of the project, the issue of what kinds of recommendations were made for the problems encountered was addressed. In addition, why the pre-service teachers made these recommendations was also questioned, and evaluations were made. Furthermore, by looking at how pre-service teachers interpreted their serving experiences in the soup kitchen, when some of the basic characteristics of qualitative research (Merriam, 2013) are handled, the focus will be on meaning and understanding, rich descriptions can be made in terms of contributions, problems, solutions, and recommendations, and thus inductive process can be realized because there is no aim to test hypothesis. In this regard, the study was designed with the case study method, which is one of the qualitative research methods. According to Merriam (2013), case study is *the in-depth description and examination of a limited system*. The thing to be investigated must be a limited system like a person, a program, a group, an institution, etc. This study focused on a soup kitchen and students serving voluntarily there, and their experiences related to this institution.

### 2.2. Study group

The research was carried out with the 3<sup>rd</sup> grade students enrolled at the department of social studies education at the education faculty of a state university in Turkey in 2015-2016 academic year. The pre-service teachers did some activities for ten weeks in a foundation affiliated to the Directorate General of Foundations in the city centre where the university is located. A total of six pre-service teachers' opinions related to the activities were gathered in the research. The selection of the pre-service teachers was done according to the criterion sampling method, one of the purposive sampling methods. According to Yıldırım and Şimşek (2013), purposive sampling allows for in-depth study of the conditions considered to be a wealth of information. In the criterion sampling, which is a kind of purposive sampling, the criteria of "the soup kitchen group that the pre-service teachers working in other projects found successful", "the group that regularly went every week", and "the group that was successful based on the observation of the course instructor" were used. Three groups carried out the soup kitchen services among the projects. The pre-service teacher group in our research was selected as the best project by the members of other projects not only among the soup kitchen projects but also among the other community service practices projects. The group regularly went to the soup kitchen on every Friday and worked for an average of 6 hours daily for 10 weeks. The instructor examined the weekly reports and the student works and concluded that the most successful group among the soup kitchen groups was the research group in our study. A group of six students was considered appropriate for the sample size of the research by taking the research focus into account since it was a single case. In addition, when the reports and works of the other soup kitchen groups were examined, it was seen that the concepts and processes started to recur and the saturation point was reached with a single group. The information of the six pre-service teachers who participated in the process was as follows: Three of the pre-service teachers were 22 years old, two of them were 21 years old; five

of them were female and one was a 22-year-old male. None of the teacher candidates took part in a project like soup kitchen before. Under the theme of the contributions of the project in the findings part, the sub-theme called "the recognition of a soup kitchen-style foundation" seems to support this information.

### 2.3. Role of the Researcher

The researchers did not have a participatory role in the study. They followed the process, conducted the focus group interview, and examined the relevant documents and reports. The first researcher has been teaching the social project and community service practices courses at the undergraduate and graduate level for nearly a decade. The second researcher has been closely following the social project and community service practices course for about three years. Both researchers have certificates of appreciation within the scope of community service practices and also carry out works on social projects.

### 2.4. Data collection tool

In the study, focus group interview was used. According to Yıldırım and Şimşek (2013) focus group interviews are *"discussion series that are carefully planned to obtain perceptions about a predetermined topic in a moderate and non-threatening environment"*. It is appropriate for 6-8 people to take part in these interviews; and this type of interview has many advantages of the interview method. In our study, focus group interview was conducted in the social studies seminar room. The meeting room consisted of a "U-shaped" table and adjustable, comfortable chairs. A total of seven questions suitable for chat style and everyday language use were prepared. In-depth opinions were attempted to be obtained through eight probes that emerged during the interview. Relevant literature was reviewed in the preparation stage of the interview questions and expert opinion was sought after the raw form of the items was prepared. The questions were piloted on the other groups working in the soup kitchen project. The interview was conducted by the researcher. The pre-service teachers were given information about the study; it was emphasized that the pre-service teachers should express their opinions by stating their names and should talk one by one; and it was indicated that the interview would last about an hour. The interview took one hour and four minutes and was recorded with a recorder.

### 2.5. Data Analysis

The data obtained from the interview were analyzed by descriptive analysis method. In this method, the data obtained are summarized and interpreted according to the predetermined themes. The data can be arranged according to the themes revealed by the survey questions (Yıldırım and Şimşek, 2013). The data were organized according to the themes revealed by the questions posed during the interview in this study as well. However, during the analysis of the data, a theme called "the attitudes and behaviours of the corporate staff" occurred. The analysis phase of the data was realized in the following steps.

- The framework for descriptive analysis was created based on the interview questions. The themes dealt with in this framework were as follows: the contribution of the implementation, problems encountered during the practice, recommendations for the implementation, and methods for determining the target audience of the implementation.
- After the thematic framework was determined, the processing phase of the data started. The interview was transferred to a computer environment without making any changes. A twelve-page data were gathered. The participants were shown these data and told that the data would be used for scientific studies without referring to their names. First, coding was done and then the themes took their final shapes. The main themes were determined via consensus and disagreement formula.
- The identification phase of the findings started. Direct quotations were included under each theme.
- Finally, the findings were interpreted to uncover the cause and effect relationship between the findings described.

### 2.6. Credibility, Transferability and Consistency

In the study, within the scope of credibility, long-term interaction was ensured, depth-oriented data were aimed to be collected, expert examination was asked for, and participant confirmation was received. In this context, soup kitchen practice lasted for 10 weeks and long-term interaction with the data was realized thanks to the reports coming every week. In the focus group interview, the participants that were engaged in a dialogue with the researcher for ten weeks were in comfort and trust which would allow them to contribute to the study. A total of eight probes were included to collect in-depth data during the interview. The opinions of field experts and Turkish language education experts were gathered while preparing the focus group interview questions. After all the work finished, it underwent the examination of field experts. After the interview, the participants were shown the final shape of the study and confirmation was sought by asking whether there were any parts to be corrected or added. Confirmation was received by having a confirmation meeting as a group. Confirmation meeting was photographed with the permission of the participants. This evidence would be stored in the archives for a while.

In the study, within the scope of transferability, a detailed description was made and purposive sampling method was used. After the data obtained from the interview were described in detail, direct quotations were frequently referred to. Criterion sampling was used for purposive sampling.

In order to ensure consistency in the research, attention was paid to the consistency in the conceptualizations during the coding of the data obtained from the focus group interview.

The results of the study and coding were examined by field experts for confirmation in the study.

## 2.7. Ethical Issues

The participants took part in the soup kitchen project voluntarily. After the objectives of the study were explained, they willingly stated that they would be happy to participate in the study. In the weekly reports with photos, the fact that the pleasure they took from the work they did was reflected in the reports and photos supported this. Their consent was taken to conduct the focus group interview. After the study ended, the results that they were waiting excitedly were confirmed by them again. After some of them answered yes and some answered no to the question "*Would you like your name to appear in the study?*", representative codes were given because by majority of votes, the answer "no" was dominant. The data obtained from the sound recording would be kept in the archive for a while.

## 3. FINDINGS AND DISCUSSION

### 3.1. Findings regarding the First Sub-Problem

According to the teacher candidates, "the contributions of the implementation" are indicated as follows:

- Seeing and knowing the people in need
- Realizing that one's own problems are minor compared to the problems of others
- Gaining the motivation to be patient and to struggle in tough conditions
- Gaining a different perspective on life
- Having the idea that you need to see real lives to be sensitive
- The emergence of happiness and desire to help more as a result of charity
- Transformation of the negative attitudes at the beginning of the implementation to positive attitudes
- Recognition of a foundation like a soup kitchen
- Gaining the desire to continue doing charity
- Gaining the desire to ensure their students gain awareness with similar events

It is clear that soup kitchen project had a lot of contributions to the pre-service teachers. That is, the soup kitchen project affected the pre-service teachers taking part in the study positively. Some expressions that belong to the pre-service teachers who support this judgment are as follows: S1: "*There were people who could not see. Husband and wife were both blind, but they were trying to hold on to the life. This impressed me a lot, for example, there were people with disabilities*", S2: "*In fact, I have seen that now we do not deal with anything, we have no difficulty. So I have learned that you should never give up in life.*", S1: "*Personally, I was complaining about some issues, but I have learned that I should not care about them.*", S3: "*You know, people should not behave like in the proverb 'let sleeping dogs lie', I think we need to observe our surrounding a little bit more like the things people have experienced, what they have done, or what they suffer from.*", S5: "*We started the project PASVAK within the scope of a course, and initially we thought whether we could do this in such busyness. However, after we started our duties in PASVAK, we understood that this idea was meaningless. It is a very worthwhile project, a project where there are really big-hearted people. We are pleased to be in such a project. We still want to continue to do so.*", S3: "*We would not have known about PASVAK if it had not been this course.*", S3: "*We just give food to people and ask how they are doing in just two minutes, but we do not know what people have actually survived in their lives. You just want to go up to them and have a chat or conversation with them and want to spend time with them all day.*", S5: "*When I finish college in the future, if I am appointed or work in an institution, I really want to come here, because I have things to say sincerely when I come to talk to this lady.*"

### 3.2. Findings regarding the Second Sub-Problem

According to the teacher candidates, "the problems encountered during the implementation" are as in the following:

- Delay of assistance because of road works
- Adverse weather conditions
- The intolerance of some people in need to the delays of assistance
- Delays due to the destitute people



- The shortage of vehicles
- Delays sometimes experienced due to food spills
- Staff shortage
- The small number of such institutions
- Lack of kitchen utensils
- That fact that it is not known by other students; the problem of promotion
- Being late for class sometimes because of delivery delays

It is obvious that the pre-service teachers experienced problems associated with delays in the soup kitchen project. Some of the points that they considered as a problem were the lacks that they expressed as shortages. Some expressions that belong to the pre-service teachers who support this judgment are as follows: S5: *"There were road works in the path that our shuttle vehicle followed, that is, on the roads that the poor also followed. We tried to get through road works in a way, but sometimes, we got stuck, sometimes we could not get out. So, this caused a delay in the delivery of food to the people in need; such problems arose. Sometimes we were stuck in traffic, could not use the roads because of infrastructure works. We could not pass through the roads closed due to construction. I confronted such problems."*, S1: *"The dissatisfaction of some families, even though we gave food to them, made me sad."*, S3: *"I also have a problem like this, for example, we go somewhere, but there is no one at home. They do not contact us when they are not at home. We ring the bell and just wait and wait but no one comes."*, S5: *"There are only five vehicles and since the number of vehicles is low, the distance becomes far."*, S3: *"When we do not go, the person working there is alone, so he both drives and distributes food. So you know this is quite a troublesome process, I think."*, S5: *"Now there could be a PASVAK there but I think more PASVAK can be established in the opposite direction, because I think Denizli is growing."*, S3: *"The number of kitchen equipment can also be increased. For example, I was surprised at many things. You know, sometimes some men say that one of their dinner pails is missing."*, S3: *"Both at the dormitory or outside, when I say my friends that I'm going to PASVAK, they ask what that is."*

### 3.3. Findings regarding the Third Sub-Problem

The pre-service teachers' "recommendations for the implementation" are as follows:

- Recommendations for the soup kitchen: The number of staff, vehicles, tools/equipment needs to increase
- Recommendations for institutions other than soup kitchens: This type of institutions are few and their number should be increased, there should be such projects in all the faculties
- Promotional activity recommendations: Conferences, posters, brochures,
- Extra activity recommendations: There should be activities for the service needs in issues like health, clothing, and loneliness; scholarship should be found to help children, and there should be activities to determine the people in need
- Recommendations for people who will take part in this kind of services: you should not be hasty, it will be more effective to go out for food distribution rather than prepare meal at the soup kitchen, you should not be prejudiced, the best frequency to go to the soup kitchen would be once or twice a week, students should undertake the promotional activities, you should go to bed early on the day of the implementation, you should know kinds of dinner pails, and it should be known that their contributions will eliminate the drawback of its being difficult and tiresome, and you need to comply with the directives of the drivers who have established their own systems.

It is clear that teacher candidates have recommendations for the soup kitchen, the institutions other than the soup kitchen, and soup kitchen-style foundations and feels that there are lacks about the promotion and activity issues. Some expressions that belong to the pre-service teachers who support this judgment are as follows: S1: *"You should go to PASVAK and go out for food distribution; in that way you can understand the situation of people better."*, S3: *"I do not say only to the ones studying at the faculty of education."*, S2: *"Students enrolled at other faculties should go to PASVAK at least once, but I think once is too little, they should go there and observe at least for a week. They will certainly have a very big change."*

### 3.4. Findings regarding the Fourth Sub-Problem

According to the teacher candidates, "the identification of the target audience" is done in the following ways:

- Getting people to fill out a form
- Getting people to prepare the necessary documents
- A detailed examination of the houses
- The views of neighbours
- Drivers' tracking the aid

- A complaint by anyone
- The special examination of those who do not receive food continuously
- Giving only bread to some families

According to the pre-service teachers, many assessment and evaluation are conducted to determine the target audience and they should be on an ongoing basis. Some expressions that belong to the pre-service teachers who support this judgment are as follows: S4: *"The employees go and look at the houses. This can take form of even going into the kitchen and looking at the fridges. One of them told already, I asked according to what criteria these houses were chosen? They said yes, there were criteria; people need to be really in need, we go to the houses, examine and look at them "*, S5: *"On-site monitoring is done. It is just more of the data. When they are going to provide aid, they do very good research. I do not think there will be a deceit. What they eat and drink is monitored. If there is a deceit, drivers already notice it, and they say it again. Then, it is investigated again, according to the result, the aid is cut. These kinds of things happen. They are in constant tracking."*

### 3.5. Findings regarding the Fifth Sub-Problem

According to the teacher candidates, "the attitudes and behaviours of corporate staff" are as indicated below:

- Sensitive
- Willing to overwork
- With positive communication and human relations
- Grateful to volunteer participants
- Decisive and tracker in determining the destitute

According to the pre-service teachers, the attitudes and behaviours of the corporate staff were positive both towards the pre-service teachers and the destitute. Some expressions that belong to the pre-service teachers who support this judgment are as follows: S3: *"How can I say, there are no communication problems with the people working there when we go out for food distribution. They do not need to behave shy. Both the drivers and women working there are really warm when we go out for food distribution."*; S3: *"The lady whose foot was cut once asked me where her son was for the driver. She wanted him to bring tomatoes to her. Good communication really helps the driver; he once sighed and said that he would have brought sausages to the lady."*

## 4. CONCLUSION, DISCUSSION AND RECOMMENDATIONS

### 4.1. Results and Discussion

It is clear that the soup kitchen project had important contributions to the pre-service social studies teachers. No studies were found in the literature related to the contributions of working in institutions like soup kitchens to individuals. However, when the overall purposes of community service practices are considered, it appears that pre-service teachers need to achieve gains such as improving their sensitivity to social problems, knowing the community, and having the taste of serving the community (Kamer, 2009). With the soup kitchen project, pre-service teachers have known the destitute, they have emphasized that by seeing the real lives you can be sensitive and that they want to make their own students gain this sensitivity through activities like this, they have experienced the happiness given by the charity work, and they have gained motivation to help more.

It has been revealed that the most common problems experienced were delays due to the road works. When the general problems stated are considered, it can be seen that the problems experienced by pre-service social studies teachers were mainly associated with the delays in food, that is, there were problems related to their sensitivity, and also they did not have any personal problems other than sometimes being late for the classes due to the delays in food distribution.

The pre-service teachers made recommendations to the people who would take part in the soup kitchen project or to the institutions associated with the soup kitchen project. The recommendations aimed at people who will serve in soup kitchen are of more importance than others for our work. Finding solutions to the problems in the soup kitchen, if there is, is shown among the activities conducted in the community service practices (Sönmez, 2009). Our teacher candidates presented their own problems and solution recommendations to the people who would work in institutions similar to soup kitchens.

The basic problem with social assistance is that the real destitute people cannot be reached (Yıldırım, 2010). It is indicated in the statements of the pre-service teachers who have an objective perspective that the institution works in a detailed and meticulous way in the identification of the people who are in need and is in a continuous tracking. It is seen that the foundation reaches the real destitute.

The corporate personnel appear to be in the positive attitudes and behaviours. The smiling faces of the staff who prepare meals in the institution are reflected both in the expressions and photos of the pre-service teachers. It is obvious that the drivers who are in close contact with the destitute have positive attitudes and behaviours towards those in need and are willing to do more task than given to them.

#### 4.2. RECOMMENDATIONS

There seems to be important contributions of the project. Pre-service teachers are recommended to take part in the soup kitchen project, even if it is once.

Pre-service teachers talked about being impressed by the struggle for life, about learning patience, and about setting their own problems aside. It is recommended that studies on the impact of the soup kitchen project on these values be conducted.

In this study, only the opinions of pre-service teachers were taken. It is recommended that studies are carried out to reveal the views of the staff and of the people who are in need regarding pre-service teachers' taking part in this project.

This study was administered to students at the undergraduate level. It is recommended that similar studies be conducted at the other educational levels.

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## THE PLAY IN ELEMENTARY EDUCATION – UPBRINGING, TEACHING, DIAGNOSIS OR THERAPY?

Justyna TRUSKOLASKA

The John Paul II Catholic University of Lublin, Poland  
[justas@kul.pl](mailto:justas@kul.pl)

Nasturcja TORUJ

The John Paul II Catholic University of Lublin, Poland  
[nasturcja.t@gmail.com](mailto:nasturcja.t@gmail.com)

### ABSTRACT

In the article the problem of variety of function of the play in elementary education is undertaken. After defining the concept of early childhood education, its tasks and a place of plays and games in kindergarten and school, four main issues are discussed successively: educational function, didactic function, diagnostic and therapeutic function of the play. In each part of the article were presented examples of ludic activity of children in the above-mentioned aspects.

### INTRODUCTION

Education (Latin: *education*) can be understood widely as process of teaching and upbringing (Kukołowicz, 1994), successively the elementary education – as it was stated by Scientific Council of the Journal “Elementary Education” in 2013 – is treated as education of children in preschool and grades 1-3 (between 3 to 7 and 7 to 9 years old). Although it has to be mentioned that in 2017 the educational system in Poland is going to change, resulting in expanding the scope to grades 1-4, covering the children aged 7-10. The basic goal of elementary education is comprehensive development of the child: intellectual, emotional, motivational, moral, spiritual and social (Skoczylas-Krotla, 2006). Moreover, education should include: transfer of knowledge and skills, inspiring sensitivity to values and towards creative attitudes, arousal of cognitive independence, independent thinking and self-criticism, as well as ability to self-upbringing, self-educating and integration of individual with social and cultural life of society, and finally arousal of the need for knowledge and beauty (Skoczylas-Krotla, 2006).

In order to properly implement the foregoing assumptions for elementary education it is desirable, for example, to ensure that activity of children during the school day is properly organized. The preschool child should have at least one fifth - and for younger children even one fourth - of their time to spend on unrestricted play. Respectively, the same amount of time should be dedicated to play in the open air, and no more than the same amount of time should be dedicated to organized educational and teaching activities. These classes should take the form of play (*Core curriculum for preschool...*, 2014).

In turn, pupils in class 1-3 (7 to 9 years old) should be guaranteed proper conditions to learn and play. Teacher is obligated to use play in process of teaching, and furthermore to prepare children to independent, safe and responsible management of ludic activity, also with use of modern technologies. The classroom should be prepared to carry out the play. There should be a recreational area and adequate resources: art and sports implements, games, toys (*Core curriculum for preschool...*, 2014).

Based on the literature on upbringing preschool child and pupils of class 1-3, we will attempt to answer the question about the function of play in work with children in age between 3 to 9 years old.

### PLAY AS A BASIC METHOD OF UPBRINGING CHILD IN ELEMENTARY EDUCATION

We assume, that upbringing is assistance in development to becoming a fully mature adult, mainly in personal aspect. Within the meaning of personalistic pedagogy and concepts of education in philosophy of personalism, especially ethical. What is important in these concepts, personal nature of pupil is achieved through his free and thinking actions. Developmental activity of pupil concerns functioning on both levels: individual and community. It is directed to the recognition of values such as truth, right and beauty. In Christian upbringing additionally it is directed to the value of sanctity, which can be understood as heroic virtues. Within its philosophical meaning there are prudence, justice, fortitude and moderation, and within the meaning of theology: faith, hope and love. Personal development should be supported by educators: parents and teachers, which are advisors and helpers of the child. Than the process of upbringing takes place mainly in the family home, but also in preschool, school and other educational environments.

Based on those assumptions we can distinguish the areas: cognitive (development of cognitive functions and

gaining knowledge about world), social and moral (gaining knowledge about society, norms of the society and moral values as well as development of attitudes and social competence), emotional and motivational (control of emotions, development of feelings, stimulating of cognitive curiosity and interest in science etc.) and physical (development of motor skills, especially manual).

Play is understood as voluntary activities of an autotelic character, accompanied by pleasure, joy, or voltage flowing from the action (Truskolaska, 2007). Where autotelic (Greek: *auto* and *telos*) means that the play is a goal in itself. As such play is a primary activity of the child during the period of early education and hence it should be and it is one of the main forms in educational work of the teacher during the early education. According to the *Core curriculum ...* (2014) in the process of upbringing pupils, teacher is responsible for forming the attitudes favoring the further individual and social development, such as: honesty, responsibility, self-esteem, respect for other people, activity, creativity, entrepreneurship, willingness to participate in culture, taking the initiative, teamwork, citizenship, respect for the culture and traditions of their own people, but also other nations. Play stimulates the activity of the child in many aspects, especially social, emotional, intellectual and physical. As such it seems to enable the development of above attitudes.

It is important for educators to properly organize children's play and discretely observe the ludic activities of prechoollers and pupils. By proper organization of ludic activity of the child we can understand:

- applying the principles of fair play in the game by following the rules of the game;
- avoiding unnecessary rivalry between children, caused by race with time or circumstances (Baer, 1999),
- transforming competitive play into cooperative play (Baer, 1999),
- development of skills such as cooperation, team building, helping each other in play (Gruszczyk-Kolczyńska, 1996),
- resignation of sometimes unnecessary awarding during the play, driven by the idea “better play for fun than for the award” (Montessori, 2005),
- use of play in order to train focus and attention (Montessori, 2005; Gruszczyk-Kolczyńska, 1996);
- shaping joy and serenity in play, which is derived from the positive emotions experienced during the play, and also shaping values and contact with other person in the play. This thought may be found in work of Robert Baden-Powell and St. John Bosco (Baden-Powell, 2006; Bosco, 2009),
- transferring to children the skill of play “beyond divisions”, e.g. joint games children with disabilities and healthy children, or in a group of diverse age, or intergenerational (Zaorska, 1997),
- stimulating play with elements of self-improvement and overcoming individual's weaknesses (Baden-Powell, 2006; Kamiński, 1984),
- development of creative attitude – willingness to participate, commit, but also change and transfer of the ludic reality, which had been found on the beginning, creating of new ideas, leaving the schemes and create the new ones in play (Kamiński, 1984; Barciński, 2004),
- care of child's individuality and following the child (Montessori, 2005).

The foregoing propositions are only examples of proper organization of children's ludic activities towards the desired attitudes.

### **PLAY AS A BASIC METHOD OF TEACHING AND LEARNING IN ELEMENTARY EDUCATION**

Among teaching methods the most frequently mentioned are those based on giving and activating as well as verbal, visual and active (Klim-Klimaszewska, 2010; Kupisiewicz, 1996). Among activating methods the attention is particularly drawn towards those, which are stimulating pupil's cognitive activity, especially through action, e.g. tasks, problem and the method of projects (Kalkan i inni, 2012). For younger children the most effective methods are the active methods, mostly the ludic activity, e.g. carry out experiments, studies and observations of the world around the child, which can be initiated, indicated or directed by teacher or parent.

Zbigniew Marciniak (2010) wrote, that education of the youngest pupils (3-9 years old) should combine learning and play, to gently introduce child into school. That was the goal of people who created the new core curriculum for classes 1-3 and preschool. According to Wincenty Okoń (1987) child is possessing informations about the world (social and natural) while playing. Those informations are possessed by child in passing, included into the play, becoming a part of experience. Okoń emphasizes, that in preschool education most of the information is acquired through play and in the contact of the child with his environment (Okoń, 1987). Empirical studies are confirming the meaning of play in teaching children (Olejarczyk, 1976; Pawłowska, 1987; Niemiec, 2012; Solich, 2013).

Importance of play and diversity in learning is highlighted by two studies. First of them had been reported by Halina Spionek in 1985. Her study shows, that after few years of learning in school the intelligence quotient is clearly decreasing. The second study, conducted by Edyta Gruszczyk-Kolczyńska (2014), shows that

mathematical abilities are also decreasing after 8 months of school education. She stated, that the reason for this phenomenon can be found in the way of teaching, which is routine, not very creative and closed to pupil. She is proposing her own system of "children's math", which is based on games. Also she is proposing realization of her own programs, so called "islands of pedagogical happiness"

Based on previously created education systems of a young child we can formulate postulates for educators, concerning organization of play for teaching:

- use and stimulate children's natural cognitive curiosity in play (Majchrzak, 1995; Gruszczyk-Kolczyńska, 1996),
- the best in teaching is following the interests of the child – according to the rule of individualization (Majchrzak, 1995; Montessori, 2005),
- in education through play very important role is ascribed to freedom of choice of place, time, subject, companions and toys,
- in play possible and important is developing the ability to focus attention, what enables child to get fully involved in his "Great Work" (Gruszczyk-Kolczyńska, 1996; Montessori, 2005),
- in education it is important to connect freedom and discipline, what leads to harmony. It may be achieved by creating an atmosphere of freedom, orderliness and internal peace of playing child, as well as external discipline in the group, flowing from ludic activity,
- for teacher and parent it is important to adequately prepare teaching aids – toys, which will stimulate senses, hands and thinking of the child, and also allow teacher to direct the work of the child,
- really important is necessity of creating a situation posing an opportunity to ask questions in play, e.g. situations which are ambiguous, unspecified (Kochanowska, 2007, 2014),
- it is important to use polysensory play, as a most adequate way to explore the world for a young child (Sherborne, 1990; Bogdanowicz, Kisiel & Przasnyska, 1998; Bogdanowicz, 2004; Wedderburn, 2014),
- boredom should be considered as a stimulator of creativity and curiosity of a child, which is allowed to organize the play for itself,
- nowadays the latest information technologies can be used in play, e.g. educational computer games.

The proposals above are not only a theoretical construct, but were selected on the basis of teaching activities, which were carried out within last 100 years on the basis of teaching systems designed by well known specialists.

### DIAGNOSTIC FUNCTION OF PLAY

Teacher in preschool and in classes 1-3 is obligated to diagnose strengths and weaknesses of child in its preparedness to take up school, as well as its skills and difficulties at school. During his work teacher is in contact with the diagnosis of medical, psychological, pedagogical and teachers (Gruszczyk-Kolczyńska, 2013). The teacher is responsible (in whole or in part) for the preparation of the last of them.

Child's play – as one of his elementary activities – is a source of plenty of important information about the child. Through observation and analysis of child's ludic activity and through analysis of his creations we can say about e.g. child's traits, interests, abilities (Czaja-Chudyba, 2006), possibilities and limitations. These observations may relate to motor, emotional, social, cognitive and motivational development of the child.

Examples of techniques which are using elements of child's ludic activity (plays, games and artistic activities) for a diagnostic purpose are: "Assessment of School Maturity" by Bożena Januszczyńska (2012), "Questionnaire for Diagnosis and Research Tools in Educational Therapy" by Joanna Tomczak and Renata Ziętara (2008) "The Scale of the Risk of Dyslexia" by Marta Bogdanowicz (2002), "Scales to Observation of Behavior" by Marta Bogdanowicz and Ewa Lubianiec (1998), teachers observation techniques by Maria Montessori, assessment of aggressiveness on the basis of observation of the pupil in the playful forms of struggle (Kalina, Jagiello, 2000), "Teachers Diagnosis of Mathematical Education of Children" by Edyta Gruszczyk-Kolczyńska (2013), but in this case - as the author points out - not all the tasks should introduce ludic elements; lateralization trials by Rene Zazzo and N. Galifret-Granjon, "Drawing the Family Test" by Maria Braun-Gałkowska (1985) and many others.

Experienced teacher through observation of child's play can conclude about child's needs, its experiences, social and family relations etc. (Grzeszkiewicz, 2013). It is advisable to include in the diagnosis: the type of play chosen by child, course of play, roles taken by child, the way of play, used vocabulary, the organization of play, the way of solving problems, the level of development of social skills, especially: attitude towards the balancing the interests, partnership, agreeableness, leadership, ability to compromise (Grzeszkiewicz, 2013).

We can conclude, that play can be diagnostic, especially in the pedagogical diagnosis of children on the level of early education. It is probably because the essence of ludic activity is spontaneity. During the play child may

freely express itself, what enables the observer to predicate about properties of the person at various levels of the development.

### PLAY AS ONE OF METHODS OF THERAPY OF THE CHILD

According to the *Core Curriculum ...* (2014) school is obligated to organize e.g. classes which increase educational possibilities of both: gifted pupils and those with various difficulties in learning. There are three types of this classes: (1) compensatory, (2) additional which allow the children to expand they interests and (3) in the field of pedagogical therapy. Because child on the level of early education is blurring the boundaries between different types of its activity, play may be found in many types of therapy (medical, psychotherapy, socjotherapy etc.) and in many types of methods of the therapy (laughter therapy, physiotherapy, therapies with animals such as dogs and horses etc.).

Therapeutic functions of play are known since at least 100 years. According to Bożena Muchacka during the play occur processes which allow children to naturally express emotions, communicate their problems, relieve negative experiences, change motivation, experience positive emotions, develop new models of behavior and integrate the functions of ego (Muchacka, 2013). Play also allows to establish positive emotional bonds with peers and adults.

Virginia Axline emerged eight basic rules of non-directive ludic therapy, according to which a therapist should: (1) develop warm, friendly relationship with the child; (2) accept the child as it is; (3) develop a sense of consent to express feelings; (4) be sensitive to feelings expressed by the child and reflect them, to allow the child to gain insight into their own behavior; (5) deeply respect child's abilities to solve its own problems; (6) do not try to direct child's behaviors or utterances in any way; (7) do not try to rush the therapy, which is a gradual process; (8) establish only those limitations, which are necessary to relating therapy with the real word and make the child aware of his responsibility in the therapeutic relationship (Axline, 1989; Muchacka, 2013).

Numerous examples of use of the ludic therapy can be found in Poland and all over the world, e.g. Programs of Activity by Marianna and Christopher Knill, Method of Developing Movement by Weronika Sherborne, Education Through Music by Carl Orff, Method of Good Start by Marta Bogdanowicz, Child's Mathematic, especially mathematical games by Edyta Gruszczyk-Kolczyńska, Unicornmaths by Sarah Wedderburn (2014) and a lot of others. Most of those therapeutic methods/systems is based on assumption of psychophysical unity of human and on multisensory cognition. There are also known therapeutic methods, which interact with the child through art, e.g. drawing, literature, theatre, music, dance. These methods are located on the border of ludic therapy and artetherapy.

In Poland educators and animators of play since 1990 are united by Polish Association of Educators and Animators KLANZA (Polskie Stowarzyszenie Pedagogów i Animatorów KLANZA), while specialists of educational therapy are represented by Polish Society of Dyslexia (Polskie Towarzystwo Dysleksji, PTD), in which play is widely used method. In United States of America play therapists are united by Association for Play Therapy (APT) since 1982, while in Grate Britain by the UK Society for Play and Creative Arts Therapies, and in Kanada by Canadian Association for Child and Play Therapy (CACPT).

### CONCLUSIONS

According to many educators and psychologist which were mentioned above, play is considered as such type of activity, which is characteristic for children, which performs educational, socializing, acculturating, profilactic, diagnostic and therapeutic functions. Some of theme are subject of this article. Play is comprehensive type of activity of children and adults. It might and should be one of the primary methods of upbringing, teaching, diagnosis and therapy. This statement applies mainly to children in preschool and early school age. To sum up, it might be generally stated, that:

- functions of the play are various and important in development of the child, especially in early education;
- play should be used by educators, teachers and parents in education, diagnosis and therapy;
- there are number of actual and practical guidelines for educators, teachers and parents on organizing ludic activity of the children, which are worth knowing and using. Some of them were mentioned in this article.

These issues raise many questions, e.g. whether the proposed understanding of play is not too wide? Where should be place a border between e.g. play and work or play and learning? Is this border necessary? Should we consider play as method or way of organizational form of the work with children at the elementary stage of education? Those and many other questions should be further discussed.

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# THE POTENTIAL OF RESPONSIBLE RESEARCH AND INNOVATION IN CREATIVE LEARNING. A CASE STUDY: “APPLICATIONS OF NANOMATERIALS IN SOLAR ENERGY SYSTEMS”

Gabriela Alina ANGHEL  
Teacher Training Department  
Valahia University of Targoviste, Romania  
[anghelalina2002@yahoo.com](mailto:anghelalina2002@yahoo.com)

Gabriel GORGHIU  
Teacher Training Department  
Valahia University of Targoviste, Romania  
[ggorghiu@gmail.com](mailto:ggorghiu@gmail.com)

## ABSTRACT

The paper aims to identify good educational practices based on the integration/valorization of the specific methodology of Responsible Research and Innovation (RRI) in science education, taking into consideration the dimension of creative learning, at the level of upper secondary school. The research was centered on the following explanatory paradigm: the creative learning is focused around the active learning activities, being based on: exploration and active knowledge, problem solving, experience, but also on the valorization of the previous learning experiences in new educational contexts. The specific objective of the research was to measure the efficiency of the teaching methods used in the creative learning, based on the integration of RRI in the instructive-educative process. In order to measure the efficiency of the teaching methods, the Delphi technique has been used, in a specific unit „Application of Nanomaterials in Solar Energy Systems”, developed in the frame of the European FP7 project named IRRESISTIBLE. The main conclusion resulted from the research directed us to state that good educational practices must be identified in the context of an instructive-educative process (mainly empirio centric type) and described according to the efficiency of the training methods.

## INTRODUCTION

Today, education is preoccupied especially by the realization of an instructive educative process able to assure for students the shaping and development of their cognitive, attitudinal, instrumental applicative and reflexive skills necessary to a normal social functioning. In this framework, what is brought into discussion is the need to promote an active instructive educative process able to stimulate the interest in relation with the students' knowledge and active participation to the discovery of knowledge. In this context, an increasingly present topic is the education based on knowledge and the valorification of knowledge in the sense of innovation and performance. At the level of the European policies (Horizon 2020 Programme), was brought into focus the need to support the actions oriented in the direction of responsible research and innovation in nearly all domains, as an indicator of the increase in performance and aware valorification of the research products.

Responsible Research and Innovation „refers to the comprehensive approach of proceeding in research and innovation in ways that allow all stakeholders that are involved in the processes of research and innovation at an early stage (A) to obtain relevant knowledge on the consequences of the outcomes of their actions and on the range of options open to them and (B) to effectively evaluate both outcomes and options in terms of societal needs and moral values and (C) to use these considerations (under A and B) as functional requirements for design and development of new research, products and services” (EC, 2013, p.3).

As well, RRI can be defined as „a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products in order to allow a proper embedding of scientific and technological advances in our society” with the following features (Owen et al., 2012): Democratic governance, Responsiveness, emphasizing the integration and institutionalization of established approaches of anticipation, reflection and deliberation in and around research and innovation, influencing the direction of these and associated policy, raming of responsibility itself in the context of research and innovation as collective activities with uncertain and unpredictable consequences.

Responsible Research and Innovation in education is described in the context of formal, non-formal or informal instructive-educative activities based on scientific inquiry. The use of learning activities integrating Responsible Research and Innovation in their teaching strategies appears as an important preparation for the education based on scientific knowledge (Gorghiu, Anghel, Ion, 2015, p.601).

In this framework, we can appreciate that the adoption of good educational practices integrating/ profitably using scientific inquiry contributes successfully to the formation and development of the learners' cognitive, attitudinal, instrumental applicative and reflexive skills. It has been appreciated that Responsible Research and Innovation in education is projected in the frame of the creation of a stimulative learning environment allowing the investigation, exploration, explanation, elaboration and evaluation of the object of learning. In this framework, the need to identify good educational practices facilitating sustainable learning is the desideratum of cutting-edge education. "Good educational practices" are considered those teaching activities validated by the professional practice and producing visible results on the learners' level in point of sustainable acquisitions on the level of the following dimensions: cognitive, affective, behavioral. In professional practice, good educational practices are analyzed on the level of the instructive-educative process depending on: the efficiency of the teaching methods in the context of their adequacy and integration and their endeavor to answer the need to shape skills; previous education acquisitions; resources needed (human, material and time resources); learners' and teachers' type of motivation; professional factors (skill, tact and pedagogical style). In this framework, the advantage of active learning is that it makes a successful use of creativity. Active learning is identified in the context of the learning environment "permitting the pupils to discuss, listen, read, write and reflect on one's own modalities of knowing by problem-solving, participation in informal groups, simulations and case studies, role play and other activities, all meant to invite the pupil to apply what he is learning" (Meyers, 1993, p. 6).

The module "Applications of nanomaterials in solar energy systems" was realized in the context of non-formal learning undertaken at the Multidisciplinary Scientific and Technological Research Institute, the Department of Energy-Environment Research of Targoviste in the framework of the 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. The project represents the collaboration of educational environment partners (schools, high schools and university), research, museums and the economic environment, aiming to work together in their attempt to make young people aware of the issues specific of Responsible Research and Innovation. In this partnership, Universities, Science Centers and Museums have cooperated profitably using their expertise and experience in the realization of formal and non-formal learning activities.

Specifics of non-formal activity consisted of: visits at the Research Institute – presentation of functional solar energy conversion systems and laboratories in this field; visits in research laboratories and realization of demonstrative experiments grouped on several topics regarding solar energy conversion (which took place outdoors, for about 20 minutes); debates on the following topics: "The opportuneness of realizing investments in solar energy conversion systems", "The role of research in the domain solar energy conversion systems"; realization of thematic show rooms: "The Sun and the Nano World", "The World of Nanomaterials and Solar Energy".

## RESEARCH METHODOLOGY

The paper aims to identify good educational practices based on the integration/valorization of the specific methodology of Responsible Research and Innovation (RRI) in science education, taking into consideration the dimension of creative learning, at the level of upper secondary school. The research was centered on the following explanatory paradigm: creative learning is focused on active learning activities, being based on: exploration and active knowledge, problem solving, experience, but also valorization of previous learning experiences in new educational contexts. Specific research objective are: measure the efficiency of the teaching methods used in creative learning, based on the integration of RRI in the instructive-educative process. In order to measure the efficiency of the teaching methods, the Delphi technique has been used, in a specific Unit - "Application of Nanomaterials in Solar Energy Systems" developed in the frame of the European FP7 project named IRRESISTIBLE.

## ANALYSIS AND INTERPRETATION OF RESULTS

Regarding identifying teachers' attitudes and behaviours in relation to education approaches adopted on the level of the socio-educational group, they were found following issues considered important: knowing the value of each pupil's training, of his personality, of his status in the group/class; knowing the structural particularities and psychosocial phenomena taking place in class; motivating the pupils by emphasizing the long-term benefits of discovery-based learning; reassuring and guiding the pupils in the necessary informational framework (internet, research laboratories, power workshops, meetings with specialists; identifying alternative possibilities of stimulating the pupils (stimulating extrinsic positive motivation – quantifying the effort made in the mark/grade and praising the pupil on the school level, participating in thematic meetings with researchers.

The analysis of the educational practices guided by the teachers to realize the thematic exhibition highlights didactic approaches corresponding to a constructivist model, in six steps: Engage, Explore, Explain, Elaborate, Exchange, Evaluate.

In this framework, the educational practices have been described as follows: cultivating the pupils' interest by activities such as watching films on global warming, solar energy, visits at the research institute, meeting

researchers, realizing discussion groups in the virtual space on the topic “The Sun in Our Life”, realizing photo collections, video material from which they may process information later on (Engage). In the next step (Explore), the pupils analyze the data collected, develop working hypotheses, realize preliminary investigations and teachers provides supplementary information resources having the role of facilitator.

The teaching methods used are: learning by collaboration, inquiry, debate, problematization, presentation with opponent. The strategy used was to dissemination of the information collected inside the group / class to obtain feedback regarding the relevance of the information collected using the following teaching methods: explanation, debate, simulation, heuristic conversation; discussions in the virtual area, discussion forums (Explaine) [Fig.1].



**Figure 1.** Teacher and students at the stage of explaining the lesson

In the next stage (Elaborate) [Fig. 2], we were made products exhibition (billboard, photovoltaic panel) In this step was used the following types of strategies using: heuristic didactic strategies (explanatory-investigative strategies, half-guided discovery, investigative-explanatory strategies, observative exploration, experimental exploration) discovery (independent, guided, half-guided) based on heuristic conversation, based on problematization, based on project elaboration, based on team research.



**Figure 2.** Teacher and students at the stage of elaborate the lesson

Step dissemination of information (Exchange) [Fig. 3], collected by students was characterized by realization by the pupils of an exhibition on the topic “The Sun and the Nano World”, using the following teaching methods: active-participative methods, participative management on the level of the pupil group – well represented, respecting the principles of: commitment, ethics and governance. At this stage, the methods used were: inter-evaluation, self-evaluation, visitors’ feedback; specialists’ feedback in museum and experts’ feedback in research (Evaluate) [Fig 4].



**Figure. 3** Students at the stage of explaining the lesson



**Figure. 4** Students at the stage of explaining the lesson

Such a teaching design model of non-formal tuition has permitted the identification of a series of advantages related to its use in the instructive educative process, namely: the easy repartition of the tasks on the level of the students by the use of a didactic strategy based on learning methods by collaboration (e.g. Mosaic method). The creative learning methods applied in the context of the integration of the specific of RRI have facilitated the students' active participation in the realization of the tasks specific of learning activities. Other advantages identified have been: stimulation of the productive and critical thinking, of the divergent thinking, freedom to express knowledge, thoughts, acts; valorization of the skills specific of each individual in turn; stimulation of the student's motivation and increased interest for the new, feedback provided after each effort made by each student in turn; exploration and exercise of research skills, ideas and information search skills; development of the skills related to the organization of ideas and their objectivization in the realization of the materials necessary to realize the development of the social and research skills.

## CONCLUSION

Good educational practices in the domain of non-formal education are explained in the context of the valorification of the pupil's creative potential in the context of the accumulation of consistent knowledge in relation to the topic under research. Good educational practices aim to integrate learning methods stimulating the pupil's motivation in relation with learning and implicitly an active participation in the education process. The methods used have permitted: understanding and explaining some physical phenomena; shaping the skills needed for the realization of some simple experiments; applying new knowledge in making a decision regarding the opportuneness of using solar energy conversion systems. The good educational practices model identified was developed while respecting the following principles: ethics, governance, gender equality, accessibility, scientific education, sustainability, social justice.

## ACKNOWLEDGEMENTS

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## THE QUALITY LEVEL OF THE PRIMARY SCHOOLS IN TURKEY

Mehmet KÜÇÜKÇENE  
Kırıkkale University, Turkey  
mehmetkcene@hotmail.com

İsmail AYDOĞAN  
Kırıkkale University, Turkey  
iiaydogan124@gmail.com

### ABSTRACT

It has been 16 years since total quality management was first implemented in primary schools in 1999. The aim of this study was to determine the quality level of primary schools after 16 years of total quality management. In order to determine the quality level of primary schools, the views of teachers and school administrators was asked. The research population included 150 school administrators and 980 teachers working in 52 different schools. According to the teachers' and administrators' opinions, total quality management which was implemented in primary schools in 1999 and the quality development teams aiming to achieve it are not functional and the management programme is not implemented successfully. For instance, schools in city centres are given more importance in comparison to schools in villages.

**Keywords:** Total Quality Management, Primary Education, Administration

### INTRODUCTION

In the post-modern world, societies and communities are developing in a complex manner. Correspondingly, communication and high technology affect every aspect of people's life. As a result of this development, many organizations come face to face with innovations and change. One of these changes is total quality management (Ahn and Ook, 2001). Total quality management is a management approach that aims to make institutions more principled. Also, it is an administrative approach that creates a more enjoyable working environment enabling employees to develop. Total quality management can be successfully implemented only when certain principles are put into practice. The principles developed by Edwards Deming, Juran and Crosby are given below (Freed et al, 1997);

- Vision
- Commitment of systems
- Leadership that creates and supports quality culture
- Personal developments
- Fact-oriented development
- Allocation of power of decision
- Cooperation
- Planning development

As regards target and conception, quality, quality output and quality process are necessary elements. Quality as a concept is seen both in output and process. Quality output means getting desirable results. The process of realizing good quality requires achieving desirable goals throughout all the organization's functional stages. To achieve good quality, an administrator should first of all eliminate any barriers. Secondly, if something goes wrong in the organization, an administrator should make the necessary adjustments. Therefore, it is essential to correct the faulty behaviour of employees working to achieve this process. Thirdly, instead of rivalry, cooperation should be emphasized; this requires some lower level changes. Fourthly, administrators should be honest towards employees. Fifthly, it should be recognized that improving education is important (Ellen and Lawrence, 1992). In this context, there are four main factors supporting quality in any organization. These are (Weis, 2001)

- Participation and attitude of administration: quality is supported and established.
- Professional quality management: the quality council established in on organization manages the quality.
- Participation of staff: comprehensive training on the concept of quality is given to staff so they can adopt this concept.
- Recognition: This is planned to support the staff's effort and success and establish different professional stages in the organization.



Apart from these four factors, process management, customer orientation, universal responsibility and prevention of errors are also listed. By implementing the concept of quality, organizational management and staff attitudes change; the staff is encouraged and strengthened. During the process, research is done to improve products and services. With regard to problem solving, responsibility is important. Iankard (1992) states that five important factors are necessary to improve quality. These factors can be listed as

- Decision making
- Organizational development
- Focusing on customers
- Adaptation to the process
- Constant improvement

In the concept of quality, it is essential to see employees as partners instead of subordinates. When employees work together, they feel much stronger. Forming a team has positive effects. First of all, many people contribute to the decision-making process and decisions are better implemented. Secondly, members of the team learn each other's opinions. Thirdly, improved information and activity are obtained by means of group work. Fourthly, mistakes are made and precautions are taken. Lastly, group members can take more risks with the help of the unifying power of group work. As a result, quality means accommodation to needs. Also, quality prevents repeating mistakes that have been experienced before and it aims to achieve zero error (Smith, 2001).

### **TOTAL QUALITY MANAGEMENT IN SCHOOLS**

For people making use of an organization's products and services, quality is of considerable importance. Quality includes the physical structure of products and services, fertility rate, reliability and maintainability and efficient use of production resources. The quality level of the education system can be enhanced with the quality balance of human resources, student services, social and cultural environment, educational technology, student-school-industry cooperation, educational administration and educational programmes. When educational quality is mentioned, zero error comes to mind. Educating human beings without errors involves three areas. These are (Temel, 1999)

- Inputs (educational programmes, trainers, other employees in the field, Money and educational materials) Which should be free of errors or be of good quality before the beginning of the educational process.
- The education process itself (programmes, methods, implementation and feedback).
- Outputs such as students' success (academic, social, cultural and sportive etc) continuance to higher education, participation in the business world, in-service training and the success of employees.

Total quality management foresees some changes in the educational field (Weaver, 1992). These include

- The role of the student: administrators encourage students' participation in education.
- The role of teachers: total quality management changes teachers' attitude toward their relationships with students and administrators. Teachers need to look at education through students' eyes; team work is largely in administrators' hands. They hand over some of their responsibilities and this strengthens teachers.
- Trials and evaluations: instead of using standardized tests to evaluate students' development, it is more meaningful to evaluate students' development throughout the whole year. In the same way, teachers' performances should be evaluated throughout the year, not just by a single classroom visit from an inspector.

In schools there are two types of teams: one of them is the permanent team and the other is the temporary team. The permanent team focuses on a determined function such as a programme or the education of a special age group. The temporary team focuses on short-term goals and when the aim is achieved the team disbands. One of the most common groups is the management team. Generally, this team includes managers or mid-level managers. The management team is responsible for mission, decision making and broad political areas. Management teams can be established in schools and help managers in decision making, problem solving and planning. The quality team requires two important factors: commitment and relationship. Both of these factors represent the culture of the team. As a part of a strong culture, the should of a sense of purpose team comprise appropriateness, bravery and power. Cohesion among team members, brings energy, information and skills together. Commitment is a feeling of being together in a team (Oswald, 1996).

Quality development is a standardized version of organizational development and education of school staff. In almost all countries, schools' focus regarding quality improvement is in the area of policy making. In the context of quality development, some popular topics to which new leaders give importance and previous leaders ignore can be listed as (Poston, 1997)

- The power of vision
- Creating shared values
- Consultancy of successful managements, integration of vision and flexibility
- Giving importance to feedback about performance

Constant quality development requires the ability to decide on facts, to know the organization's internal and external customers consciously and to perform a systematic organizational analysis. It also requires open communication with the organization itself. It educates staff, popularizes team work and gives importance to relationships. Constant quality development in the educational field focuses on students and classroom activities and assess educators' feedback (Wolverton, 1994).

The total quality management approach which was first implemented throughout Turkey in the 1980s aims to establish a society in which every person adopts the principle constantly to improve his/her own job, to meet customers' needs and expectations in the best way and satisfy them, to evaluate their performance according to universal standards and to promote lifelong learning and achievement.

After positive results were obtained from the implementation of total quality management in the business world, it was proposed that total quality management could solve problems in schools and enhance schools' efficiency. On this basis, total quality management started to be implemented in 1999 and it has been operating in all state schools since then (Hernandez, 2001). To implement total quality management successfully, the Ministry of National Education issued a directive (MEB, 1999). According to this directive

- Total quality management implementation should be done in a project planning framework.
- Precautions should be taken to please the beneficiaries of educational services.
- In every stage of total quality management, all parties concerned should be encouraged to participate voluntarily and team work should be promoted.
- Resources should be used efficiently and effectively.
- Level of achievement of goals constantly should be evaluated.
- The system constantly should be developed and improved.
- The education of administrative staff should be institutionalized and quality should be improved; the delivery of services should be refined.
- An appropriate working environment should be provided to staff so that each individual can perform to the best of his/her ability.
- Institutionalizing the concept of learning as an individual and as an organization should be carried out in a systematic manner.
- Raising the awareness of employees should be done in the context of being part of the solution, not part of the problem.
- In delivering services, quality development should be seen as the duty of all staff and this approach should be adopted and accepted by personnel.
- Every individual should be conscious that development can only be achieved by change.
- Providing a balance between the aims of the institution and the aims of the employees results in the job satisfaction of employees.

To realize these aims, a quality commission and quality development teams were established. In every school quality commission includes at least 5 people who have sufficient knowledge and ability to be responsible for the critical issues related to quality development. The school principal presides at the commission. The duties of the commission areas follow:

- to provide coordination in the total quality management implementation project.
- to choose the manager of the quality development team.
- to determine the working principles of the quality development team.
- to support the quality development team, provide the team with resources and prepare the working environment.
- to prepare the strategic plan of the quality development team according to the team's situation analysis.



- to evaluate the results of development activities.

In addition to these duties, during the total quality management implementation process, a quality development team was established in every school by the school principals and this team was made up of at least three people. This team takes measures to raise the quality level of services and operations. These precautions can be classified into three groups:

- improvements that can be made by measures taken by the school.
- improvements that can be made with the approval of the Minister of Education.
- improvements that can be made a change into law.

The concept of total quality management was first implemented in Turkish schools in 1999. This research aims to determine the quality level of primary schools in Turkey and the effect total quality management which has been implemented for the last 15 years has on the quality of primary schools.

## METHOD OF RESEARCH

What does total quality management implementation in primary schools mean in practice? This question requires an answer. This research, therefore aimed to describe the present situation and used the scanning method.

The target population of the study included 7883 teachers working in 553 primary schools in Kayseri during the 2014-2015 educational year. Kayseri is one of the most developed cities in Turkey. The primary education schooling rate in Kayseri is 99%. Due to the fact that there are so many teachers working in Kayseri the sampling method was preferred. The sample population included 980 teachers and 150 school principals working in 52 different primary schools. Out of 52 schools, 15 were primary schools in villages; 20 were county primary schools; 17 were primary schools in the city centre. One hundred and fifty of the participants were school principals or deputy principal and 980 were teachers. Two hundred and seventy of the participants worked in a village; 380 worked in a county; 480 of all participants worked in the city centre. They all worked in primary schools.

The research variables were the positions held in schools (principal or teacher) and the locations of the schools (village, county and city centre). In the study, principals and teachers were interviewed according to these variables.

**Developing Data Collection Tool** In this study, scale was used as a data collection tool. The scale used in the research was developed by Iowa University's faculty member William K. Poston. Poston developed this scale for his research "Comprehensive Study of Factors Impacting Perceived Quality in School Organizations: Findings from research on quality assessment in Iowa school districts" (Poston, 1997). The original form of the scale was obtained from the author via electronic mail. Permission was given to translate the scale into Turkish and to do validity and reliability assessment using the scale in this study. It was translated into Turkish by the researcher himself. The original scale and the translated version were examined by six competent faculty members in terms of use of language, context, methodology, assessment and evaluation. Following their suggestions, some changes were made to make the scale more understandable and then it was finalized.

Factor analysis was used to assess the construct validity of the scale. In the factor analysis, a factor load value of 0.35 or higher than 0.35 was sought. The varimax technique was used to describe factor structures. The item total correlation coefficient was used to determine to what degree each item of the scale analysed the quality level of schools. To determine the scale's reliability, the Cronbach Alpha internal consistency coefficient was checked.

To determine the construct validity of the scale, factor analysis was used and at the beginning 45 items were included in the factor analysis. In the first application of the factor analysis, it was found that the factor load value of 9 items was under 0.35 and some factors had higher values. After eliminating those items, the analysis was repeated and it was seen that 36 items accumulated in 6 factors, and only one factor had a higher factor load value.

In the study, we found that the first factor's eigenvalue was 15.34; for the second factor it was 2.26; for the third factor it was 1.63; for the fourth factor it was 1.51; for the fifth factor it was 1.31; and for the sixth factor it was 1.07. As we look at the eigenvalues of the factors, (Table 1), we see a quick decrease after the first factor. In this situation, the scale was assessed as having a single factor. You can see the results of factor analysis performed on the basis of a single factor below in Table 1.

**Table 1**  
**Results of Factor Analysis of the Scale used to Assess the Quality Level of Schools**

Item	Common Factor Variance	Factor Load	Total Item r <sup>2</sup> si	Item	Common Factor Variance	Factor Load	Total Item r <sup>2</sup> si
1.	52	60	57	19.	68	76	72
2.	72	59	57	20.	73	56	54
3.	69	57	54	21.	76	67	64
4.	67	49	47	22.	75	45	42
5.	63	60	57	23.	74	69	66
6.	67	66	63	24.	58	68	65
7.	63	77	75	25.	68	58	56
8.	49	54	51	26.	62	59	57
9.	62	66	63	27.	69	69	66
10.	46	62	59	28.	64	61	58
11.	61	63	60	29.	58	60	58
12.	66	71	68	30.	62	71	69
13.	66	69	67	31.	67	70	68
14.	69	68	65	32.	73	75	73
15.	54	62	60	33.	72	78	75
16.	61	71	68	34.	54	62	59
17.	67	77	73	35.	71	74	72
18.	64	68	66	36.	34	36	41

Eigenvalue of the first factor; 15.34  
The variance explained by the first factor=42.6 %  
Cronbach Alpha coefficient of the scale= .96

As seen in Table 1, item factor loads vary between 0.36 and 0.77. the eigenvalue of the first factor is 15.34 and total variance is 42.6 %. Also, the total item correlations vary between 0.41 and 0.75. This shows that the differential strength of the items is high. The alpha reliability coefficient of the scale is 0.96. This result indicates that the internal validity of the scale is high.

The scoring method in the scale is as follows: between 1 and 1.79 means “none”; between 1.80 and 2.59 means “little”; between 2.60 and 3.39 means “medium”; between 3.40 and 4.19 means “many”; 4.20 and 5.00 means “so many”.

## FINDINGS AND COMMENTS

The findings obtained by the study were analysed statistically with the statistical package program SPSS 15 version. The quality level of primary schools was assessed by averaging the views of the participants. In addition, a t-test was used to determine whether there was a difference between the opinions of the participants in relation to position variable. A one-way analysis of variance was used to determine whether there was a difference between the participants' views according to location.

After completing the analyses, we used the following techniques to interpret the data: the items that indicated the difference between the views of the groups formed in terms of position and location variables were interpreted in detail; on the other hand, items showing no difference between views were interpreted in a general terms.

### a. Views of school principals and teachers in terms of position variable

150 of the study participants were school principals and 980 were teachers. The results below demonstrated the findings obtained from the items showed no difference in the views of the groups (in other words school principals and teachers stated similar opinions) formed on the basis of position variable (Table 2).

They agreed on the following points:

1. Quality policy is conveyed to the whole staff but this process is not done in a satisfactory way.
2. The government together with business organizations and other organizations do not sufficiently encourage students and school staff.
3. Methods are not developed efficiently to get information from various resources about the organization's performance.
4. Decision making is not done on the basis of collected data and results of analyses

5. Quality development is the result of medium-level analyses and gathered data.
6. The quality of programmes and services are compared to the systems of other schools in only a medium-level.
7. The planning process is correlated with daily activities only at a minor level and in the same way administrators and teachers are not totally involved in the process.
8. The information gathered from staff and the environment is not used efficiently in strategic planning.
9. Teams formed in schools are hardly involved in planning about the staff.
10. Deliberative quality education is not sufficiently given to personnel.
11. Personnel teams are not involved in solving regional problems.
12. Development, taking risk and creativity are not encouraged or supported.
13. Opportunities are not given to groups and individuals to support quality aims and plans.
14. Occupational development plans are hardly used in personnel development and education.
15. Employees are not sufficiently encouraged to develop their own performance.
16. The performance level of personnel is not assessed regularly.
17. Declaration of views during programme planning and delivery is not sufficiently encouraged.
18. The services of consultants are not taken advantage of in updating the context and process of the programmes.
19. Findings and results regarding performance are not shared freely with personnel and school.
20. Performance control of the activities and programmes conducted in schools is not done regularly
21. The number of activities and consultants is not constantly increased.
22. Schools do not get in touch with their graduates or get information about them or conduct analyses.
23. Students' talents are insufficiently recognized and developed.
24. The quality level of services like education, instructional resources, and materials is not adequately developed.
25. The quality level of schools is not compared to that of other schools in an efficient way.
26. Students and parents' wishes and complains are not fully taken into consideration.
27. Little research is done to get feedback from students and parents.
28. Satisfaction of schools and personnel is not sufficiently monitored.
29. Standards are not determined clearly; personnel do not acquire the necessary skills for communicating with students and their parents.
30. Information about all fields is only slightly increased every years and in the same way, the unifying processe is slow and not sufficient.
31. Determining the needs and expectations of the next generation of students and developing appropriate programmes are important but insufficient effort is exerted to realize them.

Apart from the above, there are other items showing difference in opinions between teachers and administrators on the basis of position variable. These items are listed as follows:

1. "Administrators of city, county and school are interested in quality improvement", School principals agreed with this statement with an average of  $X=3.02$ ; teachers agreed with an average of  $X=2.55$ .
2. "Administrators of city, county and school give importance to extra-curricular activities to improve quality level", School principals agreed with this statement with an average of  $X=2.60$ ; teachers agreed with an average of  $X=2.19$ .
3. "Information transfer throughout the school is done systematically and information is conveyed to everyone", School principals agreed with this statement with an average of  $X=2.71$ ; teachers agreed with an average of  $X=2.25$ .
4. "Materials and techniques to improve quality are used in the planning process", School principals agreed with this statement with an average of  $X=2.46$ ; teachers agreed with an average of  $X=2.08$ .
5. "Special programmes are arranged to help people related to the school", School principals agreed with this statement with an average of  $X=1.86$ ; teachers agreed with an average of  $X=2.61$ .

When we examined the above results, we realized that for the first four statements, teachers and administrators had similar points of view. The results obtained from the first and second statements can be explained by the close relationship between school principals and other administrators of national education. As for the third and fourth statements, school principals also hold administrative positions. In the last statement, the teachers' average was higher than that of school principals; this means that teachers agreed with the statement more, because they communicated more often with parents.

### Views of school principals and teachers in terms of location variable

Fifty two schools were involved in the research sample. Out of 52 schools, 15 schools were located in villages; 20 schools were located in counties; 17 schools were located in city centres. According to this information, 270 of all participants worked in villages; 380 participants worked in counties; and 480 participants worked in city centres.

When we assess the quality level of schools in terms of the location variable (Table 3), we see there is only one item showing a difference, the rest of the 35 items show similarities. The item showing a difference says that “the school principal in the city centre or county is interested in raising quality”. According to the data gathered, school administrators working in city centres or counties take an eager interest in quality development; school administrators working in villages are not really interested in quality development. As we examine the rest of the items (35 items), we can see that school administrators and teachers stated that the quality level of the schools in city centres, counties and villages is low or average.

**Table 2**  
*Views of School Principals and Teachers in Terms of Position Variable*

Item	Administrator N=150		Teacher N=980		t-value
	X	Sd	x	Sd	
1.	2.50	1.34	2.83	1.07	1.49
2.	2.55	0.99	3.02	1.08	2.23*
3.	2.19	0.92	2.60	1.02	2.11*
4.	2.27	0.91	2.42	1.05	0.73
5.	2.25	1.20	2.71	1.20	1.97*
6.	2.02	0.81	2.06	0.92	0.21
7.	2.25	0.93	2.50	1.03	1.26
8.	2.77	1.04	2.75	1.13	0.13
9.	2.63	0.99	2.53	0.96	0.56
10.	2.47	1.08	2.51	0.87	0.21
11.	2.08	0.96	2.46	0.88	2.15*
12.	2.08	0.96	2.31	0.93	1.25
13.	2.11	1.06	2.10	0.83	0.01
14.	1.80	0.82	1.96	0.98	0.87
15.	1.72	0.74	1.83	0.80	0.74
16.	1.91	1.10	1.93	0.99	0.09
17.	2.19	1.14	2.20	0.96	0.06
18.	2.08	0.96	2.09	0.93	0.08
19.	2.19	1.11	2.38	1.00	0.91
20.	1.91	1.05	2.14	1.16	1.01
21.	2.25	1.15	2.50	1.20	1.06
22.	1.55	0.87	1.59	0.91	0.24
23.	1.94	1.04	2.15	1.07	0.99
24.	1.91	1.07	2.01	1.01	0.47
25.	1.61	0.93	1.66	0.85	0.30
26.	1.91	1.02	1.71	0.93	0.99
27.	2.30	1.09	2.07	0.98	1.15
28.	2.30	1.11	2.34	1.09	0.20
29.	2.66	1.37	2.92	1.15	1.08
30.	2.58	1.18	2.71	1.07	0.62
31.	1.91	1.15	2.09	1.09	0.83
32.	1.97	1.05	2.05	0.99	0.41
33.	1.86	0.99	2.08	0.95	1.19
34.	1.94	0.94	2.11	0.86	0.85
35.	1.80	0.92	2.00	0.92	1.07
36.	2.61	3.45	1.86	0.82	1.93*

\*<.05

**Table 3**  
*Views of School Administrators and Teachers in Terms of Location Variable*

item	Village N=270		County N=380		City centre N=480		F value
	x	sd	x	sd	x	sd	
1	2.75	1.18	2.66	1.15	2.75	1.14	0.91
2	2.55	0.86	2.82	1.14	3.08	1.12	0.08*
3	2.44	0.94	2.48	1.04	2.55	1.04	0.89
4	2.44	0.90	2.38	1.01	2.34	1.08	0.90
5	2.68	1.13	2.61	1.38	2.50	1.18	0.78
6	2.00	0.96	2.20	1.00	1.96	0.77	0.41
7	2.58	0.94	2.46	1.04	2.34	1.03	0.57
8	2.93	1.06	2.84	1.26	2.58	0.97	0.30
9	2.72	1.03	2.66	1.00	2.39	0.91	0.23
10	2.72	0.95	2.51	0.99	2.39	0.81	0.28
11	2.31	0.84	2.48	1.02	2.27	0.89	0.52
12	2.03	0.77	2.33	1.05	2.29	0.95	0.38
13	2.34	0.76	2.10	0.91	1.98	0.92	0.20
14	1.72	0.84	2.07	1.01	1.91	0.96	0.32
15	1.79	0.81	1.82	0.72	1.81	0.80	0.98
16	2.06	1.13	1.94	1.12	1.84	0.89	0.62
17	2.44	0.98	2.23	1.13	2.05	0.92	0.22
18	2.13	0.87	2.02	0.90	2.10	1.00	0.87
19	2.58	1.01	2.30	1.15	2.20	0.93	0.26
20	2.00	1.06	2.28	1.25	1.96	1.07	0.37
21	2.58	1.08	2.46	1.41	2.27	1.12	0.49
22	1.44	0.63	1.79	1.08	1.48	0.86	0.17
23	2.06	1.09	2.05	1.12	2.10	1.05	0.97
24	1.96	0.90	2.12	1.00	1.86	1.01	0.43
25	1.51	0.78	1.64	0.93	1.63	0.83	0.79
26	1.75	0.83	1.76	1.18	1.75	0.84	0.99
27	2.20	1.01	2.20	1.23	2.00	0.85	0.53
28	2.48	0.73	2.28	1.27	2.27	1.15	0.68
29	2.72	1.25	2.94	1.39	2.86	1.09	0.75
30	2.48	1.29	2.74	1.16	2.75	0.94	0.51
31	2.03	1.20	2.12	1.23	1.96	0.95	0.77
32	2.00	0.88	2.02	1.20	2.05	0.96	0.97
33	2.10	0.81	2.17	1.12	1.87	0.93	0.29
34	2.13	0.87	2.02	0.98	2.06	0.83	0.87
35	1.93	0.96	2.10	0.96	1.81	0.86	0.31
36	2.00	0.88	2.05	0.91	2.13	2.76	0.94

\*<.05

## RESULTS AND SUGGESTIONS

In general, primary school administrators and teachers stated that the quality level of primary schools is not up to the mark. It can be stated that the total quality management programme that was implemented in primary schools in 1999 and the quality development teams are not functional. It is clear that much more importance is given to schools located in city centres than schools in villages. On the other hand, total quality management is not integrated enough by teachers or school principals. The most important reason for this situation is that the Education Ministry made total quality management compulsory in schools without giving in-service training to teachers and administrators about the programme. This shows that a centralist mindset has non-negligible effect on the structure of the education system. Additionally, we can say that this formalism does not increase efficiency in schools and hinders the emergence of innovative views and understanding.

To raise the awareness of both schools and school staff about total quality management and to encourage them to offer high quality service and products, the following measures should be taken:

- a) School administrators should be encouraged to act as school leaders, and in order to do this, required flexibility in formal issues should be provided.
- b) Information gathered from institutions in the immediate surroundings should be used in decision making, planning and implementation.
- c) Teams formed in the schools should be functional and should be active in decision making, planning, motivation, and in internal and external customer satisfaction.
- d) Team synergy should be raised among administrators, teachers, students, parents and environmental forces and information exchange should be provided. This information should be used in instruction programmes and in the enhancement of relations between staff and parents.
- e) Schools should be in touch with groups, people and institutions that form the school environment. Schools should be developed not only in the city centres but also in rural areas.

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# 1THE RECOMMENDED SYSTEM FOR STUDENTS' MAJOR SELECTION BASED ON MINING EDUCATIONAL DATA

Satien JANPLA

Suan Sunanadha Rajabhat University, Thailand  
satien@ssru.ac.th

Kunyanuth KULARBPHEETONG

Suan Sunanadha Rajabhat University, Thailand  
[kunyanuth.kul@ssru.ac.th](mailto:kunyanuth.kul@ssru.ac.th)

## ABSTRACT

This research aims to develop the recommended system for student in choosing an emphasized track of student majoring at Suan Sunandha Rajabhat University. The objective of this research is to develop the recommended system using data mining technique to analyze knowledge and conduct decision rules. The results of the experiment show that such relationships can be used to demonstrate the reasonableness of student choosing a track as well as to support his/her decision and the system is verified by experts in the field. The sampling is from student of computer science based on the system and the questionnaire to see the satisfaction. The system result is found to be satisfactory by both experts and student as well.

## INTRODUCTION

Recently, major selection of student is very important and affected on his/her life because it has a significant effect on their career path and may affect to student's life such as time consuming to study in unsuitable field or not finish study and so on. Computer Science program is one of the significant graduate programs in Thailand. However, the problem encountered by computer science students is an error in the fields of study. Most students do not know the exact needs and their skills in the fields of study. According to The National Statistics Office of Thailand, the unemployment rate of university graduates has the highest than when compared with the research of employment situation among population over 15 years old and Computer and IT field is the second field of unemployment. Therefore, to decide appropriated fields, information of student, like registration information, course information and class learning courses, was evaluated and data mining techniques was applied to analyze pattern and relationship of information.

Data mining approach is the promising methodology to extract valuable information in this objective. Data Mining can analyze relevant information results and produce different perspectives to understand more about the students' activities so as to customize the course for student learning. This research aims to develop a decision support system which will make an important benefit to student in choosing the appropriate fields on the abilities. Moreover, it is also beneficial to improve the curriculum and resources, both personnel and equipment used in teaching to achieve maximum performance. The rest of this paper is organized as follows. Section 2 reviews the related methodologies used in this work. Section 3 presents the implementation based on the purposed data mining techniques. In section 4 the result and discussion is presented. Finally, we conclude the paper with future research issues in section 5.

## THE METHODOLOGIES

In this section, we illustrate the literature search and the specified methodologies used in this project. Data Mining is the data analyzing approach from different perspectives to summarize the useful information results. The data mining technique has many principles as machine learning, statistics and visualization techniques to discover and present knowledge in an easily comprehensible form. There is another definition as "the nontrivial process of identifying valid, novel, potentially useful, and ultimately understandable patterns in data" (Fayyad, U. M. Piatetsky-Shapiro, G. Smyth, P. and Uthuramy, R., 1996), (Frawley, W. Piatetsky-Shapiro, G. and Matheus, C., 1992).

Association rule mining is used to discover interesting relationships between variables in databases. According to Agrawal et al (Agrawal, R. Imielinski, T. and Swami, A.N., 1993), an association rule explains a close correlation between items in a database in the form of  $x \Rightarrow y$  where  $x$  and  $y$  are sets of Item set  $I$  ( $x$  and  $y \subset I$ ) and  $x \cap y = \emptyset$ .  $I = I_1, I_2, \dots, I_m$  is an Item set of  $m$  distinct attributes. The rule is indicated  $x$  implies  $y$  whereby  $x$  is called antecedent and  $y$  is called consequent. There are two importance thresholds for measurement association rule mining, minimum support and minimum confidence. The support of a rule  $x \Rightarrow y$  is the probability of the Item set  $\{x, y\}$  that means the relevance of the rule and the confidence of a rule is the

conditional probability of y given x that indicate the accuracy of the rule.

$$\text{Confidence} (x \Rightarrow y) = \frac{\text{support}(\{x, y\})}{\text{support}(x)} \quad (1)$$

and

$$\text{Support} (x \Rightarrow y) = \frac{\text{support}(\{x, y\})}{\text{Total number of transaction in } D} \quad (2)$$

Set of transactions:  $D = \{d_1, d_2, \dots, d_n\}$  each  $d_i \subseteq I$

Confidence is a significant measure of the association rules to indicate how to strength of the mined rules. If the confidence of the association rule  $x \Rightarrow y$  is 80%, it means that 80% of the transactions that contain x also contain y, based on users to indicate the specified minimum confidence (Qiankun, Z., 2003). Apriori Algorithm is an influential algorithm for association rule mining, purposed by proposed by Agrawal (Agrawal, R. and Srikant, R., 1994). The Apriori Algorithm is used level-wise search for frequent item sets, the sets of items that have minimum support.

Let  $C_k$  is Candidate itemsets of size k and  $L_k$  is itemsets of size k.

```

1)  $L_1 = \{\text{large 1-itemsets}\};$ 
2) for (  $k = 2; L_{k-1} \neq \emptyset; k++$  ) do begin
3)    $C_k = \text{apriori-gen}(L_{k-1});$  // New candidates
4)   forall transactions  $t \in \mathcal{D}$  do begin
5)      $C_t = \text{subset}(C_k, t);$  // Candidates contained in t
6)     forall candidates  $c \in C_t$  do
7)        $c.\text{count}++;$ 
8)   end
9)    $L_k = \{c \in C_k \mid c.\text{count} \geq \text{minsup}\}$ 
10) end
11)  $\text{Answer} = \bigcup_k L_k;$ 

```

Fig.1 Apriori Algorithm (Agrawal, R. and Srikant, R., 1994)

A decision tree is one of the most well-known classification algorithms that are commonly used to examine data and induce the tree in order to make predictions (Edelstein, H., 1999). The purpose of the decision tree is to classify the data into distinct groups or branches that generate the strongest separation in the values of the dependent variable (Parr Rud, O., 2001). The ID3 algorithm, introduced in 1986 by Quinlan Ross (Mitra, S. and Acharya, T., 2003), uses the top-down induction of decision trees. ID3 uses information gain to build the leaves of the tree. A greedy search is used and the best attribute is selected by it and never reconsiders earlier choices by looking back (Quinlan, J. R., 1986). J48 is an open source Java implementation of the C4.5 algorithm under WEKA data mining platform. C4.5 is an algorithm used to generate a decision tree developed by Ross Quinlan. C4.5 is a software extension and thus improvement of the basic ID3 algorithm designed by Quinlan (Quinlan, J. R., 1986).

## EXPERIMENTAL SETUP

The data of this experiment was collected from the computer science program, Suan Sunandha Rajabhat University, during the period of 2012-2015. The student data set was composed of 150 personal records, registered course records and students 'quizzes in computer skills. According to Nutthapat K., and et al, 2015, a recommended System of career path was to implement by using the equation of prediction to 3 computer profession groups (Programmer, IT Support and System Analysis) in Bangkok Thailand. However, in the gathering data phrase of this project, computer Science students were subjected to take quizzes in computer skills. The questionnaire was used as a testing tool to measure basic vocational orientation in computer professional career path, which included 20 random choices.

As presented in Fig 2, it showed the process of this research to generate the student's academic performance model by using data mining techniques and used PHP to develop a decision support system based on the model. Then, the data is preprocessed, and transformed to be appropriated format so as to apply data mining techniques

to generate model. The equal width method was used to partition the value of continuous attributes into five nominal values: VERY POOR, POOR, FAIR, GOOD and VERY GOOD.

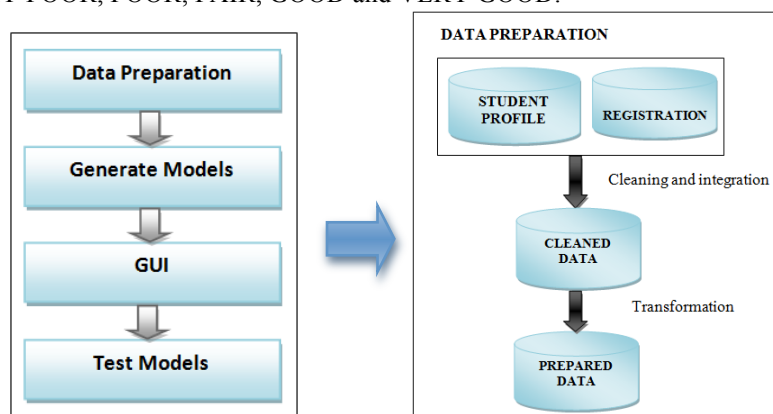


Fig.2 The process of the student's academic performance model

After preparation phrase as shown in Fig 2, Data was analyzed by WEKA. WEKA, the Waikato Environment for Knowledge Analysis, is a collection of machine learning algorithm to analyze data set for data mining tasks (Agrawal, R. and Srikant, R., 1994).

J48 and Bayesian Networks algorithms were used in this project to estimate and evaluate for creating the model. To take measure the result, the K-fold cross validation method was provided to validate the result. And to create the effectiveness model, the results of each algorithm were evaluated by the percentage correct, precision, recall and F-measure.

### THE EXPEIMENTAT RESULTS

In this research, we separate the result by the research purposes into 2 parts: developing the decision support system for student's major selection and testing and evaluating the system. In developing the decision support system for student's major selection application, the data was analyzed by using J48 and Bayesian Networks algorithms and using the appropriated result was created the model to develop the decision support system to guide student major selection. The results of this experiment were shown in TABLE 1, compared the effectiveness of each algorithm.

TABLE I THE EXPERIMENT RESULTS OF EACH ALGORITHM

	percentage of collect	Precision	Recall	F-measure
<b>J48</b>	89.23	0.84	0.92	0.88
<b>Bayesian Networks</b>	92.13	0.93	0.9	0.91

The results of the experiment show that the Bayesian Networks algorithm is more efficient than J48 algorithm. The percentage of prediction is accurate 92.13% and precision and F-measure are 0.93 and 0.91 respectively.

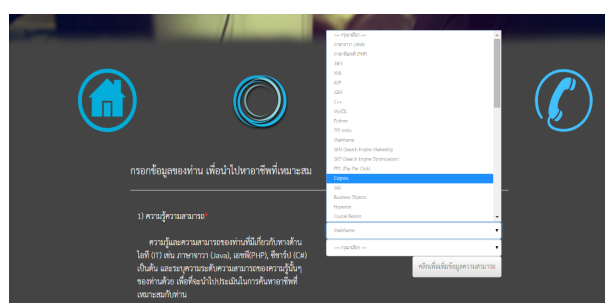


Fig. 3 the example page of application



In testing and evaluating this decision support system, black box testing and questionnaires by specialists and students were used to test this project. Black Box testing was used to determine the error of the project as following: functional requirement test,

TABLE 2 the results of Black box testing

	Specialists		Users	
	$\bar{x}$	SD	$\bar{x}$	SD
1.Function Requirement Test	4.14	0.554	4.06	0.659
2. Functional Test	4.15	0.610	4.13	0.718
3. Usability Test	4.23	0.610	3.97	0.645
4. Performance Test	3.96	0.416	3.96	0.531
5. Security Test	3.79	0.624	3.71	0.665
Summary	4.05	0.563	3.97	0.644

Function test, Usability test, Performance test and Security test. Functional Requirement test was evaluated the ability of the system in needs of the users and Functional test was assessed to evaluate the accuracy of the system. Usability test was tested the suitability of the system. 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.

## CONCLUSION AND FUTURE WORK

In this paper, we presents the preliminary result showing a promising progress in this prototypes model for the ongoing improvement project and also this model can be beneficial to help student for selecting his/her major. However, in term of the future experiments, we are looking forward to research about other data mining techniques to enhance this project and also apply the tool to support student's decision.

## ACKNOWLEDGMENT

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## THE RELATION BETWEEN THE ATTITUDES OF PRE-SERVICE PHYSICAL EDUCATION TEACHERS TOWARDS INSTRUCTIONAL TECHNOLOGIES AND MATERIAL DESIGN COURSE AND THEIR ACADEMIC STANDING: BATMAN UNIVERSITY SAMPLE

Enes İŞIKGÖZ

Batman University, College of Physical Education and Sport, Turkey  
pdgenes@gmail.com

### ABSTRACT

The purpose of this study is to analyze the relation between the attitudes of pre-service physical education teachers towards Instructional Technologies and Material Design course and their academic standing. The study group is composed of 81 pre-service teachers studying teaching program in Batman University School of Physical Education and Sports in 2015-2016 academic year spring term. Data of the study were obtained from Attitude Scale towards Instructional Technologies and end-of-term scores of pre-service teachers for Instructional Technologies and Material Design course. Following the study, it has been concluded that the attitudes of pre-service physical education teachers towards instructional technologies and material design course are "Good", their attitudes and academic standings don't differ by sex; however, there is a positive and moderately significant relation between their attitudes and academic standings.

**Key Words:** Physical Education, Pre-service Teacher, Instructional Technologies, Material Design, Academic Standing.

### INTRODUCTION

Since the emergence of educational institutions and teaching profession, a highly rapid process of change and development has been observed in these fields as in every field. Differences in the functions of educational institutions as per the changing and developing conditions have caused differences in the roles of teachers and developments are observed that will lead to various functions after that (Özkan, 2005). Developments in information and technology lead this progress. The integration of education being in the centre of social, cultural and economic development into the information age, technological innovations and technological advancements is among the indispensable requirements of the age. As technological advancements are used more in education field in the information age. It isn't possible to think technology and education being two important dynamics of this information age separately (Alım, 2007). New improvements in educational technology have reflected to instructional materials and the use of qualitatively and quantitatively improving instructional materials have brought along many benefits in terms of reaching to teacher, student, teaching way of a lesson, general and special targets of education (Bozkurt and Akalın, 2015).

Nearly in every society, teachers being the main element of education system are responsible for socializing new generations in line with the social necessities and targets and therefore integrating them with the society (Aslan, 2003). In this sense, the role of teachers in adaptation and of technology into the education and training in the process of education and its effective use is very important. Teachers try to reach information to their students by using effective and technology-based methods every passing day (İşman, 2005). As sense of modern education expose teachers to the obligation and responsibility of selecting and applying the teaching method that will ensure learning at the highest level (Yılmaz, 2001). Realizing this function for teachers depends on their training and attitudes. Applying information technologies in teacher training also helps training of qualified individuals needed by the society in information age (Davis, 2003).

After such penetration of information technologies into the field of education, a number of changes were made in the field of teacher training in our country and these changes still continue according to today's requirements. The most important one of these changes is that the duty of teacher training was given to universities in 1982. After this regulation, a set of innovations have been made in the system of teacher training. One of them is the "Pre-service Teacher Training Project" jointly held by YÖK (Council of Higher Education)-World Bank between the years 1994 and 1998. Within the scope of the project, faculties of education were restructured in 1997 and re-regulated teacher training programs as of 1998-1999 academic year were applied. With the new program, *important changes were made in the number and weekly course hours of "Knowledge of Teaching Profession" courses. The purpose of this program was to help pre-service teachers to learn the courses in their own subject fields on the one hand and to prepare for the teaching profession and mentality with the teaching formation courses on the other hand, to recognize various technologies such as computer, internet, multimedia,*

television, video, projector machines and to use them in teaching through the courses that emphasize the use of information technologies at school and development of different materials necessary for teaching. So, it has been foreseen that future teachers will bear such qualities to know technology and to put it into practice effectively and efficiently in teaching" (YÖK, 1998). Within the program, obligatory computer courses were brought in an early period in all teacher training programs and the purpose of this course was to help pre-service teachers obtain basic proficiency of computer use and to know information technologies well. "Instructional Technologies and Material Development" [ITMD] course ranking among the teaching formation courses is a follow-up of this basic computer course and contains application of developing technologies in teaching environment in various ways (YÖK, 1998).

One of the most important characteristics of teacher training programs updated according to today's conditions and applied as of the 2006-2007 academic year is increasing the proportions of general knowledge courses. The purpose of this change is to equip pre-service teachers trained at university level with intellectual assets that an enlightened person must have. A versatile pre-service teacher who has a certain level of general knowledge and skills related to information technology, who can conduct a scientific research and benefit from the previously made researches will be more successful in fulfilling the requirements of modern education. This qualification of teacher will yield positive reflections in preparing students for the future (YÖK, 2007). Within the scope of new regulation of YÖK, the course "Instructional Technologies and Material Development" has been changed as "Instructional Technologies and Material Design [ITMD]". The ITMD course envisaged to be given for 4 hours a week in the program has been defined as follow: *"The concepts related to Instructional Technology, features of different teaching technologies, the place and use of instructional technologies in teaching process, determining the technology needs of school or class, making and performing appropriate technology planning, developing two and three-dimensional materials via instructional technologies, developing teaching materials (handouts, activity design, overhead transparencies, slides, visual media (VCD, DVD) tools, computer based tools), analysis of teachwares, evaluation of instructional tools with different qualities, researches on Internet and distance education, visual design principles, efficacy condition of teaching materials, use of instructional technologies in Turkey and in the world"* (YÖK, 2007).

Ministry of Education [MEB] has also performed some studies with the purpose of increasing the qualifications of teachers. In this regard, the competences teachers must have were determined and these technological competences were specified as below (MEB, 2006).

- ✓ *Technologically literate (they have knowledge and skills related to the concepts and practices of technology).*
- ✓ *They benefit from information and communication technologies in order to support their professional development and to increase efficiency.*
- ✓ *They benefit from information and communication technologies (on-line journals, packaged software, e-mails etc.) with the purpose of sharing information.*
- ✓ *They prepare appropriate learning environments for students who have different experiences, characteristics and skills by using information and communication technologies.*
- ✓ *They mention about how information and communication technologies will be used in the lesson plan.*
- ✓ *They use computer and other technological tools in preparing materials.*
- ✓ *They set an example for effective use of technological sources and teach them.*
- ✓ *They analyze data by using information and communication technologies.*
- ✓ *They share evaluation results with parents, school management and other educators by using information and communication technologies.*

Physical education and sports teachers in our country are trained in Faculties of Sports Sciences, Schools of Physical Education and Sports and undergraduate programs of Physical Education and Sports Teaching in Faculties of Education in universities. As in other teacher training programs, 4 hours of weekly "ITMD" course is given within the scope of teaching profession knowledge course in undergraduate programs of physical education and sports. Instructional technology and material design are interconnected concepts and instructional technology is used for correct, up-to-date and active material design. Instructional materials are the tools offered to students in different environments by teachers during the learning process. These tools can be such objects as printed materials, photographs and models. They can also be presented in such environments as sound records, videos, CDs, internet pages and various software that require higher technology to access the content (Kaya, 2006).

Physical education course has an important place as an indispensable part of general education both for health reasons and development of cognitive, affective and psychomotor skills for students. Use of instructional technologies and material design for the course are also important in physical education and sports courses as in

other courses. Use of instructional technologies in physical education course in accordance with today's conditions and material design for the course depend on pre-service physical education teachers to be trained well-equipped in this field and to show positive attitudes towards technology. As technology has an important place to ensure advancement in education. Therefore, educators must combine their own field of study with technology (Akkoyunlu, 2002). The fact that none of the education models can produce service over the quality of human source that will manage that model makes the process of training students a key process also for the quality of education activities at schools (Ataç, 2003). In this sense, pre-service teachers must be equipped with the skills of using instructional technologies and material design. In the related literature, scale development studies (Kinay et al. 2015; Çetin et al. 2013; Metin et al. 2013) analyzing the opinions of pre-service teachers for "ITMD" course (Acer, 2011; Bektaş et al., 2009; Öztürk and Öztürk, 2015; Yazar, 2015; Duruhan and Şan, 2013; Gündüz and Odabaşı, 2004; Gömleksiz et al., 2010; Güven, 2006), their approaches (Güneş and İskenderoğlu, 2014; Alım, 2007) their self-confidence and level of use (Eyüp, 2012; Erdemir et al., 2009; Karamustafaoğlu, 2006) and experiences (Kolburan, 2010) are observed. When these studies are analyzed, it is observed that the efforts are made to determine the opinions and self-confidence levels of pre-service teachers for the course; however, it is seen that there is no such study that presents the relation between the attitudes of pre-service physical education teachers towards the course and their academic standings together. The purpose of this study is to analyze the attitudes of pre-service physical education teachers towards ITMD course and their academic standings. In line with this purpose, answers were sought for the questions below;

- 1- What are the attitudes of pre-service physical education teachers towards the instructional technologies and material design course?
- 2- Do the academic standings of pre-service physical education teachers for the instructional technologies and material design course and their attitudes towards the course differ by sex significantly?
- 3- Is there a significant relation between the attitudes of pre-service physical education teachers towards the instructional technologies and material design course and their academic standing?

## METHOD

This study aiming to analyze the attitudes of pre-service physical education teachers towards ITMD course and their academic standings has been designed as a screening model with the characteristic of comparison. A total of 81 pre-service physical education teachers composed of 57 male and 254 female students studying in the 3rd grade of teaching program in the School of Physical Education and Sports in Batman University for the 2015-2016 academic year spring term constitute the study group of the research.

Data of the study were obtained from Attitude Scale towards Instructional Technologies and end-of-term scores of pre-service teachers for ITMD course. "Attitude Scale towards Instructional Technologies [ASIT]" developed by Metin et al. (2012) is a likert scale and composed of 37 items as 17 positive and 20 negative items. The scale is composed of five sub-dimensions namely "Believe regarding usage of instructional technology in lesson [BRUIT] 10 items", "Appreciation to usage of instructional technology in lesson [ASIT] 9 items", "Unappreciated using instructional technology [UPIT] 9 items", "Disinclination to make use of instructional technology [DMIT] 7 items" and "Believe in usefulness of instructional technology [BUIT] 2 items". Cronbach Alpha internal consistency coefficient for the whole scale was found as .94 and between .75 and .89 for sub-dimensions. In this study, Cronbach Alpha internal consistency coefficient for the whole scale was calculated as .86.

Positive items in the scale were graded as "Strongly Agree=5", "Agree=4", "Undecided=3", "Disagree=2" and "Strongly Disagree=1" from 5 to 1, negative items were graded reversely from 1 to 5. Points obtained from the scale were interpreted as "Highly Insufficient" between 1.00 – 1.79, "Insufficient" between 1.80 – 2.59, "Moderate" between 2.60 – 3.39, "Good" between 3.40 – 4.19 and "Very Good" between 4.20 – 5.00. Academic standings of students for ITMD course were received from the system of registrar's office. Academic standings differ within the rank of "0-90". Success grades are categorized as "Low" between 0-30, "Medium" between 31-60 and "Good" between 61-90. Students were asked to write down their sex and pass marks for ITMD course while filling the attitude scale. Aside from the descriptive statistical techniques, correlation analysis and t-test for independent groups were used in analysis of data. Whether there was a difference between variables was evaluated at a  $p < .05$  significance level.

## FINDINGS

**Table 1. Descriptive statistics results for the attitudes of pre-service physical education teachers towards instructional technologies in sub-dimensions**

	<i>M</i>	<i>SD</i>
[BRUIT]-Believe regarding usage of instructional technology in lesson	3,99	1,81
[ASIT]- Appreciation to usage of instructional technology in lesson	4,10	1,93
[UPIT]- Unappreciated using instructional technology	2,57	1,34
[DMIT]- Disinclination to make use of instructional technology	2,64	1,08
[BUIIT]- Believe in usefulness of instructional technology	4,02	0,53
<b>Total</b>	<b>3,42</b>	<b>0,96</b>

According to data of Table 1, it is seen that the attitudes of students for the sub-dimension believe regarding usage of instructional technology in lesson are "Good" ( $3,99 \pm 1,81$ ), their attitudes for the sub-dimension appreciation to usage of instructional technology in lesson are "Good" ( $4,10 \pm 1,93$ ), the attitudes for the sub-dimension unappreciated using instructional technology "Insufficient" ( $2,57 \pm 1,34$ ), "Insufficient" for the sub-dimension disinclination to make use of instructional technology ( $2,64 \pm 1,08$ ) and "Good" for the sub-dimension believe in usefulness of instructional technology ( $4,02 \pm 0,53$ ). In total of all sub-dimensions, it is observed that the attitudes of students towards instructional technologies and material design course are "Good" ( $3,42 \pm 0,96$ ).

**Table 2. t-test results for the academic standings of pre-service physical education teachers and their attitudes towards ITMD course by the sex variable**

	<i>Sex</i>	<i>N</i>	<i>M</i>	<i>SS</i>	<i>sd</i>	<i>t</i>	<i>p</i>
Academic Standing	Male	57	59,85	18,35	79	,22	.82
	Female	24	58,80	21,96			
BRUIT	Male	57	40,19	20,24		,25	.80
	Female	24	39,08	11,85			
ASIT	Male	57	37,49	19,72		,49	.60
	Female	24	35,38	10,09			
UPIT	Male	57	22,33	12,78		-,93	.35
	Female	24	25,08	9,98			
DMIT	Male	57	19,42	7,78		1,79	.07
	Female	24	16,17	6,51			
BUIIT	Male	57	8,04	1,02		-,18	.85
	Female	24	8,08	1,18			
Total	Male	57	127,47	38,78		,42	.67
	Female	24	123,79	26,23			

Regarding Table 2, academic standings of pre-service physical education teachers differ significantly by sex variable ( $t_{(79)} = ,22$ ;  $p > .05$ ). Average academic standings of pre-service teachers are close. It is observed that the attitudes of pre-service physical education teachers towards instructional technologies for the sub-dimensions believe regarding usage of instructional technology in lesson ( $t_{(79)} = ,25$ ;  $p > .05$ ), appreciation to usage of instructional technology in lesson ( $t_{(79)} = ,49$ ;  $p > .05$ ), unappreciated using instructional technology ( $t_{(79)} = -,93$ ;  $p > .05$ ), disinclination to make use of instructional technology ( $t_{(79)} = 1,79$ ;  $p > .05$ ) and believe in usefulness of instructional technology ( $t_{(79)} = -,18$ ;  $p > .05$ ) don't differ significantly by the sex variable. When the total of all sub-dimensions are analyzed, it is seen that the attitudes of pre-service physical education teachers towards instructional technologies don't differ significantly by the sex variable ( $t_{(79)} = ,42$ ;  $p > .05$ ).

**Table 3. The relation between the attitudes of pre-service physical education teachers towards instructional technologies and their academic standings**

		<i>BRUIT</i>	<i>ASIT</i>	<i>UPIT</i>	<i>DMIT</i>	<i>BUIIT</i>	<i>Total</i>
<i>Academic Standing</i>	Pearson Correlation	,675**	,609**	-,085	-,087	,454**	,611**
	p	,00	,00	,45	,43	,00	,00
	N	81	81	81	81	81	81

\*\*Correlation is significant at the 0.01 level (2-tailed).

Concerning Table 3, it is observed following the correlation analysis that there is a positive moderate ( $r=.675$ ;  $p<.05$ ) relation between the academic standings of pre-service physical education teachers for ITMD course and [BRUIT]- Believe regarding usage of instructional technology in lesson, positive moderate ( $r=.609$ ;  $p<.05$ ) relation in the sub-dimension [ASIT]- Appreciation to usage of instructional technology in lesson and positive weak ( $r=.454$ ;  $p<.05$ ) relation in the sub-dimension [BUI]- Believe in usefulness of instructional technology. It is seen that there is a negative weak ( $r=-.085$ ;  $p>.05$ ) but not statistically significant relation between the academic standings of students for ITMD course and the sub-dimension [UPIT]- Unappreciated using instructional technology and negative weak ( $r=-.087$ ;  $p>.05$ ) relation in the sub-dimension [DMIT]- Disinclination to make use of instructional technology. There is a positive and moderately significant relation between the academic standings of students and their attitudes towards instructional technologies in total of all sub-dimensions ( $r=.611$ ;  $p<.05$ ).

## DISCUSSION AND CONCLUSION

Below results have been achieved in this study that analyzes the relation between the attitudes of pre-service physical education teachers towards instructional technologies and material design course and their academic standings; average academic standings of pre-service teachers for ITMD course is 59,85 for male students and 58,80 for female students. The attitudes of pre-service teachers for the course are "Good" in the sub-dimensions believe regarding usage of instructional technology in lesson, appreciation to usage of instructional technology in lesson and believe in usefulness of instructional technology; their attitudes are "Insufficient" in the sub-dimensions unappreciated using instructional technology and disinclination to make use of instructional technology. In total of all sub-dimensions, it is observed that the attitudes of students towards the instructional technologies and material design course are "Good".

The fact that the attitudes of pre-service teachers towards ITMD course are positive coincides with the results of similar studies in this field (Yazar, 2015; Öztürk and Öztürk, 2015; Özer and Tunca, 2014; Güneş and İskenderoğlu, 2014; Metin et al. 2013; İnel et al. 2011; Kolburan, 2010; Usta and Korkmaz, 2010; Can, 2010; Özgen and Obay, 2008; Güven, 2006; Sönmez et al. 2006). Eyüp (2012) has stated in his study that the self-confidence levels of pre-service Turkish language teacher regarding use of instructional technologies are "sufficient". In the research conducted by Yılmaz et al. (2010) which tries to determine the attitudes and opinions of the students studying in physical education teaching program towards the use of technology in education, it is stated that pre-service teachers are willing to use instructional technologies in lessons. It is stated in the study of Kolburan (2010) performed with the pre-service teachers that all pre-service teachers are of the opinion that ITMD course leads to professional contribution. It is a desired result not only in this study but also in other studies that pre-service teachers have positive attitudes towards use of technology. When it is taken into account that technology is used nearly in every field today and use of these technologies in education has become obligatory, it is inevitable for the attitudes of pre-service teachers towards use of technologies in teaching to increase positively (Metin et al. 2013).

Another finding of the study is that ITMD course success of pre-service physical education teachers and their attitudes towards the course don't differ by sex. In other words, sex isn't a significant variable for the course success of pre-service physical education teachers and their attitudes towards the course. It has been observed that this finding of the study coincides with the findings of similar studies in literature (Alım, 2015; Metin et al. 2013; Eyüp, 2012; Ulaş and Ozan, 2010; Karamustafaoğlu, 2006; Saka and Saka, 2005); however, it doesn't coincide with some others (Kinay et al. 2015; Menzi et al. 2012; Can, 2010; Erdemir et al. 2009). Although the results of the research are different, it is an important finding in this study that pre-service physical education teachers agree concerning ITMD course in terms of sex variable. As teachers and pre-service teachers must acquire the skills related to use of educational technology and effectively apply these skills in class in order to ensure effective teaching in class (Varank and Ergün, 2005).

Another finding obtained from the study is that there is a positively moderate and significant relation between the ITMD course success of pre-service physical education teachers and their attitudes towards the course. Regarding the relation between the course success of pre-service teachers and their attitudes towards the course in sub-dimensions, there is a positive and moderate relation in the sub-dimensions believe regarding usage of instructional technology in lesson and appreciation to usage of instructional technology in lesson; a positively weak and significant relation in the sub-dimension believe in usefulness of instructional technology. It is an expected result that the direction and degree of the relation between the course success of pre-service teachers and their attitudes towards the course are significant. Because an attitude developed towards a course foresees 25% of the success (Bloom, 1976). Determining the attitudes towards certain activities is also important in terms of establishing the success in these activities (Ekici, 2002). There isn't a significant relation found between the attitudes of pre-service physical education teachers and their academic standings in the sub-dimensions unappreciated using instructional technology and disinclination to make use of instructional technology. It is an

expected result that negative attitudes yield reverse correlation with course success. However, it is seen that the values obtained aren't high and significant. In the study of Bakaç and Özen (2016) which analyzes the relation between the attitudes of pre-service teachers, their perception of creativity and self-efficacy beliefs concerning the instructional technologies and material design course, they have concluded that there is a low level of positive and significant relation between the self-efficacy belief levels of pre-service teachers for material design and their perception of creativity; there is a medium level of positive and significant relation between their self-efficacy belief levels for material design and attitude scores.

In teacher trainer programs, the purpose is to equip pre-service teachers with the competences related to use of various instructional technologies and design and evaluation of instructional material through ITMD course (Gömlüksiz et al. 2010). In order to effectively use technology in education systems, educators must know how individuals will learn and they must recognize the intense relation of technology with science (İşman, 2005). During teacher training programs, positive attitudes of pre-service teachers towards instructional technologies and material design course will not only ensure their professional development, but also increase their academic standing.

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## **THE RELATIONSHIP AMONG STATISTICS SELF-EFFICACY SCORES, DEMOGRAPHIC CHARACTERISTICS AND EDUCATION LEVEL OF POSTGRADUATE STUDENTS (MASTERS DEGREE, PHD DEGREE)**

Serap ÇOLAK

School of Physical Education and Sport, Department of Sports Management, Kocaeli University,  
Kocaeli, Turkey  
srpclk@gmail.com

### **ABSTRACT**

Nowadays, statistics have been into economy, education, sport, politics and research areas like all parts of human life. Especially, statistics using in education and research areas. Feeling confident about using statistics make easier graduate and post-graduate students' academic life in university. The purpose of this study is to evaluate the statistic self-efficacy belief (SSEB) levels of masters and doctorate students and to determine whether there is a significant relationship between students' education levels and their demographic characteristics, including age, gender, region of origin, and place of residence. 43 masters (%74.1) and 15 doctorate students (%25.9) totally 58 post-graduate students attended to this study. 39 of this study participants (%67.2) are male (age average is  $30.10 \pm 5.409$ ) and 19 (%32.8) female (age average is  $28.16 \pm 5.025$ ). We applied Information Collection Survey and Statistical Self-Efficacy Belief scale (SSEB) to participants. 36 of participants came from Marmara region (%62.1). We identify that there is no significant difference between masters and doctorate students, but ten answers given to the questions of survey. According to these datas, higher SSEB values of post-graduate students will increase both their academic success and their self-reliance about statistics usage.

### **INTRODUCTION**

Statistics definition is inventory in Turkish. Statistics defined data collection, table graphics summary and result interpretation for specific purpose. Statistics is covered explanation of this results integrity, generalisation of pattern result for populace, research of features relation, projection of various topics, test adjustment and rules of observation. (Turkcebilgi, 2015)

Self-efficacy is defined as personal achievement about problem solution capability by Bandura (1977). Person implemented problem resolution according to self-efficacy when problem occurred. So self-efficacy is personal work completion and achievement. Social psychology implemented self-efficacy at different disciplines. (Akkoyunlu and Orhan, 2003; Lev, 1997). Statistics self-efficacy research is limited.

It can be determined as the confidence of statistic self-efficacy as "personal statistic capability assessment". The individuals that has high self-confidence of statistic capability must be considered as to have more motivation and success. If we think the importance of research in people's lives that in post-graduate education in nowadays, we can understand more about how a very important part of in their success is of the self-efficacy belief on statistics.

### **PURPOSE OF THE STUDY**

Purpose of the study is especially according to the literature, post-graduate students' confidence of personal statistic assessment and the result classification based on student demographic features such as age, gender, hometown and educational level, relation statistic during academical life.

### **RESEARCH QUESTIONS**

- 1-) What is the relations between university postgraduate student SSEB and demographical features?
- 2-) What is the student level of SSEB?
- 3-) What is the relations university postgraduate student SSEB and educational level?

### **MATERIAL AND METHOD**

58 postgraduate participants attend to our study. 39 of participants are male (Age average  $30.10 \pm 5.409$ ), 19 participants are female (Age average  $28.16 \pm 5.025$ ).

### **DATA COLLECTION**

Research data source is data collection survey and SSEB scale. The reliability of survey questionnaire is related to consistency of measuring, repeatable and balanced (Erdoğan,1998) Related to this, self-efficacy for statistics are prepared as articles, asked to professionals if they were relevant. Content validity confirmed by specialists' opinion and named as SSEB scale.

#### *Data Collection Survey*

This survey covered age, gender, location they came from and educational level.

#### *Confidence of Statistics Self Efficacy Scale*

This scale measured self sufficient with 16 line items defined by researcher. Each question score between 1 to 5 points. (1:Never, 2:Bit, 3:partly, 4:often, 5:always)(Colak, 2013)

### STATISTICAL ANALYSES

The data were analysed using the SPSS package( SPSS for Windows V15.0, SPSS Chicago IL, USA). The means and standard deviations of all the measurements were calculated. The differences between group means were determined using a non-parametric test for independent samples (Mann-Whitney U test). A *p* value of 0,05 was considered statistically significant ( Colak ,2013)

### RESULTS:

**Table 1:**

	<b>Male n:39(%67,2)</b>	<b>Female n:19(%32,8)</b>	<b>Total n:58</b>	<b>p* value</b>
Age(years)	30.10±5.409	28.16 ± 5.025	29.47±5.322	0,160
SSEB	47.82±5.558	50.32±6.490	48.64±5.940	

Values are given as mean±SD

\*Significant differences.

Research attendees 58 postgraduate student %67.2(n:39) male (Age average 30.10± 5.409) %32.8 (n:19), female (Age average 28.16 ± 5.025) (Table-1).

**Table 2:**

<b>Region</b>	<b>Frequency</b>	<b>Percent(%)</b>	<b>SSEB</b>
<b>Marmara</b>	36	62.1	49.00±6.32
<b>Black Sea</b>	5	8.6	48.60±3.57
<b>Mediterranean</b>	5	8.6	51.20±5.35
<b>Aegean</b>	3	5.2	44.33±10.01
<b>Central Anatolian</b>	2	3.4	48.50±2.12
<b>Eastern Anatolian</b>	3	5.2	48.00±1.73
<b>Southeastern Anatolian</b>	3	5.2	44.00±5.56

Research group coming from %62.1 (n:36)Marmara, %8.6(n:5) Black Sea, %8.6 (n:5) Mediterranean, %3,4(n:2) Central Anatolian, %5.2(n:3) Aegean, %5.2(n:3) Eastern Anatolian, %5,2(n:3)Southeastern Anatolian at post-graduate education(Table-2).

**Table 3:**

	Frequency	Percent(%)	SSEB	p* value
<b>Master</b>	43	74.1	49.05±5.60	0.432
<b>Doctorate(PhD)</b>	15	25.9	47.47±6.88	

\*Significant differences.

%74.1 (n:43) of participants are master (Age average 28.95+/- 5.473) and %25.9(n:15) is doctorate(Age average 30.93+/- 4.728).(Table -3) Only %67.2 of participants have known statistics before their post-graduate education.

**Table 4** –Relationship between answers given to survey questions and education levels (post-graduate and doctorate ) evaluated with Wilcoxon test as accepting  $p < 0,05$

Questions	SSEB mean (Master)	SSEB mean (Doctorate)	P value
1	3,44±1,14	2,27±1,16	<b>0,002</b>
2	4,16±0,94	3,93±1,28	0,704
3	3,84±1,23	2,93±1,28	<b>0,014</b>
4	3,63±1,21	2,47±1,06	<b>0,004</b>
5	2,56±1,14	3,07±1,48	0,270
6	2,09±1,01	2,87±1,45	0,072
7	2,37±1,17	3,07±1,16	0,051
8	2,49±1,24	2,80±1,47	0,534
9	2,35±1,21	2,93±1,16	0,072
10	2,53±1,42	3,47±1,45	<b>0,036</b>
11	3,63±1,04	2,40±1,18	<b>0,001</b>
12	2,70±1,16	1,87±1,06	<b>0,021</b>
13	1,79±0,94	2,60±1,05	<b>0,010</b>
14	4,26±0,81	3,53±1,30	<b>0,046</b>
15	3,84±1,06	2,87±1,55	<b>0,032</b>
16	3,37±1,25	4,40±0,98	<b>0,005</b>

1: I feel safe while applying statistics, 2:It makes me happy when I learn new things about statistics, 3: I try to solve problems that encountered while applying statistics ownself, 4: I think it is easy to use statistical in studies, 5: I feel forced when I need to to learn something new about statistics, 6:If I am obliged to use statistics related my job I feel trouble, 7: I often have trouble while applying statistics, 8: I'm afraid of making mistakes can not be corrected while applying statistics, 9: Statistics are too complicated issue for me, 10:If not required I don't apply statistics ownself, 11:I believe I can finish my work faster with using statistics, 12: I would say I was a good statistics practitioner, 13:I would have panic when I have statistics problems,14: I believe everyone can learn to use statistics if they are willing to learn, 15: I believe I have the ability to meet my needs of statistics, 16:When I encounter a problem while applying statistics I would absolutely take help from someone

Master and doctorate groups are compared in terms of statistics, using the answers they give to the SSEB survey. As result there is significant difference between the doctorates and master in 1, 3, 4, 10, 11, 12, 13, 14, 15 ve 16

th questions( $p<0.05$ ) (Tablo4) but in 2, 5, 6, 7, 8 and 9 th questions there is not a significant difference between them. ( $p>0.05$ ) (Table4).

## DISCUSSION:

Statistics word's usage origin is Aristotle time line. At that time, State defined total military and financial level via statistic. Beginning of the 17th century, statistical was not improved. The first step came John Graunt with statistic analyse 'Political Arithmetic' is life statistic, insurance and economical statistic to be covered William Petty book (1623 -1687) in the same century (Otrar 2015). Statistics is the branch of scientific method which deals with the data obtained by counting or measuring the properties of populations of natural phenomena. In this definition 'natural phenomena' includes all the happenings of external world, whether human or not'(Kendall and Stuart 1943,Smith 2011)

Kayhan and Koca (2004) study investigated master and doctorate thesiss at Mathematic Department. The Mathematic researchs are in 'cognitive format', mathematical subjects and educational method according to this study. This is demonstrated mathematic and statistic importance for education life and postgraduate life. (Kayhan and Koca 2004). This study explain correction postgraduate student self-sufficient and related study based on statistics.

Statistic working type increased at university academic life. Postgraduate student used statistic for assignment completion, research, thesis study.

Statistics keeps big place in life of computer century population. Statistic is must for research. Statistic given reliability to self-sufficient increase for postgraduate student. Student will use statistic which is help academic life.

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## THE RELATIONSHIP BETWEEN FACULTY OF EDUCATION STUDENTS' ARGUMENTATION SKILLS AND CRITICAL THINKING, CREATIVE THINKING AND PROBLEM SOLVING SKILLS

Abdulkerim KARADENİZ  
Department of Turkish Education  
Ahi Evran University, Turkey  
akaradeniz@ahievran.edu.tr

### ABSTRACT

This study aims to investigate the relationship between faculty of education students' argumentation skills and critical thinking, creative thinking and problem solving skills. First of all, the correlation value between the argumentation skill and other variables was determined in the study. Then, to what degree critical thinking, creative thinking and problem solving skills predicted the argumentation skill was examined. The findings of the study were obtained using the Critical Thinking Skill Scale, the Creative Thinking Skill Scale and the Problem Solving Skill Scale developed by the researcher. In order to determine argumentation skills of students, they were asked to write an essay and the essays were evaluated according to Toulmin's argument model. Study results showed a high-level correlation between students' argumentation skills and other variables. Also, another result of the study was that critical thinking, creative thinking and problem solving skills explained 74,1% of students' argumentation skill.

**Keywords:** Argumentation, critical thinking, creative thinking, problem solving.

### INTRODUCTION

The literature contains experimental studies investigating the effect of the argumentation-based science learning method on students' basic skills such as critical thinking, problem solving, creative thinking and decision making (Arlı, 2014; Demir, 2014; Demirbağ and Günel, 2014; Kardaş, 2013; McGhee, 2015; Şahin, 2016; Tonus, 2012). The common result of these studies is that the argumentation-based science learning method has a positive effect on students' basic skills. In addition to these studies, there are also those revealing positive and high-level correlations between students' basic skills and argumentation skills (Demiral, 2014; Torun, 2015). We believe that the present study will contribute to the literature by revealing the relationship between university students' argumentation skills and critical thinking, creative thinking and problem solving skills. Also, this is the first study aiming to reveal to what degree critical thinking, creative thinking and problem solving skills predict the argumentation skill.

The Turkish Language and Literature Curriculum (2005) emphasizes the importance of developing critical thinking, problem solving and creative thinking skills and aims to develop these skills in students through text analysis. Today, the goal is to raise individuals who can investigate, question, reach information independently and identify whether information reached is reliable or not. It is necessary to develop verbal and written expression skills of students to achieve this goal. Interpretation, comparison and evaluation skills of students may be improved with literature education. The argumentation skill stands out as a skill seen in students with higher-order thinking skills. This study attempts to reveal the relationship between students' higher-order thinking skill and argumentation skills.

Driver, Newton and Osborne (2000) define argumentation as the thinking and writing activity performed individually or in groups. In 1958, Toulmin developed an argument model utilized by educators and especially science educator in order to determine factors and complexity of arguments between students (Kardaş, 2013). Toulmin's (2003) argument model consists mainly of the following components: claims, a qualifier, data, warrants, rebuttals and backing.

Argumentation scaffolding is a form of learner support designed to help bridge the gap between the students' current and desired ability to create evidence-based arguments (McGhee, 2015). Argumentation allows students to understand that they can and should have an opinion, a claim, and they should back it up with evidence if they want to be truly understood and respected (Olsen, 2013).

The argumentation skill may be defined as a process in which students use reasoning in relation to a certain subject and associate their impressions by reasoning them out. In this process, students make use of their critical thinking, creative thinking and problem solving skills. Therefore, it is possible to think that argumentation skills of students are closely related to these skills defined as higher-order thinking skills.

Discussion and writing activities performed individually or in groups may be used in order to improve argumentation skills of students. To teach these skills to students is important, because argument and critique are at the very center of science—connecting the “hands-on” work of scientific inquiry with the “minds-on” work of developing scientific ideas and theories (Osborne et al., 2016). Argument and critique are skills that may be developed with Turkish and literature courses. It can be said based on previous studies that especially text analysis may be used as a tool to teach students these skills as well as higher-order thinking skills (Karadeniz, 2012; Karadeniz and Gürsoy, 2014).

### **Objective of the Study**

This study aims to investigate whether there is a relationship between argumentation skills and critical thinking, creative thinking and problem solving skills of students attending the faculty of education. Based on this aim, the study seeks to answer the following questions:

1. Is there a relationship between argumentation skills and critical thinking, creative thinking and problem solving skills of students?
2. To what degree do critical thinking, creative thinking and problem solving skills of students explain their argumentation skills?

## **METHODOLOGY**

### **Research Model**

This study, aiming to investigate the relationship between faculty of education students' argumentation skills and critical thinking, creative thinking and problem solving skills, was designed as a mixed method research. The document analysis technique, which is a qualitative data collection technique, was used in order to examine essays written by students in order to determine their argumentation skills. In order to reveal the relationship between students' argumentation skills and critical thinking, creative thinking and problem solving skills, the relational screening model, which is a qualitative research method, was used. Relational screening models are research models which aim to identify the presence or the degree of covariance between two or more variables (Karasar, 2005: 81).

### **Working Group**

The study was performed with 64 prospective teachers selected through impartial assignment among 2200 prospective teachers attending the Faculty of Education, Ahi Evran University in 2015-2016 academic year. The study included 17 students from Turkish Teaching Program, 15 students from Social Sciences Teaching Program, 16 students from Science Teaching Program and 16 students from Primary School Teaching Program. Also, 28 students in the working group were male and 36 were female.

### **Data Collection Tools**

The data required for the study were collected using “Toulmin's Argument Model”, “Critical Thinking Skill Scale”, “Creative Thinking Skill Scale” and “Problem Solving Skill Scale”. Measurement tools were tested for validity and reliability and following results were found:

The “Critical Thinking Skills Scale” developed by Karadeniz (2012) was applied to 453 out-of-sample university students to determine its compliance with the model. Model compliance values were tested by the researcher using confirmatory factor. Following results were obtained:  $\chi^2/df = 2,24$ ; RMSEA= 0,073; SRMR= 0,062; GFI= 0,90; AGFI= 0,90; CFI= 0,95; IFI= 0,95 and NNFI= 0,97. Also, the internal consistency of the scale was tested with Cronbach's Alpha coefficient, which was found to be  $\alpha = ,906$ .

The “Creative Thinking Skills Scale” developed by Karadeniz (2012) was applied to 453 out-of-sample university students to determine its compliance with the model. Model compliance values were tested by the researcher using confirmatory factor. Following results were obtained:  $\chi^2/df = 2,23$ ; RMSEA= 0,070; SRMR= 0,066; GFI= 0,90; AGFI= 0,87; CFI= 0,97; IFI= 0,94 and NNFI= 0,95. Also, the internal consistency of the scale was tested with Cronbach's Alpha coefficient, which was found to be  $\alpha = ,893$ .

The “Problem Solving Skills Scale” developed by Karadeniz (2012) was applied to 453 out-of-sample university students to determine its compliance with the model. Model compliance values were tested by the researcher using confirmatory factor. Following results were obtained:  $\chi^2/df = 2,31$ ; RMSEA= 0,067; SRMR= 0,065; GFI= 0,92; AGFI= 0,90; CFI= 0,96; IFI= 0,94 and NNFI= 0,96. Also, the internal consistency of the scale was tested with Cronbach's Alpha coefficient, which was found to be  $\alpha = ,898$ .

Considering the results given above in relation to confirmatory factor analysis applied to scales, it is seen that compliance values are within acceptable levels (Jöreskog and Sörbom, 1993: 123; Raykov and Marcoulides, 2006: 43). In addition, results related to Cronbach's Alpha coefficient can be said to be good (Field, 2005: 668).

In order to measure their argumentation skills, students were asked to write an essay about problems faced by the Turkish language today and what can be done to solve these problems and essays written by students were evaluated according to Toulmin's argument model (2003). Essays were scored from 1 to 5 according to components of Toulmin's (2003) argument model. Accordingly; essays containing a simple claim against a claim were scored 1, essays containing data, grounds and counter-claims were scored 2, essays containing data, grounds and weak rebuttals were scored 3, essays containing clearly expressed rebuttals were scored 4 and essays containing multiple rebuttals were scored 5.

### Data Analysis

In order to determine the statistical method used in the study, it was first examined whether the data showed normal distribution. In order to test the suitability of data to normal distribution, the Kolmogorov-Smirnov normal distribution test was performed, since the sample size was larger than 50 (Wright, 2006, 94). It was found as a result of the normal distribution test that the significance level was higher than 0,05 and it was decided based on kurtosis and skewness coefficients and histogram chart that the data showed normal distribution. Pearson Moment Correlation Coefficient ( $r$ ) was calculated to determine relationships between faculty of education students' argumentation skills and variables. Multiple linear regression analysis was performed for prediction of students' argumentation skills. Standardized Beta ( $\beta$ ) coefficient and t-test results related to significance of this coefficient were taken into account when interpreting the regression analysis.

### FINDINGS

This section discusses the findings based on the data collected in accordance with sub-problems of the study. Table 1 shows mean and standard deviation values related to variables of the study and relationships between dependent and independent variables.

**Table 1:** Mean and Standard Deviation Values and Relationships Between Variables

Variables	$\bar{X}$	SD	1	2	3	4
1. Argumentation	3,72	,477	–	,756**	,584**	,832**
2. Critical Thinking	3,70	,439			,652**	,728**
3. Creative Thinking	3,99	,428				,577**
4. Problem Solving	3,74	,634				

\*. Correlation is significant at the level of 0,05. n=64

\*\*. Correlation is significant at the level of 0,01.

Table 1 shows that argumentation skills of prospective teachers participated in the study were ( $r = 3,72$ ). Correlation coefficients between variables reveal that the argumentation skill, the independent variable of the study, had a positive and significant relationship with all of the dependent variables. The relationship of the argumentation skill was at the level of ( $r = .756$ ,  $p < .01$ ) with the critical thinking skill, at the level of ( $r = .584$ ,  $p < .01$ ) with the creative thinking skill and at the level of ( $r = .832$ ,  $p < .01$ ) with the problem solving skill.

Table 2 shows the results of the stepwise regression analysis related to prediction of the argumentation skill by other variables.

**Table 2:** Results of Multiple Regression Analysis Related to Prediction of Argumentation Skill Scores

Predictor Variables	R	AR <sup>2</sup>	Std. Error	R <sup>2</sup> Change	F Change	F Regression	Beta	t	p
Critical Thinking	,756	,571	,312	,572	675,633	675,633	,295	8,130	,000
Creative Thinking	,766	,584	,308	,014	17,340	357,396	,052	1,721	,086
Problem Solving	,861	,741	,243	,156	305,191	483,514	,587	17,470	,000

Table 2 shows that there were significant relationships between the argumentation skill and critical thinking, creative thinking and problem solving skills. These predictor variables explain 74,1% of the total variance in students' argumentation skills. Critical thinking explains 57,2%, creative thinking explains 1,4% and problem solving explains 15,6% of the argumentation skill.

### DISCUSSION AND CONCLUSION

The present study examines the relationship between university students' argumentation skills and various variables.

The Pearson correlation analysis performed in order to investigate whether there was a significant relationship between argumentation skills and critical thinking, creative thinking and problem solving skills of students showed a positive and significant relationship between the argumentation skill and other variables. Accordingly, the relationship of the argumentation skill was at the level of ( $r=,756$ ,  $p<,01$ ) with the critical thinking skill, at the level of ( $r=,584$ ,  $p<,01$ ) with the creative thinking skill and at the level of ( $r=,832$ ,  $p<,01$ ) with the problem solving skill. Based on this finding, it can be said that an increase in argumentation skill scores of students will result in an increase in their critical thinking, creative thinking and problem solving scores as well.

In her study, Kardaş (2013) concluded that argumentation-based learning had no effect on the problem solving skill, whereas Demir (2014) concluded that the argumentation-based science learning approach positively affected creative thinking skills of students.

A multiple linear regression analysis was performed in order to determine to what degree critical thinking, creative thinking and problem solving skills predicted the argumentation skill. As a result of the analysis, it was found that there was a high-level and significant relationship between the argumentation skill and dependent variables. Accordingly; critical thinking, creative thinking and problem solving skills explain 74,1% of the total variance in the argumentation skill. Critical thinking explains 57,2%, creative thinking explains 1,4% and problem solving explains 15,6% of the argumentation skill. It can be said based on the standardized ( $\beta$ ) coefficient and the t value that critical thinking, creative thinking and problem solving are significant predictors of the argumentation skill with relative significance levels.

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## THE RELATIONSHIP BETWEEN SOCIAL ENTREPRENEURSHIP AND CAREER PLANNING ATTITUDES: A STUDY ON PRE-SERVICE TEACHERS

Merve GERÇEK

İstanbul University, School of Business, Human Resources Management, Avcılar, İstanbul, Türkiye  
[mrvgercek@gmail.com](mailto:mrvgercek@gmail.com)

Zeliha ÖZSOY-GÜNEŞ

İstanbul University, Hasan Ali Yücel Education Faculty, Science Education, Vefa, İstanbul, Türkiye  
[ozsoyz@istanbul.edu.tr](mailto:ozsoyz@istanbul.edu.tr)

### ABSTRACT

This study considers the importance of social entrepreneurship and aims to determine its relation to career planning attitudes. Social entrepreneurship is defined as the process of creating social values and finding innovative ways of using resources in order to fulfill social needs. Social entrepreneurship differs from economic entrepreneurship by its social aspect and individuals' altruism. Career planning attitudes involves the way an individual views on his or her capacity to cope on change in the future, comforts in performing planning and asses employment trends. The purpose of this study is to determine the relationship between social entrepreneurship and career planning attitudes of individuals. In order to pursue this purpose, Social Entrepreneurship Scale (Konaklı and Göğüş, 2013) and Career Futures Inventory (Rottinhaus, Day and Borgen, 2005) were used as data collection tools. The study sample consists of 342 pre-service teachers from departments of science, math teaching, social studies and elementary school education departments in the education faculty. Pearson correlation coefficient analysis technique was applied in order to observe the relationship between social entrepreneurship and career planning attitudes. The analysis indicated that both total and sub-factor scores of Pre-service Teachers' Social Entrepreneurship Qualifications Scale and Career Futures Inventory are positively related.

**Keywords:** Social Entrepreneurship, Career Planning Attitudes, Pre-Service Teachers

### INTRODUCTION

Entrepreneurship is generally linked to economic activities. Social entrepreneurship represents the social dimension of entrepreneurship. Entrepreneurship consists of having a vision and leadership skills to activate the vision. Social entrepreneurs are the people who gather together the necessary resources in order to make a difference (Thompson, 2005). Social entrepreneurship focuses on the social and benevolent aspect of entrepreneurship. In this sense, social entrepreneurship is considered altruistic. Social entrepreneurs attempt to gain profit society at risk of personal loss. Social entrepreneurship involves some degree of risk as well as entrepreneurship in general (Tan, Williams and Tan, 2005).

Social entrepreneurship is generally linked to not-for-profit marketing literatures (Weerawardena and Sullivan Mort, 2006). It is defined as the use of entrepreneurial behavior for social ends rather than for profit objectives (Hibbert, 2001). Waddock and Post (1991) approaches social entrepreneurship from the non-profit organizations point of view. They suggest that creating a public organization in order to alter the existing pattern of allocation of scarce public resources refers to social entrepreneurship. According to Sullivan Mort, Weerawardena and Carnegie (2003), social entrepreneurship refers to searching for and recognizing opportunities that lead to the establishment of new social organizations and continued innovation in existing ones. Since there has been a lot of different views on social entrepreneurship, Weerawardena and Sullivan Mort (2006) argued the need to develop a new theoretical framework. Their multidimensional model of social entrepreneurship involves risk management, proactiveness, innovativeness as interrelated dimensions.

Career is defined as the occupational positions an individual holds over the years (Dessler, 2013). Career management is the process which is held in organizations in order to understand and develop employees' career skills so that their skills can be used effectively within the company. On the other hand, career planning is the process which an individual becomes aware of his or her skills, interests, knowledge and seeks information about career opportunities. Career planning involves determining career goals and forming action plans for future goals. Thus, career planning requires an individual to have certain characteristics such as seeking information, openness to new information and actively communicate with the others.

According to Rottinghous, Day and Borgen (2005), career planning behaviors include career adaptability, career optimism and perceived knowledge of job market. Career adaptability is a term referring to the readiness to deal with the predictable tasks of being prepared to and participating in the work role. Career adaptability comprises of “planful attitudes, self and environmental exploration and informed decision making” (Savickas, 1997). Dispositional optimism is about expectancies of career outcomes. Career optimism is a disposition to expect the best possible outcome of an individual’s future career development. In addition, adequate career planning demands a correct assessment of job market and employment trends.

Career adaptability is a systematic planning process which starts from adolescence to adulthood. Therefore, it means coping with all kinds of changes in every stage of an individual’s life (Savickas, 1997). Coping strategies helps individuals to make stable career choices. Determining personal goals, creativity, risk taking, ability to tolerate ambiguity and motivation of achievement are essential components of social entrepreneurship. In the light of all these, relationship between social entrepreneurship potential of individuals’ and career planning attitudes has been sought.

### OBJECTIVE OF THE RESEARCH

The purpose of this study is determine the relationship between social entrepreneurship and career planning attitudes of pre-service teachers. For this purpose it has been sought to answer the following questions:

1. Is there a significant relationship between social entrepreneurship and career planning attitudes?
2. Do social entrepreneurship levels differ according to demographic varieties?
3. Do career planning attitudes differ according to demographic varieties?

### METHOD OF THE RESEARCH

Quantative research method is preferred in this study. Model of the research is relational screening. In accordance with this model the existence and the level of the relation between dependent and independent variables were attempted to be displayed (Kurtuluş, 2010).

### SAMPLE OF THE RESEARCH

The population of this study is formed by 342 pre-service teachers from departments of science, math teaching, social studies and elementary school education departments in the education faculty. 100 of Students (29,2%) are from the department of science, of 80 them (23,4%) are from the department of elementary school education, of 70 them (20,5%) are from the department of social studies, of 92 them (26,9%) are from the department of math teaching. 263 of students (76,9%) are female and 79 of them (23,1%) are male. 167 of students (48,8%) are 3rd grade and 175 of them (51,2%) are 4th grade students.

### DATA COLLECTION INSTRUMENTS

A three fold form has been prepared for the study. In order to measure social entrepreneurship levels Social Entrepreneurship Scale developed by Konaklı and Göğüş (2013) was used in the first part. The scale consists of 21 items and 3 sub-factors. In the second part, Career Futures Inventory developed by Rottinhous et al. (2005) and adopted to Turkish by Kalafat (2012) was used to determine career planning attitudes. The last part contains demographic varieties including gender, grade, department, graduated high school, education level of mother and father, working status of student’s mother and father.

**Pre-service Teachers’ Social Entrepreneurship Qualifications Scale (PTSEQS):** PTSEQS which was developed by Konaklı and Göğüş (2013) consists of 21 items and 3 sub-factors. Factors are called “risk taking”, “self confidence” and “personal creativity” respectively. The overall scale’s internal consistency is 0,855. The internal consistency for sub-factors are 0,716; 0,767 and 0,70 respectively.

**Career Futures Inventory (CFI):** CFI was originally developed by Rottinhous, Day and Borgen (2005) and translated into Turkish by Kalafat (2012). CFI is made up of 25 items and three sub-factors called career adaptability (CA), career optimism (CO) and perceived knowledge (PK). The overall scales internal consistency is 0,88. Cronbach’s alpha coefficients for each sub-factor are 0,83 for CA, 0,82 for CO and 0,62 for PK. Confirmatory factor analysis shows that three factor structure is appropriate for Turkish study sample.

### EVALUATION OF THE DATA

In order to determine whether the data displays normal distribution or not, "One Group Kolmogorov- Smirnov Test" test has been applied to the data collected by the scale. The values attained are; for the "Pre-service Teachers’ Social Entrepreneurship Qualifications Scale (PTSEQS)" ( $Z=1,349$ ,  $p>,05$ ), for Career Futures Inventory (CFI) ( $Z=,887$ ,  $p>,05$ ). All of the data collected have normal distribution with regards to all variables. Quantitative data was analyzed by using SPSS 20.0 program at the .05 significance level. ANOVA, independent sample t-test and post-hoc test methods were used to evaluate the scores derived from the scales in terms of the

socio-demographic variables of the participants. Pearson correlation coefficient analysis technique was applied in order to observe the relations between social entrepreneurship and career planning attitudes.

## FINDINGS

### Is there a significant relationship between social entrepreneurship and career planning attitudes?

As a result of Pearson Multiplication Momentum Correlation Analysis, conducted to define the relations between the scales and factors; Pre-service Teachers' Social Entrepreneurship Qualifications Scale (PTSEQS) total score and factors and Career Futures Inventory (CFI) total score and factors have a significant positive relation ( $p < .01$ ) (Table 1).

Table 1. Pearson Multiplication Momentum Correlation Analysis Results conducted to define relations of the scales and factors.

CFI and Factors	PTSEQS and Factors			
	Risk Taking	Self-Confidence	Self-Creativity	PTSEQS Total
Career Adaptability	$r = .519 (**)$	$r = .564 (**)$	$r = .429 (**)$	$r = .602 (**)$
Career Optimism	$r = .463 (**)$	$r = .470 (**)$	$r = .405 (**)$	$r = .531 (**)$
Perceived Knowledge	$r = .382 (**)$	$r = .329 (**)$	$r = .240 (**)$	$r = .380 (**)$
CFI Total	$r = .565 (**)$	$r = .581 (**)$	$r = .466 (**)$	$r = .641 (**)$

Pearson correlation coefficients of PTSEQS and CFI ( $r = .641$ ) indicate that as social entrepreneurship qualifications of pre-service teachers increase, career planning attitudes of them will increase as well. Also, it has been found that "career adaptability" sub-factor of CFI has the highest correlation coefficients considering "risk taking" ( $r = .519$ ), "self-confidence" ( $r = .564$ ) and "self-creativity" ( $r = .429$ ). In general, all the sub-factors of both scales are positively related.

### Do social entrepreneurship levels differ according to demographic varieties?

In this study, the taken total PTSEQ scale score was calculated as 77,6404. The minimum and the maximum score that can be taken from the PTSEQ scale are between 21-105.

As in Table 2, as a result of independent group T-test applied to define whether the scores taken from the PTSEQ scale and factors differentiate according to the gender variable; for the Risk Taking factor score the difference between the arithmetic average of the groups have been found statistically significant. Male students' score average is significantly higher than the female students ( $p < .05$ ).

Table 2. The results of Independent group T-test of the scores taken from PTSEQ scale and factors according to the gender

PTSEQ scale and Factors	Group	N	X	SD	SE	T test		
						t	df	p
Risk Taking	Female	263	25,4183	4,44731	,27423	-2,329	340	,020
	Male	79	26,7595	4,62495	,52035			
Self-Confidence	Female	263	29,2548	4,67327	,28817	-1,243	340	,215
	Male	79	30,0127	5,01662	,56441			
Self-Creativity	Female	263	22,5589	3,79576	,23406	,677	340	,499
	Male	79	22,2278	3,86950	,43535			
PTSEQS Total	Female	263	77,2319	10,85731	,66949	-1,247	340	,213
	Male	79	79,0000	11,67509	1,31355			

The results of one-way analysis of variance (ANOVA) which is done in order to determine whether the PTSEQ scale and factors show a significant difference according to the department variable; for PTSEQ scale and factor scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

However, considering the department variable, it has been seen that the highest scores from PTSEQ scale belonged to elementary school education students and the lowest scores belonged to social studies students. Students in elementary school education have the highest scores in "risk taking" and "self-creativity" sub-factors. Also, the highest scores in "self-confidence" sub-factor belonged to math teaching students.

As in Table 3, as a result of independent group T-test applied to define whether the scores taken from the PTSEQ scale and factors differentiate according to the grade variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

Table 3. The results of Independent group T-test of the scores taken from PTSEQ scale and factors according to the grade

PTSEQ scale and Factors	Group	N	X	SD	SE	T test		
						t	df	p
<b>Risk Taking</b>	3.grade	167	25,9581	4,38831	,33958	167	25,9581	,388
	4.grade	175	25,5086	4,63974	,35073			
<b>Self-Confidence</b>	3.grade	167	29,3593	5,04823	,39064	-,267	340	,789
	4.grade	175	29,4971	4,47711	,33844			
<b>Self-Creativity</b>	3.grade	167	22,3293	4,05005	,31340	-,726	340	,469
	4.grade	175	22,6286	3,57100	,26994			
<b>PTSEQS Total</b>	3.grade	167	77,6467	11,53939	,89294	,010	340	,992
	4.grade	175	77,6343	10,61407	,80235			

As a result of one-way analysis of variance (ANOVA) which is done in order to determine whether the scores taken from the PTSEQ scale and factors show a significant difference according to the graduated high school variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

The result of one-way analysis of variance (ANOVA) which is done in order to determine whether the PTSEQ scale and factors show a significant difference according to the mother's education level variable; for PTSEQ scale and factor scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

The result of independent group T-test applied to define whether the scores taken from the PTSEQ scale and factors differentiate according to the working status of mother variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

The result of one-way analysis of variance (ANOVA) which is done in order to determine whether the PTSEQ scale and factors show a significant difference according to the father's education level variable; for PTSEQ scale and factor scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

As in Table 4, as a result of independent group T-test applied to define whether the scores taken from the PTSEQ scale and factors differentiate according to the working status of father variable; for the Self-Creativity factor score the difference between the arithmetic average of the groups have been found statistically significant. "Working father" students' Self-Creativity factor score average is significantly higher than the "non-working father" students' score ( $p < .05$ ).

Table 4. The results of Independent group T-test of the scores taken from PTSEQ scale and factors according to the working status of father

PTSEQ scale and Factors	Group	N	X	SD	SE	T test		
						t	df	p
<b>Risk Taking</b>	Non-working	87	25,9310	4,44813	,47689	,485	340	,628
	Working	255	25,6588	4,54779	,28479			
<b>Self-Confidence</b>	Non-working	87	28,5862	4,56618	,48955	-1,923	340	,055
	Working	255	29,7176	4,79652	,30037			
<b>Self-Creativity</b>	Non-working	87	21,5977	3,81387	,40889	-2,528	340	,012
	Working	255	22,7843	3,76846	,23599			
<b>PTSEQS Total</b>	Non-working	87	76,1149	10,37150	1,11194	-1,493	340	,136
	Working	255	78,1608	11,25657	,70491			

### Do career planning attitudes differ according to demographic varieties?

In this study, the taken total Career Futures Inventory score was calculated as 77,6404. The minimum and the maximum score that can be taken from the Career Futures Inventory are between 22-125.

As in Table 5, as a result of independent group T-test applied to define whether the scores taken from the Career Futures Inventory and factors differentiate according to the gender variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

Table 5. The results of Independent group T-test of the scores taken from Career Futures Inventory and factors according to the gender

CFI and Factors	Group	N	X	SD	SE	T test		
						t	df	p
<b>Career Adaptability</b>	Female	263	40,7300	5,68708	,35068	-,950	340	,343
	Male	79	41,4557	6,77060	,76175			
<b>Career Optimism</b>	Female	263	39,7795	6,50872	,40134	,281	340	,779
	Male	79	39,5443	6,60962	,74364			
<b>Perceived Knowledge</b>	Female	263	9,5589	2,03859	,12571	-1,813	340	,071
	Male	79	10,0380	2,12701	,23931			
<b>CFI Total</b>	Female	263	90,0684	11,90111	,73385	-,618	340	,537
	Male	79	91,0380	13,29589	1,49590			

As seen in Table 6, as a result of one-way analysis of variance (ANOVA) which is done in order to determine whether the Career Futures Inventory and factors show a significant difference according to the department variable; for Career Adaptability factor score and CFI Total scores the difference between the arithmetic average of the group has been found statistically significant ( $p < .05$ ). Following this process Post-Hoc analysis techniques are started to be applied.

After one-way analysis of variance (ANOVA); to determine how changed in Career Adaptability factor score and CFI Total scores among sub-groups considering the department variable. LSD test has been chosen from among the post-hoc analysis techniques; because of Career Adaptability factor and CFI Total scores group variance are homogeny according to the Levene's test ( $L=1,388$ ;  $L=,507$ ;  $p < .05$ ). As a result of this test it has been stated that, Science Education students' score are significantly higher than Social Studies and Math Teaching students' score for Career Adaptability factor and CFI Total scores.

Table 6. The results of one-way analysis of variance (ANOVA) applied to define whether the scores taken from Career Futures Inventory and factors differentiate according to the department variable of students.

N, X and SD Values					ANOVA Results					
	Group	N	X	SD	Var. K.	SS	df	MS	F	P
<b>Career Adaptability</b>	Science Education	100	42,6900	5,09643	Between	546,222	3	182,074	5,335	,001
	Elementary School	80	40,9000	5,70276	Within	11535,196	338	34,128		
	Social Studies	70	39,3286	6,43298	Total	12081,418	341			
	Math Teaching	92	40,1413	6,23634						
	Total	342	40,8977	5,95226						
<b>Career Optimism</b>	Science Education	100	40,5300	6,02596	Between	96,093	3	32,031	,751	,522
	Elementary School	80	39,2000	6,95992	Within	14414,071	338	42,645		
	Social Studies	70	39,4571	6,63911	Total	14510,164	341			
	Math Teaching	92	39,5109	6,58919						
	Total	342	39,7251	6,52317						
<b>Perceived Knowledge</b>	Science Education	100	9,8600	2,00514	Between	7,274	3	2,425	,566	,638
	Elementary School	80	9,7250	2,08050	Within	1448,389	338	4,285		
	Social Studies	70	9,5286	1,76702	Total	1455,664	341			
	Math Teaching	92	9,5217	2,32747						
	Total	342	9,6696	2,06611						
<b>CFI Total</b>	Science Education	100	93,0800	11,13433	Between	1183,547	3	394,516	2,679	,047
	Elementary School	80	89,8250	12,65589	Within	49771,213	338	147,252		
	Social Studies	70	88,3143	12,21491	Total	50954,760	341			
	Math Teaching	92	89,1739	12,64443						
	Total	342	90,2924	12,22405						

As in Table 7, as a result of independent group T-test applied to define whether the scores taken from the Career Futures Inventory and factors differentiate according to the grade variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

Table 7. The results of Independent group T-test of the scores taken from Career Futures Inventory and factors according to the grade

CFI and Factors	Group	N	X	SD	SE	T test		
						t	df	p
<b>Career Adaptability</b>	3.grade	167	40,5808	6,67248	,51633	-,961	340	,337
	4.grade	175	41,2000	5,17398	,39112			
<b>Career Optimism</b>	3.grade	167	39,8683	6,40270	,49546	,396	340	,692
	4.grade	175	39,5886	6,65158	,50281			
<b>Perceived Knowledge</b>	3.grade	167	9,6168	2,23266	,17277	-,461	340	,645
	4.grade	175	9,7200	1,89870	,14353			
<b>CFI Total</b>	3.grade	167	90,0659	12,99636	1,00569	-,334	340	,738
	4.grade	175	90,5086	11,47204	,86720			

As a result of one-way analysis of variance (ANOVA) which is done in order to determine whether the scores taken from the Career Futures Inventory and factors show a significant difference according to the graduated high school variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

The result of one-way analysis of variance (ANOVA) which is done in order to determine whether the Career Futures Inventory and factors show a significant difference according to the mother's education level variable; for Career Futures Inventory and factor scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

The result of independent group T-test applied to define whether the scores taken from the Career Futures Inventory and factors differentiate according to the working status of mother variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

The result of one-way analysis of variance (ANOVA) which is done in order to determine whether the Career Futures Inventory and factors show a significant difference according to the father's education level variable; for Career Futures Inventory and factor scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

The result of independent group T-test applied to define whether the scores taken from the Career Futures Inventory and factors differentiate according to the working status of father variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant

## RESULTS and DISCUSSION

This study considers the importance of social entrepreneurship and aims to determine its relation to career planning attitudes. As a result of statistical analysis conducted to define the relations between the scales and factors; Pre-service Teachers' Social Entrepreneurship Qualifications Scale (PTSEQS) total score and factors and Career Futures Inventory (CFI) total score and factors have a significant positive relation.

In this study, the taken total PTSEQ scale score was calculated as 77,6404. The minimum and the maximum score that can be taken from the PTSEQ scale are between 21-105. According to this rating, PTSEQ scores of pre-service teachers are considered high. The result of the analysis applied to define whether the scores taken from the PTSEQ scale and factors differentiate according to the gender variable; for the Risk Taking factor score the difference between the arithmetic average of the groups have been found statistically significant. Male students' score average is significantly higher than the female students.

As a result of analyses which were conducted in order to determine whether the scores taken from the PTSEQ scale and factors show a significant difference according to the graduated high school variable, the department variable, grade variable, the graduated high school variable, the mother's education level variable, the working status of mother variable, the father's education level variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

The result of independent group T-test applied to define whether the scores taken from the PTSEQ scale and factors differentiate according to the working status of father variable; for the Self-Creativity factor score the difference between the arithmetic average of the groups have been found statistically significant. "Working father" students' Self-Creativity factor score average is significantly higher than the "non-working father" students' score.

In this study, the taken total Career Futures Inventory score was calculated as 77,6404. The minimum and the maximum score that can be taken from the Career Futures Inventory are between 22-125. According to this rating, CFI scores of pre-service teachers were found to be high.

The result of analysis which is done in order to determine whether the Career Futures Inventory and factors show a significant difference according to the department variable; for Career Adaptability factor score and CFI Total scores the difference between the arithmetic average of the group has been found statistically significant. As a result of this test it has been stated that, Science Education students' score are significantly higher than Social Studies and Math Teaching students' score for Career Adaptability factor and CFI Total scores.

The result of applied to define whether the scores taken from the Career Futures Inventory and factors differentiate according to the gender variable, the grade variable, the graduated high school variable, to the mother's education level variable, the working status of mother variable, the father's education level variable, the working status of father variable; for both scale and factors scores the difference between the arithmetic average of the group has been found to be insignificant statistically.

The results of this study highlights the relationship between social entrepreneurship qualifications and career planning attitudes. Only "risk taking" sub-factor has been differentiated according to gender among all sub-factors of PTSEQ scale. Besides, for both CFI scale and sub-factor scores have found to be insignificant statistically. These results indicated that other demographic variables might be included in future research. Because there has been found a significant relationship between social entrepreneurship qualifications and career planning attitudes, the effects of social entrepreneurship on career planning attitudes might be investigated.

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## THE RELATIONSHIP BETWEEN STUDENTS' ATTITUDES TOWARD LEARNING ENGLISH AND THEIR ACADEMIC SUCCESS

Orhan ATAMAN  
Düzce University, Turkey  
o.ataman@hotmail.com

Ahmet ESKİCUMALI  
Sakarya University, Turkey  
ecumali@sakarya.edu.tr

### ABSTRACT

In today's world English has become the lingua franca and there are millions of English learners all around world. In Turkey, when students get into university, thousands of them attend one-year language courses called as *preparatory class (prep class)* to improve their skills in English before they start their own majors. The aim of this study is to investigate the relationship between the prep class students' attitudes toward learning English and their academic success.

In this study, quantitative research methods were employed and correlational research design was utilized to find the relationship between the dependent and independent variables. The participants of this study are prep class students in Duzce University in 2014-2015 academic year. Research data was collected with one subtest of Gardner's (1985) Attitude and Motivation Test Battery (AMTB) which is originally comprised of 11 subtests. Four of the subtests were adapted and translated into Turkish by Doğan (2009). One of them called as *Attitudes toward Learning English* was administered to all students of prep classes for this study. 364 students' responses were analyzed with t-test, ANOVA, Tukey HSD test and Pearson Correlation. The main finding of the study is that students have positive attitude toward learning English but their mean score of academic success is really low. Also, it is found that there is a positive relationship ( $r=0,545$ ), ( $p=0,000$ ) between students' attitudes toward learning English and their academic success.

**Keywords:** attitudes, prep class, EFL, foreign language success, AMTB.

### INTRODUCTION

English has been the most studied language in almost every country around the world for three or four decades, and it is the same for Turkey as well. It is neither a national nor an official language in Turkey but it is the most widely taught foreign language at all stages of Turkish education system (Karahana, 2007). Students start learning English at primary school (as early as 2<sup>nd</sup> grade since 2012 with the new education system in Turkey) and they take English courses at every stage of their education until they graduate from college. However, most of the students still have poor foreign language skills and they cannot go beyond the basic level in English after all these years of instructions.

In addition to that, many college students attend one-year language courses called as *preparatory class (prep class)* before they start their own majors. It offers an intensive English instruction with 22-26 hours of class per week. In that case, a few of the students are able to reach the desired level of language skills and they can communicate in the target language. Yet, again, most of the students cannot attain the desired level of proficiency despite such an intensive instruction. This is one of the most common complaints among the instructors who teach English at universities in Turkey (Yalçın, 2005; Madran, 2006; Aydın, 2007; Görgün, 2013; Doğan, 2013; Çekirdek, 2014). Therefore, the reasons for this situation have been hotly debated issues among the researchers and they examine the factors affecting students' proficiency in foreign language instruction from different perspectives. While many studies focus on instructors, teaching and learning situations and learners' cognitive skills, some of the studies focus on affective factors involved in learning a foreign language.

Stern (1983) claims that "the affective component contributes at least as much and often more to language learning than the cognitive skills". There are many studies which support the importance of affective factors in the literature, to name a few; Skehan, 1989; Gardner, 1985; Spolsky, 1989. The characteristics of affective domain are: interest, values and tendency and most of these shape our attitudes (Saracaloğlu, 2000). Students' attitude toward learning English is one of the affective factors that have recently received significant attention from researchers. It is argued that attitudes have an important effect on people's behaviors and choices and that is one of the reasons why attitude has become an important research topic in foreign language education. Another important issue about attitudes is the relationship between attitudes and achievement. The results of the

afore-mentioned studies show that both positive and negative attitudes significantly influence students' language proficiency.

Gardner (1985:9) defines *attitude* as an 'evaluative reaction to some referent or attitude object, inferred on the basis of the individual's beliefs or opinions about the referent'. In addition to that Gardner (1985:10) sees attitude as one of the three components that compose the motivation in language learning. According to him, 'motivation refers to the combination of effort plus desire to achieve the goal of learning the language plus favorable attitudes toward learning the language'. From this definition it is clear that motivation comprise of three components which are effort, desire and positive attitudes.

According to Allport (1954:45) 'an attitude is a mental and neutral state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related.'

Hilgard and Atkinson (1975:523) argue that an attitude is defined both as an orientation toward or away from some object, concept or situation and a readiness to respond in a predetermined manner to these related objects, concepts and situations. Both orientation and readiness to respond have emotional, motivational and intellectual aspects and they may in part be unconscious.

Another definition can be found in Longman Dictionary of Applied Linguistics, and it is more specific because it defines *language attitudes*. (Richards ve Schmidt, 2010:314)

Language attitudes are the attitudes which speakers of different languages or language varieties have towards each other's languages or to their own language. Expressions of positive or negative feelings towards a language may reflect impressions of linguistic difficulty or simplicity, ease or difficulty of learning, degree of importance, elegance, social status, etc. Attitudes towards a language may also show what people feel about the speakers of that language. Language attitudes may have an effect on second language or foreign language learning. The measurement of language attitudes provides information which is useful in language teaching and language planning.

Brown (1994: 168) explains how people form attitudes, and which factors have an impact on the formation of attitudes as follows: "attitudes, like all aspects of the development of cognition and affect in human beings, develop early in childhood and are the result of parents' and peers' attitudes, contact with people who are different in any number of ways, and interacting affective factors in the human experience".

Wenden (1991) suggests that the term attitude contains three components: cognitive, affective and behavioral. A cognitive component is made up of the beliefs and ideas or opinions about the object of the attitude. The affective part refers to the feeling and emotions that one has towards an object: the 'likes' or 'dislikes' and the 'with' or 'against'. Finally, the behavioral component refers to one's consistent actions or behavioral intentions towards the object.

Stern (1983) distinguishes three types of attitudes in second language learning situation: (a) attitudes towards the community and people who speak the L2, (b) attitudes towards learning the language concerned, and (c) attitudes towards languages and language learning in general.

### **PURPOSE OF THE STUDY**

As it is stated in the introduction part of this present study, instructors who teach English at prep classes of universities in Turkey complain about students' poor language skills even after one-year of intensive English instruction. And, there may be various reasons for this problem; however, instructors working at Düzce University - School of Foreign Languages usually ascribe this problem to the prep class students' attitudes towards learning English. The instructors argue that students are not enthusiastic enough; they do not fulfill their responsibilities etc.

From this point of view, this study attempts to investigate the students' attitudes and their academic success, and to reveal the relationship between these two variables by answering the following questions:

1. What are students' attitudes toward learning English?
2. What is the level of students' academic success?
3. Do students' attitudes toward learning English differ according to some variables?

4. Does students' academic success differ according to some variables?
5. What is the relationship between the students' attitudes and their academic success?

## METHODOLOGY

In this study, quantitative research methods were employed and correlational research design was utilized to find the relationship between prep class students' attitudes toward learning English and their academic success. Research data was collected by a questionnaire which consisted of Personal Information Form and statements to identify students' attitudes toward learning English.

First part of the questionnaire (Personal Information Form) was developed by the researcher and it was used to obtain information about (i) gender, (ii) being a daytime or evening class student, (iii) being a compulsory or voluntary prep class student, (iv) department, (v) amount of time spent on studying English, (vi) amount of time spent on extra-curricular activities such as; listening to English songs or watching movies in English.

In the second part, to identify students' attitude toward learning English one subtest of Gardner's (1985) Attitude and Motivation Test Battery (AMTB) -which is originally comprised of 11 subtests- was used. AMTB took its final form after twenty years of rigorous effort and it has been used in many studies for thirty years because it is one of the most reliable and valid instruments to define students' motivation and attitude. Dörnyei (1998:123) states that AMTB is a frequently used standardized instrument with well documented psychometric properties, it also offers a comprehensive list of motivational factors that have been found to affect learning achievement significantly in past empirical studies (including classroom-specific factors such as the appraisal of the teacher and the course). Four of the subtests were adapted and translated into Turkish by Doğan (2009) and one of them called as *Attitudes toward Learning English* was administered to all students of prep classes for this study. The reliability of questionnaire was assessed using Cronbach's alpha model and the reliability coefficient of the scale was measured to be .907 which indicated a high level of reliability. Five-point Likert type scale was used to get student's answers.

Finally, another data used in the study is the year-end mean score of students' academic success which consists of midterms (%20), quizzes (%20), homework assignments (%20) and final exam (%40).

The participants of this study are prep class students in Duzce University in 2014-2015 academic year. 364 students participated to the study and 216 of them are male students which constitutes the 59.3 % of the group, whereas 148 are female constituting the 40.7 % of the group. 261 students are daytime class students which constitutes the 71.7 % of the group, and 103 are evening class students constituting the 28.3 % of the group. 319 students compulsorily attend to prep class and it constitutes the 87.6 % of the group, whereas 45 of them voluntarily attend to prep class constituting the 12.4 % of the group.

In data analysis, SPSS 22.0 statistical program was used. First of all, to answer the first and second research questions mean scores were calculated. Secondly, to answer third and fourth research questions t- test and one-way analysis of variance (ANOVA) were used, which enabled to identify the difference between the groups. In addition to that, the differences between the groups were revealed through Tukey HSD test. Finally, to answer the fifth research question, the relationship between students' attitudes toward learning English and their academic success was examined through Pearson correlation squares.

## THE FINDINGS

The first research question is: "What are students' attitudes toward learning English?" To answer this question, descriptive statistics were obtained to identify students' attitudes toward learning English. The findings are shown in the Table 1.

Table 1. Descriptive Statistics of Students' Attitudes toward Learning English

	n	$\bar{x}$	sd
Attitudes Toward Learning English	364	3,85	,81086

Findings about the first research question shows that participants' attitudes toward learning English is positive because the mean score ( $\bar{X}=3,85$ ) is between 3,40 – 4,20. So, it seems like students are actually eager to learn English and they like learning English.

The second research question is: "What is the level of students' academic success?" To answer this question, descriptive statistics were obtained to identify year-end mean scores of students' academic success. The findings are shown in the Table 2.

Table 2. Descriptive Statistics of Students' Academic Success

	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>
Academic Success	364	47,35	20,82565

The findings in Table 2 shows that year-end mean score of students' academic success is 47,35 which is very low and under satisfactory level. Students need to get 65 and over to complete the prep school successfully.

The third research question is: "Do students' attitudes toward learning English differ according to some variables?" These variables include (i) gender, (ii) being a daytime or evening class student, (iii) being a compulsory or voluntary prep class student, (iv) department, (v) amount of time spent on studying English, (vi) amount of time spent on extra-curricular activities such as; listening to English songs or watching movies in English. To answer this question, t- test and one-way analysis of variance (ANOVA) were used to identify the difference between the groups. The findings are shown in the Table 3.

Table 3. Differences of Students' Attitudes Toward Learning English According to Some Variables

<b>Gender</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>t</b>	<b>p</b>
Male	216	3,81	,87448	-1,168	,243
Female	148	3,91	,70642		
<b>Class Time</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>t</b>	<b>p</b>
Daytime class	261	3,84	,79588	-,175	,861
Evening class	103	3,86	,85151		
<b>Attendance Type</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>t</b>	<b>p</b>
Compulsorily	319	3,82	,81849	-1,783	,075
Voluntarily	45	4,05	,73162		
<b>Department</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>F</b>	<b>p</b>
Business	116	3,82	,84211	1,038	,404
Electrical and Electronic Engineering	91	3,71	,84243		
Tourism and Hotel Management	82	3,87	,75355		
International Relations	30	3,99	,81956		
Computer Engineering	15	4,20	,66332		
Environmental Engineering	11	3,92	,68570		
Mechanical Engineering	12	3,98	,74447		
Mechatronics Engineering	7	4,05	1,00309		
<b>Weekly Studying Period</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>F</b>	<b>p</b>
None	145	3,48	,88399	19,455	,000*
1-3 hours	177	4,10	,57786		
4-6 hours	21	3,98	,74874		
More	21	4,17	1,06918		
<b>Extra-Curricular Activities Period</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>F</b>	<b>p</b>
None	98	3,48	,94836	10,070	,000*
1-3 hours	147	3,96	,67553		
4-6 hours	57	4,02	,69083		
More	62	4,00	,80569		

As it is shown in the Table 3, there is not a statistically significant difference between male and female students' attitudes toward learning English ( $p=,243 > ,05$ ). Also, mean scores for males ( $\bar{x}=3,81$ ) and females ( $\bar{x}=3,91$ ) are very close to each other. The next variable is being a daytime or evening class student at school. The findings show that the mean scores for daytime class students ( $\bar{x}=3,84$ ) and evening class students ( $\bar{x}=3,86$ ) are nearly

the same. Therefore, there is not a significant difference between daytime class students and evening class students' attitudes toward learning English ( $p=,861 >,05$ ). The next variable is about attending the prep school compulsorily (because it is a pre-requisite for some departments) or voluntarily. The data shows that there is not a significant difference between these two group of students ( $p=,075 >,05$ ). However, it is important to state that although the difference is not statistically significant; the mean scores are not quite alike (mean scores of students attending compulsorily  $\bar{x}=3,82$  and attending voluntarily  $\bar{x}=4,05$ ). The next variable is students' departments and the findings show that there isn't a significant difference among students' attitudes toward learning English with respect to their departments ( $p=,404 >,05$ ). It should be noted that Computer Engineering students have the highest mean scores ( $\bar{x}=4,20$ ), whereas Electrical and Electronic Engineering students have the lowest mean scores ( $\bar{x}=3,71$ ). The next variable is the amount of time that students spend on studying English or doing homework per week. The findings show that there are significant differences among students' attitudes toward learning English with respect to their weekly studying hours ( $p=,000 < ,001$ ). At this point, Tukey HSD test results reveal that students who study English 1-3 hours, 4-6 hours or more have more positive attitude toward learning English than those who never study or do homework at home. In addition to that, as it is expected the students who never study English have the lowest mean scores of attitudes ( $\bar{x}=3,48$ ), whereas students who study English more than 6 hours per week have the highest mean scores of attitudes ( $\bar{x}=4,17$ ). The last variable is the amount of time that students spend on extra-curricular activities such as; listening to English songs or watching movies in English. The findings show that there are significant differences among students' attitudes with respect to this variable ( $p=,000 < ,001$ ). At this point, Tukey HSD test gives the same results with the previous variable, that is to say, students who spend 1-3 hours, 4-6 hours or more on extracurricular activities have more positive attitude toward learning English than those who never do.

The fourth research question is: "Does students' academic success differ according to some variables?" These variables are the same with the third research question. To answer this question, t- test was used to identify the difference between the variables of (i) gender, (ii) being a daytime or evening class student, (iii) being a compulsory or voluntary prep class student. Also, one-way analysis of variance (ANOVA) was used to identify the difference between the variables of (iv) departments, (v) amount of time spent on studying English, (vi) amount of time spent on extra-curricular activities. The findings are shown in the Table 4.

Table 4. Differences of Students' Academic Success According to Some Variables

<b>Gender</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>t</b>	<b>p</b>
Male	216	48,61	22,41981	1,387	,166
Female	148	45,53	18,17055		
<b>Class Time</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>t</b>	<b>p</b>
Daytime class	261	46,82	20,54993	-,781	,435
Evening class	103	48,71	21,55086		
<b>Attendance Type</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>t</b>	<b>p</b>
Compulsorily	319	46,08	20,53617	-3,141	<b>,002*</b>
Voluntarily	45	56,37	20,86133		
<b>Department</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>F</b>	<b>p</b>
Business	116	42,75	19,07633	7,945	<b>,000*</b>
Electrical and Electronic Engineering	91	54,64	20,60495		
Tourism and Hotel Management	82	39,68	18,78526		
International Relations	30	50,50	21,62813		
Computer Engineering	15	60,73	18,41764		
Environmental Engineering	11	37,63	12,95587		
Mechanical Engineering	12	63,58	18,63261		
Mechatronics Engineering	7	64,14	24,86248		
<b>Weekly Studying Period</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>F</b>	<b>p</b>
None	145	37,09	19,79735	28,211	<b>,000*</b>
1-3 hours	177	52,10	18,39901		
4-6 hours	21	58,76	18,01639		
More	21	66,85	15,74575		

Extra-Curricular Activities Period	n	$\bar{x}$	sd	F	p
None	98	35,05	17,90201	20,280	<b>,000*</b>
1-3 hours	147	50,14	19,56036		
4-6 hours	57	50,42	20,18835		
More	62	57,38	20,20579		

\*  $p < ,05$

As it is shown in Table 4, there is not a statistically significant difference between male and female students' academic success ( $p = ,166 > ,05$ ). However, it can be said that male students' mean score ( $\bar{x} = 48,61$ ) is slightly higher than females' mean score ( $\bar{x} = 45,53$ ) of academic success. The next variable is being a daytime or evening class student at school. The findings show that the mean score for daytime class students ( $\bar{x} = 46,82$ ) is very similar to the evening class students' ( $\bar{x} = 48,71$ ) mean score of academic success. As a result, there is not a significant difference between daytime class students and evening class students' mean scores of academic success. ( $p = ,435 > ,05$ ). The next variable is about attending the prep school compulsorily or voluntarily. The data shows that there is a statistically significant difference between the academic success of these two groups of students ( $p = ,002 > ,05$ ). It can be seen that the students who attend to prep school voluntarily ( $\bar{x} = 56,37$ ) are more successful than the other group of students ( $\bar{x} = 46,08$ ). The next variable is students' departments and the findings show that students' academic success differs significantly with respect to their departments ( $p = ,000 > ,01$ ). The highest mean score ( $\bar{x} = 64,16$ ) belongs to Mechatronics Engineering students and the lowest mean score ( $\bar{x} = 37,63$ ) belongs to Environmental Engineering students. Tukey HSD test results demonstrate that students of Electrical and Electronic Engineering, Computer Engineering and Mechanical Engineering departments are more successful than Business students. Also, it is seen that students of Electrical and Electronic Engineering, Computer Engineering, Mechanical Engineering and Mechatronics Engineering departments are more successful than Tourism and Hotel Management students. Finally, it is found that mean score for Mechanical Engineering students' academic success is higher than Environmental Engineering students. The next variable is the amount of time that students spend on studying English or doing homework per week. The findings show that students' academic success differs significantly with respect to their weekly studying hours ( $p = ,000 < ,001$ ). Tukey HSD test results reveal that -regardless of the amount of time students spend on studying- students who study English (1-3 hours, 4-6 hours or more) are more successful than those who never study or do homework at home. Furthermore, another finding reveals that students who study more than 6 hours per week have higher grades than those who study just 1-3 hours per week. The last variable is the amount of time that students spend on extra-curricular activities. The findings show that there are significant differences in students' academic success with respect to this variable ( $p = ,000 < ,001$ ). Tukey HSD test results show that students who spend 1-3 hours, 4-6 hours or more on extracurricular activities are more successful than those who never do.

The fifth research question is: "What is the relationship between the students' attitudes and their academic success?" To answer this question Pearson Correlation analysis was performed. The findings are shown in Table 5.

Table 5. Relationship Between the Students' Attitudes toward Learning English and Their Academic Success

Attitudes Toward Learning English	Pearson Correlation	<b>,520**</b>
	Sig. (2-tailed)	,000
	N	364

\*\*  $p < ,01$

As it is shown in Table 5, there is a positive relationship between students' attitudes toward learning English and their academic success; in addition to that it is a moderately significant relationship ( $r = ,520$ ) ( $p < ,01$ ).

## CONCLUSION

As a result of this study, it has been seen that students actually have positive attitudes toward learning English as opposed to instructors' common beliefs which ascribe the problem of students' poor language skills to lack of enthusiasm and indifference. On the other hand, students do really have poor year-end mean scores of academic success, which is in line with and which supports the instructors' complaints in this respect. Therefore, it can be concluded that the common problem of students' low grades in English does not stem from some kind of

negative attitudes toward learning English. The reason for this conflicting situation might be the fact that the medium of instruction at Duzce University is not English, but Turkish, which is the native language of the participants. For this reason, students do not need to get high grades from the exams or to become successful at prep class to go on their own majors the following year. As a result, the most reasonable explanation for this situation can be deduced from students' study habits. 145 of the students stated that they never study or do homework. 177 of the students stated that they study just for 1-3 hours in a week. (That makes 322 out of 364.) Gardner (1985) suggests that it would not be wrong to expect the learners with favorable attitudes to be more attentive and serious. However, such attitudes might not necessarily lead to foreign language achievement.

Another important result of this study is that students' attitudes toward learning English do not show statistically significant differences with respect to their gender, class time, attendance type and departments. However, their attitudes toward learning English show significant differences with respect to the amount of time they spend on studying and on extracurricular activities. In sum, the more positive attitudes students have, the more time they spend on studying and on extra-curricular activities.

As for the year-end mean scores of students' academic success; gender and class time do not cause important differences in this respect. On the other hand, it has been found that attendance type, department, weekly studying period and weekly extra-curricular activities period bring about considerable differences in students' academic success. At this point it should be noted that even though evening class students get into university with lower university entrance exam scores, they are as successful as the daytime class students; as a matter of fact, they are slightly more successful than the daytime class students. It is important to state that the students who attend to prep class voluntarily get higher mean score than those who attend to prep class compulsorily. So, it can be deduced that the first group of students are more intrinsically motivated, more attentive and more enthusiastic to learn English, which results in higher grades. Finally, as it is expected that the more amount of time students spend on studying English or on extra-curricular activities, the higher grades they get. It is seen that the students who study more than 6 hours per week could slightly go beyond the minimum passing score which is 65.

Finally, when it comes to the relationship between the students' attitudes toward learning English and their academic success, it is clear that there is a positive and moderately significant relationship between these two variables. Therefore, it can be suggested that the more positive attitudes students have, the more successful they become. However, it is neither a very strong relationship nor a weak relationship. All in all, it can be concluded that favorable attitudes toward learning English positively affect students' proficiency to some extent.

As for the pedagogical implications, it can be suggested that students' affective characteristics should be taken into consideration in foreign language education. Teaching-learning situations should be examined with respect to affective characteristics, thus the factors causing positive or negative attitudes can be identified. As İnal, Evin and Saracaloğlu (2005:49) suggest affective aims and activities should be placed in curriculum to enable students to develop favorable attitude towards learning a foreign language. As an example of this, Mantle-Bromley (1995) carried out a 9-week Foreign Language Exploratory (FLEX) program to investigate to what extent it would be possible to change students' attitudes during the language learning process. In her study she attempted to improve students' attitudes toward French and Spanish speakers, so the students in the treatment group participated in culture-related lessons that used attitude-change theory in their design. The findings showed that treatment group's mean score of attitude was significantly greater than that of students in the control group. Moreover, she found that students had some misconceptions about language learning that may impede their progress and persistence in language study. As it can be seen from the results of this study, foreign language teachers can create positive impacts on students' attitudes toward the target group, culture and learning a language.

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## THE RELATIONSHIP BETWEEN TEACHERS' COMMUNICATIVE TOLERANCE AND THEIR STYLES OF PEDAGOGICAL COMMUNICATION

Svetlana LUKASHOVA  
Suleyman Demirel University  
Kazakhstan  
[svet-lukashova@yandex.ru](mailto:svet-lukashova@yandex.ru)

### ABSTRACT

The role of 'tolerant teacher' in modern educational realm cannot be overestimated. There is still a gap in the scientific evidence about relationship between teachers' communicative tolerance and autocratic and democratic styles of pedagogical communication. It is important to understand how teaching style and tolerance are related and find out the ways to foster communicative competence in teaching. The present investigation aims at finding out the links between different components of teacher communicative tolerance and autocratic and democratic styles of pedagogical communication. The study was conducted in Suleyman Demirel University, Kazakhstan. A random sample of 60 educators (26 men and 34 women) were selected from Philology, Economics, Engineering faculties and Social – Humanities department. The participants' age varied between 25-65 years old. Overall, the findings have revealed 8 positive correlations, which can act as predictors for certain communicative traits in university teachers according to their preferred style of communication with students. Finally, the study proposes a list of descriptive characteristics forecasting high or low communicative tolerance ability in teachers. The results of the present research can be implemented in teacher training seminars as well as professional development courses.

**Keywords:** communicative tolerance, pedagogical communication, autocratic and democratic teaching styles.

### INTRODUCTION

Outwardly, we live in the era that appears more open-minded, non-judgemental and tolerant than at any time in human history. The very term intolerant invokes moral condemnation. Time and again the public is instructed in the importance of respecting diversity and different cultures. Students are frequently reminded that there is no such thing as a right answer and there are many truths. The role of 'tolerant teacher' in modern educational realm cannot be overestimated. 'Without tolerance we cannot be free, we cannot live with one another in relative peace, we cannot follow and act on our conscience, we cannot exercise our moral autonomy nor pursue our own road towards seeking the truth' (Furedi, 2011, p. 3). Tolerant teacher removes constraints on students' behavior linked to the exercise of individual autonomy, which is crucial for learner self-efficacy and success. Being tolerant is a desirable trait for a teacher to manage conflicting beliefs and behaviours. It is a virtue which implies a willingness to tolerate disagreeable beliefs and opinions. This virtue can be demonstrated via teacher-student interaction which also reflects teacher's style of communication developed throughout pedagogical experience. Obviously, if both teaching style and tolerance reveal themselves in teacher-student interaction, there should be close relationship between these two significant for education psychological concepts. Therefore, we decided to explore this relationship.

### LITERATURE REVIEW

#### Tolerance in Education

Psychologically, tolerance is the competence to accept others as holders of different ways of thinking and behaving; by being conscious of the human right to insist on this difference; by being able to see the insight of the person; by observing the world from 'mine and theirs' perspectives.

The main indicators of psychological tolerance according to Tokkulina, G. (2015) can be presented as follows: 1) willingness to work together in different cultural situations and being able to achieve the goals by building constructive relationships; 2) unconventional problem-solving skills; 3) flexibility in decision making; 4) ability to empathize by making practical efforts; 5) social-moral motives and personal stability.

There is a misleading tendency in modern society to regard a tolerant person as the one who rejects his own ideas and values. However, Johnson, H. (2001) reminds that we should not reduce tolerance to denial of self-interest, or conformity, but ability to realize their personal views and respecting positions of others.

The problem of communicative tolerance is one of the major concerns in modern psychology. Pedagogic tolerance determines the development of tolerant thinking which then leads to the formation of communicative tolerance in teachers. According to Turcan, L. (2013) pedagogic tolerance is an affective competence based

on humanistic values reflected in such skills as listening, understanding, respecting person's individuality ; so that respond adequately and show responsibility for the communication feedback . The researcher agrees with Fadeyeva , T. (2011) who describes pedagogic tolerance as an affective component reflecting the teacher's emotional culture . Turcan , L. explains why pedagogic emotional culture has become an up-to-date issue : in addition to the traditional role, teachers have to fulfill such responsibilities as student and parent counseling, research and innovation jobs; besides, teachers tend to be vulnerable to mental distress and emotional exhaustion. The low level of teacher's emotional culture frequently leads to interpersonal conflicts , lack of emotional expressiveness , intolerance , and lack of cooperation , etc. Thus , there is a constant need for adaptation and demand for formation of tolerance in pedagogic communication , which can be illustrated by certain features of the teacher : pedagogical tact , psychological stability , goodness , the spirit of justice , nonviolence , ability to make good judgments , a sense of observation , closeness to students , patience , and sincerity in the interaction with students.

On the whole , the theory analysis allows us to define communicative tolerance as emotional, social, and moral competence which is very important for educators. The degree of development of teachers' communicative tolerance is determined by the peculiarities of personality attributes such as intelligence, motivation , will , emotions , and communicative competence.

### Teaching Styles

Different researchers use different definitions to define a teaching style. According to Wright (1987) , the teaching style involves a complex mix of beliefs, attitudes, strategies, techniques, motivation, personality and control . Grasha (1996) says that teaching styles represent the pattern of needs , beliefs and behavior shown by teachers in the classroom . Peacock (2001) claims that the teaching style is the way a person teaches by nature , a habit that is used to convey information and skills in the classroom .

The notion of style of pedagogical communication is referred to the concept of individual style of leadership , which originated in Lewin's works. Kurt Lewin and colleagues conducted experiments on leadership decision – making in 1939 and identified three different styles of leadership: autocratic, democratic, and laissez-faire .

In the autocratic style, the leader takes decisions without consulting with others , which caused the most level of dissatisfaction . Having made a decision , autocratic leaders impose it and expect obedience. An autocratic style works where the decision would not change as a result of input, and where the motivation of people to act would not be influenced whether they were or were not engaged in the decision-making.

In the democratic style, the leader involves the people in the decision-making and carry the responsibility for bringing these decisions to the desired outcomes. Democratic decision-making is generally valued by the people, especially if they have been treated by autocratic leaders before. It can be problematic when there are a wide range of opinions and there is no clear way of reaching an equitable final decision.

The laissez-faire style allows people to make their own decisions by minimizing the leader's involvement, although he may still be responsible for the outcome. Laissez-faire works best when people are capable and motivated in making their own decisions, and where there is no need for a central coordination.

Lewin discovered that the most effective style was democratic. Excessive autocratic styles led to revolution, whilst under a laissez-faire approach, people were not coherent in their work and did not put in the energy that they did when being actively led.

Modern research works on these styles support Lewin's conclusions. The findings of Tahseen (2012) study revealed that the democratic leadership style used by the school principal has no effect on teachers' job stress; while teachers were more stressed under the autocratic style . Bhatti et al. (2012) study found that the democratic leadership style had positive influence on teachers' job satisfaction and ownership feeling in both private and public schools in Pakistan, where the teachers' were free to express their fears, propose and exchange their ideas and views . In the academic institutions the distributed leadership style is used interchangeably with the democratic. It depends on distributing authority at all levels of the organizations rather than it is centralized at the top . The distributed style is able to enhance and facilitate learning by creating 'high levels of commitment as a result of certain practices of such as trust, cooperation , participation in decision making and problem solving'(Kawar , 2012, p.320).

In the final theory analysis, there have been found relationship between teachers' style of pedagogical communication and their job stress and satisfaction, also between teaching styles and students' learning

environment, achievement, and relationship. However, there is still a gap in the scientific evidence about relationship between teachers' communicative tolerance and autocratic and democratic styles of pedagogical communication.

### THE STUDY

The problem of the current research is to examine interdependence of the teaching style of pedagogical communication and communicative tolerance. Hence, the research tasks of this study are as follows:

- 1) to explore components of communicative tolerance in university educators;
- 2) to discover any statistically significant relationship between teachers' communicative tolerance and autocratic and democratic styles of pedagogical communication;
- 3) to make a list of descriptive characteristics predicting high or low communicative tolerance ability.

A variety of studies in the area of pedagogical psychology indicate that a great majority of pedagogical problems result from deformation of professional communication. Efficiency of educational process generally depends on successful implementation of teacher strategies of communication with students. No doubt, the choice of such strategies are greatly influenced by teacher's style of pedagogical communication that cannot be effective without respect for students' right to hold beliefs in accordance with their conscience, which is tolerance. If this is so, then it is important to understand how teaching style and tolerance are related and find out the ways to improve communicative competence in teaching.

Formation and development of communicative competence which includes such attributes as tolerance, respect for diverse participants of communication, empathy, ability to cooperate, and mobile teaching style have become major factors of professional suitability of the teacher (Rysbayeva, 2014, p. 447).

### Methodology and Procedure

**Participants:** The study was conducted in the University of Suleyman Demirel, Kazakhstan. A random sample of 60 educators (26 men and 34 women) were selected from Philology, Economics, Engineering faculties and from the social – humanities department. The participants' age varied between 25-65 years old. The average made up 34.5.

**Research Tools:** Depending on the literature and previous studies, 2 questionnaires were selected in order to resolve the assigned research tasks.

The findings indicated that both questionnaires were found to have high reliability.

1) The method of "Behavioral traits of communicative tolerance." The technique was developed by V.V. Boyko in 1996. Diagnosis of communicative tolerance is held on 9 behavioral traits. (Possible ranges are from 0 to 15 points). The more points for a particular trait, the less tolerant are people in this aspect of communication. Conversely, the less points on a particular behavioral trait are gained, the higher is the level of communicative tolerance in this aspect of the relationship. The maximum number of points that you can earn - 135, indicative of zero tolerance towards others, which is hardly possible for a normal person. On average, respondents are gaining: preschool teachers - 31 score, nurses - 43, doctors - 40 points.

Indicators of behavioral traits of communicative tolerance are as follows:

1. The rejection or lack of understanding the other person's individuality. The individuality is primarily presented by your nature and nurture. Intolerance is expressed when the teacher is unable to accept genetic and environmental mismatches between his personality and those of his students.
2. Using oneself as a standard. In this case, the teacher tends to deny the student's right to be individual. Moreover, via a direct or veiled form he then considers himself the "ultimate truth", evaluates students in accordance with his habits, attitudes, and moods.
3. Showing conservatism in the evaluation of others. The teacher requires students to behave in the preferred monotony that matches his inner world - the established values and tastes.
4. Inability to hide or smooth the unpleasant feelings when dealing with uncommunicative partner. The teacher with a low level of general communicative tolerance usually shows unmanageable negative reactions in response to an uncommunicative student.
5. The desire to re-educate the partner. The teacher attempts to change this or that student's personality substructure, update, reassign, or replace it with desirable for a teacher elements. These efforts can be seen, for example, in the habit of reading morals, patronizing, or rebuking in violation of the rules of ethics.
6. The desire to fit partner for yourself, to make more convenient. In this case, the teacher is "hewing" certain personality traits of students, seeking to regulate their conduct or to achieve a resemblance, insisting on taking his point of view.
7. Inability to forgive others' mistakes. This means that teacher's mind is "stuck" on the differences between his personal substructures – and his students'. This is the source of mutual grievances; attempts to complicate

relationship with a student by giving a specially unpleasant meaning to student's behaviour .

8. Intolerance to physical and mental discomfort. This is observed in cases when a student is unwell, complaining, cranky, nervous or seeking empathy. A teacher with a low level of communicative tolerance tends to be mentally stale and therefore does not notice any of these conditions or they irritate him, at least, cause condemnation. He ignores the fact that he can encounter the same conditions and usually relies on empathy and support of students.

9. Inability to adapt to a partner. This fact indicates that the teacher's adaptation to oneself is functionally more important and is achieved easier than adapting to students. The mutual existence, however, involves adaptation skills of both parties.

2) The Method of 'Style of Pedagogical Communication Self-evaluation' (modified by Ilyin, E.)

There are 3 scales for each style : autocratic, democratic , and laissez-faire . The strength of each style is represented by 3 degrees:

0-3 points - low;

4-7points - middle;

8-11points - high.

The test is made up of 33 yes/no questions. All subjects were divided into two groups depending on the predominance of autocratic or democratic component in the style of pedagogical communication .

## FINDINGS AND DISCUSSION

Behavioral components of communicative tolerance

The total level of communicative tolerance found in university educators was 50.1 points out of 135 possible, which indicates that teachers are quite tolerant to the behavior of students.

Lower ( 48-52 ) results were observed in the following scales :

scale 9 - 'inability to adapt to partners', scale 6 – 'the desire to fit the partner for yourself' making him more convenient', scale 7- 'inability to forgive others' mistakes'. This means that adaptation to students is functionally important to university teachers and is achieved relatively easily. Moreover , teachers are not very perfectionistic and are able to deal with students' mistakes well and feel quite comfortable with some personality mismatches.

At the same time, high score (65) on scale 4 reveals 'the inability to hide or smooth the unpleasant feelings when dealing with uncommunicative partner', points out that teachers may show unmanageable negative reactions in response to an uncommunicative partner. The rejection of the other is most often caused by uncommunicative types of persons, uncommunicative personality traits and uncommunicative style of interaction. Thus, there is the failure of students with low communicative skills due to the weak development of these skills among teachers themselves.

Preferred teaching style in university educators

Method 'Self-evaluation of one's Style of Pedagogical Communication' allowed us to obtain the following results:

- 27 respondents with a predominance of autocratic style of pedagogical communication (between 5 and 7 points, which corresponds to the middle degree);
- 33 respondents with a predominance of the democratic style of pedagogical communication (the lowest possible score on the autocratic style of 1-3 points and high scores on the democratic style).

Thus, a slight majority of the respondents in modern higher education prefer the democratic style . Teachers with democratic style are more communicative and empathetic, light and agile in the emotions; realize their educational influence on the basis of compatibility with the student, find common ground in their personal lives.

At the same time, according to D.A. Mishutin (1992), these teachers are not uncommon to have students in their class to provoke conflicts. Obviously, students do not always see only strengths of this style of management and communication, but also its weakness which is possibility to exert psychological pressure on the teacher .

S. Ivanov (1990) maintains that students in most cases (58% of responses) prefer a democratic style of communication, at least - the laissez-faire style (26%) and even less - autocratic (16%). Teachers with autocratic style of communication have the following features: intolerant to others; often busy with themselves, their feelings and experiences and little responsive to the needs of the people around them; they tender, first of all, the ability to satisfy their claims; seek to avoid criticism from the manager/ colleagues or students, as well as to avoid possible penalties, or troubles. Teachers with democratic style seek to understand the inner world of the student, even in the face of lack of information. They have a high need for communication, the desire to maintain good relations with colleagues, show interest in the joint venture .

These results are consistent with the findings made by N.A. Kurdyukova in 1997 ; using Cattell's questionnaire,

she revealed some personal characteristics of teachers with different styles of leadership. Teachers with autocratic style of leadership have the following characteristics: a desire for independence, autonomy in decision-making and analysis of the group of problems do not require approval and support from the outside, have a high level of self-sufficiency. They are characterized by impulsivity, low self-control, inattention to others, conflict. They are emotionally unstable, irritable, impatient, have difficulty in communicating. Teachers with democratic leadership style are more independent, self-reliant, self-sufficient than laissez-faire teachers, but inferior to the teachers autocrats. They have a vision, are well aware of the motives of others, do not experience difficulties in decision-making and analysis of group problems. They are not inherent in impulsive behavior. They are conflict-free, considerate of others, have a high level of self-control, emotional stability, balanced.

Statistically significant relationship between teachers' communicative tolerance and autocratic and democratic styles of pedagogical communication are observed below:

**Table 1.** Reliable differences in communicative tolerance of teachers with different teaching styles

variables	Styles of pedagogical communication	Mean	Mann — Whitney U-test	Reliability
Total level of communicative tolerance	Autocratic	<b>35,89</b>	300,000	<b>0,031</b>
	Democratic	26,09		

Correlational analysis (Spearman Factor) examines interdependence of two variables under study. It has 3 characteristics: form, direction, and strength. Two variables in our case are communicative tolerance and teaching styles.

The data reveal 8 correlations with various traits of communicative tolerance:

1. The autocratic style is associated with a positive correlation with 6 traits:
  - Using oneself as a standard ;
  - Showing conservatism in the evaluation of others ;
  - The desire to fit the partner for themselves, to make him more convenient ;
  - The inability to forgive mistakes ;
  - Intolerance to physical and mental discomfort ;
  - Inability to adapt to the partner .
2. The democratic style is positively correlated with the desire to re-educate the partner.
3. The laissez-faire style is positively correlated with the desire to fit the partner for them making him more convenient.

**Table 2.** Correlations with various traits of communicative intolerance

Traits of communicative intolerance	Autocratic style	Democratic style	Laissez-faire style
standard	0,174*		
conservatism	0,221*		
desire to re-educate		0,181*	
desire to fit partner	0,228**		0,181*
inability to forgive mistakes	0,247**		
intolerance to discomfort	0,232**		
inability to adapt	0,238**		

## CONCLUSION.

Thus, teachers with a predominance of autocratic style of pedagogical communication possess low communicative tolerance ability, which can be illustrated by the following behavioral characteristics:

- deny students' right to identity;
- consider themselves "the ultimate truth" to judge students in accordance with their habits, attitudes, and moods;
- require the monotony, which corresponds to the prevailing values and tastes;
- want "to trim" the qualities of students' personality;
- desire to make students become more similar, insisting on taking their point of view;
- "stuck" on the differences between their personal substructures and their students;
- demonstrate callousness, irritability, lack of empathy, the desire not to compromise.

At the same time , teachers with a predominance of democratic style of pedagogical communication demonstrate higher communicative competence , being able to:

- attempt to re-educate this or that personality substructure, update, reassign, by reading morals, patronizing , or rebuking in violation of the rules of ethics;
- remove the confusion, clumsiness in students;
- evolve encouragement and support , assisting in the choice of words, sentence construction;
- show sincere interest in the dialogue with students, using positive critique;
- resist to difficulties of the professional life and adapt easily to professional context;
- send explicit attitudes and explore various pedagogic values including those of each individual student;
- establish the effective method of self-communication.

### PEDAGOGIC IMPLICATION

The formation and development of teachers' communicative competence make up prerequisites for the education for tolerance of students. That means that a teacher with insufficiently developed tolerance , who is characterized by shortage of emotional energy, mental exhaustion resulted from professional overload , verbal aggression and apathy, creates ineffective learning environment and produces negative attitudes to learning.

For these reasons , there is a need to foster certain values in teachers. We suggest grouping these traits according to their emotional , cognitive , and moral nature discovered in the structure of communicative tolerance, which should be trained consciously and regularly.

**Table 3.** Values exhibiting high level of communicative tolerance

Affective element	Cognitive element	Moral element
Sensitive	Thoughtful	Self-conscious
Balanced	Intelligent	Disciplined
Emotionally mature	Demanding	Strong
Emotionally expressive	Original	Self-determined
Friendly	Creative	Self-accomplished
Relaxed	Curious	Persistent
Empathetic	Constructive	Integrated
Charismatic	Assertive	Self-motivated
Satisfied	Efficient	Positive

We believe these values should be trained in teachers consciously and regularly in order to enable them to establish the optimal pedagogical dialogue in the classroom . And this can be achieved only with democratic teaching methods, students emancipation, breaking artificial barriers between teachers and students.

Optimal style of pedagogical dialogue contributes to a positive result in communication, interaction, and therefore the overall efficiency of the teaching process, and is characterized by a high level of psychological and pedagogical competence, the development of communication skills, the capacity for empathy and reflection.

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# THE RELATIONSHIP BETWEEN TEACHERS' MOBBING BEHAVIORS AND JOB SATISFACTION<sup>1</sup>

Abbas ERTÜRK

Mugla Sitki Kocman University, Turkey  
abbasertuk@gmail.com

İlkay YILMAZ

Mugla Sitki Kocman University,,Turkey  
yeniadim-ilkay@hotmail.com

## ABSTRACT

The purpose of this study is to determine the relationship between the mobbing behaviors of teachers and their job satisfaction. The study was designed in the survey model. The sample of the study consisted of 375 teachers working in Mugla. The research data were collected the Negative Acts Questionnaire Scale (NAQ) and Job Satisfaction Scale. According to the results, job satisfaction level of the teachers was found to be medium. Teachers' level of exposure to mobbing behaviors was low. There was an inverse and meaningful relationship between the mobbing behaviors and job satisfaction. The results indicated that teachers' job satisfaction level didn't differ significantly according to the variables of gender and the school type, but teachers' exposure to mobbing behaviors differed significantly in terms of the variables of gender and school type. When female teachers and male teachers were compared, female were determined to be more exposed to the mobbing behaviors. It was also identified that teachers working at vocational high schools were more exposed to the mobbing behaviors than general high schools.

**Keywords:** mobbing, job satisfaction, teacher

## INTRODUCTION

Such conditions as competition among employees, inequality in the distribution of rewards and promoting, setting authority and responsibilities inconsistently and also conflicts among individuals might cause mobbing behaviors in organizations (Kirel, 2007). Mobbing behavior, which is a problem that makes the lives of employees difficult in the organizations, can be explained as psychological violence, pressure and bullying behaviors that are repeated constantly, planned and systematically (Ozler, Atalay and Sahin, 2008).

The term mobbing was first used in 1960's by the Australian scientist Konrad Lorenz in order to describe a group of animals' aggressive behaviors and attacks in his researches. Then, in 1980's Heinz Leymann used the term for the similar behaviors at work place. Leymann used the term of mobbing in order to describe the long term, hostile and aggressive behaviors among the employees (Tınaz, 2006).

According to Leymann, mobbing behaviors at work place can be described as hostile and unethical psychological violence or psychological terror, communication which is directed in a systematic way by one or a number of persons mainly towards one individual or several individuals (cited by Davenport and others, 2003, p.4-5). In addition, according to Einarsen (2005), mobbing behaviors at workplace include all the negative behaviors that employees are exposed to and can't defend themselves. According to Erturk (2013), some of the mobbing behaviors are rumoring among individuals, excluding from the society, mocking, isolating the individual and emotional attacks towards the individuals in the organization. Besides, such behaviors as assigning a meaningless and offensive duty to the employee, isolating the person in social communities, ridiculing with the private life of a person, rumoring and verbal attacks at work place can be regarded as mobbing behaviors (Zapf and Leymann, 1996).

Mobbing behaviors at work place affect employees individually in a negative way. Some of the effects of mobbing behaviors can be identified as stress, emotional disorders, accidents and disabilities. These mobbing behaviors might even cause suicide. Furthermore, mobbing behaviors have negative effects on organizations. These negative effects include conflicts, unhealthy organizational culture, low morale, restriction of creativity, increase in the sickness leave, cost of the personnel turnover, low productivity, paying compensation to the employees, low quality of work, expenses of prosecutions and increasing personnel expenses.

On the other hand, the term job satisfaction is defined as the joy and satisfaction which someone gets from his job (Hackman and Oldham, 1975). According to Locke (1976), job satisfaction can be described as pleasant and positive feelings an individual gets as the result of his evaluation of his own job and work experiences. Besides,

<sup>1</sup> Bu çalışmada, İlkay Yılmazın aşağıda adı verilen yüksek tezi için toplanan verilerin bir kısmı kullanılmıştır. "Öğretmenlerin maruz kaldıkları psikolojik yıldırma davranışları ve iş doyumu: Okul türleri arası bir karşılaştırma"



Judge, Hulin and Dalal (2009) define the term of job satisfaction as multi-dimensional psychological responses that include cognitive and emotional factors.

Having high sense of job satisfaction has several benefits not only in terms of employees but also organizations. Job satisfaction is associated with performance and productivity in organization. In addition, job satisfaction can be effective on increasing the organizational performance of individuals, decreasing the personal turnover and enhancing the sense of organizational commitment as well. Having high sense of job satisfaction also helps employees decrease the rate of quitting their jobs, provides mental and physical health, learn the changes related to job quickly, have less absenteeism in their jobs are more helpful to other colleagues and perform organizational citizenship and commitment behaviors (Luthans, 1995, 129). On the other hand, job dissatisfaction causes employees to experience job stress and be hopeless about their jobs in the organization. This situation also affects other employees negatively and causes their performances to decrease.

The results of previous studies on the relationship between mobbing and job satisfaction has indicated a negative relationship between the two terms. Karcioğlu and Akbaş (2010) in their research at public and private university hospitals, Civilidag (2014) and Akbolat, Yilmazer and Tutar (2014) in their studies on employees working in hotels, and also Civilidag ve Sargin (2013) in their study conducted on academicians have found out similar results. Similarly, in a study conducted in primary schools, Dogan (2009) has determined that there was a negative relationship between mobbing and job satisfaction.

Although there are studies determining the relationship between mobbing and job satisfaction in literature, no studies investigating the mobbing behaviors that teachers are exposed to, their job satisfaction and comparing in terms of school types could be reached by the researchers. Therefore, it is considered that this study will contribute to the related literature. The purpose of this research is to determine the relationship between the mobbing behaviors and job satisfaction of teachers. In accordance with this purpose, the questions below were searched throughout this study:

1. What is the level of mobbing behaviors teachers are exposed to?
2. What is the level of teachers' job satisfaction?
3. Do the mobbing behaviors teachers are exposed to and their level of job satisfaction differ according to their gender?
4. Do the mobbing behaviors teachers are exposed to predict the level of their job satisfaction?

## METHOD

This study was designed in the survey model. The population of this study consisted of 13.028 teachers working in the province of Mugla at primary, secondary and high schools during the 2015-2016 academic year. In determining the sample of this study, disproportionate cluster sampling was applied. The sample size was calculated as 374 for 95% confidence level. Considering the loss of data, sample size was increased as 20 %. The opinions of 448 teachers were reached but 375 teachers' opinions are evaluated as valid after research. 40% of these teachers (n=150) are male, 60% (n=225) of them are female. 25.6% (n=96) of teachers work at primary schools, 40.5% (n=152) of them work at secondary school, 25.3% (n=95) of them work at general high schools and 8.5% (n=32) of them work at vocational high schools.

## Data Collection

The data collection instrument consists of three sections. First section includes the demographic characteristics of the teachers. In the second section, Negative Acts Questionnaire (NAQ) is used. This questionnaire was developed by Einersan and Rakness (1997) and adapted into Turkish by Aydın and Ocel (2009). High points from the questionnaire indicates the extent of the level of teachers' exposure to mobbing behaviors. Factor values of the items in the questionnaire ranged from .31 to .76, besides the total correlations of items was determined to be between .32 and .68. In addition, the Cronbach's Alpha coefficient of consistency is calculated as .88.

In the third section, Job Satisfaction Questionnaire is used. This questionnaire developed by Hackman and Oldham (1975). Tasdan (2008) adapted this scale suitable for school organizations and teachers by using Turkish form developed by Silah (2002). Job Satisfaction Questionnaire, which is used in order to identify teachers' evaluation of their own jobs, consists of 14 items. High scores obtained from the questionnaire indicate the high level of job satisfaction. According to the results of the research that Tasdan (2008) conducted on teachers, the questionnaire comprises of one dimension. The factor values of the items in the questionnaire ranged from .69 to .86. The questionnaire explains 64% of the total variance. Besides, the Cronbach's Alpha coefficient of consistency is calculated as .95.

Both of the scales applied in this study are 5-point-Likert type scales. Scores obtained from the scales are evaluated as (1.00-1.80) "never", (1.81-2.60) "low", (2.61-3.40) "medium", (3.41-4.20) "high" and (4.21-5.00) "very high". The absolute value of coefficient correlations can be interpreted as 0.00-0.29 low, 0.30-0.69 medium and 0.70-1.00 high level of relationship.

### Data Analysis

In order to determine the level of teachers' exposure to mobbing behaviors and job satisfaction, descriptive statistics, t-tests for two way comparisons and one way analysis of variance analysis (ANOVA) for three or more dimensional comparisons are used. SPSS 20.0 package program is used to conduct these analyses.

### FINDINGS

According to the perceptions of teachers, the distribution of the variance related to teachers' job satisfaction and mobbing behaviors they are exposed to is presented in Table 1.

**Table 1.** The distribution of variance related to the job satisfaction and mobbing behaviors according to the perceptions of teachers

	N	$\bar{X}$	ss
Job satisfaction	375	2,99	,86
Exposure to the mobbing behaviors	375	2,03	1,06

As can be indicated in Table 1, job satisfaction level of teachers is medium ( $\bar{X} = 2.99$ ) and exposure level of the mobbing behaviors is low ( $\bar{X} = 2.03$ ). Besides, t-tests results of the job satisfaction level and exposure level of the mobbing behaviors according to the gender of the teachers is shown in Table 2.

**Table 2.** T-tests results of the job satisfaction level and exposure level of the mobbing behaviors according to the gender of the teachers

	Gender	n	$\bar{x}$	S	df	t	p
Job Satisfaction	Female	150	2,99	,86	373	,072	,943
	Male	225	2,98	,86			
Exposure to the mobbing behaviors	Female	150	2,24	1,13	373	3,150	,002
	Male	225	1,89	,99			

When the results related to the gender variable in Table 2 is investigated, it can be asserted that job satisfaction [ $t_{(373)} = .072$   $p > .05$ ] doesn't differ significantly in terms of gender variable. This finding demonstrate that gender variable is not a significant determinant for the teachers' perceptions of job satisfaction level.

However, exposure to the mobbing behaviors [ $t_{(373)} = 3.150$   $p < .05$ ] differs significantly in terms of gender variable. Female teachers' exposure to the mobbing behaviors ( $\bar{x} = 2.24$ ) is higher when compared to male teachers ( $\bar{x} = 1.89$ ). This result shows that according to teachers' perceptions, the variable of gender is a significant determinant for teachers' exposure level to the mobbing behaviors. In addition to this, one-way analysis of variance (ANOVA) test results of the teachers' perceptions concerning their job satisfaction level and exposure level of the mobbing behaviors according to the school type they work is given in Table 3.

**Table 3.** ANOVA tests results of the teachers' perceptions about their job satisfaction level and exposure level of the mobbing behaviors according to the school type

	School Type	n	$\bar{x}$	Ss	df	F	p	Scheffe
Job Satisfaction	Primary S.	A 96	3,05	,91	371	2,544	,652	
	Secondary S.	B 152	2,99	,82				
	General High S.	C 95	2,95	,86				
	Vocational High	D 32	2,85	,92				
Exposure to mobbing behaviors	Primary S.	A 96	1,98	1,08	371	2,785	,041	C-D
	Secondary S.	B 152	2,15	1,13				
	General High S.	C 95	1,81	,87				
	Vocational High	D 32	2,29	1,07				

As can be seen in Table 3, it can be stated that there isn't a significant difference in the job satisfaction levels of teachers in terms of the variable of school type [ $F_{(3,371)} = .544$   $p > .05$ ]. In other words, job satisfaction level of teachers doesn't differ significantly according to the school types they work.

On the other hand, there is a significant difference in the mobbing behaviors teachers are exposed to, in terms of school type variable [ $F_{(3,371)} = 2.785$   $p < .05$ ]. That is to say, teachers' exposure level of the mobbing behaviors differs significantly according to the school types they work. In order to identify among which groups teachers' exposure level of the mobbing behaviors differs, Scheffe test is applied. The results obtained from the Scheffe

test indicate that teachers' exposure level of the mobbing behaviors working at vocational schools ( $\bar{x}=2.29$ ) is higher than the teachers working at general high schools ( $\bar{x}=1.81$ ). This finding proves that school type factor is a significant determinant for the teachers' exposure level of mobbing behaviors. Moreover, the results of the regression analysis in order to determine whether or not teachers' exposure level of the mobbing behaviors predicts their job satisfaction level is presented in Table 4.

**Table 4.** Results of the regression analysis for predicting the teachers' job satisfaction level according to their exposure level of the mobbing behaviors

Factor	B	Standard Error	$\beta$	t	p
Constant	3,84	,083		46,417	.000
Mobbing behaviors	-,42	,036	-,516	-11.629	.000
R= .516	R <sup>2</sup> = .266	F= 135.242			

As can be identified in Table 4, exposure level of the mobbing behaviors predicts the job satisfaction level at a medium ( $r= 0.516$ ) and significant level [ $R=.516$ ,  $R^2= .266$ ,  $F= 135.242$ ,  $p<.05$ ]. In other words, teachers' exposure level of the mobbing behaviors explains % 26 of the total variance regarding their job satisfaction.

## DISCUSSION

In this study, the relationship between teachers' mobbing behaviors and their job satisfaction is investigated. Data collection instruments are applied in primary, secondary, general high schools and vocational high schools. In this study, it is determined that job satisfaction level of the teachers is medium. It can be asserted that this result is similar to the results of the previous studies. In the studies that are conducted by Tunacan and Cetin (2009) on teachers working at secondary schools and by Yilmaz (2012) on teachers working at primary schools, it is remarked that job satisfaction level of teachers is medium. However, Altinkurt and Yilmaz (2014) found out that job satisfaction level of teachers is high in their study which is conducted on teachers working at primary and secondary schools. The job satisfaction level of employees demonstrates that they work in a pleasant and healthy organizational environment. This situation affects their productivity as well (Altinkurt and Yilmaz, 2014: 59). Therefore, when analyzed in this context, it can be stated that job satisfaction level of the teachers is not that high as expected. Because when teachers' productivity is concerned, their attitudes towards their jobs change in accordance with their job satisfaction level. With a low level of job satisfaction, teachers cannot be expected to have high productivity (Altinkurt and Yilmaz, 2012).

The findings related to the variable of gender indicate that gender is not determinant for teachers' job satisfaction level. Similarly, there have been some studies which have found similar results with this study (Altinkurt and Yilmaz, 2014; Yilmaz, 2012; Tasdan and Tiryaki, 2008; Sahin, 2013; Koruklu, Feyzioglu, Ozenoglu, Kritevit and Aladag, 2013). On the other hand, there are some studies which have determined that there is a significant difference according to the gender variable. In these studies, it is identified that female teachers have higher scores of job satisfaction when compared to male teachers (Tunacan and Cetin, 2009; Sahin, 1999). When investigated from the point of school type variable, it is determined that teachers' job satisfaction levels do not differ significantly according to the school types they work. This situation indicates that job satisfaction levels of teachers working at different school types do not differ in terms of their school types.

According to the perceptions of teachers, it is determined that teachers' exposure level of mobbing behaviors is low. This finding supports the results of the previous studies (Dasci and Cemaloglu, 2015; Erturk, 2015; Korkmaz and Cemaloglu, 2010). The result indicating that teachers' exposure level of the mobbing behaviors is low is a desirable finding, however, it is undesirable in terms of indicating that mobbing behaviors are experienced at schools even at a low level. Because it has been stated in the earlier studies that exposure to the mobbing behaviors decreases teachers' organizational commitment and causes teachers to experience psychological and physical health problems (Korkmaz and Cemaloglu, 2010; Hoel, Faragher and Cooper, 2004). The variable of gender is determinant for the teachers' perceptions of mobbing behaviors. Accordingly, female teachers' exposure level of mobbing behaviors is determined to be higher when compared to male teachers. This result supports the findings of the studies that are conducted by Bayraktar Durgun, Cetinkaya Aydin and Yurdakul (2015). However, in his study, Erturk (2013) found out that male teachers are more exposed to negative behaviors than female teachers. While male teachers regard these negative behaviors as normal phases of work life, female teachers consider that these kinds of negative behaviors are unacceptable. In other words, male teachers don't describe negative behaviors as mobbing whereas female teachers classify the same behaviors as mobbing behaviors. When investigated in terms of school type variable, teachers' perceptions of mobbing behaviors differ significantly. In this regard, the findings indicate that teachers working at vocational high schools are more exposed to mobbing behaviors when compared to the teachers working at general high schools. However, the results of Erturk's study (2015), which was conducted in the population of Ankara, demonstrate that teachers working at vocational high schools are less exposed to mobbing behaviors when compared to the teachers working at general high schools. Besides, Bayraktar Durgun, Cetinkaya Aydin and Yurdakul (2015)

identified in their study that teachers working at kindergartens are more exposed to mobbing behaviors than the teachers working at secondary schools in Turkey. That's why, it can be asserted that these different findings obtained from the related studies might have resulted from different sampling groups.

On the other hand, the regression analysis demonstrates that teachers' exposure level of the mobbing behaviors predict their job satisfaction level. The relationship between two variables is determined to be negative, significant at a medium level. This result supports that teachers' job satisfaction level decreases as long as they are exposed to mobbing behaviors (Diagram 1).

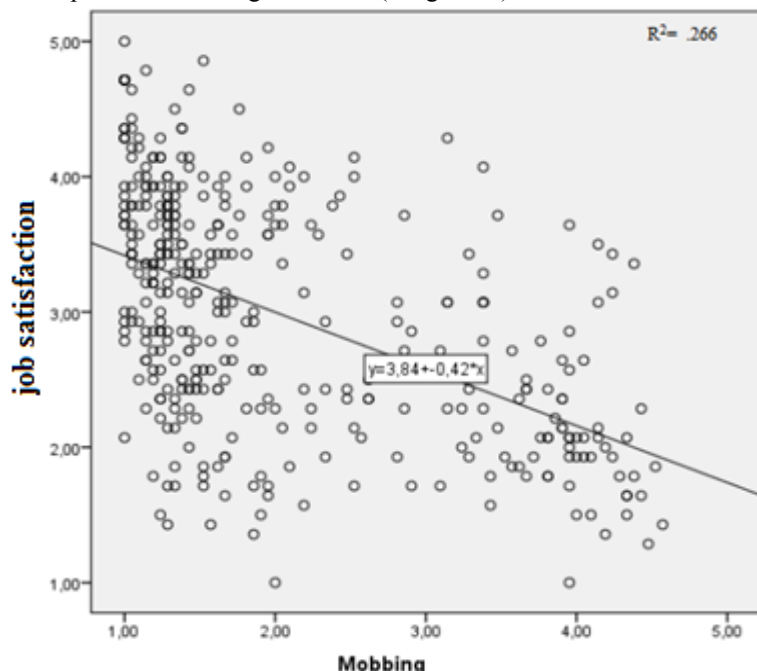


Diagram 1. Regression analysis of job satisfaction and mobbing behaviors.

This result supports the findings of the study conducted by Dogan (2009). The same results are found in the studies conducted in different fields in Turkey (Ozmete and Laleoglu, 2013; Dogan and Dogan, 2009; Ertureten, Cemalcilar and Aycan, 2013; Civilidag and Sargin, 2013; Cinar and Dursun, 2012). Moreover, according to the study conducted by Giorgi, Leon-Perez and Arenas (2015) in Italy, and the study conducted by Loh, Restubog, and Zagenczyk (2010) in Australia and Singapore, it has been determined that there is an negative relationship between mobbing behaviors and job satisfaction. This situation not only indicates that mobbing behaviors exist in organizations but also it demonstrates the relationship between mobbing behaviors and job satisfaction of the employees in organizations. It can also be stated that the existence of mobbing behaviors and negative communication among employees decrease or ends the peace at the work place and prevents the employees from getting satisfaction from their jobs.

The relationship between these two variables both sorts out the organizational effects of mobbing behaviors and enables individuals to eliminate these negative effects. When investigated from this point of view, it is necessary to determine whether or not mobbing behaviors occur in organizations and take steps in order to prevent these behaviors if teachers' job satisfaction levels are expected to be higher.

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## THE RELATIONSHIP BETWEEN THE LEVELS OF PHYSICAL EDUCATION PREDISPOSITION AND MOTOR SKILLS OF ADOLESCENT FEMALE STUDENTS

Mustafa Kayıhan ERBAŞ  
Aksaray University, School of Physical Education & Sport  
Aksaray, Turkey  
kayihan.besyo@gmail.com

Hüseyin ÜNLÜ  
Aksaray University, School of Physical Education & Sport  
Aksaray, Turkey  
unlu68@gmail.com

### ABSTRACT

The purpose of this research is to investigate the relationship between the levels of predisposition to physical education lessons and motor skills in the case of adolescent girls and compare the levels of predisposition to physical education in terms of class variable. The study group consists of a total of 186 female students. The Physical Education Predisposition Scale has been used for determining the levels of students' predisposition, while the motor skill tests have been conducted for measuring their motor skills. In analyzing the data, a t-test has been performed for the purpose of comparing the levels of predisposition to physical education in terms of class variable and a correlation analysis conducted for the purpose of identifying the relationship between the students' predisposition towards physical education and their motor skills. It has been found based on the findings of such analyses that the students' predisposition towards physical education decreased as they graduate to higher classes and that there is a relationship between their predisposition to physical education and motor skills. As a result, it has been concluded that the predisposing factor is an important factor that needs to be taken into consideration in terms of developing motor skills.

### INTRODUCTION

Societies face with new problems everyday in an ever changing and advancing world. One of the most significant of such problems is known to be the issue of obesity, which is also considered to be a health problem. Once considered to be an illness peculiar to the economically advanced countries and people of high socioeconomic status, today obesity has come to afflict people in the developing countries and become associated with the societies of mid to low socioeconomic status (Monterio, Moura, Conde & Popkin, 2004). In this respect, the most effective ways to tackle obesity in general has been narrowed down to the following three methods: healthy diet, physical activities and medical support (Bozpolat & Cömert, 2016). As a result, there has been an increasing emphasis on the significance of efforts to promote school based interventions and physical activities (Van Sluijs, McMinn & Griffin, 2007).

It has been found that the physical education in schools is the most effective method for fighting obesity and promoting physical activities for children and adolescents, and that it is taught as a compulsory lesson in the advanced countries (Fairclough, Hilland, Stratton & Ridgers, 2012). Moreover, the evidence suggests that physical education is highly beneficial in terms of promoting participation in regular physical activities, developing motor skills and other skills (Hellison & Templin 1991, Trudeau & Shephard, 2005). It is also suggested that the physical education is the best way to increase the ratio of participation in physical activities (Welk, 1999).

While it is possible to suggest that the physical education has an important place in terms of maintaining life-long physical activities and developing motor skills, the same can not be said for the students who do not actively take part in physical education lessons (Myers, Strikmiller, Webber, & Berenson, 1996). For this reason, it is suggested that there is a number of factors that affect the students' attitudes towards both the physical activities and physical education and that studies into the physical education should focus on such factors (Erbaş, Ünlü & Kalemoglu-Varol, 2015). Such factors have been conceptualized by Welk (1999) in his Youth Physical Activity Promotion Model, where the aforementioned factors have been brought together with many other potential factors and evaluated separately. When these factors, covering educational and organizational aspects, are examined in general, they are found to have been studied in terms of (a) Enabling factor, (b) Predisposing factor, (c) Reinforcing factor, (d) Personal demographics factor.

One of the factors that comes to the fore among the aforementioned factors is the “Predisposing” factor. This factor has two sub-factors. The first sub-factor involves perceived competence and self-efficacy factors under the sub-heading of “Am I Able?” Here children evaluate everything they do and become aware of the field they are good at (Welk, 1999). The second sub-factor involves the factors of enjoyment, beliefs, perceived benefits and attitudes under the sub-heading of “Is it worth it?”, and it is found to be important rather in terms of cognitive and sensory development (Welk, 1999).

Defined as a transitional period between childhood and adulthood involving a number of biological, cognitive and social changes (Santrock, 2010), adolescence is also described as a preparatory stage for adulthood that starts biologically and ends culturally (Gallhue & Ozmun, 2006). This period also marks an important and impressionable period in human life in terms of development of motor skills.

Motor development studies the changes occurring in lifelong motor skills and the factors that underpin and affect such changes (Kerkez, 2013). One of such factors is the level of physical activity; it has been established that a high level of physical activity affects motor coordination in a positive way (Chagas, Carvalho & Batista, 2016; Hekim & Hekim, 2015). In this respect, it is suggested that the physical education lessons are very important for motor development (Ericsson & Karlsson, 2012; Trudeau & Shephard, 2005). It is suggested that the observable end product of motor development and the motor skills such as strength, endurance, power, balance, flexibility and reaction time –all of which are identified through measuring motor skills and measured by special test batteries- may provide information regarding the direction of development (Gallhue & Ozmun, 2006). In this respect, it is believed that the nature of relationship between the predisposing factor and motor skills should be identified.

A good deal of studies conducted in the past (Carlson, 1995; Erbaş, Güçlü & Zorba, 2012; Luke & Cope, 1994; Ryan, Fleming & Maina, 2003) have failed to sufficiently take into account the issue of predisposition while studying the students’ attitudes towards physical education lessons. The study that stands out the most out of the studies conducted in this particular field is that of the scale improvement study conducted by Hilland et. al (2009) based on the predisposing factor that was inspired by Welk’s (1999) model (Hilland, Stratton, Vinson & Fairclough, 2009). In the study in question, Hilland et al. (2009) further improved the Physical Education Lesson Predisposition Scale to conduct a validity and reliability study, where they also studied the levels of predisposition towards physical education lessons based on gender. As a result of the study they concluded that male students were more predisposed towards the physical education lessons than female students.

Another study conducted by Fairclough et al. (2012) studied the adolescent girl students’ predisposition to physical education and their physical activity levels by using the physical education lesson predisposition scale. As a result of the study, it was established that there was a very significant relationship between the perceived skills in physical education and the physical activity levels.

Another study conducted regarding the subject matter saw the adaptation of the Physical Education Predisposition Scale into the Turkish context by Erbaş et al. (2015). As a result of the study, it was concluded that the scale was valid and reliable to be used in the Turkish context.

In another study, Gallegos and Extremera (2016) adapted the Physical Education Predisposition Scale into the Spanish context. As a result, the researchers concluded that the scale was valid and reliable to be used in the Spanish context.

We have come across some studies in the literature that were conducted with respect to the measurement of motor skills. One of such studies was conducted by Aslan et al. (Aslan, Eyüpoğlu & Koç, 2016). In the said study, the researchers compared the leg strength, anaerobic power and flexibility skills of a group of young and middle aged women that engage and do not engage in physical exercises based on age variable, and they found that there were statistically significant differences between the groups in terms of body weight, body mass index, vertical jump, leg strength, flexibility and anaerobic power parameters.

In another study, Atan et al. (2015) studied the effects of a 12 week basketball training program on the development of some of the motor skills in educable mentally challenged children (Atan et. al., 2015). At the end of 12 weeks, the researchers reported statistically significant improvements on 20 m running time, gripping strength, flexibility, vertical jump, reaction time and balance values and informed that the performances of the educable mentally challenged children that participated in basketball training sessions increased.



Another noteworthy study conducted by Chagas et al. (2016) examined the relationship between the motor coordination and physical activity levels in female students. As a result of the study, they concluded that there was a statistically significant positive relationship between motor coordination and physical activity and that overweight girls could both lose weight and develop their motor coordination through physical education.

We have come across similar studies in the literature, but failed see any other study that addressed the relationship between the predisposition to physical education lessons and motor skills. After having reviewed the available studies in the literature, it is believed that the nature of the relationship between the predisposing factor and motor skills should be presented. For this reason, the present study aims to study the relationship between the adolescent girls' predisposition to physical education lessons and their motor skills and compare their levels of predisposition to physical education in terms of class variable.

## METHOD

### Research Model

The relational screening model was used in the study. The relational screening model is defined as a model that aims to establish the existence of joint variation between two or more variables (Karasar, 2014).

### Research Group

The study group consists of a total of 186 female students ( $M_{age} = 12.51 \pm 0.931$ ) 90 of whom are 6<sup>th</sup> grade students (48.4%) and 96 of whom are 7<sup>th</sup> grade students (51.6%) studying in various secondary schools in Aksaray province during the academic year 2015-2016.

### Data Collection Tools

#### The Physical Education Predisposition Scale

Personal information forms and the "Physical Education Predisposition Scale" -originally developed by Hilland et al. (2009) and adapted into the Turkish context by Erbaş et al. (2015) were used as data collection tools for this study. The scale consists of two sub dimensions and 11 items. According to this scale the first sub-dimension is the "perceived physical education worth" consisting of 6 items, and the second dimension is the "perceived physical education ability" consisting of 5 items. The scale is a 5-point Likert-type scale with a rating system in the form of "(1) I strongly disagree, (2) I disagree, (3) I neither agree nor disagree, (4) I agree, and (5) I strongly agree". Items 3, 4, and 5 contain negative statements, whereas the rest contain positive statements. Negative statements are scored in reverse. The internal consistency coefficients of the scale was recalculated for this study, as a result of which the internal consistency coefficient for the "perceived physical education worth" sub dimension was found as .85, while the internal consistency coefficient for the "perceived physical education ability" sub dimension was found as .84, and the internal consistency coefficient for the entire scale was calculated as .88.

### Methods for Measuring Motor Skills

The performed measurements included reaction time, flexibility, vertical, jump, agility and sprint. While choosing the psychomotor skills measurement methods, the students' age was taken into consideration and the priority was given to the anaerobic measurements. It was concluded that performing anaerobic measurements on adolescent participants - who get exhausted quickly and require energy more than others and are currently going through one of the most significant stages of their physical development would not be suitable for the purposes of this study.

*a) Reaction Time Measurements:* Reaction time measurements were conducted under two sub-headings: visual reaction time and auditory reaction time. The measurements were performed by using the Timer Hakkus 1999 v 1.0 software package. While measuring the visual reaction time, the subject was asked to press the mouse button when they see the red round shape appearing on the computer screen after having pressed on the start button, the time elapsed in between was taken as the basis for the measurement. The best score out of six attempts was accepted. In measuring the auditory reaction time, however, the subject, wearing headphones, was asked to wait for the sound that would come once they press the start button. The time elapsed between their hearing of the sound and pressing the mouse button was taken as the basis for the measurement. The best score out of six attempts was accepted.

*b) Flexibility Measurements:* The sit & reach test was performed. The test tables that were ordered to be built specifically for the measurement purposes are 35 cm in length, 45 cm in width and 32 cm in height and were completely in line with the standards. The upper surface measurements of the tables are 55 cm in length and 45 cm in width. The upper surface extends 15 cm away from the surface where the feet are rested. There is a

measurement grid of 0-50 cm. The measurements were performed based on the best score obtained from 3 repetitions.

c) *Vertical Jump Measurements*: The vertical jump test was performed based on the vertical jump test that was used in the eurofit test battery. For this purpose, 155 cm high, 60 cm wide and 220 cm long wall adhesive measurement grids were used. The best score obtained out of 3 attempts was accepted

d) *Agility Test (Zig Zag Test)*: The subjects were asked to run a racetrack prepared in the form of letter Z. The best score obtained out of three attempts was taken as the basis for the measurement.

e) *20 m Sprint Test*: The subjects were asked to run a 20 m racetrack with designated start and finish points. The best score obtained out of three attempts was taken as the basis for the measurement.

### Data Analysis

The fact that the study data was consistent with the normal distribution was established by using the Lilliefors' Kolmogorov-Smirnov test ( $p > .05$ ), the histogram chart and the normal distribution curve, Skewness (between +1 and -1) and Kurtosis (between +2 and -2) tests. An independent t test was performed for arithmetic means with a view to comparing the class variable in terms of physical education predisposition levels and motor skills. A correlation analysis was used to determine the relationship between the levels of predisposition to physical education and motor skills. In addition to the aforementioned tests and analyses, descriptive statistics were used as well.

## FINDINGS

### Levels of Predisposition to Physical Education Lessons

As a result of the examination of the levels of predisposition to physical education lessons in adolescent girls, the values determined with respect to the perceived physical education worth -being the first sub factor-, perceived physical education ability and scale grand total are presented in the Table 1 below.

**Table 1.** Descriptive Statistical Data Regarding the Levels of Predisposition to Physical Education Lesson in Adolescent Girls (N=186).

Variables	M	SD	$\alpha$
Perceived Physical Education Worth	21.53	5.931	.85
Perceived Physical Education Ability	23.48	2.815	.84
Level Of Predisposition	45.02	6.492	.88

When the Table 1 is reviewed, it is observed that the values found with respect to the sub factors of 'perceived physical education worth' and 'perceived physical education ability' are high. The levels of predisposition to physical education lessons were also found to be high in terms of scale grand total.

### Comparison of the Levels of Predisposition to Physical Education in terms of Class Levels

A t-test was performed regarding the differences between the arithmetic means within the independent samples for the purpose of comparing the levels of predisposition to physical education in terms of class levels, the results of which are presented in the Table 2 below.

**Table 2.** Results of the t-test that was conducted for the purpose of comparing the Levels of Predisposition to Physical Education in terms of Class Levels

Variables		N	M	SD	Df	t	p
Perceived Physical Education Worth	6 <sup>th</sup> grade	90	22.81	4.994	184	2.891	.004**
	7 <sup>th</sup> grade	96	20.34	6.493			
Perceived Physical Education Ability	6 <sup>th</sup> grade	90	23.74	1.639	184	1.198	.232
	7 <sup>th</sup> grade	96	23.25	3.577			
Levels of predisposition	6 <sup>th</sup> grade	90	46.555	5.336	184	3.185	.002**
	7 <sup>th</sup> grade	96	43.593	7.150			

\* $p < .05$ ; \*\* $p < .01$

According to the Table 2, there is a significant difference in terms of values found in the perceived physical education worth sub factor. In this respect, the levels of predisposition on the part of the 6<sup>th</sup> grade students are found to be higher than that of the 7<sup>th</sup> grade students. However, no significant difference has been found in the second sub factor, which is the perceived physical education ability. In term of scale grand total, no significant difference has been detected in the Levels of Predisposition to Physical Education Lessons in terms of class variable. Based on the findings, the 6<sup>th</sup> grade female students are found to be more predisposed to the physical education lessons than the 7<sup>th</sup> grade female students.

### The Relationship Between the Levels of Predisposition to Physical Education and Motor Skills

A correlation analysis has been conducted for the purpose of studying the relationship between the levels of predisposition to physical education lessons and motor skills, the results of which are presented in the Table 3 below.

**Table 3.** Results of the Correlation Analysis that was conducted to establish the relationship between the levels of predisposition to physical education lessons and motor skills

Variables	VR	AR	F	V	A	S	F1	F2	P
Visual Reaction (VR)	1	.821**	.076	-.067	.279**	-.178*	-.223**	-.317**	-.341**
Auditory Reaction (AR)	.821**	1	-.339**	-.259**	.426**	-.108	-.217**	-.368**	-.358**
Flexibility (F)	.076	-.339**	1	.502**	-.138	-.243**	-.024	-.046	-.042
Vertical Jump (V)	-.067	-.259**	.502**	1	-.543**	-.217**	.141	.306**	.261**
Agility (A)	.279**	.426**	-.138	-.543**	1	.105	-.330**	-.243**	-.407**
Sprint (S)	-.178*	-.108	-.243**	-.217**	.105	1	.098	-.340**	-.058
Factor 1 (F1)	-.223**	-.217**	-.024	.141	-.330**	.098	1	-.028	.901**
Factor 2 (F2)	-.317**	-.368**	-.046	.306**	-.243**	-.340**	-.028	1	.408**
Predisposition (P)	-.341**	-.358**	-.042	.261**	-.407**	-.058	.901**	.408**	1
Means	0.361	0.325	25.27	233.80	6.341	4.324	21.53	23.48	45.02
Standard Deviations	0.068	0.059	3.605	18.388	0.495	0.258	5.931	2.815	6.492

\*\*p<0.01 (**Factor 1:** perceived physical education worth; **Factor 2:** perceived physical education ability)

According to the results presented in the Table 3, there is a moderately negative relationship between the perceived physical education worth which is a sub factor of predisposing factor- and the visual, auditory reaction time and agility variable. While there is a moderately negative relationship between the perceived physical education ability being the second sub factor- and the visual, auditory reaction time and sprint variables, a moderately positive relationship is identified with the vertical jump variable.

While a moderately negative relationship has been identified between the levels of predisposition to physical education lessons and the variables of visual and auditory reaction time and agility, a moderately positive relationship has been established with the vertical jump variable.

### DISCUSSION AND CONCLUSION

When the levels of predisposition to physical education lessons are reviewed (Table 1), it is seen that the values found with respect to the perceived physical education worth sub factor and the perceived physical education ability sub factor are high in the case of adolescent girls. The levels of predisposition to physical education lessons are also found to be high in terms of scale grand total. The findings of the present study appear to be in parallel with the findings of a similar study conducted by Fairclough et al. (2012), where they found that the levels of predisposition to physical education lessons on the part of adolescent female students were statistically high and positive. In another study conducted by Erbaş et al. (Erbaş, Ünlü & Kalemoğlu – Varol, 2016) it is suggested that the levels of predisposition to physical education lessons in adolescent female students are higher than male students. It is believed that various factors such as the adolescent girls' perspective on the physical education lesson and their predisposition to the lesson, the area where the lesson is taught, the lesson instructor and in-class atmosphere may have been influential in such findings.

When the levels of predisposition to physical education lessons are reviewed in terms of class variable (Table 2), a significant difference is established in terms of the values in the perceived physical education worth, which is the first sub factor. In this respect, the levels of predisposition on the part of the 6<sup>th</sup> grade students are found to be higher than that of the 7<sup>th</sup> grade students. However, no significant difference has been found in the second sub

factor, which is the perceived physical education ability. In term of scale grand total, no significant difference has been detected in the Levels of Predisposition to Physical Education Lessons in terms of class variable. Based on the findings, the 6<sup>th</sup> grade female students are found to be more predisposed to the physical education lessons than the 7<sup>th</sup> grade female students.

This appears to be in parallel with a similar study conducted by Erbaş et al. (2016) in which the levels of predisposition to physical education were found to be reduced as the students graduated to higher classes. A different study conducted on the subject matter by Hilland et al. (Hilland, Stratton, Vinson & Fairclough, 2009) has also produced similar results. Another study suggested that the increase in the class level led to a decrease in the level of predisposition to the physical education lesson (Subramaniam & Silverman, 2007). While it is believed that such findings may have been influenced by the physiological changes observed during the adolescent period -which coincides with the period where students graduate to higher classes- as well as the social and emotional changes experienced during the said period, the attitudes on the part of the parents and teachers may also be thought to have a role in it as well. It is also suggested that the fact that the students are taught in accordance with the same curriculum from the 5<sup>th</sup> grade to the 8<sup>th</sup> grade may result in a motivational decline for them (Luke & Cope, 1994).

When the results of the correlation analysis that was conducted to establish the relationship between the levels of predisposition to physical education lessons and motor skills (Table 3) is observed, it is seen that there is moderately negative relationship between the perceived physical education worth -a sub factor of predisposing factor- and the variables of visual and auditory reaction time and agility. While a moderately negative relationship has been established between the perceived physical education ability -being the second sub factor- and the variables of visual and auditory reaction time and sprint, a moderately positive relationship has been identified with the vertical jump variable. While a moderately negative relationship has been identified between the levels of predisposition to physical education lessons and the variables of visual and auditory reaction time and agility, a moderately positive relationship has been established with the vertical jump variable.

As a result of the literature review, no similar study has been found. The perceived physical education worth may also be believed, to some extent, to be in parallel with the concept of preparedness. The concept of preparedness is defined as a set of environmental conditions in which the individual gets biologically acclimated and acquainted with the requirements of a specific task and specialized in a specific skill (Gallahue & Ozmun, 2006). Departing from this point of view, it is believed that the moderately negative relationship between the perceived physical education worth and the variables of reaction time and agility can be accounted for. Since such variables are measured temporally, the increase in the perceived physical education worth increases in proportion with the decrease in such variables can be regarded as a positive outcome.

The moderately negative relationship identified between the perceived physical education ability -second sub factor- and the levels of predisposition to physical education lessons and the variables of sprint, reaction time and agility can also be considered as an expected outcome. In this respect, the increase in the perceived ability on the part of the adolescent girls in proportion with the decrease in the temporally measured variables can be considered as a positive outcome. Moreover, the positive relationship between the vertical jump variable and the second sub factor and the levels of predisposition to physical education lessons can also be regarded as a positive outcome as the variable of vertical jump is measured in terms of linear units. Having studied the relationship between the daily physical education activities and the development of motor skills, Ericsson and Karlsson (2012) concluded that the physical education lessons were highly influential in the development of motor skills, which also supported overall academic success and the development of social and cognitive skills. In the light of the above findings, it can be concluded that there is a strong link between the levels of predisposition to physical education lessons and motor skills and that motor skills are improved further with the increase in the level of predisposition to physical education.

As a conclusion, it is believed that the physical education lessons influence motor skills and the level of physical activity in a positive way, and that -depending on PE instructors, curriculum etc.- the levels of predisposition to physical education lessons are dropped in the case of adolescent girls as they graduate to higher classes. Moreover, it is concluded that there is a direct relationship between the levels of predisposition to physical education and motor skills and that the predisposing factor is a significant factor that needs to be taken into consideration in terms of developing motor skills.

It is recommended that the studies to be conducted in the future should conduct a wide scale research with a broader population for the purpose of establishing the relationship between the predisposing factor and motor skills and by taking into account various different demographic variables.

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## THE RELATIONSHIPS BETWEEN ACADEMIC MOTIVATION AND ACADEMIC SUCCESS OF PHYSICAL EDUCATION TEACHER CANDIDATES

Hüseyin ÜNLÜ

Aksaray University, College of Physical Education and Sports, Turkey  
unlu68@gmail.com

M. Kayihan ERBAŞ

Aksaray University, College of Physical Education and Sports, Turkey  
kayihan.besyo@gmail.com

### ABSTRACT

The aim of this study is to determine the academic motivation levels of physical education teacher candidates and to reveal the relationships between academic motivation and academic success. The study follows a general scanning model in which the sample consists of 238 participants (147 male and 91 female). The Academic Motivation Scale (AMS) was used as a data collection tool in the study. In order to analyze the data, the researcher made use of the Pearson coefficient of correlation and multiple regression analysis as well as descriptive statistics. The study results suggest a high level of academic motivation among physical education teacher candidates. In addition, a significant relationship between academic motivation and academic success was found. It was also observed that academic motivation is a meaningful predictor of academic success in regression equations while there was found to be no meaningful predictor except the a-motivation dimension.

**Key words:** Physical education teacher candidate, motivation, academic motivation, regression

### INTRDOCUTION

Recently, motivation has been a prominent issue in education, especially in teacher training (Arioğul, 2009; Güçlü, Recepoğlu & Kılınç, 2014; Karataş & Erden, 2012; Özder & Motorcan, 2013). Motivation is defined as the total reflection of all variables affecting the level of willingness of an individual to participate in an activity (Ünal-Karagüven, 2012), and it is originally based on the self-determination theory (Deci & Ryan, 1985; Deci, Vallerand, Pelletier & Ryan, 1991). This theory focuses on the reasons to activate individuals and aims to determine the factors which contribute to the healthy developments of individuals, groups and societies (Ryan & Deci, 2000a). It also claims that different levels of motivation reflect various self-determination levels (Guay, Mageau & Vallerand, 2003). In this context, three types of motivation are covered in this study: *intrinsic motivation*, *extrinsic motivation* and *a-motivational state* (Deci & Ryan, 2000b; 2006).

Intrinsic motivation refers to engaging in an activity because it brings joy or inspires interest. External motivation refers to engaging in an activity simply for the sake of the outcome (Deci & Ryan, 2000b). Intrinsic motivation comes from inside an individual and encourages him to produce while extrinsic motivation is influenced by factors related with rewards and job environments (Kılıç & Keklik 2012). The a-motivational state is the absence of desire to act. That is, it is the absence of motivation. This state also reflects a feeling of incompetency to complete an activity or benefit from it (Deci & Ryan, 2000b).

Both intrinsic and extrinsic motivation is of critical importance to reinforce students to participate in educational activities, to increase their academic performance and to attain education goals (Ünal-Karagüven, 2012; Özdemir Özkan, Akın and Durna, 2015). It is also stated that motivation is related to outputs such as curiosity, persistence and performance (Deci & Ryan, 1985), encourages students to develop positive attitudes towards courses (Ajayi, Lawani and Salomi, 2012), and that students with high levels of motivation tend to succeed (Green, Nelson, Martin, & Marsh, 2006; Khalila, 2015; Linnenbrink & Pintrich, 2002; Pintrich & Schunk, 2002). Similarly, students with academic problems are found to have low levels of motivation (Henning, 2007).

Individual's opinions about education, ambition to study, interest level, needs and desires are related to academic motivation (Brown, 2009; Rusillo and Arias, 2004). Academic motivation has always taken educators' attention, and its effects on school performance and learning have become research subjects (Coetzee, 2011; Henning, 2007; Özder & Motorcan, 2013). Arioğul (2009) pointed out the importance of academic motivation in determining academic success. In general, the positive relationship between academic performance and motivation is underlined (Kusurkar, Ten Cate, Vos, Westers, and Croiset, 2013; Komarraju, Karau & Schmeck, 2009).

The assessment of teacher candidates' academic motivation is of importance in predicting their success in education and professional lives. Although there have been various studies concerning the academic success of teacher candidates (Gürşimşek, 2002; Arioğul, 2009; Eymur-Geban, 2011; Eğmir, Ödemiş, Bayar, Bayar &

Kayır, 2013; Gömleksiz & Serhatlıoğlu, 2013), the number of studies about the academic success of physical education teacher candidates' academic motivation (Alemdağ, Öncü & Yılmaz, 2014) and the relationship between academic success and motivation of these teacher candidates is quite limited (Eymür & Geban, 2011).

Academic success and motivation are accepted as having a substantial effect on physical education teacher candidates' ability to develop both in their personal and professional lives, to follow innovations, to search for information and to produce new knowledge. In this sense, this study examines the relationship between academic success and motivation among physical education teacher candidates.

## METHOD

### Sample

Designed with the general scanning model, the study sample consists of 238 participants coming from physical education and sports departments from four different universities during the 2015-2016 academic year and 147 (61.8%) of whom are male and 91 (38.2%) of whom are female (Class=1-4, age=21,37±2.206; gpa=2.60±.430).

### Data Collection Tools

The study made use of the Academic Motivation Scale (AMS) which was developed by Vallerand et al. (1992) and adapted into Turkish by Ünal-Karagüven (2012). There are seven sub-scales and 28 items in the scale, and each sub scale has four items. These sub-scales include Intrinsic Motivation (IM; three sub scales), Extrinsic Motivation (EM; three sub scales) and A-motivational State (AS; one subscale). It is a 1-to-7 Likert scale in which 1 stands for *definitely disagree* while 7 stands for *definitely agree*. The scoring for every sub scale ranges between the lowest point - 4 - and the highest point - 28 - for every sub scale. The items within the a-motivational state sub scale were scored in reverse. The high scores from the scale represent a high level of academic motivation whereas the low scores represent a low level. Cronbach's Alpha of Internal Reliability for this scale was measured to be between .67 and .87.

### Data Analysis and Assessments

Before data analysis was initiated, the researcher checked whether the data had a normal distribution curve or not, what the normal distribution curves were, the coefficient of skew and kurtosis, and the Kolmogorov-Smirnov test results in order to determine which statistical techniques to use. According to the Kolmogorov-Smirnov (K-S) test results, which indicate whether scores of the dependent variable show a normal distribution for every independent variable, the scores obtained from all sub-scales show a normal distribution. Since there were not extreme deviations in the distribution curve and the coefficient of skew and kurtosis, the descriptive statistics (mod-median-arithmetic average  $\bar{x}$ ) were found to be close to each other and the number of the participants was high (n=230). Parametric statistics techniques were used for this study. The scores of students in the academic motivation scale and its subscales were determined through the use of descriptive statistics (mod-median-arithmetic mean). Additionally, with the aim of revealing the differences between dependent and independent variables, independent samples t-test and the Pearson Product-Moment Correlation Coefficient were adopted to determine the relationship. The significance level of the study was 0.05. And lastly, SPSS 20 was used for data analysis.

## FINDINGS

This part of the study presents the findings concerning the academic motivation levels of physical education teacher candidates, the relationship between academic success and motivation, and the predictive effect of academic motivation on academic success.

### *Academic Motivation Levels of Physical Education Teacher Candidates*

The score averages and standard deviation values related to the academic motivation of physical education teacher candidates are presented in Table 1 below.



*Table 1. Motivation Levels of Physical Education Teacher Candidates*

<b>Academic Motivation</b>	<b>N</b>	<b>M</b>	<b>Ss</b>
Intrinsic Motivation-Knowledge (IMTK)	238	4.96	1.153
Intrinsic Motivation- Accomplish (IMTA)	238	4.73	1.146
Intrinsic Motivation to Experience Stimulation (IMES)	238	4.76	1.125
Extrinsic Motivation External Regulation (EMER)	238	4.96	1.176
Extrinsic Motivation Introjected Regulation (EMIN)	238	4.86	1.154
Extrinsic Motivation Identified Regulation (EMID)	238	4.66	1.217
Amotivation (AMOT)	238	4.66	1.217
Academic Motivation- Total Scale (AMS)	238	4.71	.940

In Table 1, the averages of physical education teacher candidates from the AMS and its sub-scales are presented. As shown in the table, the participants scored  $M = 4.71 \pm .940$  average from the scale in general. In addition, the highest average of the participants was scored in the IMTK  $M = 4.96 \pm 1.153$  and EMER  $M = 4.96 \pm 1.176$  sub-scales while the lowest scores belong to the EMID  $M = 4.66 \pm 1.217$  and AMOT  $M = 4.66 \pm 1.217$  sub-scales.

### ***The Relationship between Academic Motivation and Academic Success of Physical Education Teacher Candidates***

The study adopted the Pearson Product-Moment Correlation Coefficient in order to measure the relationship between academic motivation and academic success of physical education teacher candidates. The results are shown in Table 2 below.

*Table 2. The Relationship between the Academic Motivation and Academic Success of Physical Education Teacher Candidates.*

<b>GPA</b>	<b>IMTK</b>	<b>IMTA</b>	<b>IMES</b>	<b>EMER</b>	<b>EMIN</b>	<b>EMID</b>	<b>AMOT</b>	<b>AMS</b>
<b>Pearson Corr.</b>	.228**	.156*	.230**	.242**	.139*	.286**	.286**	.244**
<b>Sig. (2-tailed)</b>	.000	.016	.000	.000	.032	.000	.000	.000

The findings suggest that there is a positive and meaningful correlation between academic motivation and academic success of physical education teacher candidates ( $p < 0.05$ ).

### ***The Predictive Effect of Academic Motivation on Academic Success***

With the aim of determining the predictive effect of academic motivation on academic success among physical education teacher candidates, the researcher made use of multiple regression analysis and the results are presented in Table 3 below.

*Table 3. The Predictive Effect of Academic Motivation on Academic Success*

<b>Variables</b>	<b>B</b>	<b>Standard error</b>	<b><math>\beta</math></b>	<b>t</b>	<b>p</b>	<b>Dual r</b>	<b>Partial r</b>
Constant	2.075	.137	—	15.118	.000		
IMTK	.018	.047	.047	.370	.711	.024	.023
IMTA	-.089	.047	-.237	-1.896	.059	-.124	-.118
IMES	.032	.049	.085	.653	.514	.043	.041
EMER	.016	.044	.044	.371	.711	.024	.023
EMIN	-.060	.048	-.161	-1.261	.209	-.083	-.078
AMOT	.097	.040	.276	2.456	.015	.160	.153
<b>R=.336</b>	<b>R<sup>2</sup> = .113</b>	<b>F= 4.168</b>	<b>P= .000</b>				

Table 3 shows the predictive effect of academic motivation on academic success among physical education teacher candidates. The predictive equation was determined as ( $R^2 = .11$ ,  $F = 4.168$ ,  $p < .05$ ). EMID was also seen to be out of the model. The variables in the academic motivation sub scales explain 11% of the variance of the total academic success. To the standardized regression coefficient (**B**), the relative orders of importance of predictive variables in score averages were as such: AMOT, IMTA, EMIN, IMES, IMTK and EMER. Upon examining the

t-test results concerning the level of significance of regression coefficients, the MS sub-scale was found to be a meaningful predictor in score averages.

## DISCUSSION AND CONCLUSION

This study shows that the participant teacher candidates have a high level of academic motivation. In their studies, Arioğul (2009) & Gömleksiz and Serhatlıoğlu (2013) also reached conclusions about high levels of academic motivation among teacher candidates parallel to this study's. Similarly, Öncü, Alemdağ and Yılmaz (2014) conducted their study with physical education teachers and Şahin and Çakar (2011) studied education faculty students, both of which revealed that teacher candidates have above average levels of academic motivation.

Another result of the study is that there is a positive and meaningful correlation between academic success and academic motivation of physical education teacher candidates. In their study, Özder and Motorcan (2013) mention a high level of correlation between academic success and academic motivation. In another related study, Eymur and Geban (2011) point out the relationship between academic success and the knowledge and stimulation sub-scales of the academic motivation scale.

The study also tested the predictive effect of academic motivation on academic success among physical education teacher candidates. Although the model was measured and assessed as meaningful, there was found to be no effect of the sub-scales of the academic motivation scale on academic success. Also, the effect of academic motivation on academic success was measured as 11% which can be said to be a low rate. The study findings also underscore the importance of increasing academic motivation among physical education teacher candidates. In his study, Arioğul (2009) revealed the positive relationship between academic motivation and the *intrinsic motivation* sub-scale of the academic motivation scale while he found a negative correlation with the *a-motivational state* sub-scale. It is a significant finding that the academic motivation and academic success levels of participants are above average which affects the model. However, this does not reflect a predictive feature.

Future studies should examine the relationship between academic motivation and academic success among physical education teacher candidates by determining the effective factors in the variables thoroughly, which would in turn contribute to their academic motivation and success.

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## THE RELATIONSHIPS BETWEEN DECISION MAKING STYLES WITH LOCUS OF CONTROL AND ASSERTIVENESS IN SOCCER REFEREES

**Serdar SUCAN**

Erciyes University, School of Physical Education and Sport, Kayseri, Turkey  
ssucan@erciyes.edu.tr

**M. Behzat TURAN**

Erciyes University, School of Physical Education and Sport, Kayseri, Turkey  
behzatturan@erciyes.edu.tr

**Barış KARAOĞLU**

Erciyes University, School of Physical Education and Sport, Kayseri, Turkey  
bariskaraoglu@erciyes.edu.tr

**Osman PEPE**

Erciyes University, School of Physical Education and Sport, Kayseri, Turkey  
opepe@erciyes.edu.tr

### ABSTRACT

The first aim of this research was to examine the relationships between decision making styles and locus of control, assertiveness in soccer referees and to investigate the contributions of locus of control and assertiveness of decision making styles. The second aim of the study was to examine the effects of socio-demographic variables such as gender, age, classification on decision making styles. For this purpose, Melbourne Decision Making Questionnaire-II (Mann, Harmoni, Power, 1998, p. 265-278), Rathus Assertiveness Scale (Rathus AS, 1977, p. 393-397) and Rotter's Locus of Control Scale (Dağ, 1991, p. 10-16) were administered to 93 soccer referees (27 female and 66 male). For analysis of the data, t-test, ANOVA test, Tukey test, Spearman correlation analysis and Multiple Linear Regression were used, was found and level of significance. According to the findings, there was a significant positive relationship between locus of control and decision-making styles; which was showed a significant effect on the decision-making styles of the gender, age and class variable.

**Key Words:** Referee, decision making styles, locus of control, assertiveness.

### INTRODUCTION

Struggling and competition are on the basis of sports as a way of struggling individuals make within the framework of specific rules against the rival, self, nature, distance and time using mind and body (Güven, 1990). Whereas using the ability of decision-making on time and at the correct point as having great importance in sports environment as well as daily life affect the competition positively, wrong decisions can negatively affect the competition result.

Decision-making is an important, complex, and cognitive process in which individuals determine several action alternatives, evaluate these, and choose one of them to implement (Phillips, Pazienza, Ferrin, 1984, p. 497-502, Von Winterfeldt, Edwards, 1986). Decision-making process starts with revealing the problem and ends with implementing the decision and evaluating the results (Adair, 2000). During the decision-making process, individuals use vigilant, buck-passing, procrastinating and hyper-vigilant decision-making styles. The individuals using vigilant decision-making styles search for the information elaborately before making the decision, and make their choices after evaluating the alternatives. The individuals implementing the buck-passing decision-making style avoid making decisions, and hands over the decision to the others. Accordingly, they try to escape from making decisions passing the responsibility to the others. The individuals implementing the procrastinating decision-making style try to postpone, retard and procrastinate the decision. And the individuals implementing the hyper-vigilant decision-making style tend to present thoughtless behaviors and find urgent solutions feeling themselves under time pressure when they face with making a decision (Deniz, 2004, p. 23-35).

Efficiency of the decision-making process depends upon the individual who makes decision. That is why the method individuals on decision-making process follow and their personality traits are important (Shiloh, Koren, Zakay, 2001, p. 699-710). Whereas some individuals believe that the control related to the behavior of decision-making are on them, some others believe that this control is determined by external factors. Accordingly, type of the locus of control individuals have in their decision-making behavior is an important factor. Locus of control is tendency of individuals towards perceiving the events affecting themselves positively or negatively as a result of

their own behaviors or as an effect of external powers such as luck, etc. (Rotter, Change, Phares, 1972, p. 1-43). Depending upon the result of their own behaviors, individuals are “internal audit-oriented” if they behave according to the result of their own behaviors, and “external audit-oriented” if they behave according to the external powers or people (Zimbardo, 1985, p. 275). Locus of control is a personality trait that is directly affecting the decision-making behavior. Internal audit-oriented individuals are aware of the fact that they are efficient on their own decisions, and they take the responsibility for their behaviors. External audit-oriented individuals believe that luck or other people control their life, and therefore are possible not to make a decision (Gordon, 1996, p. 561-585, Kulas, 1996, p. 721-729).

A behavior can be aggressive, assertive or timid. Assertive behavior style individuals are expected to present in their relationships with people is defined as a type of behavior providing to act in accordance with the interests as devoid of equality and worries in relationships, to defend the self, to express the feelings honestly and easily and to use the rights of self without violating the rights of others (Alberti, Emmons, 1998). The individuals who can establish efficient communication are the ones presenting assertive behaviors. Assertive individuals act in accordance with their own purposes, and make more efforts rather than the timid individuals to overcome the problems they encounter (Fensterheim, Baer, 1994). Therefore, assertive individuals are known to have higher decision-making skills (Piccinin, Me Carrey, Fairweather, 1998, p. 75-93).

Recently, football has been played faster and more technical. Due to the instant and unexpected changes of football dynamics, referees are required to make faster and more careful decisions during the game. The responsibility for making the most appropriate decisions on these rapid changes sportsmen and trainers make during the match is on referees. Therefore, referees have mental and physical difficulties during the match (Doğan, 2005). Individuals’ having assertive behaviors and being ideal audit-oriented increases their success and provides them to be constructive in relationships (Phares, 1976, p. 23, Beck, Collins, Overholser, 1985, p. 43-63, Bulechek, McCloskey, 1995, p. 328-337). As could be understood, individuals’ social and personal traits are important upon their decision-making behavior. In the literature, attitudes of parents, age, gender, and school success have been noticed to be included much in the studies related to locus of control and decision-making behavior. However, no studies investigating the decision-making behavior and locus of control and assertiveness together in referees were encountered.

Referees are the unique persons who are assigned to determine the scores won in competitions, provide the rules to be implemented and to punish the ones who do not obey these rules in matches (Durna, 1997, Tiryaki, 2000). Therefore, the decisions referees will make during the match at an important position, critical time and under pressure are essential as well as the decisions of trainers and sportsmen.

The purpose of this study was to determine the relationship between assertiveness style, locus of control and decision-making styles of the referees, and to investigate whether there was a significant difference in terms of the variables such as gender, age and classification in decision-making styles. It was expected at the end of the study that significant contributions would be provided creating descriptions related to the current situation considering the effects of referees upon the match score, their responsibilities during the match and performances according to the structure and requirements of football.

## METHOD

### POPULATION AND SAMPLE

The sample of the research 2015-2016 soccer season form in Kayseri serving 93 soccer referee. Referees, national, regional, province and HIF are divided into groups according to the official.

**Table 1.** Socio-demographic characteristics of Soccer Referees

		N	%
<b>Gender</b>	Male	63	67.7
	Female	30	32.3
<b>Age</b>	18-22	21	22.5
	23-27	19	20.4
	28-32	34	36.5
	33-37	11	11.8
	38-over	8	8.8
<b>Marital status</b>	Single	76	81.7
	Married	17	18.3

<b>Education level</b>	High school	17	18.2
	University	68	73.1
	Graduate	8	1.7
<b>Monthly Income Level</b>	500-1499	21	22.5
	1500-2499	39	41.9
	2500-3499	18	19.3
	3500-over	15	16.3
<b>Classification</b>	HIF	16	17.2
	Province	35	37.6
	Regional	27	29
	National	15	16.2

## DATA COLLECTION TOOLS

### PERSONAL INFORMATION FORM

To collect data about the arguments of the study a questionnaire developed by the researcher; gender, marital status, education level, monthly income and the classification status consists of 6 questions to determine.

### MELBOURNE DECISION MAKING QUESTIONNAIRE I-II (MDMQ I-II)

“Melbourne Decision-Making Questionnaire” which was designed by Mann et al. (1998, p. 265-278) was adapted into Turkish in order to discover decision-making styles of the Turkish university students and to conduct comparative studies where these styles are compared to the decision-making styles of other nations. Melbourne Decision-Making Questionnaire involves two parts: the first part measures self-esteem in decision-making (self-confidence) and is consisted of six items and one sub-scale. The second part includes 22 items addressing decision-making styles and four sub-scales: a) vigilance, b) buck passing, c) procrastination and d) hyper-vigilance. Upon the administration on 154 university students, internal consistency coefficients of the MDMQ I-II were found by Deniz (2004, p. 23-35) as follows: Cronbach Alpha self-esteem in decision making: .72; vigilance: .80; buck-passing: .78; procrastination: .65; and hyper-vigilance: .71 (Deniz, 2004, p. 23-35).

### RATHUS ASSERTIVENESS SCALE

The scale developed by Rathus (Rathus, Spencer, Jeffrey Nevid, 1977, p. 393-397), Turkish adaptation and reliability study made by Voltan (1980, p.23-25), there is a 6-point Likert-type inventory of 30 items. Inventory items; it doesn't fit me at all (-3), doesn't fit me much (-2), not me (-1), fits me a little bit (+1), fits me (+2), fits me very well (+3) is scored. 1,2,4,5,9,11,12,13,14,15,16,17,19,23,24,26,30. if the items in the opposite direction points. Inventory total -90 to +90 and average score in the range +10 and they score above the assertive, +9 and it is considered as the shy down points level.

### ROTTER'S LOCUS OF CONTROL SCALE

The scale developed by Rotter (1966, p. 1-28), Turkish adaptation and reliability study made by Dağ (1991, p. 10-16), including of each item on the scale carried out two options (a and b) has a total of 29 items. These options are more suitable to itself of sentences of persons included in the option you will be prompted to mark. On the scale 1,8,14,19,24,27. substances are not considered in the calculation. 2,6,7,9,16,17,18,20,21,23,25,29. items (a) options; 3,4,5,10,11,12,13,15,22, 26,28. items (b) options (1) points. Scale in the range of 0-23 points in total, 0-11 points internal audit oriented, 12-23 points external audit oriented showed are accepted.

## ANALYSIS OF THE DATA

Validity and reliability of an acceptable quality in frequency in the descriptive analysis of the data (N), percentage (%), arithmetic mean and standard deviation analysis were used. Referee to decide the style of comparison for determining whether demographic characteristics differed significantly according to the t test and one-way analysis of variance (ANOVA) was used. Tukey test was performed to determine the source of differentiation. Decision making styles to examine the relationship between assertiveness and locus of control Spearman correlation test was used. Decision making styles with assertiveness and locus of control to explain for the procedure to feature multiple regression analysis was used. Statistical significance level of alpha ( $\alpha$ ), the error level  $p < 0.05$  was adopted.

## FINDINGS

The average age of female soccer referees in research  $25.73 \pm 2.63$ , the average age of male soccer referees  $28.27 \pm 2.14$ . Referees HIF 17.2%, 37.6% Provincial, 29% Regional and 16.2% National. Referees vigilance 39.7%, buck passing 26.8%, procrastination 20.4% and hyper-vigilance 13.1% has decision making style. Referees shy 76% and 59.3 % is controlled internally.

**Table 2.** Decision Making Styles Scores of Soccer Referees

Decision-Making Styles	N	%	X	SS
vigilance	37	39.7	11.09	2.52
buck passing	25	26.8	12.11	1.48
procrastination	19	20.4	12.17	3.49
hyper-vigilance	11	13.1	13.35	1.50

When the score averages obtained from decision-making styles sub-dimensions of referees were analyzed, the lowest score was obtained from vigilance decision-making style ( $11.09 \pm 2.52$ ), and the highest score was obtained from hyper-vigilance decision-making style ( $13.35 \pm 1.50$ ) (Table 2).

**Table 3.** Decision Making Styles Gender Dimensions of Soccer Referees T-Test Results

Decision-Making Styles	Gender	N	X	SS	t	p
vigilance	Male	63	11.34	4.49	2.336	.015*
	Female	30	10.16	4.51		
buck passing	Male	63	12.15	9.48	.602	.542
	Female	30	11.96	9.55		
procrastination	Male	63	12.71	3.52	.309	.756
	Female	30	13.69	3.35		
hyper-vigilance	Male	63	13.58	3.98	2.943	.078
	Female	30	12.24	3.57		

\*p < .05

Whereas no significant level of difference was observed in buck-passing, procrastinating and hyper-vigilant sub-dimensions of decision-making styles of football referees in terms of the gender variable ( $p > .05$ ), significant level of difference was observed in terms of the gender variable in vigilant decision-making style ( $p < .05$ ). According to this, vigilant decision-making style of male football referees was found to be significantly higher rather than the female football referees (Table 3).

**Table 4.** Decision Making Styles Age of Soccer Referees ANOVA and Tukey test Results

Decision-Making Styles	Age	N	X	SS	F	Tukey Test Results
Vigilance	18-22 <sup>a</sup>	21	10.04	1.98	6.843*	b-a, c-a, d-a
	23-27 <sup>b</sup>	19	11.49	2.05		
	28-32 <sup>c</sup>	34	11.76	2.12		
	33-37 <sup>d</sup>	11	11.89	2.08		
	38 and over <sup>e</sup>	8	11.80	3.56		
Buck passing	18-22 <sup>a</sup>	21	12.37	2.35	.721	
	23-27 <sup>b</sup>	19	12.73	2.11		
	28-32 <sup>c</sup>	34	12.98	1.82		
	33-37 <sup>d</sup>	11	12.95	1.80		
	38 and over <sup>e</sup>	8	13.23	2.97		
Procrastination	18-22 <sup>a</sup>	21	12.32	2.63	1.718	
	23-27 <sup>b</sup>	19	11.78	2.39		
	28-32 <sup>c</sup>	34	11.82	2.53		
	33-37 <sup>d</sup>	11	11.57	2.37		
	38 and over <sup>e</sup>	8	12.02	2.34		

Hyper-vigilance	18-22 <sup>a</sup>	21	13.25	2.40	1.306
	23-27 <sup>b</sup>	19	14.23	2.10	
	28-32 <sup>c</sup>	34	14.42	1.99	
	33-37 <sup>d</sup>	11	14.63	1.66	
	38 and over <sup>e</sup>	8	14.60	1.89	

\*p &lt; .05

In terms of the age variable, vigilant decision-making style as one of the decision-making sub-dimensions of the football referees significantly differed ( $F=6.843$ ). In vigilant decision-making style score averages of the football referees in 23-27 years old, 28-32 years old and 33-37 years old age groups were noticed to be significantly higher rather than the score averages of the referees in 18-22 years old age group. In buck-passing, procrastinating and hyper-vigilant sub-dimensions of decision-making styles, no significant difference was determined in terms of the age variable ( $p>.05$ ) (Table 4).

**Table 5.** Decision Making Styles Classification of Soccer Referees ANOVA and Tukey test Results

Decision-Making Styles	Classification	N	X	SS	F	Tukey Test Results
Vigilance	National <sup>a</sup>	15	13.46	1.98	1.140	
	Regional <sup>b</sup>	27	13.90	1.98		
	Province <sup>c</sup>	35	13.79	2.00		
	HIF <sup>d</sup>	16	13.38	2.17		
Buck passing	National <sup>a</sup>	15	13.80	2.87	5.162*	a-b
	Regional <sup>b</sup>	27	12.51	2.40		
	Province <sup>c</sup>	35	12.93	2.44		
	HIF <sup>d</sup>	16	13.51	2.26		
Procrastination	National <sup>a</sup>	15	13.68	2.13	5.525*	a-b
	Regional <sup>b</sup>	27	12.45	2.02		
	Province <sup>c</sup>	35	12.87	2.09		
	HIF <sup>d</sup>	16	13.02	2.01		
Hyper-vigilance	National <sup>a</sup>	15	11.46	2.25	2.879	
	Regional <sup>b</sup>	27	10.16	2.23		
	Province <sup>c</sup>	35	10.62	2.09		
	HIF <sup>d</sup>	16	10.61	2.43		

\*p &lt; .05

In terms of the classification variable, buck-passing and procrastinating decision-making style sub-dimensions of football referees' decision-making styles significantly differed ( $F=5.163$ ,  $F=5.525$ ). Buck-passing and procrastinating decision-making style score averages as one of the decision-making sub dimensions of national football referees was found to be significantly higher rather than the score averages of the regional football referees. In other comparisons, no significant difference was determined (Table 5)

**Table 6.** Correlation Coefficients between Decision Making Styles, Assertiveness and Locus of Control

N=93		Assertiveness	Locus of Control
Decision-Making Styles	r	,043	,245*
	p	,680	,017

\*p &lt; .05.

Soccer referees have decision making style with assertiveness and the locus of control between correlation findings related (Table 6). An examination table, soccer referees decision making style with the assertiveness because it doesn't have a significant relationship ( $r=0.043$ ;  $p>0.05$ ), locus of control with the decision making style at a low level, it is positive and significant relationship ( $r=-0.144$ ;  $p<0.05$ ).

**Table 7.** Regression Table Towards Prediction of the Discussion and Results Decision Making Styles

Variable	B	Standard error	$\beta$	t	p	binary r	partial r
Constant	1,199	,479	-	2,502	,014	-	-
Assertiveness	,111	,288	,039	,384	,702	,034	,040
Locus of Control	,534	,217	,249	2,459	,016	,249	,250



R=0.252

 $R^2=0.063$  $F_{(2, 91)}=3.080$ 

p= .05

Assertiveness and locus of control regression analysis results for the prediction of decision making styles according to the varieties is given in Table 7. The predictive variable the dependent variables are examined the dual and partial correlations, the correlation calculated positive and low levels of decision making styles with the locus of control ( $r=0.249$ ), it seems to be when other variables are controlled positive and low level ( $r=0.034$ ). The locus of control variable, low-level with soccer referees decision making styles gives a positive and significant correlation ( $R=0.252$ ,  $R^2=0.063$ ,  $p<.05$ ). Assertiveness and the locus of control variables together, about 6% of the total variance of the decision making style describes ( $F_{(2, 91)}=3.080$ ;  $p<.05$ ).

## DISCUSSION AND CONCLUSION

Theoretical explanations related to decision-making styles focus on decision behavior and amount of information individuals collect during the decision-making process. Use of the decision-making processes can vary according to age of individuals, the situation they encounter and the events they experience. Decision-making is a comprehensive phenomenon including the decisions related to politics, economy, profession and family in life of individuals (Schvaneveldt, Adams, 1983, p. 98-104).

As result of the analysis in our study, whereas the lowest average value obtained from decision-making styles was found in "vigilant decision-making style" sub-dimension, the highest average value was obtained from "hyper-vigilant decision-making style." Obtaining low score from decision-making scale meant that individuals preferred the relevant sub-dimension (decision-making style) more. In reference to these findings, it was possible to mention that football referees preferred vigilant decision-making style as the most, and hyper-vigilant decision-making style as the least. In other words, we could state that football referees mostly made their decisions according to the result they concluded after evaluating the knowledge and alternatives carefully, they did not constantly retard the act of decision-making without a reason, they made their decisions on time, and they did not unnecessarily extend the decision-making process. When we analyzed the score averages in general, it was possible to mention that football referees made their decisions not behaving in a hurry, reaching to different information and evaluating the choices on time. When the literature was reviewed, the findings obtained in the studies carried out using different measurement methods (Sanchez, Calvo, Bunuel, 2009, p. 369-373, Craig, Watson, 2011, 689-708) were similar to the results of this study.

Our findings we obtained as result of the analysis proved that there was a significant difference between the decision-making styles of female and male football referees. As in our study, research findings of several researches in the literature was determined to reveal a significant difference according to the variable of gender in terms of the decision-making styles (Haniffa, Ahmed, 2008, p. 405-415, Salo, Allwood, 2011, p. 97-119, Certel, Aksoy, Çalışkan, 2013, p. 1971-1975, Çetin, Taşgın, Arslan, 2011, p. 1826-1831). However, it was also noticed in the literature that some research findings obtained from the studies on different fields did not significantly differ according to gender (Keleccek, Altıntaş, Aşçı, 2012, p. 244, Köksal, Gazioğlu, 2007, p. 133-146).

Decision-making styles of football referees were noticed to be differed according to their ages significantly. In similar studies, the findings had a quality supporting the findings of our study, and decision-making styles of the individuals were determined to differ according to age groups (Demirbaş, 1992, Özcan, 1999, Alver, 2003, Gacar, 2011). In some researches in the literature, it was specified that decision-making styles did not differ according to the variable of age (Çetin, 2009, Gülşen, 2008, Uzunoğlu, Şahin, Fişekçioğlu, 2009, p. 32-36). These obtained findings can be interpreted in a way that female and male referees made decisions similarly against the problems they encountered in match environment. Furthermore, referees' preferring vigilant decision-making style more as their age increased was considered to be arisen from the increase at their self-confidence due to their experiences.

Decision-making style depends upon the preference of individuals, and personal and environmental factors they have. Whereas some individuals believe that the control related to the decision-making style is on their self, some others believe that this control is determined by the external factors. Accordingly, type of the locus of control individuals have in decision-making style is an important factor. In our study, referees were noticed to use vigilant decision making style (39.7%) and internal audit-oriented locus of control more.

A low level positive relationship was found between decision-making styles and locus of control of the football referees. In some studies, the individuals with higher internal locus of control were mentioned to use vigilant decision-making style more (Mann, Harmoni, Power, 1989, p. 265-278, Scott, Bruce, 1995, p. 818-831, Çoban, Hamamci, 2006, p. 393-402). Literature findings also had a quality supporting the findings of this study. These

studies in the literature proved that there was a positive relationship between decision-making style and locus of control. They proved the regression model to be significant, in general ( $F(2,91) = 3,080$   $p < .05$ ). When t-test results related to the significance of regression coefficients were analyzed, it was determined that locus of control was a significant predictor of decision-making style, and observed change was explained by the predicting variable up to 6.3% ( $R = .252$ ,  $R^2 = .063$ ;  $p < .05$ ). The reason for the model to be significant was considered to be arisen from locus of control's being on the center of personal traits.

In conclusion, football referees' being internal audit-oriented was considered to cause them to be aware of their being efficient upon their decisions, their taking the responsibility of their own decisions, and an increase occurred in vigilant decision-making style. Because the fact that football referees' preferring vigilant decision-making style positively affected their performances was known well, we considered that football referees' being internal audit-oriented would also affect their performances positively. Therefore, studies in order to provide football referees to acquire internal audit-oriented personality traits could be mentioned to be included within the fundamental duties of federations and referee trainers.

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# THE RESULTS OF A LEARNING MODEL USING AUGMENTED REALITY TECHNOLOGY IN A DIGITAL LEARNING PLAYGROUND TO DEVELOP INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS FOR PRIMARY SCHOOL STUDENTS

Burin NARIN

Muban Chombueng Rajabhat University, Thailand  
burinnarin@hotmail.com

Namon JEERUNGSUWAN

King Mongkut's University of Technology, Thailand  
namon2015@gmail.com

## ABSTRACT

The objectives of the research study on the development of learning model using Augmented Reality technology in a digital learning playground to improve the information and communication technology skills for primary school students were: (1) to study and synthesize the conceptual framework of learning model using augmented reality technology in a digital learning playground, (2) to design the learning model, (3) to develop the system following the model, (4) to study the usage of the system, (5) to evaluate for the system approval. The research design was Research and Development (R&D). The samples were 450 students of Wat Thewa Sangkharam School under the Patronage Supreme Patriarch in Kanchanaburi Province and Ban Chombueng School in Ratchaburi Province. The multi-stage random sampling was used for the sample group. The data were analyzed using average ( $\bar{X}$ ), standard deviation (S.D.), and t-test. The results of the research study were as follows: (1) The designed learning model consisted of three main components of AAA model which were analysis, activity, and authentic assessment. Analysis consisted of the analysis of curriculum, content, learner, and environment. Activities was comprised of the Inquiry Cycle learning or 5Es. Assessment was composed of the authentic assessment of the information and communication technology skills and the learning achievement. (2) The learning system consisted of 30 augmented reality units, 30 learning plans, Inquiry learning activity, and authentic assessment. (3) The post-test of the students using the learning system was significantly higher than the pre-test. (4) The authentic assessment in six areas of Information and Communication Technology skills of 450 students using 5 rubrics criteria were 11,480 scores from total scores of 13,500 or 85.04% (5) The opinions of the student toward the learning model were at the highest level of appropriateness, ( $\bar{X} = 4.55$ , S.D. = 0.70) (6) The experts approved the model.

## INTRODUCTION

According to Strategy 1 of Thailand Information and Communication Technology Master Plan No. 2 B.E. 2552-2556, it aims to develop manpower for the field of ICT as well as for general public to be capable of creating, producing and using information with consideration and wise judgment. It requires that there be measures to support and develop electronic learning and teaching materials to suit subject contents at various levels by means of improving existing ones to be of certain quality and to meet a certain standard (Ministry of Information and Communication Technology, 2009). This is in line with the Ministry of Education's policy, which strives to develop the nation's youth for the 21<sup>st</sup> century. In accordance with the Government of Thailand's policy on modernising information technology, students at all levels are encouraged to use digital devices as part of their education. This is regarded as an opportune period whereby learning and teaching innovation may be developed to use alongside digital devices. Augmented Reality Technology is a technology that assists learners to have a new experience of virtual reality. This is because it is the technology that integrates the real world with the virtual world (Azuma, 1997). It comes with advantages that differ from other types of media, and the most outstanding advantage of it is the ability to create the Wow Factor for learners (Thananuwong, 2013). A suitable approach of using Augmented Reality media is using it to create students' interest leading them to a learning lesson. Therefore, the researcher has developed a learning model by using Augmented Reality Technology in a digital learning playground in order to develop information and communication technology skills for primary school students. This is to increase their effective learning level in information and communication technology.

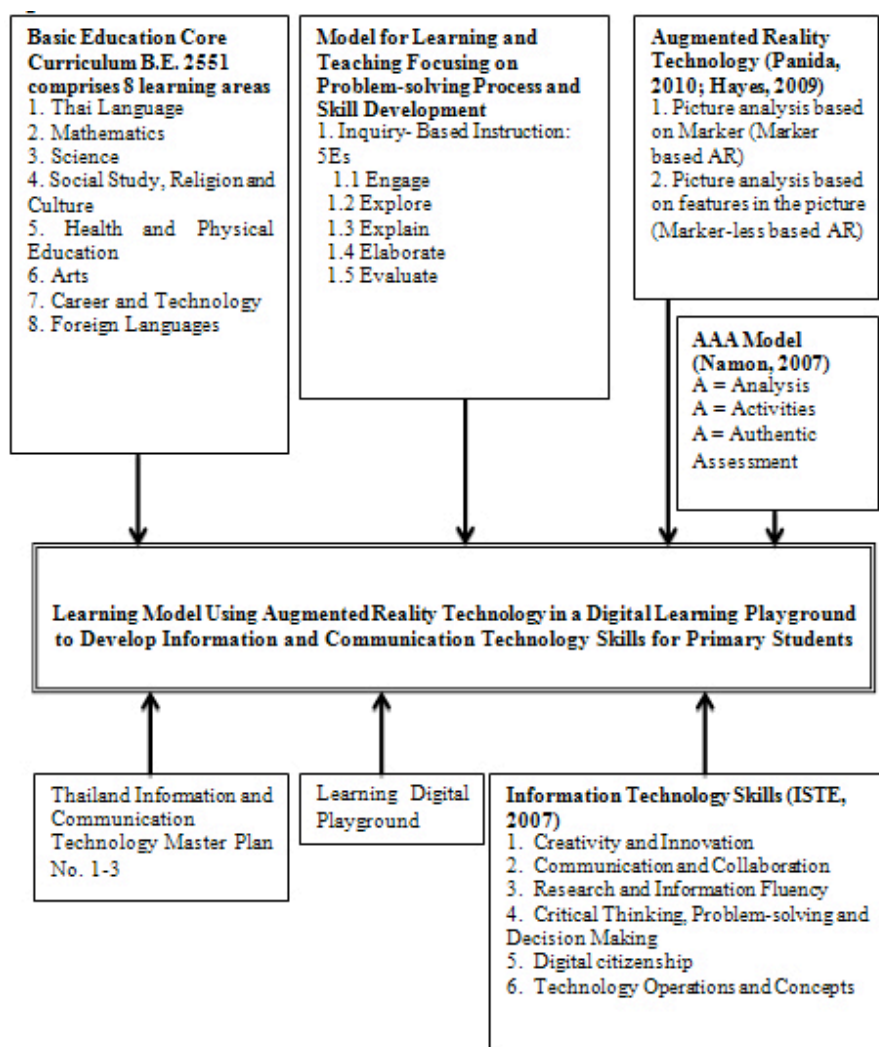
## THE STUDY

The development of the learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary school students was a research and development. It was divided into 5 steps as per the research objectives. The steps and research methodologies

were as follows: 1) The step of studying and synthesising conceptual framework for the learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary students. 2) The step of designing the learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary students. 3) The step of developing a system for Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary students. 4) The step for studying results from using the system for Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary students comprised the study of the following topics; 4.1) Learning achievement for the Information and Communication Technology subject of primary school students year 1-6; 4.2) Results from assessment in information and communication technology skills of primary school students year 1-6; and 4.3) Opinions of the students towards using the system of Augmented Reality Technology in a digital learning playground to develop information and communication technology skills. 5) The step of evaluation to support the learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary students.

## FINDINGS

The conceptual framework of the learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary students is illustrated in Figure 1

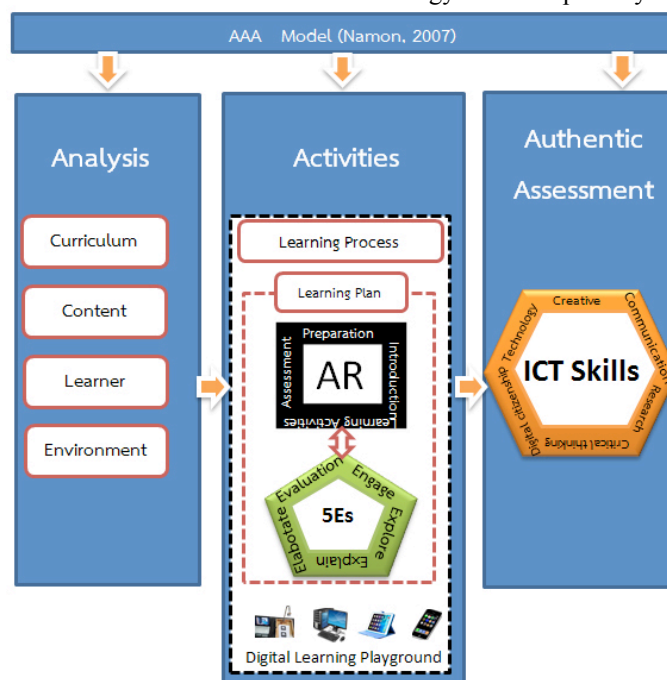


**Figure 1:** Conceptual Framework of the Learning Model Using Augmented Reality Technology in a Digital Learning Playground to Develop Information and Communication Technology Skills for Primary School Students.

The conceptual framework of the learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary school students that was used as sources for designing this learning model consisted of:

- 1) A model for learning and teaching focusing on problem-solving process and skills development. This was the Inquiry-Based Instruction: 5Es, which comprises 5 steps of 1.1) Engage, 1.2) Explore, 1.3) Explain, 1.4) Elaborate and 1.5) Evaluate; (Department of Physics and Materials Science Chiang Mai University, 2008)
- 2) Augmented Reality Technology. This was divided according to picture analysis including 2.1) Picture analysis based on Marker (Marker based AR) and 2.2) Picture analysis based on features in the picture (Marker-Less based AR); (Hayes, 2009; Tunsiri, 2010)
- 3) Thailand Basic Education Core Curriculum B.E. 2551. This comprises 8 learning areas 3.1) Thai Language, 3.2) Mathematics, 3.3) Science, 3.4) Social Study, Religion and Culture, 3.5) Health and Physical Education, 3.6) Arts, 3.7) Career and Technology and 3.8) Foreign Languages. This research focused on the Career and Technology Learning Area, Area 3 Information and Communication Technology;
- 4) Thailand Information and Communication Technology Master Plan. Thailand implemented 3 areas of Information and Communication Technology Master Plan: 4.1) Information and Communication Technology Master Plan (No. 1) B.E. 2545-2549, which aimed to develop basic foundation of information and communication technology, 4.2) Information and Communication Technology Master Play (No. 2) B.E. 2552-2556, which placed importance in developing manpower for the field of information and communication technology as well as improving the weaknesses resulting in the ICT Master Plan (No. 1) failing to reach its goal, and 4.3) Information and Communication Technology Master Plan (No. 3) B.E. 2557-2561, which has a goal to prepare Thailand for the era of digital economy; and,
- 5) Information and communication technology skills. The International Society for Technology in Education classifies information technology skills into 6 areas: 5.1) creativity and innovation, 5.2) communication and collaboration, 5.3) research and information fluency, 5.4) critical thinking, problem solving and decision making, 5.5) digital citizenship and 5.6) technology operations and concepts (ISTE, 2007).

Outcome from designing the learning model using Augmented Reality Technology in a learning digital playground to develop information and communication technology skills for primary school students



**Figure 2:** Learning Model Using Augmented Reality Technology in a Digital Learning Playground to Develop Information and Communication Technology Skills for Primary School Students.

According to Figure 2, the learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary school students consisted of 3 steps as per the AAA Model (Jeerungsuwan, 2007) as follows:

1) Analysis step. This consists of 4 steps as follows: 1.1) Curriculum analysis. This is the step of studying and gathering data from the Basic Education Core Curriculum B.E. 2551 in relation to the 8 learning areas. This is to study the goal of the curriculum, learners' important competencies of interest, and various desired characteristics; 1.2) Content analysis. This is the step of studying content in the Career and Technology Learning Area, Area 3 Information and Communication Technology in order to study a student level indicator of all primary school year levels with the intention to using it to design Augmented Reality media to cover all levels. 1.3) Learners analysis. This is the step of studying learners' characteristics at the primary school level. It is to study the nature, needs and interests of students at the primary school level. 1.4) Environment analysis. This is the step of checking environmental settings around current learning and teaching management for the Information and Communication Technology subject.

2) Activities step, this consists of 2 steps as follows: 2.1) Learning Model. This is the step of choosing a suitable learning model for activities to develop skills using a learning model of Inquiry Cycle or 5Es consisting of 5 steps as follows: 2.1.1) Engage. It is the first step of the learning process, which leads learners to the learning lesson. The important objective of this step is to have learners become interested and eager to know about the activity leading to the learning lesson. It should link the prior learning experience of the students' to the current one. The activity should be what is expected to soon happen because it will make the learners interested and attentive to the study of concepts, processes or skills. It will also make them begin to link the prior concepts, processes and experience to new ones. 2.1.2) Explore. It is the step of giving learners joint experience in creating and developing concepts, processes and skills by allowing the learners time and opportunity to conduct a survey activity and inquiry about what the learners intend to learn according to each individual learner. 2.1.3) Explain. It is the step whereby the learners can develop their abilities to describe their concepts obtained from the survey and the inquiry. The teacher should give the learners a chance to discuss and exchange ideas in relation to skills and learning behavior. Explanation requires that the learners jointly use the conclusion to link learning items. The teacher should always remember that these activities are learner-focused. That is the learners may develop their abilities to describe something by themselves. The teacher role is only to give directions through activities in order for the learners to have a complete chance in developing their knowledge and understanding about the concept clearly. 2.1.4) Elaborate. It is the step in which the learners may insist on and expand or increase their knowledge and understanding about the concepts in a broader and deeper manner. It will also give the learners a chance to practice skills and act according to what the learner's desire. In case the learners do not understand or are confused or understand only the conclusion obtained from the survey and the inquiry, new experience should be given to the learners so that they may develop their knowledge and understanding about the concept in a broader and deeper manner. The important goal of this step is that the teacher should give directions to the learners to apply in their daily life. It will allow the learners to have more concepts, processes and skills. 2.1.5) Evaluate. This step allows the learners to obtain reversed information about explanation of their knowledge and understanding. During the learning and teaching of this step, the teacher must stimulate or encourage the learners to assess their knowledge, understanding and own abilities. It also allows the teacher to assess the knowledge and understanding of the learners. 2.2) Learning activity using Augmented Reality Technology. This is the step of learning and teaching by using Augmented Reality Technology. It is used as in accordance with the implementation of the 4 steps of Interactive Multimedia System Design and Development (IMSDD) by Dastbaz, which comprises: 2.2.1) System Requirements 2.2.2) Designing 2.2.3) Implementation and 2.2.4) Evaluation (Kanjanasuwan, 2003). After testing the function of the Augmented Reality media, the effectiveness of the media may then be assessed by an expert in media production.

3) Authentic assessment step. This is the final step of the model for assessment in information and communication technology skills of students'. It is summative evaluation using an information and communication technology skills assessment form, which is designed as per the standardised assessment process of the International Society for Technology in Education. According to this process, the students must have the following standardised characteristics: 3.1) Creativity and Innovation. 3.2) Communication and Collaboration. 3.3) Research and Information Fluency. 3.4) Critical Thinking, Problem Solving, and Decision Making. 3.5) Digital Citizenship and 3.6) Technology Operations and Concepts.

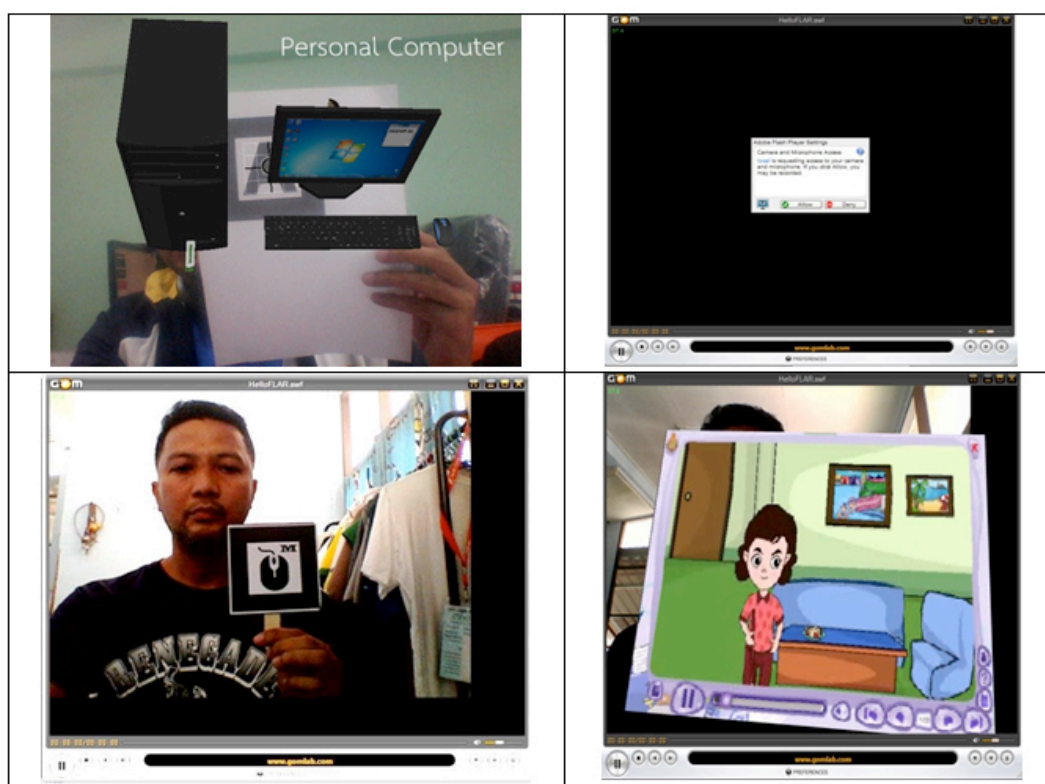
Outcome from Development of Learning System Using Augmented Reality Technology in a Digital Learning Playground to Develop Information and Communication Technology Skills for Primary School Students. According to the study of data, concepts, theory and related research, Basic Education Core Curriculum,



Information and Communication Technology Master Plan, learning model using Augmented Reality Technology in a digital learning playground, the researcher employed the obtained data to conduct analysis and synthesis in order to come up with a system for Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary school students. The researcher also designed an learning activity plan to be used as guideline for learning by using the system for learning by using Augmented Reality Technology in a digital learning playground, which consisted of: 1) Marker. An Augmented Reality Technology is a design of Marker, which is used together with 3 dimensional video media using Marker-based design as the main format (Hirunkerd, 2014). 2) Digital learning playground. This is implemented through building an area to be used for learning management by using Augmented Reality Technology on the part of the teacher. This method is adapted from the research of Campos (2011), who designed a board game they used to put Marker on it. The researcher designed the board game to put the Marker on as illustrated in Figure 3.



**Figure 3:** Marker Board



**Figure 4:** Augmented Reality Media for Information and Communication Technology Subject to Develop Information and Communication Technology Skills for Primary School Students.



3) Learning management plan for the Information and Communication Technology Subject and 30 stories of the Augmented Reality Media, which were designed according to the student level indicator.

## CONCLUSIONS

The research findings from the development of learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary school students were as follows: (1) A learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary school students, which was developed from 3 main elements of the AAA Model. These included analysis of activities and authentic assessment. The analysis consisted of the analysis of curriculum, content, learners and environment. In case of activities, there were learning activities based on the Inquiry Cycle, 5Es. Finally, authentic assessment, which comprised authentic information and communication assessment as well learning achievement assessment. (2) A learning system that uses Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary school students. This comprised 30 sets of Augmented Reality Media, 30 of the learning plans, searching learning activities, and authentic assessment form. (3) The learning achievement of students who learned through the learning model using Augmented Reality Technology in a digital learning playground was higher after the lesson compared to before the lesson. This was statistically significant at the 0.01 level. (4) According to the outcome from the assessment of the 6 aspects related to information and communication technology skills through authentic assessment using 5 level-rubrics, it was found that the total scores of information and communication technology skills from 450 students were 11,480 scores out of 13,500 scores or 85.04 percent. (5) According to the students' opinions towards the learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary students, it was found that the suitability was at the highest level ( $\bar{X} = 4.55$ , S.D. = 0.70) (6) An expert evaluated and approved the learning model using Augmented Reality Technology in a digital learning playground to develop information and communication technology skills for primary school students.

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## **THE SELF-ASSESSMENT PROCESSES TO IMPROVE EFFECTIVENESS AND EFFICIENCY OF THE SCHOOL EDUCATION SYSTEM**

Marco GIANNINI

Department of Economics and Management  
University of Pisa, Italy  
marco.giannini@unipi.it

### **ABSTRACT**

The self-assessment process is an opportunity to improve the quality of educational system. This paper aims to show the important role of self-evaluation in schools. It begins with the presentation of the improvement objectives of the school and then shows their identification in the school through a self-assessment process. In this way, the paper has the important goal to spread a culture of evaluation with the overcoming of individual differences. The self-assessment becomes a tool to the school for an analysis of its operation and setting the priorities to undertake in the improvement plan. In any case, to transform the school in true place of learning, this should be integrated the internal self-assessment processes with the external evaluation.

**Keywords:** Self-assessment process, Improvement plan, School

### **INTRODUCTION**

Autonomy and assessment of the school are two important elements to promote action of innovation and development in the educational processes.

In teaching, the ability to innovate requires systems with the school evaluates its results.

This bring us to analyze some essential requirements: the context where the school works, its resources, the activities realized, its outcomes (immediately or in the medium period).

In the assessment system of the school, there is the self-assessment process (Vanhoof et al., 2015). This is an internal evaluation conducted by a special unit of the school, the assessment team. The assessment team has the responsibility of the assessment process and it requires the involvement of every subjects of the school. the self-assessment is an instrument to identify in the internal dimension (strengths and weaknesses) and in the external dimension (opportunities and threats). Also it offers at the school ideas for improvement organizational and professional aspects. In this way, the school can better perform its educational mission. with the goal of spreading a culture of quality beyond the system certifications (Hedegaard-Soerensen & Tetler, 2016).

The education world has undergone many changes and they are an important step to initiate a review process of schools function.

### **IMPROVEMENT OBJECTIVES**

Now the school is seeking to pursue objectives, such as:

- improve the knowledge of teachers and trainers: the training of teachers is a key factor for educational quality improvement (Stringher, 2014);
- ensure strong links between the education systems and the labor market, with particular emphasis on the orientation (Sleegers et al., 2014);
- promote a specific learning to reduce the dropout phenomenon;
- define study programs to develop professional profiles required in emerging economic sectors with significant employment opportunities (Creemers et al., 2013);
- greater use of information and communication technologies as teaching and learning tools from the earliest levels of study;
- enhance the learning of foreign languages (Stringher, 2014).

Other ways the focus of the students' needs is the direction of a careful analysis of the organization and quality improvement.

In the educational world, organizational solutions defined in advance are not "excellent". But it is necessary before an careful analyze of organizational reality, identifying its strengths and weaknesses, in order to define the most appropriate interventions to be carried out (Pancaldi, 2014).

### **THE SELF-EVALUATION PROCESS**

The self-evaluation process may be the start point of a path of improvement. With this process allows the school to identify its positive aspects (skills possessed, subject of breadth of teaching, etc.) and its critical areas (limits in staff and space availability, resistance to change, etc.) that may become areas of intervention (INVALSI, 2014). Similarly, it can evaluate threats (limited resources available against the need to make investments, economic system trends, etc.) and external opportunities (possibility of making agreements, contacts with other

organizations, etc.). All of this can help the school to change the methodological approaches used and make innovative renewed decisions (Chen & Nassaji, 2015).

Today we can make a critical question: Does the school create a learning environment for the development of students' skills? This question needs an analyses of different aspects of the school: the educational aspects (teaching methods), the organizational aspects (laboratories, hours, etc.) and the relational ones (inside or outside).

In that, the self-assessment process can help the school. This process, that today every school in Italy must to do, concerns all schools and the territory where each school works (Chierici & Senni Guidotti Magnani, 2014). It becomes an opportunity for the people work in the school and promotes meeting between them to share the same process. Also it gives the school the opportunity to analyze its situation in term of strengths and weakness and establish priorities and targets for the improvement. So the awareness of its strengths, enabling to highlight the aspects that improve the quality of the school (Bombardi, 2015). At the same time, the knowledge of its weakness indicates the school where it need to act. The self-assessment is an incentive to reflect on the quality of the educational offer. It's an instrument for improve and exploit the potential of each school.

So, what is the way that the school should take? This is because each school is specific: it crosses the evolutionary phases of its life cycle and the measures for improvement are conditioned by the situation in which the school located (Creemers et al., 2013). Similar interventions in different schools often tend different results.

A profile of the different phases of a self-assessment process is shown in Table 1 with the explanation below.

**Table 1:** The self-assessment process

<b>1. Phases of evaluation</b>
<ul style="list-style-type: none"> <li>• external analysis of the school</li> <li>• internal analysis of the school</li> <li>• evaluate the processes carried out by the school</li> <li>• evaluate the resources (staff, tools and economic)</li> <li>• check the status of school targets</li> <li>• promote the skills of staff</li> <li>• realize territorial networks with different partners</li> </ul>
<b>2. Identification of critical elements</b>
<b>3. Establish priorities and define the improvement plan</b>

The starting point is the careful analysis of the context in which the school operates. This analysis allows the school an appropriate design of teaching. In this the school has to adapt its effectiveness to the reality in which it operates. For example we can consider the assessment of the socio-economic context of students, the characteristics of the territory where the school works and the presence of educational institutions with which the school may interact (Infante & Labanti, 2015).

It adds to the external analysis (opportunities and constraints), it is necessary an analysis of the internal environment to identify strengths and weaknesses.

In this the school can examine the educational outcomes of students. It is important that the school following the educational path of students. For example, the school can evaluate:

- How many students are not admitted to the following year and why?
- How many students drop out of school?
- What is the success of its students in the following courses of study or in the world of work?

These information derived from internal evaluation are important for the improvement of educational offer and learning processes (Creemers et al., 2013).

Also the school can evaluate in it provides an adequate level of skills to students to enter in the world of work? The labour market asks young people: a solid background of knowledge, a good skill to build relationships, communication, continuous learn, reprocess and use the knowledge that they have. Then, a fundamental task of the school is: to provide an adequate level of basic knowledge of the different subjects and especially for the application subjects and give practical applications to the learned. In this way, the school prepares students for greater pragmatism (Demetriou & Kyriakides, 2012).

The third area of self-assessment process concerns the processes carried out by the school. The school must reflect on the instructional design and the training offer.

Can the school training program meet the educational and training expectations of the external environment? The school must create a favorable environment for learning and development of students' skills (Smith & McCully, 2013). This includes:

- the material and organizational dimension (management of space, equipment, laboratories, libraries, schedules, etc.)
- the educational dimension (relationship between students and teachers, dissemination of innovative teaching

- methods, etc.);
- the relational dimension (in terms of internal and external level).

It is important to assess the ability of the school to promote and manage relationships with disabilities or students with special educational needs. Also it is important to analyze the ability of the school to provide adequate orientation activities. These activities must be finalized at the choice of the following educational path in accordance with the productive and professional realities of the territory. All these processes are linked together. An analysis of them allows the school to have a global vision of itself.

The fourth area of self-assessment process relates to the ability of the school to value:

- the internal intellectual energy
- the contributions and the resources offered by the territory
- the available financial and instrumental resources.

With respect to the financial resources, it is important the ability of school to find different funding from public ones.

The organizational analysis considers the educational offer as the result of a consistent set of processes that need to be properly planned, governed and controlled in order to ensure the quality and reliability of the same. The identification of these processes in school allows it to: ensure the development and control, reduce the causes of inefficiency and have more positive visibility in the territory in which it operates (Simons, 2013).

The fifth area of self-assessment process relates to the ability of the school to check the status of progression of its goals. In this context, it is important to check if the resources provided to specific projects are used for the achievement of priority goals of the school (Podgornik & Mažgon, 2015).

The sixth area of self-assessment process is the ability of the school to promote the development of staff skills by investing in training. The continuous training of teaching is presented with a plurality of experiences and upgrade opportunities.

The seventh and latest self-assessment area is the ability of the school to act as a partner for the realization of territorial networks. This also with the involvement of figures who have political responsibility for education in the territory. Specifically it is the opportunity to build relationships with other schools, organizations and associations, but also with companies for the realization of forms of internship (Schiekirka S. et al., 2013).

In the appearance of critical elements, it is essential a thorough assessment of its causes.

The causes are much more complex and much more require very careful study. After the identification, it is necessary to act on the causes because not only allows you to remedy the side effects but also allows you to prevent the same recur. Useful information can be obtained via questionnaires. The questionnaires are administered to all involved figures (teachers, administrative staff, students, families and companies with which the school has a cooperative relationship) to have a more objective overview. These assessments allow the school to: identify additional interpretive trails of the results achieved and indicate critical elements that need work. For example, get information on the relational climate within the school (many studies have found significant correlations between school climate and student achievement), organization and functioning of the school, perceived quality, etc. (Sleegers et al., 2014).

At this point, following the need to identify priorities on which the school intends to take action in order to prepare an improvement plan. With respect to this plan, the school can define the medium and short term objectives (for example, by the end of the next school year). The pursuit of effective improvement actions is the true goal of every quality process. In any case, the improvement is not an immediate consequence of self: it may be necessary to overcome the innate inertia of each organization (Vázquez & Gairín, 2014).

In the context of the improvement process, there is the improvement of quality. It is a path that requires resources, determination and involvement of people, who make a contribution to the school. In all the activities carried out every day, the school tries to exploit all available resources to improve the quality of the offer and at the same time reducing non-quality factors.

## CONCLUSION

The self-assessment processes is important for the school but it is not enough because the school requires of external evaluation sessions. These are not intended to create the charts of the best performing schools but to help schools to define a path of continuous improvement. In fact, the external audit puts the school in contact with experts who know the school and quality issues. External evaluation can provide methodological support to the same self-assessment process (Gustafsson et al., 2015). Together these can promote a synergy between the different moments of assessment to stimulate improvement.

In conclusion, a limit is related to the lack of a culture of evaluation in the schools. In fact the development of a culture of evaluation allows people to see the same evaluation as an opportunity rather than a threat (Pancaldi, 2014). It also enables an involvement of all the components of the school that is essential for the effectiveness of the process.

This paper hopes that schools address the self-evaluation process not as a fulfillment but as a stimulus to improve, to adapt to the constant demand for training by means of a participatory logic.

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## THE SIGNIFICANCE OF KOREAN-CHINESE ORGANIZATION ACTIVISTS' EXPERIENCE

Haiying HUANG  
Department of Multicultural Education  
Inha University, South Korea  
Haiying04@hanmail.net

Youngsoon KIM  
Department of Social Education  
Inha University, South Korea  
kimysoon@inha.ac.kr

### ABSTRACT

This study examines a socio-cultural acculturation of Korean-Chinese (so called Chosun ethnic group) who has strongly maintained their own identity in China. Although Korean-Chinese have quickly adapted to Korean society due to similar linguistic identity, they undergo another difficulties which derives from cultural stigmatization and distorted identity of the main society. In this context, this study figures out the recognition struggle of Korean-Chinese organization activities in Korea. This study conducted in-depth interviews with the leader or the head of organization who joined and actively participated in Korean-Chinese organization. As a result, this study finds out that their experiences through the activities are a struggle for recognition toward the main society. They had various experiences through the activities, and the detailed activities and interviews are as followed; first, meeting with good people(Korean-Chinese); second, being strong through education; third, continuous appeal toward the main society; forth, efforts for protecting rights and interests; fifth, efforts for settlement and being a member of Korean society. Since 20-years-of migration, Korean-Chinese have tried to enter the main society through recovering their identity, building competencies, and doing social practices by making organizations. Regarding this change, Korea's social integration policy should consider diverse voices instead of a policy of one-way assimilation.

### INTRODUCTION

According to Korea Immigration Service's monthly report of October 2015, there are totally 1,895,428 people who live Korea as an extended stay as foreigners, naturalized citizens, and foreigners' children (so called "foreign citizen"). Above them, Chinese compatriots are 649,261, however, there are more than 700,000 including illegal staying. Chinese compatriots are the early immigrants in Korea society, and they currently became the largest immigrant group in Korea. They have settled in Garibong-doing in Seoul and Ansan. Early Chinese compatriots' organizations are private organizations to protect poor working environment and human right of Chinese compatriots' employees staying in Korea. These organizations filled up the institutional blank and publicized the issues that threaten immigrant employees (You Piao, 2011). Along with overall execution of visiting employee system (H2) and compatriot visa (F4), these organizations encounter the change.

This study is to figure both the context of experience of a leader or a head of Korean-Chinese organization regarding on how they participate the activity and what kinds of experience they had. For that, this study uses narrative research method to find factors which influence the activities. Research problems of this study are followed.

First, what kinds of experience do Korean-Chinese organization leaders have through the organizational experience?

Second, what is the significance of the organizational experience of Korean-Chinese organization leader?

### THEORETICAL BACKGROUND

#### 1. Korean-Chinese Organization

Forming an immigrant's ethnic community is the first stage of collective behavior. Basically, immigrant's community is formed in the process of surviving in an under-protected environment and sharing information for living. Immigrants compensate the sense of loss in the exclusive society by depending on people who have same language and life-style. For this reason, most of immigrants' communities in Korea are comprised of ethnic emotional backgrounds (Hongjin Kim, 2007).

The study of Hyeonho Seo (2003) reflects this characteristic on immigrant's community in Ansan area. Early immigrants communities are easily divided by nationalities, however, they differentiated as time goes. Also, they



form partnerships with domestic immigrants supporting organization, have close relationship with homeland's political organization, and more over develop as an independent autonomic community. Main Korean-Chinese organizations are classified as groups for social practice and social gathering. While social practice organization bands together with religious organization to protect the rights of Korean Chinese, social gathering organization does various activities such as events, volunteer, and sharing. The characteristic of Korean-Chinese organization have changed from the social practice to community volunteer and recognition improvement. In addition, current organizations also head toward economic and conscious strengthening of ability.

## 2. Recognition Struggle of the Minority

From 1980's recognition struggle for identity of individual or organization has been a main issue. Hegel (1807) developed the insight that human's self-consciousness depend on social recognition. Hegel's 「Phänomenologie des Geistes」 (1807) developed the ideology of mutual recognition that one needs to recognize others to be recognized by others. Also, the identity cannot be formed by one's pure consciousness, but always by the others and the relationship of the other's recognition.

Inter-subjective identity internalized the other's perspective on oneself, and achieved by arguing 'one's demand. Honneth(1992) stated that this 'one' extend it's given rights and create new standard through recognition struggle. He stated, when one is not recognized by others and even damaged its identity, one seeks to a new form of recognition and find the possibilities of solve inner conflict. The new form of recognition means claiming legitimacy of one's existence and right through dismantlement of one's given value, norm, and ideology, and behaviors based on the reality and validity,.

Korean-Chinese has been labeled as a potential criminal group according to a murder case and standardized image in media (Myeongja Lee, 2014). Since they have strong ethnic self-esteem and have been recognized as a superrich, they started to refuse these cultural stigma in Korean society. Their refusal has been reinforced by the feeling of solidarity through organizational activities, and actively expressed in a various form of social recognition.

## RESEARCH METHOD

This study is a qualitative research using narrative research method to figure out the aspect and significance of experience of Korean-Chinese who enthusiastically participated in organizational activities. Connelly & Clandinin (1995) stated that human create a significance of experience through 'storytelling' and 're-storytelling' while knowledge is conceptualized as specific, narrative, and relative. Therefore narrative research is one method of understanding experience, and an ongoing collaboration between a researcher and a participant within an interaction among one or several environments. This study, therefore, analyses preceding studies through literature research, goes through basic research on Korean-Chinese organization, and interviews research participants regarding on research problems for obtaining their experience and thoughts.

Research participants are selected as a head or leader of organization where researchers join as a member. Researchers explained the purpose of the interview, and proceeded interview with the participants after getting an agreement. The general information of the participants are shown in following <Table 1>.

**Table 1** : The General Information of Research Participants

Classification	Age	Sex	Statues of Stay	Organization of Activity Career	Period of Domestic Stay	Occupation	Academic Background	In order to deeply and comprehensively understand the experience of Korean-Chinese
Research participants A	38	Male	acquisition of nationality	10years	10 years	Instructor Trade	Graduate School	
Research participants B	55	Female	F4	3years	5 years	Office job	College	
Research participants C	22	Male	D2	3years	3 years	Student	Under-graduate	
Research participants D	41	Female	F4	5 years	10 years	Teacher	Graduate School	
Research participants E	49	Female	acquisition of nationality	3 years	20 years	Travel Company	Under-graduate	

Chinese activist, this study used two methods. First, the researcher personally joined the Korean-Chinese organization in Korea, and did participatory observation for one year by recording online materials in organization webpage, group talks in messengers, and organizational newspaper. Second, a leader or a head of organization who had been a board member did in-depth interview. There is a close rapport with research participant during one-year of organizational activity, and they all proud of being in a organization. Also, they actively participated to the interview because they thought this interview would help them to make better image of Korean-Chinese society. In addition, the participants have full experience of organizational activities and have a good sense of storytelling since they worked as a board member of the organization. The content of interview has been blinded and interviews used recording and memo.

This study focuses on how their experiences relate to recognition struggle toward mainstream society and analyzing the significance of the experiences. Therefore collected materials are being analyzed and explained according to standing content and topic from field experience factors. To achieve a validity of analysis, triangulation and reflective recording was used. Besides, researchers tried to objectify the analyzed content through giving a presentation at qualitative research colloquium in researcher's laboratory.

## RESEARCH RESULTS

### 1. 'Meeting with Good People'

The research participants satisfied with meeting with good people through organizational activities. Through the activity participation, they meet another Korean-Chinese in the same condition, and form a positive relationship with each other which became a base for the mutual recognition. Also, this acts as a mechanism in the aspect of individual identity for recovery of the sense of shame from the cultural stigma in the mainstream society.

This organization has very good people. They are all young, and we are the same Korean-Chinese, so that we can do everything in passion. (Research Participant B)

(After organizational activity) what has been changed is that friends, good people I met. I'm really thankful with that. We meet here. In a close look, our organization has people with high academic background. They are all Master graduates from pretty good universities in Korea...(Research Participant D)

Through the organization, Korean-Chinese formed new personal connection from the lonely living away from home, obtained positive relationship, gained self-esteem rather than the sense of shame toward Korean-Chinese society.

### 2. 'Being Strong through Education'

The research participants tried to strengthen their ability through education, and they hope to improve of their statues in Korean society. Since they acknowledged their weak position, they have a positive thinking on the education for ability enforcement. Also, they enjoyed the education itself from the organization activity.

Last year, I did seventeen cultural field trips for Korean-Chinese historic education supported by Administrative Department. I do a lecture on the immigrant history and identity vision of Korean-Chinese. Especially, people who are elite tend to hide, and most of them experience identity confusion. Our generation just lives like this. We need generation's efforts in Korea. (Research Participant A)

Within the identity confusion and difficulties of adoption, the research participants find the solution through education. Also, several heads of organization give a lecture themselves based on their experience and knowledge.

### 3. 'Ongoing Appeal to Mainstream Society'

Korean-Chinese living in Korea realized the damage of their image is the influence of media. They directly confronted toward images of criminal and ridicule which has stand out in the Korean society. They sometimes appeal to the media directly, and promote their healthy image for improving awareness through volunteering and other activities.

Last year, I challenged to lecture competition for housewife. I did not get the first prize. A lot of people come to see the competition. I met one report at there. I said him, that even though we are 700 thousand Korean-Chinese, the media always report on bad news. So please do some political improvement for us. Even we are on MBC broadcasting in the topic of one ethnic group. (Research Participant E)

Through their own efforts, Korean-Chinese organization activists sensibly recognized the subtle change in

Korean society, and tried ongoing effort on the strength of positive experience. This means that they dissolve the value, norm, and ideology given by others for recognition of their right and identity. Furthermore, they insist the legitimacy of their existence and right through behaviors based on a specific, reliable, and valid ground.

#### 4. 'Identity Politic-Effort to Protect Korean-Chinese Rights and Interests'

Korean-Chinese showed their movement toward extending rights of their society through the effort to protect their rights and interests.

Look. There is Multicultural Families Support Act for multicultural family, isn't it? For overseas compatriots, there is Overseas Korea Foundation Act. Even, there is Migrant Workers' Center in every region. However, is there anything for 750 thousand Korean-Chinese? Korean-Chinese Center is just a result. We need more essential support, such as act. We need act. For example, we need special act for Korean-Chinese. (Research Participant A)

Korean-Chinese insisted that they are human and a member of Korean society, so that they need a special act for their right protection in Korea society. In this aspect, it is not just a issue of justified recognition in mainstream society, but a problem of human right to protect humanity.

#### 5. 'Efforts for Settlement and Being a Member of Korean Society'

Korean-Chinese insisted for their right as a member of Korean society throughout the people who already obtained Korean nationality. They have more empathy with the term 'Korean-Chinese' as a name for being a new member of Korean society.

I don't feel bad if someone call me Chosun- ethnic group. However, I feel left out since I was called as Chosun ethnic group in China not here. In China, there are a lot of minor ethnics; we can be called as Chosun ethnic group. I believe that being called as Korean-Chinese is well-beloved. (Research Participant E)

Research participants E argued that since they settled in Korean society Korean-Chinese need to be recognized as compatriots not as Chosun ethnic group. This is the thought of people who living in Korea. They want a settlement as Korean race or Korean-Chinese in Korean society, because the identity cannot be defined as an identity of minor ethnic groups. As the qualified Korean-Chinese voter has increased, they try to protect their rights and interests as a citizen rather than immigrants.

### CONCLUSIONS

As globalization accelerates, diverse immigrant groups are created in Korean society. This study is to examine the organizational experience of Korean-Chinese organization activists and figure out significance of their experience. The results are followed.

First, there is a recovery of identity as a personal significance. Korean-Chinese has unavoidably become others and experience identity confusion in Korean society. In this study, Korean-Chinese organization activists pose problems about given identity by mainstream society, try to find solution for establishment of healthy identity. Furthermore, they do subjectivation themselves through arguing recognition on the established identity. If there is no social recognition, it is impossible to achieve identity of individual or organization. Ultimately, Korean-Chinese organization activists obtain their own "new positive relationship" through participating activities of social struggle.

Second, as a social aspect, the organization activists extend their field of interest from oneself to Korean-Chinese society, even mainstream society. Korean-Chinese internally experienced mutual recognition as interdependent existence, and externally showed movement of extending rights such as insisting for their right protection as a member of Korean society who share common purpose and value. Through the organizational activities, Korean-Chinese gained more responsibility that the identity problem is not upon individual itself and the change of Korean-Chinese society is needed. Korean-Chinese organization activists show their effort for settlement as a citizen and for claim of right as the people of Korea.

This study is the first research from the inside on the experience of Korean-Chinese organization activists. By this, this study can be used as a basic material for the movement of recognition struggle for self-realization of immigrants in multicultural society.

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## THE STRUCTURE AND MUSICAL STYLES OF BILINGUAL MUSICAL THEATRE IN MALAYSIA

Fung Chiat LOO  
Department of Music,  
Faculty of Human Ecology,  
Universiti Putra Malaysia  
[fungchiat@hotmail.com](mailto:fungchiat@hotmail.com) / [lfc@upm.edu.my](mailto:lfc@upm.edu.my)

Fung Ying LOO  
Department of Music,  
Cultural Centre,  
University of Malaya  
[loofy@um.edu.my](mailto:loofy@um.edu.my)

Elaine Swan Chien TOON  
Department of Music,  
Faculty of Human Ecology,  
Universiti Putra Malaysia

### ABSTRACT

Deriving from the Western art form, musical theatre by local Malaysian productions has been increasing since the last decade. The multiculturalism of the community is also reflected in the growing trend of local bilingual musicals. Bilingual use in various art forms is not an unfamiliar phenomenon in Malaysia since it is a multicultural country that consists of three main ethnicities: Malay, Chinese and Indian. This paper highlights and discusses the structure and the musical style employed in bilingual musical productions in Malaysia. Analysis of several productions shows the function of language in these musicals and how bilingualism is used to construct the architecture of a musical.

### INTRODUCTION

Musical theatre performed by various local Malaysian productions has increased over the last decade. The many popular musicals or 'megamusicals' (Swain, 2002) from Broadway and the West End that reach the international arena no doubt have had a great influence on Malaysian musical productions or other musical productions around the world. Research done on musical theatre covers several fields or studies, including musical analysis (Swain, 2002), history (Jones, 2003; Mates, 1987; Bordman, 1980; Everett & Laird, 2002), sociology (Knapp, 2005; Taylor, 2012), performance (Deer and Vera, 2008) as well as other aspects. Unlike other forms of performing arts, musical theatre is one of the genres that is able to communicate perhaps most effectively as it is a combination of music, song, and dance into a performance. This explains why languages, as similarly used in various media and art forms, nevertheless serve an important function to deliver the content of a musical. Not only representing a culture and as a communicative tool, language also provides great effects to the lyrics of the songs and the overall musical effects. The evolution of musical theatre and the genre into many countries indirectly results in the production of bilingual and multilingual musicals. This is certainly not a new phenomenon in Malaysia due to it being a multilingual and multicultural country, where bilingual musical theatre production was noticeable in the recent decade followed by the increase and development of this genre. This article discusses the construction of the structure and musical styles in local musical productions affected by the use of bilingualism which feature various content including romance, ethnicity, myth, history and so forth.

### BILINGUALISM

The earliest definition of bilingualism may have come from Bloomfield (1933, p.55) in which it ranges from 'a minimal proficiency in two languages' to 'an advanced level of proficiency which allows the speaker to function and appear as a native-like speaker of two languages.' Bilingual is used to refer to a person who can speak two languages (Crystal, 2003) or 'someone who has some functional ability in a second language' (Spolsky, 1998, p.45). To Grosjean (1982, p.1), bilingualism was not only present in different classes of society, age groups and worldwide, it actually 'existed since the beginning of language in human history.' Globalization and Westernization certainly had a great influence that encourages bilingualism or multilingualism in certain communities. As stated in Ritzer and Atalay (2010, p. 25), global flows and structure have overwhelmingly affect our everyday life. These processes that involve 'liquidity the growing multi-directional flows of people, objects, places and in formation [...]' certainly have a great impact on various fields such as politics, media, education, languages, literature, arts, sports and many more. In addition, these processes nevertheless directly

had a great impact on languages that explained the relationship between globalization with bilingualism and multilingualism. As language is concerned, much research on bilingualism was conducted, particularly in the field of education (Bialystok, 1991; Kubota, 2002; Morgan, 2004; Kumaravadivelu, 2008; Baker, 2011; Lasagabaster, 2013). Other research on bilingualism includes its association and effects on cognitive levels (Ullman, Corkin, Coppola, Hickok, Growdon, Koroshetz, & Pinker, 1997; Gold, Kim, Johnson, Kryscio & Smith, 2013; Paap, & Greenberg, 2013), together with social implication and structure (Lambert, 1967; Heller, 2007; Minett and Wang, 2008).

### **BILINGUALISM IN MUSICALS**

Tracing back to the origins of the genre, the development of bilingual or multilingual musicals may have started directly or indirectly through successful productions such as *West Side Story*, *Miss Saigon*, *In The Heights*, *The Lion King*, *The Book of Mormon*, *Those Were the Days*, *The Light in the Piazza* to recent musicals, *On Your Feet*, *Cuba Libre* and *Once*. The fundamental reason for having a variety of languages in these musicals is the necessity of portraying the origins of certain cultural and geographical concerns related to the story and synopsis. For example the feature of two ethnic backgrounds of Americans and Hispanics in *West Side Story*; the setting of plot in Saigon during the Vietnam war in *Miss Saigon*; and the romance set in Italy for *The Light in the Piazza*. Over the years, many of these musicals were also translated into different languages around the world due to their popularity, as evidenced by the great amount of runs. The use of language and lyrics in these productions certainly raises much disputation amongst critics and audience from time to time.

The use of bilingualism in musical theatre has close affinity with the development in pop music, looking at the similarity in many styles shared by the two genres. In analyzing 'Danza Kudoro', the employment of hybridized language and music are aimed to appeal to both local and global population, and to be a more market-driven commodity (Eid, Greco, Kasperski, Martin, Mujkanovic, 2015). Davies and Bentahila (2008) explain that although bilingualism in song text is very much encouraged in terms of the globalized mass media, however, it is not new, as earlier genres displayed examples of mixture of Latin and European, Arabic and Hebrew, and traditional song lyrics that used multiple languages.

Relating to the use of bilingual lyrics in pop music and musicals, one of the most significant elements is code switching and code mixing which derived from the field of language in the aspect of conversation and dialogue (Poplack, 1998; Eastman, 1992). Categories of code switching such as inter- and intra-sentential switching (Myers-Scotton, 1989; Li, 2000; Auer, 2013) in these studies relate closely to the formation of mostly song lyrics in Asian pop music (Manuel, 1995; Moody, 2006; Chan, 2009; Lee, 2006). The pop music style in many of the musicals, regardless of Western or Eastern production, definitely relates much to the use of code-switching in bilingual musical productions. As mentioned, the use of language in musicals thus provides a greater effect in the delivery of content since it involves not only singing but also the libretto.

Projecting authenticity may be one of the most fundamental reasons why bilingualism was used in theatre, play, drama or musical. As Montgomery (2009) reviewed, the revival of bilingualism in *West Side Story* may seem to be more authentic to an audience which does not understand Spanish. The issue of authenticity is indeed very relevant for musicals that portray a plot featuring a local element in certain country. It was also stated in Weinstein (2000) that multilingual theatre was produced due to an inspiration to deliver a performance with the different languages spoken everyday on the streets of Taiwan. He argues that a multilingual theatrical production, such as the author explored in Taiwanese theatre, is not a marketing strategy but a necessity. Along the same lines, Ladouceur (2013) explored Francophone artists working in Western Canada theatre, stating that bilingualism is common in the local population and explains the consequences of heterolingual text used in the local productions.

### **BILINGUAL MUSICALS IN MALAYSIA**

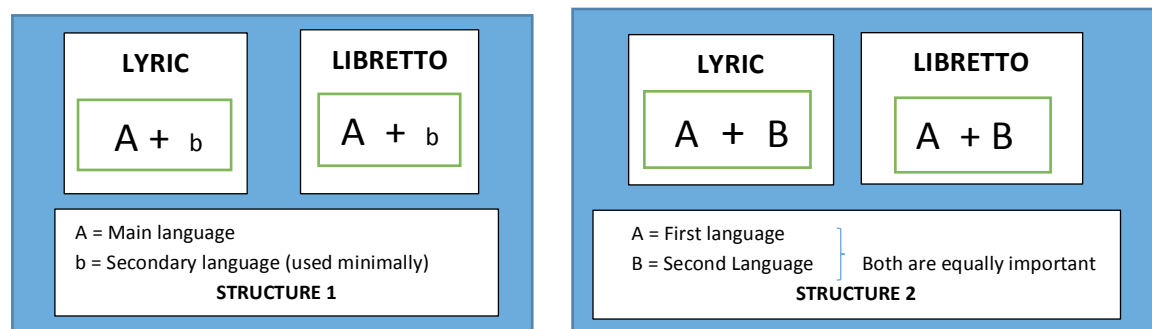
The development of musical theatre in Malaysia has grown tremendously in recent years, featuring a variety of conventional plots, either monolingual or bilingual, such as romance, epic, legend, history, environment, religion, moral, and so forth. Studies regarding the use of music and various issues on local musicals were looked into (Loo and Loo, 2012a; Loo, Loo and Tee, 2014). As a multicultural country, language mixing is not alien to Malaysia which has a majority population of Malay, Chinese and Indians. The use of language was much determined according to the production company: for example, English and Malay were mainly used by Enfiniti and Kuala Lumpur Performing Arts Centre, English and Chinese are used by Dama orchestra, and Chinese by Asia Musical production. Local musical productions also followed or were influenced very much by the model, structure and style of Broadway and West End Musicals. This is not surprising as for decades many Malaysians had their musical training from the West. While there were great numbers of musical productions

performed in previous decades, some of the large-scale productions which ran for many seasons were modelled very much on the Western musical structure and style, thus encouraging the evolution of the genre in local production. Among these notable productions are *Puteri Gunung Ledang* (2006), *Butterfly Lovers* (2006), *The Jewel of Tibet* (2008), *Above the Full Moon* (2004), *Broken Bridges* (2006) and many others.

Productions that were intentionally bilingual include *Butterfly Lovers* (2006), *Paper Crane* (2012), *Empress Wu* (2012), *Xuan Zang – Journey to the West* (2014) and many more. The content of these musicals ranges from epics of both Chinese and Malay literature, romance, religion, issues of morality and environment. Although not extensively analysed, the use of bilingualism was mentioned through other related studies of local musical productions. For example, Loo and Loo (2012b; 2014) looked into Dama Orchestra's bilingual production in a Chinese *Huangmei* folk musical theatre and the revival of *shidaiqu* (songs of the times). The authors discussed the necessity of English text in featuring classic Chinese epics such as the *Butterfly Lovers*, as spectators come from a multicultural background that includes Sinophone community, Anglophone Malaysian Chinese and the other races in the country (Loo, 2009). From the many productions, three types of structure in the use of bilingualism were identified in these musicals, which this paper will address.

### STRUCTURE AND MUSICAL STYLES OF LOCAL BILINGUAL MUSICALS

Through observation and participation, language serves as one of the elements that determines the structure and musical style of bilingual musicals. Three significant structures were identified in the use of bilingualism amongst the many productions. The first and second categories could be gathered based on the functions of code-switching that indirectly provides a structure not too different from musicals in literature. For the first category, musicals use bilingualism in a condition that one language remains as the primary language throughout the performance. The initial intention of this type of musical may not be bilingual but the use of minimal terminology of the secondary language serves to facilitate the authenticity of the context in the synopsis (Figure 1). Examples of works in this category includes *The Secret Life of Nora* (2011) by Enfiniti Vision Media, *ADAM - The Musical - An Uncommon Love* (2010) – a collaboration by the Actor's Studio and Malaysian AIDS Council and *Mimpi Artilla* (2014), produced by My Performing Arts Agency (MyPAA) and collaboration with the Ministry of Tourism and Culture (MoTaC), and the National Department for Culture and Arts (JKKN).



**Figure 1:** Structure 1 and 2 for bilingual musicals in Malaysia

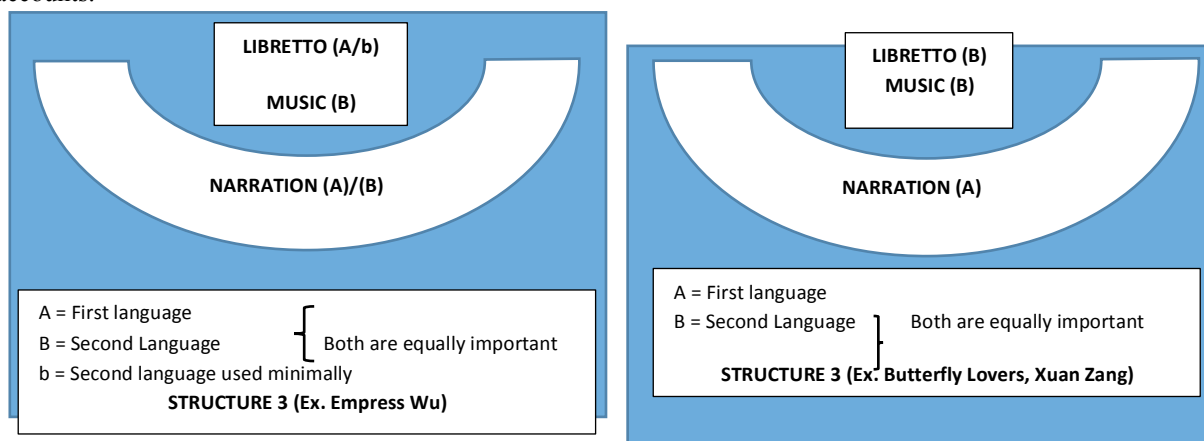
English is the main language used in both *The Secret Life of Nora* and *ADAM*, where Malay words existing in inter- and intra-sentential switching were used minimally in the libretto. Mostly in a secular context, all these productions aimed to portray the way of communication that occurs in the actual everyday life of a community. This may be an effective way to draw the attention of the audience, particularly on the topic addressing serious issue such as Aids in *ADAM* and pollution in *Broken Bridges*, politics and history as in *Tunku* (2007) and *Ismail – The Last Day* (2008). In addition, the use of code switching for productions in this category was arranged less deliberately with one or two words of greeting terms, slang or short phrases that were normally used in the particular community. The natural use of two or more languages in these musicals thus occurred as early as those in *West Side Story*, *The King and I*, *South Pacific*, to the more recent *On Your Feet* (2015). The use of English as the primary language in this group of local bilingual musical productions may explain why a solid Western pop music style provides the sonic experience to supplement the storyline. Despite the context of the story, the style of the composer thus stamps a certain characteristic. For example, the stated aim of the composer Lim Chuang Yik in the musicals *Broken Bridges*, *Tunku*, and *ADAM*, is the hope that audiences could remember the motifs or melodic line of his compositions in these musicals, which he modelled on productions Roger and Hammerstein. The musical style approach was not different even for productions with a historical and political context, such as *Tunku-The Musical* that highlights the first Prime Minister Tunku Abdul Rahman who led to Malaysian independence, featuring the unity of the multiracial community. In other productions such as *The Secret Life of Nora* and *Esya*, the mixture of genres of Western pop including Malaysian pop yeh-yeh and slow

ballad describes the overall musical style. The use of more contemporary, fusion and mixture of genres in this category no doubt reflects the secular context of these productions that feature moral and current issues.

The second category of bilingual musicals can be examined from the much more extensive arrangement of two languages in the production. Both language are equally important as arranged in the lyrics and libretto. One of the significant examples from this group is the use of English and Cantonese in *Paper Crane* (2012) which features the community of a Cantonese opera troupe in Malaysia. Not only were most of the functions in code switching used, but the proportion of each language lasts longer, for whole sections or at least several phrases. This is a less common type of local bilingual musical than the first, and the handling of both languages is very much modelled from those such as *In the Height* (1999), *Aspects of Love* (1989) and *Light in the Piazza* (2003). While subtitles were given, audience members who understood both languages had an advantage in appreciating the production. However, this definitely serves as a good entertainment for many audiences particularly in the capital of Malaysia, Kuala Lumpur and its neighbouring state, Selangor, as English-Cantonese was largely used amongst the Chinese community.

Written by the same composer as *Tunku* or *Broken Bridges* in the first category mentioned above, the musical style in *Paper Crane* still closely matches that of Hammerstein. Due to the balance of both languages, themes or motifs of selected songs were constructed using Chinese pentatonic or Japanese Hirajoshi pentatonic scales, although these melodic ideas were accompanied with a strong Western pop style accompaniment. A tinted sound of the erhu using a midi format from keyboard portrays the flavour of the Cantonese opera. Other than that, the orchestration in this bilingual musical was purely written very much in a Western pop style, regardless of the content that involved Cantonese opera. However, the authenticity of this scenario may not be inaccurate as the Chinese community who were often call themselves 'English educated/English speaking' thus use English/Cantonese or Mandarin fluently. The use of code switching in the lyrics was analysed to identify its function in portraying the many embedded interpretations of the story (Toon, 2016). The two languages serve to represent contrast in many aspects: the portrayal of different peer groups of social class in a troupe where English was used by higher rank personnel, while Cantonese reflects the younger peers with informal speech in the song 'The Last Show'; to suggest reality and imagination, where English was used in the current situation and Cantonese was used in projecting imagination as in the song 'When the Curtain Rise'; or describing the contrast of future and present using English and Cantonese in 'Why do you still hate me?' Nonetheless, the switching of English and Chinese lyrics has little effect on the Western style accompaniment as Western pop had stamped a significant influence in the era of Chinese pop as early as *shidaiqu* to Cantopop (Loo and Loo, 2014).

The third category is slightly different from the two mentioned above; though bilingualism is intentionally written, functions of code switching are used minimally. In these productions, both languages 'switch' in a different context, in which the portion of each language is sustained even longer than in the second type. One of the idiosyncrasies is the use of narration, sometimes as soliloquy or monologue that frames the entire performance, giving a significant structure to the musical. While mostly communicating with the audience, the narrator may sometimes incidentally be involved as a role in certain acts. The structure is also contributed to by the fixed language used in each element of the musical, i.e the lyrics, libretto and narration. Examples in this group includes *Butterfly Lovers* (2006), *Glitz and Glamour* (2010), *Empress Wu* (2012) and *Xuan Zhang – Journey to the West* (2014). Again, English implicitly employed in the narration for all the mentioned production, and Mandarin was equally used since most of these production feature Chinese legends or historical accounts.



**Figure 1:** Structure 3 for bilingual musicals in Malaysia



Through conversation and interviews with producers with Dama orchestra, it was found that the main reason English is used in productions such as *huangmei* folk song musical *Butterfly Lovers* and the historical *Empress Wu* is to be able to deliver a better understanding to a Malaysian audience with a mixed language background. This was discussed in Loo and Loo (2012b) looking into Dama Orchestra's bilingual production in a Chinese *Huangmei* folk musical theatre. The use of narration existed as early as in the biographical and sung-through musicals that featured *shidaiqu* (songs of the times) (Loo and Loo, 2014) and has been a trait of Dama productions. The use of English narration while maintaining songs and dialogue in Mandarin may not be an unexpected arrangement, but in *Empress Wu* the entire libretto was written in English despite featuring a Chinese historical biographical account in Tang dynasty. While all songs were sung in Mandarin, only greetings of protocol in the palace and one of the two narrators use Mandarin. Although originally written based on the biography of the first empress in China, the use of English with Chinese costumes and sets, and the dialogue between members of the cast was thus completely contrary to the common function of using bilingualism to enhance the authenticity of certain ethnicity, culture, era, or region. The libretto weighted heavily in English accompanied by the costumes and sets completely featured in Chinese tradition indirectly affects the decision on the musical styles of the bilingual musicals. However, *Empress Wu* furnished an issue of either creativity or authenticity when its libretto was completely written in English, leaving all lyrics and an insignificant portion of narration in Mandarin. The approach of using English in the libretto with a Chinese historical synopsis may not be new, but the question arises why Mandarin as the original language was not accentuated.

Due to the fact that these productions fundamentally portray context from Chinese literature, a much greater Chinese flavour was evident in the musical style along with Chinese instruments. However, productions such as *Butterfly Lovers* and *Empress Wu* share an identical approach and establish a musical style as both are produced by the same production company, Dama orchestra. One of the most significant characteristics is the use of Western symphonic texture in enveloping the theme and melodic idea of the musical. Portraying the Chinese legend in the Eastern Jin dynasty was directly clear with the use of *huangmei* folk song which laid the foundation of musical idea for *Butterfly Lovers*. Although in a bilingual production, the *huangmei* folk song remained all sung in Chinese but the accompaniment of all numbers was arranged greatly in a symphonic orchestral texture, with solo Chinese instruments such as erhu, dizi, and guzheng used as counterline (Loo and Loo, 2013). This differs from the original version in heterophonic texture. Romantic numbers were accompanied in the style of a ballad or a hint of R&B rhythm, demonstrating the very retro folk song simultaneously with the more current sound of popular song. The amalgamation of East and West musical style thus aims to harmonize the bilingualism in the musical.

The same approach was used in *Empress Wu* although it was a completely original production in terms of the libretto and music. Similar to *Butterfly Lovers*, the bilingualism of the two languages was demonstrated by all melodic ideas being constructed from the pentatonic scales in reflecting the Chinese essence, and enveloped with a much Western symphonic orchestral accompaniment to depict the libretto in English. Harmonization from the Western musical orchestration and style also serves to alleviate the sudden change from English dialogue to the songs, where lyrics were all taken from the Tang poem. The internationalization and assimilation from many cultures from the Tang dynasty indeed coincidentally mirror the hybridized musical styles of Dama orchestra. While using the symphonic orchestral texture as the skeleton to establish the ambience of the palace and Western harmonization to suggest various emotions, the Chinese and historical essence was highlighted with Chinese instruments. A few solo instruments that were used substantially in Dama orchestra indirectly reflected instruments employed in the Tang dynasty. The first is the erhu which was stated to be developed from the *Xiqin* (Thrasher, 2008); and the same goes for the *pipa* and *sheng*, a reed instrument. The overall hybridized concept in the use of an unauthentic language and the Western musical style regardless the symphonic orchestra or pop music added an anachronistic touch to this production.

From observation and analysis through these bilingual musicals, it was found that in general, the use of English is predominantly employed in many bilingual local productions regardless of the background story, ethnicity or geographical concern. Despite the influence of Broadway and West End musicals that marked the history of this genre, there is no doubt that globalization and Westernization implicitly affect the evolvement of musical theatre in Malaysia. When discussing Westernization that 'goes beyond politics and economics' including aspects such as law, lifestyle, food, and others that travel to countries around the world, this involves English as the *lingua franca*, in which Malaysia was included in the map showing significant use of 'Global English' in the current world (Ritzer & Atalay, 2010:75). Despite the national language, this evidently shows the significance of English in not only education but also in many other domains. The same may be applied to musical language, where the variety of pop musical styles also served as a medium like the use of English to deliver a better understanding to the audiences from a range of different backgrounds. Pop music that permeates the musicals

can also be traced from productions such as *Joseph and the Amazing Technicolour Dreamcoat*, *Grease* (1978), *Mama Mia!* (2008), *Once* (2007), *Footloose* (1998), *Glee* (2015) and many others. Musicals with elements of ethnic and cultural aspects using an anachronistic approach of pop musical styles are also not unfamiliar as can be widely seen in Chinese costume drama in recent years. One obvious reason could be that the familiarity of the harmonization and rhythm in pop music style communicates more effectively to an audience of different backgrounds, together with the intended emotion and narrative.

## CONCLUSIONS

This paper highlights three structures that describe current bilingual musicals in Malaysia which were constructed by the use of language and musical styles. From the many productions, it could be gathered that bilingualism is portrayed both authentically to reflect the actual experiences of certain ethnic groups, or is used in an unauthentic approach. However, both shared a similar intention which is to deliver a better understanding of the content to the audience. Being a multicultural country, the use of bilingualism or multilingualism is nevertheless not uncommon in any aspects and being a genre that comprises language, the practice of bilingualism thus reflects a sense of familiarity to the audience. The sense of familiarity also encourages the hybridization of different genres to merge into a performance, for example the lion dance performance by Kun Seng Keng features musical instruments from all three major ethnic groups in Malaysia, the Chinese, Malay and Indian (Loo and Loo, 2016). Research with more in depth analysis regarding the interpretation and interaction between casts in the use of these languages in both the libretto and songs should be looked into in future studies. Bilingual approach in musicals also led to the discussion of musical style that framed the entire performance. Through the survey of selected bilingual musicals, although presented in a greatly hybridized styles, the influence derives greatly from the more conventional production of Western musical of Hammerstein and Lloyd Webber; together with the light and contemporary pop genre of the 70s and 80s. Musicals with ethnic context are thus reflected by the strong essence from the constructed theme and motifs but enveloped similarly in either in a Western classical symphonic or pop style. The use of pop genre to certain extent may invite the question of uniformity and sameness as discussed in issue of globalization and cultural convergence (Ritzer and Atalay, 2010:258), but more importantly the use of popularly accepted styles or traits may indeed again grasp the attention and understanding of a local and global audience.

## ACKNOWLEDGEMENT

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## **THE STUDY OF TRAINING NEEDS IN EDUCATIONAL INNOVATION AND INFORMATION TECHNOLOGY FOR TEACHERS IN THE OFFICE OF THE BASIC EDUCATION COMMISSION**

Nongnuch TARADOLRATTANAKORN  
Office of the Basic Education Commission of Thailand  
Ministry of Education, Thailand  
nuch108@gmail.com

Sasichai TANAMAI  
Office of the Basic Education Commission of Thailand  
Ministry of Education, Thailand

### **ABSTRACT**

This study aimed to investigate the training needs in educational innovation and information technology for teachers in the Office of the Basic Education Commission. The sample included 395 teachers under the Office of the Basic Education Commission selected by simple random sampling. The research instrument was an online questionnaire. Percentage, average and standard deviation were applied to analyze data. The results could be described as follows. 1) A majority of the questionnaire respondents was female aged between 36 – 50 years old. They possessed master degrees and taught in secondary schools (grade 7 – grade 12) and primary schools (grade 1 to grade 6). The teacher needs of innovation and information technology in education training under the Office of the Basic Education Commission involved instructional media design and production in 5 aspects as follows. 1) Graphic design and animation production included Adobe Photoshop for photo revision and media production, development of mobile games without program writing; 2) computer and internet design and production included development of computer skills to meet ICDL standard, construction of new instructional media on Mobile Learning through iTunes U; 3) electronic media design and production included innovative information technology for teaching instruction, construction of instructional media from Google Apps for Education; 4) web design and production and database included construction of online lessons by LMS Moodle, Edmodo and development of online lessons by Social Media through E-learning, Line, Facebook, YouTube, E-mail and Blog and; 5) Video design and production included video instructional media and construction of video presentation by Adobe After Effect.

### **INTRODUCTION**

Teaching and learning process in the 21st century is changed. Learners learn through information technology and modern communication and can access information quickly. Teachers should develop themselves to be knowledgeable in technology. Learning in the 21st century is a cooperative learning between teachers and learners combined with application of modern technology. Learners seek further knowledge by themselves. Therefore, ICT skills are essential to teachers in the 21st century. Current learning resources employ technology as tools so it is important for teachers in 21st century to focus on technology for learning management. This enables learners to connect learning resources worldwide via Internet. Teachers can deal with all documents such as Word, Excel, File Multimedia and others for teaching and learning effectiveness. Teachers can use computers and tablets in teaching instruction, offer diverse teaching and learning styles via different instructional media and apply social media in social network as teaching tools. It is essential for teachers in 21st century to have skills in innovation and information technology in education. Since technologies are widely available, applying information technology into training is one of the elements for achieving a leap growth in teacher development effectively.

### **THE STUDY**

The researcher is interested in the training needs in educational innovation and information technology for teachers in the Office of the Basic Education Commission. The results of the study would develop the training focusing on developing knowledge, skills and attitude. The researcher surveyed needs of the target group to evaluate success in preliminary stage and to seek consistency between training curriculum and needs of trainees. Teachers who have the training will apply knowledge to solve problem effectively. Preliminary, the researcher is interested in collecting information about the needs of teachers under the Office of the Basic Education Commission. The results of the survey could be used to determine innovation and information technology in education training curriculum for teachers under the Office of the Basic Education Commission. Additionally, it would be preliminary data for administrators in formulating policy and management plan for innovation and information technology in education training for teachers under the Office of the Basic Education Commission in a clearer direction.

### Objective

To study the training needs in educational innovation and information technology for teachers in the Office of the Basic Education Commission.

### Methodology

1. The survey was used in this research.
2. The researcher studied definitions, theories, principles and concepts related to studies of the needs of information technology in education training from textbooks, research journals and articles and published research and used it as guidelines to construct the questionnaire.
3. The population included one teacher from each school under the Office of the Basic Education Commission. The database showed that there were 30,816 schools under the Office of the Basic Education Commission.
4. The sample size was determined by Taro Yamane calculation representing the population of 30,816 teachers and error of sampling (0.05). The sample size of teachers under the Office of the Basic Education Commission in this study included 395 teachers selected by simple random sampling.
5. The research instrument were online questionnaires.
6. Percentage, mean ( $\bar{x}$ ) and standard deviation (S.D.) were applied to analyze data.

### FINDINGS

Most respondents were female including 229 respondents (57.97%) and another 42 participants were males (42.03). One hundred and eighty respondents (45.57%) were 36 – 50 years old. Two hundred and three respondents (51.39%) had master degrees. Two hundred and forty six respondents (62.28%) taught secondary level (grade 7 – grade 12) and one hundred and forty nine respondents (37.72%) taught primary level (grade 1 – grade 6) respectively.

The training needs in educational innovation and information technology for teachers in the Office of the Basic Education Commission in each aspect could be presented from the highest to the lowest as follows:

1. Graphic design and animation production. ( $\bar{x} = 4.10$ , S.D. = 0.05)
  - 1.1 Adobe Photoshop for photo revision and media production.
  - 1.2 Development of mobile games without program writing.
  - 1.3 Adobe Illustrator for graphic design.
  - 1.4 3D Animation.
  - 1.5 Adobe Flash for animation.
  - 1.6 Professional Adobe InDesign for printing media.
  - 1.7 Professional Microsoft Publisher for printing media.
2. Electronic media design and production. ( $\bar{x} = 4.00$ , S.D. = 0.07)
  - 2.1 Innovative information technology for teaching instruction.
  - 2.2 Construction of instructional media from Google Apps for Education.
  - 2.3 Design and learning development through (E-learning) and CAI.
  - 2.4 Construction of instructional media by Computer Aided Instruction (CAI).
  - 2.5 Construction of instructional media by E-book.
  - 2.6 Construction of instructional media using Application on Android or IOS, development of simple program on Mobile Phone or Tablet.
  - 2.7 Construction of instructional media by Course Lab.
  - 2.8 Construction of instructional media by Desktop Author, a program for E-book construction.
  - 2.9 Construction of instructional media by Adobe Connect Presenter.
  - 2.10 Construction of instructional media by Macromedia Author ware.
  - 2.11 Construction of instructional media by Adobe Captivate.
3. Video design and production. ( $\bar{x} = 3.91$ , S.D. = 0.07)
  - 3.1 Video instructional media.
  - 3.2 Construction of video presentation by Adobe After Effect.
  - 3.3 Video editing by Adobe Premiere.
  - 3.4 Short film production for education.
  - 3.5 Video editing and production by Sony Vegas.
  - 3.6 Construction of instructional media by Camtasia Studio.
4. Web design and production and database. ( $\bar{x} = 3.89$ , S.D. = 0.09)
  - 4.1 Construction of online lessons by LMS Moodle, Edmodo.
  - 4.2 Development of online lessons by Social Media through E-learning, Line, Facebook, YouTube, E-mail and Blog.

- 4.3 Visual Basic.Net with SQL Server design.
- 4.4 Online English language development.
- 4.5 Web design by Adobe Dreamweaver.
- 4.6 Teaching and learning database.
- 4.7 Web management by Open Source.
- 4.8 ASP Database Web for E-Commerce design.
- 4.9 Web Programming design by PHP, ASP.NET.
5. Computer and internet design and production. ( $\bar{x} = 3.86$ , S.D. = 0.07)
  - 5.1 Development of computer skills to meet ICDL standard.
  - 5.2 Construction of new instructional media on Mobile Learning through iTunes U.
  - 5.3 Office 365 application.
  - 5.4 E-learning Tools application such as:
    - Google Drive/Docs (Office suite & file storage service) Gmail / Google Drive / Google Docs.
    - Dropbox (File storage & synchronization) Install / Sharing.
  - 5.5 Computer maintenance.
  - 5.6 Effective searching.
  - 5.7 Basic computer, Internet and e-mail.
  - 5.8 Microsoft Office format.
  - 5.9 SPSS application.
  - 5.10 Existing electronic program application in operating system.
  - 5.11 New electronic program application additionally installed in computer.

The needs of innovation and information technology in education training other than the 5 aspects included; 1) VR Learning; 2) animation production; 3) Advanced programming; 4) teaching/instructional media application supporting OS system; 5) new program application to create and develop teaching and learning through mobile application; 6) in-depth projector and printer repairing; 7) installation and management of self-identification system; 8) design and management of network in institution; 9) Android application writing; 10) educational management by educational technology; 11) e-Pub; 12) online-test construction; 13) Internet of Things; 14) construction of test bank and; 15) network management for learning and educational institution management.

#### Suggestions

1. Current computers were out of date and could not support higher programs.
2. The presented training included copyright programs with expensive costs. There would cause problems if they were used. Teachers should be able to create work which would not be copyright infringement and be good models for society and educational context.
3. Training should be organized during term breaks so it would not interfere in the teaching time.
4. Training should be organized during term breaks only.
5. Training should be available on websites.
6. Training should be more and the news about training should be widely informed.
7. Training on computer network administrator in educational institutions should be offered.
8. Specific training should be offered to teachers who did not graduated in computer fields to provide knowledge and skills necessary to effective teaching and learning.
9. Innovation and information technology in education training should be organized at least one time per semester.

#### CONCLUSION

The results of this study on the training needs in educational innovation and information technology for teachers in the Office of the Basic Education Commission could be applied to develop of training for secondary level teaches (grade 7 – grade 12) and primary level teachers (grade 1 – grade 6) in the aspects of knowledge, skills and attitude. The researcher surveyed needs of the target group to evaluate success in preliminary stage and to seek consistency between training curriculum and needs of trainees. Teachers who have training will apply knowledge to solve problem effectively. It was found that teachers under the Office of the Basic Education Commission needed design and media production in 5 aspects as follows. 1) Graphic design and animation production: the teachers thought that graphic could express meanings directly since photos were key elements to communicate. This enabled better understanding and gave effective and efficient communication between human. Animation was moving pictures in different ways which activated attention and enhanced learner autonomy. It was suitable for teaching and learning and would play a significant role in the future. 2) Computer and internet design and production: the teachers thought that using computers in teaching and learning enabled learners to seek further knowledge by themselves. Therefore, knowledge sources were important which enabled learners to seek knowledge other than in the classrooms. In addition, it allowed learners to communicate or seek data from every corner of the world. The teachers were interested in developing skills and strongly needed

training in this field. 3) Electronic media design and production: the teachers needed understanding of electronic media design and production because it involved textbooks or electronic books for teaching. 4) Web design and production and database is large network covering the entire world and supports teaching and learning through websites. It applies Internet characteristics to design and develop instructional media enabling learners to interact with the content and lessons. The IT teachers were interested and needed the training on electronic media design and production. This would enable teachers to control the system by themselves without having administration from other sources. Finally, the teachers needed the training on video design and production because it could enhance learners' knowledge and understanding. It could be used with DVD players which are cheap and available in all schools. The schools with computer system could install video files into network and be converted into Video on demand , Video Online , Streaming Video, providing video bank. Teachers who have the training could apply knowledge to solve problem effectively. Moreover, it would be preliminary data for administrators in formulating policy and management plan for innovation and information technology in education training for teachers under the Office of the Basic Education Commission in a clearer direction.

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## THE SUCCESS RATE OF DIFFERENT TEACHING METHODS AT ELEMENTARY SCHOOLS

Lea Nedomova  
Faculty of Informatics and Statistics  
University of Economics, Prague  
Czech Republic  
nedomova@vse.cz

Barbora Svatkova  
Sunny Canadian International School  
Czech Republic  
svatkova@sunnycanadian.cz

### ABSTRACT

This article focuses on a problem currently affecting education in entire Europe, specifically the diminishing interest of students in natural science education. We mapped literature discussing this problem. As part of our research, we prepared three lessons that were taught using different methods in select classrooms. We worked with six classes and monitored them for 16 hours. The monitored lessons were taught using the frontal teaching method and the inquiry-based teaching method. We have discovered that the best results were achieved by the classical frontal teaching method, although students, as expected, prefer inquiry-based teaching, which however also depends on the specific type of method.

### INTRODUCTION

The view on elementary school education has considerably changed lately. The emphasis is on conveying a large number of information to students and on developing students' key competencies. Parents, grammar and high school teachers and future employers demand that students have various skills and understand a wide range of issues, starting with general knowledge all the way to computer and language skills. In view of the big competition on the labor market, it is also important to develop in students the competencies that are crucial for problem-solving, communication and social development and many other competences. Different styles of teaching also help to develop these crucial competencies, by making students to use different work methods and to think about a certain problem from different perspectives. We feel that it is important to know how effective individual teaching styles are because of the growing demands (Chinnammai, 2005; Doucek, Maryska, & Novotny, 2013). In secondary and tertiary education as well as on the labor market (Doucek, Maryska, & Novotny, 2014; Maryska & Doucek, 2011; Maryska, Novotny, & Doucek, 2010). Different teaching styles do not necessarily mean students' bigger success. One of the problems of modern-day primary and secondary is the students' lack of interest in learning science and technical subjects (Rocard et al., 2007). Popularity of science and technical subjects is currently low (MSMT, 2011).

At the elementary school Sunny Canadian International School, we expanded the "regular" frontal teaching method for several other, mostly activating, methods of teaching, which also include the inquiry-based teaching of natural science subjects (Svatkova, 2015). Our research focused on whether students better retain information conveyed by a teacher or information that they can verify themselves or learn by observation or experiment. Based on our control test that students took after the lessons, we were able to conclude whether frontal teaching or inquiry-based teaching is more effective. Students' personal attitude toward teaching is an important part of their success. Therefore, our research also included information about the students' age. Our research was conducted at the elementary school among students from the 6th to 9th grade. Students' mentality and view of education rather considerably changes throughout those grades. Therefore, we decided not only to compare the success rate of individual teaching styles but also to map how the results change with students' age.

### PROBLEM FORMULATION

Our research conducted at the elementary school Sunny Canadian International School was to find out whether students better retain information conveyed by a teacher (frontal teaching) or information that they can verify themselves or learn by observation or experiment (inquiry-based teaching) and how this fact changes with students' age. As part of our research, we asked the following research questions:

- RQ1: Will students prefer a lesson that will help them to better apply acquired knowledge?
- RQ2: Will the least preferred lesson result in the lowest success rate of tests?
- RQ3: Will students better retain knowledge acquired by working with microscopes than knowledge acquired by working with Pasco sensors?

- RQ4: Will students better retain knowledge acquired by frontal teaching than knowledge acquired by inquiry-based teaching?
- RQ5: Will students better understand an issue presented by frontal teaching than by inquiry-based teaching supported with microscopes?

### **MATERIAL AND METHODS (DATA COLLECTION)**

The survey was conducted at the private Sunny Canadian International School (SCIS), which was established in 2002, when it opened a kindergarten. Then, in 2006, it opened an elementary school and in 2014 a four-year secondary school. At present, more than 500 students study at SCIS (SCIS, 2016). Since its establishment SCIS has upheld the principle of bilingual learning where all the subjects are taught in Czech and in English by native speakers. The vision of SCIS is to inspire each student to become healthy, open-minded and responsible, ethical citizens, who achieve academic and linguistic success while attaining personal fulfillment through engaged and knowledgeable inquiry. One of the ways of achieving this goal is to make the study conform with similar aims defined by the Czech Ministry of Education (see above). SCIS is the first institution in the Czech Republic that integrates in its curriculum preparation of students for the IGCSE examination (International General Certificate of Secondary Education) and its graduation after the second year of secondary school. IGCSE is an academically rigorous, internationally used, and specialized English language curriculum which is offered to students to prepare them for International Baccalaureate (IGSE, 2016).

The project using inquiry-based learning in lessons at the SCIS elementary school was implemented in the period 1.4.2013 - 31.12.2014 (SCIS, 2016). For the project SCIS bought special study aids that could be used in the incorporation of inquiry-based learning into the SCIS curricula. Specifically, SCIS purchased Pasco (Pasco, 2016) probes for measuring various biological processes, such as working with CO<sub>2</sub> and taking blood pressure, and microscopes enabling the students to understand in more depth other natural phenomena. After the completion of the project in the period 01.2015-12.2015 we assessed the success of the implementation of inquiry-based learning in study. The research took the form of a full survey 6-9 SCIS classes.

### **METHODOLOGY**

We have defined teaching methodology for sensor Pasco for teachers and for students. Similar methodology was prepared also for work with microscopes. The methodology is described in detail in (Svatkova, 2015). At the outset each of the groups of respondents was introduced to the survey course and the methods that would be employed during it. The students were acquainted with each learning approach. The survey was divided into frontal learning, inquiry-based learning using microscopes, and finally, inquiry-based learning using Pasco probes.

Prior to starting the entire project, students were briefly informed about the individual teaching methods and their basic characteristics and differences. Individual lessons took place in the following order:

- Inquiry-based teaching supported with microscopes;
- Inquiry-based teaching supported with Pasco tools;
- Frontal teaching.

The learning was assessed in two ways:

- Enjoy, doesn't enjoy, not interested, where the students only mark whether they enjoy the learning regardless of the comprehensibility of the supplied information and its easiness to remember,
- With a mark 1, 2 and 3, where the students assess whether the transmitted knowledge is understandable and easy to remember.

The research was realized among all students of sixth, seventh, eighth and ninth grade at Sunny Canadian International School. The Czech Republic passed Act No. 101/2000, on the protection of personal data. Therefore, we made all processed data anonymous at multiple levels. We made all information anonymous that could lead to the identification of a specific student.

### **GENERAL DATA CHARACTERISTICS**

The data file with research answers currently includes 207 answers from 85 students of the second level of SCIS that we have been collecting in 2015. The second level represents 6-9 classes. Three monitored lessons were given in each class. The first lesson was based on traditional frontal learning, in the next the students worked with a microscope set and in the last with Pasco probes. The last two lessons are a typical example of inquiry-based learning, which is preferred today in teaching of science and technical subjects. After the lessons the students completed an evaluation questionnaire and a control test on a given theme.

Each record provides information about how the students evaluate lectures led by different styles and with different techniques (sensors Pasco and microscopes). The most key attributes in the data file include gender, grade, answers and information about whether or not a student is satisfied with teaching method and comparison with other teaching methods.

## RESULTS AND DISCUSSION

### GENERAL OVERVIEW

Our full survey yielded a total of 207 answers from 85 students – six-graders through nine-graders of SCIS. A detailed classification of students by grade and gender is provided in the first part of Table 1 and the number of answers is provided in the second part of Table 1. There are no answers from boys from the 7A class actually because there are no boys in this class. We conducted three surveys in each class, except for the 7A and B classes where we conducted only two surveys (frontal teaching and microscope-supported teaching). The average return rate was approximately 81%.

**Table 1:** Number of Students at SCIS (source: authors)

Grade	6A	6B	7A	7B	8A	9A	Sum
Boys	7	10	0	7	7	10	41
Girls	5	5	9	6	10	9	44
Total Number of Students	12	15	9	13	17	19	85
Answers - Boys	21	29	0	13	21	25	109
Answers - Girls	15	15	14	10	29	15	98
Total Number of Answers	36	44	14	23	50	40	207
Rate of return of questionnaires	100%	100%	52%	59%	100%	70%	81.18%

### DATA ANALYSIS

The first part of our analysis focuses on aggregate results discovered after a lesson taught using a specific teaching method. [Table 2] identifies the popularity of individual teaching methods among the surveyed students. Informing students about individual teaching styles (frontal teaching and inquiry-based teaching) was the premise for our evaluation. The preferences of individual teaching types were always evaluated after a specific lesson. Lessons took place in the following order:

- Inquiry-based teaching supported with microscopes;
- Inquiry-based teaching supported with Pasco tools;
- Frontal teaching.

**Table 2:** Preference of the methods used in lessons in % (source: authors)

n=192	Boys + Girls		
	VHmikro	VHpasco	VHfront
FRONT	16.42%	15.38%	23.08%
MIKRO	76.12%	71.15%	70.51%
PASCO	7.46%	13.46%	6.41%
SUMA	100.00%	100.00%	100.00%

Legend: **Front** – frontal teaching, **Micro** – microscope, **Pasco** – Pasco sensors

[Table 2] shows that students preferred inquiry-based teaching supported with microscopes the most after the first lesson. It is interesting that frontal teaching placed second and inquiry-based teaching supported with Pasco sensors was the least popular. The second lesson was taught using inquiry-based teaching supported with Pasco sensors. In this case again, the preference of inquiry-based teaching supported with microscopes considerably prevailed, but the difference in preferences between frontal teaching and inquiry-based teaching supported with Pasco sensors was minimal. A lesson using classical frontal teaching took place last. In this case, we had the biggest surprise. The popularity of inquiry-based teaching supported with microscopes and Pasco sensors dropped even more while the preference of classical frontal teaching went up considerably.

A detailed analysis by gender is provided in the following table. In this case, the values of 37.5% and 0% are worth mentioning. Girls prefer frontal teaching and totally reject Pasco-sensor-supported teaching.

**Table 3:** Preference of the methods used in lessons in % by gender (source: authors)

$n_m=95$ $n_z=97$	Boys			Girls		
	VHmikro	VHpasco	VHfront	VHmikro	VHpasco	VHfront
<b>FRONT</b>	11.76%	11.54%	7.89%	21.21%	19.23%	37.50%
<b>MIKRO</b>	73.53%	73.08%	78.95%	78.79%	69.23%	62.50%
<b>PASCO</b>	14.71%	15.38%	13.16%	0.00%	11.54%	0.00%
<b>SUMA</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

The following tables show the students' results obtained in didactic tests taken after each lesson taught using a specific teaching method. The values 1, 2 and 3 (equivalent to A, B, C in the English education system) in the following table show the final grades that students obtained in these tests. It is a standard grading system where 1 is the best and 3 is the worst. These abbreviations mean the following: FRONT = frontal teaching, MICRO = inquiry-based teaching supported with microscopes and PASCO = PASCO-tool-supported teaching.

**Table 4:** Total grades of individual control tests (source: authors)

	Boys+Girls			
<b>X</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Sum</b>
<b>FRONT</b>	95.89%	2.74%	1.37%	<b>100.00%</b>
<b>MICRO</b>	73.44%	20.31%	6.25%	<b>100.00%</b>
<b>PASCO</b>	75.00%	21.15%	3.85%	<b>100.00%</b>
<b>SUMA</b>	<b>82.54%</b>	<b>13.76%</b>	<b>3.70%</b>	<b>100.00%</b>

Table 4 clearly shows that most students received excellent grades in the tests followed after frontal teaching. We tried to figure out why there was such a big difference in obtained grades. It seems probable that tests taken after frontal teaching test only the level of acquired knowledge the same way as tests followed after inquiry-based teaching, which in retrospect can be considered an obstacle. Tests do not fully verify a student's practical knowledge and skills. And this is why a student may lose points, which affects test results. Detailed results by gender are provided in the following [Table 5].

**Table 5:** Grades of individual tests by gender (source: authors)

	Boys				Girls			
	<b>1</b>	<b>2</b>	<b>3</b>	<b>Sum</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Sum</b>
<b>FRONT</b>	97.22%	2.78%	0.00%	100.00%	94.59%	2.70%	2.70%	<b>100.00%</b>
<b>MICRO</b>	69.70%	27.27%	3.03%	100.00%	77.42%	12.90%	9.68%	<b>100.00%</b>
<b>PASCO</b>	92.59%	7.41%	0.00%	100.00%	56.00%	36.00%	8.00%	<b>100.00%</b>
<b>SUMA</b>	<b>86.46%</b>	<b>12.50%</b>	<b>1.04%</b>	<b>100.00%</b>	<b>78.49%</b>	<b>15.05%</b>	<b>6.45%</b>	<b>100.00%</b>

Table 5 shows the results of individual tests by tested girls and boys. The results are surprising because most students, both boys and girls, had excellent results in the tests taken after frontal teaching. The success rate of boys and girls differed in the tests taken after working with microscopes and Pasco sensors. Boys achieved better results in the tests taken after working with Pasco sensors, while girls had better results in the tests taken after working with microscopes. It is interesting that although the success rate of individual tests differed, students achieved excellent results overall. 86.46% of boys and 78.49 % girls received a 1.

Based on the aforesaid analyses, we are now able to answer the individual research questions. The first research question, i.e. whether the most preferred lesson will also be the method allowing students to best apply acquired knowledge, has not been confirmed. Students most preferred the inquiry-based teaching supported with microscopes. However, our survey shows that students obtain the best results (a 1 or a 1 and 2) after a lesson using frontal teaching.

The second research question, i.e. whether the least preferred teaching method will result in the lowest success rate of tests, has also been rejected. The Pasco method was clearly the least preferred teaching method. The didactic test showed that the least preferred method of teaching does not have the worst results. The worst results of the didactic test were after inquiry-based teaching supported with microscopes. This also provides the answer to RQ3; knowledge acquired by working with microscopes is not retained better than knowledge acquired by working with Pasco sensors.

The fourth research question, i.e. whether knowledge acquired by frontal teaching is harder to retain than knowledge acquired by inquiry-based teaching, can be rejected as well. Based on the didactic tests, we concluded that the students best retained knowledge acquired by classical frontal teaching (95.89% of the students received a 1) as compared to inquiry-based teaching where 73.44% or 75% of the students received a 1. The last research question, i.e. whether students will better understand an issue presented by frontal teaching than by inquiry-based teaching supported with microscopes, has been confirmed. Based on the aforesaid tables, we found out that students achieve the best results after lessons using classical frontal teaching.

## CONCLUSION

Based on our research, RQ1 – RQ4 have been rejected. Only RQ5 has a positive result, i.e. has been confirmed. We find it interesting that students prefer lessons that provide knowledge that cannot then be fully applied. We think that it is because most students do not find important the scope of acquired knowledge but how much a lesson is demanding and entertaining, often without any regard for effectiveness. Another surprising outcome is that students were able to answer most of the questions in the test taken after the least preferred lesson. This shows that students not always correctly estimate the effectiveness of teaching.

During our observation, students preferred working with microscopes and often asked about their further application, yet did not use their knowledge in the test better than in the test taken after working with Pasco sensors.

Since there is now a huge push for the modernization of teaching, we decided to include question 4 in our research, which was to verify whether students will be able to better apply knowledge acquired by inquiry-based teaching than by frontal teaching. The outcome shows that students are able to better apply knowledge from frontal teaching, which surprised us. This outcome is in compliance with RQ5.

Although our tests show frontal teaching to be the most successful, we recommend making inquiry-based teaching a part of lessons. And not only as a supplementary teaching method but as a full-fledged part of teaching. We understand that it is difficult for students to work with information obtained in a way that is very different from what they are used to. This is why we would like to include inquiry-based teaching in our lessons to such an extent so that students could practice the application of knowledge acquired in a way that is different from what they have been used to so far.

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## THE TRANSLATED BOOKS IN MOLECULAR BIOLOGY FIELD; BENEFITS AND LOSSES

İsmail POYRAZ

Molecular Biology and Genetic Department  
Bilecik Seyh Edebali University, Turkey  
Ismail.poyraz@bilecik.edu.tr

### ABSTRACT

There are many books that was translated to Turkish from English and published in molecular biology field. These translated-books were used as textbook or reference book in some foundations that educate in undergraduate and graduate level. However, the known common opinion is presence of many complicated sentences and expressions and lack of meaning integrity in subjects. In this study, the reasons of mentioned-negative opinions were investigated with widely perspective using translation samples from different translated-books. The encountered and repeated mistakes in investigated samples and reasons of these mistakes were discussed. In addition, to learn perception of users for the translated-books in molecular biology field, a user survey among students, researchers, lecturers related the mentioned field was performed. Consequently, we aimed to detect dimension and variety of perception occurred against translated-books. We investigated positive and negative effects translated-books on reading and learning desires of book users using the knowledge obtained from survey data and determined expectations of book users for solution. Strategies for solution was discussed via comparison and evaluation of data obtained survey works.

### INTRODUCTION

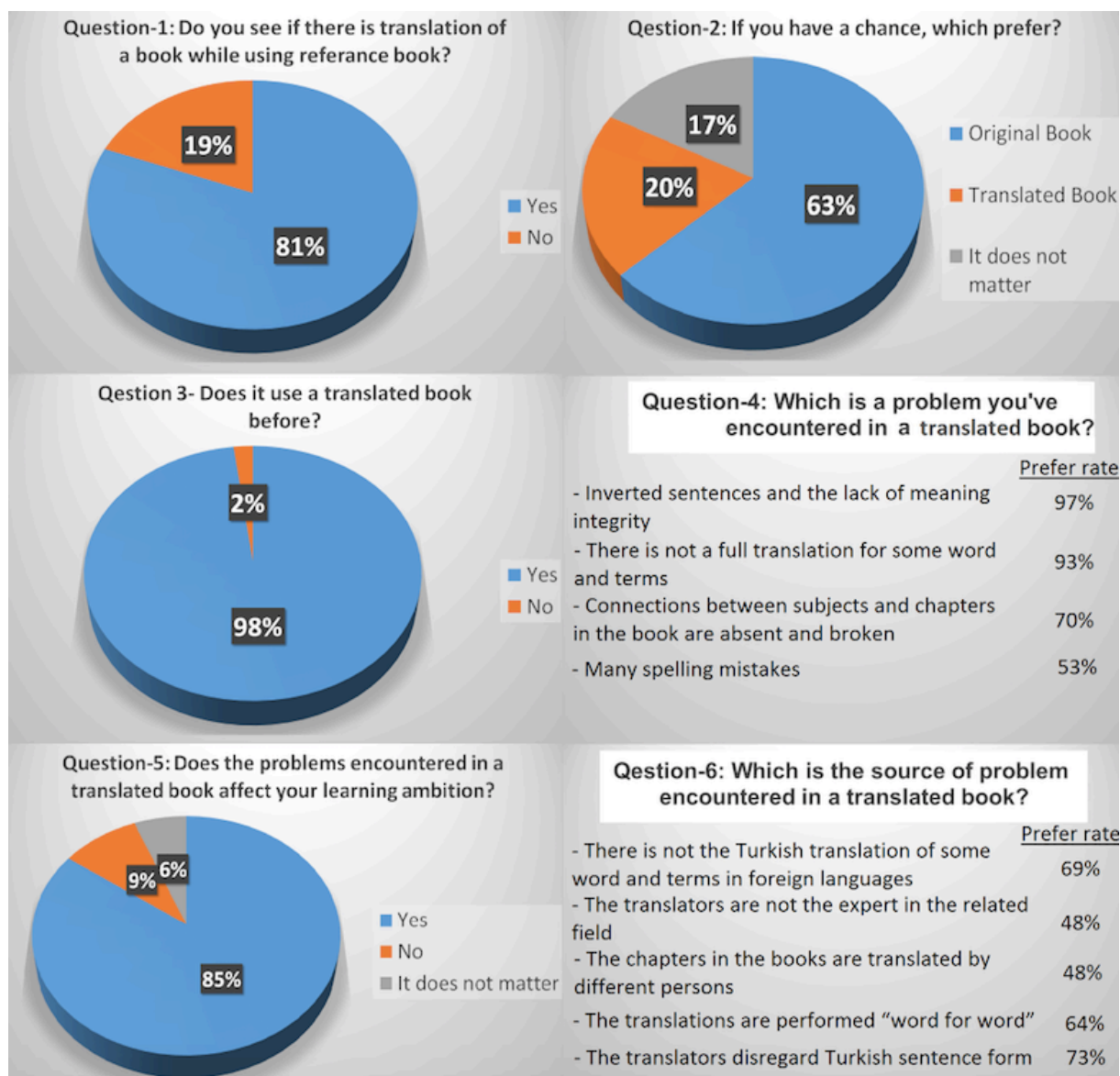
Reformation of the sixteenth century, translation most clearly showed itself as a political weapon in Europe (Munday, 2009). Translation studies, in this century, is a buoyant field where theorist and practitioners frequently come together (often in one person), where the mutual dependencies between research and practice are well understood, and where few doubt the need to work together to improve research, teaching and practice across the board (Malmkjaer, 2004). The study of translation, an interdisciplinary field known as translation studies, has also developed enormously in the past twenty years. It interfaces with a wide range of other disciplines from linguistics and modern languages to cultural studies (Hatim and Munday, 2004). As undergraduate students, the current population of associate and full professors learned science by studying the rule book, by reading about science, by attending lectures, by memorizing notes and textbooks (Chopin, 2002). The lost-in-translation communication phenomenon can have a powerful negative effect in online education and can be linked to student attrition (Betts, 2009). In this study, we aimed investigation of reasons of negative opinions about translated books in molecular biology field using a user survey and determination of mistakes in translation samples from different translated-books. The encountered and repeated mistakes in investigated samples and reasons of these mistakes were discussed. In addition, to learn perception of users for the translated-books in molecular biology field, a user survey. We investigated positive and negative effects translated-books on reading and learning desires of book users using the knowledge obtained from survey data.

### THE STUDY

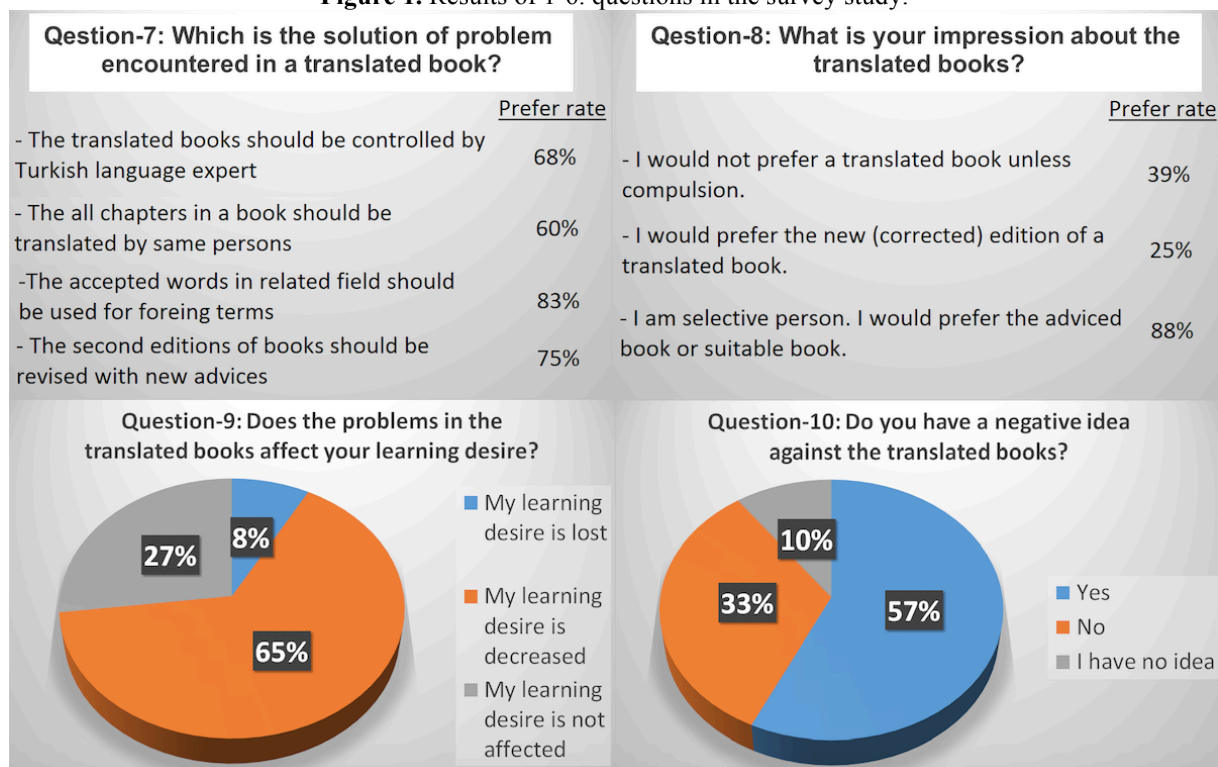
We examined some translation samples from different translated-books in molecular biology field. We discussed the encountered and repeated mistakes in investigated samples and reasons of these mistakes (the preliminary study). To learn perception of users for the translated-books in molecular biology field, we performed a user survey with one hundred persons among students, researchers and lecturers. We used the ten questions determined using data from the preliminary study in user survey. We asked that *What are problems encountered in a translated book? What can the origin of problems encountered in translated books?* We obtained some inferences as answers of these questions. These inferences formed the choices in the user survey.

### FINDINGS

We obtained the results from the user survey about translated books in molecular biology field. The survey participants are 84% undergraduate and %16 graduate students and academic persons. The rate of academic persons is 8%. We showed as figure for each survey question (Figure 1 and 2).





**Figure 1.** Results of 1-6. questions in the survey study.**Figure 2.** Results of 7-10. questions in the survey study.

## CONCLUSIONS

We determined some inferences from the basic questions about problems of translated books in molecular biology field and sources of these problems. These inferences are basically “*inverted sentences and the lack of meaning integrity*” and “*many spelling mistakes*”. The other inferences as sentence from the user survey: “*There is not a full translation for some word and terms. Connections between subjects and chapters in the book are absent and broken. There is not the Turkish translation of some word and terms in foreign languages. The translators are not the expert in the related field. The chapters in the books are translated by different persons. The translations are performed “word for word”. The translators disregard Turkish sentence form*” In recent years, the many translated books in molecular biology field were published in Turkey. There are many critical mistakes in these translated books. This negative case was complained by the book users in the mentioned fields. We observed that the translation mistakes in the references books for undergraduate students is very important and critical for motivation of students. We detected that this basic problem seriously reduces efficiency of education. We determined that interest of students to lessons is decreased and stress and anxiety disorders among undergraduate students are occurred. The results obtained from the user survey have supported our thesis about the mentioned case.

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## **THE USE OF APPLE TECHNOLOGY TO SUPPORT FLIPPED CLASSROOM APPROACH IN HIGHER EDUCATION OF THAILAND**

Rattasapa KANKAEW  
Sripatum University, Thailand  
[rattasapa.ka@spu.ac.th](mailto:rattasapa.ka@spu.ac.th)

Narong SOMPONG  
Kasetsart University, Thailand  
[fedunrs@ku.ac.th](mailto:fedunrs@ku.ac.th)

### **ABSTRACT**

This paper is a report on the findings of a study that Thai instructors use Mac (Mac all includes MacBook, Mac Book Air, MacBook Pro, iMac, Mac Pro and Mac Mini) to creating the presentation by the Keynote for Mac, creating the Multi-Touch textbooks by the application iBooks Author, creating the video by the application PhotoBooth and using application QuickTime, software Screenflow and Camtasia Studio for produce a video with screen recoding and narration. Instructors use the iPad to recoding the video such as the use of application Explain Everything for iPad, the use of iPad with Swivl Robot and application Swivl Capture and the use iPad with application Touchcast and Green Screen for creating the video. For the using Apple technology in classroom, the instructors use of iPad by using applications such as Siri, Camera, iMovie, Keynote, iBook, iTunes U, Photoshop, Aurasma, iAnnotation, Notability, Scribbee, Photoshop, e-Clicker and QR Code Scan for support classroom activities. The instructor using iPad for motivate the students by Website Kahoot, Google Site, Padlet, Facebook, Blogger and Ping-pong Spot Networking and also using Apple TV with AirPlay for the projection on the screen projector with a wireless connection in the classroom. The problems and obstacles in using Apple technology that founds that the price of the devices too expensive for some student, the unfamiliarity in use of Apple Technology and the policy of the university affecting to the using of the Apple Technology of the students. The problems and obstacles in Flipped Classroom Approach is the unfamiliarity of Flipped Classroom approach of instructor and students in Thailand and the discipline of the students affecting to the Flipped Classroom approach.

### **INTRODUCTION**

Flipped Classroom, one of the strategies of the teaching in a blended learning that educators have discussed widely. Flipped Classroom, Thai educators are called differently. For example, Vijan Panit (2014), called “diverse classroom”, while Bumroong Khamkorn (2013), called “classroom backwards”. The researcher of national education had used the word called “Ubiquitous Learning”, the instructional model focuses on learning more than teaching. By Ubiquitous Learning have one keywords is “learn at home, Homework at classroom” this is a class that emphasize the children to study at home and then remove the homework to do at the school (Bumroong Khamkorn, 2013)

Flipped Classroom flip instructional model that traditional lecture or specific activities in the classroom to send online video content or video clip for students before the meeting in the classroom. And move back to do homework in the classroom. The model of the flipped classroom, learner will be able to view the online video content, to work and the conversation in the online format that the learner has studied at home and participate in the concept and activities in the classroom with the introduction of the instructor. This will be useful in reducing the time teaching in the classroom. The use of the flipped classroom the strategy is important in stimulating creativity for students than to teach in a lecture in the original form. Education for the new generation is different from the past. Quality of education will be required to change the learning of the learner and the role of the teacher is to be changed. The teachers love the students, but also use the traditional teaching method Will not the teacher use the disciples. The teacher to students to change the role of the teacher to a coach or facilitator. (Vijan Panit, 2014)

Bergmann and Sams (2012) to say about Flipped Classroom, that the instructor will create the video contents of the lecture in the form of digital. The learner can learn the content through the view video at any time as required through mobile devices from the study are available. Which method of Flipped Classroom, they discovered a miraculous things. Because the Flipped Classroom instruction is not just standing and talking between teachers and students. A variety of problems in the management in the classroom is missing. In addition, also found that the learner is a way to learn more than one way because most time studying in class is used for activities or tasks in a small group assignments. Make the classroom of students were distracted.

The use of technology to support the Flipped Classroom is the use of technology to send the knowledge to the learner. In which the use of technology to help manage the teaching that the Teaching Model to be prepared in a variety of ways that are associated with the technology. Especially the classroom learning environment or tool that covers the activities such as Learning Management System (LMS) with a variety of channels and in teaching or Learning Content Management System (LCMS) with various content items used in online learning. By using instructional technology online should consider the server with high efficiency that cater to teaching and learning activities to have a connection to send and receive data. That means the amount of data transmission (Bandwidth), there must be enough speed to access data (Accessibility), security in the teaching, hardware, software, and infrastructure in the use of the tasks that are required to be used in the system (Infrastructure issues) (Anusorn Hongkhunthod, 2015).

Apple technology was used to support the widely studied, such as in the United States and other countries around the world. Apple has established agencies that support the instructor in the apple technology used to study seriously. The belief that the technology has the power to change classes to process new thinking and a new approach that inspire creative ideas.

In addition, Apple also support project instructor's use of apple technology in learning to join the program the Apple Distinguished Educator (ADE). The ADE Community is an online community of users of apple technology in teaching can access the exchange of learning. As well as many university in Thailand have been U.Store shop equipment of apple in education price. It was also found that some private universities have policies in the supply iPad to students and management of learning environment to support the Flipped Classroom. The results of study about the Using of Apple Technology in Flipped Classroom in Higher Education of Thailand will be used in the selection of technology to bring in design the teaching in Flipped Classroom in higher education.

## OBJECTIVE

1. To study the patterns of the use of Apple Technology to support Flipped Classroom approach in higher education of Thailand
2. To study the problems and obstacles of the using Apple Technology to support Flipped Classroom approach in higher education of Thailand
3. To study the problems and obstacles of Flipped Classroom in higher education of Thailand

## SOURCE OF DATA AND ANALYSIS

The research applying the qualitative research method to study situation of using Apple technology to support Flipped Classroom approach in higher education of Thailand. The data of the study is the primary data acquired through in-depth interview from key informant. It also relies on secondary data from document such as journal, e-book, academic article, research report, and the data from website such as Blog, web board and other. Then analyze and present the results with the content analysis.

## DATA COLLECTION

This study collection of the data from instructors who taught in Flipped Classroom in higher education, instructional technology expert, and instructors who use the Apple Technology in teaching and learning (Apple Distinguished Educator: ADE) in higher education.

## INSTRUMENT

The instrument of this study there is a 3, such as:

1. Semi-Structured interview for instructors who taught in Flipped Classroom in higher education of Thailand.
2. Semi-Structured interview for instructional technology expert.
3. Semi-Structured interview for instructors who use the Apple Technology in teaching and learning (Apple Distinguished Educator: ADE) in higher education.

## RESULTS

For the results of study the researcher to present in 3 parts are as follows:

Part 1: The using of Apple Technology to support Flipped Classroom approach in higher education of Thailand

This part the researcher to present of results about the using of Apple Technology to support Flipped Classroom approach in higher education of Thailand, by is divided into 2 points:

## **1.THE USING OF APPLE TECHNOLOGY TO CREATE THE INSTRUCTIONAL MEDIA AND VIDEO CLIP**

### **1.1 The using of Apple Technology to create the presentation media**

#### **1.1.1 Create the presentation media with the keynote application**

Keynote application is the apple technology that is used in the creating of the presentation media for a presentation in a variety of equipment. The keynote application split into 3 categories: 1) Keynote for Mac, Keynote for iOS that is used in iPad 2) Keynote for iOS that is used in iPhone and 3) Keynote for iOS that is used in iMac.

This research has found that most of the create presentation media start creating with the Mac (MacBook, MacBook Air, MacBook Pro, iMac, Mac Pro, and Mac Mini). Secondary, found that the create presentation media with the keynote for iOS that is used in iPad for the convenience in the presentation.

However, the keynote for Mac is different to the Keynote for iOS that is used in iPad and iPhone in the format to change the slide in the section of the transition and animation. If the instructor create the presentation media on Mac, that will be enabled on the ipad and iphone but there may be changes to the format to change the slide in the section of the transition and animation. If the format of the change the slide in the section of the transition and animation is not a matter of the presentation the creation of presentation on the mac and open or used in ipad and iphone will have a more convenient.

The instructors that use Mac (MacBook, Mac Book Air, MacBook Pro, iMac, Mac Pro, Mac Mini) will use the keynote for Mac to creating presentation. Because the keynote for Mac is the application, with the appliance in case of the purchase of the new Mac today (\$9.99 for the keynote application in case of the old Mac version). The keynote application with the beautiful template and the transition to present the image and video clip that easy to use, facilities, and management. In addition, the keynote application for mac is compatible with the Microsoft Power Point file can be enabled for the use of the Computer PC.

An important part of the main features of the keynote for Mac is compatible with the application keynote for IOS (on ipad and iphone). The instructors can create of the presentation on application keynote for mac, and then apply to open on ipad or iphone.

For the user of keynote for iOS (on iPad and iPhone) to create the presentation, that the reason of use the keynote for iOS (on ipad and iphone), with the instructors does not need to be free and can create a presentation with the iPad and use the presentation. Moreover, the Keynote for iOS on iPad with the beautiful template and the transition to presentation but less than the Keynote for Mac, that can used create the good presentation and there is compatible with the Microsoft Power Point file that can be enabled for the use of the PC (Computer PC).

#### **1.1.2 Create the Multi-touch e-book with iBooks Author application**

Multi-touch e-book is the one of presentation media can present in the class or the students can be download for Course iTunes U to learning before class. The create of Multi-touch e-book with iBooks Author application, the instructors can free download to used and the application has the template in both of landscape and portrait, has the page layouts of the e-book design, has the tool look like the Keynote application.

In past of the insert text, graphics, images, or movies, iBooks Author application is easy to do with to drag and drop. When you drag and drop content from Microsoft word to put in the e-book window the content will be around the image automatically. In addition, the advance user can be used to adobe InDesign file and ePub to edit in ibooks author and can be insert the graph, table content in the e-book.

The user of iBooks Author application can be design text by using a custom font For a mathematical, can be design the book is elegant mathematical expressions by LaTeX or MathML as well as to add the image or audio for interesting of e-book.

For the use of Multitouch e-book, the instructors can be export the e-book in iBooks format for share in iTunes U or for the iPad or Mac user can be save the file or export the book in PDF file for read or open in other devices.

## **1.2 The using of Apple Technology to create the video content (video clip)**

The research has found that, the instructors uses the 3 methods in the create the video content :

### **1.2.1 Creation of the video content by Mac**

The creation of the video content for support on Flipped classroom by Mac, most of user to use in MacBook, Mac Book Air, and MacBook Pro for recode of the instructional media. Because, the user say that the MacBook, Mac Book Air, and MacBook Pro as the hardware used on a routine basis and there are data or information for create the instructional media and can carry it easily and recode the instructional media at the residence.

However, the research has found that the instructors want to use the special software such as: software of the editing of the image and audio, software of the architecture and engineering that used iMac or Mac Pro in recode video clip. The creation of the video clip by Mac (MacBook, Mac Book Air, MacBook Pro, iMac, Mac Pro and Mac Mini) it was found that there is a way to do the following:

#### **a) The use of PhotoBooth Application to record of the video clip**

The PhotoBooth Application is installed with the every Mac (MacBook, Mac Book Air, MacBook Pro, iMac). This can be used to record the image or animation by the PhotoBooth application is working together with the front camera (facetime). The user can be use PhotoBooth application take a photo. This is the start of the video content that the instructor can make the video by self.

#### **b) The use of QuickTime X to record of the screen capture with the lecture**

The QuickTime X is installed with the MAC OS X that can use the feature screen recording for recode the screen capture with the lecture and slide presentation and then can be convert the file to the video content for the instructional media. The using of the QuickTime X to record the screen capture with the lecture it easy to use. For the record of the voice of lecture, usually the Mac (macbook, mac book air, macbook pro, and imac) will have a microphone installed in the machine, but if instructors want to better audio quality must install microphone to separate the via USB port.

#### **c) The use of other software or application to record of the screen capture with the lecture**

For the other software or application to record of the screen capture with the lecture. The ScreenFlow for Mac and Camtasia Relay or Camtasia Studio for Mac is popular software for create the video clip. The ScreenFlow for Mac is the professional software that there is many feature in the of the screen capture. The highlight of the ScreenFlow for Mac is a feature that is used to zoom in and zoom out the image during the lectures and can also edit the video clip.

### **1.2.2 Creation of the video content by the iPad**

The research has found that, in 2 to 3 years ago the instructors create the video content by iPad. The Apple has developed a high quality iPad. The iPad is a camera and have the application that supports recording the video and to have the applications. The instructors using iPad in the teaching and learning and create the video content. However, found that there are 5 format for using iPad record the video clip:

#### **a) Use the Camera application installed with the iOS to record the video clip**

The instructors can use the Camera application by using the record feature video for record the lecture and then export to the instructional media in video clip format. That is the basis in the record the video clip for the teaching and learning. Everyone can do it just use the front of the camera of your iPad for record the video clip.

#### **b) Use the Explain Everything application to record of the iPad screen capture with the lecture**

The instructors can use other application to record of the iPad screen capture with the lecture which will have a record the screen capture of the iPad and then export it as a video clip. Explain Everything application is the popular application to record the video clip. Explain Everything application has a feature that can record the screen capture of the iPad during writing the message and be able to insert a picture to the video clip. This application that easy to use and to fast to do the video clip that suitable for courses that you want to write to describe the process and do not need to see the face of the instructor during the recording video clip. Explain Everything application is sold at \$3.99 for the users that you want to use in the advance level.

#### **c) Use the iPad with the Robot Swivl and Swivl Capture application to record the video clip with the lecture**

The using of the iPad with the Robot Swivl and Swivl Capture application is a new innovation in 2016. The instructors can use the Swivl Capture application to control the iPad to pan, tilt, and tracking the instructors during the lecture in the class. In the present, the Robot Swivl is available for 2 model and it have the potential to two important functions: 1) to automatically moving or tracking the instructors by detector from the microphone

with the infrared system in neck strap instructors. And 2) to record the audio from the microphone and then sent the audio to the iPad to create the video clip.

**d) Use the iPad with Touchcast application to record video clip with the lecture**

The using of the iPad with Touchcast application is a new innovation has found that: the instructors in King Mongkut's University of Technology Thonburi can use the iPad with Touchcast application in record the video clip on Green screen that the instructors can change the background of a image or animation. The Touchcast application, There are features in the auto cue as a move of the text on the left of the iPad which is facilities in the record the video clip allows the instructors remember or read the content to the lecture. Moreover, the touchcast application can use with the iPad with the Robot Swivl and Swivl Capture application in record the video clip and then can upload the video clip file to Cloud system to the learner.

**e) Use the iPad connect with the computer PC in duplication for record the screen capture with the lecture by Camtasia Studio for computer PC**

The research has found that: the instructor that has the team record the video clip for use to the instructional media. The using of the iPad connect with the computer PC in duplication for record the screen capture with the lecture by Camtasia Studio for computer PC by using the microphone to support the creation of the video clip. For this recording method is a way to record the video clip by use the Camtasia Studio Software in the computer PC to record the video clip but this way have a limitation in use to the editing of the video clip and send to the data to the database Knowledge Management (LMS) system.

**1.2.3 Creation of the video content by iPhone**

The iPhone is smart phone that there are camera and the applications to supports recording the video clip. The instructors can use iPhone to record the video clip, especially to record the summary lecture video clip to support the flipped classroom by self. The 2015 iPhone edition can record the high quality video clip. The research has found that, the use of iPhone to record the video clip can divide into 2 format that following:

**a) Use the Camera application that installed with the iOS to record the video clip**

The instructors can use the Camera application to record the video clip by using the feature to record the video as well as the use of iPad to record the video clip.

**b) Use the iPhone with the Robot Swivl and Swivl Capture application to record the video clip with the lecture.**

The use of iPhone with the Robot Swivl and Swivl Capture application to record the video clip with the lecture that can use same with the iPad. But use of iPhone with the Robot Swivl and Swivl Capture application it is not as popular because the screen of iPhone too small and the memory less than the iPad.

**2. THE USING OF APPLE TECHNOLOGY TO SUPPORT ON FLIPPED CLASSROOM IN THE CLASS**

**2.1 The using of Mac to support on flipped Classroom in the class**

The research has found that, the instructors that use Mac or can call "Mac User" just use the Mac to create the activity in the class. Mac user present the instructional media by Keynote Presentation or open the video content with the Quicktime application and connect the Mac with the website by Safari application and record the lecture with the Camtasia Studio application. The instructors are the activity in the class with the Kahoot which is a website that will help the learner to answer the questions in the classroom. The instructors will be connected the Mac to the network and to display in the screen projector.

**2.2 The using of iPad to support on flipped Classroom in the class**

For the using of iPad to support on flipped Classroom in the class would like to present in 3 parts that following:

**2.2.1 The using of iPad with Apple development of application to support activity in the class**

The applications on iPad can be support activity in the class. The research has found that the Pages, Numbers, and Keynote applications is application support the instructor and the learner by the Page application the user can create the report by insert image, video, and graphic, Numbers application can create the presentation in table and chart and Keynote application can create the presentation media. The application these are designed for iOS and Mac and can be used in Microsoft office system. And the document can share from Mac to computer PC moreover, there have to share the document to iCloud that the students can open from any device in iOS system.

### 2.2.2 The using of iPad with other development of applications to support activity in the class

The iPad is a product of Apple but can be download applications for other development of applications such as: Google applications for searching the data, Aurasma applications can using with the AR technique in teaching and learning, and QR Code Scan applications for link to the database.

### 2.2.3 The using of iPad with Web-Browsing applications for link to the website to support activity in the class

The research has found that, the instructors using many activities in the class and define the learner to use the iPad with web-browsing application to link to the website in the class such as: Prizi, Kahoot, Edupuzzle, Padlet, Moodle, Facebook, Blogger, Google Drive, Google Site, and Pingpong Spot Networking.

### 2.3 The using of Apple TV to support activity in the class

The research has found that, many university such as: Chulalongkorn University, Bangkok University, University of the Thai Chamber of Commerce, King Mongkut's University of Technology Thonburi and Rangsit University has an Apple TV to use to support the activities in the class by connected with screen projector of the classroom. The Apple TV can connect with the iPad and iPhone on wireless communication so the instructors can organize the activities to students from the corner of one of the classroom.

### 2.4 The using knowledge management system iTunes U to support on flipped classroom

The research has found that, even though some university will have iTunes U but the instructors also create the course iTunes U of private course to support on flipped classroom. The iTunes U can be help the instructors to create content, video clip, and Multi-touch Book to the students. The new iTunes U version have a feature assignment the student to do activity and can give the score to the students.

### 2.5 Example of the proceed and activity of the using of Apple Technology to support on Flipped Classroom in the class

The example of the proceed and activity of the using of Apple Technology to support on Flipped Classroom in the class, present in the table are as follows:

**Table 1:** Shows the format of iPad using with the activity in class

Subject of Instructional	Proceed and Activity
Story Telling	<ol style="list-style-type: none"> <li>1. The instructors assigned to the learner to the video on the title "Edit of the image and image composition" before the class.</li> <li>2. In Class, the instructors divided the learner into groups of 3 people each person provides an iPad that is provided in one per group.</li> <li>3. The instructors determines the standard layout and tell the learner such as: a woman sitting and then there was one man came forward and then submit the one thing to women.</li> <li>4. The instructors assignment the learner to take the story in a format that the learner to create manually such as: music video, shot film any time to take it is within 30 minutes.</li> <li>5. The learners to the shooting by selecting a friend in the group to acting by using the camera application in the iPad for recording the video.</li> <li>6. The learner can take it with 3 iPad, for will be the different view of the video.</li> <li>7. The learner come back to the class, and then used the Feature AirDrop in iPad for sent the video clip to editing machine.</li> <li>8. The instructors guides the iMovie application to the learner, and then configure the learner to take 1 hours in the editing video for story telling.</li> <li>9. The instructors facilitate to the learner about the special tool for video editing.</li> </ol>

**Table 1:** Shows the format of iPad using with the activity in class (Con.)

Subject of Instructional	Proceed and Activity
Calculation	<ol style="list-style-type: none"> <li>1. The instructors assigned to the learner to the video on the title “calculate the arithmetic” in Youtube channel before the class.</li> <li>2. In Class, the instructors assigned to the learner using the Safari application on iPad for entry to the Google site.</li> <li>3. The instructors check the name of the learner through google site.</li> <li>4. The instructors motivate the learner by Kahoot</li> <li>5. The instructors assigned to the learner edit the question of mathematical by sub-groups, A sub-group of 5 people.</li> <li>6. The instructors using Notability application on iPad for find the answer of the question of mathematical and then share to the learner on apple TV by connect the iPad of the instructors with the airplay system to display the image to the projector screen.</li> <li>7. The instructors facilitate to the learner and used the camera application for the take the photo in the calculation of the learner and then using Notability application for display and share the image to the projector screen.</li> <li>8. The instructors summaries the content of the study and assigned to the learner sent the work via Google Site to the instructors.</li> </ol>
The History of Architecture	<ol style="list-style-type: none"> <li>1. The instructors assigned to the learner to the video on the title “The History of Architecture” in YouTube channel before the class.</li> <li>2. In Class, the instructors assigned to the learner using the Safari application on iPad for entry to the content.</li> <li>3. The instructors to pre-test through the e-clicker application.</li> <li>4. The instructors assigned to the learner using the Aurasma application link to the virtual reality of the door in the old age architecture.</li> <li>5. The instructors assigned to the learner using the Photoshop application create a layer of the architecture structure as a separate ground floor classified by color.</li> <li>6. The instructors to post-test through the e-clicker application.</li> </ol>

### **Past 2: Problems and obstacles of the using of Apple technology to support on Flipped Classroom approach in higher education of Thailand**

The research has found that the problems and obstacles of the using of Apple technology to support on Flipped Classroom approach in higher education of Thailand in 3 issues:



### **2.1 The price of the devices too expensive**

The MacBook, Mac Book Air, MacBook Pro, iMac, Mac Pro, Mac Mini, iPad, and iPhone is too expensive more than the other devices. And there is a problem with the support devices of the Apple is too expensive.

Many instructors agree that the Apple Technology are very stable and there is a safety in use. However, in the university has a policy to support the device that is the Apple Technology to the instructors will not have this problem such as: University of the Thai Chamber of Commerce has a policy that offers the iPad to the instructors to use as a device in the create of the instructional media and use to the teaching and learning. It also provides the iPad to the students in the university. That the University of the Thai Chamber of Commerce is the university in Apple Technology and has a policy to create the digital content.

### **2.2 The unfamiliarity in use of the Apple Technology**

The research has found that, iPhone is device for the instructors just started to use the Apple Technology to teaching and learning. The first time for the instructors need to the Mac for create the instructional media that found the unfamiliarity in use of the Apple Technology even if the instructor will have the skills to use the computer PC. The many university of Thailand there is cooperation with the Apple by offers a U.store in the university for sell the apple products and there are also the staffs for the consultation to the using Apple Technology.

### **2.3 The policy of the university affecting to the using of the Apple Technology of the students**

The research has found that, University of the Thai Chamber of Commerce and Rangsit University have a policy that offers the iPad to the students that this allows the students to have the device to used in the learning and to reduce the trouble with the display in a different format .

## **Part 3: The problems and obstacles in Flipped Classroom approach in higher education of Thailand**

For the problems and obstacles in Flipped Classroom can divide into 2 issues:

### **3.1 THE UNFAMILIARITY OF FLIPPED CLASSROOM APPROACH OF INSTRUCTORS**

The first time that the instructors to use the Flipped Classroom approach in teaching and learning that found the problems in the unfamiliarity of the Flipped Classroom technique. Especially the instructional that teach in team instructors because the instructors have a difference in understanding of the Flipped Classroom technique. The problem is clearly if the instructors still the teaching by lecture technique.

There are little instructors in the high education to use the Flipped Classroom. The instructors of school of Engineer in Chulalongkorn University that use the Flipped Classroom for 3 years ago and use in the basic courses such as: Math courses and found that, there are video clip more than 90 hour to the students to watch before the class. The Flipped Classroom to use in the basic courses of School of Engineer because there is a problem with not enough time to the lecture to the students.

### **3.2 The discipline of the students affecting to the Flipped Classroom**

Thai students do not watch the video clip before the class even though the instructors will motivate the score to the students. For the way to this resolve, the instructors assign to the students ask the questions about the video clip and then motivate by the award to the students.

## **RECOMMENDATION**

1. The research has found that, Apple TV to use to support the activities in the class by connected with screen projector of the classroom. The Apple TV can connect with the iPad and iPhone on wireless communication so the instructors can organize the activities to students from the corner of one of the classroom. The cost is not very high of Apple TV if compare with the other Apple devices. So, Apple TV is the way to success in the Active Learning or flipped Learning.

2. The research has found that, The using of the iPad with the Robot Swivl and Swivl Capture application is a new innovation in 2016. The instructors can use the Swivl Capture application to control the iPad to pan , tile, and tracking the instructors during the lecture in the class. This technology of Apple to support the instructors to create the video clip and can using with the Cloud system.

3. For the study in the future, to study in the using of the Android Technology with the computer PC for support on Flipped Classroom to expand the body of knowledge. Moreover, to study in the quantitative research

about the survey of needs in using of Apple Technology to support on Flipped Classroom in students. The results that support the instructors to select technology to use in the Flipped Classroom.

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## **THE USE OF INFORMATION TECHNOLOGIES BY THE STUDENTS OF ANADOLU UNIVERSITY PORSUK VOCATIONAL SCHOOL OF HIGHER EDUCATION RADIO AND TELEVISION TECHNOLOGY AND PRINTING AND PUBLISHING TECHNOLOGIES DEPARTMENTS**

Prof. Dr. Emine Demiray  
Anadolu University Turkey  
edemiray@anadolu.edu.tr

Asst. Prof. Dr. Serpil Dünder  
Anadolu University Turkey  
sdunder@anadolu.edu.tr

### **ABSTRACT**

This study aims to examine the use of information technology by the students of Radio and Television Technology and Printing and Publishing Technologies departments. To this end, a questionnaire consisting of 25 questions have been given to the students, and the results have been analyzed through the software SPSS 23. Later, frequency and cross tables of the data have been taken, with reference to which the data have been analyzed and interpreted. As a result, the study defines what the information technology devices owned and most frequently used by the students are, their motives for using these devices and how much time they spend on them, and their opinions about information technology and their perceptions of the contributions of these devices to their personal development.

**Key words:** Anadolu University, informatics, information technology, use of information technology.

### **INTRODUCTION**

New media has been shaped after the advances in computer and information technologies since 1970s. for this reason, new media is called as information and communication technologies as well (Törenli, 2005, p: 88 ). Computer use has increased particularly in the last decade of twentieth century. This increase has happened as a result of both its spread all around the world, and its having a diversified fields of use. Information technologies have appeared as a result of developments in computer sector including various computer software and hardware technologies to store, transmit, and process the data. However, today, information technologies (IT) are not limited to setting computer systems, and structuring software. From an up to date perspective, IT includes various components including computer hardware, software, computer networks and communication technologies, labor force educated in this field, procedures, the Internet, intranet and communication tools. Information sector is a sector which has an extraordinary significance in modern world.

Information technologies are the technologies that comprise all technologies including communication and computers, which are used to communicate information from one place to another, in collecting, storing, and processing information. Information technology is a term used to describe all types of information services provided through communication and computer systems. In addition to easing our lives from various perspectives, they help us get rid of various useless errands. In other words, they help us have and spend more time for ourselves, and focus on our lives. Information technologies are related to all other disciplines in a way, and as a result of this, they can be applied in various forms and provide an unlimited effect and improvement facility for us. Information technologies help us reach knowledge which is the raw material of information society anytime and anywhere in a rapid way. In addition to this, they mediate the production of new information sources constantly. Society is reshaped through these technologies (<http://www.msxlab.org>, 20.06.2016).

Performances that appear in virtual platform take the time and place of traditional media in our daily lives, and become a natural part of the flow of our lives. Information technologies, which are called as new media as well, are seen and used almost at every aspect of life including interpersonal communication, business, politics, health, career, games and so on ( Binark, 2007, p:5.).

Socialization that has appeared as a result of new technologies is not independent from gender. Girls-women receive little support in terms of adopting new technologies. Seldom, there have been some female role models or experts. The basic reason of women's not getting into communication with new technologies is economical and time constraints. Purchase and operation expanses of information technologies and communication cause more burden on the budget of women compared to men. Moreover, women do not have enough time for

themselves as they have various responsibilities at home which is a considerable limitation for them. Women rarely have their own computers. Usually, they share computers with their husbands, fathers or children. depending on time and place, adoption of information technologies for women is rather (Dorer, 2006, p: 202.), (Birke and Henry, 1997, p: 232.).

### **Aim and Method**

The aim of this study is to find out information technologies usage of students from Anadolu University Porsuk Vocational School of Higher Education, Radio and Television Technologies and Printing and Publishing Technologies Departments. In order to fulfil this aim a questionnaire including 25 questions was applied to students in April 2016. Questions of "Turkish Statistical Institute (TSI) Households Information Technologies Utilization Survey" were benefitted during the preparation of questionnaire items. Total number of both departments were 238. 138 students from these two departments answered the questionnaire. SPSS 23 statistical package program was used to analyze the results, and then frequency and cross tables of the data were taken. Data were analyzed through these tables. Questionnaire had to parts; first part had questions aimed to collect information about demographic characteristics of students, and second part had questions relate to information technology usage of students. As a result, information technology devices the students had; the most frequently used device; the frequency of their use of these devices; personal usage aims; their participation to their personal developments; and their opinions on information technologies were identified.

### **FINDINGS and DISCUSSION**

Information technology usages of students from Anadolu University Porsuk Vocational School of Higher Education, Radio and Television Technologies and Printing and Publishing Technologies Departments were found out in the study. General information about Anadolu University Porsuk Vocational School of Higher Education and the departments the study was conducted is as follows:

**General Information:** Porsuk Vocational School started offering education in 2001 with five programs, i.e. Computer Technology and Programming, Highway Transportation and Traffic, Design and Printing-Publishing, Radio-Television Techniques and Railroad Construction.

By 2012, there are eight education programs in the Vocational School. These programs are: Printing and Publishing Technologies, Computer Programming, Generation, Transmission and Distri.of Ele, Graphic Design, Mechatronics, Mechanics Drawing Construction, Radio-Television Technology, Building Inspection.

Porsuk Vocational School serves in a building, restored by the University, on Porsuk Campus situated on Basın Şehitleri Street. Vocational school trains well-equipped, skilled technical staff for the industry. The normal period of study in all programs is four semesters. During their study, students are equipped with not only theoretical knowledge but also laboratory practice. The laboratories are designed to meet both technological and physical needs of each program.

**Program in Printing and Publishing Technologies:** The printing industry is the oldest occupation in the world and this industry is developing with information technology. Nowadays, rapid changes in printing technologies increase the demand for a qualified labor force in printing industry. The aim of this program is to train individuals to accomplish the operations for designing, printing, publishing, and marketing communications of these products so as to work in printing - publishing organizations.

**Occupational Profiles of Graduates:** In the light of their qualifications, the graduates may be employed in printing and publishing sector and related institutions.

**Radio and Television Technology:** The maintenance and application of equipment of audio and video production and editing in radio and television studios and broadcast centers are thought. The workshops are provided by the Open Educational Faculty Radio and TV Production Center Studios located in campus. The latest technology is applied in studios for educational purposes. Our students have an opportunity to practice their theoretical knowledge and to be integrated to business life by getting training in important enterprises about Radio and Television industry (TRT and Private Radio Television production and broadcasting centers). Students have to get training in total 30 days. The graduates get Radio & TV Technician title.

**Occupational Profiles of Graduates:** Graduates of the Radio Television Program, in accordance with the qualifications gained, are employed in radio television production and broadcasting sectors.

Number of the students in departments the study was conducted are given in Table 1.

**Table 1: Departments and Number of their Students**

Departments	Number of Students		
	Female	Male	Total
Radio and Television Technology	58	89	147
Printing and Publishing Technologies	40	51	91
<b>Total</b>	98	140	238

**Demographic characteristics of participants:** There were 238 students in both departments. 98 of these students were female, and 140 male. 138 students, 67 (48,6%) of which were female and 71 (51,4%) male joined the study. 40,6% of students were freshman and 59,4% were sophomore students. As for departments, 48,2% of students were from Printing and Publishing Technologies department, and 51,8% were from Radio and Television Technology department.

89,9% of participants were between 19-22 years old. Only 2,2% of them were 25 and above, and all of them were female. As to the school they had graduated from prior to their departments, 117 students had graduated from vocational high school and Anatolian vocational high school; 21 students had graduated from multi-program high school. Majority of students had received vocational education during their high school education. 56,5 of the participants stated that they were living in metropolitan cities with their families; 31,9 stated living in cities and 6,4% of participants stated that they were living in villages. All of the participants were single. 82,6% of them was not working at anywhere, and 17,4% of them were working. In other words, they were both studying and working at the same time. 8,7% of these employed students were female.

**Information technology usages of the students who participated in the study:** Firstly, students were asked, “Which information technology do you personally possess?” The most frequently possessed information technology was smart mobile phone with a percentage of 88,4%. It was followed by desktop computers with 58,7%. Lap tops had a percentage of 55,1%; mobile phones, 42,8; digital cameras, 39,1%; tablet computers and mpmp4 players, 34,8%; printers, 23,2%; game consoles, 18,8%; and scanners had a percentage of 13,8%. Information technology possession rate of students was relatively high. There was not any significant difference between women and men in terms of possession of information technologies. The most apparent difference was seen in the possession of game consoles. 15,2% of males had a game console whereas the rate of women having a game console was only 3,6%.

Second question of the questionnaire was, “Which information technology do use more?” 84,7% of students stated that they used smart mobile phones the most. It was followed by lap tops with 50,4%; desktop computers with 32,1%; and tablet computers with 27%. As for the difference between women and men, the most significant difference was observed in terms of usage of desktop computers. 8,7% of women stated that they were using desktop while the rate of men using desktop was 23,2%. The rate of using lap top was 21,7% for men and 28,3% for women. On the other hand, the rate of using tablet computers was 10,9% for women and 15,9% for men. Deriving from these results, it could be sad that desktops and tablets were preferred by men whereas laptops were preferred by women. As for other information technology tools, there wasn't any significant difference between men and women.

Another question asked in the questionnaire was, “Do you have internet access at home or the place where you live?” 43,5% of women and 47,1% of men answered “yes” for this question. As for the rate of the ones having their own computer, 36,2% of women and 40,6% of men stated that they had their own computers. The device the students preferred for internet access was smart mobile phones with a rate of 54,7%. It was followed by laptops with a rate of 24,7%. The rate of desktops in terms of internet access was 13,7% and tablets 6,8%. The most significant difference in terms of internet access of students regarding gender was in the use of desktops. The rate of it was 5,8% for women and 13% for men. The other devices did not reveal any significant difference between men and women. The students were also asked where they used their desktops, laptops, tablets and smart phones with internet access the most. The highest rate was at home or dormitory with 35,2%. It was followed by everywhere every time with 24,1%. At school was at the third rank with the rate of 15,3%. Students preferred to use their devices with internet access at home or dormitory. The most significant difference

between men and women in terms of the place the internet accessed was school with the rate of 10,1% for woman and 18,8% for man; and everywhere and every time with the rate of 26,8% for women and 18,8% for men. No significant difference was found for other choices.

The students were asked how often they used the Internet as well. 55,8% of students stated that they had used it for seven and more years. Rate of the woman for this answer was 28,3%, and 27,5% for men. 19,6% of participants 8% of which were women and 11,6% was men stated that they used the Internet for five-six years. As for the rate of the participants stating that they used the Internet for one year or below, it was 1,4% for women and 2,2% for men. Participants also answered the question of how long they used the internet. The highest rate for this question was three-four hours a day with 26,8%. It was followed by nine-ten hours and more a day with 18,8%. There wasn't any significant difference between men and women in terms of these rates. As for the rate of the ones using the internet one hour or less a day, it was 1,4% for women and 3,6% for men. The highest rate regarding the duration of using computer and the internet for their lessons per day was 37% for less than one hour a day. One-two hours a day was at the second rank with 34,1%. 18,1% of women stated that they spent one-two hours using computer or internet for their lessons; however, 23,9% of men stated that they spent less than one hour for it. It can be derived from these results that women used computer and the internet more than men for their lessons.

As for using the internet for personal aims, social networks had the highest rate with 87%. Downloading and listening to music followed this with a rate of 70,3%; reading newspapers and magazines with 60,1%; following up to date news with 52,9%; sending and receiving emails with 52,2%; watching movies and short films and online chats with 48,6%. The lowest rate of using internet for personal aims was 2,9% for creating and saving their own weblogs or blog pages, and joining chat rooms, news groups or online forums with 6,5%. The most distinctive differences between women and men in terms using the internet for personal reasons included listening to radio and watching TV through the Internet with a rate of 20,3% for women and 10,9% for men; getting information about some products and services and shopping through the Internet with a rate of 15,9% for women and 8,7% for men; as for reading e-book, the rate of women was 10,9% and men's was 2,2%. The other personal aims for using the Internet were learning something, getting informed about school and lessons which had a rate of 23,9% for women, and 16,7% for men; playing games with someone through the internet had a rate of 18,1% for men and 10,1% for women; downloading computer games and videos, and system updates had a rate of 16,7% for men and 8,7% for women. These findings showed that students used the internet for personal aims with regards to their social gender roles.

Asking which sites students entered, it was found out that search engines (such as google, etc.) had the first rank with 66,2%. Social media sites followed this preference with a rate of 60,3%; online shopping websites with 47,1%; and media web sites with 39,7%. Differences between men and women in terms of the web sites they visited were seen at shopping web sites with 31,2% for women and 15,2% for men; sports sites with 26,3% for men and 9,4% for women; game, entertainment-chatting web sites with 26,1% for men and 9,1% for women. E-state web page was followed by 9,4% of women, and 18,8% of men. Educational web pages were followed by 16,7% of women and 10,9% of men, and sites related to technological knowledge were followed by 5,1 of women and 10,9% of men. Considering the web pages the students preferred, it can be seen that their preferences were identified by social gender roles. Women mostly preferred shopping and education sites whereas men preferred sports, e-state, game-entertainment-chatting sites and sites that required technical knowledge at a high rate.

As to the question which materials they preferred while studying lesson, 62,3% of the participants stated that they preferred computer programs and the internet, and 34,1% of them said they preferred printed materials. The rate of the ones who stated that they preferred both was 3,6%. There wasn't any significant difference between man and woman regarding this question. They were also asked to tell their preferences in terms of personal banking or other official operations. 57,2 of the participants stated that they preferred face to face operations regarding these areas. There wasn't any significant difference between men and women regarding this question as well. The most important factor that hindered them to connect the Internet was not having enough time with a rate of 49,6%; not wanting to use the internet as it distracted them from social life; 31,1% for security and secrecy worries; and 28,9% because of quota limitation and economic reasons. Students want to use the internet more; however, the reasons they stated prevent this. The highest differences between men and women were seen at security and secrecy worries with a rate of 18,1% for women and 12,3% for men; connection costs and economic reasons with a rate of 12,3% for women and 9,4% for men; and necessity of studying lesson with 8,7% for women and 11,6% for men.

Individual contributions of the Internet and computer usage were asked to the participants as well. Answers of the students for this question are shown in Table 2.

**Table 2: What are the individual contributions of using computer and the Internet for students?**

Individual Contributions	Woman		Man		Total	
	Yes	No	Yes	No	Yes	No
<b>It made my life easier.</b>	%46.4	%0.7	%50	%0.7	%96.4	%1.4
<b>It saved my time.</b>	%41.3	%5.1	%42	%8	%83.3	%13
<b>It helped me have a job and occupation.</b>	%15.2	%31.2	%14.5	%32.6	%29.7	%63.8
<b>It had positive contributions in using my spare times.</b>	%41.3	%3.6	%42.8	%5.8	%84.1	%9.4
<b>It eased my reaching to information.</b>	%44.2	%2.2	%48.6	%0.7	%92.8	%2.9
<b>It provided communication between me and my environment.</b>	%37.7	%8.7	%34.8	%14.5	%72.5	%23.2
<b>It had positive contributions to my education.</b>	%38.4	%8	%39.1	%10.1	%77.5	%18.1
<b>It increased my professional knowledge.</b>	%33.3	%13	%37	%10.9	%70.3	%23.9
<b>It eased my house chores.</b>	%16.7	%29.7	%15.2	%30.4	%31.9	%60.1
<b>It increased my success at my lessons.</b>	%26.1	%19.6	%24.6	%21	%50.7	%40.6
<b>It increased my communication and language skills.</b>	%34.8	%10.1	%33.3	%15.9	%68.1	%26.1
<b>It helped me learn different cultures.</b>	%43.5	%2.9	%39.9	%9.4	%83.3	%12.3
<b>It helped me reach resources related to my lessons.</b>	%45.7	%1.4	%43.5	%5.8	%89.1	%7.2
<b>It eased my studying lesson.</b>	%34.8	%11.6	%31.9	%17.4	%66.7	%29
<b>It helped me find partner and friends.</b>	%21	%26.1	%26.8	%22.5	%47.8	%48.6

Regarding the contributions of using computers and the internet individually, 96,4% of stated that it eased their lives as the highest one among other answers. The answer, “it eased my reaching to information” was the second highest one with 92.8%. the rates of other answers were as follows: “it helped me reach resources related to my lessons” had a rate of 89,1%; “it had positive contributions in using my spare times” had a rate of 84,1%; “it helped me learn different cultures”, and “it saved my time” both had 83,3% for each; “it had positive contributions to my education” had 77,5%; and “it provide communication between me and my environment” had a rate of 72,5 The answers with lowest rate of yeses were 29,7% for “it helped me have a job and occupation” and 31,9% for “it eased my house chores” Individual preferences of using computers and the internet did not reveal any significant difference in terms of social genders for students. The most considerable differences among the yeses of students were seen at “it helped me find partner and friend” with a rate of 21% for women and 26,8% for men; “it helped me learn different cultures” with a rate of 43,5% for women and 39,9% for men; “it eased my reaching to information” with a rate of 44,2% for women and 48,6% for men; and “it eased my life” with 46,4% for women and 50% for men.

Students were asked to state their opinions on information technologies as well. Responses of students regarding this question are shown in Table 3.

**Table 3: Opinions of Students on Information Technologies**

Opinions on Information Technologies	Woman		Man		Total	
	Yes	No	Yes	Yes	No	Yes
<b>Information technology products have an important role in my life.</b>	%40.6	%7.2	%44.2	%7.2	%84.8	%14.4
<b>I don't like information technology products but I use them as I need them.</b>	%10.9	%37	%17.4	%34.1	%28.3	%71.1
<b>Information technology products are far for me.</b>	%5.1	%41.3	%10.1	%35.5	%15.2	%76.8
<b>I am afraid of using information technology products.</b>	%2.9	%43.5	%11.6	%34.8	%14.5	%78.3
<b>I don't have enough information about information technology products. I use them in a limited way.</b>	%14.5	%31.9	%23.2	%27.5	%37.7	%59.4
<b>Using information technology products makes me prestigious.</b>	%12.3	%34.8	%22.5	%29	%34.8	%63.8
<b>I follow new information technology products closely.</b>	%25.4	%22.5	%32.6	%18.1	%58	%40.6

<b>I buy new information technology products as soon as they are on sale.</b>	%2.9	%44.9	%13	%38.4	%15.9	%83.3
<b>Information technology products are inevitable for my education.</b>	%26.8	%21	%20.3	%31.2	%47.1	%52.2
<b>Education given through information technology products is more beneficial than face to face education.</b>	%6.5	%39.9	%15.2	%36.2	%21.7	%76.1
<b>Information technology products are at the top of the list of the things I would like to buy.</b>	%9.4	%37.7	%17.4	%34.1	%26.8	%71.7

Asked their opinions on information technologies, students stated their opinions as, “Information technology products have an important role in my life” with a rate of 84,8% saying, “yes” as the highest one. It was followed by “I follow new information technology products closely” with 58%; “Information technology products are inevitable for my education” with 47,1%; “I don’t have enough information about information technology products. I use them in a limited way” with 37,7%; and “using information technology products makes me prestigious” with a rate of 34,8%. The lowest rate of “yes” responses were “I am afraid of using information technology products” with 14,5% and “Information technology products are far for me” with 15,2%. Comparing individual contributions of using computers and the Internet all of the statements related to this revealed significant differences between women and men considering social gender. The highest rate of the differences were seen at “using information technology products makes me prestigious” with a rate of 12,3% for women and 22,5% for men; “I don’t have enough information about information technology products. I use them in a limited way” with 14,5% for women and 23,2% for men; “I buy new information technology products as soon as they are on sale” with 2,9% for women and 13% for men; “education given through information technology products is more beneficial than face to face education” with 6,5% for women and 15,2% for men; “information technology products are at the top of the list of the things I would like to buy” with 9,4% for women and 17,4% for men; and “I follow new information technology products closely” with 25,4% for women and 32,6% for men. The lowest rate of difference was seen at “information technology products have an important role in my life” with 40,6% for women and 44,2% for men.

## CONCLUSION

As a result of the study conducted with students from Anadolu University Porsuk Vocational School of Higher Education, Radio and Television Technologies and Printing and Publishing Technologies Departments to find out their information technology usages, it was seen that participants of the study yielded information technologies, and their possession rate of these technologies was relatively high. However, although they stated that information technology products had an important role in their lives with a rate of 84,8%, their mostly possessed, preferred and used information technology device for internet access was smart mobile phone. They used the internet for personal aims including using social networks with a rate of 87% and downloading and listening to music with a rate of 70,3%. This showed that they did not use information technologies for personal development, educational aims and contribution to their professional lives at a sufficient level.

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## THE VALIDITY AND RELIABILITY STUDY OF THE VIEWS ON TEACHING PROFESSION SCALE

Mediha SARI  
Faculty of Education  
Cukurova University Turkey  
medihasari@gmail.com

Ece YOLCU  
Faculty of Education  
Cukurova University Turkey  
eduser@cu.edu.tr

### ABSTRACT

The main aim of this study was to re-analyze the reliability and validity of The Views on Teaching Profession Scale (VTS) developed by Yolcu and Sari (2014), present a valid assessing tool for the researchers will conduct similar studies. VTS, a five point Likert scale, consisted of 32 items and four dimensions related to professional and technician teaching approaches. In order to conduct the reliability and validity studies, the form was applied to 245 pre-service teachers 155 women (%63.5) and 89 men (%36.5). Through these studies, exploratory and confirmatory factor analyses were implemented. The results indicate that VTS is appropriate and valid and reliable tool to use.

**Keywords:** Professional teacher, technician teacher, teacher education

### INTRODUCTION

The seek for quality in teacher education is the primary of the topics remained on the agenda of Turkish education system. Which qualities should a teacher possess and how can we provide them with these qualities? These qualities are explained in different ways by various approaches. One of these approaches is professional-technician teaching approach. It is possible to see the reflections of states'ideological approaches as much as their educational approaches through this classification. As Althusser (2015) asserted, education is one of the most important apparatuses state uses to impose its legitimacy, fundamental principle and approach on the individuals and gradually the whole society, establish a social order in accordance with its own ideological demands. The most important actors of actualization of this apparatus' functions are certainly teachers. Hence, it is so crucial which approaches these teachers are educated through and they adopt.

According to professional teaching approach, teacher is the person who is a researcher, critical thinker, produces alternative solutions for the problems s/he encounters and can form his/her own ideology and philosophy through education(Yıldırım, 2011). Within this approach the teacher autonomy and authority are dominant in educational applications. As for technician teaching approach, teacher is the one could be gained the competencies regarding effective teaching, needs guidance, controllable, accountable, stick to standards, focuses on implementing rather than thinking (Yıldırım, 2011; Ünal, 2005). Giroux (2011) and Maguire (2010) indicate that this approach makes teachers only implement the instructions through curriculum, prepare students for exam and turns teachers into technicians gradually deskilling them.

By which paradigm a teacher approaches his/her profession is also among the basic identifiers of how learning-teaching processes will be organized. Therefore, in terms of forming learning-teaching processes in schools in line with contemporary education, it is crucial to determine how teachers approach the profession, analyze this viewpoint and tendencies. However, there is not any assessing tool other than The Views on Teaching Profession Scale by Yolcu and Sari (2014) to be used in determination of teachers' views on profession within the frame of professional-technician teaching conflict. Considering this necessity, the main aim of this study was to re-analyze the reliability and validity of VTS, present a valid assessing tool for the researchers will conduct similar studies through a single research.

### METHODOLOGY

#### Study Group

Within this study, 245 pre-service teachers attended to Pedagogical Formation Certificate Program in Çukurova University, Faculty of Education during 2015-2016 Education Year, participated. While 138 (56.3%) of pre-service teachers were seniors, 65 (26.5%) of them were graduates; 42 pre-service teachers did not mention their graduation status. Whereas 155 (63.5%) of the participants were women and 89 (36.5%) of them were men, the participants' distribution in terms of departments were as: 37 mathematics, 52 literature, 31 biology, 32 medicine,

34 theology, 27 physics, 32 chemistry. The pre-service teachers', whose age range was changing between 20-44, age average was 25.73 and standard deviation was 4.31.

### **Data Collection Instrument**

The main purpose of this study was to test the reliability and validity of The Views on Teaching Profession Scale (VTS) developed by Yolcu and Sarı (2014) which was used only in one study being re-applied. Yolcu and Sarı conducted exploratory factor analysis through development of VTS, had an assessing tool of 32 items. As a result of factor analyses a structure of four dimensions was obtained: two of them related to technician teacher (exam-orientedness and curriculum dependence) and the other two related to professional teacher (effectiveness in learning-teaching process and self-development). The communalities belong to the items in the scale were between .33-.68. The Cronbach Alpha internal consistency coefficients for the four dimensions: for professional teacher-effectiveness in learning-teaching process dimension was .95; for Technician teacher-exam-orientedness was .84; Professional teacher-self-development was .82 and for technician teacher-curriculum dependence was .80. Four sub-scales explained 58.01% of total variance.

Answered on a five point Likert scale (1. Not important at all – 5. Very important), VTS was aimed for determining the importance level teachers or pre-service teachers give to the statements regarding professional and technician teaching approaches. There are 19 items concerning professional teaching approach. Fourteen of these were related to effectiveness in learning-teaching process (PT-1) while the other 5 were concerned with self-development (PT2). On the other hand, 7 of the 13 items in the scale regarding technician teaching approach were under exam-orientedness (TT-1) dimension and 6 of them were under curriculum dependence (TT-2) dimension. As every item in the scale was scored by the sub-scale it belonged, there were not any items reversed. However, since the dimensions were related to two different approaches, it was considered appropriate to conduct the analyses based on subscale scores rather than scale total scores. In addition, by two dimensions related to professional teaching being calculated professional teaching scores; by adding scores for two dimensions concerning technician teaching approach technician teaching scores could be generally analyzed.

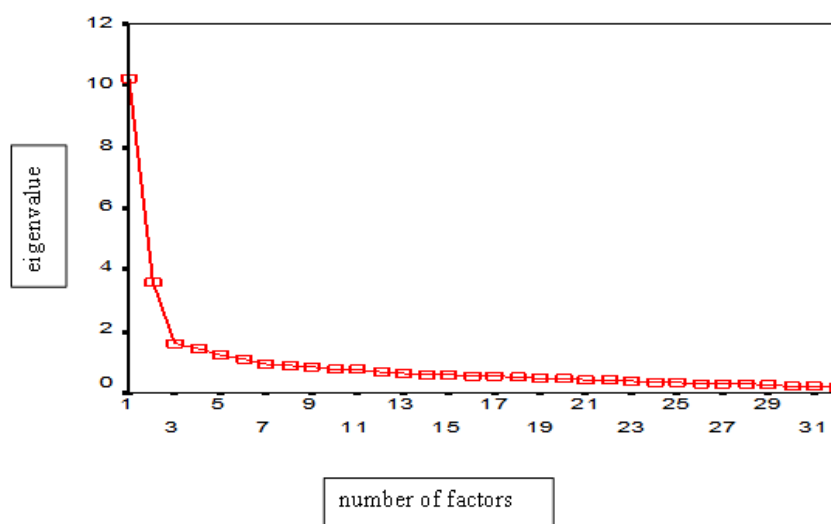
### **Process**

In the scope of VTS' validity and reliability study, the scale with 32 items was applied to 255 pre-service teachers having their pedagogical formation. The data collected was analyzed in terms of appropriateness for analyses after they were computerized. As a result of this analysis 10 pre-service teachers' data found to have extreme values and excluded from the database. According to this, the analyses were conducted on the data gathered from 245 participants. Within the analyses, the items' skewness and kurtosis coefficients, item-total score correlations, items' correlation matrix values, factor loads (min. .30) and the differences between items' factor loads loaded on more than one factor (min. .20) were analyzed. These processes were carried out using principal components factor extraction method and orthogonal (varimax) rotation process (Tabachnick & Fidell, 1996, p.647). To examine the factor structure of VTS, at the beginning of factor analysis, in order to determine if the data was appropriate for factor analysis Kaiser-Meyer-Olkin (KMO) coefficient and Barlett Sphericity test results were analyzed; these values were found to be statistically significant (KMO = .90; Barlett Sphericity test  $\chi^2 = 3818.565$ ,  $df = 496$ ,  $p < .001$ ).

## **FINDINGS**

### **Exploratory Factor Analysis**

Through exploratory factor analysis, when Figure 1 in which the scree plot belong to factors were examined, it could be seen that the break point is around the fourth factor and after this point there is an increase with chart gridline.



**Figure 1:** Screeplot of Factor Eigenvalues

The factors, factor loads, variance percentages explained by factors and item-total score correlations ( $r$ ) with also Cronbach Alpha values acquired by factor and reliability analyses were shown on Table 1.

**Table 1.** The Results of Factor and Reliability Analyses of The Views on Teaching Profession Scale

Item Number	F1 (PT-1)	F2 (TT-1)	F3 (TT-2)	F4 (PT-2)	$r$	$h^2$	Mean	SD
23	.78				.74	.64	4.02	1.10
16	.76				.73	.62	4.08	1.09
24	.76				.75	.64	3.99	1.08
17	.73				.68	.56	4.19	1.03
12	.72				.60	.58	4.14	1.07
13	.72				.68	.56	4.24	0.91
26	.71				.71	.57	4.09	1.01
25	.70				.69	.56	4.07	0.95
20	.66				.58	.46	4.04	1.06
29	.64			.31	.61	.53	4.04	1.02
19	.64				.63	.48	4.09	1.01
32	.57	.32			.60	.45	4.06	1.08
28	.56				.62	.48	4.02	1.04
31	.55	.35			.62	.51	3.96	1.05
18		.75			.62	.62	3.32	1.17
15		.64			.53	.50	3.45	1.29
21		.60			.56	.48	3.69	1.12
14		.58			.56	.48	3.87	1.05
22	.40	.57			.50	.49	3.84	1.04
30		.53	.31		.44	.39	3.29	1.32
27		.39		.38	.39	.34	3.96	1.06
9			.75		.60	.59	3.39	1.13
10			.71		.58	.59	3.83	1.00
7			.67		.57	.52	3.25	1.22
11			.65		.51	.50	3.50	1.29
6			.60		.55	.49	3.47	1.08
8			.57		.46	.42	3.88	1.03

4				.71	.62	.62	4.18	0.93
1				.67	.61	.58	3.75	1.07
2				.64	.62	.55	3.79	1.04
3				.62	.50	.47	3.88	1.07
5	.347			.51	.53	.46	4.11	0.97
Eigenvalue	10.23	3.59	1.60	1.44	Total Variance Explained % 52.75			
Variance %	31.96	11.24	5.02	4.51				
Cronb.Alfa	.92	.79	.79	.80				

r : Item-total score correlation;  $h^2$  : Mutual factor variance (communality)

Notes: To follow more easily factor loads under .30 were not shown on the table.

F1: Professional teacher (PT) – Effectiveness in learning-teaching process; F2: Technician teacher (TT) – Exam-orientedness; F3: Professional teacher (PT) – Self-development; F4: Technician teacher (TT) – Curriculum dependence

As seen on Table 1, at the end of analyses, it is seen that the four dimension structure of the scale, being two for professional and two for technician teaching approaches was retrieved. This structure explained 52.75 % of total variance.

The first component obtained was Professional teacher-Effectiveness learning-teaching process (PT-1) sub-scale explaining 31.96% of total variance with 14 items. Through this sub-scale, there were statements such as “Focusing the attention on activities will improve students sophisticatedly through teaching processes”, “Caring for diversity through educational activities”, “Caring for students’ sophistication in many ways more than their success on exams”. The factor loads of the items in this sub-scale were .55-.78; item-total score correlations were .60-.74 and their Cronbach Alpha internal consistency coefficient was .92.

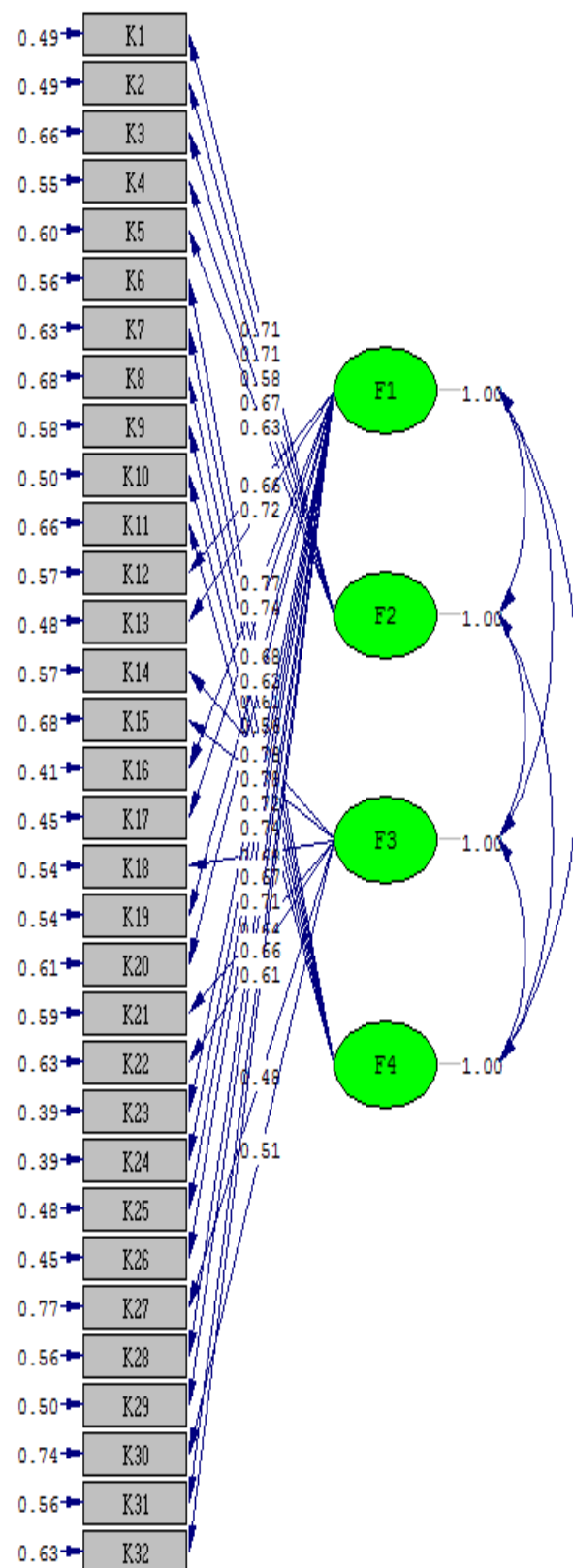
The second sub-scale of VTS was Exam-orientedness (TT-1) dimension within technician teaching approach. This factor explained 11.24% of total variance. Through this factor consisting of 7 items such as “Focusing on being successful on high stakes tests (YGS, LYS, SBS, etc.) through educational activities”, “Emphasizing the instructional methods will increase students’ exam success”, the items’ factor loads were changing between .39 and .75 while their item-total score correlations were changing between .39 and .62, Cronbach Alpha was .79. Even though it was indicated that 22. and 27. items had factor loads higher than .30 under two factors, they were not eliminated as their loads under the factor they belong were higher and their other values were at an acceptable level. On the other hand, it was thought that it was necessary to analyze how they would act through Confirmatory Factor Analysis before eliminating them.

Third factor was Technician teacher- Curriculum dependence (TT-2) sub-scale including six items such as “Being aware of his being only the implementer of predictions within the curriculum more than his own decisions”. In this sub-scale explaining 5.02 % of total variance, factor loads were between .57 and .75; item-total score correlations were between .46 and .60. Cronbach Alpha was .79.

The fourth factor of VTS was Professional teacher- Self-development (PT-2) factor consisting of items such as “Having a researcher personality”. This sub-scale explained 4.51% of total variance. The factor loads belong to the five items within this sub-scale were .51-.71; while item-total score correlations were changing between .53 and .62. Cronbach Alpha internal consistency coefficient was .80.

### Confirmatory Factor Analysis

After it was seen that VTS showed the same structure with exploratory factor analysis, confirmatory factor analysis (CFA) was conducted to test if the factor structure would be validated. The CFA results for the acquired four dimension structure were presented on Figure 2 and Table 2. When Figure 2 is analyzed, it is observed that fit indexes of The Views on Teaching Profession Scale including 32 items and four factors were significant and generally pointed out good fit ( $\chi^2=984.32$ ,  $df=458$ ,  $p=.000$ ,  $\chi^2/df=2.14$ ).



Chi-Square=984.32, df=458, P-value=0.00000, RMSEA=0.069

**Figure 2:** CFA Results for the Views on Teaching Profession Scale

According to CFA results conducted to evaluate the efficiency of the model analyzed for appropriateness, fit indexes were presented comparatively with goodness of fit values on Table 2.

**Table 2.** Goodness of Fit Standards and Fit Indexes of the Scale

Fit Indexes	Good fit values	Acceptable Fit Values	Aquired values
*X <sup>2</sup> /df	$0 \leq X^2/df \leq 2$	$2 \leq X^2/df \leq 3$	2.14
*P value	$0.05 \leq p \leq 1$	$0.01 \leq p \leq 0.05$	.000
*RMSEA (Root Mean Square Error of Approximation)	$0 \leq RMSEA \leq 0.05$	$0.05 \leq RMSEA \leq 0.08$	0.069
*NFI (Normed Fit Index)	$0.95 \leq NFI \leq 1.00$	$0.90 \leq NFI \leq 0.95$	0.93
*NNFI (Non-Normed Fit Index)	$0.97 \leq NNFI \leq 1.00$	$0.95 \leq NNFI \leq 0.97$	0.96
*SRMR (Standardized Root Mean Square Residual)	$0 \leq SRMR \leq 0.05$	$0.05 \leq SRMR \leq 0.10$	0.069
*GFI (Goodness of Fit Index)	$0.95 \leq GFI \leq 1.00$	$0.90 \leq GFI \leq 0.95$	0.80
*AGFI (Adjusted Goodness of Fit Index)	$0.90 \leq AGFI \leq 1.00$	$0.85 \leq AGFI \leq 0.90$	0.77
*CFI (Comparative Fit Index)	$0.97 \leq CFI \leq 1.00$	$0.95 \leq CFI \leq 0.97$	0.96
*RFI (Relative Fit Index)	$0.90 < RFI < 1.00$	$0.85 < RFI < 0.90$	0.96
**IFI (Incremental Fit Index)	$0.90 < RFI < 1.00$	$0.80 < RFI < 0.90$	0.92
**RMR (Root Mean Square Residual)	$0 \leq RMSEA \leq 0.05$	$0.05 \leq RMSEA \leq 0.08$	0.08

\*Schermelleh-Engel-Moosbrugger, 2003 (cited in Özabacı, 2011); \*\* Nayır, 2013.

As seen on Figure 2 and Table 2, the fit indexes obtained by CFA were significant. When these indexes were compared with the fit values accepted as standards, it could be inferred that X<sup>2</sup>/Sd, NFI, NNFI, CFI and RFI values pointed to concordance at a good level; RMSA, SRMR, GFI and AGFI values showed an acceptable fit level.

## DISCUSSION

In the study, the validity and reliability of The Views on Teaching Profession Scale (VTS) for which a pre-study of development was conducted by Yolcu and Sarı (2014), was analyzed by using also confirmatory factor analysis at this time. As a result of the analyses, the assessing tool with 32 items and four dimensions overlapping with the prior studies by Yolcu and Sarı was regained. Two of the dimensions within the scale were related to technician teaching (exam-orientedness and curriculum dependence); two others were concerning professional teaching (effectiveness in learning-teaching process and self-development). These dimensions and items within are parallel to the explanations (Evans, 2010; Güven, 2010; Hargreaves, 2000; Stone-Johnson, 2014; Ünal, 2005; Yıldırım, 2011; Yıldız, 2014; Zeichner & Ndimande, 2008) regarding technician and professional teaching approaches in the literature.

For reliability of the scale, Cronbach Alpha internal consistency coefficients mostly accepted as suitable for Likert scales were examined (Büyüköztürk, 2005; Gadermann, Guhn & Zumbo, 2012; Tezbaşaran, 1996, 1997). It was found out that internal consistency coefficients belong to VTS sub-scales were between .79 and .92 in the study. When it is considered that .70 and above values are good indicators for the test points' reliability in psychological tests (Büyüköztürk, 2005), it could be said that VTS is a tool allows researchers to make reliable measurements.

It was found that total variance explained by the scale was 52.75 %. This value is compatible with the values accepted adequate for the scales developed through social sciences (Büyüköztürk, 2005; Tavşancıl, 2002). Besides, most of the items in 32 items of scale apart from one of them had factor loads above .60. These values going up to .78 are parallel to the values acceptable through literature (Sheskin, 2004; Tabachnick & Fidell, 2001; Tavşancıl, 2002). Similarly, item-total score correlations generally above .50 were also above .30, the limit Büyüköztürk (2005) accepts as an indicator of items' distinguishing the individuals effectively.

The four dimension structure obtained with explanatory factor analysis (EFA), was analyzed with confirmatory factor analysis (CFA) as well. Through CFA, in order to see the appropriateness of model, goodness of fit criteria ( $\chi^2$ ,  $\chi^2/sd$ , RMSEA, NNFI, CFI, GFI, etc.) were examined. While interpreting these values, the accepted values (Byrne, 1998; Kline, 1998; Nayır, 2013; Özabacı, 2011; Seçer, Halmatov, & Gençdoğan, 2013; Sümer, 2000; Şimşek, 2007) through literature were taken as criteria; the model aquired were seen to have a good fit.

## CONCLUSION

The values obtained as the result of reliability and validity analyses for The Views on Teaching Profession Scale (VTS) present solid proofs concerning the appropriateness of this scale for use. It is possible to use VTS in similar studies to analyze the teaching approaches teachers and pre-service teachers have. There could be made comparisons between these approaches in terms of different variables. Teachers' views on profession could be examined together with some other variables could be related such as educational beliefs, attitudes towards profession and level of burnout.

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## THE VALUES INDIVIDUALS FROM VARIOUS EDUCATION LEVEL BELIEVE IN

Kenan DEMİR

Mehmet Akif Ersoy University Faculty of Education

Department of Educational Sciences

Burdur / TURKEY

kenandemir@mehmetakif.edu.tr

### ABSTRACT

This study has been carried out to reveal whether the difference between the values, which individuals from various education levels believe or care, is meaningful or not.

The sample group of the study consists of 1782 persons in total who study at or graduate from the universities and their various departments in Ankara, İstanbul, Muğla, Adana, Mersin, Bursa, Burdur, Kayseri, and Trabzon. The sample group of the study has been determined in respect of easily reachability and willingness. The participants of the sample group are 103 high school graduate, 1153 university student, 310 university graduate, 152 post graduate alumni, and 64 doctorate graduate. 1120 persons, about % 63, are female and 662 persons, about % 37, are male of these participants between 19 - 52. "Schwartz's Portrait Values Questionnaire" scale has been applied upon the all participants. This scale, in which the values such as Power, Achievement, Hedonism, Stimulation, Self-direction, Universalism, Benevolence, Tradition, Conformity, Security take place, has been translated into Turkish by Demirutku. Determined Cronbach's Alpha reliability coefficient of the scale for this study has been 0, 87.

Whether being statistically meaningful or not of the difference between the values, which participants from various education levels care, has been compared by use of ANOVA test. Tukey test has been used to determine whether there is a difference or not among which groups and meaningful level has been accepted as 0, 05 in these comparisons.

It has been observed that the difference among the views of high school graduate, university student, the individuals who has taken education at the levels of university - post graduate - doctorate upon the values of power, achievement, and security is not statistically meaningful. It has been determined that individuals, who has graduated from university and post graduate, put more emphasis on hedonism value than the individuals who are high school graduate or university student. It has been found out that the individuals who have graduated from university and post graduate put more emphasis on the value of stimulation than university students and university graduates put more emphasis on self-direction than university students. It has been observed that university student, and the individuals who has graduated from university and post graduate adopt the value of universalism more than high school graduates. It has revealed that the individuals who have graduated from post graduate are better than high school graduates in respect to the value of benevolence. It has been determined that the individuals, who are high school graduate and university student, are more traditionalist than the individuals who has graduate from university and post graduate. It has revealed that university students put more emphasis on the value of conformity than university graduates.

**Key words:** Value, Education of Value, Schwartz Values Scale, Power, Achievement, Hedonism, Stimulation, Self-direction, Universalism, Benevolence, Tradition, Conformity, Security

### INTRODUCTION

Probably, the value is the thing that individuals feel deficiency most today in which technology takes place human. Any product manufactured by technology cannot feel, wonder, cry, laugh, be troubled, needs another product to talk to - help each other - share. These needs are special to human and not significant such for any creature except for human. Schwartz (1996; 2006) describes the value as effective facts which are adopted by individuals or society and compound the human with himself/herself - the human with another person.

Individual adopts values because he/she thinks they are for goodness of himself/ herself and the society. Values are the judgments and believed criteria which interests not only conscious but also emotion and excitement. Values represents motions, which take place in conscious of individual and lead behavior, conscious purposes. Values gives response necessities which are needed for keeping living and working regularly of societies and need of social interaction of human (Schwartz 1992).

We give decisions in many subjects with preferences of value (Aktepe & Yel, 2009:607-508) which determine our perspective on life and purposes, affect our decisions, enable to reflect our beliefs, and form our principles. Values are used as a comparison organ in the situations of individual's attitude, manner, behavior, action,



emotion, opinion, purpose, etc. in real life (Bulut, 2013). Value priorities have a significant role in estimation and understanding of people's decisions and manners (Myrsky, 2008:549-561).

Schwartz (1992, 2006a, 2006b) states that the value becomes a central concept in social sciences day by day and his hypothesis is related to basic values of the people in all countries. Again according to Schwartz, values are the beliefs dependent on emotions, they motivate people for activity, and make a reference to preferred purposes. Values precede specific behavior or action. Values work as individual/social standards or criteria. Values have an order of significance specific to each person or society. Many values guide the behavior which has been showed or will be showed. During the studies which have been carried out upon values in tens of different countries and in various cultures, intercultural proofs were picked up to define the content and form of the concept of value. In these studies, many qualities such as intercultural basis of value priorities, forms and origins of value relationships, sources of individual differences (life course, sex, age, education, income) in values have been examined in a totalitarian way in respect to relationship and pattern (Schwartz, 1992, 2006a, 2006b).

While defining the concept of value, Schwartz emphasizes that it is a goal which adapts every situation, it has the power of building up interest, it has a significance which changes person to person, and it is a principle which guides human life (Schwartz, 1992; 2006a; 2012). He has found out as a result of researches of value he has carried out in various countries and cultures that intellections of value different from each other in these countries. Schwartz, who has observed same circular relationship form among the values in various countries and cultures, with all measurement tools, has determined that these values can be gathered below 10 of values of life. Moreover, he has determined that there is a high level concurrence among almost all societies in respect to the values (Schwartz, 1992; 2006a-b; 2012).

Sıgı, Tabak and Ercan (2009: 1-4) states that the matter, makes the study of Schwartz authentic, "examination of the effect of individual values upon behavior, approach, and social values with psychological perspective". Besides, they state that this perspective has a more complicated form than other perspectives and Schwartz has produced a cultural map of the world during the researches of value in various countries.

Individuals learn differentiating "good-bad" and "true-false" and to acquiring a measure in respect of their own moral principles (Beill, 2003: 14). This acquired measure constitutes the complement of thoughts and beliefs called as value. The thing constitutes the society, which consists of people's coming together, a set of collective values. Shared values have a significant role in formation and development of societies (Kızılcı, 1994). Because of this reason, educators concentrate on the value-oriented studies more day by day (Özsoy, 2007). There are various definitions and approaches upon value in the field of social sciences.

Schwartz has examined individual values in respect of their positions and significance in leading people's life. While examining values culturally, he has looked for the situation of producing data related to discrete opinions which the society share in general and depend on social criteria (Schwartz, 2012; Yazıcı, 2011; Sıgı & Tabak, Ercan, 2009; Bardi and Schwartz, 2003). Value types and qualities, which an individual can have, are given below.

**Power:** The individuals, who care this value, prefer having social statute and prestige, controlling people and sources or having authority over people and managing them, and subordination. The individuals, who care this value, believe in social power, authority, and wealth and try to keep their dominant positions in the social system.

**Achievement:** The individuals, who care this value, feel ambition for success intensively and struggle much to succeed and reach major goals. Personal success is the value of success in showing personal abilities effectively and torridly in accordance with social standards.

**Hedonism:** The individuals, who care this value, put more emphasis on getting pleasure from the life, having fun, and living comfortably. These self-indulgent individuals try to get all the tastes of the life.

**Stimulation:** In this value, individuals' being stimulated, getting pleasure, and exciting gain importance. It is significant for these individuals to look for excitement and innovation and be brave. They put emphasis on leading a life which is diversified, changeable, and exciting.

**Self-direction:** Most typical qualities of these individuals are having an independent thinking, choosing their own behaviors, being creative, being curious, discovering, and searching. It can be said that the individuals, who adopt this value, are capable of creative and artistic works, prefer being free and independent in their decisions, and are in tendency to choose their own goals.

**Universalism:** These individuals, who has a universalistic perspective, wish peace, social justice, equality, and tolerance for everyone. The qualities observed among these people are being thoughtful, open-minded, virtuous, and tolerant and looking out for goodness of all the people and the nature.

**Benevolence:** The individuals, who adopt this value, come to the fore with wishing goodness of their relatives and struggle for this, helping the others, providing general social wealth. These individuals adopt being helpful, fair, forgiving, faithful, merciful, and responsible as a lifestyle.

**Tradition:** Respect and loyalty against cultural, social or religious custom and ideas. In this value, individuals want to keep traditional and accustomed one and the world order same. Any change discomforts these originally conservative individuals. Being modest, being religionist, accept the things come from the life, being respectful against traditions, being moderate (deserting earthly affairs, being humble, the person who accept his/her role in life, and respectful against tradition, religionist, and moderate).

**Conformity:** The individuals, who have this value, struggle to limit their behaviors which can harm others and are against social expectations. The individual is in tendency to obey social rules and structures. The individuals, who care this value, gain the feeling of doing the said one and controlling by obeying the law. Several of general qualities of these individuals are kindness, being obedient, dignifying parents and old people, respecting against them, and checking oneself.

**Security:** In this value, in which peace and continuity of society, present relationships, and himself/herself of the person are significant, people look for health and security more than other people. The values such as national security, wishing for keeping social order, being clean, security of the family, returning the favor are significant for the individuals who have this value.

## METHOD

In this study, it has been described whether the difference between the values, which individuals from various education levels believe or care, is meaningful or not.

**Sample Group:** The participants, who take get training in modern drama desks and agencies in the provinces of Ankara, İstanbul, Muğla, Adana, Mersin, Bursa, Burdur, Kayseri, and Trabzon. The students study at the universities in these provinces has constituted the sample group of the study. In respect to easily reachability and willingness, 1782 participants in total as 103 high school graduates, 153 university students, 310 university graduates, 152 post graduate and 64 doctorate alumni or students has taken place in the study. “Schwartz’s Portrait Values Questionnaire” has been applied to the participants. 1120 persons, about % 63, are female and 662 persons, about % 37, are male of these participants between 19 - 52.

**Data Collection Tool:** Quantitative data of the study has been attained with the scale of “Schwartz’s Portrait Values Questionnaire”. This scale, translated into Turkish by Demirutku, has been used as data collection tool in many studies. Determined Cronbach’s Alpha reliability coefficient of the scale for this study has been 0, 87.

**Data Analysis:** Whether being statistically meaningful or not of the difference among the points which the individuals, who have took education of drama before, and the individuals, who have not, has gotten from Schwartz’s scale of values has been determined by “one directed ANOVA test”. Meaningfulness level is accepted as 0.5 in the comparison and attained findings are given below by following the order of the values in the scale of values.

## FINDINGS

Attained findings in the studies are given below by following the order of the values in the scale of values and sub-problems.

The values have been compared in an order to find out the answer of the question, “Is the difference among the values, which high school graduates, university students, university -post graduate - doctorate alumni care, statistically meaningful?” and value order has been followed while presenting attained findings.

**1. Comparison of Power Value:** The findings attained by comparing the views of the individuals, who have various education past, upon POWER value are given in Table 1.

Table 1. Comparison of the Views of the Participants upon POWER Value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	6,76	3,54	Between G.	47,205	4	11,801	1,047	,382
2. University student	1153	6,26	3,48	Within G.	20038,754	1777	11,277		
				Total	20085,959	1781			

3. University graduate	310	6,22	3,11
4. Master student-graduate	152	6,68	3,02
5. Ph. D. student-graduate	64	6,41	2,64
Total	1782	6,32	3,36

It is seen in Table 1 that the difference among the views of the individuals from different education levels upon power value is not meaningful at the level of 0.5. Individuals care power value at the same level whatever their education levels are. This result corresponds to the results of the studies which Demir & Kök (2012) and Aykaç (2014) have carried out. Also Demir, Doğan, Demirhan, and Savaş (2009) have determined in the researches they have carried out that the teachers at the art centers, superior and abled students have education at, share similar views upon power value.

**2. Comparison of Achievement Value:** The findings attained as a result of comparing the views of the individuals from various education levels upon ACHIEVEMENT value are given in Table 2.

Table 2. The Comparison of the Views of the Participants upon ACHIEVEMENT Value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	12,93	3,65	Between G.	51,995	4	12,999	,909	,458
2. University student	1153	12,99	3,86	Within G.	25412,952	1777	14,301		
3. University graduate	310	12,57	3,78	Total	25464,947	1781			
4. Master student-graduate	152	12,87	3,38						
5. Ph. D. student-graduate	64	12,54	3,44						
Total	1782	12,89	3,78						

It has been determined according to Table 2 that the difference among the views of the individuals from different education levels upon achievement value is not meaningful at the level of 0.5. This result can be interpreted as the individuals from various education levels care achievement value at similar levels. This result resembles the results of the researches which Ergün (2013), Demir and Kök (2012), and Demir, Doğan, Demirhan, and Savaş (2009) have carried out.

**3. Comparison of Hedonism Value:** The findings attained by comparing the views of the individuals upon HEDONISM value are given in Table 3.

Table 3. The comparison of the views of participants upon HEDONISM value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	8,30	3,13	Between G.	295,123	4	73,781	7,471	,000 *
2. University student	1153	8,65	3,27	Within G.	17550,127	1777	9,876		
3. University graduate	310	9,52	2,90	Total	17845,249	1781			(3-1)
4. Master student-graduate	152	9,57	2,70						(3-2)
5. Ph. D. student-graduate	64	8,77	2,83						(4-1)
Total	1782	8,87	3,17						(4-2)

It has been determined that the difference among the views of the participants upon hedonism value is statistically meaningful. It has been observed that the participants, who are university graduates and study at post graduate, put more emphasis on hedonism value than the participants who are high school graduates and study at university. It can be said in respect of this result that the participants, who have high education level, put more emphasis on the values such as having fun, getting pleasure, and fast living than the participants who have low education level. It has been observed that the views of high school graduates, university students, and doctorate students upon this value are similar. It has also seen that university students, and the individuals, who study at post graduate and doctorate, share similar views.

**4. Comparison of Stimulation Value:** The findings related to the views of the individuals, who have various education past, upon STIMULATION value are given in Table 4.

Table 4. The comparison of the views of the participants upon STIMULATION value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	8,44	2,92	Between G.	322,864	4	80,716	9,305	,000 *
2. University student	1153	8,25	3,08	Within G.	15414,422	1777	8,674		
3. University graduate	310	9,19	2,66	Total	15737,286	1781			
4. Master student-graduate	152	9,33	2,70						(3-2)
5. Ph. D. student-graduate	64	8,41	2,27						(4-2)
Total	1782	8,52	2,97						

The difference among the views of the individuals, who have various education levels, upon stimulation value has been found out statistically meaningful. It has been observed that the individuals, who are university graduates and study at post graduate, put more emphasis on stimulation value than the individuals who are high school graduates. In another saying, it has been determined that the individuals, who are university graduate and post graduate alumni, put more emphasis on the topics such as looking for excitement and novelty, being brave, living a changeable and exciting life than the individuals who are high school graduate. The difference among the points attained by the other groups has not been found out meaningful. It can be said that the views of these groups upon stimulation are similar.

**5. Comparison of Self-Direction Value:** The findings attained by comparing the views of the individuals from various education levels upon SELF-DIRECTION value are given in Table 5.

Table 5. The comparison of the views of the participants upon SELF-DIRECTION value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	14,48	3,03	Between G.	123,849	4	30,962	3,837	,004 *
2. University student	1153	14,42	3,00	Within G.	14338,952	1777	8,069		
3. University graduate	310	14,98	2,48	Total	14462,801	1781			
4. Master student-graduate	152	15,04	2,10						(3-2)
5. Ph. D. student-graduate	64	14,19	2,78						
Total	1782	14,57	2,85						

The difference among the views of the individuals who adopt this value which includes the qualities such as thinking independently, choosing own behaviors, being creative, and making search has been found out meaningful at the level of 0.5. According to this meaningful difference, it has been determined that university

graduates adopt self-direction value more and a meaningful difference has not been found out among the other groups.

6. **Comparison of Universalism Value:** The findings attained as a result of comparing the views of the individuals upon this value related to universalistic perspective are given in Table 6.

Table 6. The comparison of the views of the participants upon UNIVERSALISM value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	25,22	4,3	Between G.	238,507	4	59,627	3,812	,004 * (2-1) (3-1) (4-1)
2. University student	1153	26,43	4,01	Within G.	27794,612	1777	15,641		
3. University graduate	310	26,69	3,88	Total	28033,119	1781			
4. Master student-graduate	152	27,03	3,54						
5. Ph. D. student-graduate	64	25,97	3,51						
Total	1782	26,44	3,97						

It has been seen as a result of comparing the views of the participants upon universalism value that there is a difference between the views of the high school graduate participants and the individuals who still study at university, are university graduate, study post graduate or have graduated from post graduate. According to this result, it has been determined that the individuals, who have had education from university to post graduate, believe in the qualities such as being thoughtful, open-minded, virtuous, and tolerant and looking out for goodness of all the people and the nature more than the individuals who are high school graduate. It has been observed that the views of the other individuals are not different from each other and they put similar emphasis on universalism value.

7. **Comparison of Benevolence Value:** The views of the individuals from various education levels upon BENEVOLENCE value have been compared and the results are given Table 7.

Table 7. The comparison of the views of the participants upon BENEVOLENCE value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	14,56	2,71	Between G.	82,777	4	20,694	3,103	,015 * (4-1)
2. University student	1153	14,93	2,65	Within G.	11849,408	1777	6,668		
3. University graduate	310	14,91	2,63	Total	11932,185	1781			
4. Master student-graduate	152	15,53	1,93						
5. Ph. D. student-graduate	64	15,46	2,14						
Total	1782	14,98	2,59						

It has been determined that only the difference between the views of the individuals, who study at post graduate or have accomplished post graduate education, and the individuals, who are high school graduate, is meaningful at the level of 0.5. It has been observed that the individuals, who study at post graduate, put more emphasis on the qualities such as being helpful, fair, forgiving, and faithful than the individuals who are high school graduate. It has been seen that the individuals, who have the other education levels, have similar views upon benevolence value.

8. **Comparison of Tradition Value:** The comparison of the views upon TRADITION value, which is respect and loyalty against cultural, social, or religious manners and opinions, can be seen in Table 8.

Table 8. The comparison of the views of the participants upon TRADITION value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	13,93	3,43	Between G.	643,815	4	160,954	12,578	,000 *
2. University student	1153	13,12	3,58	Within G.	22739,214	1777	12,796		
3. University graduate	310	11,77	3,74	Total	23383,029	1781			(1-3)
4. Master student-graduate	152	12,12	3,58						(1-4)
5. Ph. D. student-graduate	64	12,99	2,86						(2-3)
Total	1782	12,84	3,62						(2-4)

It can be seen in Table 8 that the views of the participants upon tradition value differentiate meaningfully. It has been determined that this difference is between high school graduates and the participants who are university graduate and study at post graduate. It has also seen that there is a difference between the views of the students, who study at university, and university graduates or the students who study at post graduate. It can be said in respect of this result that tradition value is cared less as long as education level gets higher. In another saying, it is probable to say that high school graduates and university students are more loyal against their traditions than the other participants. It has been seen that the views of the individuals, who study at doctorate or have accomplished it, are similar to the views of the individuals from all education levels.

**9. Comparison of Conformity Value:** The findings upon CONFORMITY value, which includes the qualities such as doing the said one, kindness, being obedient, dignifying parents and old people, are given in Table 9.

Table 9. The comparison of the views of the participants upon CONFORMITY value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	14,47	3,44	Between G.	300,604	4	75,151	6,702	,000*
2. University student	1153	14,68	3,46	Within G.	19924,710	1777	11,213		
3. University graduate	310	13,62	3,12	Total	20225,314	1781			(2-3)
4. Master student-graduate	152	14,06	3,05						
5. Ph. D. student-graduate	64	14,27	2,81						
Total	1782	14,42	3,37						

It has been seen that the difference among the views of the individuals, who adopt conformity value, is statistically meaningful at the level of 0.5. This difference has been found out meaningful between only the university students and the individuals who are university graduate. It can be observed via Table 9 that level of adoption conformity value by university students is higher than the individuals from the other group. It has been determined that the views of the other groups upon conformity value do not differentiate meaningfully and these individuals put emphasis on conformity value at similar level.

**10. Comparison of Security Value:** The views of these individuals, who look for health and security mostly, upon SECURITY value have been compared and the findings are given in Table 10.

Table 10. The comparison of the views of the participants upon SECURITY value

Educational Level	Descriptive Statistics			Results of Variance Analysis					
	N	Mean	Std. Dev.	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
1. High school graduate	103	19,79	3,42	Between G.	68,598	4	17,149	1,320	,260
2. University student	1153	20,11	3,74	Within G.	23085,292	1777	12,991		
3. University graduate	310	19,98	3,39	Total	23153,889	1781			
4. Master student-graduate	152	20,34	3,31						
5. Ph. D. student-graduate	64	20,94	3,08						
Total	1782	20,12	3,61						

It is given in Table 10 that the difference among the views of all the individuals, who have responded to scale of values, upon security value is not meaningful. It has been found out that all the individuals put emphasis on security value, which includes the qualities such as loyalty, being healthy, security of family, national security, social order, and share of favors, at similar levels whatever their education levels are. This resembles the results of many researches carried out by use of same scale in our country (Aykaç, 2014; Demir and Kök, 2012; Demir, Doğan, Demirhan, and Savaş 2009).

## CONCLUSIONS

The general results attained in this study in which it has been revealed whether the values, which the individuals from various education levels care, differentiate meaningfully or not.

Even if they have various education pasts, the difference among the points, which they have gotten upon power, achievement, and security values, has not been found out meaningful. This result can be interpreted as the difference among the points, which the individuals have gotten, upon power, achievement, and security values has not been found out meaningful even if they have various education levels. In another saying, it can be said that the individuals believe in and care these values at similar levels whatever their education levels are.

It has been seen that the individuals, who are university graduate and study at post graduate, put more emphasis on hedonism value than the individuals who are high school graduate and study at university. In another saying, it has been determined that the degree of belief of individuals in hedonism value increases as long as education level gets higher. A meaningful difference has not been reached among the other education levels upon hedonism value.

It has been observed that the individuals, who are university graduate and study at post graduate, adopt stimulation value more than the individuals who study at university. According to this result, these individuals put more emphasis on the values such as looking for novelty in life, being brave, and getting excited than the individuals who are high school graduate. As a result of comparing the other education levels in respect to stimulation value, the difference among the views is not statistically meaningful. It has been seen that the views of the individuals, who have these education levels, upon stimulation value are similar.

It has been determined that university graduates adopt self-direction value, which includes the qualities such as choosing own behaviors, being creative, being curious, and discovering, more than university students. The other individuals, who have various education levels, share similar views upon stimulation value.

It has been seen that the individuals, who study at university, are university graduate, and study at post graduate, put more emphasis on having universalistic perspective than the individuals who are high school graduates. This result can be interpreted as the individuals adopt universalism value more as long as education their level gets higher.

The difference between the individuals, who study at post graduate, and the individuals, who are high school graduate, has only been found out meaningful in the comparison upon benevolence value. It has been determined that the individuals, who study at post graduate, put more emphasis on benevolence value. It has been observed that the other groups have the views upon benevolence at similar levels.

It has been seen that the individuals, who are high school graduate and study at university, adopt tradition value more than the other individuals. In another saying, it has been observed that the individuals' loyalty against traditional values increases as long as education level gets lower and they adopt universal values more as long as education level gets higher.

It has been determined that the individuals, who are university graduate, adopt conformity value more than the individuals who still study at university. It has been observed that the difference among the other groups upon this value is not meaningful.

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## THE VIEWS OF SOCIAL STUDIES TEACHER CANDIDATES ON MULTIPLE ENTRY POINTS

Kudret AYKIRI  
Pamukkale Üniversitesi, Turkey  
kaykiri@pau.edu.tr

### ABSTRACT

The aim of this study is to examine the views of social studies teacher candidates on using multiple entry points in geography teaching in education faculties. Study was conducted with 3rd and 4th grade social studies teacher candidates in a state university of Turkey during 2013-2014 education year fall semester. Seven multiple entry points (activities) on renewable energy sources were developed and by applying in the course, the views of 94 teacher candidates both from daytime and evening classes were taken. Survey study which is one of the descriptive research methods was used and survey technique was applied in the study. Survey which was used to collect the data was consisted of 28 questions in 5 points Likert type. In data analysis, mean, frequency, standard deviation, t-test and Anova analysis were used. The analysis of data gathered was done with SPSS 14 programme by using the significance level of .05. According to results of study, it was seen that teacher candidates have positive views about the course which includes multiple entry points and on being ashamed and feel degraded while applying activities however they have partially negative views on having difficulty and lack of time while designing and applying activities. Various suggestions on using multiple entry points were given based on those results.

**Keywords:** Multiple Entry Points, Multiple Intelligence, Introduction to Course Activities, Getting Attention, Retaining Attention.

### 1.INTRODUCTION

New knowledge about learning and teaching shows that learning is unique like a fingerprint and when suitable learning opportunity is given there is no one who can't learn (Özden, 2002). For this reason, what is important is that educators should teach their courses based on one or several theories taking into account their students' characteristics (Yanpar, 2005). One of these theories is "Multiple Intelligence Theory" which gives most value for individual differences.

On the basis of studies of Howard Gardner who is the most advocate of Multiple Intelligence Theory, the idea of how a more effective teaching-learning environment can be designed in the same class for students with various different individual characteristics lies (Bektaş, 2007). According to Gardner (2010), there are 8 dimensions of intelligence such as; logical-mathematical, visual-spatial, musical-rhythmic, bodily-kinaesthetic, interpersonal-social, intrapersonal, naturalistic intelligences. After years passed of his idea, he expressed "Multiple Entry Points" which appeal to all intelligence areas of each individual (Gardner, 2006). Multiple Entry Points are activities which can realise introduction to the course, getting attention and retaining attention behaviours.

As known, in class teaching activities are formed of 3 main parts namely introduction, progress and conclusion (Öztürk 1999). Introduction activities are the first stage and other activities follow this. Adequacy of introduction activities may increase considerably the efficiency of other stages (Sönmez 2003). Besides, using introduction to course activities according to the course's target behaviour level may affect learning in a positive way (Büyükkaragöz & Sarı 1997). Those activities are formed of four stages: taking attention, motivation (activate willingness), reviewing and transition. Teacher may use activities to take students' attention to the topic and the behaviours targeted (Sönmez, 2003). Choosing suitable activities in accordance with students' interest, needs and experiences in teaching environments may be an effective stimulus to take their attention (Ergin & Birol, 2000). Also, taking attention activity should be used when students' attention was distracted during the course (Basar, 2004). If students individual differences were tried to be taken into account both in taking attention and retaining attention behaviours, multiple entry points should be used.

All in all, Multiple Entry Points might be defined as activities used to take attention in accordance with the various intelligence areas owned by the individual.

Gardner (2006/2013) expressed that an educator who builds upon multiple intelligence theory may find at least seven entry points as of "story form", "numerical", "logical", "existential-structural", aesthetic", "applied", and "interpersonal".

## 1.2. Problem Statement

What are the views of social studies teacher candidates on using multiple entry points in renewable energy sources topic?

## 1.3. Aim of the Study

The aim is to get views of teacher candidates about the activities and the effect of those activities on their attention by using multiple entry points/activities in geography teaching.

Based on the main aim, sub-objectives are as follows:

- What are the views of teacher candidates on the course which multiple entry points were implemented?
- What are the views of teacher candidates on applying multiple entry points?

## 2. Method

### 2.1. Research Model

This research was designed as a descriptive research. Descriptive research studies describe the given situation as fully and carefully as much as possible. The most common descriptive method in studies in education area is survey study. Survey study is a study which aims to collect data to determine the specific properties of a group. Survey technique is mostly used in survey studies (Büyüköztürk, 2011). Survey technique will be used in the present research.

### 2.2. Study Group

The population of the study is consisted of social studies students of faculty of education in a state university of Turkey during 2013-2014 education year fall semester. The sample is consisted of 94 teacher candidates who are studying in 3rd and 4th grades determining with random method from the population.

### 2.3. Data Collection Tools

In order to determine views of teacher candidates on the course and applying activities "View Form to the Course and Applying Activities" which was designed by the researcher was used. A measurement tool which was consisted of 30 items determined based on the aim of research, related literature review and preliminary views of the experts was designed. In order to have a validity and reliability study of this tool, the tool was applied to a group of 134 students. In line with the analysis of the results, factor loads were calculated and factor loads which have two or fewer items were extracted from the measurement tool. As a result of factor analysis, extracted items from the measurement tool were a19 and b2. In order to decide the last version of the items, expert opinions were taken. In this line, measurement tool was composed of two sub-dimensions. The dimensions specified were found to be in capable of explaining students' views. Reliability studies of each dimension were done. The internal consistency of the first sub-dimension "What are the views of teacher candidates on the course which multiple entry points were implemented?" was found as .925. The internal consistency of the second sub-dimension "What are the views of teacher candidates on applying multiple entry points?" was found as .796. The general reliability value of the measurement tool was found as .885. The results obtained revealed that the measurement tool is relevant and reliable.

### 2.4. Data Collection Process

Experimental treatments were done in October for two course hours period for each class. Same activities were done in both classes.

### 2.5. Designing Activity

Activities were designed in line with the designing activity criteria. In order to identify whether or not the designed activity is suitable for the level of the students, both the views of the course lecturers and the field experts were taken. Before designing the activities, Turkish Geography and Geopolitics, and Human and Economic Geography courses were analysed. "Energy Sources" topic was found as the common topic for both courses. Because of the fact that not all the energy sources may be covered in two lesson hours period, only "Classifying Energy Sources, Solar Energy, Wind Energy and Biomass Energy" topics were dealt during the course. While designing activities, the examples given in the book named "Educated Mind" and activities related to multiple intelligence and related studies that suitable for each intelligence areas were analysed.

## 2.6. Data Analysis

Descriptive analysis was applied to the data gathered in the study. In descriptive analysis, in line with the sub-problems, mean, frequency, standard deviation, t-test and Anova analysis were applied. The analysis of data gathered was done with SPSS 14 programme by using the significance level of .05.

## 3. Findings and Conclusion

**3.1. Findings Related to First Sub-Problem:** What are the views of teacher candidates on the course which multiple entry points were implemented?

**Table 3.1. The views of teacher candidates on the course which multiple entry points were implemented**

	Totally Disagree		Disagree		Partially Agree		Agree		Totally Agree		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
I would like to attend such a course.	0	0	4	4.3	13	13.8	38	40.04	<b>39</b>	<b>41.5</b>	94	100.0
I enjoyed the course process.	0	0	1	1.1	14	14.9	37	39.4	<b>42</b>	<b>44.7</b>	94	100.0
Activities took my attention to the course.	0	0	0	0	8	8.5	34	36.2	<b>52</b>	<b>55.3</b>	94	100.0
Activities increased my attention to the course.	0	0	0	0	16	17	36	38.3	<b>42</b>	<b>44.7</b>	94	100.0
I didn't realise how time has passed.	4	4.3	7	7.4	29	30.9	<b>32</b>	<b>34</b>	22	23	94	100.0
I learned while enjoying.	0	0	1	1.1	21	22.3	34	36.2	<b>38</b>	<b>40.4</b>	94	100.0
I would like to have such activities in all courses.	1	1.1	2	2.1	14	14.9	27	28.7	<b>50</b>	<b>53.2</b>	94	100.0
This course gave me more learning responsibility.	1	1.1	4	4.3	22	23.4	<b>36</b>	<b>38.3</b>	31	33.3	94	100.0
I felt myself as if I have done a great job.	7	7.4	13	13.8	<b>30</b>	<b>31.9</b>	27	28.7	17	18.1	94	100.0
I think it is more effective than a traditional classroom teaching.	5	5.3	3	3.2	7	7.4	21	22.3	<b>58</b>	<b>61.7</b>	94	100.0
Activities helped me to reinforce the topic.	0	0	0	0	13	13.8	25	26.6	<b>56</b>	<b>59.6</b>	94	100.0
Activities helped me to use higher order thinking.	0	0	2	2.1	22	23.4	33	35.1	<b>37</b>	<b>39.4</b>	94	100.0
I enjoyed the fulfilment of activities.	0	0	4	4.3	25	26.6	<b>38</b>	<b>40.4</b>	27	28.7	94	100.0
Activities helped me to create new perspectives.	1	1.1	2	2.1	19	20.2	<b>39</b>	<b>41.5</b>	33	35.1	94	100.0
There isn't the boredom I encountered in traditional classroom environment.	1	1.1	5	5.3	7	7.4	37	39.4	<b>44</b>	<b>46.8</b>	94	100.0
Activities were effective in understanding the topics.	0	0	2	2.1	7	7.4	32	34	<b>53</b>	<b>56.4</b>	94	100.0

Activities helped me to learn more than a traditional classroom environment.	2	2.1	0	0	10	10.6	28	29.8	54	57.4	94	100.0
We have done activities based on application.	1	1.1	1	1.1	12	12.8	34	36.2	46	48.9	94	100.0
Activities helped me to improve my performance.	0	0	7	7.4	22	23.4	39	41.5	26	27.7	94	100.0
I would like to learn such kind of activities.	0	0	2	2.1	15	16	23	24.5	54	57.4	94	100.0
I would like to use such kind of activities in my teaching career after learning them.	0	0	0	0	10	10.6	21	22.3	63	67	94	100.0
I enjoy designing those activities.	0	0	3	3.2	18	19.1	32	34	41	43.6	94	100.0
Designing those activities improves my creativity.	0	0	2	2.1	7	7.4	23	24.5	62	66	94	100.0

As seen in Table 3.1, 67% of teacher candidates for the item I would like to use such kind of activities in my teaching career after learning them, 66 % for designing those activities improves my creativity, 61.7 % for I think it is more effective than a traditional classroom teaching, 59.6 % for activities helped me to reinforce the topic, 57.4 % for activities helped me to learn more than a traditional classroom environment, 57.4 % for I would like to learn such kind of activities, 56.4 % for activities were effective in understanding the topics, 55.3 % for activities took my attention to the course, 53.2 % I would like to have such activities in all courses, 48.9 % for We have done activities based on application, 44.7 % for I enjoyed the course process, 44.7 % for activities increased my attention to the course, 46.8 % for there isn't the boredom I encountered in traditional classroom environment, 43.6 % for I enjoy designing those activities, 41.5 % for I would like to attend such a course, 40.4 % for I learned while enjoying, 39.4 % for activities helped me to use higher order thinking have stated "totally agree".

41.5 % of the teacher candidates for the item activities helped me to create new perspectives, 41.5 % for activities helped me to improve my performance, 40.4 % for I enjoyed the fulfilment of activities, 38.3 % for this course gave me more learning responsibility, 34 % for I didn't realise how time has passed have stated "agree".

31.9 % of the teacher candidates have stated "partially agree" for the item I felt myself as if I have done a great job.

In line with the findings, it was seen that students have positive views on the course which multiple entry points were implemented.

**3.2. Findings Related to Second Sub-Problem:** What are the views of teacher candidates on applying multiple entry points?

**Table 3.2. The views of teacher candidates on applying multiple entry points**

	Totally Disagree		Disagree		Partially Agree		Agree		Totally Agree		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
I might have difficulty in designing activities.	16	17	15	16	32	34	22	23.4	9	9.6	94	100.0
I might have difficulty in applying activities.	17	18.1	16	17	35	37.2	22	23.4	4	4.3	94	100.0

I might be ashamed while applying activities.	35	37.2	27	28.7	25	26.6	5	5.3	2	2.1	94	100.0
I might have the fear of feel degraded before students while applying activities.	47	50	28	29.8	11	11.7	6	6.4	2	2.1	94	100.0
I might not have time to design activities.	22	23.4	25	26.6	34	36.2	9	9.6	4	4.3	94	100.0

When 3.2 was examined, 37.2 % of the teacher candidates for the item I might have difficulty in applying activities, 36.2 % for I might not have time to design activities, 34 % for I might have difficulty in designing activities have stated “partially agree”.

50 % of the teacher candidates for the item I might have the fear of feel degraded before students while applying activities, 37.2 % for I might be ashamed while applying activities have stated “totally disagree”.

In line with that information, it was seen that while teacher candidates have positive views on being ashamed and feel degraded while applying activities, they have partially negative views on having difficulty, having no time while designing and applying activities.

#### 4. Discussion, Result and Suggestions

**Findings related to the first sub-problem:** In the first sub-problem of the study, it was found that teacher candidates have positive views on the course which multiple entry points were implemented. It was thought that multiple entry points affected the learning in a positive way might be the reason of this. By that multiple entry activities are “introduction to course activity” in line with multiple intelligence; the results of Büyükkaragöz and Sünbül (1997); Ergin, Battal and Çardak (1999); Yiğit and Akdeniz (2001) are parallel with the results of our first sub-problem.

**Findings related to the second sub-problem:** In the second sub-problem of the study, it was found that teacher candidates have partially positive and partially negative views on applying multiple entry activities. Because of the fact that the study group of the study was “teacher candidates” and teachers are having partially negative views on applying activities suitable for multiple intelligence theory have parallelism with the results of Şenocak (2012), Yıldız (2009), Erdamar (2009) and Kucur (2007)’s research studies.

In the light of this information, those might be suggested:

\*Because teacher candidates have positive views on multiple entry points in the study, it is a need for teacher candidates to have detailed information about activities and applications. For this end, those activities should be introduced in the curriculum of faculties of education.

\*This study was conducted with undergraduate students. Therefore, it is suggested that a similar study might be done with different levels and different courses.

\*Only the views of teacher candidates were taken in this study. Thus, it is suggested to examine the effect of multiple entry points on attitude, academic achievement and cognitive processes.

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## TOWARD THE ESSENCE OF WRITING

Matti ITKONEN  
Department of Teacher Education  
University of Jyväskylä  
Finland  
matti.t.itkonen@jyu.fi

### ABSTRACT

It is doubtful whether any kind of absolute value even exists. Everything has its own opposite. This is how the whole becomes complete: an individual discovers which things to strive for and which to avoid. It is also a matter of guidance toward certain values or good manners, through which, for example, readers can be led toward an ideal of sophistication. A refined and sophisticated taste in cuisine or drink is always an indication of the personal predilections of an individual. When these tastes inspire for example the writing of reviews, the inherent world view of the texts begins to display characteristics of media reality: sensationalism and the desire to shock and awe rear their heads. The subject becomes the object, and the actual essentiality of the object under scrutiny is eclipsed. Over-zealous emphasis of one's self serves no purpose, and produces only inessential writing – as well as non-critical criticism.

### MOTTO

"But what kind of "self-portrait" is this? [...] Whoever reads this book will inevitably begin to see glimpses of myself, and of the image of my spirit. It is present in those landscapes that I've lived in, and in the people that I've met. It is in my thoughts, in my view of the world, in the way I feel and speak." (Bergroth, 1942, p. 321).

### THEORY: THROUGH WHOSE EYES?

A person can examine herself (\*) through both inner and outer eyes. She can examine her own me-ness from a here-based position or a (possibly) imaginary there-based position. Other fellow human beings, however, are always seen from the perspective of their own thereness. Based on our own experiences, each one of us can understand that the outer-ness of a partner also hints at the existence of an inner-ness element. This conclusion can be arrived at on the basis of the me-experience (surely everyone is aware of the factuality that in addition to her body-state, there exists an interior dimension as well).

How does the monitoring of one's self with inner or outer eyes affect those contents which are sketched on to the reflective self-portrait? What kind of things is it essential to record in order to deepen the understanding of one's self? How and why does one want to present one's self and appear to others? What kinds of things help others understand my feelings and thoughts? Are there two me's in existence: an inner and outer me, in other words a me-for-me and a me-for-someone-else, a me-not-for-me? How do these separate selfnesses differ from one another? When someone claims to know herself, who or what kind of me does she truly know? Could it be that she is merely a stranger to herself? If so, then who is she then in the end? Or is she simply nobody? (For more, see e.g. Itkonen, 2005; 2006; 2009; 2015).

### IMPLEMENTATION: UNKNOWN REALITIES

#### *Extracts from the media age*

"A beautifully opaque yellow. A powerful bouquet, juicy, reminiscent of freshly squeezed apples. Natural-like. The dry, full fruity flavor matches the scent. A hint of the apple core's bitterness. Suitably acidic and long." (Helsingin Sanomat, 2009, p. D 1).

"A deep golden yellow color. The bouquet carries a hint of cat pee or sweat. A dryish taste. A balanced and suitably acidic cider. Uncomplicated." (Ibid.).

"The bouquet carries hints of wood, earth and barrel, sour apple, rhubarb and cat pee. The flavor suggests dryness, sour apple and a hint of oak. The alcohol becomes more pronounced toward the end." (Ibid.).

"A coppery color. The earthy bouquet speaks of yeast, soil and byre. The same rusticity is present in the taste: ripe, cloudberry-like and lush. Dry, suitably fruity and acidic." (Ibid.).

"A promising bouquet: horse sweat, cat pee and manure. A slight hint of oak, with a strong sour apple taste, full of bitter aromas and apple-core." (Ibid.).

### ***The birth of an experience***

Often one hears of someone experiencing some kind of ecstatic "whoosh", which she describes as an aesthetic experience. Philosopher Roman Ingarden, however, disagrees: According to him, an aesthetic experience is not a fleeting feeling of pleasure or sadness, arising as a reaction (a response, so to speak) to the factuality of a sensory perception (such as a scenic lake view [or the seeing of one]). An aesthetic experience can be better defined as a combined process with separate stages and a distinctive development of heterogeneous elements. The duration and complexity of this sequence of events naturally depend on whether one is dealing with a simple or complex aesthetic object. Sometimes the mere shade of a color or the timbre of a sound become such objects. Although the "course" of an aesthetic experience is correspondingly transient, it is nevertheless not a fleeting feeling of pleasure or sadness. (Ingarden, 1961, p. 295; Itkonen, 1999; 2004).

### ***The essence of writing***

In the quotation at the beginning of this text, the author Kersti Bergroth demonstrated commendable insight into the difficulties and demands of sketching one's own portrait or image of one's self. Thus writing is in fact the reflective sketching of the image of one's self. A person must be capable of seeing herself through inner eyes. Nevertheless, the knowledge that a text may be published forces the subject to abandon her own existential position and examine her being from an outer perspective. Thus the situation carries with it both inter-pretation as well as outer-pretation i.e. the act of being interpreted. Nevertheless, one cannot completely change places with one's partner, in other words it is impossible to actually become another person. One must travel the journey of life as one's own, inimitable self.

The media-age excerpts are from the popular "Food Thursday" feature pages of the newspaper *Helsingin Sanomat* (2009). On May 28th, a comparative summary of blind tastings of French and English ciders was published. The summary was both impressive as well as inkeeping with the spirit of the times. The panel of judges was composed of four members, only one of whom was female. Based on the opinions of this group of experts, the various drinks were then deemed as either good or bad and were ranked. So the question arises: who has looked, at whom and with what kind of eyes?

The first impression is that a very subjective me-experience has been wordified. At the same time, four people are represented by a mutually agreed upon voice of collectivity. The leading newspaper in Finland serves as the publishing channel. Does this provide access to some kind of national innerness dimension, where mutual understanding between Finns can take place? It also has to do with the exact opposite of an aesthetic experience, in other words an under-experientiality, whereby a me examining the world through inner eyes writes or explains something to herself; to the I-me.

In describing the drinks, very curious manifestations of quality are singled out: length, earthiness, the bitterness of an apple-core, horse sweat, manure and even cat pee. What are these meant to convey in connection with ciders? The favorable qualities presented seem more like nonqualities and nonvalues, which one would never hope to connect with ciders. When a me writes for the I-me, at the same time she builds up her own representative-me for the media reality. The author of the text or the expresser of the opinion seems to have fallen prey to the world view of the media: she imagines a me-for-others-me which is presumed to please or shock the external reader. I too should be able to find myself in that aggregate construct me-for-another-as-me, in other words as the presumed reader of Thursday's food pages. Nowhere, however, did I detect anything familiar. What can possibly have happened?

Sweat, urine and manure are qualities which can never conjure up aesthetic experiences. At best, they can lead to an ugliness experience, in other words an unaesthetic experience. Cider is commonly seen as a pleasurable substance, which should bring enjoyment to its consumer. Likewise in the case of a sweat-element, the experiencer is faced with a simply unaesthetic object, which can evoke an experiential flow describable with one word only: repulsive. Thus the duration and lingering of the smell or taste mentioned in the text also becomes a nonvalue, which one would wish dissipated into non-existence as quickly as possible. Otherwise the only justifiable reaction would be to reject the cider, which surely cannot be the goal of the panel of judges? Or can it? Perhaps the earthiness of the bouquet or the rustic peasant quality of the taste contains some cider mysticism after all, which I as a city dweller have grown unaccustomed to. Or perhaps I am simply the child of a different world age than the ungracious judges of *Helsingin Sanomat*.

### **IN CONCLUSION: WORLDLY UNWORDLYNESS**

For any kind of experience, aesthetic or otherwise to be attainable, a situation must always have two elements: 1) an examinable target, which must have a discernible form and 2) an awareness observing the said target. From this engagement is born an aesthetic moment of realization, when the target under observation is understood to



be something. This understanding demands that an individual has the ability to partake in the existence-flow of the object of observation. Thus empathic understanding demands sensitivity for reliving and re-experiencing. Naturally the idea of repeatability must also be concretizable: one must be able to find bouquets and flavors in the outside world as well. (See e.g. Dilthey, 1986; Itkonen, 2007; Mitias, 1986).

It is a shame that the cider characterizations of May's Food Thursday pages seem so thoroughly unsuccessful. The pages themselves have a fine history, concrete testimony of which is the elegant and exquisite collection *Food Thursday* published in 2006. The sub-heading of the publication is quite descriptive in itself: "From the Helsingin Sanomat food pages: Recipes for the everyday, for celebrations, and for the celebrations of the everyday." For a similarly excellent outcome now, some love of cider wisdom, or cidrosophia, would have been required. Unfortunately, familiarity with cider philosophy was not one of the strengths of the panel of judges. The descriptions are fundamentally unworldly: they have no real correlates, experiential counterparts, in the livable everyday.

No individual well-versed in upholding the idea of the gourmand would order a beverage which brashly exudes the toilet-dimension. One purpose of the reviews is surely also to educate consumers and convey information. Here, unworldliness has led to the reviewers mainly presenting their own quest for publicity and shock value. The reader faces a problem, as she cannot find anything that is close to her within the descriptions. Writing with the essence in mind would have meant skilfulness in seeing one's own existence in the world through outer eyes: the ability to produce text, for which the presumed reader is the me-for-another-me. Thus no one would have remained a stranger to anyone, and the esteemed food pages would have conveyed deep spirited cider philosophy truly worthy of publication.

(\*) In the interest of stylistic simplicity, I have used the word "she" in situations where both sexes are referred to.

#### POSTSCRIPT: THE PREREQUISITES OF INSIGHT

The grounds, the basis, have been created so it is now time to examine the mode of existence of the phenomenon, philosophical food culture, and the essence of playspace or time-play-space (*Zeit-Spiel-Raum*) (see, e.g. Kockelmans, 1984, p. 168).

The concept of a hermeneutic situation is crucial when analysing meaning. We could even claim that all understanding necessarily takes place in a hermeneutic situation. The situation can be characterized by means of the "technical" terms of fore-having (what we have in advance, *Vorhabe*), fore-sight (what we see in advance, *Vorsicht*) and fore-conception (what we grasp in advance, *Vorgriff*). It is also possible to define the matter more precisely as follows:

- 1) that which we already have in our possession; the existence prior to ourself (*Vorhabe*)
- 2) the manner in which we already regard our entity; our life that preceded each situation (*Vorsicht*)
- 3) the idea that we already have of the entity; the trace of our life that preceded each situation (*Vorgriff*).

(See, e.g., Itkonen, 1996, pp. 73–74; Kockelmans, 1985, pp. 104–106; Varto, 1992, p. 78).

Professor Juha Varto continues the interpretative examination of the hermeneutic situation and thus also of the thought structures of Martin Heidegger by adding the concept of mind (*Sinn*). It is mind that crucially makes the ideas of fore-having, fore-sight and fore-conception important and eloquent. They can be significant either each individually in its own right or all together. Those dimensions are after all a piece of human existence as well as part of a single, huge tapestry of meaning. They direct the project of existing towards what is yet to come: the entire human existence stretches out with each of its sub-projects towards the future. The hermeneutic concepts mentioned signify a linguistic means of research that allows us to approach the quotidian from the viewpoint of common sense. They also signify a method for comprehending something as something: part of a path to the edge of insightful being. (See Varto, 1992, pp. 78–79).

**Application:** 1926 saw the appearance of Thora Holm's fascinating book *Pöydänkattaminen ja tarjoilu* (*Setting the Table and Serving*). Its subheading reads: "Advice on the tasteful setting of a table for both everyday and festive occasions". The book was translated into Finnish by Helmi Krohn. Holm's ideas, committed to paper 90 years ago, still entice us to make follow-up interpretations. A sliver of yesteryear slips into the midst of modernity when the importance of small things is described: "Amongst all those small things which help make a house a home, laying the table for the various meals plays an important role. No matter how simple the setting, only few means are needed to create a feeling of homeliness, as long as you know what you are doing. Apart from a clean and smooth tablecloth, the most important thing is not to forget that multitude of small things which make for a peaceful dining atmosphere – above all, the salt cellar. Is there anything more awkward and unpleasant for the hostess than having to constantly remind staff of all those small matters that are part of laying

the table, matters which domestic servants so often find impossible to learn? Even in the simplest home a young girl can be taught orderliness and attention in this respect. She will thus be spared many an unpleasant moment nor will she have to listen to agitated rebukes, which always produce an unpleasant atmosphere and spoil the good relationship between hostess and domestic servant.” (Holm, 1926, p. 12).

A second excellent book from the point of view of research is *Tyttöjen keittokirja* (*The Girls' Cookery Book*), the first edition of which was published in 1925. Later on several new editions appeared. This book also stresses the importance of laying the table and does so in considerable detail: “The food tastes good when you are sitting at a well-laid table. For this reason it is important to pay special attention to setting the table carefully. [...] The tablecloth must be smooth and clean, the dinner service should look beautiful both in colour and design. We prefer to use a white or natural unbleached tablecloth. Against this a coloured service looks beautiful. If you want white dishes to look beautiful, they must be made of quality materials. The dishes should all be undamaged and belong to the same service set. Dishes with chips or broken edges spoil an otherwise well laid-out table. Glassware, for example drinking glasses, should also be undamaged and identical.” (Calonius, Lindqvist & Tennberg, 1953, pp. 22–23).

Nowadays the homepages of a restaurant can be regarded as some kind of virtual or electronic self-image. They also indicate a fixed way in which some place presents itself to the world, to a synthetic reality, for particular people. The target audience probably consists of potential customers and the idea is to arouse their interest in dining at the restaurant. There is reason to examine web pages as a modern-day food table, also laid. For this reason the quotations above open up an interesting interpretative perspective on the problem of understanding.

An admirably suitable object for analysis is the Hotel Torni in Helsinki. It has, after all, been a concrete and cultural landmark of our capital city for nigh on 90 years. For this reason deliberations on the meaning of the concept of a hermeneutic situation, for example, are successful when mediated by a Torni reality because in this way we can link a sufficiently long time perspective to the entire phenomenon.

What sort of structure does the being-in-the-world of Torni's play-space or its time-play-space have? Now it is still important to concentrate especially on the thematics of food and dining. An extract from the hotel's web pages is an excellent starting point for our contemplations: “On its completion this 14-storey skyscraper designed in 1928 by the celebrated architectural office of Jung & Jung already gave a promise of modern life. Since then the Torni has continued to be known thanks to its distinctive hotel, high-quality gastronomy and romantic ambience.” (See, e.g., Torni, 2016).

Visitors would also probably wish to add the feeling of homeliness to the spirit of the Torni. Central to Holm's descriptions is the mentioning of the peacefulness of the meal, the importance of small details, the correct placing of tableware, promptness and smooth collaboration. It would be regrettable if discrepancies arose between the webpages of the Torni restaurant and a visitor's experience. There is, however, no danger of this because the photograph on the home page immediately shows a view of a beautiful and harmonious restaurant interior. In other words, the general impression of balance between the text and colour corresponds to Holm's idea of the importance of dining peace. It is indeed easy for the experience of today to chime with the praising comments of earlier generations, proof of which is given in the form, for example, of various textual and photographic documents. Thus each and every diner in the present time period already possesses some kind of advance information on Torni's self-presentation as a restaurant. This element could be termed the cultural furrow of Torni's past in the minds of various gastronomic generations (Vorhabe). Comparisons with other restaurants merely confirm the correctness of this feeling.

People of different ages are probably in a different position with regard to the pull-down menu realities that open from the home page. You have to be able to find the path to the virtual decked table before it is possible to acquaint yourself with it. Experienced and practised Internet users will examine the electronic culinary offerings of the Torni beforehand (Vorsicht). They are able to make effortless use of all of its dimensions. Their earlier everyday experience helps them to know where each particular item is located. Collaboration between the web pages and people belonging to the computer generation is trouble-free. There is no trouble whatsoever in acquainting oneself with the verbal and photographically unenhanced world of food helpings on the menu. Nevertheless there are certainly still types of diners for whom the only true reality means a menu that is held in the hand and can be looked over concretely. In other words, the situation also includes an understanding of the nature of restaurant dining that has arisen earlier: a trace of lived life in each experiencer (Vorgriff). In spite of everything a delicious mushroom pasta surely pleases every restaurant customer. The guarantee of this is a staff with abundant professional skill and practical expertise.

A gallery of photographs, stylish and artistically of high quality, adds the element of mind to the hermeneutic situation. The entire photo gallery can function both as an independent segment or as a supplement to the web pages. The photographs breathe a gust of life into mediacized reality. Through them the sumptuousness of the anticipated culinary experience is brought to life in the human consciousness in advance. It is as if the designer and executor of this photographic shoot had read some of *The Girls' Cookery Book*: the table settings are beautiful, tasteful, as well as uniform and harmonious. The sense of unbroken-ness is very strong. The virtual table setting has been constructed with attention, thought and vision. It is easy to begin planning one's next occasion to dine out and direct one's conscious being project towards a gastronomic future. An indirect and direct culinary experience can be woven into a multiply spiralled or layered Torni tapestry. They help in the philosophical analysis of the quotidian stream from the perspective of meaningfulness. For this reason the idea of insightful existence is fulfilled. And thus furthermore depth is given to our understanding of the quality of national food culture and the essence of modern restaurant life – with its roots taking a firmer hold. (For information on Torni see also Itkonen, 2010; Salo, 2006; Talvi, 1981).

Translated by Benjamin and Glyn Hughes

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## TOWARDS A GERIATRIC-FRIENDLY LIBRARY: A Q METHODOLOGY

Jenneth Gomez CAPULE  
Miguel de Benavides Library  
University of Santo Tomas

España Boulevard, Manila, 1008, Philippines

[jdgonmez@munl.ust.edu.ph](mailto:jdgonmez@munl.ust.edu.ph); [capulejenneth@gmail.com](mailto:capulejenneth@gmail.com)

### ABSTRACT

While library efforts are geared toward the provision of free and low-cost services aimed at addressing the information of the public, the fact still remains that very few attempts have been made to serve the needs of the aging population. In the Philippines alone, a clear-cut library program intended for geriatric people is virtually non-existent. The overall intent of this Q-methodological inquiry was purported to ascertain the information needs of 15 geriatric Filipino citizens from various educational backgrounds, with a view to structuring a library program responsive to the distinct and ever-increasing information needs of the overlooked sector in society. Preliminarily, the 15 participants (P-set) were asked to arrange 42 statements (Q-set) derived from initial interviews. With the use of the PQ method version 2.11 software, five interesting profiles emerged via the by-person factor analysis. These include the (i) Classic and People-Oriented; (ii) Gregarious Geriatric, (iii) Cautious Architect; (iv) Soulful Reader; and (v) Trendy and People-Oriented. Their information needs vary from profile to profile and are geared toward library collection and physical facilities. The identified profile characterizations are valuable inputs in crafting a library program that can be labeled as a geriatric-friendly library.

**Keyword:** geriatric, geriatric Filipino citizens, geriatric-friendly library, information needs

### THE PROBLEM RATIONALE

#### 1.1 Rationale

It is foreseen that the persons aged 60 or over will triple its number by 2100 from 784 million in 2011 to 2 billion in 2050 and 2.8 billion in 2100 (United Nations, Department of Economic and Social Affairs, Population Division, 2011). The number of persons aged 60 or over in the more industrialized regions is rising at 2.4 percent each year before 2050 and 0.7 percent every year from 2050 to 2100 and it is likely to grow by more than 50 percent over the next four decades, increasing from 274 million in 2011 to 418 million in 2050 and to 433 million in 2100 (United Nations, Department of Economic and Social Affairs, Population Division, 2011). However, there is a rapid aging on the population of the less developed regions compared with the more developed world (United Nations, Department of Economic and Social Affairs, Population Division, 2011). It's been anticipated that there will be a rapid population growth of aged 60 or over in the developing world in the next thirty years with rates of 3 percent per year and likely to increase from 510 million in 2011 to 1.6 billion in 2050 and to 2.4 billion in 2100 (United Nations, Department of Economic and Social Affairs, Population Division, 2011). The decrease in world fertility is the main reason for the said demographic trend. The birthrate in the less developed regions as a whole is likely to decrease from 2.67 children per woman in 2005-2010 to 2.19 in 2045-2050 and 2.02 in 2095-2100 based on the United Nation's *World Population*

*Prospects: the 2010 Revision* (United Nations, Department of Economic and Social Affairs, Population Division, 2011). In the Philippines, its population would continue to grow, increasing from 76.5 million in May 2000 to 141.7 million in 2040 based on the 2000 Census-based population projections prepared by the National Statistics Office in collaboration with the Inter-Agency Working Group on Population Projections. The nation's population would also become older as it is projected that child-bearing rate by women in the country will continue to decline and the survival rates of all age groups will improve. In addition, 4.3 percent of the Filipinos would be 65 and over by year 2010, and by year 2040, 9.7 percent of them would be in the same age group.

The expanding sympathy toward the sustenance of the increasing number of aging people is the same with the need to give more noteworthy thought to the production of commodities and services to customers of old age (Barrett, 2005). Public libraries are among the institutions that consider the needs of older people. To give free or inexpensive services to fulfill the information needs of people in general is their main goal (Bertot, Jaeger, McClure, & Ryan, 2006; Xie & Bugg, 2009). They encounter a compelling endeavor in the increasing number of older people who are likely to have special needs and preferences for information than the younger patrons (Xie & Bugg, 2009). Information about health is commonly desired and is deemed necessary for aging people compared to younger ones (Xie & Bugg, 2009). Their needs are intricate and thus require an integrated approach to come up with a positive change (Sloan, 2009). Their varying views will become highly significant and libraries need to be prepared to re-examine whether services they render are still applicable and whether innovations are needed to be developed (Sloan, 2009). To accomplish this, there is need to create and carry out conventional services with consideration to older population (UK Audit Commission, 2008; Sloan, 2009).

There is an increasing consideration on the appropriation of sufficient and productive information, advice and advocacy services in the social and community services of the United Kingdom which is regarded to be important in advocating the older people's independence, rights and interests and giving them more choices and supervision in meeting their needs. (Harding, 1997; Better Government for Older People, 2000; Carter & Beresford, 2000; Department of Health, 2002; Department of Work and Pensions, 2005; Department of Health, 2006; Social Exclusion Unit, 2006; Bernard, 2007; Godfrey & Johnson, 2009). Consideration is focused on health information, social services, pensions and welfare benefits and broader phase of life including learning, leisure, healthy living, volunteering and employment opportunities (Godfrey & Johnson, 2009). The availability of information for older people that is understandable, easy to use and is circulated in a manner that is common to them will make them more independent and will only ask for a minor assistance from health and social services (Barrett, 2005). In a world of lifelong learning, public libraries are expected to play the role of bridges linking the local learning setting either of formal or informal kind with all-inclusive resources of information and knowledge and as a result, can be a major key to the improvement of forthcoming systems of lifelong learning (Butcher, 2009). By having a persistent engagement in the learning activities, the older people can bring up new interests and build up additional skills; enhance comforts and quality of their life; expand their life horizons; attain self-realization; uphold the place of the older people in the family and society; and stay substantial in the community (Hsieh, 2010)

In the Philippines alone, a clear-cut library program intended for the geriatric citizens is virtually non-existent. The National Library of the Philippines has no existing programs or even proposed study to establish a section designed exclusively for the senior citizen/aged (Y. E. Jacinto, personal communication, August 2, 2010; see Appendix V). Hence, this study purports to determine the information needs of the geriatric Filipino citizens with a view to developing an appropriate and relevant library program that can be labeled as geriatric-friendly library. Materializing library services for the elderly will require enough time and effort yet the recompense is the offer of life improvement for all people who will be part of the older population (Sloan, 2009).

## 1.2 Research Impediments

The study focuses on the information needs of the Filipino elderly and their concept of a library especially designed for them that can be labeled as geriatric-friendly library. Filipino elderly residing in Baliuag, Bulacan and senior librarians residing and working in Metro Manila are the centers of the study. They were chosen purposively following the subsequent inclusion criteria: (1) 60 years old and above (2) able to read and write and (3) understand *Tagalog* or English.

A big number of participants (P set) is not imperative in Q-methodology to achieve a variation of accounts (Rajé, F., 2007). In using Q methodology, it is necessary to know that the rule is subjectivity and a small number of participants is only needed to determine a category and not to analyze the category's corresponding placement in a bigger population (Valenta & Wigger, 1997, p. 501; Rajé, F., 2007). Watts and Stenner (2005, p. 20) augmented the advantages of conducting a study with smaller groups of participants when using Q and pointed out that it can be precarious when working with a larger number that it can actually nullify several slight differences, intricacies, and therefore a number of the important features included in the data. Therefore, it is apt that an essential or distinctive characteristic and accuracy may be achieved when working with smaller groups (Rajé, F., 2007). Hence, this study worked with small number of samples. There were ten samples for the first group and five for the second group. The former is greater than the latter since it is of an incidental sampling technique meaning the sample are most accessible to the researcher while the other which of purposive sampling include only the especially qualified individuals.

## THE RESEARCH QUESTIONS

### 2.1 Review of the Literature

Based on the study of Library and Information Science (LIS) research literature, a considerably higher number of LIS researchers have insufficient knowledge about research on older people in general regardless of its notable existence (Asla, Williamson & Mills, 2006). Many of the LIS research studies are focused mainly on evaluation of services, programs and dissemination of library resources for users of old age from the 1970s into the 1990s (i.e., Bewley & Crooks, 1984; Cleveland Public Library, 1971, 1972; Su & Conway, 1995; Turrock, 1982; Williamson K. & Asla T., 2009).

In the Philippines, there was no practically social research conducted about the geriatric Filipino citizens until the United Nations designated the year of 1982 as the Year of the Elderly (Medina, 2001; Mendoza, 2005). The geriatric

group is one of the thirteen (13) categories under the “Disabled Persons” along with released prisoners, negative Hansenites, mendicants, drug/alcohol users and former political detainees under the subheading, “Socially Disabled” (Domingo, Medina, Domingo, 1994; Carlos, 1999). This group has special needs that can be satisfied through services that are especially designed for them. The Philippines’ Department of Social Welfare and Development (DSWD), the government’s social welfare arm, is tasked on the public delivery of the services for geriatric people which intends primarily on the care for the elderly and the elderly volunteer program (Carlos, 1999). The former is basically designated to provide care and assistance while the latter is aimed at tapping the elderly as resources for various socio-economic undertakings (Domingo, 1987; Carlo, 1999).

The senior citizens centers are among the facilities that were provided to serve their increasing needs. This center refers to the place established by Republic Act No. 7876 or the Senior Citizens Center Act, with recreational, educational, health and social programs and facilities designed for the full enjoyment and benefit of the senior citizens in the city or municipality accredited by the DSWD (Republic Act No. 9994 also known as the “Expanded Senior Citizens Act of 2010”). It can be any available structure, a spacious room in a private or public building, a room attached to a community center, a barangay hall or chapel. In spite of that, much of the senior centers available are intended for several purposes providing nutritional, health and wellness, financial, social-recreational, cultural, educational and referral programs and services (Beisgen & Kraitchman, 2003; Turner, 2004; Hostetler, 2011). These centers are not enough to meet totally the information needs of geriatric people that can be fully satisfied by building up a library especially designed for them. According to a Philippine study by Virginia PB Samonte, et al., the two most frequent forms of recreation among the rural geriatric respondents were radio listening and TV watching, which were reversed in the case of the urban geriatric respondents. Aside from these two major leisure activities, both groups enjoyed reading comics, magazines and newspapers (Carlos, 1999). This shows that geriatric people still engage their time in reading as part of their recreation. Unity among individuals in different generations or age categories will be promoted when libraries in retirement communities are established (Williamson, K. & Asla, T., 2009) and libraries have role in supporting the ability of geriatric people to live independently and remain actively engaged in the community and the world of learning (Sloan, 2009).

**Geriatric** – an old person (Chambers Large Print Dictionary, 2005).

**Geriatric-Filipino citizen** – also known as senior citizen or elderly, refers to any Filipino citizen who is a resident of the Philippines, and who is sixty (60) years old or above. It may apply to senior citizens with “dual citizenship” status provided they prove their Filipino citizenship and have at least six (6) months residency in the Philippines (Republic Act No. 9994 also known as the “Expanded Senior Citizens Act of 2010).

### **Information needs of geriatric citizens**

Information communicates knowledge to an individual’s cognition and is utilized as support in making decision about a particular action (Godfrey & Johnson, 2009). It is understood as a medium to generate an output necessary in obtaining a service or resource or finding solution to a problem, and not as basically beneficial in itself (Godfrey & Johnson,



2009).

As people become older, they may evolve into being particular in the kinds of information they explore and where they explore it, a finding which is supported in the human information behavior literature by Marchant in 1991 and in the literature of psychology by the concept of adaptation by Baltes and Baltes in 1990 (Asla, Williamson & Mills, 2006). Older people are beset with impaired sight, hearing and mobility and common health problems but this difficult situation does not lower but increase their longing to read and to enjoy books and other materials in whatever format they find best (Sloan, 2009).

Previous studies have been made about information needs of geriatric people. In the United Kingdom, a couple of studies have exhaustively investigated the field of information needs with respect to older people including the research carried by Epstein in 1980 of the Research Institute for Consumer Affairs (RICA) which is considered as one of the first major studies in information needs (Barrett, 2005). The said study observed carefully the information on benefits and services available to geriatric people in England and how they utilized that information (Barrett, 2005). In the RICA study (Epstein, 1980), the interviewees were not questioned straightforwardly about their information needs and wants but instead the most worrying problem they had been in the previous year where health and financial were the most common types of problem being identified (Barrett, 2005). In Scotland, Troup (1985) carried out a questionnaire survey and discovered that the most frequently identified fields of information needs were money, housing, leisure opportunities and health concerns (Barrett, 2005). Troup (1985) also administered focus groups where he determined all aspects of finance, housing and benefits to be field of utmost need (Barrett, 2005).

In Australia, the idea of “theoretical sampling” as conferred by Glaser and Strauss in 1967 was used in the study of Williamson in 1995 and 1998 with a sample of 202 older persons of which were purposefully selected that represent all the major variables important to her study (Asla, Williamson & Mills, 2006). The sample, much of them were residing independently in suburban and rural Australia, comprised of 146 persons aged 60–74 (labeled as young-aged), 44 persons aged 75–84 (described as old-old), and 12 individuals aged 85 and older (named as the very old). The information needs between the younger old and the oldest old were not distinguished mainly in other published information behavior studies involving older people (e.g., Marchant, 1991; Su & Conway, 1995). In Chatman’s study in 1991 and 1992, her sample consisted of 55 women with fair age of 82 (age range 68–100) and considered as a homogenous group. Nevertheless, she particularly analyzed the media uses of older persons aged 80 and up (Chatman, 1991, pp. 290–291). Her two year ethnographic field study gave a considerable chance to analyze her participants in their environment and obtain their confidence and as a result, she was at the top in acquiring information regarding their personal and family information needs (Asla, Williamson & Mills, 2006).

In Asia, particularly in Singapore, the paper of Chong, S. & Theng, Y. in 2004 strived to analyze the geriatric citizens’ information needs specifically centered on the web usage. It studied their experience using computers on the web and determined their recreational activities and topics of concern that could be conveyed to the web.

### Geriatric-friendly library

New kinds of challenges are being developed due to the increasing percentage of older people in society. Presently, fruitful declining years corresponds to nullity of diseases and disabilities, sustenance of high levels of bodily and mental abilities and continuity of social and productive activities (Motta et al., 2005; Valkila, Litja, Aalto & Saari, 2010). Older people can keep up and enhance their physical and cognitive health by being physically and socially nimble (Ramos and Wilmoth, 2003; Hogan, 2005; Valkila, Litja, Aalto & Saari, 2010). Libraries need to establish better relationships with this group of people. They are called to make the necessary adjustments to buildings and services to accommodate them. However, much of the library services at present are concerning the children and the youth. Though these services are very significant in devoting effort to build up literacy, increase lifelong readers and support with academics, services to geriatric people are usually ignored (Wenninger, 2003). But even though this group may be aware of traditional services and even be regular users of the library, their changing and special needs and interests must still be addressed (Wenninger, 2003). When planning libraries, valuable input can be gained directly from the older adults themselves and they should be involved in the planning (Wenninger, 2003). The overall features of old age are essential to the depiction of library services for geriatric citizens that can be labeled as geriatric-friendly library.

Ray Oldenburg initiated the concept of the first place being the home and the people living there; and the second place being the workplaces in his book *The Great Good Place* (Joseph, 2009). He then labeled as third places those informal gathering places that are free or low-cost, reachable, friendly and convenient that people can visit daily (Joseph, 2009). In a research conducted by Fisher et al. (2007), who explored the main library Seattle, he discovered that the library is considered and used as a social place; their participants emphasized the social aspect of visiting the library (Aabø, Audunson & Vårheim, 2010). The public library has a firm capability of being a meeting place as discovered by Goulding in his study in 2005 and the feeling of community can still be powerful and promoting a sense of acceptance and harmony though a library patron may not actually speak to anybody at the time of his visit to the library (Aabø, Audunson & Vårheim, 2010).

## 2.2 THEORETICAL FRAMEWORK

The parameters of this study were supported by the guidelines established by the American Library Association (ALA) which has a record existing for a longtime in enhancing library and information services to older adults. It has developed guidelines in the 1970s which have been improved to respond to the varying statistics of an aging population of the United States of America. These guidelines have been initially updated in 2005 and revised in 2008 by Library Service to an Aging Population Committee of the Reference Services Section of the Reference and User Services Association (RUSA) of the ALA and were approved by the Board of Directors of the RUSA. The guidelines present key principles in library services to older adults that identify their differences in culture and language and obstruct stereotyping in planning collections, programs and services for this group of people (Reference and User Services Quarterly, 2008). For the objectives of these guidelines, an “older adult” is defined as a person at least fifty five years old. In this study, Filipino elderly is defined as a person age sixty and above.

Below are the revised Guidelines for Library and Information Services to Older Adults (Reference and User Services

Quarterly, 2008).

### **1.0 Acquire current data about the older population and incorporate it into planning and budgeting.**

Under this guideline, survey plays an important role in gathering key information of a particular older people which include their location and housing, educational, socioeconomic and ethnic background; religious organizations and other groups to which they are part. Utilizing these data, various information needs due to older people's language, culture, education, age, gender, health care, financial planning, social security, civic engagement and other community services provide vital information to determine the kind of services that a community organizes (Reference and User Services Quarterly, 2008). In the Philippines, the resemblance is much alike because of its population consisting of multiple ethnicities and culture which assumes a diverse socioeconomic ethnic and religious background of people. Thus, it entails various demands in information and services required in a given community.

### **2.0 Ensure that the special needs and interests of older adults in your community are reflected in the library's collections, programs, and services.**

This guideline assures tangible support for the older people and letting them know how welcome they are in accessing and enjoying library collections and services by assigning a librarian to act as a coordinator of services to older adults. It also gives an assurance for proper monitoring and developing library collections and services with older adults in mind (Reference and User Services Quarterly, 2008).

### **3.0 Make the library's collections and physical facilities, safe, comfortable, and inviting for all older adults.**

In this respect, all kinds of assistance pertaining to the good welfare of an older adult should be incorporated like provision of at least one wheel chair in the library for public use; placing library materials frequently used by older adults on easily accessible shelves; assuring enough spacing to accommodate users in wheelchair; and giving at least one computer station labeled and installed large type software for older adults with low vision (Reference and User Services Quarterly, 2008). The consideration is made for older adults with physical, visual, aural, reading and other related disabilities such that library accessibility is given for all in accordance to any particular guidelines for Filipino elderly.

### **4.0 Make the library a focal point for information services to older adults.**

In this case, government agencies should involve and cooperate with public libraries by providing invaluable services about its programs available for older adults. Thus, a library serves as a great venue for information dissemination. Library's website can provide links to the sites of organizations and agencies serving older adults as well as newspaper and other websites (Reference and User Services Quarterly, 2008).

### **5.0 Target the older population in library programming.**

Here, it is adequate to incorporate funding for programs, collections, and services for older adults in the library's operating budget and actively seek supplemental funding toward partnerships with other agencies, organizations and foundations interested in serving older adults.

### 6.0 Reach out to older adults in the community who are unable to travel to the library.

The need to analyze community demographics, population forecasts and housing trends play a major role to effectively meet the needs of older adults. Primarily, this caters the demand for outreach services such as delivery of library materials by mail or mobile library services. Advertisements through local media, public health agencies and other agencies that work with older adults should play as a mode of information dissemination among other community and local agencies.

### 7.0 Train the library's staff to serve older adults with courtesy and respect.

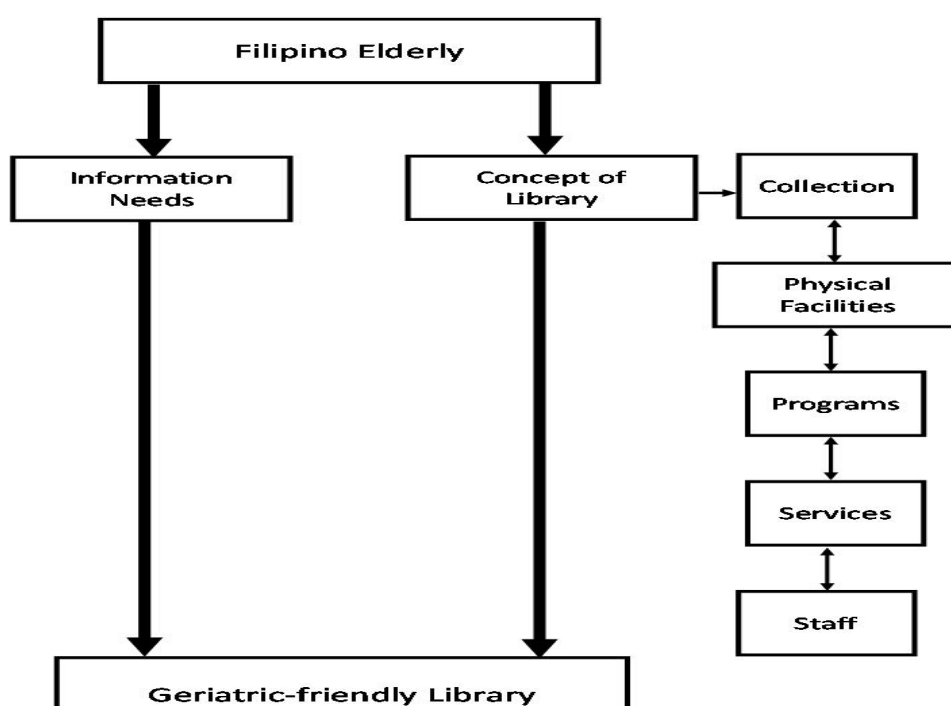
This guideline demands proper training of library staff who will render services to older adults. The values of patience, sensitivity, respect and courtesy should be inculcated into the heart and mind of library staff assigned to handle the position.

## 2.3 RESEARCH QUESTIONS

The study purports to determine the information needs of the geriatric Filipino citizens with a view to developing an appropriate and relevant library program that can be labeled as geriatric-friendly library. Particularly, the study will answer the following research questions:

1. What information needs do geriatric Filipino citizens have?
2. What chief sources can address the identified information needs of the geriatric Filipino citizens?
2. What makes a library a geriatric-friendly to geriatric Filipino citizens?

## 2.4 Research Paradigm



Geriatric Filipino citizens ought to have a library that is especially designed for them that will reflect their information needs and interests. Each of them has varying information needs based on one's mode of living and also each has a different concept of a library that is suitable to these needs. By thorough interview, the distinctive viewpoints of each geriatric about their information needs and their concepts of a library based on its different aspects namely staff, collection, physical facilities, services and programs are gathered and analyzed in order to come up with the general idea of a geriatric-friendly library especially designed for them.

## **THE RESEARCH METHOD**

### **3.1 Research Design: Q Methodology**

#### **3.1.1 Meaning**

Basically, Q methodology was conceptualized in the 1930s as a creative way to analyze people's subjectivity (Stephenson, 1935; Brown, 1980; Cuppen, E., et. al., 2010). From then on, it has been employed in distinct fields of social science in pursuits to reveal forms of viewpoints that are based in people's subjectivity (Dryzek & Berejikian, 1993; Van Eeten, 2001; Webler et al., 2001; Clarke, 2002; Ellis et al., 2007; Cuppen, E., et. al., 2010). Based on its usage in Q methodology, subjectivity was described by McKeown and Thomas (1988) as communication of one's perspective. The significant feature of this methodology is to guarantee that individual character is maintained rather complicated with the outward aspects obtained by a researcher in exploring subjective phenomena (McKeown & Thomas, 1988, p. 7; Militello, M. & Benham, M.K.P., 2010). Likewise, it also include specific set of psychometric and operational principles that when combined with distinct statistical applications of correlation and factor-analysis techniques, gives researchers with a methodical and accurately quantitative means of analyzing human subjectivity (McKeown and Thomas, 1988; Cordingley, et al., 1997; Chang, S. O., et al, 2008).

This method facilitated the study in determining the information needs of the Filipino elderly with a view to developing an appropriate and relevant library program that can be labeled as geriatric-friendly library.

#### **3.1.2 Subject and Study Site**

For the purpose of determining the information needs with a view to structuring a library program responsive to the distinct and ever-increasing information needs of the overlooked sector in society, fifteen (15) geriatric Filipino citizens with various educational backgrounds residing in Baliuag, Bulacan and in the National Capital Region of the Philippines were chosen to take part in the study, a majority of which are females (12 or 79.9%). The selection's ages range from 60 to 86. They were chosen purposively based on set inclusion criteria: (1) 60 years old and above, (2) residing in Baliuag Bulacan and in the National Capital Region of the Philippines, (3) able to read and write and (4) understands *Tagalog* or English.

The study was conducted at several residences of geriatric Filipino citizens from different educational backgrounds in Baliuag, Bulacan and in several libraries in the National Capital Region. All of the selections participated in the first two phases of the study, which comprised of a semi-structured interview, the actual Q-sorting and a post sort discussion.

Said respondents were chosen to be the selections to determine the information needs of the aging population.

### 2.1.3 DATA MEASURE

This study used two kinds of instruments to collect data and information significant to the questions discussed in the study (see Appendices III & IV).

1. Respondent's *Robotfoto*. This is a Dutch term that is used as an initial sketch to describe a person apprehended of a crime (Kelchtermans & Ballet, 2002). This study used this instrument to determine background information about the two groups of respondents such as their age, gender, civil status, and educational background.
2. Interview Questions. This study used two different sets of self-made interview questions for the two groups of respondents which were based on the revised guidelines for library and information services to older adults (Reference and User Services Quarterly, 2008).

### 3.1.4 DATA GATHERING PROCEDURE

Data needed in this study were gathered following the three stages in Q-methodology namely: the identification and sorting of statements (Q-sort), data analysis (Q-analysis) and interpretation (McKeown & Thomas, 1988; Valenta & Wigger, 1997; Jedeloo et. al., 2010). A *robotfoto* (Kelchtermans & Ballet, 2002) was used to determine the demographic profile of the respondents.

An initial semi-structured interview lasting an average of one hour per respondent was conducted. Two sets of guide questions focusing on information needs and ideals of a geriatric library were prepared based on the guidelines established by the American Library Association (ALA). The first set is for the Filipino elderly and the other set is for senior librarians. From the transcribed interview, similar anchors and phenomenal referents were clustered and summarized and a Q-concourse (Raje, 2007) comprising of 65 statements emerged from the cool analysis. It was then narrowed down to 42 statements which served as the Q sample (Raje, 2007; Militello & Benham, 2010). The statements were then categorized and five aspects (Table 1) of the library surfaced from the dendrogram (Thelwell et al., 2007) namely the staff, collection, physical facilities, services and programs. Each of the themes has at least three statements. Staff refers to the personnel in-charge of the library supervision. Collection refers to the different types of books that meet the information needs of the elderly. Physical facilities refer to the physical plan of the library. Services refer to the helpful activities held by the library. Programs refer to the schedule of activities and procedures to be followed by the library.

Table 1: Major themes represented in final Q-set

Theme	Statement
I Staff	17, 28, 29, 30
II Collection	2, 3, 4, 5, 6, 7, 10, 16, 18, 19, 22, 32, 33, 34, 35, 36, 37, 39, 42
III Physical Facilities	1, 8, 9, 13, 14, 21, 23, 24, 25, 26, 27, 38
IV Services	15, 40, 41
V Programs	11, 12, 20, 31

Each statement from the Q-set was printed on small piece of paper. The respondents, otherwise known as the P-set (Raje, 2007; Militello & Benham, 2010) were asked to categorize the statements in three piles: agree, disagree and neutral. Next, they were instructed to place statements on the Q-sort table (Fig. 1), with a 7 point Likert scale. The leftmost column corresponds to the statements where they agree the most while progressing to 'disagree the most' on the rightmost side of the table. They were then given the same instruction for the disagree pile but starting from the rightmost column instead. The neutral pile was ranked in the remaining slots in the middle. There were limited numbers of statements that can be assigned on each score. Finally, the participants were asked to justify and elaborate on the placement of the statements on the Q-sort table. The interviews were audio recorded with the consent of the participants.

[illegible]

Figure 1 Q-sort Table

### 3.1.5 Ethical Considerations

An interview session was set for each of the members of the two groups of respondents at their most favorable time to make sure that they can attentively participate with the interview without thinking other concerns. Participants were given oral and written information regarding the objectives, course and the significance of the study. Consent to record the interview (see Appendices I & II) was also requested in order to assist the progress of the examination and determination of information that will be collected.

### 3.1.6 Mode of Data Analysis

After the Q-sorts have been obtained and completed, they were subjected to the by-person factor analysis (centroid

factor extraction) and then were rotated with Varimax method using PQMethod software version 2.11 (Schmolck & Atkinsons, 2002; Van Exel, de Graaf & Rietveld, 2004; Jedeloo et. al., 2010). This was done to limit the number of resultant ways the statements were sorted. A composite sort was computed for each factor representing how a respondent with a 100% loading on that factor would have ordered the 42 statements.

The factors were then interpreted and illustrated as profiles of Filipino elderly using the characterizing statements (those with factor score of +3, +2, +1, 0, -1, -2, -3 in the composite sort), the distinguishing statements (those with a statistically significantly different factor score as compared to all other factors;  $p < .05$ ) and the anchors and phenomenal referents from the transcribed post-sort interviews (Jedeloo et. al., 2010; Militello & Benham, 2010). Both consensus and distinguishing statements were used to determine the chief characteristics for each factor profile (Militello & Benham, 2010). The principal themes were developed using inductive approach.

## RESULTS AND DISCUSSION

*Table 2. Demographic data of selections (n=15)*

Variable	N=15	%
Age		
60-65	6	39.9
66-70	5	33.3
71-above	4	26.6
Gender		
Male	3	19.9
Female	12	79.9
Civil Status		
Single	2	13.3
Married	9	59.9
Widow/Widower	4	26.6
Highest Educational Attainment		
Elementary level		
Elementary graduate		
High school level	1	6.6
High school graduate		
College level	1	6.6
College graduate	9	59.9
MS/MA	3	19.9
Ph.D.	1	6.6

As illustrated in Table 2, there is a preponderance of female respondents (n=12 or 79.9 %) over their male counterparts. Of the 15 respondents, majority are within the age range 60-65 (n=6 or 39.9%), married (n=9 or 59.9%) and are college graduates (n=9 or 59.9%).



Table 3. List of statements (Q-sample) with composite factor scores

		Factor				
		A	B	C	D	E
1	The library should provide special kind of music suited for senior citizens while reading.	-1	1	1	2	0
2	I want inspirational books.	1*	-1	0	3*	0
3	I want information about cooking/food preparation.	0	0	-2	-1	2
4	I want information about health.	3	-2†	2	1	0
5	I want information about religion.	1†	-3	-2	-1	0
6	I want novels and literature books.	1*	-2	-3†	2*	-2
7	I want current information.	2	-1	1	0	-1
8	The library should have multimedia materials like TV, computer with Internet connection and audio materials.	1	2	1	1	2
9	The library should have a place where readers can read comfortably and rest after reading.	0	0	0	1	-3*
10	The library collection should be easily accessible and organized in a simple way.	2	2	-1	2	-2
11	The library should not only provide reading program but also recreational program.	-1	2	-1	-1	3
12	The library should serve as a training ground for senior citizens where their old talents will be revived and recognized in activities like choral group, theater play, etc. which will be presented to the community.	-1	3*	-1	0	-2
13	The library should have a shower room.	-3	0	-3	-3	0
14	The library should have a pantry.	-3	-2	-1	-2	1†
15	The library should also function as venue for different occasions like outreach programs and social gatherings for senior citizens.	-1	1*	-2	-1	-1
16	I want books about agriculture.	1	-3*	-2*	1	1
17	The librarian should be accommodating, patient, courteous and understanding.	3†	1	1	-3*	2†
18	The books should be updated regularly.	0	-1	3*	1	1
19	I want books about physical wellness/personal hygiene.	1	0	0	-1	1
20	The library should provide opportunities for senior citizens to connect with fellow elderly through exchanging of information and ideas.	-2*	3	2	2	3
21	The library should be well-ventilated and has bright ambience.	2	2	2	1	1
22	The reading materials should have only short and readable text.	0	0	0	-1	-1
23	The library should have attractive materials around like quotations and photographs.	0	1	-1	1	2
24	The library should have a comfort room.	-2	1	1	0	-2
25	The library should be clean and safe.	0	1	3*	1	0
26	The library should also provide water stand free for senior citizens.	-1†	1	1	0	-3†
27	The library should also have coffee shop.	-1	0	-2	0	1
28	The librarian should be knowledgeable in his profession.	3	1	1	3	3
29	The librarian should be kind, friendly and caring.	2	0	2	0	0
30	The librarian should be young.	-3*	0	0	-1	0
31	The library should offer cultural tour sponsored	-1	2†	0†	-2	-3

	by local government/private sectors.					
32	I want books about history.	1	0	0	0	1
33	I want books about aging.	2	-1	0	0	-1
34	I want information about house interior design.	0	0	-3†	-2	-1
35	The books should also be written in Filipino Language.	1	-1	0	-3	0
36	I want information on how to be successful financially.	-2	-2	-1	-2	-2
37	I want information about lifestyle.	0†	-1	-1	-1	-1
38	The library should have reading carrels.	-2	-3	2	-1	2
39	I want biography books.	0	-1	0	0	1
40	The library should offer first aid service.	-2	-2	0	0	-1
41	The library should post announcements of different activities and programs like seminars, trainings, etc.	-1†	3	3	2	1
42	I want books on livelihood education like handicrafts, embroidery, etc.	0	-1	1	3*	0

*Note:* A= “Classic & People-Oriented”, B= “Gregarious Geriatric”, C= “Cautious Architect”, D= “Soulful Reader” and E= “Trendy & People-Oriented”. “3” (extreme left of Figure 1) denotes most agreement with the statements and “-3” (extreme right of Figure 1) denotes least agreement with the statements.

\*Distinguishing statements for a factor are indicated ( $p < 0.01$ ).

† Distinguishing statements for a factor are indicated ( $p < 0.05$ ).

### Classic and People-Oriented

This group of respondents believes on the importance of [17] being accommodating, patient, courteous and understanding of the librarian. In short, [28] the librarian should be knowledgeable of his profession. This group shares common information about [4] health, [2] inspirational books, [6] novels and literature books and [5] religion. However, this group gives less priority on the physical appearance of the librarian who will assist them during the time they need particularly in the statement that [30] the librarian should be young. As regards to physical structure of the library, the respondents find it insignificant to have [13] a shower room and [14] a pantry inside and also [26] a water stand free for geriatric citizens.

### Gregarious Geriatric

The distinct characteristic of this group is their strong agreement with various community programs. For them, [12] the library should serve as a training ground of geriatric citizens where their old talents will be revived and recognized in activities like choral group, theater play, etc. which will be presented to the community. This group also believes that the library should support and assist all the endeavors pertaining to cultural awareness and community involvement which will be sponsored by certain group of people. [31] The library should offer cultural tour sponsored by local government and/or private sectors. Therefore, [11] the library should not only provide reading programs but also recreational programs. In this case, the library also becomes [15] a function for different occasions like outreach projects and social gatherings. However, this group gives less priority on the collections in the library particularly the books about [16] agriculture, [4] health, [5] religion. They are not also particular if the library [38] has reading carrels.

### **Cautious Architect**

Under this classification, the respondents believe that a library is structurally and physically in order that [25] it should be clean and safe. Considering that the patronizing client of the library are geriatric people, there is high regard for the safe standards and procedural operations in the building. In addition to structural content, [21] the library should be well-ventilated with bright ambience as well as the presence of [38] reading carrels in the library. Along with the physical structure, a section is given [41] to post announcements of different activities and programs like seminars, trainings, etc. Hence, this group focuses on the physical and structural composition of a library as designed according to their special needs. On the other hand, this group finds it irrelevant [13] to have a shower room and [27] coffee shop inside because for them these facilities do not conform to what is really needed for the special concerns and treatment of the geriatric citizens.

### **Soulful Reader**

The distinct characteristic of this group is their visible desire for various collections of books fitted for their age and [1] a special kind of music suited for them while reading. Majority of the respondents wanted books on [42] livelihood education like handicrafts, embroidery, etc. This group would also like to have [2] inspirational books. Having said these, the geriatric citizens believe that inspirational thoughts and concepts are significant in order to have positive outlook in life as they advance to becoming more mature in age and in years of experience. This group also wants [6] novels and literature books. It is also worth to consider that [10] the library collection should be easily accessible and organized in a simple way. As a result, the kind of collections this group would like to have mirrors their inspirations, ideals and above all, the identity they carry as long as they are still alive. However, it is not given much importance under this group the structural facility of the library for as long as it does not affect the welfare of geriatric citizens. This group finds it unnecessary that [31] the library should offer cultural tour sponsored by the local government/sectors as well as [36] information on how to be successful financially.

### **Trendy and People-Oriented**

Under this classification, the respondents are willing to accept the changes that can be made in the library particularly the establishment of unique facilities inside like [13] shower room, [14] pantry and [27] coffee shop. They have also deep respect for the librarians who assist and take care of their special needs. [17] The librarian should be accommodating, patient, courteous and understanding. This group believes that their needs must be accommodated accordingly and be given high respect. In this line of thinking, [28] the librarian should be knowledgeable in his profession. This simply means that being a librarian, one should understand the special needs of every geriatric individual and the unique kind of approach he should render to them. On the other hand, it is not much important that [9] a library should have a place where readers can read comfortably and rest after reading as well as [26] the water stand free for senior citizens.

## **DISCUSSION**

The five profiles which emerged from the by-person factor analysis depicted marked differences in the viewpoints of the geriatric Filipino relative to the five themes identified in the Q-sample. Similar to other age groups, geriatric people

are individuals with their own intuitive wants and aspirations and they are consistently mobilizing and reformulating the course of aging and their mental outlook towards it (Valkila, et al., 2010). Their varying characteristics and perspectives are relevant in crafting a library program that can be labeled as geriatric-friendly library.

Respondents under Profile A (*Classic and People-Oriented*) and Profile E (*Trendy and People Oriented*) both expressed significance on the manner the librarian should cater to the needs of geriatric people. Sloan (2009) averred that library physical access needs to be complemented by a positive and welcoming staff attitude and geriatric people wants to have staff who are not too busy to assist them.

The eagerness of geriatric people to try new things is completely involved with their individual feelings and sensitivities, such that the process of growing old and assistance gained, for instance, as engaging or not, enticing or irrelevant, alarming or helpful, as it may be (Marin, 2002 & Valkila et al., 2010). Respondents under profile A are reluctant to embrace some changes that will be made in the library particularly incorporating contemporary physical facilities including shower room [13], pantry [14] and coffee shop [27] which are opposite to profile E who are the only ones who agree to have these kinds of facilities inside the library. However, all the respondents welcome the idea of experiencing modern trend facilities in a form of multimedia materials like television, computer with Internet connection and audio materials which provided support for the aging process as found in the study conducted by Agree and Freedman (2003); Taylor and Hoenig, 2004 and N. Valkila et al., (2010). All of them also agreed that the library should be well-ventilated and has bright ambience [21]. Sloan (2009) stated that geriatric people will become regular users of the library if its environment is welcoming, comfortable and encouraging.

According to Curson, Wilson and Whitney (2005), “social contact for geriatric people is not just important for the narrow aims of the task in hand but also for social inclusion.” Respondents under Profile B (*Gregarious Geriatric*) are seen with fondness to activities that promote social contact with fellow elderly. They also perceive the library as more than a place for reading books but also as a [15] venue for different occasions like outreach programs and social gatherings which is further supported by a study conducted by Fisher et al. (2007), further supported by a study conducted by Fisher et al. (2007), who examined the main library in Seattle and discovered that the library is considered and utilized as a social place and its participants highlighted the social quality of visiting the library (Aabø, S., et al., 2010).

Respondents under profile D (*Soulful Reader*) recognized the importance of music in a library stating that “*it makes me feel relaxed while reading.*” Frequent listening to music had compelling results in the improvement of mind, concentration and attitude after stroke as discovered by Särkämö, et. al. (2008) and have also pointed out that it is a beneficial weapon in the rehabilitation of stroke patients. This is further supported by a study conducted by Ruokonen and Ruismäki (2011) who concluded that music-based activity can be used to improve the geriatric people’s well being and can be seen as potentially important part of their lives.

Although, it is not suitable for the geriatric people to be engaged in the complicated or severe learning activities (Hui-

Jong Hsieh, 2010), all the profiles still want books and information about history stating that *"I love history especially our nation's history because of its rich cultural heritage."* However, they all disagreed to have information on how to be successful financially stating that *"I'm no longer after for uplifting my financial consciousness. I just want to enjoy the remaining years of my life."* This finding is contradicted with other studies of the information needs of geriatric people particularly in the study made by Williamson (1995, 1998) where health was the number one topic while income and finance were second (Williamson & Asla, 2009).

## CONCLUSION

The overall intent of this study is to identify the information needs of the geriatric Filipino citizens and their general concept of a library that is favorable to their needs using Q methodology. The valuable inputs emerged from the identified profile characterizations namely: classic and people-oriented, gregarious geriatric, cautious architect, soulful reader and trendy and people-oriented, truly contribute in crafting a library program intended for them. Interestingly, their special needs and views are geared toward library collection and physical facilities which are part of the major components in lieu of setting up a unique library which can be labeled as geriatric-friendly library. It also constitutes their satisfaction by way of showcasing various activities which promote camaraderie and social contact with fellow geriatric citizens. Having limited this study mostly to the female geriatric citizens who are college graduates invite the need for future researchers to do replication studies across educational background and gender for purposes of differentiation.

The local and private sectors should be involved and cooperate in terms of assisting and supporting the proper implementation of a geriatric-friendly library. Necessarily, therefore, the national government as the institutionalized agency is also mandated in ensuring that geriatric citizens are given full support in the manner that they are truly taking care of and protected in the community. The researcher also finds it relevant to have particular law that will push through to the establishment of libraries designed for geriatric Filipino citizens because as of today, only senior citizens centers are available in the country which are multi-purpose in function with less emphasis on the information needs of senior citizens. Moreover, the public libraries today have very few services or none at all for senior citizens. Majority of their services and programs are designed for the children and youth with even limited resources.

To give support in securing for the best possible quality of life across lifespan should be the goal of being not only as professionals in the field of Library and Information Science (LIS) but also as human beings (Williamson K. & Asla T., 2009). This can be done by providing information that will contribute in the enrichment of their physical, affective and cognitive development. Having a geriatric-friendly library will uphold the morale of geriatric Filipino citizens because they are given a special recognition in the society. In addition, having this kind of library will also help enhance their well-being and stay healthy by engaging themselves in different activities offered. Furthermore, the public will also have a general awareness of the interests and information needs of this group of people.

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## TÜRKİYE'DE KAMU KURUM VE KURULUŞLARINDA HİZMET İÇİ EĞİTİM

Prof. Dr. Elif YÜKSEL OKTAY  
Yalova üniversitesi, Türkiye  
elifsel@gmail.com, elif.oktay@yalova.edu.tr

Şeyma TÜFEKÇİ  
Yalova üniversitesi, Türkiye  
seymatufekci@hotmail.com

Ekonomik, sosyal ve teknolojik gelişmeler ülkeleri, kurumları ve kişileri bu gelişmelere ayak uydurmaya zorlamakta dolayısıyla eğitim önemli bir kavram olarak ön plana çıkmaktadır. Günümüzde eğitimin çocukluktan başlayarak yaşlılık dönemini de kapsayacak şekilde hayat boyu sürmesinin gerekliliği daha iyi anlaşılmıştır. Toplumun ihtiyaçlarını karşılamak için kurulan kurum ve kuruluşlar bir başka deyişle örgütler de rekabet güçlerini arttırmak, daha iyi hizmet verebilmek ve devamlılıklarını sağlamanın ön koşulunun çalışanların sürekli eğitiminden geçtiğinin farkına varmışlardır. Çalışanların görevleriyle ilgili gerekli bilgi, beceri ve tutumları kazanmalarını sağlamak üzere yapılan eğitimlerin tümü hizmet içi eğitim olarak adlandırılmakta; bu eğitimler ile çalışanların en etkin şekilde yetiştirilmesi, verimlilik oranlarının artırılması ve gelecekteki görevlere hazırlanmaları amacıyla alt yapılarının güçlendirilmesi amaçlanmaktadır. Bu çalışmada hizmet içi eğitim kavramının yanı sıra Türkiye'de kamu kurum ve kuruluşlarında gerçekleştirilen hizmet içi eğitimler ele alınacaktır.

Anahtar Kelimeler: Hizmet içi eğitim, kamu sektörü, mesleki eğitim, Türkiye

### IN-SERVICE TRAINING AT STATE INSTITUTIONS AND ORGANIZATIONS IN TURKEY

Economic, social and technological developments force countries, institutions and persons to keep pace with these developments and therefore education comes to the forefront as an important concept. The necessity for education to continue lifelong starting from childhood until the old age has been understood better today. The institutions and organizations that have been established to fulfill the necessities of the society have realized that the precondition to improve their competition strength, provide a better service and ensure their continuity is the continuing-education of workers. The entirety of the education provided to ensure workers to gain the required knowledge, skills and attitudes related to their duties is called in-service training; and strengthening of infrastructures is aimed for an effective training of workers, improving their efficiency rates and preparation for future assignments by these trainings. In this study, in addition to the in-service training concept, in-service trainings provided at state institutions and organization in Turkey will be discussed.

Key Words: In-service trainings, Public sector, vocational education, Turkey

### GİRİŞ

Bilgi ve iletişim teknolojilerindeki gelişmeler gerek ülkeleri, gerekse kurumları ve kişileri meydana gelen bu gelişmelere uymak zorunda bırakmakta ve bu değişimlere ayak uyduramayan kamu ve özel sektör kuruluşları toplumun ihtiyaçlarını karşılayamamakta veya verimsiz çalışmakta ya da sonunda ortadan kalkmaktadırlar. Gelişmelere ve yeniliklere ayak uydurmak sadece teknik bilginin kullanılmasıyla değil, çalışanların da bu yeniliklere ayak uydurmasını gerektirir.

Eğitimin çocukluktan başlayarak, hayat boyu sürmesi gerekirken, kişi kendini sürekli yenileyebilsin. Bu yenilenmenin sadece kişinin sosyal ve kültürel hayatında değil, çalışma hayatında da gerçekleşmesi gerekir. Çünkü kişiler işlerinin gerektirdiği donanımına sahip değilse ve bunun yanı sıra bilgi ve iletişim teknolojilerinde meydana gelen yeniliklere göre de eğitilmezlerse çalıştıkları kurumlardaki planlar, programlar, kullanılan malzeme, üretim teknikleri ne kadar mükemmel olursa olsun elde edilen sonuç hedeflenen sonuç olmayacak, başarısızlık meydana gelecektir.

Kamu sektöründe temel amaç topluma hizmettir. Bir başka deyişle kamu sektörü sosyal hizmet amacıyla hareket eder. Dolayısıyla kamu kesiminde çalışanların işlerinin gerektirdiği nitelik ve niceliğe sahip olmaları topluma

daha kaliteli ve istenen hizmeti daha iyi vermelerini sağlayacaktır. Türkiye’de Kamu kurum ve kuruluşlarında çalışanlara göreve başladıkları zaman hizmetin gerektirdiği bilgi, beceri ve davranış biçimlerine sahip olabilmeleri için adaylık eğitimi verilmektedir. Adaylık eğitimi alan memurların asli memurlukları sırasında da çağın gerektirdiği bilgi, beceri ve donanıma sahip olmaları için de hizmet içi eğitim almaları gerekir. Böylelikle çalışanlar görevlerinin gerektirdiği bilgi, beceri ve davranış biçimlerini kazandıkları için kendilerine olan güvenleri artacak, moralleri düzelecek ve kuruma olan bağlılıkları artacak, işlerini daha iyi yapacakları için hizmette kalite yükselecek, hizmet sürecinde meydana gelecek kaza ve hatalar azalacaktır.

Bu çalışmada hizmet içi eğitim kavramı ele alınarak, Türkiye’de kamu kurum ve kuruluşlarında uygulanan hizmet içi eğitim yasal mevzuat çerçevesinde incelenerek, olumlu yönleri ve eksiklikleriyle değerlendirilecektir.

## 1.HİZMET İÇİ EĞİTİM KAVRAMI

Kamu hizmetlerinde özellikle 2. Dünya Savaşı’ndan sonraki gelişmeler, yönetimin daha etkili ve verimli işlemesini, kamu kesimi çalışanlarının da, daha nitelikli olarak yetişmelerini zorunlu kılmıştır. Memurlar önceleri basit, tekdüze ve daha az uzmanlık isteyen işleri yerine getirirken, yönetsel işlemlerin çeşitlenmesi ve teknik nitelik kazanması ile görevlerini daha iyi bir şekilde yerine getirmeleri için eğitime ihtiyaç duyar hale gelmişlerdir. Özellikle bilgi ve iletişim teknolojilerindeki gelişmeler kamu görevlilerinin bu gelişmelere ayak uydurabilmeleri için sürekli biçimde hizmetiçi eğitime tabi tutulmalarını gerekli kılmaktadır (Kayar, 2011:316).

Hizmet içi eğitim ya da yetiştirme, kişinin hizmete girerken ya da girdikten sonra, hizmetin çeşitli aşamalarında “mesleki” yönden yetiştirilmesidir (Eryılmaz, 2008:299). Çalışanın en verimli şekilde kullanılması için gerekli bilgi, beceri ve davranış biçimlerine sahip kılınması süreci olan hizmet içi eğitim (Barkurt, 1990: 87), üretim ve hizmette etkinliğin, verimin, kalitenin yükseltilmesi, ürünün üretimi ve tüketimi sürecinde meydana gelebilecek hataların ve kazaların azaltılması, maliyetlerin düşürülmesi, satış ve hizmet sunumunda nitel ve nicel yönden gelişmenin sağlanması, karların yükseltilmesi, vergi gelirlerinin ve tasarrufların artırılması amacıyla işgücüne verilen temel meslek ve beceri eğitimi yanında; iş görene yönelik çalışma hayatı süresince bilgi, beceri ve davranış ve verim düzeyini yükseltici planlı eğitim etkinlikleri şeklinde de tanımlanabilir (Çakır, 2008:22). Literatürde hizmet içi eğitim anlamında kullanılan kavramların artması konunun önemine işaret etmektedir. Bu kavramlardan bazıları şunlardır (Öztürk, Sancak, 2012:765):

- Personel geliştirme,
- Personel yenileştirme,
- İnsan kaynaklarının geliştirilmesi,
- Sürekli eğitim,
- Profesyonel ilerleme,
- Örgüt yenileme

Hizmet içi eğitim kavramı hakkında her ne kadar birbirinden farklı tanımlar yapılmış olsa da aslında tüm tanımların özünde hizmet içi eğitim yolu ile bireye çalıştığı işin gerektirdiği mesleki anlamda yeterli bilgi, beceri ve tutum kazandırma, bireyin işyerinin verimliliğini artırma, başarısını pekiştirmek üzerine gerçekleştirilen bir süreç yönetimidir. Yani hizmet içi eğitim, kısaca yaşam boyu eğitim içinde yer alan bir alt süreç olarak ifade edilebilir (Kayar, 2011: 7, Babadoğan, 1989: 261).

Bir kurumda hizmet içi eğitiminin gerekliliğini gösteren bir çok durum vardır. Bu durumlardan bazıları şöyle sıralanabilir (Taymaz, <http://egitimvebilim.ted.org.tr/index.php/EB/article/view/5639/1780>):

- Kurumda üretilen mal veya hizmetin saptanan ya da beklenen kalitenin, niteliğin altında olması,
- Üretilen mal veya hizmetin gerekli niceliğin, miktarın altına düşmesi, rantabilitenin azalması,
- Üretimin zamanında alınamaması, gecikmesi, süre standartlarına uygun olmaması ve verimliliğin azalması,
- Üretim için gereğinden fazla malzeme kullanılması, malzeme kaybının artması,
- Kurumda bakım ve onarım giderlerinin amortisman sınırlarını aşarak artış göstermesi,
- Mal veya hizmetin üretiminde kusur, hata ve iş kazalarının artması, iş düzeninin bozulması,
- İş alımında ve yapımında beklenen algılama, benimseme ve istekli çalışmaların azalması,
- Kurumda iletişim, işbirliği ve koordinasyonda aksaklıkların meydana gelmesi, üretimi etkilemesi,
- Kurumda çalışan personel arasında uyumsuzluk ve disiplin olaylarının artması,
- Kurumda personel hareketliliğinin, yer değiştirme ve ayrılımlarının artış göstermesi.

Hizmet içi eğitimin amaçları ise genel olarak şöyle sıralanabilir (Eryılmaz, 2008:300):

- Hizmetin gerektirdiği nitelikler için memurun mesleki ve teknik yönden geliştirilmesi ve bilgisinin artırılması,
- Kamu hizmetlerinde daha az personel kullanarak ya da aynı personelle daha fazla mal ve hizmet üretmek bir başka deyişle hizmetlerde etkinlik ve verimliliğin sağlanması,
- Kurumla, yöneldiği hizmet çevresi arasındaki ilişkileri düzenlemek, çevrenin tepkisini değerlendirmek, halkla ilişkiler bölümlerinin yardımıyla memur-vatandaş ilişkilerini iyileştirmek,
- Bir kararın oluşumuna katılan birden fazla “birim” ya da “yetkili” olduğu durumlarda kararların çabuk ve zamanında alınarak sonuçlandırılması, vatandaşların kamu kurumlarındaki işlerinin kolaylaştırılması, işlerin kırtasiyeciliğe boğmadan kuralların azaltılması ve sadeleştirilmesi, yetki devri yoluyla günlük işlere ilişkin kararların alınmasının hızlandırılması kısaca iş akışının hızlandırılması,
- Personelin motive edilmesi. Hizmet içi eğitim programlarına çağırılma memura çalıştığı ortamın koşullarından belirli bir süre uzaklaşma, dinlenme ihtiyacını giderme, kendini bilgi ve deneyim olarak geliştirme fırsatı tanıdığı için olumlu bir unsurdur. Bu durum bireysel açıdan çalışanın moralini arttırmasının yanı sıra, aynı veya benzer hizmetlerde çalışanların bir araya gelerek “grup dayanışmasına”, tecrübe ve bilgi alışverişine yardımcı olacaktır.

Kamu sektöründe çalışanların kadrolu devlet memuru olması sebebiyle işten atılma kaygısının düşük olması verimliliği olumsuz etkilemektedir. Yüksek performansın, büyük ölçüde işten elde edilen tatmine bağlı olduğu düşünülürse, memura işinin en iyi şekilde nasıl yapılacağı gösterilip öğretilmezse, memur büyük ölçüde başarıya ya da başarılı olma duygusundan yoksun kalır. İşi öğretme, düzeltme ve disiplin, başlangıçta kısmi bir huzursuzluğa ve sıkıntıya yol açarsa da, bu durum kişinin kendisine saygısını yitirmeden yapıcı bir şekilde yürütülürse, belirli bir süre sonra kişideki başarıya duygusunun gerçekleşmesine yol açarak motivasyon artışını sağlayabilecektir (Görmüş, Kahya, 2014:40).

## 2. TÜRKİYE’DE KAMU KESİMİNDE HİZMET İÇİ EĞİTİM

### 2.1. TÜRKİYE’DE HİZMET İÇİ EĞİTİME İLİŞKİN YASAL MEVZUAT

Türkiye’de kamu kurum ve kuruluşlarında hizmet öncesi ve hizmet içi eğitimin düzenlenmesi yasalarla zorunlu kılınmıştır. Bazı bilgi, beceri ve davranışlar ancak hizmet içi eğitimle kazanılabilmektedir. Örneğin, polislik, kaymakamlık, vergi memurluğu vb. gibi görevler sadece kamu sektörüne özgü görevlerdir. Bunların karşılıkları özel sektörde yoktur. Bu nedenle kamu sektörüne özgü görevlerde, değişen ve gelişen tekniklerin öğrenilmesi ancak hizmet içi eğitimle sağlanabilmektedir. Bu bilgi ve beceriler de hizmete girdikten sonra kazanılabilir (Selimoğlu, Biçen Yılmaz, Ocak 2009:11).

Türkiye’de hizmet içi eğitim 14.07.1965 tarihinde kabul edilip, 23.07.1965 tarihinde Resmi Gazete’de yayınlanıp yürürlüğe giren 657 sayılı Devlet Memurları Kanunu’nun “Devlet Memurlarının Yetiştirilmesi” başlığının bulunduğu Kısım 7’de 214-225. maddelerinde yer alan hükümlere göre yerine getirilmektedir. Kanun’a göre hizmet içi eğitim devlet memurlarının yetiştirmelerini sağlamak, verimliliklerini arttırmak ve onları ilerki görevlere hazırlamak amacıyla uygulanmaktadır. Eğitimle ilgili maddeler aşağıdadır (<http://www.mevzuat.gov.tr/MevzuatMetin/1.5.657.pdf>):

214. madde’de hizmet içi eğitimin Devlet Personel Başkanlığı tarafından ilgili kurumlarla birlikte hazırlanacak yönetmelik dâhilinde yürütülerek gerçekleştirileceği vurgulanarak memurların yetiştirilmesinde temel sorumluluk kurumlara yüklenmektedir. 215. ve 216. maddelerde her kurumda, yetiştirme faaliyetlerini düzenlemek, yürütmek ve değerlendirmekle görevli bir “Eğitim birimi”nden bahsedilmektedir. Birden çok birim kurulan kurumlarda bunlardan biri “Merkez Eğitim Birimi” adını alır. 216. maddeyle kurumlara kendi eğitim ihtiyaçlarını karşılamak üzere eğitim merkezi açma yetkisi verilmektedir. Madde’ye göre kurumlar arası eğitim ihtiyaçlarını karşılamak üzere, Başbakanlık Devlet Personel Başkanlığı’nın teklifi ve Bakanlar Kurulu kararnamesiyle, kurumlar arası eğitim merkezleri de açılabilir. Eğitim birim ve merkezlerinin kuruluş ve işleyişleri Başbakanlık Devlet Personel Başkanlığı’nın görüşü alınmak suretiyle kurumlarınca hazırlanacak yönetmeliklerle düzenlenir.

Kanun’un 218. ve 221. maddelerinde yer alan “kurumların, memurlarını yurt dışında eğitebilecekleri gibi, kendi bünyeleri içerisinde mesleki eğitim ve öğretim yapabilirler, yurt içindeki öğrenim kurumlarında öğrenci okutabilirler” şeklindeki ifadeler kurumlara kendi memurlarını eğitime konusunda takdir yetkisi tanımıştır. Yurt içi ve yurt dışı eğitim programlarının hazırlanmasında ve uygulanmasında yol göstermek, yetiştirme faaliyetlerini koordine etme ve denetleme yetkisi Başbakanlık Devlet Personel Başkanlığı’na verilmiştir.

25.07.1983 tarih ve 83/6854 sayılı Bakanlar Kurulu Kararı ile Devlet Memurları Eğitimi Genel Planı 19 Ekim 1983 tarih ve 18196 sayılı Resmi Gazetede yayınlanarak yürürlüğe girmiştir. Devlet Memurları Eğitimi Genel Planı; eğitimin bütünlüğü ilkesi içinde, hizmet içi eğitime yön verici ilkeleri ve tedbirleri belirterek, Devlet kamu hizmeti görevlerinin bağlı olacağı eğitim faaliyetlerinin niteliğine, hizmet içi eğitim görececek personel gruplarına ve hizmet içi eğitim sorumluluklarının yürütülmesine ilişkin esasları düzenler. Plan'a göre kurumlar, devlet memurlarını yetiştirirken aşağıdaki ilkeleri gözönünde bulundurmalıdır (http://www.resmigazete.gov.tr/arsiv/18196.pdf, s.26-27) :

- Hizmet öncesi öğretim ve eğitim veren yüksek öğretim kurumları, mesleki ve teknik okullar ile bu nitelikteki kursların ders programları, ülke ve kamu hizmetlerinin Başbakanlıkça tespit edilecek ihtiyaçlarına uygun olarak düzenlenir.
- Personelin bir plan dahilinde hizmet içi eğitimden geçirilmeleri esastır.
- Personelin hizmet içi eğitimi kamu kurum ve kuruluşlarının ihtiyaçları ile kalkınma plan ve programlarında öngörülen hedeflere göre gerçekleştirilir.
- Personeler, hizmet içi eğitimde kurum ve kuruluşu ile ilgili genel bilgi ve hizmetlerin yerine getirilmesinde yararlı olacak bilgi ve teknikler verilir, geçeri ve davranışlar kazandırılır.
- Hizmet içi eğitim kariyerlerin geliştirilmesine yardım eder.
- Kamu kurum ve kuruluşları, hizmet içi eğitimi eğitimin sürekliliği esasına göre yürütürler.
- Kamu kurum ve kuruluşları, hizmet içi eğitim faaliyetlerini, bu planda yer alan ilkeler ve esaslar çerçevesinde önceden tespit edecekleri hizmet içi eğitim ihtiyaçlarını gözönünde bulundurmak suretiyle, kendi yönetmelikleri çerçevesinde yıllık eğitim programlarına uygun olarak düzenler, yürütürler ve değerlendirirler.
- Personeler hizmet içi eğitimde çalıştıkları kamu kurum ve kuruluşlarının Teşkilat, Personel ve Malzeme kadrolarında belirtilen görev yerlerine göre yeni teknikler de gözönünde tutulmak suretiyle bu görevlerin yerine getirilmesi için gereken niteliklerin kazandırılması esastır.
- Kamu kurum ve kuruluşları, personeline, görevlerinin gerektirdiği bilgi, tecrübe ve becerileri kazandırmak üzere işbaşında uygulamalı eğitim de verebilirler.
- Kamu kurum ve kuruluşları, belli dallarda kendi okullarında yapmakta oldukları öğretim ve eğitimi sadece kendi eleman ihtiyacını karşılamak amacıyla değil, bu alanda diğer kamu kurum ve kuruluşlarını da gözönünde bulundurmak suretiyle yaparlar. Eğitim kurumlarının kapasiteleri kamu hizmetlerinin ihtiyaçlarını karşılayacak şekilde düzenlenir.
- Kamu kurum ve kuruluşlarında hizmet içi eğitime tabi tutulan personel eğitimde kazandırılan niteliklere ve eğitime gönderilme amacına uygun görevlerde istihdam edilirler.

Plan'da kamu kurum ve kuruluşlarında çalışan personelin görevleri ile ilgili bilgi ve becerilerini artırmak amacıyla yaptırılacak hizmet içi eğitim türlerine de değinilerek; kamu kurum ve kuruluşlarında eğitici personel olarak görevlendirileceklerin yetiştirilmelerinin Devlet Personel Dairesinin koordinatörlüğünde, Türkiye ve Orta Doğu Amme İdaresi Enstitüsü ve ilgili yüksek öğretim kurumlarınca düzenlenecek eğitimcilerin eğitimi programları ile olacağı yer almaktadır. Üst kademe yöneticilerinin yetiştirilmesi, bu konudaki mevzuat hükümlerine göre yapılırken; üst kademe yöneticilerinin dışındaki yöneticilerin ve mesleki ve teknik personelin yetiştirilmesinin sorumluluğu kurumlarına verilmiştir (http://www.resmigazete.gov.tr/arsiv/18196.pdf).

27.06.1983 tarihinde Devlet Personel Başkanlığı Aday Memurları Yetiştirme Genel Yönetmeliği 18090 sayılı Resmi Gazete'de yayınlanarak yürürlüğe girmiştir. Bu Yönetmelik; 657 sayılı Devlet Memurları Kanunu'nun 2670 sayılı Kanun'la değişik 55'inci maddesine dayanılarak; aday memurların yetiştirilmesi için uygulanacak eğitim programlarını, eğitim sürelerini, eğitimlerde uygulanacak sınavları, sınav değerlendirme esaslarını ve ilgili diğer hususları belirlemek amacıyla düzenlenmiştir (http://www.resmigazete.gov.tr/arsiv/18090.pdf).

18.06.1984 tarihinde Resmi Gazete'de yayınlanarak yürürlüğe giren 217 Sayılı Devlet Personel Başkanlığı Kuruluş Ve Görevleri Hakkında Kanun Hükmünde Kararname'nin 3. maddesinin h ve ı fıkralarında Devlet Personel Başkanlığı'nın hizmet içi eğitime ilişkin görevleri belirtilmiştir. Bu fıkralara göre kamu kuruluşlarında personel planlaması yapılması ve uygulamasına yardımcı olmak ve her kademe görevli personelin hizmet içinde eğitilmesi ve yetiştirilmesi ile ileriki kadrolara hazırlanmalarını sağlamak üzere gerekli eğitim programlarının hazırlanması, uygulanması ve bunların takip ve değerlendirilmesine ait esasların düzenlenmesi ve bu alandaki uygulamaların denetlenmesi, hizmet öncesi eğitim kurumlarının müfredat programlarına, kamu görevlerinin gerektirdiği niteliklerin ve bilgi ve alışkanlıklarının kazandırılmasına yararlı konuların yansımaları

için gerekli koordinasyon ve çalışmaların yapılması Devlet Personel Başkanlığı'nın görevleri arasındadır. Bununla ilgili görev Kararname'nin 9. maddesi ile Başkanlığın ana hizmet birimlerinden olan Eğitim Dairesi Başkanlığı'na verilmiştir. Eğitim Dairesi Başkanlığı'nın bu konudaki görevleri şunlardır (<http://www.mevzuat.gov.tr/MevzuatMetin/4.5.217.pdf>):

“Kamu personelinin yurt içinde ve yurtdışında hizmet öncesi ve hizmetiçi eğitim ve yetiştirilmeleri ile ilgili her türlü çalışmalar yapmak, ilgili kurumlara tekliflerde bulunmak ve gereken hallerde işbirliği sağlamak, uygulamaları takip etmek, değerlendirmek ve denetlemek, kamu kurum ve kuruluşlarının personel birimlerinde görev alacak elemanların yetiştirilmesi amacıyla eğitim merkezleri açmak, eğitim ihtiyaçlarını tesbit etmek, Kamu Yönetimi ile ilgili öğrenimin gelişmesini, görevlilerin modern idare esasları ve tekniğine göre bilgilerini arttırmak ve tekamülünü sağlayacak tedbirler almak, uygulamak ve bu gibi tedbirleri teşvik etmek ve desteklemek, bu alanda öğretim elemanları yetiştirilmesine yardımcı olmak, Kamu yönetimi ile ilgili araştırma ve incelemeler yaparak bu alanda öğretim ve eğitim yapacak kurum ve kuruluşlara gerekli öğretim kaynakları meydana getirmek, Başkanlığın hizmet içi eğitim politikasının tesbitine yardımcı olmak, eğitim plan ve programlarını hazırlamak, programa katılacakların sayılarını ve kurumlara ayrılacak kontenjanları belirlemek, üst kademe yöneticilerinin hizmet içi eğitimiyle ilgili işlemleri yapmak, Personelin ileriki kadrolara hazırlanmaları için uygun usul ve vasıtaları tesbit etmek, ve Başkanlıkça verilecek benzeri görevleri yapmak.”

T.C. Anayasası'nın 128. maddesi'nde “Üst kademe yöneticilerinin yetiştirilme usul ve esasları, kanunla özel olarak düzenlenir” ([https://www.tbmm.gov.tr/anayasa/anayasa\\_2011.pdf](https://www.tbmm.gov.tr/anayasa/anayasa_2011.pdf)) şeklindeki hüküm 10.01.1985 tarihinde kabul edilip, 19.01.1985 tarihli 18640 Sayılı Resmi Gazete'de yayınlanarak yürürlüğe giren 3149 sayılı Üst Kademe Yöneticilerinin Yetiştirilmesi Hakkındaki Kanun ile hayata geçirilmiştir. Kanun üst kademe yöneticilerinin yurt içinde ve yurt dışında yetiştirilme usul ve esaslarını düzenlemek amacını taşımakta, kamu kurum ve kuruluşlarında Müsteşar, Müsteşar Yardımcısı, Genel Müdür, Başkan, Kurul Başkanı, Genel Müdür Yardımcısı, Daire Başkanı, Büyükelçi, Vali, Kaymakam, Bölge Müdürü olarak atanabilecek kamu görevlileriyle Devlet Personel Başkanlığının teklifi ve Bakanlar Kurulu kararıyla tespit edilecek diğer üst kademe yöneticilerini kapsamaktadır. Adalet Bakanlığı personelinin bu Kanun kapsamına alınması Adalet Bakanlığının teklifi üzerine, Silahlı Kuvvetler personelinin bu Kanun kapsamına alınması ise Genelkurmay Başkanlığının teklifi üzerine, Bakanlar Kurulu Kararı ile olur. Cumhurbaşkanlığı Genel Sekreterliği ile Türkiye Büyük Millet Meclisi Başkanlığı İdari Teşkilatı üst kademe yöneticilerinin yurt içinde ve yurt dışında yetiştirilme usul ve esasları, Cumhurbaşkanlığı Genel Sekreterliği ile Türkiye Büyük Millet Meclisi Başkanlık Divanı tarafından düzenlenir. Kanun'un 3. Maddesi'ne göre eğitimin yapılacağı yerler, eğitime katılacakların tespiti, eğitimin süresi, eğitimde uygulanacak programlar ile eğitimle ilgili diğer usul ve esaslar Devlet Personel Başkanlığı ile Türkiye ve Orta Doğu Amme İdaresi Enstitüsünün görüşü alınarak Başbakanlıkça çıkarılacak bir yönetmelikle düzenlenir. Eğitime katılacaklarda aranacak şartlar şunlardır ([https://www.tbmm.gov.tr/tutanaklar/KANUNLAR\\_KARARLAR/kanuntbmmc068/kanuntbmmc068/kanuntbmmc06803149.pdf](https://www.tbmm.gov.tr/tutanaklar/KANUNLAR_KARARLAR/kanuntbmmc068/kanuntbmmc068/kanuntbmmc06803149.pdf)):

- a) Kamu kurum ve kuruluşlarında askerlik süresi dahil, yükseköğrenimden sonra en az 4 yıl fiilen çalışmış olmak,
- b) Müracaat tarihinde 40 yaşını geçmemiş bulunmak,
- c) Üst kademe yöneticisi olabileceğine dair olumlu sicil almış olmak ve üçüncü maddede belirtilen yönetmelikteki diğer şartları taşımak.

Dönemin Cumhurbaşkanı Kenan Evren tarafından 3149 sayılı Kanun'un Anayasa'nın 7., 8., 11., 128. ve 140. maddelerine aykırı olduğu gerekçesiyle açılan İptal Davası sonucunda, Anayasa Mahkemesi Kanun'un bazı maddelerini iptal etmiş, geriye kalan hükümlerin de uygulama kabiliyetinin kalmadığına karar vermiştir (<http://www.kararlaryeni.anayasa.gov.tr/Karar/Content/b43c7248-6229-4bd9-9705-1d16c2b7939c?excludeGerekce=False&wordsOnly=False>, <http://www.memurlar.net/haber/573995/>).

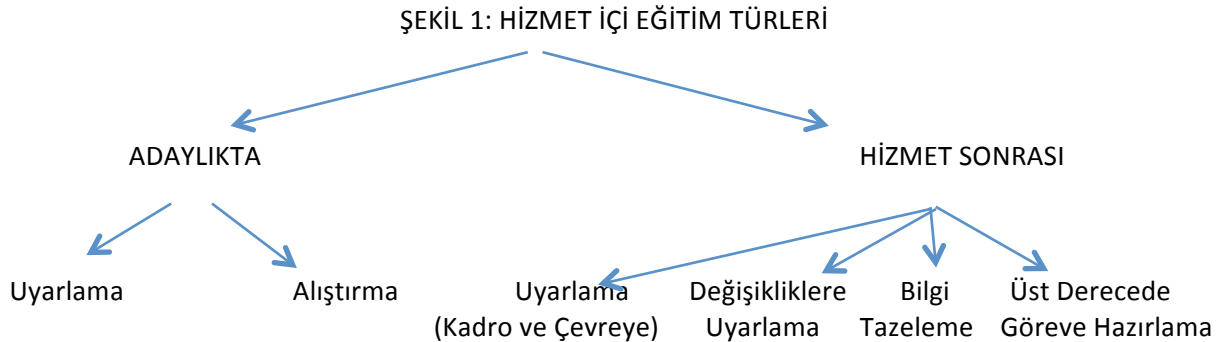
Türk Hukukuna göre; 657 sayılı Devlet Memurları Kanunu kapsamında çalışan kamu görevlilerinin, görevleri gereği yaptıkları seyahatlerdeki harcamaları kamu idarelerince karşılanması gerekmektedir. Bu bağlamda harcırah, 6245 sayılı Harcırah Kanunu'nda özel olarak düzenlenmiştir. Gerek 657 sayılı Kanun gerekse 6245 sayılı Kanun, kamu görevlilerinin, görevleri ile ilgili olarak yaptıkları harcamaların harcırah yoluyla karşılanmasının kamu idarelerinin bir görevi olduğunu açıkça düzenlemiştir (Uz, 2007:59). 10.02.1954 tarihli 6245 sayılı Harcırah Kanunu'nun 37. maddesi'nde hizmet içi eğitim amacıyla şehir dışına gönderilecek devlet memurlarına ödenecek harcırahtan bahsedilmektedir. Madde'ye göre “Mesleki bilgilerini arttırmak amacıyla memuriyet mahalli dışında açılan kurs veya okullara gönderilenlere, bu Kanun'a göre geçici görev gündeliği verilir (İkinci fıkra mülga: 14/1/1988 - KHK - 311/15 md.). Bu maksatla yabancı memleketlere gönderilenlere

özel anlaşmaları gereğince, yabancı devlet, uluslararası kuruluş veya resmi diğer kuruluşlar tarafından ödeme yapıldığı takdirde bu ödemeler gündeliklerinden indirilir. Yurt içinden veya yurt dışından sağlanan burslara dayanılarak veya aylıkları transfer edilmek suretiyle staj ve öğrenim amacıyla yurtdışına gönderilenlere bu madde hükmü uygulanmaz. Bunlara ilgili kanun hükümlerine göre müstehak oldukları ödeme yapılır”. Aynı Kanun’un 33. maddesi’nin “b” fıkrasına göre gündelik ödenenler hariç yurt içinde yatacak yer temini için ödedikleri ücretleri belgelendirenlere, belge bedelini aşmamak ve her defasında on gün ile sınırlı olmak üzere gündeliklerinin tamamına kadar olan kısmı ayrıca ödenecektir (<http://www.mevzuat.gov.tr/MevzuatMetin/1.3.6245.pdf>, s.2584-2585).

## 2.2. HİZMET İÇİ EĞİTİM YÖNTEMLERİ

Hizmet içi eğitimde kullanılacak yöntemin doğru seçilmesi eğitimin başarısı için çok büyük önem arzeder. Uygulama aşamasında hangi tür eğitim yönteminin uygulanacağı çeşitli faktörler gözönüne alınarak saptanır. Bu faktörler; eğitime katılacakların düzeyi, sayısı, eğitim için ayrılacak zaman, bütçe, eğitimin kimler tarafından verileceği gibi unsurlardan oluşur (Sabuncuoğlu, 2012:145). Hizmet içi eğitimde kullanılması gereken yöntemle ilişkin çeşitli görüşler vardır. İş başında eğitim ve iş dışında eğitim en yaygın sınıflandırmadır. İş başında eğitim gerçek çalışma ortamındaki eğitim olup, kurumlar tarafından en çok tercih edilen eğitimidir. İş başında eğitim temelde, acemi çalışanların işinde deneyimli ve usta olanlarla yakın çalışması ve izleyerek, yaparak, dinleyerek ve değerlendirerek öğrenmesidir. İş başında eğitim yöntemleri; gözlemci nezaretinde eğitim, işe alıştırma (oryantasyon) eğitimi, iş değiştirme (rotasyon) yoluyla eğitim, yetki devri yoluyla eğitim, monitör (kılavuz) aracılığıyla eğitim, özel tasarımlar (proje çalışması) ve staj yoluyla eğitim olarak sıralanabilir. Üniversite ve meslek lisesi gibi eğitim kurumlarına veya özel seminer ve kongrelere gidilerek gerçekleştirilen, iş dışında eğitim ise, belirli görevlerin özelliklerine yönelik olmayıp daha çok tamamlayıcı bir niteliktedir. İş dışında eğitim yöntemleri; grup tartışmaları, panel (toplu tartışma), sempozyum (toplu sunuş), açık oturum (forum), beyin fırtınası, anlatım yöntemi, seminer ve kurslar, örnek olay yöntemi, evrak sepeti yöntemi, rol oynama yöntemi, gezi-gözlem, simülasyon (taklit) yöntemi olarak sıralanabilir (Dalkıran, 2014:192).

Bir diğer görüşe göre hizmet içi eğitim türlerini hizmet öncesi ve hizmet içi olarak (adaylıkta ve hizmette) ikiye ayırmak mümkündür. Buna göre, adaylıkta hizmet içi eğitim uyarlama ve alıştırma olarak iki gruba ayrılabilir. Hizmette verilen eğitim ise, kadro ve çevreye uyarlama, değişikliklere uyarlama, bilgi tazeleme ve üst görevlere hazırlama olarak dört gruba ayrılabilir (Kalkandelen, 1979: 39).



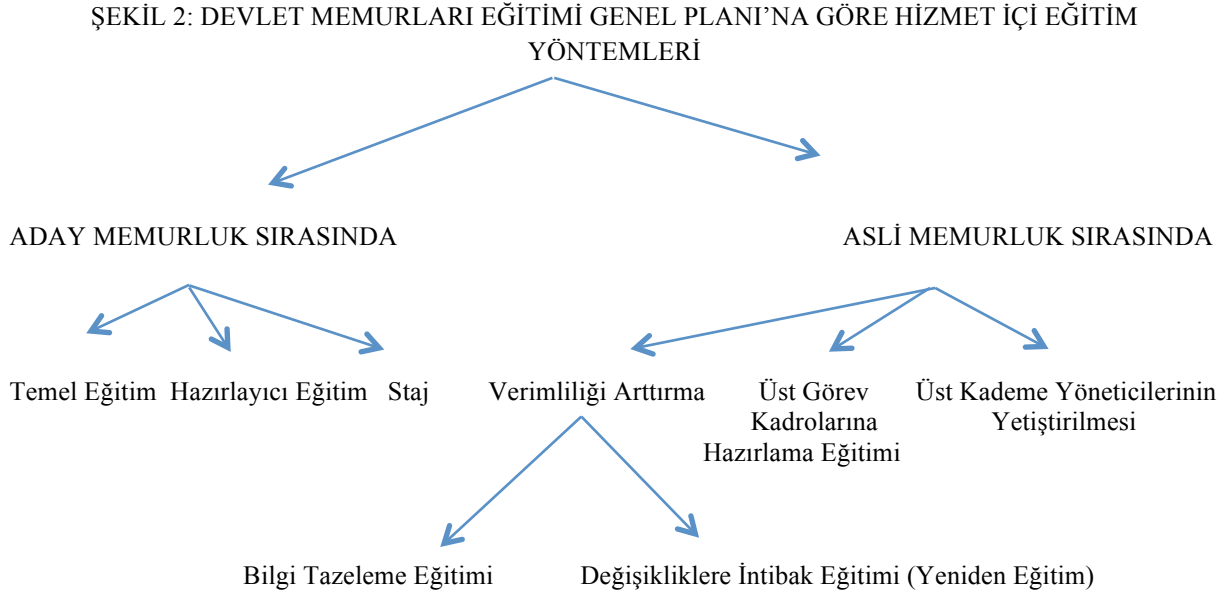
Kaynakça: A. Hayrettin Kalkandelen; (1979), **Hizmet İçi Eğitim El Kitabı**, Ajans–Türk Gazetecilik ve Matbaacılık Sanayi, Ankara.

Hizmete yeni giren personel için yapılan eğitimde personele kurum politikası, iş ve işlevleri, hizmeti/ürünü, personeli, görev, yetki ve sorumlulukları öğretilir ve hizmet öncesi yetiştirme eksiklikleri giderilir. Bu eğitim hizmet öncesi eğitim, iş tanıtma ve uyum eğitimi ve iş başında yetiştirme şeklinde yapılabilir. Göreve ilk defa atanan personele yaygın olarak uygulanan programlar alıştırma (oryantasyon) ve hazırlık eğitimleridir (Kılıç, 2008: 5).

Devlet Memurları Eğitimi Genel Planı’na göre ise eğitim aday memurluk sırasında ve asli memurluk sırasında verilmelidir. Gerçekten de Aday memurluk sırasında verilen eğitimler temel eğitim, hazırlayıcı eğitim ve staj olmak üzere üç çeşittir. Asli memurlukta eğitimler ise verimliliği artırma eğitimi (bilgi tazeleme eğitimi ve



değişikliklere intibak eğitimi/yeniden eğitim), üst görev kadrolarına hazırlama eğitimi ve üst kademe yöneticilerinin yetiştirilmesi şeklindedir (<http://www.resmigazete.gov.tr/arsiv/18196.pdf>, s.28-29.).



Kaynak: <http://www.resmigazete.gov.tr/arsiv/18196.pdf>, s.28-29.

27.06.1983 tarihinde resmi gazetede yayınlanan Devlet Personel Başkanlığı Aday Memurları Yetiştirme Yönetmeliği'ne göre temel eğitim, aday memurların asli memur olabilmeleri için tabi tutuldukları Devlet memurlarının ortak nitelikleri ile ilgili hususları kapsayan eğitimidir. Hazırlayıcı eğitim aday memurların; Başkanlık, atandıkları birim, sınıf, kadro ve görevleri ile ilgili olarak yapılan eğitim olup; Staj eğitimi ise aday memurların gördükleri temel ve hazırlayıcı eğitim konularıyla ilgili olarak yapılan uygulamalı eğitimidir. Stajın hedefi ise aday memurlara, hazırlayıcı eğitim döneminde verilen kuramsal bilgilerle ilgili, uygulama yaptırmak suretiyle beceri ve deneyim kazandırmaktır (<http://www.resmigazete.gov.tr/arsiv/18196.pdf>, s.28-29).

Devlet Memurları Eğitimi Genel Planı'na göre Asil memurluk sırasında verilecek üç hizmet içi eğitim türü vardır. İlki verimliliği arttırmaya yönelik hizmet içi eğitimlerdir. Personelin mesleki bilgilerinin genel çizgileriyle hatırlatılması suretiyle mesleki bilgilerden daha geniş ölçüde ve oranda yararlanması amacını güden Bilgi Tazeleme Eğitimi ile mevzuat, teknoloji kullanılan araçlarda değişiklikler veya görev değişikliği meydana geldiği takdirde, ilgili personele bunların öncelikle iletilmesini ve bu değişikliklerin hizmete uygulanması amacını güden Değişikliklere İntibak Eğitimi (Yeniden Eğitim) diğer eğitim türleri olup, bu eğitimler memurun verimliliğini arttırmayı amaçlar. Üst Görev Kadrolarına Hazırlama Eğitimi asli memurlara uygulanan bir başka hizmet içi eğitim türüdür. Eğitilmiş personelin görevlerinde yükselmesi liyakat esasına bağlı olduğundan ve bir üst görevi yapılabilmesi daha üstün bir bilgi, deneyim, beceri ve tekniğe sahip olmayı gerektirdiğinden, bu eğitimle memurların daha üst görevlere hazırlanmaları amaçlanır. Üst Kademe Yöneticilerinin Yetiştirilmeleri, bu konudaki mevzuat hükümlerine göre yapılır. Eğitimler ya yurt içinde, ya da yurt dışında gerçekleştirilir. Yurt dışında personele verilecek hizmet içi eğitimin, hizmetle ilgili hususların ancak yabancı memlekette sağlanma zorunluluğunun bulunması gerekir. Bu konuyla ilgili eğitimin usul ve esasları 21.01.1974 tarih ve 7/7756 sayılı Bakanlar Kurulu Kararı ile yürürlüğe konulan Yetiştirilmek Amacıyla Yurt Dışına Gönderilecek Devlet Memurları Hakkında Yönetmelik hükümlerine göre yapılması gerekmektedir.

Üst kademe yöneticilerinin dışındaki yöneticilerin yetiştirilmesinden kurumları sorumludur. Kamu kurum ve kuruluşları bu eğitimleri teşkilat kanunlarındaki hiyerarşik yapıya uygun olarak kademelendirmek suretiyle yaparlar. Faaliyetlerin planlaması ve uygulanmasında, kurumlara Devlet Personel Dairesi rehberlik eder, öğretim malzemesi, program geliştirilmesi ve eğiticilerin temini gibi hususlarda Türkiye ve Orta Doğu Amme İdaresi Enstitüsü (TODAİE), diğer kurum ve kuruluşlar, üniversite ve yüksek okullar ile işbirliği yapılır. Taşra Teşkilatında görevli diğer yöneticilerin yetiştirilmesinde, eğitim programlarının ilerde veya bölgelerde düzenlenmesi hususu gözönünde bulundurulur. Bu konudaki eğitim sorumluluğu kurumlarına veya kurumların yetkili taşra birimlerine aittir. Mahalli İdarelerdeki üst kademe yöneticileri dışında kalan diğer yöneticilerin

yetiştirilmelerine ilişkin sorumluluk İçişleri Bakanlığı'na aittir. Bu kademelendirme içinde hizmet içi eğitimin sorumluluğu kurumların yıllık eğitim programları çerçevesinde, kurumlarına veya kurumların yetkili taşra birimlerine verilebilir (<http://www.resmigazete.gov.tr/arsiv/18196.pdf>, s.30).

### 3. TÜRKİYE'DE KAMU KURUM VE KURULUŞLARINDA HİZMET İÇİ EĞİTİMİN DEĞERLENDİRİLMESİ

Türkiye'de memurlar, genel eğitim ve öğretim kurumları olan ilköğretim, lise ve üniversitelerden mezun olanlar arasından seçilmektedir. Türk Silahlı Kuvvetleri ile Emniyet Genel Müdürlüğü eğitim kurumlarının kendine özgü düzenlemeleri bulunmaktadır. Hizmet içi eğitim etkinlikleri Kurumsal Eğitim ve Kurumlararası Eğitim olmak üzere iki şekilde yürütülmektedir. Yukarıda Yasal Mevzuat kısmında belirtildiği gibi kurumsal eğitim, kurumların Merkez Eğitim Birimleri tarafından düzenlenirken, kurumlararası eğitim ise, 25.06.1958 tarih ve 7163 Sayılı Türkiye Orta-Doğu Amme İdaresi Enstitüsü Teşkilat Kanunu ile kurulan TODAİE tarafından yürütülmektedir (Kayar, 2011:191).

Enstitü bünyesinde yer alan Sürekli Eğitim Merkezi kurum ve kuruluşların hizmet içi eğitim gereksinimlerinin karşılanmasına yönelik olarak istemde bulundukları çeşitli kurs, seminer ve benzeri türde sürekli eğitim niteliğindeki hizmetleri yürütmek; kısa süreli uzaktan eğitim programları yoluyla kamu kesimi personelinin yeterliklerini geliştirici etkinlikler düzenlemek; Enstitü'nün ilgi alanı içinde bulunan konularda kısa süreli eğitim projeleri planlamak ve düzenlemek üzere, Mayıs 2000'de kurulmuştur. Merkezin ayrıca, sürekli eğitime ilişkin kuramsal gelişme ve uygulamaları izleme, program geliştirme, çözümleme ve değerlendirme gibi görevleri de bulunmaktadır. Sürekli Eğitim Merkezi'nce kısa süreli eğitim etkinlikleri çerçevesinde kamu yönetiminin çeşitli alanlarında kurs ve seminerler, bilimsel toplantılar ve benzeri eğitim programları düzenlenmektedir. Kurs ve seminer türündeki eğitim programları, bütün kurumlara ve isteklilere açık olup genel katılımlıdır (<http://www.todaie.edu.tr/sem/>).

Yukarıda bahsi geçen 657 sayılı Devlet Memurları Kanunu'nun 214. maddesinde kamu kurum ve kuruluşlarında Devlet memurlarının yetiştirilmelerini sağlamak, verimliliğini artırmak ve daha ileriki görevlere hazırlamak amacıyla hizmet içi eğitim faaliyetlerinin uygulanacağı hükmü belirtilmiştir. Bu faaliyetleri gerçekleştirmek için de 215. madde her kurumda bir eğitim biriminin kurulmasının zorunlu olduğunu belirtmektedir. İlgili maddede eğitim birimlerinin kurum içindeki yerinin nerede olacağı belirtilmemiştir. Bu durum, her kurumda hizmet içi eğitim birimlerinin kendi örgüt şemalarına uygun farklı basamakta ve yapıda kurulmalarına neden olmuştur. Daire başkanlığı, şube müdürlüğü ve şeflik düzeyinde örgütlenmeler olmuştur. Çoğu kamu kuruluşunda hizmet içi eğitim birimleri Personel Daire Başkanlıklarına bağlı bir birim olarak çalışmaktadır. Bu farklılıklar hizmet içi eğitim birimlerini etkisiz, yetkisiz, verimsiz, çalışmayan kaynak tüketen bir duruma düşürerek kaynakların boş yere harcanmasına yol açacaktır. Kurumun ana ve destek hizmetlerinin daha verimli çalışmasını sağlama görevini üstlenen hizmet içi eğitim birimlerinin daire başkanlığı düzeyinde bütün kurumlarda örgütlenmesi gerekir (Aytaç, Eylül 2000).

Kamu kurum ve kuruluşlarında istihdam edilenlerin çok az bir kısmı hizmet içi eğitim etkinliklerine katılamamakta ve etkinliklere katılanlar ise yetersiz eğitim altyapısı ve finansman gibi zorluklar nedeniyle bu eğitimlerden yeterince yararlanamamaktadır. Ayrıca kamu kurum ve kuruluşlarınca uygulanan hizmet içi eğitim etkinliklerinin büyük ölçüde bir kısım yasal gerekleri yerine getirmek amacıyla uygulandığı ve bunun hizmet içi eğitimin verimliliği, dolayısı ile iş verimliliğinin artmasını engellediği söylenebilir. Kamu kuruluşlarının kaynak kullanımında fayda-maliyet analizlerine önem vermemeleri ve hizmet içi eğitime yönelik çalışmalardan elde edilen sonuçların somut bulguları yansıtmaması, eğitim etkinliklerinin önem ve gerekliliğinin anlaşılmasını engellemektedir. Böylece hizmet içi eğitim konusunda söylenenler Türkiye genelini yansıtmayıp, kişilerin kendi çevrelerinin veya kurumlarının faaliyetlerini algılamaya yönelik kişisel kanaatler olmaktadır (Öztürk, Sancak, 2012:781).

Bazı kamu kurum ve kuruluşlarında çalışanların algıları incelenerek yayınlanmış çalışmalarda Türkiye'de hizmet içi eğitime ilişkin olumsuz ve olumlu değerlendirmeler yapılmıştır.

**Olumsuz değerlendirmeler şöyle sıralanabilir** (Atay ve Diğerleri, 2009:92, MEB, 2006:81, Gültekin, Çubukçu, 2008:196-197, Öztürk, Kılıç, Ağustos 2014:349, Özpulat, 2010:289, Sarıgöz, 27-29 Nisan 2011:1027):

Eğitim programları hazırlanırken memurların ilgi ihtiyaç ve beklentileri çok az dikkate alınmaktadır.

Eğitim sonrası eğitime ilişkin değerlendirme yapılmamaktadır.

Hizmet içi eğitim programları olması gerektiğinden daha büyük gruplarla yapılmaktadır.

İhtiyaç olduğu halde oryantasyon programı uygulanmamaktadır.

Eğitimlerde verilen teorik bilgiler uygulamaya yönelik değildir ve süre olarak yetersizdir.

Memurlara yönelik hizmet içi eğitimlerden önce eğitimlere katılacak memurların mevcut bilgi birikimini, beceri ve yetenekleri ortaya çıkarmak için kesinlikle değerlendirme çalışması yapılmamaktadır.

Hizmet içi eğitim programları planlanırken ihtiyaca göre ya da eğitim alanların eksiklerine göre planlanmamaktadır.

Bazı eğitimler çalışanların ikametgahlarından çok uzak yerde, hatta bazen de ikamet ettikleri şehirlerin dışında yapılmaktadır. Bu durumun da eğitimlere katılım oranını azalttığı, (<http://forum.memurlar.net/konu/1396691/>), hatta bazı çalışanların bu durumdan dolayı rapor aldıkları görülmüştür (<http://www.turkiyeegitim.com/rapor-alip-hizmetici-egitime-katilmamak-yok-74014h.htm>).

**Olumlu değerlendirmeler ise şöyledir** (Atay ve Diğerleri, 2009:92, MEB, 2006:81, Gültekin, Çubukçu, 2008:196-197, Öztürk, Kılıç, Ağustos 2014:349):

“Hizmet içi eğitimler çalışanların mesleklerine ilişkin algılarında eğitim öncesine göre olumlu katkılar yapmaktadır.

Kişisel ve mesleki gelişimlerine yardımcı olmaktadır.

Çalışanların morallerini yükselterek iş verimini arttırmakta, mesleki ve sosyal alanlardaki gelişimlerinde olumlu değişimlere yol açmakta, çalışanlar arasındaki iletişim ve etkileşimin gelişmesine yardımcı olmaktadır”.

Yukarıda bahsi geçen 6245 sayılı Harcırah Kanunu’nun 33. maddedeki 10 gün ibaresine yapılan itiraz sonucunda Anayasa Mahkemesi 25.11.2015 tarihli toplantısında, Harcırah Kanunu’nun 33. maddesine, 21.4.2005 tarihli ve 5335 sayılı Kanun’un 4. maddesi ile eklenen (d) fıkrasında yer alan “...ve her defasında on gün ile sınırlı olmak...” ibaresinin iptaline karar vermiştir (<http://www.anayasa.gov.tr/icsayfalar/basin/kararlarailiskinbasinduyurulari/genelkurul/detay/11.html>). 2016 Yılı Merkezi Yönetim Bütçe Kanunu’na bağlı (H) işaretli cetvelin dipnotuna göre “6245 sayılı Harcırah Kanunu’nun 33 üncü maddesinin (b) fıkrasına göre yatacak yer temini için ödenecek ücretlerin hesabında gündeliklerinin %50 artırımlı miktarı, (d) fıkrasına göre yapılacak ödemelerde ise görevlendirmenin ilk 10 günü için gündeliklerinin %50 artırımlı miktarı, takip eden 80 günü için gündeliklerinin %50 si, müteakip 90 günü için ise müstehak oldukları gündeliklerinin %40’ı esas alınır”. (<http://www.resmigazete.gov.tr/eskiler/2016/03/20160316M1-1-210.pdf>, <http://www.resmigazete.gov.tr/eskiler/2016/04/20160413-13.htm>). Örneğin aylık/kadro derecesi 5-15 olanlarda görevlendirmenin ilk 10 günlük kısmında her gün için 51,27 TL konaklama ücreti verilirken, takip eden 80 günlük kısmında her gün için 17,09 TL, müteakip 90 günlük kısmında her gün için 9,11 TL konaklama ücreti ödenecektir. Günümüz koşullarında bu para ile konaklayacak yer bulmanın imkanı olmadığından kamu görevlileri ilk 10 günden sonraki her gün için eksik ödenen konaklama ücretini cebinden tamamlamak zorunda kalacaktır (<http://www.memurlar.net/haber/572141/>).

## SONUÇ

Eğitim gerek sosyal hayatında, gerekse iş hayatında insanın hayatını şekillendiren, hayata bakış açısını, yaşam kalitesini olumlu yönde değiştiren, mesleğini daha iyi, daha kolaylıkla yapmasını sağlayan, çalıştığı işyerine ve ülkesinin ekonomisine olumlu katkılar yapan faaliyetlerdir. Teknolojik gelişmeler yeni yetenekleri gerekli kılmakta, eski yetenekleri bazen gereksiz hale getirmekte, bazen de daha da geliştirilmesini gerekli kılmaktadır. Ayakta kalabilmek için gerek ülkelerin, gerekse işletmelerin değişen teknolojilere uyum sağlamaları gerekir. Hizmet içi eğitim programları hazırlanırken hangi konularda eğitim verilmesi gerektiği hususunda eğitim uygulanacak grubun görüşleri alınmalıdır. Eğitim uygulanacak grubun çalışma ortamı, çalışma saatleri, eğitim ve

tecrübe düzeylerini göz önüne alınarak hizmet içi eğitim planlanmalıdır. Yıl içinde eğitim verilecek konular bir önceki yıl içinde planlanarak kurumların web sayfalarında yayınlanarak kişilerin seçim yapmalarına imkan sağlanmalıdır. İsteğe bağlı eğitimlerin sayısı artırılarak, kişilerin performans değerlendirme çalışmaları sırasında aldıkları eğitimler de değerlendirme konuları arasında yer almalıdır. Böylelikle çalışanların eğitimlere daha istekli katılmaları sağlanmış olacaktır. Eğitimlerde teorik bilgi aktarımından ziyade işin nasıl yapılacağını öğreten uygulama eğitimleri verilmelidir. Hizmet içi eğitimler sonrası katılımcıların aldıkları eğitimlere ilişkin değerlendirme çalışması yapılarak eğitimin etkinliği ölçülmelidir.

Sağlık Bakanlığı Hizmet İçi Eğitim Yönetmeliği'nin 15.maddesinde Bakanlık içerisinde seçilecek eğitim görevlilerinin, eğitimde yer alan konularda gerekli bilgi, beceri ve sunuş yeteneğine sahip yüksek öğrenimli olması, üniversitelerden görevlendirileceklerin, öğretim üyesi veya öğretim görevlisi olması, diğer kamu görevlilerinin, eğitim programında yer alan konularda gerekli bilgi ve beceri ve sunuş yeteneğine sahip yüksek öğrenimli olması, ve resmî görevli olmayanlar arasından belirlenecek eğitim görevlilerin konusunda uzman ve sunuş becerilerine sahip olmaları gerekir (<http://saglik.gov.tr/TR/dosya/1-54293/h/hieyonetmelik.pdf>). Üniversitede görev yapan öğretim elemanları hariç söz konusu madde'de özellikleri anlatılan diğer eğitim görevlisi kişilerin pedagojik formasyona sahip olması gerekmektedir. Çünkü maddede yer alan “eğitim programında yer alan konularda gerekli bilgi ve beceri ve sunuş yeteneğine sahip yüksek öğrenimli olması” ifadesi açık bir ifade değildir. Kişinin gerekli bilgi ve beceri ve sunuş yeteneğine sahip olduğu resmi bir belgeyle kanıtlanmalıdır. Bu belge pedagojik formasyon sertifikasıdır. Kişinin sağlık bilgisine sahip olması öğretme yeteneğine sahip olduğu anlamına gelmemektedir. Eğitimlere katılacak kişiler yetişkin oldukları için eğitimleri verecek kişilerin yetişkin eğitimi konusunda bilgili olması, tecrübe sahibi olması gerekmektedir.

Özellikle iş dışındaki eğitimlerde klasik sınıf eğitimi yoluyla eğitim yol, konaklama, işgücü kayıpları ve zaman kaybı da hesaba katılınca çok maliyetli olmaktadır. Eğitimin etkinliğinin ölçülmesinin ne denli önemli olduğu düşünüldüğünde e-hizmet içi eğitim olarak da isimlendirebileceğimiz uzaktan eğitim uygulamaları hem bu maliyetleri ortadan kaldıracak, hem de eğitim sonunda yapılacak online sınavlarla eğitimin etkinliği değerlendirilebilecektir. Zaman problemi uzaktan eğitim programlarıyla çözümlenmelidir. Gerçekten de çalıştıkları şehrin dışında eğitimlere gidecek kamu personelinin harcırahları değerlendirme kısmında da vurgulandığı gibi yeterli değildir. Bu durum şehir dışındaki eğitimlere katılma isteğini azaltacaktır. Harcırahların günün koşullarına uygun verilmesi bu olumsuz durumu ortadan kaldıracaktır.

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# TÜRKİYE’DE TOPLUMSAL İDEALLER VE İNSAN HAKLARI EĞİTİMİ<sup>1</sup>

Cahit ASLAN

Çukurova Üniversitesi, Eğitim Fakültesi,  
Ortaöğretim Sosyal Alanlar Eğitim Bölümü,  
Felsefe Grubu Eğitimi Ana Bilim Dalı, Adana/Türkiye  
caslan@cu.edu.tr

## ÖZET:

Eğitim tarihi açısından Türkiye’de “insan hakları eğitimi” oldukça yeni sayılır. Temel ve ortaöğretim kurumlarında böyle bir eğitimin verilmesindeki amaç yurttaşların bir taftan modern eğitim süreçlerinden geçerken diğer yandan yurttaşlık bilincine bağlı olarak insan hakları fikrini benimsenmesini de sağlamaktır. Fakat Türkiye’nin modernleşme idealine uyan bu uygulamaya paralel son yıllarda sanki insan hakları eğitimi ikame eden bir başka eğitim uygulaması daha yapılmaktadır. Özellikle yerel cemaatler marifetiyle milli eğitim kurumlarında yapılan bu uygulamanın adı “değerler eğitimi”dir. Buradan Türkiye’nin idealleri de çağdaş, modernist olma ekseninden daha gelenekçi ve muhafazakâr olmaya doğru kaymaya başladığı da anlaşılmaktadır. İşte bu çalışmanın amacı Türkiye’nin ideallerindeki eksen kaymasının göstergesi olan “değerler eğitimi” anlayışlarının ışığında “insan hakları eğitimi”ni tartışmaktır.

**Anahtar kelime:** İnsan Hakları Eğitimi, Değerler Eğitimi, Türkiye’nin Toplumsal İdealleri

## ABSTRACT:

"Human rights education" in the history of Turkish education is quite new. The aim of such education in basic and secondary schools is to ensure both the adoption of human rights depending on the idea of citizenship and citizens' passing through modern educational process. However, parallel to this practice, fitting in Turkey's modernization ideal, it seems that another education practice which replaced human rights education has recently been put into practice. The name of the practice applied by local communities in the national educational institutions is "values education". Here it is also understood that contemporary ideals of Turkey have begun to shift from modernist axis to traditionalist and conservative axis. Thus, the purpose of this study is to discuss "human rights education" in the light of "values education" as an indicator of axis shift in Turkey's ideals.

**Key words:** Human Rights Education, Values Education, Sociatal ideals of Turkey

## GİRİŞ

Türkiye Cumhuriyeti’nin siyasal kuruluş ideallerinin başında muasır medeniyetler seviyesine ulaşma ülküsü gelir. Modernleşmeyi de ifade eden çağdaşlaşma/muasırlaşma kavramı Batılılaşma kavramına tekabül etmektedir ki aynı zaman da uygar olanı ifade ettiği söylenir. Türkiye cumhuriyetinin bu kuruluş ülküsünün toplumsal idealler haline gelmesi için kurucu kadrolar tarafından devrimci değişimlerle de hayata geçirilme çalışıldı. Fakat bu uygulamalar zaman zaman dirençle karşılaşıldı. İşte bugün Türkiye’deki siyasal-toplumsal fay hatlarından bir de kurucu kadronun bu ideallerinin toplumsal ideallere dönüştürülmesi çabası ile buna direnç ve hatta karşı hareket arasındaki zıtlıklarda oluşmaktadır.

Artık bir devletin uygar olup olmadığı ne tür geleneklere sahip olduklarıyla değil insana haklarına ne kadar önem verip vermediği, demokrasiyi ne kadar gerçekleştirdiği ile ölçülmektedir. “İnsan hakkı, hangi ulusal, etnik, dini, zümrevi veya mesleki topluluktan olursa olsun, her kişinin yalnızca insan olması itibarıyla sahip bulunduğu değer ve tercih özgürlüğünün, siyasi otorite tarafından tanınmasını ve her çeşit dış müdahaleye karşı korunmasını gerektiren en üstün ahlaki iddia veya taleptir” (Erdoğan, 2004: 146-148) ve demokratik toplumların yapı taşıdır. Türkiye’de insan haklarını kuruluş sürecinin toplumsal ideallerine uygun olarak son yirmi yıldır bir değer olarak en azından siyaseten benimsendi ve eğitim kurumlarında bir değer olarak öğretilmeye başlandı.

Öte yandan toplumun sürekliliği için toplumun yarattığı, biriktirdiği ortak değerlerin öğretilmesinde ve yeni nesillere aktarılmasında değerler eğitiminin önemli ve belirleyici rol oynadığı da bir gerçektir.

İnsan değer üreten bir varlıktır. Fakat ürettiği değerlerin bir kısmı insanlığın ortak malı haline gelirken birçoğu daha yerel ve kişisel düzeyde kalmaktadır. Kişisel, yerel değerler bireyi belli bir zaman ve mekâna yerleştirirken insanlığın ortak kabul ettiği değerler bireyi zaman ve mekân üzerine çıkarmaktadır. Bu şekilde birey yaşamını yerel ile evrensel arasında sürdürmektedir. Bireyin davranışlarına referans olan geleneksel değerlerin aşırılığı

<sup>1</sup> Bu çalışma, SED-2016-6251 kodu ile Çukurova Üniversitesi BAP birimi tarafından desteklenmiştir.

bireyi yerelleştirirken aynı zamanda evrensel olandan uzaklaşmasına yol açmaktadır. Bu da bireyin Kohlberg'in (Çiftçi,2003; Senemoğlu, 2009) "ahlaki gelişim kuramı"nın ancak "kanun ve düzen" aşamasında kalmasına neden olmaktadır.<sup>2</sup> Bu durumun mutlaka siyasal ve toplumsal sonuçları olmaktadır ki son zamanlarda Türkiye'de de yaşananlar böyle bir zıtlığın varlığını göstermektedir. Bu durum bir toplumun uygar ve bütünsel bir toplum olarak yaşayabilmesi için bir problemidir. Türkiye'de toplumsal ideallerde eksen kayması olarak tarif edilecek olan bu problemin çözümü toplumsal ideallerin seyrini belirleyecektir.

Problemin çözülmesi için bu çalışmada literatür taraması ve kaydi verilere dayalı olarak sürdürülmüştür. Çalışma, değerler üzerine, bir değer olarak insan hakları eğitimi, bir değer olarak değerler eğitimi ve iki eğitimin karşıtlığını içeren alt başlıklardan oluşmakta ve sonuç ve önerilerle de son bulmaktadır.

## 1. Değerlerin Sürekliliği Üzerine

Genellikle 'değer'in subjektif olduğu ileri sürülmekte ve buna dayanılarak da değerlendirilmesi yapılan şeyin değerinin, dolayısıyla insanın değerinin göreceli olduğu, değerlendirilene göre değiştiği iddia edilmektedir (Kuçuradi 1998: 11). Değer gerçekten de göreceli midir, kişiye göre değişmekte midir? Eğer gerçekten subjektif ise değerlerin evrenselliğinden söz edilemez, bütün değerler aynı düzlemde yer alır!

Kuçuradi'ye göre insanın en temel özelliklerinden biri olan değerlendirme etkinliğinin farklı kişilerce farklı tarzlarda gerçekleştirilmesi ve 'değer' ile "değerler" arasında bir ayrım yapılmaması gibi nedenlerden ötürü değerler subjektifmiş gibi görünmektedir.

Bir şey farklı kişilerce, farklı toplumlarca ve farklı dönemlerde farklı değerlendirildiği de bilinmektedir. Kuçuradi'ye göre bu durum insanın 'değer atfetme', 'değer biçme' ve 'doğru değerlendirme' gibi değerlendirme tarzlarından dolayı öyledir. Fakat aynı sebepler gerçek bir değerler skalasının oluşumunu meydana getirir:

*Değer atfetme*'de kendisine değer atfedilen şey, değer atfedenle olan özel ilgisi nedeniyle "değerli"... değeri söz konusu edilen şey, kendi dışında olan bir nedenden dolayı değerli ya da değersiz görülmektedir" (Kuçuradi 1998: 30). Değer atfetmede, bir şeyin değerli olmasıyla önemli olması birbirine karıştırılmakta; değer atfetme durumunda söz konusu olan değer, atfedilen şeyin değerli ya da değersiz olması değil, o şeyin birileri için önemli ya da önemsiz olmasıdır (Kuçuradi 1998: 26).

*Değer biçme*'de söz konusu olan, değerlendirilmesi yapılan şeyin değerini göstermek değil, o şeyi geçerli ilkeler, kurallar, normlar, standartlar, modalar, ölçüler bakımından –bunlara göre– nitelendirmektir. Geçerlikte olan ilkeler, normlar, kurallar, standartlar, modalar hem çağdan çağa hem de toplumdan topluma değiştiğinden, belli bir zamanda belli bir toplumda geçerli olan değer yargıları gerek bir başka toplumda gerekse aynı toplumda bir başka çağda farklı olacağından, aynı şeye biçilen değer de farklı olacaktır. Değerlendirme yaptığını sanan pek çok kişi değerlendirilmesi söz konusu olan şeye geçerlikte olan ve yüklemeleri iyi-kötü, güzel-çirkin, faydalı-zararlı, doğru-yanlış, sevap-günah vb. sıfatlar olan değer yargılarına göre değer biçmektedir veya herkesten bunlara göre değer biçmesi beklenmektedir (Kuçuradi 1998: 28-29).

Değer atfetme ve değer biçme, sıklıkla değeri kabullenme, değeri yeğleme ve değere adanmışlık gibi süreçler olarak karşımıza çıkar.

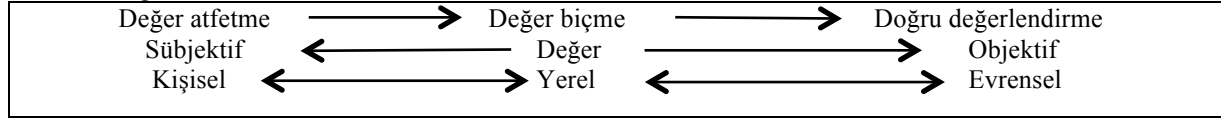
*Doğru değerlendirme* değerlendirilmesi yapılan şeyin yapı özelliği olan değerini görmek, yani onu anlamak ve kendi alanındaki yerini bulmaktır (Kuçuradi 1998: 30). Doğru değerlendirmede 'şey' bütün olarak, bütün yönleriyle kavranır.

Değer atfetme ve değer biçmede şeyin kendisi değil değerlendiren öyle gördüğü içindir ki bu yönüyle değer subjektiftir. Fakat doğru değerlendirmede 'şey' varlık olarak değerinin bilgisine başvurulur ki artık değer objektiftir. Bunun sebeplerinden biri de değer ile değerler arasında bir ayrımın yapılmıyor olmasıdır. Oysa 'değer' bir şeyin değeridir; bir şeyin bir çeşit özelliğidir, 'değerler' ise var olan şeylerdir, var olan imkânlardır (Kuçuradi 1998: 40).

<sup>2</sup> Kohlberg'e göre ahlak; hak-haksızlık, doğru-yanlış, iyi-kötü konularında bilinçli yargılama ve karar vermeyi ve bunlar doğrultusunda davranışta bulunmayı, kapsayan türe özgü bilişsel yapıdır. Bir başka deyişle; bilişsel bir yetenek olan ahlak, bireyin kendisinin belirlediği ve aynı zamanda evrensel ilkeler ile örtüşebilecek düzeydeki ilkelere göre yargıda bulunma, kararlar alma ve bu doğrultuda davranabilme yeteneğidir. Kohlberg ahlaki gelişimi gelenek öncesi, geleneksel ve gelenek sonrası şeklinde üç düzeyli altı evreli bir modelle ortaya koymuştur. İlk önce birey ve kendi davranışının yarar getirici sonuçlarının kodlanmasına odaklanılır, sonra kişilerarası ve toplumsal beklentilerle özdeşleşilir, nihayet kişilerin kendi ahlaki prensiplerini kullandıkları evrensel düzeye ulaşılır. Ona göre yetişkinlerin pek çoğu geleneksel düzeyin ötesine geçemez.



Tablo-1: Değerler skalası-1.



Kuçuradi (1998: 42) “değerin sırf insanla, insan başarılarıyla ilgili” olduğunu söyler. Bir nesnenin değerle ilgili olması için o nesnenin bir eser olması, kişi yaratması bir ürün olması gerekir. Kişi yaratması olmayan bir nesnenin değerli görülmesi, onu değerli sayan kişiyle özel ilişkisi nedeniyledir ve rastlantısaldır. Bir eser insana bir şeyler kazandırıyor, insanın yaşantı olanaklarına bir şeyler katıyorsa, o aynı zamanda değerli bir eserdir. O halde insan neden değerlidir? İnsanın neden değerli olduğu, insanın varlıktaki özel yerini göstermekle mümkündür. Bu durumda soru “insanın varlıktaki özel yeri nedir?”e dönüşür.

İnsanı diğer varlıklardan ayıran, onu değerli kılan şeylerin başında onun değerlemede bulunan ve değerler ortaya koyan varlık olması gelir. Fiilen yapıp ettiğimiz ve ortaya koyduğumuz her şey bir değerlemedir. Ortaya konan her bilgi, yalnız bir tespit etme değilse, bir açıklama ya da yorumdur ve şu ya da bu etkisi olur. Ortaya konan her eserle ise realite sürekli değerlendirilir, realiteye değer katılır. Bütün bunlar realitenin değer boyutunu ve tarihsel varlığını –insan realitesini, insanların dünyasını– meydana getirir (Kuçuradi 1998: 32). Kişilerin eylemleri, ortaya koydukları bilgiler, eserler de belirli bir zamanda ve mekândadırlar ve başkaları tarafından değerlendirilir.

Bu bakımdan değerlendirme, değerlerin gerçekleşmesi, yani bir eylem veya bir eserdir. Değerlendirme ise insanın ve insanla ilgili var olan her şeyin değerinin gösterilmesidir. İnsanın değeri başka insanın değerleri başkadır; ‘kişinin değeri’ başka ‘kişinin değerleri’ başkadır; bir kişinin değeri’ başka ‘bir kişinin değerleri’ başkadır. ‘Sanatın değeri’ başka ‘sanatın değerleri’ başka, ‘bir sanat eserinin değeri’ ise başkadır (Kuçuradi 1998: 40).

Buna göre insanın değeri, “insanın tür olarak insanın, diğer varlıklarla ilgisi bakımından özel durumu ve bu özel durumundan dolayı kişilerin insanlar arası ilişkilerde sahip olduğu bazı haklar, başka bir deyişle insanın varlıktaki özel yeridir. ‘İnsanın değerleri’ ise tür olarak insanın bütün başarılarıdır: Bilgi, bilimler, sanatlar, felsefe, teknik, moraller, kültürlerdir. Bunlar insanın varlık olanaklarının gerçekleşmesidir; varlık şartlarının ürünü olan fenomenlerdir” (Kuçuradi 1998: 40).

Tür olarak insan değerlemede bulunan bir varlık olduğundan, değerler yarattığından değerli bir varlıktır. Bu değerinden dolayıdır ki ‘insan hakları’ olarak adlandırılan bazı haklara sahiptir. İnsanın değeri insanın tür olarak sahip olduğu, onu diğer varlıklardan ayıran özellikleri ve olanakları olduğuna göre insan hakları tür olarak insanın özelliklerini ve olanaklarını gerçekleştirmek ve geliştirmek için gerekli koşulları dile getiren istemlerdir. Kişilerin diğer kişilerden nasıl muamele görmeleri gerektiğine ilişkin istemler ve böyle muamele görmelerini olanaklı kılacak toplumsal düzenlemeleri belirlemesi beklenen ilkelere.

## 2. Bir Değer Olarak İnsan Hakları Eğitimi

“İnsan haklarının temelinde yatan insan kavramı yalnızca biyolojik anlamda değil. Akıl taşıyan, düşünen ve aynı zamanda psikolojik varlık olarak insanın sırf insan olması nedeniyle doğuştan bazı haklarının olduğu savı insan hakları düşüncesinin başlangıcı olmuştur” (Çeçen, 2002: 9).

İnsan haklarının üstün bir ahlaki değer haline gelişinin uzun bir geçmişi vardır. Modern toplumun yükselen bir değeri olarak insan hakları kavramı günümüzdeki anlamına dört yüz yıllık uzun bir tarihsel süreç sonucunda ulaşmış ve yüzyıllar boyu süren çeşitli hak mücadelelerinin biriktirdiği bir temele oturmuştur (Çeçen, 2000: 11; Doğan, 2002: 235-236; Ensaroğlu, 2001: 9-11). Tür olarak insanın düşünme, bilgi üretme gibi bazı etkinlikleri gerçekleştirebilmesini güvence altına alan yasaların devlet tarafından çıkarılmasından, sadece insan olmasından gelen sağlık, çalışma ve eğitim gibi olanakların devlet tarafından teslim edilmesine kadar giden bir süreci içeren insan hakları olgusu, yalnızca devletin yurttaşlarına uyguladığı eylemleri değil bir göçmene uyguladığı eylemleri ve hatta ulusal sınırları aşarak ulus ötesi olanakları gözetmesini de içermektedir ki evrensellik olma ideali gerçekliğe dönüşmüş olsun.

İnsan Hakları Eğitimi ise uluslararası belgelerde insan haklarının evrensel bir kültür olarak yapılanmasını amaçlayan eğitim, öğrenim ve bilgilendirme faaliyetleri olarak tanımlanır.<sup>3</sup> İnsan haklarında kapsamlı bir eğitim, tek başına insan hakları ve insan haklarını koruma mekanizmaları hakkında bilginin temin edilmesini değil, aynı zamanda gündelik yaşamda insan haklarının kullanılması, savunulması ve yaygınlaştırılmasına yönelik ihtiyaç

<sup>3</sup> <http://ohehr.org/Documents/Publications/PActionEducationen.pdf>

duyulan becerilerin kazanılmasıdır. İnsan hakları eğitimi toplumun tüm üyeleri için insan haklarının savunulması ihtiyacına cevap verecek davranış ve tutumların edinilmesinin cesaretlendirmesidir (Ataman, 2008: 70).

İnsan hakları eğitimi, geçmişte çok eskiye dayanan bir olgu değildir. Birleşmiş Milletler Avrupa Konseyi ve Avrupa Güvenlik ve İş Birliği Teşkilatı (AGİT) başta olmak üzere, çeşitli uluslararası kuruluşlarca hazırlanan insan hakları ile ilgili sözleşmeler ve kabul edilen belgelerde insan hakları eğitime yer verilmiştir. “İnsan hakları eğitime yer veren ilk uluslararası belge, 10 Aralık 1948 tarihinde BM Genel Kurulunca kabul edilen İnsan Hakları Genel Bildirgesidir. Bildirgenin başlangıç bölümünde, toplumdaki tüm birey ve organların eğitim ve öğretim yoluyla iki amaç için çaba göstermeleri istenmiştir: İnsan haklarına ve temel özgürlüklere saygıyı geliştirmek, insan haklarının ve temel özgürlüklerin evrensel ve eylemsel olarak tanınmasını ve uygulamasını sağlamak. İnsan hakları eğitimi alanındaki en kapsamlı uluslararası belge UNESCO Genel Konferansınca 1974 yılında kabul edilen, uluslararası anlayış, işbirliği, barış, eğitim, insan hakları ve temel özgürlüklere ilişkin eğitim tavsiyesidir” (Alfredson, 2001: 219). AGİT çerçevesinde 1975 tarihli Helsinki Belgesi, 1976 yılından bu yana Avrupa Konseyi’nin yıllık çalışma programlarının özel bir bölümü, 1978 ve 1985 tarihlerinde Bakanlar Komitesi’nin kabul ettiği iki kararında, insan hakları eğitime ilişkin somut önerilere yer vermiştir. İnsan hakları eğitimi ve öğretimi konusunda yapılan uluslararası toplantılarda çeşitli öneriler kabul edilmiştir. Bu çerçevede 1993 Viyana’da yapılan İnsan Hakları Dünya Konferansı’nın sonuç belgeleri olan Viyana Bildirgesi ve Eylem Programı ortaya çıkmıştır (Muntarhorn, 1998:281). Bu programın bölüm-1, paragraf 33-38’de eğitimin temel amacının uluslar, ırksal ya da dini gruplar arasında anlayış, hoşgörü, barış ve dostluk ilişkilerini geliştirmek, insan hakları ihlallerine çare olması amacıyla temel hak ve özgürlükleri yaygınlaştırmak, hukuk devleti, demokrasi, halkın katılımı ve sivil toplum anlayışını benimsemek olduğunu dile getirdi. Bu amaçla hükümetler tarafından uluslararası düzeyde olduğu kadar ulusal düzeydeki eğitim politikalarıyla bütünleştirilmesi gerektiği ifade edilmektedir. Yine bölüm 2-D’nin 80. paragrafta insan hakları eğitimi insan haklarına yönelik evrensel taahhütleri güçlendirmeye dönük bir bakış açısı ile genel bir anlayışa ve bilince ulaşmak için uluslararası ve bölgesel insan hakları standartlarında izah edilen barış, demokrasi ve sosyal adaleti içermesi gerektiği yazılmaktadır.

Türkiye’de insan hakları gelişimi dünyada olanlardan etkilenmiştir ama onlarla karşılaştırıldığında da çok yavaştır. Türk demokrasinin cumhuriyet döneminde, hak ve özgürlükler, "Yurttaşlık (okullarda öğretilen bir konu olarak)", "Doğal ve Sosyal Bilimler", "Sosyal Bilimler" ve "Türkçe" konulu derslerin bir parçası olarak kabul edildi. Hak ve özgürlükler konuları "Yurttaşlık", "Vatandaşlık Bilgisi", "Vatandaşlık ve İnsan Hakları Eğitimi" ve "Demokrasi ve İnsan Hakları" ortaöğretimde ders olarak işlenmiştir. Ancak, önemi sadece 1998 yılına kadar bu kurslarda hak ve özgürlüklerin verilmiş olmasıdır. İnsan hakları aynı zamanda "Doğal ve Sosyal Bilimler", "Sosyal Bilimler", "Türkçe", "Resim", "Din Kültürü ve Ahlak gibi derslerle ilişkilendirildi. Bir konu olarak insan hakları 1998 yılından bu yana bağımsız bir ders olarak ilköğretim ve ortaöğretim müfredatına dâhil edildi. Yükseköğretim programları arasında, hukuk fakültelerinde insan hakları konuları ve eğitimi ya zorunlu ya da seçmeli dersler arasında yer aldı. Ancak, insan hakları eğitimi lisansüstü programlarında, üniversitede ve enstitülerde yetersizdir. Öğretmen yetiştiren fakültelerin bazı bölümlerinde, insan hakları konuları "demokrasi eğitimi" başlığı altında yürütüldü. 1983 yılından bu yana 10. Aralık’ı içeren hafta okullarda insan hakları haftası olarak anıldı. Yaygın eğitim alanında insan hakları eğitimi faaliyetleri Türkiye’de oldukça sınırlı kaldı. İnsan Hakları Derneği ve diğer insan hakları dernekleri ve enstitüleri çok yetersiz de olsa bazı projeler yürüttü (Selvi, 2004).

İnsan hakları bilincini artırmaya başladığını gösteren göstergelerden biri de ‘Vatandaşlık ve İnsan Hakları Eğitimi’ derslerinin ilköğretim programlarına Türkiye’de insan hakları dahil edilmiş olması ve ‘Demokrasi ve İnsan Hakları Eğitimi’nin ortaöğretim programlarına girmiş olmasıdır (Milli Eğitim Bakanlığı, 1999; Milli Eğitim Bakanlığı, 2000).

Genelde insan hakları eğitiminin temel konuları şunlardır (Flowers, 2010: 31-32): Yurttaşlık, demokrasi, ayrımcılık, eğitim ve serbest zaman, çevre, aile bakımı ve alternatif bakım, toplumsal cinsiyet eşitsizliği, sağlık ve refah, medya ve internet, katılım, barış ve insan güvenliği, yoksulluk ve sosyal dışlanma, şiddet. Milli Eğitim Bakanlığı, Talim ve Terbiye Kurulu Başkanlığı’nın 24.07. 2013 tarih sayı 71’de aldığı kararla “ortaöğretim demokrasi ve insan hakları dersi öğreti programında “demokratik sistem ve yaşayan demokrasi, insan hak ve özgürlükleri, demokrasiyi yaşamak: aktif vatandaşlık, çeşitliliğe çoğulcu bakış, barış ve uzlaşma” konularına yer verilmiştir.<sup>4</sup>

<sup>4</sup> [http://ookgm.meb.gov.tr/meb\\_iys\\_dosyalar/2013\\_08/02113729\\_201308021052.pdf](http://ookgm.meb.gov.tr/meb_iys_dosyalar/2013_08/02113729_201308021052.pdf)

### 3. Bir Değer Olarak Değerler Eğitimi

2004 yılında “yenilenen” ilköğretim müfredatında, önceki programlarda yer alan “Ahlak Eğitimi” yerine “Değerler Eğitimi” anlayışı getirildi. Bu kapsamda “Değerler Eğitimi” uygulamalarını okullarda öncelikli bir konuma getirme girişimi de söz konusudur. Nitekim bu amaçla konu, 2010 yılı Mayıs ayında İstanbul’da, Avrupa Birliği tarafından desteklenen MEBGEP (Milli Eğitim Bakanlığının Kapasitesinin Güçlendirilmesi Projesi) kapsamında düzenlenen “Değerler Eğitimi Uluslararası Konferansı”nda, müzakereye açıldı. Aynı yıl okulların açıldığı tarihte, Milli Eğitim Bakanlığı Talim ve Terbiye Kurulu Başkanlığı, 08 Eylül 2010 tarihli ve 2010/ 53 sayılı genelgesi ile bir gelenek olan “ilk ders”in “Değerler Eğitimi” konusunda işlenmesini istedi. 2010-2011 Eğitim Öğretim Yılı içinde il milli eğitim müdürleri toplantılarında Değerler Eğitimi’nin okullarda “uygulanma” koşulları ve yöntemleri konusu müzakere edildi. Bakanlık, konunun bilimsel boyutta açılımını sağlamak üzere 26-28 Ekim 2011 tarihlerinde Osmangazi Üniversitesi ile işbirliği yaparak Sosyal ve Kurumsal Yönleri İle Değerler Eğitimi Sempozyumu düzenlendi. Bu bulgular izlenerek “Değerler Eğitimi” konusunun, 2012-2013 eğitim-öğretim yılında öncelikle okulöncesi ve ilköğretim okullarında öğrenim etkinliklerinin merkezine acilen yerleştirildi.”<sup>5</sup>

2-6 Aralık 2014’te gerçekleşen 19. Eğitim Şurasında alınan tavsiyelerden biri de İnsan hakları, Yurttaşlık ve Demokrasi gibi dersler Trafik Dersi ayarında görülerek trafik de dahil olmak üzere bu derslerin haftalık ders çizelgesinden çıkartılarak Hayat Bilgisi ve Sosyal Bilgiler dersleri içinde verilmesi idi.<sup>6</sup> Böylece değerler eğitimi bütün eğitim kurumlarına, bütün müfredatın içeriğine, bütün derslerin konseptine yerleştirdiği bir içerik haline getirildi.

Değerler eğitimi iller bazında “il yürütme komisyonu”, “ilçe yürütme komisyonu” ve sonra “okul komisyonları” şeklinde görevlendirilip işlenecek konular hiyerarşik olarak yukarıdan aşağıya doğru uygulandı. Bu şekilde değerler eğitiminin temel konuları genel olarak okulöncesi ve ilkokullarda Sorumluluk, Saygı, Sevgi, Yardımlaşma ve İşbirliği, İyilik ve Hoşgörü, Dürüstlük, Barış, Özgüven; Ortaokul ve Liselerde: Sorumluluk, Saygı, İyilik ve Hoşgörü, Dürüstlük, Sevgi, Vatanseverlik, Özgüven, Yardımlaşma ve İşbirliği şeklinde tespit edildi.

Bu tür değerler eğitimi belki bir yönüyle örneğin “kişiler arasında açığa çıkan sevgi, dürüst olma, bağlılık, saygı, adil olma gibi ve açık düşünebilme, doğru bağlantılar kurabilme gibi kişi olanaklarını içeren kişi değeri” (Kuçaradi, 1998: 41) ile bağlantılı olarak görülebilir. Fakat diğer yandan Milli Eğitim Bakanlığı Hayat Boyu Öğrenme Genel Müdürlüğü ile Hizmet Vakfı arasında Değer Eğitimi verilmesine ilişkin olarak imzaladığı 15.07.2014 tarihli işbirliği protokolü kapsamında, örgün ve yaygın eğitim kurumlarında verilmek üzere eğitim seminerlerinin konularını kapsayan “içerik” ile birlikte 81 il Valiliğine gönderilen 13.10.2014 tarih ve 4529464 sayılı resmi yazı ile duyuruldu. Böylece “değerler eğitimi”nin içeriği kitapçık haline getirerek 81 ilin valiliğine gönderildi.<sup>7</sup>

Tamamının Kuran ve hadislerden örneklerle anlatıldığı Hizmet Vakfı’nın kitapçığındaki dokuz konu başlığı ise şu şekildedir: 1. Saygı ve Sevgiye Değer Bir Varlık Olarak İnsan; 2. Aile ve Toplum; 3. Ahlak ve Değerler; 4. İnsanın Sorumluluğu; 5. Sabır; 6. Adalet; 7. Hayat ve Anlamı; 8. Dua ve İbadet; 9. İktisat, Kanaat ve Şükür. Konu başlıklarının bu şekilde olmasının ötesinde kitapçığın içeriği çoğunlukla dini değerlerle doludur.<sup>8</sup> Bu uygulama değerler eğitimindeki değerlerin yerleştiğini göstermektedir.

### 4. İnsan Hakları Eğitimi Versus Değerler Eğitimi

Tarihin ilk dönemlerinden buyana demokrasileri gündeme getiren ve gerçekleştiren oluşumların hepsinin temelinde özgürlükler savaşı vardır. Bu yüzden özgürlüğü elde etmek demokrasiyi gerçekleştirmek demektir. O halde özgürlük nedir ya da özgür olan nedir?

<sup>5</sup> Mürşid Ekmel AYBEK (Psikolojik Danışman)

<http://webcache.googleusercontent.com/search?q=cache:pDMknimKOqJ:www.sosyalpolitikalar.com.tr/makale/1013-deerler-etm-ne-kadar-deerl-.html+&cd=8&hl=tr&ct=clnk&gl=tr>

<sup>6</sup> <http://www.meb.gov.tr/19-mill-egitim-srasi-sona-erdi/haber/7594/tr>

<sup>7</sup> <http://hborgm.meb.gov.tr>

<sup>8</sup> Örneğin kitapçıkta “evlerimizi, yuvalarımızı İslami ölçülerle ve imanın ışığında kurduğumuz takdirde yuvalarımız bir cennet köşesi, saadet ve huzur bahçesi olur”; “Avrupa modası yüzünden, yuva kurarken yapılan israflar ve ölçüsüzlükler yüzünden müminlerin dünya ve ahiret hayatları tehlikeye düşmektedir”; “Devletimizin bekası, kurulacak meşru aile yuvalarıyla mümkündür. Hiçbir millet ve hükümet neslin çoğalmasına karşı çıkamaz. Avrupa ve Amerika devletlerinde nüfusun artması için maddi ve manevi teşvikler yapılırken bizde başka oyunların sahneye konulması, milletimizin güçlenmesini istemeyen mihrakların planı olabilir. Sağlıklı, dindar, faziletli, ahlaklı nesillerin çoğalmasından hiç kimse endişe etmesin. Mahlûkatı yaratan ve besleyen Allah’tır” denilmektedir.

Özgürlük kendisi hakkında ve kendini ilgilendiren konular hakkında dışarıdan hiçbir etki olmaksızın, kişinin kendisinin karar verebilmesidir. Demokrasi kişinin özgür katılımı ile gerçekleştiğine göre demokrasiler özgürlükleri kısıtlayıcı olmaz. Temel haklarca da özgürlükler oluşur. Eğer insan hakkı olarak tanımlanan o kurallar, ilkler olmasaydı yeryüzünde insanlığın olmayacağını düşündüğümüz ilkeler, değerler insan olmanın gerektirdiği ilkelerden olduğu için insan haklarıdır ve evrenselidir. Kuçuradi'nin dediği gibi, ne kadar olduğu bilinmese de sınırlı sayıdadırlar. Çoğaltılan bütün haklar (kişi hakları olsun, toplumsal-kültürel haklar olsun) temel insan haklarını zenginleştirmek, güçlendirmek ve geliştirmek için vardır. Yoksa kendisi tek başına insan haklarından sayılmaz. Aksi takdirde insan hakları enflasyonu yaşanır. Bilindiği gibi enflasyona uğramış bir şey değerini yitirir. Değerini yitirenler de anlamsızdır. Kaldı ki “evrensele evrenselden kalkarak ulaşılmaz, evrensele ulaşmak üzere kendini temel alabileceğimiz herhangi bir hareket noktası bulabilmemiz fiilen olanaksızdır. Bu ise demek ki, bizim için mümkün olan, doğrudan evrensele yönelmek ve ulaşmak değil, fakat sadece ve sadece evrensele olan uzaklığımızı azaltmak, kırmak ve de aşmak olacaktır” (Cangızbay, 2001: 120). Yani bireylerin (özelde öğrencilerin) dünyasında yerelin değerlerini geriletirmek suretiyle evrenselle olan mesafemizi kısaltabileceğiz. Bu şekilde “insan hakları, artık devletlerin, kültürlerin, coğrafyaların çizdiği sınırların ötesinde kabul gören vazgeçilmez bir değerler sistemi olarak çağdaş dünya düzeninin temelini oluşturmaktadır.”<sup>9</sup>

Türkiye'deki insan hakları sorunlarının temel nedenlerinden biri toplum ve bireysel bilincin, insan hakları eğitim programlarının yeterli olmamasıdır. Bireyler kadar Türk Devleti'nin ve kurumlarının, bu alandaki sorunların çözümünde büyük bir sorumlulukları var. İnsan hakları eğitiminin ilk önce hakların korunması konusunda bir işlevi vardır. Bireylerin haklarının yükseltilmesi konusundaki bilinç düzeyleri kadar onların haklarının ihlalinin önlenmesi de söz konusudur. Haklarının bilincinde olan bireyler hem kendi hem de başkalarının haklarını korurlar.

Son yirmi yıldır Türkiye’de insan hakları eğitiminin öğrencilere verilmesi konusunda bir çaba ve arzu olmasına rağmen kayda değer bir ilerleme sağlanamadı. Hatta daha önceleri insan hakları eğitiminin gerekliliği milliyetçilik eleştirisi ekseninde yürütülürken bu durum İslamcılık ve “Milliyetçi-Muhafazakârlık” eksenine kaymıştır. Özellikle dindar nesil yetiştirmek isteyen güçlü iktidar ile yürütülmekte olan değerlerin öğrencilere aktarılması söz konusu olunca Türkiye’deki toplumsal ideallerin değiştiği izlenimi pekiştirmektedir.

Değerler eğitimi, toplumsal, sosyal hayatı sürdürebilmek için dürüstlük, doğruluk, dayanışma, özgürlük, demokrasi gibi değerler üstünden verilmesi gerektiği de alternatif eğitim anlayışlarında dile getirilmektedir. Onlara göre değerler eğitiminden anlaşılan tek şey din eğitimidir. Cumhuriyetin kazanımlarından sayılan toplumsal ideallerden geri dönüş sürecini hızlandırıp pekiştirmek isteyenlerin hızla bilimsel eğitimden uzaklaşmasıdır.<sup>10</sup>

Toplumsal ideallerde eksen kaymasının bir başka göstergesi de diğer derslerin durumudur. Okullarda bilim, sanat ve felsefe derslerine ihtiyaç olmasına rağmen bir öğrencinin okul hayatı boyunca gördüğü dersler içinde din dersleri toplam 1224 saatken, Felsefe dersi 72 saattir.<sup>11</sup>

İlaveten, yapılan çalışmalar göstermiştir ki müfredatta bir insan hakları eğitimi dersi vermekten ziyade var olanı pekiştirme söz konusudur (Bkz.: Gürtan ve Tüzün (2010). Öyle görünüyor ki bu derslerin mevcut ders kitaplarında insan haklarını ihlal eden içerikten temizlenmemiş olması ve üstelik değerler eğitimi adıyla da sürdürülüyor olması bu durumun uzun süre güncelliğini koruyacak gibi. Çünkü bu ve benzeri problemlere dikkat çekilmesine rağmen “ders kitapları dinsel, mezhepsel, cinsel ihlal içeren içerikleriyle doludur” (Çayır, 2014).<sup>12</sup>

İnsan hakları anlayışı demokrasi ve yurttaşlık kavramlarıyla ilintili olup (Doğan, 2002) birey ile devlet arasındaki ilişkide bireyin tarafını tutan bir çağdaş vatandaşlık anlayış iken, değerler eğitimi bireyle gelenek arasındaki ilişkiyi düzenleyerek devletin tarafını tutan bir anlayıştır. Bu yüzden “insan hakları doktrininin işlevi siyasaldır; amacı, devletin sınırlandırılmasıdır. İnsan haklarına dayanan iddia ve taleplerin hedefi, siyasal iktidarın kendisidir. İnsan hakları doğrudan doğruya devlete karşı ileri sürülür. İnsan hakları iddialarının temel amacı, mevcut kurum, uygulama veya normlara –özellikle de hukuki kurumlara- karşı çıkmak veya onları değiştirmektir” (Donnelly, 1995: 24-25). Amaç devletin insan haklarına dayandırılmasını ve her türlü uygulamasında insan haklarını koruma duyarlılığı ile hareket etmesini sağlamaktır. Bu nedenle insan hakları, genellikle başka kişi veya gruplara yönelik iddialara temel oluşturmazlar. Kişilerin devletten kaynaklanmayan

<sup>9</sup> Mustafa OĞUZ: [http://www.siviltoplumakademisi.org.tr/index.php?option=com\\_content&view=article&id=699:nsan-haklar-eitimi-elma-dersem-ck&catid=53:insan-haklari-belgeler&Itemid=131](http://www.siviltoplumakademisi.org.tr/index.php?option=com_content&view=article&id=699:nsan-haklar-eitimi-elma-dersem-ck&catid=53:insan-haklari-belgeler&Itemid=131)

<sup>10</sup> Veli Demir (Eğitim İş Genel Başkanı): <http://www.mebpersonel.com/sendikalar/degerler-egitimi-adi-altinda-okullar-cemaatlere-teslim-ediliyor-h155364.html>

<sup>11</sup> <http://www.guncelegitim.com/haber/3216-meb-2015-2016-ilkokul-ortaokul-lise-haftalik-ders-saati-cizelgesi.html>

<sup>12</sup> Tarih Vakfı, İstanbul Bilgi Üniversitesi Sosyoloji Eğitim Araştırmaları ve Uygulama Merkezi (SEÇBİR) ortaklığında; AB Türkiye Delegasyonu'nun mali desteğiyle Ders Kitaplarında İnsan Hakları III Projesi (DKIH III)

hak ihlalleri, insan hakları sorunu olmaktan ziyade, “hukuk ve düzen”in sağlanmasıyla ilgilidirler. Çünkü özel kişi veya gruplardan gelecek ihlaller, aslında “kamu düzeni” sorunu veya “adli” meselelerdirler” (Erdoğan, 2004: 139-140). Değerler eğitiminin hedefleri ise birey ve toplumdur. Burada devlet sabit kılınır. Eğer özel kişi veya gruplardan gelecek ihlaller değerler eğitiminin ortak paydası ise o zaman devletin insan haklarını yeterince güvence altına almadığını veya alamadığını göstergesi sayılır.

### Sonuç ve Öneriler:

İki yüz yıl önceki Osmanlı'nın modernleşme projesi Türkiye Cumhuriyeti ile tarihin en yüksek zirvesine çıktı. Cumhuriyetin kendisi bir projedir. Bu projenin amacı, çağdaş toplumsal idealleri ve değerleri siyasal-toplumsal yaşamın bir parçası haline getirmektir. Çağdaş dünyanın en son değerlerinden bir de insan hakları ve onun eğitimidir. Yurttaşların bu değerlere sahip olması için son yirmi yıldır bir gayret söz konusudur. Fakat bu değer, inkâr edilmese de hak ettiği ilerlemesi sağlanmadan bir başka eğitim, değerler eğitimi anlayışı devreye girdi. Değerler eğitiminin kendisine itiraz olunmasa da içeriği ve uygulanma biçimi oldukça tartışmalıdır. Bu içerik ve uygulamalar Türkiye'nin toplumsal ideallerinde bir geriye, yerele dönüş izlenimi vermektedir. Mevcut değerler eğitimindeki “değerler”, değer atfetme ve değer biçme düzeylerinde olup Türkiye Cumhuriyeti Devleti'nin kuruluşunda benimsenmiş olan ideallerin ekseninden farklı bir yere kaydığının son göstergesidir.

Evrensel değer ve ahlak ilkesi olarak tartışılan insan hakları kavramı ve eğitimi yerel olanla aramızdaki mesafeyi kısaltarak evrensele götürürken, tam tersine insan hakları ve eğitimi yerele hapseden, dolayısıyla yereli mutlak değişmez kılan değerler eğitimi anlayışıyla farklı yönde hareket etmektedir ve edecektir.

Konu Kohlberg'in ahlaki gelişim kuramı açısından ele alınırsa değerler eğitim, bireyi en fazla geleneksel ahlak düzeyinin “kanun ve düzen aşaması”na kadar götürürken insan hakları eğitimi bireyi gelenek ötesi düzeyin “evrensel ahlak ilkesine kadar götüreceği söylenebilir.

İnsan hakları gibi Dürüstlük, Doğruluk, Dayanışma, Özgürlük, Demokrasi gibi değerler de dahil olmak üzere okullarda öğrencilere değerler verilmelidir. Fakat bu, değerler skalasında yer alan insan hakları gibi evrensel değerler ile ters yüz edilmeden olmaz. “İnsan Hakları eğitimi, hak bilgisi edinme ve hak bilinci kazandırma işlevinin yanı sıra, insan haklarının sonradan değil önceden korunmasını sağlar” (Gülmez, 2000: 318) ki kendine yabancı değerlerin baskısından da korunsun.

Değerler insanların olgular hakkında verdiği hükümlerdir. Değerler örgütlenip kurumsallaştırılırken değerlerin kişisel, yerel ve evrensel olma özellikleri dikkate alınmalıdır. Çağdaş eğitimde bu hükümler ancak evrensel-genel geçer değer içerikleriyle verilmelidir. Bir kişiye, dine, ulusa veya ideolojiye göre belirlenen ve benimsetilmeye çalışılan değerler ise ancak totliter rejimlerin işidir.

Ayrıca, eğer bir ülkede demokrasinin ve insan haklarının faziletine inanmamış öğretmen ve idareciler varsa İnsan Hakları eğitimi konusunda öğrencilere ders vermek bir ülkede insan hakları konusunda ilerlemenin garantisi olmamaktadır.

İnsan haklarının çiğnenmesi bir demokrasi kültürü teşviki olmadan bireysel ve toplumsal davranış değişikliği için herhangi bir beklenti olamaz. Bunu başarmak için, uzun vadeli eğitim projeler yapılmalıdır. Bu şekilde bütün farklılıklarımıza rağmen toplumun “insan olma” değerinde birleştirilerek bir üst değer olarak insan hakları eğitimi verilmeye ya da çeşitli yollarla yurttaşlara bu değerler kazandırılmaya çalışılmıştır.

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## **TYOLOGY OF 18-YEAR-OLD CZECH GRAMMAR SCHOOL STUDENTS BY THEIR ADDICTION TO COMPUTER GAMES**

Miroslav CHRÁSKA,

Department of Technical Education and Information Technology,  
Faculty of Education, Palacký University Olomouc, Czech Republic  
miroslav.chraska@upol.cz

Lenka JANSKÁ

Department of Technical Education and Information Technology,  
Faculty of Education, Palacký University Olomouc, Czech Republic  
lenka.janska@post.cz

### **ABSTRACT**

The aim of the paper is to interpret the preliminary results of a research study focused on addictive behaviour regarding computer games in 18-year-old Czech grammar school students. In the research we used a quantitative research strategy with an own questionnaire to identify the degree of addictive behaviour in students in relation to computer games. The research sample consisted of 486 students in grade three of four-year grammar schools (or an equivalent grade of multi-year grammar schools) from 9 randomly selected schools.

The first part of the research focused on an analysis of questionnaire items relating to a broader approach to addictive student behaviour, which resulted in defining two basic groups of grammar school students. These groups are of about the same size but have different characteristics. The second part of the research focused on an analysis of scaled questionnaire items relating to the symptoms of addictive student behaviour. It was revealed that Czech grammar school students can be divided into four typical groups (clusters) according to the degree of addictive behaviour. The group with the highest degree of addictive behaviour (cluster 3) included 8.25 % of all grammar school students, while the group with almost no signs of addiction (cluster 2) had 32.58 % of students. The research study also considered other typical characteristics of the defined groups of students such as gender (dominance of males in cluster 3, dominance of females in cluster 2), preferred leisure activities (playing PC games in cluster 3) or the average time of playing computer games during a single day (187 minutes in cluster 3 as opposed to 35 minutes in cluster 2).

In the research the following result processing methods were used: K-means cluster analysis and globalized cluster analysis; the analysis of nominal data was performed by means of the Chi-square test of independence.

### **INTRODUCTION**

In today's information society, digital technologies are present in all areas of life. As a result, their negative effects on peoples' life are becoming a frequently discussed issue (Nešpor, 2011). Especially the area of education is subject to extensive discussions about the possibilities of using Facebook or computer games or didactic computer games in classes (Dostál, 2009; Stoffová, 2016; Zounek et al., 2016). Another frequently discussed issue is children's addiction to ICT, Internet and computer games (Kopecký, 2013). The present paper discusses selected results of a research study focused on addictive behaviour regarding computer games in 18-year-old Czech secondary school students. Specifically, the participants of the research were grammar school students. In the Czech Republic, these are general secondary schools that primarily prepare students for university study. Therefore, a certain intellectual degree of students and sufficient motivation for study is expected. In the next stage of the research in autumn 2016, the research will also be carried out in other types of secondary schools in the Czech Republic.

### **THE STUDY**

The objective of the research was, based on an analysis of responses of grammar school students indicated in an addictive behaviour questionnaire, to divide these students into characteristic groups according to the degree of their addictive behaviour in relation to playing computer games. According to preliminary results (Chráska jun., 2016), the authors assumed that the research sample of students might consist of two groups with opposing opinions about computer games. In order to make the number of identified groups of students clear, the Generalized Cluster Analysis was used.

### **RESEARCH METHOD**

For the purposes of the research we used a yet non-standardized questionnaire, which was based on a questionnaire used in 2015 (Basler, 2016; Chráska jun., 2016). For the purposes of an IGA project aimed at the issue of student addiction to computer games in a wider context, in 2016 the questionnaire was enriched with

other items. The purpose of the questions was to determine detailed characteristics of the types of students according to their addiction to computer games. Apart from these characteristics, the questionnaire focused on the degree of addictive behaviour in relation to playing computer games by means of 11 statements. The degree of agreement with each statement was indicated by the students on a six point scale with coded answers: totally agree (value 6), agree (5), rather agree (4), rather disagree (3), disagree (2), completely disagree (1). Regarding the size of the paper, Table 5 shows only selected questionnaire items, which were further analysed by means of the Generalized Cluster Analysis. This analysis was performed using the STATISTICA 12 (StatSoft, 2013) statistical package.

### DESCRIPTION OF THE RESEARCH SAMPLE

The research study was carried out in 10 randomly selected grammar schools in the Olomouc Region, Pardubice Region, Moravian-Silesian Region and Zlín Region in May 2016. The overall research sample consisted of 525 students in grade three of four-year grammar schools (or an equivalent grade of multi-year grammar schools). This paper presents an interpretation of preliminary results from 9 grammar schools (n=486). The structure of the respondents is specified in Table 1.

**Table 1:** Structure of the research sample.

	Summary Frequency Table (DATA INTE 2016)			
	Grammar School No.	Gender Female	Gender Male	Row Totals
Count	1	52	36	88
Count	2	45	28	73
Count	3	12	18	30
Count	4	19	10	29
Count	5	56	34	90
Count	6	14	6	20
Count	7	21	21	42
Count	8	48	21	69
Count	9	31	14	45
Count	All Grps	298	188	486
Total Percent		61,32%	38,68%	

### FINDINGS

#### GENERALIZED CLUSTER ANALYSIS OF STUDENTS' RESPONSES

In the first step of the STATISTICA 12 programme using the "Validation" procedure in the Generalized Cluster Analysis we determined the probable number of clusters, which was the anticipated 2 clusters.

We performed the Generalized Cluster Analysis (Chrástka jun., 2008) of the students' responses for continuous and nominal variables. The results are presented in Table 2. The average degree of agreement with the statements, average daily time spent playing computer games and the start age of playing computer games are reported in a non-standardized extent. Table 2 shows that the students can be divided by their responses into two typical groups. Those characteristics that statistically differ between the two groups are then used to determine individual typical features in groups (cluster) 1 and 2.

**Table 2:** Results of the Generalized Cluster Analysis of students' responses to selected questions for the monitored nominal and continuous variables.

Questionnaire item	Cluster 1	Cluster 2	p
Prevailing number of answers to Q1: Do you play computer games?	Yes	Yes	<0.01
Prevailing number of answers to Q2: Do you play on-line computer games?	Yes	No	<0.01
Prevailing number of answers to Q3: Do you play computer games on Facebook?	No	No	0.12
Prevailing number of answers to Q6: What do you usually do in your free time when you don't have to study?	B (I do sports)	C (I go out with my friends)	<0.01
Prevailing number of answers to Q7: Do you take part in any leisure time activities?	Yes	Yes	0.07



Prevailing number of answers to Q9: Did or do your parents limit the time for playing computer games?	No	<b>No</b>	0.01
Prevailing number of answers to Q13: How often do you stay up late because of playing computer games?	<b>1 (once per month)</b>	0 (never)	<0.01
Prevailing number of answers to Q14: If I don't play, I'm stressed (nervous, tense).	No	No	0.42
Prevailing number of answers to Q22: I often play computer games at school during lessons (e.g. using a mobile phone).	<b>Yes</b>	No	<0.01
Prevailing number of answers to Q27: Do you play educative computer games (e.g. Lingua.Ly, Duolingo, Lightbot, etc.)?	<b>No</b>	No	<0.01
Prevailing number of answers concerning gender	<b>Male</b>	Female	<0.01
Q8: For how long a day you play games (specify average value in minutes per day)?	<b>129.58</b>	62.05	<0.01
Average degree of agreement with the statement:			
Q5: Playing computer games is relaxing for me, I forget about problems or stress, I relax and feel fine.	<b>4,30</b>	3,11	<0.01
Q10: I used to have other hobbies than playing computer games, but now I spend most of my time playing.	<b>2,19</b>	1,24	<0.01
Q11: Even if I know there will be a test at school I prefer playing computer games.	<b>3,22</b>	1,62	<0.01
Q12: When I'm not playing, I often think about my previous success, what I want to achieve or how I will progress when I get to play again.	<b>2,85</b>	1,42	<0.01
Q15: I can't imagine my life without computer games.	<b>2,80</b>	1,37	<0.01
Q16: I feel that computer games are becoming increasingly important for me. I need to spend more and more time playing computer games to feel happy.	<b>2,00</b>	1,18	<0.01
Q17: I feel that I can't control the amount of time I spend playing computer games. I tried to reduce the amount of time spent playing, but I couldn't.	<b>1,97</b>	1,28	<0.01
Q18: Due to my frequent playing I sometimes have problems at school, at work or at home.	<b>2,18</b>	1,16	<0.01
Q19: I spend more time playing computer games than I am able to admit to others. I don't tell others the truth in order to conceal how much time I spend playing computer games.	<b>1,80</b>	1,13	<0.01
Q20: I have lost or put at risk an important relationship or friendship because of playing computer games. Because of playing computer games I have put at risk or lost opportunities at school or at work.	<b>1,68</b>	1,10	<0.01
Q21: My parents often prohibit or restrict me in playing computer games, which makes me upset or I play in secret.	<b>1,96</b>	1,15	<0.01
Q28: How old were you when you started playing computer games?	8.53	<b>9.21</b>	0.01
Number of cases	193	197	
Percentage (%)	49,49	50,51	

The first part of results processing suggests that 18-year-old grammar school students are divided into two groups (clusters) of almost identical size according to their approach to computer games. These groups also show a completely different degree of addiction to computer games.

Cluster 1 includes students who play PC games more often, especially on-line games. Their parents often set limits for playing computer games, students often stay up late because of playing computer games (on average only once per month though), students often play computer games at school during lessons (e.g. using a mobile phone). The group is dominated by males, they play computer games on average over two hours a day, but in their free time they do sports. For them, computer games represent a stronger means of relaxation compared with the students in the other group. They play computer games more often even if they have school assignments (e.g. learning for a test) and generally exhibit a significantly higher score of addictive behaviour than the students in group 2. They have played computer games since about 9 years and comprise about 49 % of all students.

Cluster 2 consists of students who exhibit a significantly lower score of addictive behaviour than the students in group 1. They play computer games on average one hour a day, in their free time they go out with friends. More often they play educative computer games, they started playing at about 9.5 years of age. This group is dominated by females and comprises about 51 % of all students.

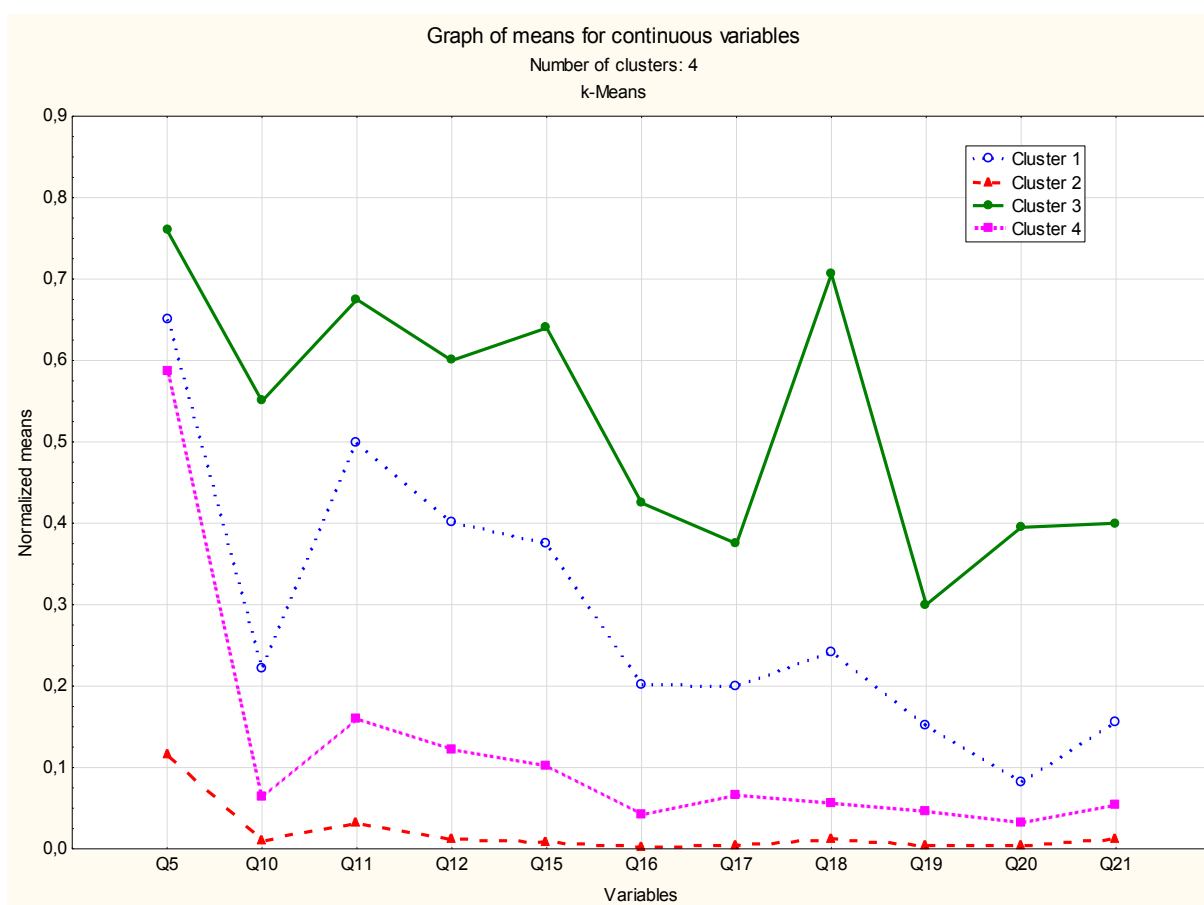
In the second part of the research the Generalized Cluster Analysis was used to analyse scaled questionnaire items relating to the symptoms of addictive student behaviour – questions 5, 10, 11, 12, 15, 16, 17, 18, 19, 20, 21. The results of the analysis are shown in Table 3. A graphical interpretation of standardized students' responses in the four clusters is shown in Figure 1. As analysis of variance ANOVA (Chráska sen., 2007) was used to compare the time students spend per day playing computer games (questions 8). This was performed for individual clusters of students – see Fig. 2. The authors also focused on the preferred way of spending leisure time (question 6) by students in individual clusters – see Tab. 4.

Figures 1 and 2 and Table 4 show that the identified 4 groups of students differ in the degree of addictive behaviour in relation to playing computer games. Students in cluster 3 show the highest degree of agreement with the statements that determine their addiction to computer games; i.e. these students are most addicted to computer games. They play computer games for over three hours a day (186.5 min), which makes it the most frequent activity in their free time. On the contrary, according to their responses, students in cluster 2 show almost no degree of addiction. They do play computer games, but only about half an hour per day (35.3 min), in their free time they go out with friends or do sports. Group 4 tends to incline to group 2, i.e. these students show only few signs of addictive behaviour in terms of playing computer games. Group 1 shows a low degree of addictive behaviour.

The authors further investigated the proportions of students by gender in the defined clusters. The results are shown in Tab. 5, which suggests that cluster 3 (students with addiction) is prevailed by men (17.11 % of all men), while cluster 2 is dominated by women (44.63 % of all women). An aggregate analysis of clusters 2 and 4 (students without significant signs of addictive behaviour in relation to computer games) shows that they comprise 84 % of all women but only 45 % of all men. It is apparent that the tendency to addictive behaviour in relation to playing computer games concerns rather men.

**Table 3:** Results of the Generalized Cluster Analysis of students' responses to scaled questionnaire items relating to addictive behaviour.

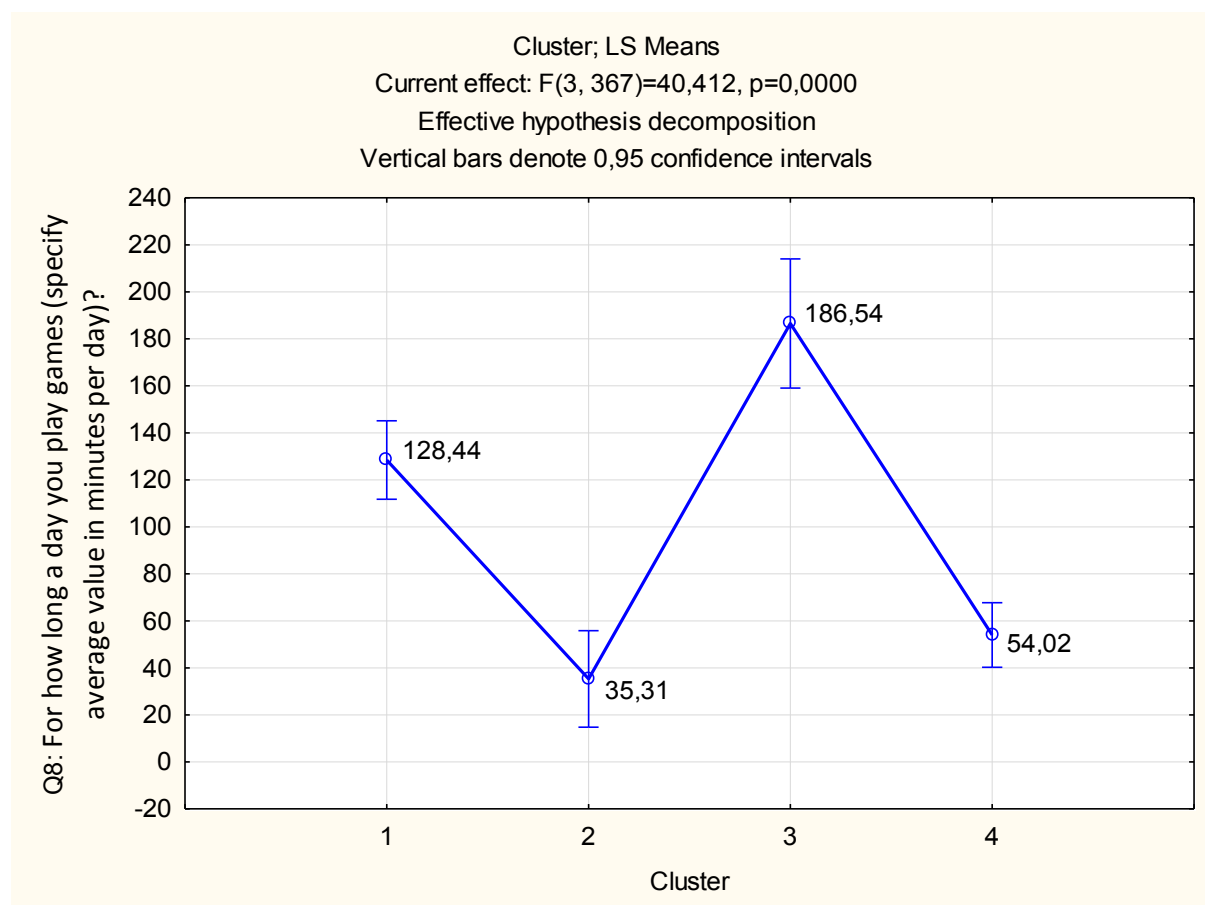
<b>Centroids for k-means clustering (DATA INTE 2016)</b> <b>Number of clusters: 4</b> <b>Total number of training cases: 485</b>	<b>Cluster 1</b>	<b>Cluster 2</b>	<b>Cluster 3</b>	<b>Cluster 4</b>	<b>p</b>
Q5: Playing computer games is relaxing for me, I forget about problems or stress, I relax and feel fine.	4.25	1.58	4.80	3.93	<0.01
Q10: I used to have other hobbies than playing computer games, but now I spend most of my time playing.	2.11	1.05	3.75	1.32	<0.01
Q11: Even if I know there will be a test at school I prefer playing computer games.	3.50	1.16	4.38	1.80	<0.01
Q12: When I'm not playing, I often think about my previous success, what I want to achieve or how I will progress when I get to play again.	3.01	1.06	4.00	1.61	<0.01
Q15: I can't imagine my life without computer games.	2.87	1.04	4.20	1.51	<0.01
Q16: I feel that computer games are becoming increasingly important for me. I need to spend more and more time playing computer games to feel happy.	2.01	1.01	3.13	1.21	<0.01
Q17: I feel that I can't control the amount of time I spend playing computer games. I tried to reduce the amount of time spent playing, but I couldn't.	2.00	1.03	2.88	1.34	<0.01
Q18: Due to my frequent playing I sometimes have problems at school, at work or at home.	1.96	1.05	3.83	1.22	<0.01
Q19: I spend more time playing computer games than I am able to admit to others. I don't tell others the truth in order to conceal how much time I spend playing computer games.	1.76	1.03	2.50	1.23	<0.01
Q20: I have lost or put at risk an important relationship or friendship because of playing computer games. Because of playing computer games I have put at risk or lost opportunities at school or at work.	1.41	1.02	2.98	1.16	<0.01
Q21: My parents often prohibit or restrict me in playing computer games, which makes me upset or I play in secret.	1.78	1.06	3.00	1.27	<0.01
Number of cases	111	158	40	176	
Percentage (%)	22.89	32.58	8.25	36.29	



**Figure 1:** Generalized Cluster Analysis – standardized students' responses to scaled items in the defined clusters.

**Table 4:** Contingency table - Students' responses to question 6 by clusters ( $p < 0.001$ ).

Q6: What do you usually do in your free time when you don't have to study?	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Row (Totals)
A – I play computer games.	18	5	22	5	50
B – I do sports.	35	44	6	50	135
C – I go out with friends.	23	61	9	69	162
D – I read.	8	16	1	15	40
E – I watch television.	2	6	1	7	16
F – I go to discotheques.	4	2	1	7	14
G – Other activities, please specify.	21	24	0	23	68
All Grps	111	158	40	176	485



**Figure 2:** Average daily time of playing computer games in the defined clusters in minutes.

**Table 5:** Proportions of students by gender in the defined clusters.

	Summary Frequency Table (DATA INTE 2016)					
	Q34: Gender	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Row Totals
Count	Female	40	133	8	117	298
Row Percent		13%	45%	3%	39%	
Total Percent		8%	27%	2%	24%	61%
Count	Male	71	25	32	59	187
Row Percent		38%	13%	17%	32%	
Total Percent		15%	5%	7%	12%	39%
Count	All Grps	111	158	40	176	485
Total Percent		23%	33%	8%	36%	

The authors further focused on the degree of addictive behaviour in relation to playing computer games by students in various grammar schools.

Table 6 suggests that the degree of addictive behaviour in 18-year-old grammar school students varies by schools. The lowest degree of addictive behaviour was reported by students in school 8 (about 3 %); the highest by students in school 4 and 7 (about 14 %).

The reason for this difference can only be assumed. A certain role is apparently played by value orientation, because the lowest degree of addiction to computer games was observed in school 8, which is a church school.

**Table 6:** Proportions of students in the defined clusters by schools.

	Summary Frequency Table (DATA INTE 2016)					
	Grammar School	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Row Totals
Count	1	23	15	10	40	88
Row Percent		26,14%	17,05%	11,36%	45,45%	
Total Percent		4,74%	3,09%	2,06%	8,25%	18,14%
Count	2	18	27	6	22	73
Row Percent		24,66%	36,99%	8,22%	30,14%	
Total Percent		3,71%	5,57%	1,24%	4,54%	15,05%
Count	3	9	9	3	9	30
Row Percent		30,00%	30,00%	10,00%	30,00%	
Total Percent		1,86%	1,86%	0,62%	1,86%	6,19%
Count	4	7	8	4	10	29
Row Percent		24,14%	27,59%	13,79%	34,48%	
Total Percent		1,44%	1,65%	0,82%	2,06%	5,98%
Count	5	22	29	5	34	90
Row Percent		24,44%	32,22%	5,56%	37,78%	
Total Percent		4,54%	5,98%	1,03%	7,01%	18,56%
Count	6	5	6	2	7	20
Row Percent		25,00%	30,00%	10,00%	35,00%	
Total Percent		1,03%	1,24%	0,41%	1,44%	4,12%
Count	7	14	15	6	7	42
Row Percent		33,33%	35,71%	14,29%	16,67%	
Total Percent		2,89%	3,09%	1,24%	1,44%	8,66%
Count	8	7	33	2	27	69
Row Percent		10,14%	47,83%	2,90%	39,13%	
Total Percent		1,44%	6,80%	0,41%	5,57%	14,23%
Count	9	6	16	2	20	44
Row Percent		13,64%	36,36%	4,55%	45,45%	
Total Percent		1,24%	3,30%	0,41%	4,12%	9,07%
Count	All Grps	111	158	40	176	485
Total Percent		22,89%	32,58%	8,25%	36,29%	

## CONCLUSIONS

The research suggests that Czech eighteen-year-old grammar school students can be divided into 4 typical groups by the degree of addictive behaviour in relation to playing computer games.

The group with the highest degree of addictive behaviour (cluster 3) included 8.25 % of all grammar school students, while the group with almost no signs of addiction (cluster 2) had 32.58 % of students.

Students in cluster 3, who show the highest degree of agreement with the statements that determine their addiction to computer games, play computer games for over three hours per day on average (186.5 min). This is the most frequent way of spending leisure time. On the contrary, according to their responses, students in cluster 2 show almost no degree of addiction. They do play computer games, but only about half an hour per day (35.3 min); in their free time they go out with friends or do sports.

An analysis of addictive behaviour in relation to playing computer games by gender shows that cluster 3 (students with addiction) is prevailed by men (17.11 % of all men), while cluster 2 is dominated by women (44.63 % of all women). An aggregate analysis of clusters 2 and 4 (students without significant signs of addictive behaviour in relation to computer games) shows that they comprise 84 % of all women but only 45 % of all men. It is apparent that the tendency to addictive behaviour in relation to playing computer games concerns rather men.

An interesting finding of the research was the fact that the lowest degree of addictive behaviour in relation to computer games was reported by students in the church grammar school, which might be related to their value system.

The next stage of the research will be carried out in other types of secondary schools in the Czech Republic and will bring further valuable results.

## ACKNOWLEDGEMENTS

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## ULUDAĞ ÜNİVERSİTESİ WEB SAYFASI KULLANILABİLİRLİK ANALİZİ

Demet GÜLSEREN

Teknik Bilimler MYO, Grafik Tasarımı Programı  
Uludağ Üniversitesi

, Ömer Nuri ÇAM

Teknik Bilimler MYO, Mekatronik Programı  
Uludağ Üniversitesi

, Evrim SIRMALI

Teknik Bilimler MYO, Grafik Tasarımı Programı  
Uludağ Üniversitesi

### ÖZET

Üniversite web sayfaları, üniversitenin tanıtım yüzüdür. Fakat aynı zamanda okuyan öğrenciler ve çalışanlar (akademik ve idari ) açısından da hızlı bilgilere ulaşılabilen, haber ve duyuruların takip edildiği bir mecradır. Bu hedef kitle açısından, üç farklı içerik ve sunum anlamına gelmektedir. Farklı kullanıcı tiplerinin beklentilerinin karşılanmasının ölçülmesi, web hizmetinin iyileştirilmesi ve geliştirilmesi açısından önem kazanmaktadır.

Bu çalışmada günlük ortalama 35 bin ziyaret alan, Uludağ Üniversitesi (UÜ) web sitesinin akademik ve idari personel ile öğrencilerin web sayfası kullanılabilirliğinin anket yöntemi ile ölçülmesi ve değerlendirilmesi yapılmıştır. Araştırmada tüm kullanıcı tiplerine ortak anket kullanılmıştır. Veri analizinde temel olarak betimsel istatistik kullanılarak sonuçlar incelenmiştir. Gözlemlenen sorunların giderilmesiyle daha kullanılabilir bir üniversite web sayfası oluşturulmasına yönelik önerilerde bulunulmuştur.

## ANALYSING ERGONOMICS OF ULUDAĞ UNIVERSITY WEBSITE

### ABSTRACT

University web pages, is the university's promotional face. But also students and staff (academic and administrative) can reach quickly in terms of information, it is a area where you can follow the news and announcements. The terms of the target audience, it also means three different types of content and presentation. Measurement of meeting the expectations of different types of users, it is important for the development and improvement of web services.

In this study, to measure the availability and evaluation of the website, that has 35 thousand visitors per day, survey was carried out to students, administrative and academic staff. All types of users answered same survey. Data were analyzed by using descriptive statistical analysis. As a result suggestions are offered to create more useful and ergonomic web site.

### GİRİŞ

Kurumların tanıtımları ve duyurularını hızlıca ulaştırmalarının en kolay yolu, kurumların web sayfalarıdır. Fakat kullanıcıların istek ve ihtiyaçlarına ne kadar uygun olduğu sorgulanması gereken parametrelerdendir. Ayrıca ortalama olarak internette bir genel tasarım trendi olmaktadır. Bu trende karşılık kurumlar da kendilerini yenilemektedir. Bu trendler renkler üzerinden olduğu gibi, sayfa tasarım mantıklarında, içerik gösterim yöntemlerinde de olmaktadır. Tasarım ve içerik trendleri her sene güncellenmektedir. (Templatemonster, n.d.) Teknolojinin gelişmesi de yeni imkanlar getirmektedir. Son yıllarda buna en iyi örnek mobil platformların çok gelişmesi verilebilir. Çok kısa süre önce, masaüstü bilgisayar ve dizüstü bilgisayarlarda çok yaygın kullanılan en düşük çözünürlük 1024x768 iken, küçük akıllı telefonlar ile 480x320 çözünürlüğe düşmüştür. Son zamanlarda 4k çözünürlük veren telefonlar çıkmış olsa da, çok sayıda farklı çözünürlükte mobil veya sabit cihazlar olmuştur. (W3Counter, n.d.) Bu da tasarımların responsive olması zorunluluğuna itmiştir. (Bouuaert, Tellier, & Chalmers, 2014)

Bahsedilen değişimlere karşılık, site değişimleri memnuniyet araştırmasına tutulmalıdır. Bu konuda literatürde her yıl onlarca konu çalışılmaktadır. Ayrıca site ergonomisi de ayrı bir araştırma konusudur. Sayfada aranılan şeyin kolayca bulunması veya genel standartlara uygun olarak yerleştirilmesi olan UX ( kullanıcı deneyimi ) çalışmaları da büyük önem taşımaktadır.

Kütüphane, fakülte, enstitü veya üniversite sayfalarına ait web sitesi kullanılabilirlik analizi büyük ilgi gören konulardandır. Sitenin kullanılabilirliği veya ergonomisi hakkında regresyon analizi çalışmaların yanında (Bringula & Basa, 2011) anket ile de ölçüm yapılmıştır. (Ate & Karacan, 2009) Yeni teknolojiler ile bu çalışmalar devam etmektedir. (Yeniad, Mazman, Tüzün, & Akbal, 2011)

Bu çalışma ile site tasarım beğenimi, ergonomisi gibi ölçümlerle kullanıcı beklentileri kısa bir anket ile ölçülmüştür.

## YÖNTEM

Uludağ Üniversitesi'nde yaklaşık 63 bin öğrenci, idari personel sayısı:5000 ve akademik personel sayısı 2300 kişi olmak üzere (Kordinatörler, 2014), anket tüm iç paydaşların yaklaşık %1'lik kısmına tekabül edecek şekilde 708 kişiye uygulanmıştır.

Anket ölçümü için betimsel istatistik kullanılmıştır. Ankete 400 öğrenci, 180 idari çalışan ve 128 akademik çalışan katılmıştır. Ankete bayanların ilgisi daha yüksek olmuştur.

Ankete katılan kişi sayısı

Öğrenci	400
İdari Personel	128
Akademik Personel	180



**Şekil1: Dünyadan ve Türkiyeden İlgi Yoğunluğu**

Uludağ Üniversitesi web sayfasının günlük hit sayısı 35 bin civarındadır. Dünya üzerindeki akademisyenler ve öğrencileri nedeniyle de farklı ülkelerden giriş almaktadır. Ortalama olarak %4 dış ülkelere giriş almaktadır. %60 Bursa civarından giriş alan web sayfasını %19 İstanbul ve daha sonra %6 kadar Ankara bölgesinden talep görmektedir. %55 oranında 360x640 çözünürlük ile en yüksek orana sahiptir. 1024 ve üzeri çözünürlük %15 kadardır. Bu da mobil giren oranını göstermektedir.

Üniversite sayfasına girişlerin %18'i kampüs içinden olmaktadır. Masaüstü bilgisayar oranı %55 olup, %44 civarında da mobil cihazlardan giriş vardır.



## BULGULAR

### Toplam Beğeni Oranı

Sayfayı beğenenlerin oranı %60'a yakın olup, genel olarak beğenilmektedir.



Şekil2: Toplam Beğeni Oranı

### Cinsiyete göre beğeni oranı

Cinsiyete göre bayanların beğenme oranı, erkeklerden iki kat daha fazladır.



Şekil3: Cinsiyete göre beğeni oranı

### Cinsiyete göre anasayfaya dönme zorunluluğu

Cinsiyete göre bayanların anasayfaya daha az dönme zorunluluğu hissettikleri ortaya çıkmıştır.



Şekil4: Cinsiyete göre anasayfaya dönme zorunluluğu

### Cinsiyete göre anasayfada bulabilme

Cinsiyete göre bayanların anasayfada aradıklarını bulabilme oranları da yine yaklaşık iki kat yüksektir.

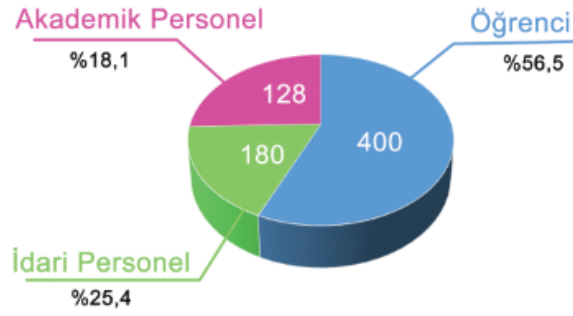


Şekil5: Cinsiyete göre anasayfada bulabilme

### Cinsiyete göre ankete katılanların oranı

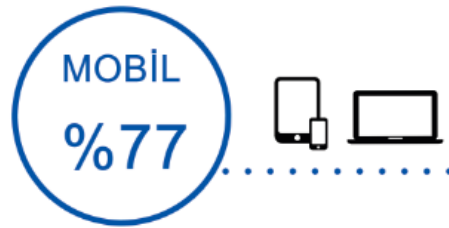


Şekil6: Cinsiyete göre ankete katılanların oranı

**Ankete katılan kişi sayısı****Şekil7:** Ankete katılan kişi sayısı**İç paydaşların türüne göre oranlar****Şekil8:** İç paydaşların türüne göre oranlar

Sayfaya mobil giriş oranı %77'dir. Diğer bir ifade ile ankete katılanların %77'si mobil olarak sayfaya bağlanmışlardır.

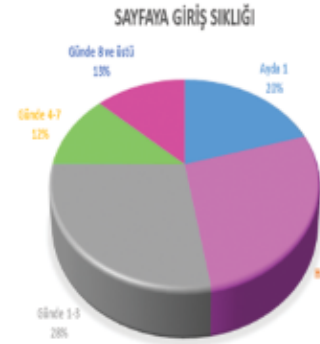
Web sayfasına ulaşılan platformlar açısından bakıldığında %54,06 ile desktop, %43,67 ile mobil cihazlar, %1,67'nin ise tabletlerden ulaşıldığı görülmüştür.

**Şekil9:** Mobil kullanım oranı**Şekil10:** Mobil kullanım oranlarının paydaşlara göre dağılımı

Sayfaya mobil giriş oranlarına bakıldığında, en fazla talebin öğrencilerden geldiği raporlanmıştır. Akademik ve idari personelin çalışma ortamları etkisiyle sabit sistemleri tercih ettikleri ölçülmüştür.

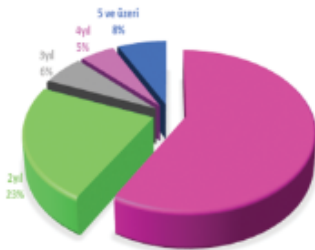
Sayfada 10 sn nin altında duranların oranı %65 ile 1.sıradadır. Bu sayfada arananların hemen bulunduğunu gösterir veya sayfadaki son haberleri takip edenlerin kontrol sıklığını gösterir. Zaten tekrar sayfayı ziyaret edenlerin oranı %79,1'dir.

Sayfaya giriş sıklığı en fazla günde 1-3 arası olduğu beyan edilmiştir. Sayfa log verilerine bakıldığında sayfaya günde bir defa girenlerin oranı %25'tir. Geri kalanlar sayfayı birden fazla ziyaret etmektedirler. Giren kişilerin türüne göre bakıldığında en çok ziyaret edenler akademisyenler ve sonrasında idari personeldir. Öğrencilerin duyuru ve haberlere ilgisinin de az olduğunu göstermektedir. Sayfaya az girmelerinden dolayı, sayfa beğenileri daha yüksek görülmektedir.

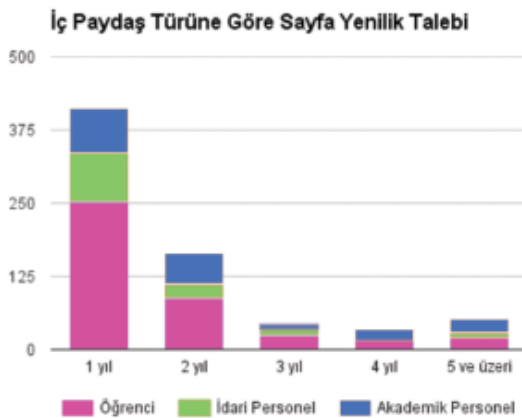


Şekil11: Sayfaya giriş sıklığı

Sayfanın en çok %58 ile her yıl yenilenme talebinde bulunulmuştur. Bu talebi yapanların %61' i öğrencilerden oluşmaktadır.

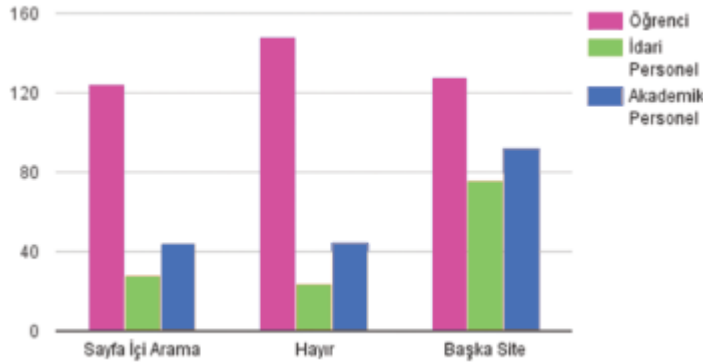


Şekil12: Sayfa yeniliği sıklık talebi



Şekil13: İç paydaş türüne göre sayfa yenilik talebi

Üniversite sayfasında aranan bir bilginin hangi kaynaktan daha çok arandığı sorulduğunda, sayfa dışında alışılagelmiş arama motorlarının daha çok kullanıldığı görülmüştür. Aramayı en çok akademik ve idari personelin yaptığı ölçülmüştür.



Şekil14: Arama kullanım oranları

## SONUÇ

Bu çalışma değişik tipteki web kullanıcılarının beklentilerinin ve kullanım tecrübelerinin farklı olduğu sonucuna varılmıştır. Çalışma sonucu ışığında;

- Seo link oluşturma ile aramaların daha kolaylaştırılması,
- Farklı platformlardan giriş nedeniyle, responsive tasarıma önem verilmesi gerektiği,
- Kişiselleştirilmiş sayfa tasarımlarının oluşturulması

gibi tavsiyelerde bulunulmuştur.

Bu noktada öğrenci kullanıcıların sayfa ziyaretlerinin azlığı dikkat çekmiştir. Sayfa içeriklerinin öğrencileri de dikkate alacak şekilde hazırlanması gerekliliği görülmüştür. Sosyal platformlardan bağlantılar oluşturulması iyileştirmeye imkan sağlayacaktır.

Bu tarz ergonomi ve memnuniyet ölçen anket çalışmalarının her tasarım değişikliği sonrasında, memnuniyet anketleri yapılarak takip edilmesi ve tecrübe edinmek gerekmektedir.

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## UNACCOMPANIED FOREIGN MINORS IN THE ITALIAN CONTEXT: FROM LEGAL ORDER TO NETWORKING IN EDUCATIONAL SERVICES

Cinzia NOVARA

Department of Psychological, Educational and Training Science  
University of Palermo, Italy  
cinzia.novara@unipa.it

Consuelo SERIO

Department of Economics, Business and Statistics Sciences  
University of Palermo, Italy  
consuelo.serio@unipa.it

Gianluigi MOSCATO

Department of Social Psychology, Social Work, Social Anthropology and East Asian Studies, University of  
Malaga, Spain  
moscato@uma.es

### ABSTRACT

As the result of armed conflict, poverty or natural disasters, many children move away from their families and culture of origin. In 2014, in Italy, the number of unaccompanied foreign minors was approximately 11,000. They represent the most vulnerable of the migration phenomenon and for this reason, in December 2013, the Directorate General of Immigration and Integration Policy of the Ministry of Labour and Social Policy, adopted new guidelines for policies on reception, repatriation and effective integration arrangements of unaccompanied foreign minors. It is possible to promote the implementation of the opportunities aimed at the children concerned activating a networking that involve National and International Social Service, non-governmental organizations, reception structure, educational and scholastic services and, of course, the families of origin in the hometown and any foster families in the host country.

**Keywords:** *unaccompanied migrant children, networking strategy, educational intervention*

### INTRODUCTION

The relationship between migration and human rights is a topic of growing interest for international organizations, scientific and political institutions and for the foreigner to recognize his political rights as a citizen. Rights that are occasionally barely guaranteed due to a inadequate governance by countries and to the remarkable dimensions of migratory flow in recent years (Observatory of International Policy, 2012).

The causes of international migration are multiple: global economic imbalances, poverty and environmental degradation along with the absence of peace and security, violations of human rights and different levels of development of judicial and democratic institutions (Centre for Research on the Epidemiology of Disasters, 2012, [www.cred.be](http://www.cred.be)).

These scenarios are also related to the increase in the number of minors involved in the migration process year by year: between 2013 and 2014 the number of non-EU citizens legally residing in Italy increased by about 110 thousand units (+ 3%) and children constitute the present 23.9% of non-EU foreigners legally residing ([www.istat.it](http://www.istat.it)).

It is important to distinguish between accompanied minors and those unaccompanied or separated children. The latter category includes minors who have been forced to separate from both parents, or guardians, but not necessarily from other relatives, and children separated from both parents, other relatives and tutors.

The European Directive 2001/55 / EC3 generally defines unaccompanied minors as 'third-country nationals or stateless persons below the age of eighteen who arrive in the territory of the Member States unaccompanied by an adult responsible for them whether by law or by custom, until they are effectively taken into care by a responsible person, or minors who are left unaccompanied after they have entered the territory of the Member States' (Art.2). It is, therefore, minors who are forced to cross Europe to escape conditions of serious deprivation, seeking asylum for fear of persecution or for the lack of protection due to the violation of human rights and armed conflict within the country of origin (UNHCR, 2004, 2).

All children have the right to protection under national laws and international conventions on the protection of children, regardless of any consideration of race, color, sex, language, religion, political or other opinion of the child or her parents or legal representatives. Of particular relevance are the rights highlighted by the United

Nations Convention on the Rights of the Child (NY, 1989) such as to have a name, legal identity and birth registration (Art. 7); to not be separated from parents (Art.9); to physical and legal protection (Art.19); to the right to provisions for basic subsistence, care and assistance appropriate to the age and needs of the child's development (Art. 23, 24, 25, 27). These rights, however, can not always be protected. For example, failure to register the birth makes it hard for the legal protection of children in cases of migration, when it becomes necessary to adopt appropriate measures. (Every child's birth right inequities and trends in birth registration, UNICEF, 2013).

Until 2012 on Italian territory, the body responsible was the Committee for Foreign Minors - CMS (Decree of the President of the Council of Ministers, December 9, 1999, n. 535), until the transfer of its duties to the Directorate General of 'Immigration and Integration Policies' (Ministry of Labour and Social Policy). Such Authorities can take different decisions with respect to unaccompanied foreign minors' rights. In this respect, as an example, it acts the assisted repatriation, arranged on request of the parent or guardian should it be deemed that the reasons for the child's immigration are not shared by the relatives (for example, running away from home...). In this case, for the minor is guaranteed the necessary assistance until the family reunification in the country of origin (art. 12, paragraph 20, of Decree n.95 / 2012, converted into Law no. 135/2012). In contrast, the Committee does not offer repatriation (art. 33 co. 2a of Act no. 286/98) if the parents or guardian do not 'claim' the child or they agree with his/her immigration plan; in those cases, as foreign minors they can not be deported unless they follow an expelled parent (TU 286/1998, art. 19). If reported, intercepted or if they arise spontaneously to the police, they are hosted in communities that provide an initial reception, whilst waiting for a path of individual emancipation. Such structures, called 'bridges', are responsible for only the first phase of reception and allow the child to be immediately placed in a safe place. They make the necessary investigations to determine the subsequent integration path, pending the transfer to the definitive facilities that will host them until they reach eighteen years of age. At the first shelter, through the work of the Mayor or his delegate, identification of the person and observation of a minor's age is carried out; as well as the acquisition of information on possible family members in Italy and a health screening to protect the child and the other members of community.

Fundamental, in this phase, is the age assessment and a correct identification to guarantee the effective exercise of the rights to which children are entitled even in cases of wrongdoing.

An investigation into age is also important to reduce the chances of adult subjects being mistakenly identified as minors and being housed in facilities for minors, endangering themselves and abusing the protection system reserved for them (UNHCR, 2014). The taking into care by social services in the second phase, however, allows the transition to a community of 'secondary reception' which can best meet the needs of protection requirements and the protection of the child, who can be recommended a care plan and customized integration until coming of 18th birthday.

The transition to adulthood of the unaccompanied foreign minor is an extremely delicate because it coincides with the closure of the educational and integration processes.

To overcome this limitation, some Juvenile Courts (eg. Palermo) resort to rehabilitative measures of placement in the community with continuation beyond eighteen years of age, believing that the resignation of youth from the host structure involves an irrecoverable interruption of the activated re-education process, as well as its likely entry into a deviant system and illegal immigration.

At this stage, it is important that the individual care plan encourages, even more so than in the first period of reception, a path of progressive autonomy where the support of the educators gradually decreases in order to allow users the experimentation of self responsible housing and daily life. All this calls for effective planning, actively involving young immigrants who can leverage internal resources more easily, increase capacity and skills, and become more aware of themselves and the world around them. Certainly obtainable goals through the management of resources and time (eg. Management and care of the home, use of resources and community services, knowledge and use of the healthcare system, finding a job); through management staff (eg. self-regulation strategies, motivation for change, goal setting, self-protection) and in interpersonal relations (eg. to support formal and informal relationships, friendships) (Smith, 1999).

## NETWORKING AS AN INTERVENTION STRATEGY

From what has been already highlighted, it is clear that failure to regularize the position of unaccompanied foreign children before they reach adulthood, which is essentially linked to delays in protection for children living in some of the host communities, is a source of risk abuse, violence and exploitation, since these children live without a caregiver and legal representation ([www.comunitalavela.it](http://www.comunitalavela.it)). A shortage driven by possibly the absence of differences, on an organizational level, that includes the initial reception (characterized by the temporariness of the permanence of the minor) and secondary care, useful to define over time the initial period of taking the minor into care and to begin an individualized path of social integration (Save the Children, 2009). Many unaccompanied foreign minors suffer, for those reasons, a violation of the right to protection, or are likely to receive 'first and provisional acceptance' (max 90 days) from the centers, conditions which are inconsistent

with minimum standards arising from rules of international and national law with regard to childhood and adolescence. They act, in this respect, as an example for the case in a safe, friendly and familiar place where the child can feel welcomed and respected. In these they have access to essential commodities (proper food, personal hygiene ...) and to social and health services under conditions equal to minor Italian citizens such as free legal assistance (timely completion of the procedures for the regularization of the child, custody and the issue of the residence permit); access to basic education and vocational training opportunities and employment. But, also, they receive information on their rights and on the services offered, and the ability to express themselves in a language they understand (linguistic - cultural mediation), including those relating to the possibility of applying for asylum; protection from all forms of neglect, abuse, violence and exploitation (in the community). Requirements, namely measures, to ensure a reassuring and welcoming environment in which to rebuild a 'bridge' to connect with what children have left and that what they have found.

In recent years, the reception system has not been as it should have been due to the absence of proper coordination between the institutional subjects that are in various capacities and in charge of the reception of children at national and local levels (European Union, Ministry of Interior, Regions, Municipality). In addition, there is also a lack of adequate resources to ensure standards and services (Second Report Anci, 2007- 2008).

There is no doubt, therefore, that to find an answer to the complex needs of unaccompanied foreign minors it is necessary create a network of different professionals (Bertozzi, 2005; Rania, Migliorini, Sclavo, Cardinali & Lotti) but also between services. We can distinguish between different forms of this methodology, which gradually translates individual demand for support into one of change of a collective nature (Raineri, 2004).

- Working with the network: primary networks, such as those spontaneous and non-professional networks, which, if strengthened, reduce mortality rates and increase the well-being of the individual;
- working in networks: the so-called method of *case management*, involving the management of individual cases through teamwork, so the networking of experts in various community services, mostly public;
- the work of the network: the organizational form of services which meet in a coordinated manner by assuming different tasks, limited to a specific project or a set of shared goals (Novara, Moscato, 2009).

At a glance, these are strategies that fill the legislative gap by adopting shared methodologies, thus standardized practices, but which are able to give into the specific nature of local circumstances and individual stories.

In particular, the work of the network is set up as a form of social work (Folgheraiter, 1995). More precisely, it identifies a 'way of working that operates at different levels to increase "the intersystemic agreement" between parties. Framed in the approach of community care, networking is defined as a social action project that starts from the contingency of a problem or a critical event and stands at the centre of change in the quality of the relationships between people and organisations, suggesting a transition from the network partnership to the institutional market and the third sector (Bocaccin, 2010).

A corollary of networking is, therefore, the collaboration between public and private subjects in recognizing that a model of welfare mix could translate their common intentions, first in pilot schemes – able to experience interconnected working methods – and then in services that, once put to the system the specific skills of each partner, may be long lasting. Although, in fact, the local authority has a legally central role by having to bear the protection of unaccompanied minors, it is clear that only by networking with all social players it is able to avoid overlaps and inconsistencies in the management of intervention.

Unfortunately, in Italy, the development of the welfare model mix has suffered significant delays due to an assistential culture that has referred the request for services to the company with the result of heavy public spending. This has become unsustainable, leaving to the associations an often-marginal role in the process of self-organization and prompt participation in the problems of collective nature. We should instead formalize agreements and existing collaborations and enable a participative programming of direct interventions to unaccompanied foreign minors, to ensure – besides control and protection – their welfare and the chances of building a 'possible future'.

In view of networking, the role of civil society also emerges in the form of voluntary work, which could complement the programs carried out by the institutional bodies and by the third sector through the creation of informal networks. Such networks activate services by combining the professionalism and spontaneity of the local community (think foster care, self help, Time Banks, peer education, etc.), enabling first contact with those 'unreachable' minors gradually accompanied through 'light' interventions to reception facilities intended for them.

In Italian reality, the path towards community welfare is experimenting with the allocation of child protection to volunteers, exceeding protection as an exclusively legal-formal fact and finding in the fabric of the community participated forms of care of unaccompanied foreign minors.

As described above, an important employment network is constituted by the host community that, after initial contact and the taking into care by the local authority, has the task of programming the educational and social services to be activated in response to the needs of the child. In this case, the work of the network is achieved in a territorial unit of municipal or district scale. Law 328/00 identifies Zone Plan as the main tool for local programming, a document drawn up in collaboration with various social, institutional and non-institutional

services (Municipality, local health, social services, and third sector) that formalizes the priority lines of action, compared to a specific target.

But it would be hoped that the coordination between all parties could happen at a national level, since the condition of an unaccompanied foreign minor is ever changing depending on his movements from one city to another in the country. By providing continuity to the courses already underway, it would solve the matter of the emergency to which you are likely to respond to with standard or contingent actions. Finally, another challenge is the coordination at a supranational level with the children's countries of origin. In fact, it is necessary to link up with them, both to prevent the phenomenon through international projects of subsidiarity and for their accompanying case of assisted repatriation, although this tool is used in Italy in an extraordinary way, subordinating it to family reunification.

The *job of the network*, of which we highlight the potential here, then redesigns the local community as the intersection (collective) for social groups with different institutional *missions* but, also, concentrates on the welfare of *many* and the possibility to contain factors of disadvantage imposed on territorial communities.

In this way, the job of the network can only be the development of the community and to adopt the strategy in identifying integrated solutions between formal, informal and quasi-formal help systems. One Model of *Community Development*, through which a network of aid 'extends outside of the primary circle of relationships to make way for strangers' (Folgheraiter, 1995), in turn, can enhance a network of additional skills compared to the original existing network (Noto & Lavanco, 2000).

At a glance, the paradigm of the network becomes an expression for the potential for community, for local, national and international networks, for working interdependently and for building prevention plans on various systemic levels.

### A POSSIBLE ROUTE

A path to follow for future policies that concern un-accompanied foreign minors is, therefore, one that recognizes the central role of networking (Bertozzi, 2005). It is true that in each local network work has taken on different forms, using tools and actions that are not always comparable. By comparing different approaches, it is evident how broadly the range of experiences that you collect and recognize in the paradigm of networking can be configured. In terms of theory alone, we see intertwined suggestions of ecological and systemic theory, graph theory and that of *social support*; anthropological theory with the psychological, social and community theories. In terms of the tools, methods of observation and the interview they are essential, along with the ability to read and mobilize reticles, create links (*linking*) and multiple interactions with various social players; as well as the possession of organizational skills to coordinate networks of services of individual actors. The different procedures adopted, the timing of the reception process of minors, with delays related to increasing numbers of recent years, the uncertainty of migration pathways (Silva, Campani, 2004) together with the vulnerability of the children themselves (Bergamo, 2006) impose a strategic methodological framework to contain deviations from the protection of minors which must be a priority. We propose the following working model of the network that, in six steps, traces a synthesis of a shared educational project.

To study a community the first step is analyze it. This means to give it a face, then to trace those essential lines through which the living environment becomes recognizable to its citizens and to an outside observer. The discomfort is not born in a social vacuum but is configured within a framework, understood as physical and social interaction, symbolic space and multiple memberships. If it is true, discomfort is the face of the community, it needs to have the tools to read it and to decipher the dynamics. The method of the community profiles is part of the paradigm of action research that, through the collaboration of researchers (experts) and community representatives (local groups), looks to change by reading into problems in the dual-social, individual expression.

To analyze the community means to understand more closely the objective, structural and purely dynamic aspects: subjective issues that only when related to each other can assume a different configuration from the isolated analyses themselves. Moreover, creating awareness of organizational resources present in the territory stimulates the possibility of merging them into specific network projects.

With regard to unaccompanied foreign minors, it means investigate scientifically their presence in the area through surveys and statistical reviews that address the extent of the phenomenon but which also integrate this data with structural data of a so-called 'community profile'. Therefore, it observes the subjective perception of the phenomenon that different social groups have, such as families (eg. those potentially being fostered), operators of care facilities, the administration responsible for the protection, representatives of associations, volunteers and stakeholders with interests in this area of intervention. It is not just aimed at translating the issue into 'figures', but to understanding the impact of the reach on community culture, therefore identifying possible interlocutors – formal and non – that for various reason could intervene in the programming of networking.

The second step consist in clarifying the partners' mission. For each potential partner, the *mission* develops strategies for understanding the nature of organizations that want to network, understanding the purpose of their work, knowing the fields of interest and intervention and measuring the resources (human, material, logistical,



etc.). By sharing the institutional task requirements, therefore, we recognize the role played by each partner in the network, acknowledging added value over existing volunteer networks. Such a step is also important in order to ensure the sharing of values and tendencies that each partner pursues independently from the others but in connection with the other. Values that the network has to be careful to respect and which never can be overwhelmed by the individual prerogatives of the partners.

Within the framework of unaccompanied foreign minors, this step would consolidate the sustainability of social policies for the integration of minors, where the public-private partnership is indispensable. Thus for training (in schools, CTP or in vocational training centers) and for employment interventions that depend also on the supply of job exchanges in the area, apprenticeship opportunities, field experiences: all measures which together could be a deterrent to the paths of illegality, which often intercept minors quickly and with promises of easy economic benefits. Moreover, if we could involve partners who are capable of responding to planning for the future life of the child, once they become older, they may go hand-in-hand with levels of housing and working through 'action bridge'.

The third step represents a ratification of the contribution that each one wants to give to the work of the network, putting pen to paper with resources and the commitment to each other. It takes shape so that the partnership can be formalized in agreement with the program, convention, agreement or network protocol agreement. At this point, it is possible to explain the logic of reciprocity, following a shared method to activate the resources, even if only potentially, to resolving the problems in question. Typically, we select a lead agency that can facilitate the organizational process. The key ingredient of this step is the trust between parties in the interests of reciprocity.

We can define trust as 'the desire to make oneself vulnerable to a partner when he/she can not be controlled' (Mayer, Davis & Schoorman, 1995) or even as 'an expectation of experience with a positive value for the actor, acquired under conditions of uncertainty' (Mutti, 1998, p. 42). Recent approaches have found mediated solutions for which it is assumed that trust has both a rational and a relational connotation (Pelligra, 2010). This requires a well-identified, familiar partner, whose reliability can be measured in well-deserved confidence (trustworthiness) based on networks of past relationships and according to reports of the 'here and now' situation (Laurent, 2012).

This perspective widens the net of participation to the third sector that especially within the environment of unaccompanied minors is constantly changing, bringing to the scene of intervention new skills which are professionally very qualified even if not 'embedded' (embedded) in rope teams of formal networks.

Integration is the process by which a 'system' acquires and maintains a structural and functional unit, while maintaining differentiation of the elements. This involves the development of communication tools – fourth step – which a system needs to achieve comparison and the exchange of information. Among the equipment, for example, is the construction of a mailing list, a format of the periodic report for the activities carried out, a results report model in the short and long term, the opening of a website (virtual reality is already a network), the maintenance of a register for verbally reporting the decisions taken at regular meetings, the appointment of a committee to design the field and an organizing committee (*governance*), the establishment of one or more group events, the printing of a magazine or newspaper to make territorial communication and the dissemination of awareness material.

At fifth and sixth steps, you are meant to sign a plan of action that involves actively involved partners, therefore, also sharing the *vision* (the change) that the project as a whole pursues. The projection of this action that brings a transformation into the future is difficult to measure in the short term, which is why we describe this action in two steps, so do not take it for granted that the drafting of the project is equivalent to the sharing of change that can arise from it. The project will specify: purpose, objectives, targets, methodologies, timing, actions distributed among partners, expected results, indicators of change and resources and expenses. In a more complete project, it will be helpful to indicate also the characteristics of innovativity of the networking proposed, the impact on the partners in terms of the new skills acquired an evaluation system and external supervision.

The proposed model avoids creating stagnant and mutilating situations and targets cohesion to the networks regarding the construction of an open system, thus, it is not given once and for all. In this sense, the development programs in the communities provide and include the work of the network, setting a view to overcoming the work of the network when the network of relationships that are built have been so dense that they leave no room to identify the skills, that over time, groups and individuals may have gained.

The management and the improvement of the quality of life depend, then, on the participatory action of all social quotas, and even more on the capacity of these to become part of a 'soft' network, and not structurally overwhelming. A network that does not smother the learning capacity of the community but that implements this through the circulation of skills; a network that does not restrict resources but that joins together temporarily to strengthen them; 'weak' networks that are capable of regrouping on emerging concerns without identifying themselves with the same problems.

Taking care of unaccompanied foreign minors by providing them with dignified reception conditions, appropriate care, pathways into effective insertion, training opportunities and job placements, offers a service to the host country, since potentially, these new citizens may be able to contribute to the common good.

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# ÜNİVERSİTE ÖĞRENCİLERİNİN ALGILADIKLARI STRES İLE PSİKOLOJİK İYİ OLMA ARASINDAKİ İLİŞKİDE SOSYAL PROBLEM ÇÖZMENİN ARACI VE DÜZENLEYİCİ ROLÜ

Fulya CENKSEVEN ÖNDER  
Çukurova Üniversitesi, Eğitim Fakültesi, Adana, Türkiye  
[fulyac@cu.edu.tr](mailto:fulyac@cu.edu.tr)

Engin EŞİĞÜL  
Deniz Kuvvetleri Komutanlığı, İstanbul, Türkiye  
[enginmailbox1@yahoo.com](mailto:enginmailbox1@yahoo.com)

## ÖZET

Bu çalışmanın temel amacı üniversite öğrencilerinin algıladıkları stres düzeyleri ile psikolojik iyi olma düzeyleri arasındaki ilişkide sosyal problem çözme becerilerinin aracı veya düzenleyici rolünün incelenmesidir. Araştırmada Algılanan Stres Ölçeği (Cohen, Kamarck ve Mermelstein, 1983), Sosyal Problem Çözme Envanteri (D’Zurilla, Nezu ve Maydeu-Olivares, 2002) ve Psikolojik İyi Olma Ölçekleri (Ryff, 1989) 350’si kadın 164’ü erkek toplam 514 öğrenciye uygulanmıştır. Çalışma grubunda yer alan öğrenciler 18-25 yaş arasındadır ( $\bar{X}$ =20.9, Ss=2.02). Araştırma sonucunda algılanan stres puanları ile sosyal problem çözme becerilerine ilişkin puanlar arasında negatif yönde anlamlı, algılanan stres ile psikolojik iyi olma puanları arasında yine negatif yönde anlamlı, sosyal problem çözme becerileri ve psikolojik iyi olma puanları arasında pozitif yönde anlamlı ilişkiler olduğu tespit edilmiştir. Sosyal problem çözmenin, algılanan stres ile psikolojik iyi olma arasındaki ilişki aracı bir etkiye sahip olup olmadığını sınamak için gerçekleştirilen Sobel Test sonucunda sosyal problem çözmenin, algılanan stres ve psikolojik iyi olma arasındaki ilişkide kısmi aracı değişken olduğu belirlenmiştir. Sosyal problem çözmenin, algılanan stres ve psikolojik iyi olma arasındaki ilişkide düzenleyici bir etkiye sahip olup olmadığını sınamak için gerçekleştirilen hiyerarşik regresyon analizleri sonucunda sosyal problem çözmenin, algılanan stres ve psikolojik iyi olma arasındaki ilişkide düzenleyici bir etkiye sahip olmadığı belirlenmiştir. Sonuçlar sosyal problem çözmenin, algılanan stres ve psikolojik iyi olma arasındaki ilişkide aracılık modelini savunan modeli desteklemiştir.

**Anahtar Kelimeler:** Algılanan Stres, Sosyal Problem Çözme, Psikolojik İyi Olma

## SOCIAL PROBLEM SOLVING AS A MEDIATOR AND A MODERATOR OF PERCEIVED STRESS AND PSYCHOLOGICAL WELL-BEING IN UNIVERSITY STUDENTS

## ABSTRACT

The main purpose of this was to investigate the role of social problem solving as a moderator or a mediator of perceived stress and psychological well-being in university students. Perceived Stress Inventory (Cohen, Kamarck ve Mermelstein, 1983), Social Problem Solving Inventory Revised (D’Zurilla, Nezu ve Maydeu-Olivares, 2002) and Scales of Psychological Well-Being (Ryff, 1989) were administered 514 (350 females, 164 males) college students. The ages of the participating students are between 18 and 25 years (  $M$  = 20.09,  $SD$ =2.02). The results indicated that the perceived stress was negatively correlated with the social problem and the psychological well-being. The social problem solving was positively correlated with the psychological well-being. The results of Sobel test analyses showed that the social problem solving was partially mediating the effects of perceived stress on the psychological well-being. The results of the hierarchical regression analyses showed that the social problem solving was not moderating the effects of perceived stress on the psychological well-being. The results supported the mediational model of the social problem solving between the relation of perceived stress and the psychological well-being.

**Keywords:** Perceived Stress, Social Problem Solving, Psychological well-being.

## UNIVERSITY BRAND IMAGE PERCEPTIONS OF ON-CAMPUS AND ONLINE STUDENTS

Süphan NASIR

Istanbul University, Faculty of Economics, Department of Business Administration,  
Istanbul, Turkey  
suphan@istanbul.edu.tr

Yiğit YURDER

Istanbul University, Faculty of Economics, Department of Business Administration,  
Istanbul, Turkey  
yyurder@istanbul.edu.tr

### ABSTRACT

The main objective of this study is to compare online and on-campus students' brand image perceptions about their university. To reach this aim, a brand personality scale that is specific for the university context was developed. The construction of the scale was carried out through a series of steps: item generation, preliminary scale purification, and scale purification stage. In the final stage of purification stage, personality traits were grouped under four factors that are Challenger, Tolerant, Charismatic and Intellectualist. There is no statistically significance difference between the perceptions of on-campus and online students with regard to Tolerant, Charismatic, and Intellectualist brand personality traits of their university. However, there is statistically significance difference between on-campus and online students' perceptions with regard to Challenger personality trait.

**Keywords:** Brand image, online and on-campus education

### INTRODUCTION

There have been considerable advancements in the field of higher education over the years, and it continues to develop and change in response to the changing needs of societies. The main problem for universities today is to cope with the dynamic and ever-changing environment. In recent years, developed countries encourage the expansion of higher education in order to create a more educated workforce that is capable of competing in the international knowledge-based economy (Furedi, 2011). The expansion of higher education has led to massification of higher education as well as competition among higher education institutions (Gibb, Haskins, & Robertson, 2009).

Competition forces higher education institutions to think and act based on business mindset. With the massification of higher education, students are increasingly considered as consumers and institutions begin to focus on to meet consumer demands (Furedi, 2011). As a result of high competition among higher education institutions, students become active consumers and more demanding. Students seek a greater level of accountability and cost-effective approaches.

Online education has become more popular in today's fast paced society. Online degree programs allow students to take courses from different cities and even from different countries. Moreover, online degree programs are designed to provide learning opportunity for people who have busy lives and want to earn a degree without being tied to strict times and without going to campus. Therefore, traditional universities, which are also called "brick and mortar" institutions are now offering more online degree programs.

On-campus degree programs have been around for hundreds of years, but online programs are relatively new and therefore there are trust and reputation issues about online programs. Since most of universities offer online degree to increase their profitability, there are some concerns about the quality of online education and the usefulness of an online degree in getting a job. TIME asked human resources executives of *Fortune* 500 companies whether an online degree can be viewed as a credible credential in a prospective employee. The findings indicate that some executives have some concerns about how students are graded and assessed. Besides some of these executives believe that online classes are generally not as challenging as traditional courses (Webley, 2012).

Although there is substantial literature on the marketisation of higher education (Bertelsen, 1998; Meek, 2000; Mok, 2001; Hemsley-Brown & Oplatka, 2006; Furedi, 2011), on the supply side higher education institutions

implement limited marketing strategies. Therefore, in the context of increasing competition universities need to implement marketing strategies that will enable them to cope with competition and attract students.

The main objective of this study is to compare online and on-campus students' brand image perceptions about their university. The comparison of brand image perceptions of online and on-campus students enable universities to evaluate performance of their online and on-campus degree programs. As a result of comparison, universities can position their online and on-campus degree programs. Brand image evaluations of students also allow universities to manage their value propositions as well as improve the quality of education.

Brand personality traits are the most common approach which is used in designing a unique brand positioning in the brand management literature (e.g., Aaker, 1997; Fournier, 1998; Keller, 2003; Rekom, Jacobs, & Verleigh, 2006). The attribution of human characteristics to brands is an important phenomenon for marketing researchers and practitioners because understanding how consumers perceive products, brands, stores and other commercial objects in terms of human attributes is useful for the effective market positioning.

The goal of the brand personality profiles is to describe perceptual reality from the consumer perception. Brand personality profiles reflect the way consumers actually feel about the brand rather than simply being an expression of the way company would like consumers to feel about the brand (Plummer, 2000). A favorable brand personality can increase consumer preference and trust (Fournier, 1998). Therefore, monitoring consumers' brand perceptions and adapting the brand to the market changes is the requirement for successful brand management.

In the literature there are debates about the effectiveness of online versus on-campus education. Some of the studies reveal the fact that online education provides effective learning experience as on-campus education (McFarland & Hamilton 2005; Summers, Waigandt, & Whittaker 2005; Parkhurst et al. 2008). However, some of the studies (Logan, Augustyniak, & Rees 2002; Urtel 2008) rejects the effectiveness of online education in providing a learning experience that is equal to on-campus education. Despite there is abundant literature on online education in general, a little attention has been paid to the comparison of online and on-campus degree programs' brand image. The comparison of online and on-campus students' brand perceptions about their university will reveal the points of differentiation between online and on-campus degree programs' positioning.

This study is going to analyze the brand image of Istanbul University which offers both online and on-campus degree programs. Istanbul University is the Turkey's first state university, which was established in 1933. According to the Academic Ranking of World Universities, it has been listed among the top 500 World universities since 2006 and the top 100 Asia Pacific universities. It has approximately 88500 registered under graduate and graduate students.

Thus this paper aims to discuss the question of "how online and on-campus students perceive brand personality of their university?" To reach this objective, this study will develop brand personality scale that is specific for the university context. The construction of the scale will be carried out through a series of steps: item generation, preliminary scale purification, and scale purification stage with the help of expert judges (e.g., D'Astous & Levesque, 2003; Ambroise et al., 2005; D'Astous, Colbert, & D'Astous, 2006).

## RESEARCH METHODOLOGY

At the item generation stage a two step procedure was followed; firstly new brand personality items are generated through focus groups. The use of focus groups to generate a sample of scale items is a common and widely used procedure in the scale-development process (e.g. D'Astous & Levesques, 2003; D'Astous, Colbert, & D'Astous, 2006). Generation of new items was developed through focus groups with a convenience sample of 45 participants. Participants of the focus groups were asked to come with adjectives that they use to describe the personality of a university. Focus group process generated a total of 25 personality traits. In the second step, items are selected from existing scales (Aaker, 1997; Aysen et al., 2012).

After the two steps are completed, scale purification was performed. In the first purification stage, identical and synonym items were eliminated by using dictionary of synonyms. Purification of the items based on judges' evaluation. Two judges eliminated the items that were judged as identical and grouped items that were judged as synonyms. As it can be seen from the Table 1, after the elimination of synonyms, a preliminary list of 63 of adjectives was retained for further analysis. In the next step of scale purification, participants were asked to rate the ability of each 63 of personality traits in describing the personality of universities on a seven point scale: "*does not describe at all / completely describes*".

**Table 1.** Personality traits that were gathered at the first step of scale purification

Intellectual	Daring	Wholesome	Spirited	Global
Social	Green	Sentimental	Confident	Clean
Proactive	Independent	Reliable	Leader	Modest
Imaginative	Successful	Caring	Foreseeing	Helpful
Transparent	Fair	Down to earth	Noble	Real
Western	Honest	Neat	Idealist	Unique
Outdoorsy	Sincere	Democratic	Corporate	Cheerful
Entrepreneur	Tolerant	Young	Original	Prestigious
Productive	Sensitive	Cool	Experienced	Wise
Open minded	Peaceful	Glamorous	Contemporary	Sophisticate
Sharing	Secure	Good looking	Researcher	Bureaucratic
Open to change	Family oriented	Exciting	Intelligent	Conservative
Hardworking	Friendly	Tough		

A structured questionnaire was used as the data collection method. The online survey was conducted with the students of Faculty of Economics, which offers both on-campus and online courses, and the respondents answered the questionnaire directly. 526 participants attended the online survey and 511 usable questionnaires were collected. Respondents were asked to indicate on a 7-point scale how well Istanbul University was described by the 63 of items that composes the university personality scale.

## FINDINGS OF THE STUDY

An online structured questionnaire was used for this study and the data collection process was conducted among İstanbul University Faculty of Economics students. A total of 511 usable responses was gathered and demographic profile of the respondents are presented as frequencies and percentages in Table 2.

Among the 511 respondents, 313 were female; while 198 were male. 27% of the respondents were from department of Economics, 20% of them from department of Business Administration and 15 % of them were from the department of Labor Economics. Most of the respondents were on-campus (79%) students; while 21 % of them were online students.

**Table 2.** Demographic profile of respondents

		<b>N</b>	<b>%</b>
<b>Gender</b>	Male	198	39
	Female	313	61
<b>Department</b>	Economics	137	27
	Business Administration	104	20
	Labor Economics	75	15
	Public Finance	50	10
	Econometrics	45	9
	Political Science	39	7
	Economics(Eng)	32	6
	Tourism Management	29	6
<b>Education</b>	On-campus	401	79
	Online	110	21

The Statistical Package for Social Science (SPSS) version 24.0 was used to analyze data. Finally, series of factor analyses was performed for the purification of the scale. Based on the principal component factor analysis with varimax rotation, we followed an iterative procedure that allows purification of the scale through elimination of items that have low factor loadings ( $< 0.50$ ). The reliability of the scale that measure 49 personality traits is 0.98. As it can be seen from the Table 3, the scale achieved acceptable reliability. Principal components analysis, with Varimax rotation was performed to identify latent variables that contribute to the variance in the set of 49 university personality items. As a pre-examination of the data, including the Kaiser-Meyer-Olkin test of sampling adequacy and Bartlett's test of sphericity, was performed to confirm that data were suitable for factor analysis. The overall value of KMO was .981 for total sample, exceeding the sampling adequacy criterion of .50 (Table 4).

**Table 3.** Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.983	49

**Table 4.** KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.981
Bartlett's Test of Sphericity	Approx. Chi-Square	29201.340
	df	1953
	Sig.	.000

In the final stage of purification stage, a varimax rotated four factor structure emerged with a set of 49 items and these 4 factors explain the 69 % of the total variance. The reliability results for the personality factors (challenger, tolerant, charismatic and intellectualist) were 0.96, 0.95, 0.93, and 0.90 respectively. As it can be seen from the Table 5, all of the factors achieved acceptable reliability. Social, intellectual and imaginative (.71, .70 and .67 factor loadings) items are the most important traits in the Challenger personality factor. For the Tolerant personality factor fair (0.68), secure (0.65) and peaceful (0.63) have the highest factor loadings; while cool (0.80), good looking (0.74), and glamorous (0.63) are the most important traits for the Charismatic personality factor. Finally, experienced (0.66), prestigious (0.62), and sophisticate (0.58) are the most dominant traits for the Intellectualist personality factor.

Using the newly created university brand personality factors, mean scores were calculated and T-test was performed to explore whether there is any significant differences between the online and on-campus students' perceptions with regard to these four brand personality factors. As it is stated in the Table 6, there is no statistically significance difference between the perceptions of on-campus and online students with regard to Tolerant, Charismatic, and Intellectualist brand personality traits of their university. However, there is statistically significance difference between on-campus and online students' perceptions with regard to Challenger personality trait. As it is indicated in Table 7, online students (4.07) perceive their university more challenging compare to on-campus students (3.53). Although there is no statistically significance difference between the perceptions of on-campus and online students with regard to Tolerant, Charismatic, and Intellectualist brand personality traits, online students perceive their university more tolerant and charismatic compare to on-campus students. However, on-campus students perceive their university more intellectualistic compare to online students. Briefly, with regard to challenger, tolerant, and charismatic personality traits on-campus students have less favorable perceptions compared to online students.



**Table 5.** Factor Loadings

	<b>Challenger</b>	<b>Tolerant</b>	<b>Charismatic</b>	<b>Intellectualist</b>
Social	.715			
Intellectual	.705			
Imaginative	.676			
Proactive	.654			
Transparent	.638			
Productive	.638			
Open to change	.636			
Entrepreneur	.635			
Outdoorsy	.635			
Open-minded	.634			
Western	.622			
Daring	.589			
Contemporary	.563			
Independent	.558			
Hardworking	.550			
Sharing	.544			
Foreseeing	.543			
Caring	.543			
Researcher	.528			
Fair		.680		
Secure		.653		
Peaceful		.638		
Family oriented		.618		
Honest		.617		
Tolerant		.613		
Wholesome		.595		
Reliable		.591		
Sincere		.584		
Sensitive		.580		
Sentimental		.578		
Friendly		.545		
Neat		.524		
Down to earth		.518		
Helpful		.516		
Cool			.802	
Glamorous			.749	
Good looking			.632	
Exciting			.592	
Tough			.585	
Confident			.557	
Spirited			.552	
Noble			.518	
Leader			.512	
Experienced				.667
Prestigious				.628
Sophisticate				.583
Wise				.581
Intelligent				.559
Modest				.557
<b>Mean Score</b>	3.6519	3.6798	4.4075	4.7117
<b>Cronbach Alpha</b>	.967	.954	.930	.902

**Table 6.** T-test results

Test Statistics				
	Challenger	Tolerant	Charismatic	Intellectualist
Mann-Whitney U	17551.500	19672.500	19434.000	21058.000
Wilcoxon W	98152.500	100273.500	100035.000	101659.000
Z	-3.283	-1.737	-1.911	-.727
Asymp. Sig. (2-tailed)	.001	.082	.056	.467

**Table 7.** Comparison of on-campus and online education

Group Statistics					
	Education Programme	N	Mean	Std. Deviation	Std. Error Mean
Challenger*	On-campus	401	3.5351	1.32095	.06596
	Online	110	4.0775	1.76289	.16808
Tolerant	On-campus	401	3.6219	1.34083	.06696
	Online	110	3.8909	1.77307	.16906
Charismatic	On-campus	401	4.3475	1.49343	.07458
	Online	110	4.6263	1.73311	.16525
Intellectualist	On-campus	401	4.7195	1.36851	.06834
	Online	110	4.6833	1.78737	.17042

As it is indicated in the Table 8, overall all respondents have more favorable perceptions about their university with regard to “experienced” (5,28), “prestigious” (5,10), “wise” (4,78), “sophisticate” (4,69), “noble” (4,66), “tough” (4,65), “good looking” (4,62), “glamorous” (4,53), “confident” (4,52) personality traits.

**Table 8.** More favorable personality traits

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Experienced	511	1.00	7.00	5.2838	1.84490
Prestigious	511	1.00	7.00	5.1037	1.78199
Wise	511	1.00	7.00	4.7867	1.87541
Sophisticate	511	1.00	7.00	4.6928	1.69472
Noble	511	1.00	7.00	4.6634	2.03504
Tough	511	1.00	7.00	4.6556	1.87417
Good looking	511	1.00	7.00	4.6223	1.81395
Glamorous	511	1.00	7.00	4.5382	1.96289
Confident	511	1.00	7.00	4.5225	1.79077

However, as it can be seen from the Table 9, “open to change” (3,34), “independent” (3,33), “secure” (3,30), “transparent” (3,11), “fair” (3,10) and “caring” (3,01) are among the less favorable personality traits.

**Table 9.** Less favorable personality traits

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Open to change	511	1.00	7.00	3.3366	1.90670
Independent	511	1.00	7.00	3.3327	1.83509
Secure	511	1.00	7.00	3.3092	2.05281
Transparent	511	1.00	7.00	3.1174	1.66801
Fair	511	1.00	7.00	3.1037	1.83939
Caring	511	1.00	7.00	3.0157	1.81706

## CONCLUSION

Since, this paper aims to analyze online and on-campus students' brand personality perceptions about their university, a brand personality scale that is specific for the university context was developed. The construction of the scale was carried out through a series of steps: item generation, preliminary scale purification, and scale purification stage. In the final stage of purification stage, personality traits were grouped under four factors that are Challenger, Tolerant, Charismatic and Intellectualist. It is clear that faculty of economics students perceive their university intellectualist and charismatic. The personality traits such as ‘experienced’, ‘prestigious’, ‘wise’ and ‘intellectual’ are the most important traits that are attributed to Istanbul University by Faculty of Economic students. This study reveals that there is statistically difference between the online and on-campus students' perceptions with regard to Challenger brand personality factor, and online students perceive their university more challenging than on-campus students. However there is no statistically significant difference between the perceptions of online and on-campus students with regard to Tolerant, Charismatic and Intellectualist brand personality factors. The study also shows that on-campus students have less favorable perceptions about the personality of their university compared to online students except ‘Intellectualist’ brand personality factor.

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## UNIVERSITY STUDENTS' GENERAL SELF SUFFICIENCIES' PREDICTIVE POWER OF THE QUESTIONING SKILLS

M. Behzat TURAN

Erciyes University, School of Physical Education and Sport, Kayseri, Turkey  
behzattrn@hotmail.com

Osman PEPE

Erciyes University, School of Physical Education and Sport, Kayseri, Turkey  
opepe@erciyes.edu.tr

Barış KARAOĞLU

Erciyes University, School of Physical Education and Sport, Kayseri, Turkey  
justified13@hotmail.com

Serdar SUCAN

Erciyes University, School of Physical Education and Sport, Kayseri, Turkey  
ssucan@erciyes.edu.tr

### INTRODUCTION

In accordance with an aim, in human activities that are realized deliberately, first individual's himself many factors are effective. Main resource of these attitudes is power that is going to be spent to realize the aim. Albert Bandura (1997) suggested that in the issue of exhibiting an attitude or an activity that individual will show one of the key factors is belief of self sufficiency, that is, person's own belief to his individual sufficiency (p.36). Albert Bandura, defined the self sufficiency notion as 'person's belief that he has talent and ability to fulfill a duty' (Peter, 2006, p.705). Our age is the age of information and increasing knowledge, skills and behaviors to be gained in learning day by day requires individuals to know effective learning (Harmandar Demirel, 2015, p. 2291). Self sufficiency, such as learning and performance, is now being research topic in the processes related to education. It is the belief that an individual needs for the capacity to exhibit a specific performance successfully. Things that are related to our skills based on our belief and to reach out aims it is required to regulate an attitude and realize that attitude (Ekici, Gürcay, Yılmaz, 2007, p. 253-259). Self sufficiency affects the learning of the individual and provides support to specify aims depend on past achievements. Researches show that students with high self sufficiency they use more effective strategies in their learning and specify difficult aims (Multon, Brown, Lnet, 1991, p.30-38). It is determined that students with high self sufficiency their participation to the learning activities much more and when they coincide with difficulties they effort much more than students that do not trust their own talents (Schunk, 1990, p.3-6). Favorable environmental conditions positively support the development of an individual, whereas adverse environmental conditions may prevent the development of an individual in many ways (Demirel, 2015, p.113).

When the literature is examined related to the body of subject it is possible to say that self sufficiency is effective in forming, processing, spending effort, generalization and providing permanency for an attitude (Aypay, 2010, p.113-131). Even though Bandura defines the self sufficiency is a perceptions state for individual's own skill it is seen that he determines self sufficiency skill may be generalized (Ekici, 2008, p.98-110). With the effect of this thought in recent years as a new notion from self sufficiency the general self sufficiency notion is derived (Scherbaum, Cohen-Charash, Kern, 2006, p. 1047-1063).

When researches, related to topic, are examined, it is seen that general self sufficiency has a relation with the sufficiency of individuals when they deal with huge and permanent stressful situations. It is also possible to say that general self sufficiency notion is also related with mental and psychological health (Tong, Shanggui, 2004, p. 637-642). Studies show that against various situations (i.e. struggle with cancer) individual's inferences have connection with general self sufficiency (Luszczynska, Scholz, Schwarzer, 2005, p. 439-457). In the result of literature survey about subject area, it is seen that studies about general self sufficiency are about master and postgraduate students (Aypay, 2010, p.113-131), school principals (Okutan, Kahveci, 2012, p. 27-42), individuals that are over 18 and at least have 5 year education (Yıldırım, İlhan, 2010, p. 301-308), individuals that are in different psychological situations (Rimm, Jerusalem, 1999, p. 329-345).

One of the activities is questioning that individual does in accordance of specific aim. Questioning is a notion that has been taken to pen by most of researchers such as; Dewey, Conant, Bruner, Schwab, Suchman, Gagne, Piaget and Lawson's studies (Tatar, 2006). Questioning is a complex process that includes; observing, forming

questions and collecting of the documents for the solving of the questions, with the help of experimental aid examining the information that was known before, using equipment for collecting analyses and interpreting the information, suggesting responses, explanations and predictions, making relationship with the results and developing different perspective about found responses (NRC, 1996). When different researchers are considered, questioning is mentioned as 'researching and researching-questioning'. Socrates determined his own method as 'asking questions that are prepared before and finding out the rights that are restored in the person's mind, with this way it is the method that make him find out the right by himself.' This method was used for teaching a slave the geometric theory, with 'Menon Dialogue' method from easy to difficult, general to special, events to result he made the slave found out the rights (Aydın, 2001, p. ), 55-80). This dialogue which is known as Socratic dialogue is the representative of the questioning skills (Karakoç, 2008). Questioning skills, which are expressed as 'questioning learning skills' by John Dewey, include students' making hypotheses for solution by asking questions, making plans for the realization of their hypotheses, doing the data collecting, recording transactions rightly and making analysis of these in the result student's forming the information by himself. (Taşköyan, 2008, p.14). In the American National Science Technologies Education standards 'questioning in education' is defined as an activity that includes such processes; asking question, observation, finding out the existing information, examining book or other sources, planning researches, acquiring data, using equipments for analyzing and predicting, reviewing the known things in the light of acquired datum, making guess and discussing the results (NRC, 2000). In the result of literature survey related to subject area, in his study, Tanışlı (2013) determined that prospective teachers' questioning skills are located at the status that we generally qualified as amateur (p. 80-95). In the study of Taşköyan (Taşköyan, 2008); before the application there was not any meaningful difference found between success tests, questioning learning skills perceptions and attitude points towards science lesson but in the end of the test there was a meaningful difference found between success test, questioning skills perceptions and open ended questions results for the goodness of experiment groups students In a study that was done by Kocagül (Kocagül, 2013); before and after the application there was meaningful difference found between teachers' scientific process skills test, self sufficiency belief scale towards questioning and teaching belief scale based on questioning points.

(When we evaluate the above information as a whole there are studies separated and integrated with other issues in general self sufficiency and questioning skills subjects are coincided. However when body of the literature was examined there was not a study coincided about increase and development of questioning skill. Thus, when the total of the questioning skill is examined because of lack of the studies that are done among general self sufficiency and questioning skills it is aimed to examine the Erciyes University Physical Education and Sports Academy Students' General Self Sufficiencies' Predictive Power of the Questioning Skills)

## **MATERIAL-METHOD**

### **STUDY GROUP**

This research is in the relational survey model. This survey model can be defined as 'Survey models that aim to determine the changing existence and/or degree of two or more than two variances (Karasar, 2007).

Research carries a descriptive quality because there is going to be situation determination in self sufficiencies' predictive power of the questioning skills of physical education and sports academy students and participants' demographic characteristic relations.

### **DATA COLLECTING TOOLS**

In the research in the duration of the application of surveys to the participants besides researcher there were also instructors of the university there to make explanations to each participants, in plenty of free time, not being hurried, making the required explanations for the participants there was a nice evaluation process wanted to be created. Also, with the purpose of filling the forms in a comfortable environment for the participants suitable material and environment conditions were tried to be provided. Data collecting tools that were used in the research were; General self sufficiency scale, questioning skill scale and Socio demographic information form were applied.

### **FORMING OF THE VOLUNTEER GROUPS**

Research is going to be carried on through study group. Study group is consisted of participants that study at Erciyes University Physical Education and Sports Academy and physical education sports teaching, trainer education, sports management and recreation education departments at 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> grades.

There were totally 690; physical education and sports academy students participated to the study from 1440 students. From the participants at least 5 maximum 10 people from each department were not included into the study because they filled the related form and inventory wrongly. Consequently sample of the research is consisted of 655 people.

**Table 1.** Socio Demographical Characteristics of the Participants

	<b>Değişkenler</b>	<b>N</b>	<b>%</b>
<b>Gender</b>	Male	348	53.1
	Female	307	46.9
<b>Age</b>	18-21	325	49.6
	22-25	224	34.2
	26-29	106	16.2
<b>Department</b>	Pesa	129	19.7
	Trainer Education	179	27.3
	Sports Management	173	26.4
	Recreation Education	174	26.6
<b>Grade</b>	1	159	24.3
	2	169	25.8
	3	164	25.0
	4	163	24.9
<b>Gaga</b>	1.25-1.99	160	24.4
	2.00-2.99	385	58.8
	3.00-4.00	110	16.8

## SOCIO-DEMOGRAPHIC INFORMATION FORM

In forming of the socio demographic information-form of the study the socio demographic information forms of the general self sufficiency and questioning skills studies in the body if the literature and there was a pool created for the characteristics that were wanted to be examined on students. Then taking help from statistic experts, socio demographic information-form was created. In this created socio demographic information form include 5 questions to acquire information of the participants such as; gender, age, university, grade and gaga.

## GENERAL SELF SUFFICIENCY

The General Self Sufficiency Scale which was developed by Schwarzer and Jerusalem (2005) and adapted into languages over 25 and its Turkish adaptation was done by Aypay (2010) after a study on 693 students from different universities. Original name of the Scale is 'General Self Efficacy Scale'. In the adaptation study scale form was applied to 711 students in 2005- 2006 education year fall term and in the participations the voluntary basic rules were obeyed. Reliability and validity studies of the students that we accepted before was done through 693 scale datum. In the result, ther were two factors acquired that were defining the 47 % of the variance and self value was more than 1 there were two factors acquired. Before turning it was seen that all of the scale article were in the positive direction and they had a load over .47. Self value of first basic component was 3.66. Two factors' common variances that were defined related to articles except for one article they differ from .33 and .63. To examine the scale validity of the GSSS, Türküm's (2002) Dealing With Stress Scale and Rosenberg's Self Respect Scale were used. While there was not a meaningful relationship found between GSSS and DWS, between points that were acquired from the sub dimension of GSSS and DWS scale ( $r=.40$ ,  $p<.001$ ) there is a positive, middle level and meaningful relationship existed. There is a middle level positive and meaningful relationship between GSSS and RÖSÖ points ( $r=.38$ ,  $p<.001$ ).

## QUESTIONING SKILL SCALE

In this research for the measurement of questioning skill of the prospective teachers the quintet likert type 'questioning skills scale', which was developed by Aldan Karademir and Saracaloglu (29), was used. This scale is consisting of 14 positive articles and each article was scaled in five categories such as; 'never' (1), "rarely" (2), "sometimes" (3), "usually" (4) and "always" (5). Range width of the questioning skills, index width / group number that would be formed calculated with this formula (Tekin, 1987). In the evaluation of research findings based considered arithmetical average ranges scaled by the researcher in; "1,00-1,80= very bad", "1,81-2,60=bad", "2,61-3,40=normal", "3,41- 4,20=good" and "4,21-5,00=very good". Since the arithmetical average point of the scale is between 1,00-5,00 a when points approach to 5,00 questioning skills of the prospective teachers it was accepted as high and when it approaches to 1,00 it was accepted as low. Alpha reliability coefficient of the scale was calculated as 0, 82. Scale is consisted of three sub factors its Cronbach-alpha value is "acquiring information" 0,76; "controlling the information" 0,66; "self confidence" is 0,82.

## ANALYSIS OF THE DATUM

Datum that was acquired from personal information form, general self sufficiency and questioning skill scales and the points that were reached in the result of the test were coded and entered in SPSS20.0 package program. Personal information belong to participants and inventory total points and factor points were given with the determination of frequency (f) and percentage (%) values. For putting forward the relationship between points that were acquired from scales the Pearson Momentum Multitude Correlation analysis (r) and if the acquired points were predictive of each other or not the multiple regression analysis was done. ( $\beta$ )

## FINDINGS

**Table2.** Descriptive Statistic of the Responses that Students Gave to the Survey

	N	Minimum	Maximum	X $\pm$ SS
<b>Questioning Skill</b>	655	14.00	70.00	51.26 $\pm$ 9.30
<b>General Self Sufficiency</b>	655	10.00	40.00	32.54 $\pm$ 5.24
<b>Self Confidence</b>	655	3.00	15.00	10.40 $\pm$ 2.87
<b>Controlling the information</b>	655	5.00	25.00	18.39 $\pm$ 3.67
<b>Acquiring Information</b>	655	6.00	30.00	22.47 $\pm$ 4.16
<b>Skill and Trust</b>	655	4.00	16.00	13.42 $\pm$ 2.24
<b>Learning and Effort</b>	655	6.00	24.00	19.12 $\pm$ 3.48

When the Table2 is examined University students' questioning skills total point averages is 51.26, general self sufficiency total point averages is 32.54, self confidence dimension point averages is 10.40, controlling the information dimension averages is 18.39, acquiring information dimension point averages is 22.47, skill and trust dimension point averages is 13.42 and learning and effort dimension averages is 19.12.

**Table3.** Correlation Coefficients between general self sufficiency and questioning skills of the Students (n=635)

		1	2	3	4	5	6	7
<b>1. Questioning Skill</b>	r	1						
	p							
	n	655						
<b>2.General Self Sufficiency</b>	r	.633**	1					
	p	.000						
	n	655	655					
<b>3.Self Confidence</b>	r	.762**	.425**	1				
	p	.000	.000					
	n	655	655	655				
<b>4.Controlling Information</b>	r	.909**	.592**	.563**	1			
	p	.000	.000	.000				
	n	655	655	655	655			
<b>5.Acquiring Information</b>	r	.907**	.599**	.517**	.761**	1		
	p	.000	.000	.000	.000			
	n	655	655	655	655	655		
<b>6.Skill and Trust</b>	r	.512**	.867**	.326**	.451**	.521**	1	
	p	.000	.000	.000	.000	.000		
	n	655	655	655	655	655	655	
<b>7. Learning and Effort</b>	r	.623**	.947**	.430**	.600**	.567**	.663**	1
	p	.000	.000	.000	.000	.000	.000	
	n	655	655	655	655	655	655	655



When Table3 was examined general self sufficiency and questioning skill total point had a positive and high level meaningful relationship found ( $r=.633$ ,  $p=.000$ ), Self Confidence( $r=.425$ ,  $p=.000$ ), Controlling the Information ( $r=.592$ ,  $p=.000$ ) and Acquiring Information ( $r=.599$ ,  $p=.000$ ) there was a positive middle level meaningful relationship found.

In the Skill and Trust and Questioning Skills total point ( $r=.512$ ,  $p=.000$ ), Controlling the Information ( $r=.451$ ,  $p=.000$ ), Acquiring Information ( $r=.517$ ,  $p=.000$ ) there was a meaningful positive and middle level relationship, In the Self Confidence ( $r=.326$ ,  $p=.000$ ) there was a positive low level and meaningful relationship found.

In the Learning and Effort and Questioning skill Total point ( $r=.623$ ,  $p=.000$ ), Controlling the Information ( $r=.600$ ,  $p=.000$ ), Acquiring Information ( $r=.567$ ,  $p=.000$ ) there was a positive and high level relationship, in Self Confidence ( $r=.430$ ,  $p=.000$ ) there were positive middle level and meaningful relationships found.

**Table4.** Regression Table Towards Prediction of the Self Sufficiency of the Students

		<b>B</b>	<b>SHB</b>	<b><math>\beta</math></b>	<b>t</b>	<b>p</b>	<b>R</b>	<b>R<sup>2</sup></b>	<b>F</b>	<b>p</b>
<b>Skill and Trust</b>	<b>Questioning Skill</b>						.528	.280	84.485	.000
	Acquiring Information	.221	.028	.411	7.905	.000				
	Controlling Information	.067	.033	.110	2.037	.042				
	Self Confidence	.041	.032	.052	1.276	.202				
<b>Learning and Effort</b>	<b>Questioning Skill</b>						.630	.396	142.56	.000
	Acquiring Information	.202	.040	.241	5.072	.000				
	Controlling Information	.340	.047	.359	7.289	.000				
	Self Confidence	.125	.045	.103	2.752	.006				
<b>General Self Sufficiency</b>	<b>Questioning Skill</b>						.639	.408	149.81	.000
	Acquiring Information	.423	.059	.336	7.128	.000				
	Controlling Information	.407	.070	.285	5.852	.000				
	Self Confidence	.165	.067	.091	2.448	.015				

(F3,651)

When the Table4 is examined model that was formed between Skill and Trust Characteristic and Questioning skills it presents a meaningful relationship ( $R=.528$ ,  $R^2=.280$ ;  $p<.01$ ). Related to meaningfulness of the regression coefficient when the t-test results were examined it was seen that; "Acquiring Information" ( $t=7.905$ ,  $p=.000$ ), "Controlling the Information" ( $t=2.037$ ,  $p=.042$ ), skill and trust characteristic regress the questioning skills and it expresses the 28 % of the total variance ( $F_{3,651} = 84.485$ ,  $p < .001$ ).

When the Table4 is examined model that was formed between Learning and Effort Characteristics and Questioning skills it presents a meaningful relationship ( $R=.630$ ,  $R^2=.396$ ;  $p<.01$ ). Related to meaningfulness of the regression coefficient when the t-test results were examined it was seen that; "Acquiring Information" ( $t=5.072$ ,  $p=.000$ ), "Controlling Information" ( $t=7.289$ ,  $p=.000$ ), "Self Confidence" ( $t=2.752$ ,  $p=.002$ ) learning and questioning characteristic recess the questioning skills and it expresses the 40 % of the total variance ( $F_{3,651} = 142.56$ ,  $p < .001$ ).

When the Table4 is examined model that was formed between Learning and Effort Characteristic and Questioning Skills it presents meaningful relationship ( $R=.639$ ,  $R^2=.408$ ;  $p<.01$ ). Related to meaningfulness of the regression coefficient when the t-test results were examined it was seen that; "Acquiring Information" ( $t=7.128$ ,  $p=.000$ ), "Controlling Information" ( $t=5.852$ ,  $p=.000$ ), "Self Confidence" ( $t=2.448$ ,  $p=.015$ ) general self sufficiency characteristic recess the questioning skills and it expresses the 41 % of the total variance. ( $F_{3,651} = 149.81$ ,  $p < .001$ ).

## DISCUSSION – RESULT

One of the basic aims of the university education students' self realization, and providing possibility to making research and learning the skill and information by developing their self sufficiencies and for the fulfillment of self realizations. Individuals that developed themselves have a high self sufficiency and so they will have a place in the environment for themselves. Even though the self sufficiencies of the people depend on various characteristics self sufficiency is also known to affects that characteristic. Especially it is thought that self sufficiency is the basic source of the questioning and learning skills in learning the information and the skill for individuals' university education and life-long. In accordance with these observations it is aimed to make an examination on self sufficiencies, questioning skills of the university students that study at physical education and sports academy and having relationships between them and its contribution to the body of literature.

In this conducted study in the analyses results that were acquired from physical education and sports academy students it was determined that their self sufficiencies and questioning skills were higher than scale mid-point. It is thought that this result makes the physical education and sports academy students improve themselves from child ages and direct themselves to the sports branch with the effect of sports they may develop themselves in a multiple way. And it is thought that questioning skills' being high is derived from it is generally student centered in teaching of sports branches and as a private education method there are problem solving methods used for the increase of student's questioning.

In this presented study there were positive and high level relationships found between general self sufficiency and questioning skill. In the learning and effort characteristic and self confidence, controlling information and acquiring information characteristics there were positive relations found. In the Skills and trust characteristic and self confidence there was a high level, in controlling information with a low level and acquiring information with a middle level positive and meaningful relationships found. In general self sufficiency characteristic and self confidence, controlling information and acquiring information characteristics there were positive, meaningful and middle level relationships found.

In this conducted study when general self sufficiency's recess of the questioning skills are examined it is seen that when there is an increase on general self sufficiencies of the students there is an increase on acquiring information, controlling information and self confidence characteristics. When learning and effort characteristic's recession of the questioning skills is examined it is seen that; as students self sufficiencies increase their acquiring information, controlling information and self confidence characteristics increase.

When body of the literature is examined the general self sufficiency is more related with effective dealing strategies' planning, searching for information, positive approach to the problem and questioning options, the low general self sufficiency is mostly related passive dealing attitudes such as reprimand himself or quitting from his interest and doing nothing behaviorally (Luszczynska, Scholz, Schwarzer, 2005). Self sufficiency is determiner of individual's predictor of that duty successfully, effort, insisting strategy, performance towards that duty depend on his motivation towards that duty (Bandura, 1997). In accordance with these definitions it shows the relationship between self sufficiency and questioning skills. In the body of literature about general self sufficiency its effect on students' study performance (Türkmen, 2009), relationship of the academic success of students (Aydın, 2010) its effect on students' readiness and thinking critical (Karataş, 2014) its effect on students' problem solving (Demirbaş, 2014) and it is seen that it has positive effect and relation on most of the learning characteristics. In this conducted study again the relationships that have an important role on students' learning and their self realizations and its parallelism with body of literature was provided. In body of literature these findings are in the quality of supporting and contributing this study.

Consequently it was determined that self sufficiency and questioning skills of the students that study at physical education and sports academy was found high. While there were meaningful relationship determined between general self sufficiencies, learning, effort, skill, trust, acquiring information, controlling information and self confidence it was also determined that it is the predictor of the self sufficiency's questioning skills.

## SUGGESTIONS

1. Universities should do activities that will increase the general self sufficiencies of the students.
2. Universities should provide environment that students can realize themselves.
3. Education that is given in universities should be regulated for university students' questioning skills increase.
4. There should be more atmospheric studies done for the increase of students' questioning skills and contribution should be provided for body of the literature.

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## UPDATES OF THE FRENCH NEOLOGY COURSE IN HIGHER EDUCATION – SHOWED ON EXAMPLES OF CONTEMPORARY LEXEMES

Radka MUDROCHOVÁ

University of Hradec Králové, Department of French language and Literature  
rfridrichova@seznam.cz

### ABSTRACT

This paper aims to present the course of French neology in the Czech context. First, we will focus on the theoretical part, the definition and description of neology and neologisms in the environment of the French and Czech language. Having set a theoretical base, we will focus on current methods of updating neologisms. Examples will be presented to show how new words are researched by linguists. On one hand, we will support our study by materials available from authorities focusing neology and terminology. On the other hand, we will use international project EmpNéo, where the author of this paper participates, as a base. The goal of this presentation is not to give a detailed description of possible ways of updating the neology course at the university. The goal is to present its possible and model foundation.

### INTRODUCTION

Neology is a discipline where the issues addressed and the focus keep changing and shifting. The subject inspected within neology consists of newly formed words and words newly used in the particular language. To make the neology course – in our instance at the Faculty of Education, University of Hradec Králové – keep up with present trends in the language, it is necessary to keep it up-to-date by introducing current linguistic phenomenon, as well as revise lexemes which have been defined as neological, since, according to Horová (2012): “*Classroom language is materialized by a syllabus according to the objectives and idiomatic-cultural content to acquire. The variety of French as a reference to the syllabus is the written, standard form. The future FLE teacher should realize that the French taught by them is only a representation of the norm [...] and development in language classes is often desirable.*”

### NEOLOGY AND NEOLOGISMS DEFINITION AND GENERALITIES

From the etymological point of view, the words *neology* and *neologism* refer to Greek. They were formed by blending the adjective *neos* (*new*) and the noun *logos* (*word*). The first word in French derived from Greek lexemes was neither a word for neology nor for neologism, yet the adjective *néologique* (neological) and the noun *néologue*, in 1726. The noun *néologisme* (neologism) can be tracked back to 1734, as well as *néologie* (neology), shortly after that (cf. Sablayrolles, 2000).

This implies that neology was introduced in French in the late 1800's. By then, it had already formed rules and principles and was a respected linguistic discipline. In addition to the discipline of neology, there was the term *neologism*. However, its interpretation was very negative, as demonstrated by its definition in the *Dictionary of French Academy (Dictionnaire de l'Académie française)* published in 1778. Authors Sébastien-Roch-Nicolas de Chamfort and Joseph Nicolas Guyot (1778) define neologism as a word which is misused or used inadequately, while neology is understood as the art of using new words.

Back then, neologisms had both advocates and objectors. The most eager objectors included Voltaire and Victor Hugo. The latter wrote in the introduction to “Odes and Ballads” that “*neologisms are a mere source of impotence*” (Huguet, 1898). The propagators, on the other hand, included for instance Pierre Ronsard, one of the founders of La Pléiade, whose approach was denounced by the authors of *Le Dictionnaire synonymique de la langue française* published in 1826 (Laveaux, 1826). For her neologisms and new phrases in her work (*De la littérature, Delphine*), Mme de Staël (Sablayrolles, 2011) was also criticised.

To summarize the facts, it can be stated that in the 18th century neologism was considered as the opposite of **neology**. Nowadays, a neologism is understood as its part, precisely speaking its subject.

In several French dictionaries, both general knowledge oriented and specialised, neology is found to be “*a tendency in a language, forming new lexical items or providing existing words with a new meaning*” (Grevisse, Goose, 2008). Digital dictionary *Trésor de la langue française* (atilf.atilf.fr) defines neology from the linguistic point of view as “*a process of forming new lexical items*”. Another general dictionary of the French language *Le Petit Robert* presents neology as “*processes used as a device to enrich vocabulary of a particular language by derivation, composition, loans, calques or other means (abbreviations, acronyms, etc.)*” (Rey, 2014). Christiane Marcellesi (1974) adds that neology forms “*new lexical items either by using new forms or by adding a meaning to an existing item*”.

On the basis of the above mentioned definitions we can deduce that neology is 1) a process within which new lexical items are formed or new meanings to existing items arise, while various devices are applied that are used to enrich the vocabulary of a language. 2) In addition, neology can also be understood as a standalone discipline

in linguistics (see e.g. Korostenski, 2007), studying, classifying and describing newly formed lexical items, i.e. neologisms.

**Neologism** is a lexical item “[...] which is, in relation to existing lexical items of the contemporary vocabulary, new, both in the sense of its origin, and of its function (in the respect of system, communication, stylistics)” (Karlik et al., 2002). According to Janovec (2013), neologism is a lexical item, “[...] typical by its novelty in the broad sense; within vocabulary, neologisms are considered the contrary to historisms and archaisms. In the synchronic aspect, a neological item can be regarded as an element illustrating certain linguistic tendencies in a given period, especially in the present. In sociolinguistics, neologisms are a documentary of the time when they were formed.”

These definitions of neologisms come from Czech environment where, unlike in French, so called *occasionalisms* (also known as *nonce words*) are recognized. Occasionalisms are neologisms formed for and used in a single occasion. “The difference between neologisms and occasionalisms is that the latter are not accepted for common usage by the linguistic community, they keep their novelty, unusualness and linguistic unweariness independently from the time of their origin” (Karlik et al., 2002). Such a distinction does not exist in French where the general term *neologism* is used, defined e.g. as *a new attribute with additional appearance of a new signifiant and a new signifié, or a new employment of an existing signifiant* (Sablayrolles, 2012). In addition, Jean-François Sablayrolles states in his email exchange from 11th May 2016 that the term *occasionalisme* – the French equivalent of *occasionalism* – is not completely unknown in French; however, it is used rarely and is not distinguished from a neologism; it is a neologism which is seldom used and therefore, this is an issue of its spreading rather than its position within linguistics.

Neologisms, as we can see, hold certain novelty. They are considered unusual, new and unordinary by their users (Martincová, 1983). L. Janovec (2013) even considers any items with a sign of newness in them as neologisms. And this is the point where we encounter more unclearness as we have to ask when exactly does a lexeme become a neologism? (Sablayrolles, 2011). When do we consider a word as neological? When does it lose this attribute? The most widely accepted view is that the decisive point is including a neologism in the metalinguistic corpus. According to J. F. Sablayrolles (2008), a neologism is a word “not included in a dictionary yet”. “Words are, therefore, neological only in the moment of their origin and spreading, until the moment they are accepted to a linguistic system when they stop being considered neological.”

Martincová (1983) states that neological items are “such [...] items which have not been officially included in the latest vocabulary.”

In this presentation, we will use this rather unambiguous categorization, i.e. if a word has not been included in a general dictionary yet, it is considered neological, with the exception of hapax.

## UPDATES OF NEOLOGISMS WITHIN THE LEXICOLOGY COURSE

### THE ROLE OF THE FRENCH ACADEMY IN THE MATTER OF NEOLOGISMS AND TERMINOLOGY

The interest taken in neology increased in late 20th century, both in French and Czech environment. Not only linguists, but also terminologists are interested in it. Neology becomes a discipline closely related to new sociological trends that require new words (Světlá, 1995).

In this context, the need of regulation of new terminology arises. The first board for terminology met in 1933 and other followed later, especially after Anglicisms started to be introduced into French in larger scale. France adopted measures in the form of a special, so called Toubon law. This law ensured that French words would be preferred to their English equivalents, in television and radio broadcast and in advertisement (Zapletalová, 2003). Even though, as Uhlířová (2001) says, “loans from foreign languages, especially from English, is the most significant method of extending vocabulary of contemporary Czech”, no such law exists in the Czech Republic that would regulate their use in the way seen in France or in Quebec where the rules are even stricter.

The French Academy proposes words which should be used instead of Anglicisms in French vocabulary. A used Anglicism is actually a neologism, as well as the proposed equivalent. In some cases, equivalents take hold and become used by a narrow or wider group of speakers (e.g. *logiciel* for *software*, *baladeur* for *walkman*), in other cases they get forgotten or are not accepted.

On the French Academy website, under “*Terminologie & néologie*”, we can find the following table (see Table 1) where replacement of these English words by their French equivalents is recommended: *hashtag*, *big data*, *bashing*, *streaming*, *digital native*, *biopharming* (in English spelled as *biofarming* or *bio-farming*).

**Table 1:** French neological equivalents of English words proposed by the French Academy

ON PEUT DIRE	AU LIEU DE
mot-dièse	hashtag
mégadonnées	big data
éreintage	bashing
flux	streaming
enfant du numérique	digital native
moléculture	biopharming

Another interesting fact is that in the general French dictionary *Le Petit Robert* (2014) the word *streaming* is already introduced, along with the official recommendation for its replacement by expression *diffusion en flux*, while in the table published by the Academy, only its shortened version *flux* can be found. The perpetual question of lifetime of neologism arises at this point. Where is the point when a word is not a neologism any more? When does it lose its status of novelty? Does this happen at the moment of introducing the word in a dictionary? As we could notice in the section addressing definitions, even linguists are not able to answer this question and clearly define, or even restrict neologisms.

“*Néologismes & anglicismes*” (<http://www.academie-francaise.fr/dire-ne-pas-dire/neologismes-anglicismes>, retrieved on 12/05/2016) is another column of the French Academy related to this topic. It can be used as a source for neology courses and for update of neologisms within the subject of lexicology. For example, on 7th April 2016, the Academy published an announcement where they addressed English lexeme *guest* which is redundantly used in place of its French equivalent *invité* existing in French since as early as the 8th century. They also defend English which is frequently degraded by the French, stating that English words are “*too often misunderstood, mispronounced and misspelled*”. This is shown on the example where expressions *to loose/looser* are confused with *to lose/loser*. Dictionary *Le Petit Robert* (2014) does not include words *loose* and *looser*. It does, on the other hand, include word *loser* and even points out the frequent mistake of the wrong transcription *looser*. In addition to that, the Academy address even semantic loans and, on 2nd April 2015, they focus on the word *opérer*, with the French meaning *to work, to care about, to carry out, to operate (referring to a surgery)*, under the influence of American English often mistakenly used in the meaning *to control*, giving use of French verb *assurer* as an example. In dictionary *Le Petit Robert*, this meaning is not presented, unlike in the case of the much discussed verb *réaliser* (referring to English verb *to realize*) – in the dictionary, this term is marked with the note “*a criticised usage*” (cf. Fridrichová, 2013).

Nowadays, English is considered a *lingua franca*. Its influence on other languages is unquestionable and appellation of new entities is mostly (if not always) done with its presence. For that reason, Anglicisms represent the majority in both neology and terminology in the resources of the French Academy.

### PROJECT EMPNÉO AS A SOURCE OF UPDATE OF NEOLOGISMS IN CLASSES

In addition to sources prepared by the French Academy and other official authorities controlled by the government that address terminology and neology, neologisms are studied by individual linguists, some of them united in teams within projects.

One of such projects is EmpNéo – derived from the French expression *Emprunts néologiques* – neological loans. Initiated by French linguist, the project has been existing for several years. In the present, four groups work on it representing four languages, i.e. Czech, French, Polish, Greek. The Czech team is represented by Alena Polická, Zuzana Hildenbrand, Jan Lazar and Radka Mudrochová, the author of this text. The first two were also the founders of the Czech team. Their first publication was dedicated to presentation of the project in the European context and to introduction of loans which were addressed by the project at the moment (cf. Hildenbrand, Polická, 2014).

The goal of this project is to conduct a survey of loans (not only from English, even though they represent the majority) in individual languages. “*To be more accurate, these include loans newly introduced in all the languages, examination of their spread, frequency and usage, their semantic, phonetic, morphological and other shifts and, last but not least, research of newly formed or older domestic equivalents which can compete with the borrowed neologism*” (Hildenbrand, Polická, 2014).

The project brings not only theoretical results (see e.g. the latest publication of the project: *Emprunts néologiques et équivalents autochtones en français, en polonais et en tchèque*) but also practical ones that help enrich courses at the home departments lead by the team members.

Such an approach allows to introduce the knowledge newly acquired within the project into classes, teach the experience obtained in the project and also engage students in scientific research, in the form of semester papers,

bachelor and diploma thesis.

### DESCRIPTION AND PRESENT STATE OF THE RESEARCH

Since February 2016, four lexemes have been researched. The working pace is set to two loans per six weeks. Once this period expires, data is collected and exchanged between teams. The negotiation language is French. The examined phenomena are recorded in a standardized table (see Table 2). The headline includes the examined word, date of processing and authors who addressed it. Entries 1T, 2T and BT (with corresponding numbers) focus on possible equivalents of the examined lexeme. The loan is characterised by AT items:

- AT3: occurrence in common dictionaries (*Databáze heslářů*: <http://lexiko.ujc.cas.cz/heslare/>; *Le Petit Robert*, *Trésor de la langue française*, *Larousse*)
- AT4: online dictionaries (*Wikipedia*, *ABZ Slovník cizích slov*, *Wikislovník*; *Wiktionnaire*)
- AT5: context with reference (periodicals)
- AT6.1: number of occurrences on the internet ([google.cz](http://google.cz), [seznam.cz](http://seznam.cz), [google.fr](http://google.fr), [yahoo.fr](http://yahoo.fr))
- AT6.2: press archives (for Czech *Anopress*, *Český národní korpus*, for French archives of daily press *Libération*, *Le Monde*, but also *Europresse*, corpus *Factiva*)
- AT 6.3: type of documents where the word can be found
- AT 7: existence of derived words
- AT 8: phonetic, morphological and grammar related adaptations

The same method is followed if there is an equivalent (marked BT) of the examined loan.

**Table 2:** Demonstration of a blank template table used for research of a loan

**Tchèque : mot, date, auteur(s)**

1T. Equivalents	
1bisT. Anciennes dénominations	
2T. Définition	

**AT. EMPRUNT**

AT3. Dict. trad.	
AT4. Dict. sur la toile	
AT5. Contextes avec références	
<b>AT6. Mesures de diffusion et acclimatation</b>	
AT6.1. Nombre de pages sur la toile	
AT6.2. Archives de presse	
AT6.3. Types de docs	
AT7. famille dériv <sup>e</sup>	
AT8. Adapt <sup>e</sup> ph/gr/mo	

**BT. ÉQUIVALENT**

BT équivalent(s)	
BT3. Dict. trad.	
BT4. Dict. sur la toile	
BT5. Contextes avec références	
<b>BT6. Diffusion</b>	
BT6.1. Nombre de pages sur la toile	
BT6.2. Archives de presse	
BT6.3. Types de documents	
BT7. Famille dériv <sup>e</sup>	

Remarques / commentaires:

The latest words submitted for analysis are the lexemes *haul* and *swag*. *Haul*, in the examined case, means “a video recording which is motivated by preying on shops or e-shops” (Reflex.cz). Haul videos are, above all, made by young adult women, sometimes called *youtubers*.

The very specific character of the neological vocabulary has attracted our attention in such an extent that we



decided to compare vocabulary of Czech and French female *youtubers* (in French called *youtubeuse*) and describe their identity and spreading. The results will serve as a resource for the lexicology course update.

### VOCABULARY OF *YOUTUBERS/YOUTUBEURS* – ON THE EXAMPLE OF THE LEXEME *VLOG*

One of the first words you come across if you contact *youtubers*, is the noun *vlog*, formed by blending the words *blog* and *video*. The lexeme exists in both languages. In French, it is also used in plural, with the plural ending -s, forming *vlogs*. *Vlogs* are posted on regular or irregular basis. If a *vlog* is used actively on daily basis, it is a so called *daily vlog*. It can also be associated with a specific period, such as Christmas, forming words as *Vlogmas* (a portmanteau from *vlog* and *Christmas*). Even if *vlog* may nowadays seem a non-neological word, in general dictionaries (*Le Petit Robert 2016*, *Larousse*, *Trésor de la langue française*) it is not presented, with the exception of online dictionary *Wiktionnaire* where the word is categorized as an IT related Anglicism with the definition which may translate as “a *blog which uses video as a principal medium for its content*”, (the original definition is available at <https://fr.wiktionary.org/wiki/vlog>). In the archive of *Libération* we find 13 references. In *Le Figaro* only 11 matches can be found (cf. Table 5). The French Wikipedia includes a reference to *vlog* with a link to *Office québécois de la langue française* (Quebec Board of the French Language) where several other forms are presented which are recommended to be preferred (*blogue vidéo*, *vidéoblogue*, *carnet vidéo*, *vidéocarnet*, *carnet Web vidéo*, *cybercarnet vidéo*) to *blog vidéo*, *vidéoblog* and English-only terms: *video blog*, *videoblog*, *vlog*, *vblog*, *vog*, *vidblog*, *video weblog* ([http://www.gdt.oqlf.gouv.qc.ca/ficheOqlf.aspx?Id\\_Fiche=8355142](http://www.gdt.oqlf.gouv.qc.ca/ficheOqlf.aspx?Id_Fiche=8355142), retrieved on 16/05/2016). It is interesting that the information was published as early as in 2006(!). If we search *vlog* in Google, the results are much more remarkable, with the total matches found at 406,000 (16/05/2016), restricted to the region of France and the French language. We found a relevant equivalent in the word *vlogue*, yet when searched in the search engine, only 740 matches are found.

As to the word *vlog* in the Czech context, the word is masculine (as well as in French) and is declined according to the model word “*hrad*”. The lexeme is not present in any dictionary of *Databáze heslářů* (Database of Indexes), a database created by The Institute of the Czech Language, The Czech Academy of Sciences. In the *Český národní korpus* (The Czech National Corpus; referred to as ČNK), a single reference can be found, dating back to 2014, in magazine ABC, No. 18, “*Video posts which are fun but also a good source of information. Youtubers get recorded telling their stories, presenting opinions, talking about their experience, and spread this material.*” (source: ČNK). Neither on *Wikipedia* nor on *Wikislovník*, not even on *ABZ.cz* (*Online Loanwords Dictionary*), this expression can be found. In the archive of one of the most popular news websites *Novinky.cz*, two occurrences can be found, in both cases accompanied by explanation that it is a *video blog* or *videoblog*. On a Czech search engine, the number of hits is significantly higher, counting 176,653 (16/05/2016) matches. Taking into consideration that France has 6 times more inhabitants than the Czech Republic, in direct proportion, Google.fr should hit approximately one million results. This may imply that, even if word *vlog* is not included in any dictionary or corpus, its occurrence ratio within the Czech internet is very high. We get even higher number if we search its equivalent *videoblog*, nearly 350,000 results. Much lower number of results (23,700) is acquired if the identical word is searched on Google.fr. However, Google returns a link to *Wikipedia* entry *blog vidéo* where we can find more expressions for *vlog*: *podcast vidéo*, *vidéopodcasts*, *videocast*, *vodcast*, *baladodiffusion vidéo*, *balado vidéo*. If we enter the longest expression (in quotes) in Google.fr, i.e. “*baladodiffusion vidéo*”, restricted to the region of France, we get nearly 700 occurrences. Unlike Czech, French uses more forms or equivalents of lexeme *vlog*. Some of them can be found in the Czech context as well, although with low numbers of occurrences, counting up to 100 results: *videocast*, *vblog*, *vidblog*, *vodcast*, all the expressions allowing adding the ending -ing. We have also come across forms *vidcast/vidcasting*, in both languages. However, the occurrence of these words on the internet is marginal, compared to the common usage of word *vlog*.

In this respect, French is richer and the total occurrence of equivalents in Google.fr (restricted to the French language and to the region of France) is summarised in Table 3 (figures were recorded on 16/05/2016 and 19/05/2016). As obvious in the table, the most common expression is *vlog*, followed by *blog vidéo*, *video blog*, *blog vidéo*, *vidéo blog*, *videoblog*, *vidéoblog* – i.e. various combinations of words *video/vidéo* and *blog* (with the original English spelling). Other expressions with high number of occurrences are *podcast vidéo* and *vog* (the frequency of the latter is, however, distorted by the high number of its homonyms).

**Table 3:** Number of occurrences of *vlog* equivalents on Google.fr

Equivalent	Number of occurrences (Google.fr)
<i>blogue vidéo/blogue video</i>	1,850/372
<i>bloguevidéo/bloguevideo</i>	1/1
<i>vidéo blogue/video blogue</i>	5,180/548
<i>vidéoblogue/videoblogue</i>	354/593
<i>blogvidéo/blogvideo</i>	1,270/2,880
<i>blog vidéo/blog video</i>	47,200/164,000
<i>vidéoblog/videoblog</i>	12,700/23,700
<i>vidéo blog/ video blog</i>	27,000/164,000
<i>carnet vidéo</i>	1,770
<i>Vidéo carnet/vidéocarnet</i>	1,810/81
<i>carnet Web vidéo</i>	4
<i>cybercarnet vidéo</i>	5
<i>vblog</i>	4,710
<i>vog</i>	384,000 (!)
<i>vidblog</i>	668
<i>video weblog/videoweblog</i>	243/5
<i>podcast vidéo</i>	98,700
<i>Vidéopodcast/video podcast</i>	809/9,180
<i>videocast</i>	6,610
<i>vodcast</i>	2,390
<i>vidcast</i>	2,560
<i>baladodiffusion vidéo</i>	664
<i>balado vidéo/baladovidéo</i>	591/4

### WORDS DERIVED FROM *VLOG*

Whenever a new word is introduced into a language, derived versions are frequently formed or its form is adopted from the original language.

In Czech, we can find words with the stem *vlog* (word class in brackets): *vloger/vlogger* (noun, masculine), *vlogerka/vloggerka* (noun, feminine), *vlogovat/vlogovat* (verb), *vlogging/vlogging* (noun, masculine), *vlogování/vloggování* (noun, neutral), *vlogový/vloggový* (adjective), *vlogerský/vloggerský* (adjective). All these words have been searched in search engines of top Czech online daily press, one magazine and the web search engine Seznam.cz (16/05/2016 and 20/05/2016). The results of the individual outputs are presented in Table 4. As we can see, derived version show variation between single and double *g*. Both spellings are usually accepted. On the internet, *vlogger* with double *g* and *vlogerka* with simple *g* are most frequently represented. Single *g* can also be found in words *vlogovat*, *vlogování*, *vlogový* and *vlogerský*. On the other hand, *vlogging* with double *g* (19,105) prevails over *vlogging* (77).

**Table 4:** Words derived from *vlog* and their frequency on the internet (Czech)

Lexeme	Novinky.cz	lhned.cz	Idnes.cz	Reflex.cz	Blesk.cz	Seznam.cz
<i>Vlog</i>	2	6	7	6	2	176,653
<i>Vloger/vlogger</i>	1/1	0/0	0/2	0/1	1/0	2,158/14,513
<i>Vlogerka/vloggerka</i>	0/1	0/0	3/1	0/3	5/0	6,610/390
<i>Vlogovat/vlogovat</i>	0/0	0/0	1/0	0/0	0/0	467/1
<i>Vlogging/vlogging</i>	0/0	0/0	0/0	0/0	0/0	77/19,105
<i>Vlogování/vloggování</i>	0/0	0/0	3/0	0/1	0/0	855/23
<i>Vlogový/vloggový</i>	0/0	0/0	0/0	0/0	0/0	820/95
<i>Vlogerský/vloggerský</i>	0/0	0/0	0/0	0/0	0/0	9/0

The same problem of variation of versions with double and single *g* can also be observed in French (Table 5).

**Table 5:** Words derived from *vlog* and their frequency on the internet (French)

Lexeme	Lefigaro.fr	Lemonde.fr	20minutes.fr	Libération.fr	Metro.fr	Google.fr
<i>Vlog</i>	11	4	17	13	7	373,000
<i>Vloguer/vlogguer</i>	0/0	0/0	0/0	0/0	0/0	1,230/145
<i>Vloger/vlogger</i>	0/0	0/1	0/5	0/0	0/0	1,200/22,400
<i>Vlogueur/vloggueur</i>	0/0	0/0	0/0	4/0	0/0	1,560/144
<i>Vlogeur/vloggeur</i>	0/0	0/0	0/0	0/0	0/1	1,330/501
<i>Vlogueuse/vloggueuse</i>	1/1	0/2	1/0	0/1	3/0	2,720/583
<i>Vlogeuse/vloggeuse</i>	0/0	0/1	0/0	0/0	0/2	651/1,210
<i>Vlogging/Vlogging</i>	0/1	0/0	0/8	0/0	0/0	1,650/8,740

The word showing the highest inconsistency is a noun referring to a masculine person who *vlogs*, creates a *vlog*, i.e.: *vloger*, *vlogger*, *vlogueur*, *vloggueur*, *vlogeur*, *vloggeur*. The most frequent form is *vlogger* (as in English), followed by *vlogueur*, respecting the French orthography by holding the correct pronunciation [vlɔʒœʁ]. The third most commonly used form is *vlogeur* which should, however, be pronounced [vlɔʒœʁ]. Writers are discouraged from using this incorrect form also by *Office québécois de la langue française* ([https://www.oqlf.gouv.qc.ca/ressources/bibliotheque/dictionnaires/terminologie\\_blogue/videobloguer.html](https://www.oqlf.gouv.qc.ca/ressources/bibliotheque/dictionnaires/terminologie_blogue/videobloguer.html), retrieved on 20/05/2016). The authority also warns of wrong usage of *vloger* with single *g* that never occurs in press. Even though on the internet the usage ratio is not insignificant, it is frequently associated with the geographic term *Vloger*.

As to the feminine form *vlogger*, the most commonly used word on Google is *vlogueuse*, followed by *vloggeuse* (again, this is an inadequate form, not respecting the pronunciation of the original English loanword).

The occurrence of individual derived words in press is very low, with the exception of the main analysed word *vlog* which can be found in archives of all the consulted daily news sites - *vlogger* (6x), *vloggeur* (1x), *vlogueur* (4x), *vlogueuse* (5x), *vloggueuse* (4x), *vloggeuse* (3x), *vlogging* (9x). In the press, verb *vloguer/vlogguer* is not found at all, whereas on the internet the form *vlogguer* dominates. We are, naturally, aware of possible mistaking of the verb for noun. *Vloger* or *vlogger* could also be used as verbs derived from the English verb *to vlog* by adding the 1<sup>st</sup> verb group ending *-er*. As to noun *vlogging/vlogging*, the original English version with double *g* is preferred.

Even though *vlog* or *video blogging* has now existed for 16 years, first used most likely by American singer Adam Kontras (<http://blog.digizone.cz/rossler/poridte-si-videoblog-uz-je-mu-deset-let>, retrieved on 20/05/2016), the vocabulary associated with this phenomenon has not settled yet. In France, the inconsistency is rather in the number of used equivalents and in both languages variation of transcription with double or single *g* can be found. Unlike in Czech, in French, pronunciation of *g* before *e*, *i*, *y* as [ʒ] complicates usage of some of these words. It will be undoubtedly interesting to observe the evolution of the word *vlog* in the future and observe its introduction into dictionaries or (as we could see in case of its close friend, the word *blog*) or its disappearance.

## CONCLUSION

The vocabulary varies. The contemporary French vocabulary is not the same as in the past, some words get obsolete and neologisms appear (cf. Horová, 2012). Likewise, extension of vocabulary is a process which is still in motion, as well as its main agent, the language, which is a subject to constant change caused by both internal and external reasons.

In the present, neology belongs to linguistic disciplines which are under constant change and where new phenomenon occur incessantly that are difficult to be observed and researched even by an entire team of the language related area (as shown on the example of the dynamics of the word *vlog*). In some words, the adjective neological may only be used for a very short period. This is frequently a cause of the paradoxical situation where a word becomes widely used and loses its novelty even before experts manage to define the lexeme. As a result of globalisation and nearly permanent connection to the internet, speed of information spread, etc., vocabulary of a given language gets constantly extended in response to referring to new information and subjects out of the current knowledge included in the language.

To ensure that teachers specialised in lexicology/neology keep up with these changes and provide their students with updates and trends in the language, it is necessary that they not only regularly consult websites of official authorities addressing terminology and neology, but also carry out their own research (in a team, on their own or in cooperation with the students). It is not certain whether they manage to capture the novelty and certain degree of usage (to avoid hapax) and it will show with time which direction the particular word takes in the future.

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## USING CO-DESIGN THEORY TO DEVELOP GRAPHICAL SIMULATION FOR ENHANCED LEARNING IN A MUSEUM DISPLAY

Dr. Ratanachote THIENMONGKOL

Faculty of Informatics, Department of New Media, Mahasarakham University, Thailand  
ratanachote.t@msu.ac.th

Perapong TRAKULPHAT

Faculty of Digital Arts, Division of Computer Arts, Rangsit University  
jedi15122002@hotmail.com

### ABSTRACT

This paper presents the key design processes in our practical based design project. It involves developing a new graphical simulation of Thai dinosaur called “Siamosaurus-Suteethorni”. Since 1976, this dinosaur gene was found as the first fossil in Thailand. Most people desire to see how the dinosaur looks like. This project was collaboration with the key informants to provide the empowerment data. It also includes the experts from four areas; 1) curator, 2) paleontologist, 3) geologist and 4) computer graphics (CG) artist. This collaboration was brought to develop a 3D hologram project for simulating features and movements of Siamosaurus-Suteethorni. Where, the hologram was installed in the National of Geological Museum. A co-design theory was employed as the key method to contribute a first of the CG protocol with Thai dinosaur in the museum. The process of data collection started from analysing a prehistoric document in Thai contexts. Then we went to the exploration of dinosaur fossil in order to collect the information needs. The collection also conducted in-depth interviews with the key informants to find out more details (i.e. anatomical structure, number of bones, scale, dimensional of movement, textural skin and footprints). The focus group was conducted with the key informants. A feedback were brought to define as a design criteria for producing such; a 3D polygon, shading, texture, bone rigging, scale, proportion, animation and motion capture in the design processes. However, after installation-team released the 3D hologram of Siamosaurus-Suteethorni in the museum. The result from assessment survey indicated that the satisfaction degree from a visitor stays at ( $\bar{X}$ ) 4.39 points from 5 points. In addition the sum assessment for learning scores from visitors stays at ( $\bar{X}$ ) 4.33 points from 5 points.

**Keywords:** Computer Graphic, Hologram, 3D modeling, Dinosaur, Digital Museum

### INTRODUCTION

Although dinosaurs are a prehistoric group of animals which believed to be extinct until the late 20th century (Michael, Andrea, Darren, & Gareth, 2014); the study of these animals are received an attention from paleontologists and researchers in other fields. It can be seen that the major areas of dinosaurs study involves with; feature, skeleton, soft anatomy, behavior evidence and etc. (Lambert, 1990; Starrfelt & Liow, 2016). These studies were arranged a body of knowledge becomes as documentary materials such text and video formats.

In Thailand, since 1976 a study of dinosaur fossils was received more attention. When, a paleontologist from Department of Mineral Resources (DMR) found a first fossil in the country (Department of Mineral Resources, 2013). A research from DMR indicated that Thailand has sixteen species of dinosaurs. Moreover, the seven numbers of them are new-discovering species in the world. Particularly in the ASEAN region, a key exploration area of the fossil is the Northeast of Thailand. This area was presumed by DMR that used to be a large basin in the Jurassic period (Department of Mineral Resources, 2013). Many dinosaurs lived and died in this place. Their bodies were overlapped by sediments and became the fossils. Loei, Kalasin, Khon Kaen, Nakhon-phanom and Nakhon-ratchasima are the key cities which were discovered a dinosaur skeleton. However, it seems that Thailand is one of the important countries in Asian about dinosaur studies.

However, Khon Kaen province is one of the five exploration areas where discovered the dinosaur skeletons. The four from seven skeletons were found in the province. Furthermore, one of them hasn't been found in the world that is named “Siamosaurus-Suteethorni”. This is a genus of theropod dinosaur from early cretaceous Thailand. The size of the animal may have reached a length of about 9.1 meters (30 ft.) and got two legs (Buffetaut & Ingevat, 1986). This emergent making a paleontologist started to study a feature and physiology of this dinosaur. They plan to create the model of Siamosaurus-Suteethorni, in order to spread and promote this exploration to people through a museum. Hence, a study of skeleton, proportion, texture, and movement of this dinosaur are the key components which a paleontologist has to carefully report the findings. The collaborative knowledge from a crossing field needs to be hybrid at this stage.

This point is the challenging of design project to associate a cross body of knowledge (paleontology, geology and computer graphic) to summarise and transform a data to the 3D hologram of Siamosaurus-Suteethorni. This project installed at the National geological museum of Thailand. The research focuses are described in the next section.

### RESEARCH FOCUSES

This study focuses on how to create 3D hologram of Siamosaurus-Suteethorni which will install in the National geological museum of Thailand. However to create the model of dinosaur that nobody has not met; we need to cooperate acknowledge from a cross expertise. The key focuses of this study follow by;

- How can we apply the Co-design theory to develop a 3D hologram of Siamosaurus-Suteethorni; in parts of modeling, skeleton, soft anatomy, texture, bone rigging and walking simulation?
- How the holograms achieve a satisfaction and assessment for learning from a visitor?

### APPLYING CO-DESIGN THEORY INTO THE PROJECT

According to the challenging points in this design project made we question whether the 3D hologram of Siamosaurus-Suteethorni was the best way to design to the corrective modeling and simulation methods. This topic illustrates an alternative method to inquire key findings from the stakeholders in design project. This project discusses co-design as the concept to design a research methodology and characterising it as way to comprehend “knowledge by doing” (Muller, 1999). The traditional, tacit and often invisible ways of key informants perform their everyday workings were integrated for shaping a productive design in this project. Mitchell et.al (2015) suggests that designers will create more innovative concepts and ideas when working within a co-design environment with others than they do when creating ideas on their own. Deborah and Lauren (2010) described that a co-design has been used in many disciplines and at various scales. Sometimes, this approach has a political dimension of user empowerment and democratization. On the other side, it is seen as a way of abrogating design responsibility and innovation by designers.

Billington (1974) stated that a co-design concept came from the American pragmatist tradition. He contended that grass-roots democracy is based on the rights and freedoms locals have to participate. Creighton (1994) supported the notion that citizen participation has a broad value to community life because of 1) engages the public, 2) builds trust, and 3) makes better decisions for the community. Sanders and Dandavate (1999) and Sanoff (Sanoff, 2005) stated that in many cases, using citizen experiences can enhance the chance of success compares with simply using outside professionals. This is because citizens are more realistic regarding the local contexts. In the early 1970s-1980s, the participatory design (or cooperative) concept developed in the Scandinavian computer professional system (Muller, 2007; Spinuzzi, 2005). This concept rapidly expanded to other fields such as; interactive, industrial, information and graphic design areas (Muller, 2007). Visser et al. (2005) explained that design cannot be separated from society; everybody uses design as part of their daily lives. This means a designer has to be responsible to the people in what and how they design. However, the principles of participatory design methods, tools and techniques are dependent on the type of organization, technology, and number of people involved with the project (Kensing & Blomberg, 1998). Schuler and Namioka (1993) suggested that a participatory design will require testing existing products or prototype of developed concepts by users, in order to ensure that those users’ and other stakeholders’ knowledge will be utilized in the design process, and the design of products will fit their lives.

Finally, the co-design theory prompted us to think about which group of people would be interacted and dealing with the project. The co-design concept also gave us ideas for selecting methods and research instruments appropriate for our data collection and analysis. The key findings from this theoretical concept assisted we developed the empowerment design of Siamosaurus-Suteethorni. Details are described in the next topic.

### PARTICIPANTS

The research participants in this project were divided as two main groups the first group consists of experts from 4 disciplines which were collected by using a purposive sampling technique.

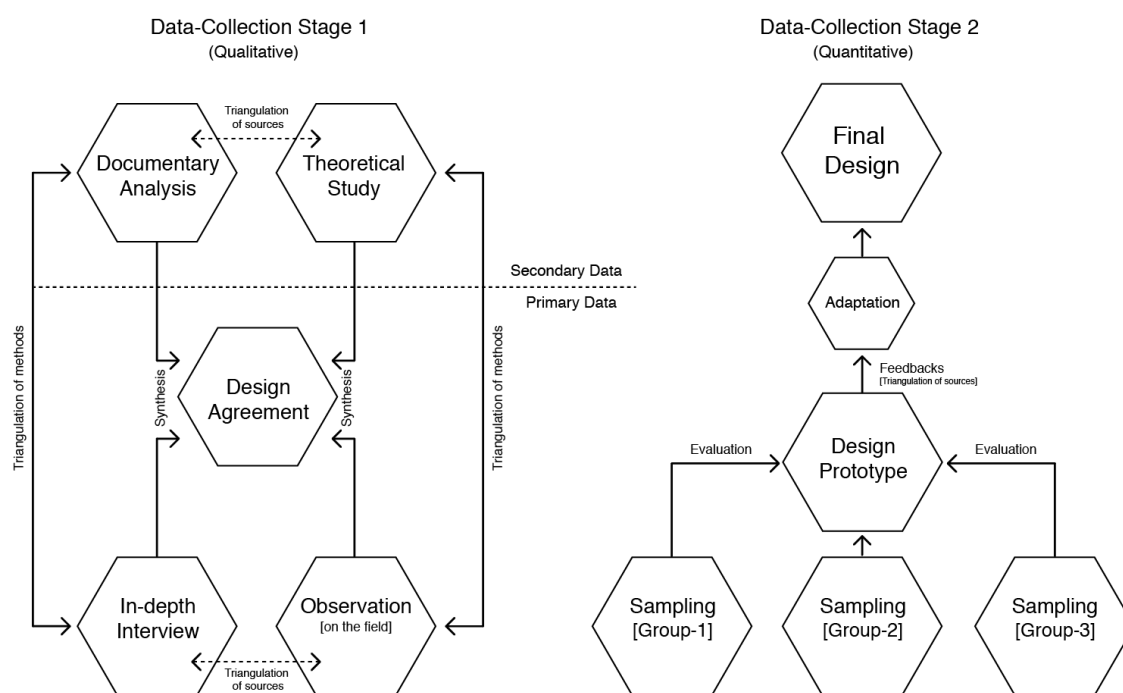
- Paleontologist
- Geologist
- Computer-Graphics Artist
- Curator

Meanwhile, the second group is a visitor who came to the museum about 90 respondents. Accidental sampling was employed to conduct at this stage. It consists of three major groups;

- Minor (sampling group(1) 30 people)
- Adult (sampling group(2) 30 people)
- Elder (sampling group(3) 30 people)

## METHODOLOGY

A mixed method was applied to design the methods of our data collection and data analysis strategies. Both qualitative (inductive) and quantitative (deductive) concepts were employed to inquire the key factors from documentaries and participants (stakeholders). The strategies of data collection and analysis were defined as two major stages (diagram presents in figure1). Following by;



**Figure 1:** the diagram presents data collection and data analysis strategies

### • Stage1: (Pre-production)

*Data collection* – This stage, we applied the qualitative approach to review a documentary and theoretical studies were collected. It also included observation on the field at Khon Kaen province. An in-depth interview with the 4 experts to inquire a key finding was conducted in this step.

*Data analysis* – we used content analysis to classify the type of key information, themes, terminologies, principles and literatures we read. A typological analysis was applied to identify a group of key words, ideas, information, and themes from the interview processes. The key interview data were arranged and set as a group of finding domains. Finally, a triangulation of sources was applied to triangulate the findings from the content and typological analysis; in order to create credibility and internal validity before summarized into the key findings. These findings were defined as a key concept of design agreement such modeling size, skeleton, soft anatomy, texture, bone rigging and walking simulation of the dinosaur protocol.

### • Stage2: (Post-production)

*Data collection* – This stage was performed after finishing the design protocol of Siamosaurus-Suteethorni (3D hologram). The evaluative survey was applied as the instrument to rate satisfying and assessment of learning ratios of the hologram from a visitor who are the respondents in museum (total 90 people). A likert scales were used as the answer items by starting from 1 (= strongly disagree) to 5 (= strongly agree) levels (Likert, 1932).

*Data analysis* – a descriptive analysis was applied to indicate the empirical results which includes; the mean score ( $\bar{X}$ ), percentage (%), the value of number (N) and the standard of deviation (S.D.). However, key feedback from the survey was summarized; in order to adjust the design protocol into the complete 3D hologram of Siamosaurus-Suteethorni. Finally, the complete design will implement at the museum.

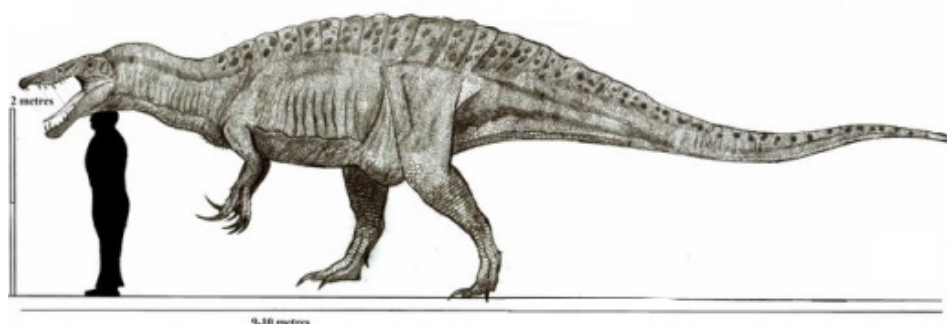


## FINDINGS AND DESIGN OUTCOMES

Key findings from the field work are divided as two stages. The first stage describes the key findings from the fossil site, documents and interviews. Meanwhile, the second stage presents the evaluative results from respondents. The design outputs will also display and augment in both stages. A detail follows by;

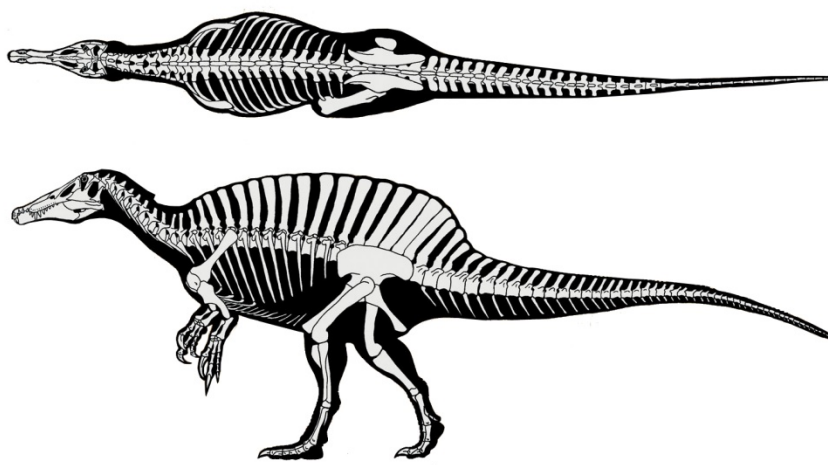
- **Key Findings – Stage1:**

Finding A – From a documentary study found that the Siamosaurus-Suteethorni is a theropoda dinosaur but it has a special feature in part of; teeth system. They have the teeth likes a crocodile. However, the paper of Buffetaut and Ingevat (1986) described that the a length of Siamosaurus-Suteethorni average at 9.1 meters (30ft.). Meanwhile, a height stays around 2-3 meters (10ft.); and body weigh stays at 5-7 tons (Department of Mineral Resources, 2013). Figure 2 displays the comparing scales between man and theropoda dinosaur (Siamosaurus-Suteethorni).



**Figure 2:** the comparing size between man and Siamosaurus-Suteethorni, adapted from Buffetaut and Ingevat (1986)

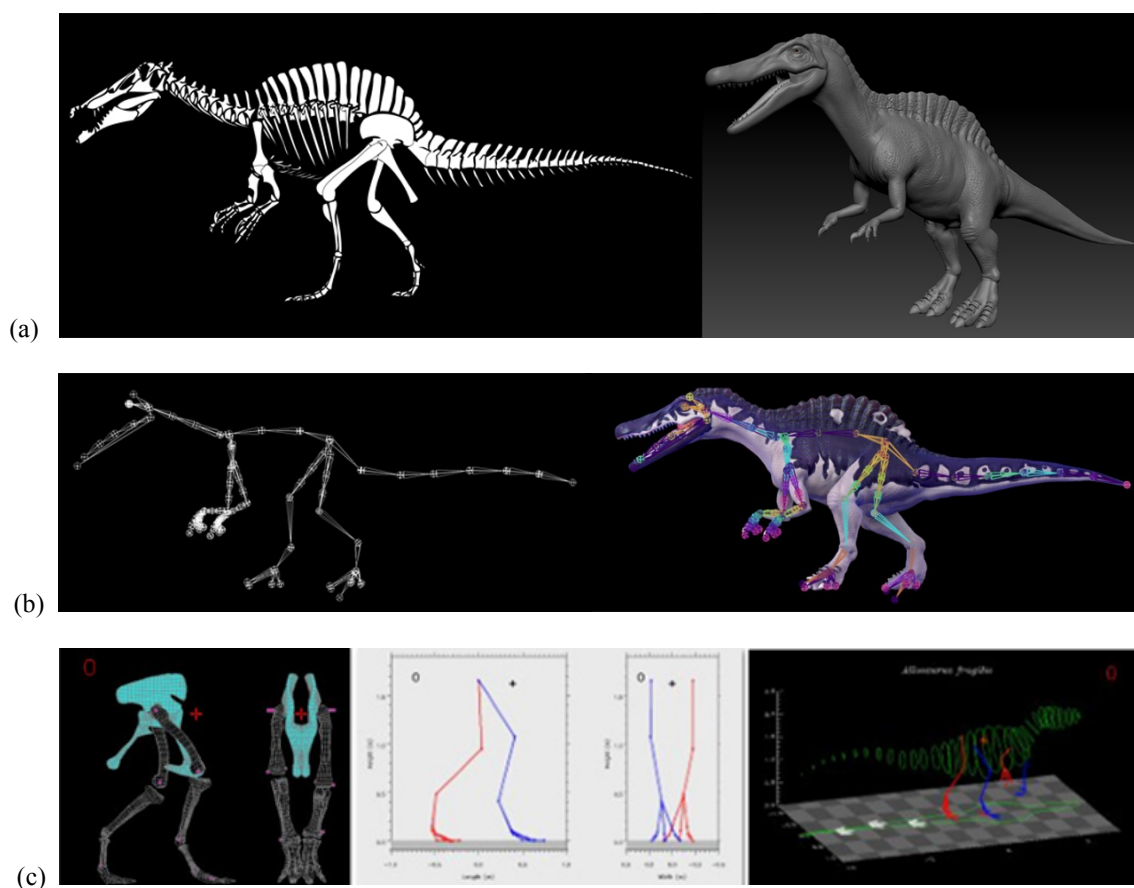
Finding B – A finding from the experts suggested that the skeleton of Siamosaurus-Suteethorni can be image like an average of theropoda dinosaurs because the self-evident of fossils indicate that the bones of Siamosaurus-Suteethorni are similarity with a normal of theropoda dinosaurs, it only just different from the other at the teeth areas (see figure 3). Meanwhile, the walking behavior of this dinosaur has about 1.5-2 meters length for one step. However, the walking behavior from the front side seems like adjacent steps. This is because the skeleton of legs has a bit convolution (see figure 4c). In term of texture, the experts suggested that the highlight pattern of this dinosaur will show on their fins and tails as a splashy mark (see figure 2). Moreover, the experts described the Siamosaurus-Suteethorni way of life that they consumed fish and hunted around a water resource.



**Figure 3:** This graphical image re-drew from the original skeletons of sponosaurus aegyptiacus, adapted from Hartman (2012)

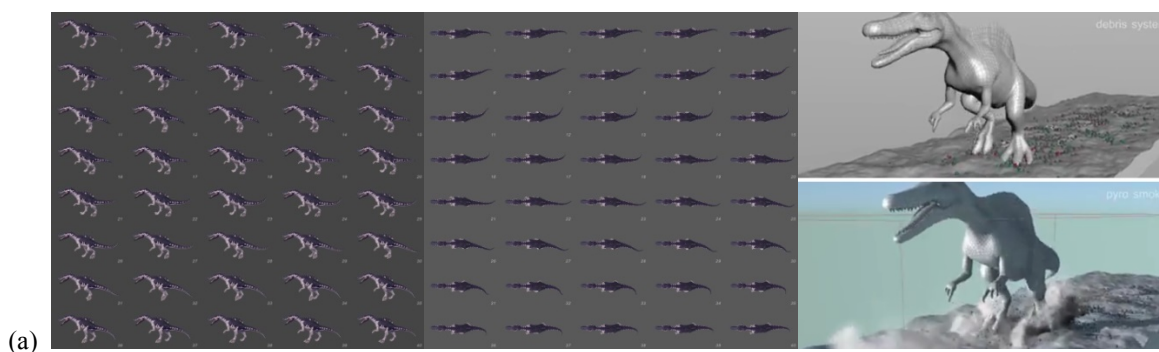


Design output – The design prototype was developed under the ideas of cooperative agreement from all experts who gave advices. The key findings from a review document and suggestion of specialists became as the design handbook for this project. We started to sketch the dinosaur outline follows the suggestions and key documents; in order to develop the empowerment figure of the dinosaur. Then, we drew the skeleton of *Siamosaurus-Suteethorni* in 3D software and created a shape of polygons to build up the real figure of the dinosaur. After that, we designed a raw texture and merged with the dinosaur model (see Figure 4a). Next, we made a bone system and linked with the model that called “rigging technique”. This technique made the model can animate (see Figure 4b). However in part of walking simulation, we worked closely with the paleontologist to create the walking step of this dinosaur (see Figure 4c).



**Figure 4:** These graphical images present design processes of the dinosaur 3D model

We set up a one step of the walking at 40 frames/per minute for testing the natural of *Siamosaurus-Suteethorni* waking (see Figure 5a). Finally, we wrote the storyline of the dinosaur for making storyboard (see Figure 5b/5c). Then, we developed the animation in form of 3D hologram and displayed in the museum.





**Figure 5:** These images present developing processes of the dinosaur 3D hologram

• **Key Findings – Stage2:**

Finding C – A demographic result indicated that the sampling group 1 consists of 16.7 (%) from age under 15 years and 16.7(%) from age 15-20 years. Meanwhile, the sampling group 2 consists of; 8.9 (%) from age 21-30 years, 15.6(%) from age 31-40 years and 8.9(%) from age 41-50 years. The sampling group 3 consists of; 24.4(%) from age 51-60 years and 8.9(%) from age up to 61 years.

Finding D – In part of education showed that 8.9(%) and 28.9(%) of sampling groups have education levels at Primary school and High school. Meanwhile, undergraduate and postgraduate degrees stays at 43.3 (%) and 17.8(%). (See the assessment activity in figure 6)



**Figure 6:** The respondents with the evaluative process at the museum

Finding E – An evaluative result from the assessment for learning of the 3D hologram (Siamosaurus-Suteethorni) found that the sum scores stays at the level of strongly agree, ( $\bar{X}$ ) 4.33 points. The assessment topics were divided into 4 areas (i.e. knowledge, skill, attitude and environment) by following the principle of Stiggins (2005). (See detail of assessment for learning in table1)

**Table 1:** Descriptive Statistics of the three sampling groups about “Assessment for Learning”

Topics of Assessment for Learning	N	Min	Max	( $\bar{X}$ )	SD
1) The comprehension about Siamosaurus-Suteethorni life story?	90	3	5	4.32	.557
2) The control panel of user interface creates your interactive learning with the 3D hologram display?	90	3	5	4.36	.567
3) The 3D hologram drives your motivation for leaning the story of Siamosaurus-Suteethorni?	90	3	5	4.29	.525
4) The virtual image of 3D hologram creates your metal picture about prehistoric environment?	90	3	5	4.38	.572
<b>Total</b>	<b>90</b>	<b>3</b>	<b>5</b>	<b>4.33</b>	<b>.555</b>

Finding F – In part of satisfaction assessment from the respondents found that the sum assessment scores stays at the level of strongly agree, ( $\bar{X}$ ) 4.39 points. The assessment topics were divided into 4 areas (i.e. storytelling, character sound and computer graphics) (See detail of satisfaction rate in table2)

**Table 2:** Descriptive Statistics of the three sampling groups about “design satisfaction”

Topics	N	Min	Max	( $\bar{X}$ )	SD
1) The satisfaction of storytelling display?	90	3	5	4.38	.572
2) The satisfaction of character design?	90	4	5	4.39	.490
3) The satisfaction of sound design?	90	3	5	4.40	.596
4) The satisfaction of computer graphics environment?	90	4	5	4.39	.490
<b>Total</b>	<b>90</b>	<b>3.5</b>	<b>5</b>	<b>4.39</b>	<b>.537</b>

## CONCLUSIONS

This article presents an experience of using co-design to develop the 3D hologram of Siamosaurus-Suteethorni. This collaborative knowledge assists us to develop the empowerment design of the dinosaur skeleton, figure, soft anatomy, texture, walking simulation and so on. Stakeholders in the project can be able to share their individual expertise, which came out from their experiences. However, it can be seen that the integration of graphical simulation with a museum display motivated the attraction from learners (visitors). They enjoy a new way of the learning environments with a dinosaur history, in Thai context. Finally, this design project has been responded by the local government to be used in the National Geological Museum of Thailand (in Patumtani province). However, we hope this project will be the design prototype for a local government who interests to build a digital museum in Thailand.

## ACKNOWLEDGEMENT

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## USING CORPUS-ASSISTED LEARNING ACTIVITIES TO ASSIST VOCABULARY DEVELOPMENT IN ENGLISH

Dr. Bilal TEKIN, Freelance Teacher Trainer  
[bilaltek66@gmail.com](mailto:bilaltek66@gmail.com)

Assist. Prof. Dr. Adem SORUC,  
 Sakarya University, Turkey  
[ademsoruc@sakarya.edu.tr](mailto:ademsoruc@sakarya.edu.tr)

### ABSTRACT

In recent years, the use of corpora has achieved increasing prominence for educational purposes in general, for second language vocabulary development in particular. To this end, the qualitative study reported in this article sought to find out learners' perceptions related to the use of corpus assisted vocabulary learning activities in an EFL classroom. The study was carried out at an international high school in Istanbul, conveniently sampling 26 learners (16 male, 10 female). The learners were exposed to four unknown words for two classroom hours of activities prepared using a corpus program as in the literature (e.g., Thurstun & Candlin, 1998). Upon completion of the activities, data, first of all, came from a persona evaluation checklist. Then, reflection papers were collected, and at the end all learners interviewed. The qualitative data were transcribed and coded. The results showed that learners found corpus-assisted vocabulary learning activities interesting enough, identifying their thoughts with such expressions as "easy", "fun", "innovative", "autonomous", "practical", but "complex". Bearing all these results in mind, a series of implications are given and suggestions made for both language teachers and learners.

### INTRODUCTION

Recent developments in the field of educational technology have led to a renewed interest in corpus-assisted language learning (Johns 1991; O'Keeffe, McCarthy & Carter, 2007; Flowerdew, 2012), which has been used interchangeably for different learning purposes, with a particular reference providing not only a better road for vocabulary development (e.g., Thurstun & Candlin, 1998; Binkai, 2012) or grammar teaching (e.g., Boulton, 2009; Smart, 2014; Lin & Lee, 2015) or writing skills (e.g., Quinn, 2014), but also a "language-learning activity" (e.g., Gavioli 1997, p. 84), or a self-correcting tool (e.g., Gaskell & Cobb, 2004; Yoon, 2008; Quinn, 2014). Given that corpus assisted language learning is made up of using technological tools, particularly concordancers, for pedagogical purposes (Gilquin & Granger, 2010), this study set out to explore, rather than measuring the effectiveness of corpus-assisted vocabulary learning activities, learners' perceptions about how they found vocabulary activities prepared using concordancing lines.

### CORPUS-ASSISTED LANGUAGE LEARNING

Corpus with its simplest definition is the collection of written or spoken texts stored on a computer for text analysis (O'Keeffe et al., 2007), and having both direct and indirect applications (Römer, 2010). It is on the one hand directly used both in and out of classroom as a language learning activity; on the other hand, indirectly used as a language teaching resource.

The direct use of corpora is most commonly in line with data-driven learning (DDL), a term derived by Tim Johns (1991). DDL is described as a tool by which learners can study a language, simply getting exposed to the input in concordancing lines (Frankenberg-Garcia, 2014) and analyzing 'masses of input in a quest to become more familiar with structural regularities via inductive means' (Geluso & Yamaguchi, 2014, p. 227). DDL can be viewed as a pivotal pedagogical tool on the grounds that it includes large amounts of text, and as it 'involves skills such as scanning and comprehending and observing recurring patterns, and forming conclusions based on these reoccurrences' (Quinn, 2014, p.167). In other words, learners explore data by themselves detecting 'patterns among multiple language samples' (Boulton, 2010, p. 535). Put simply, learners take advantage of corpora which allows them to discover either alone or in pairs driving them both to notice and to identify linguistic features in data (Lin & Lee, 2015) – which is closely related to Schmidt's (1990) noticing hypothesis as learners focus on either the form or the word itself in the concordancing lines.

Corpus-assisted language learning is known to have various advantages such as facilitating multi-contextual lexical acquisition (O’Keeffe, McCarty, & Carter, 2007), bringing authenticity to classroom (Gilquin & Granger, 2010), and contributing to autonomous learning (Binkai, 2012). On the other hand, it is also known that concordancing lines lined up vertically with the words on their right and left side startle learners because of their physical appearance (Lamy & Klarskov Mortensen, 2012), challenging learners to interpret the concordance lines (Koosha & Jafarpour, 2006), and taking so much time processing the meaning of the word (Yoon, 2011; Quinn, 2014; Lin & Lee, 2015). Corpus-assisted language learning is however a well-known tool or a ‘promising technique’ (Gilquin & Granger, 2010, p. 367) by which learners contact with authentic language and discover either linguistic forms or lexis and develop important cognitive skills (Gilquin & Granger, 2010).

The role of corpus-based instruction on vocabulary development has been investigated to date. To take a specific example, Thurstun and Candlin (1998) introduced concordancing program, *Microconcord*, which contains 1.016.000 words taken from academic texts to teach learners frequently used academic English words. In their study, examples were, firstly, presented to the learners in concordance lines, which were then followed by a series of tasks/activities to ensure that the learners used the targeted items correctly and appropriately. Though learners were initially startled by the cut-off sentences of one-line concordances, both learners and teachers later admitted that such tasks based on corpora helped them to gain ‘helpful, very different and innovative’ (p. 277) insight into vocabulary development. Thurstun and Candlin (1998) therefore argued that the rich language context obtained by corpora, especially when the words are studied or exercised, gives learners ‘considerable opportunities’ (p. 278) to broaden both their lexical knowledge and/or grammatical awareness.

Koosha and Jafarpour (2006) investigated the role of DDL and concordancing materials in the production of collocation of prepositions by English-major Iranian learners (n=200) in three different universities. The participants were divided into two groups, and related to prepositions and their collocational patterns while one received traditional instruction, the other, DDL-based instruction. The results showed that learners receiving DDL instruction outperformed those in the traditional group, which thereby further showed that DDL had a greater “explanatory power” (p. 202) compared to traditional ways that teachers generally use in the classroom.

In another study, Binkai (2012) conducted a study on vocabulary learning using concordancers of a corpus (New College English Corpus and BNC). Then, to measure how much learners enjoyed corpus-driven vocabulary learning, Binkai gave a questionnaire to Chinese learners (n=87). The results showed that a large majority of learners either enjoyed (66.7%) or liked (29.8%) learning vocabulary using the corpus. When compared to traditional ways, this time many learners found corpus-driven way helpful (54%), although some (24.2%) argued both ways are similar. In addition, although some learners sometimes “felt dull and lost the interest” (p. 135), a large number (94.2%) still reported that their vocabulary knowledge improved to a greater extent, as ‘concordancing lines are of great help in discovering the collocation, colligation and prosody of the search word’ (p. 135).

More recently, Quinn (2014) investigated how third-year tertiary learners (n=58) in an intermediate-level EFL writing course used corpora for the purpose of self-correcting teacher coded errors. After five-class introduction to general corpus usage, the learners revised texts familiarizing themselves with the process. The questionnaire data showed that the use of corpus as a learning activity helped learners to ‘write more naturally’ (p.173).

Author 2 (2015) researched the effectiveness of a corpus program (COCA) on vocabulary development, assigning some learners (n=20) into the corpus group, others (n=20) into the control group. In an-eight-classroom hours of instruction, to learn 23 target unknown words (measured by a word recognition test prior to instructions), while learners in the corpus group were exposed to concordance lines, those in the control were engaged in traditional vocabulary activities such as finding synonyms, antonyms, etc. The word recognition test showed that the corpus group scored significantly more than the control group; interviews that learners enjoyed learning by the corpus program as it provided them words in “repetitive context” (p. 2630).

Several studies have showed that corpus-based programs and/or DDL is effective on the development of grammatical features (e.g., Boulton, 2009; Smart, 2014; Lin & Lee, 2015), lexis (Thurstun & Candlin, 1998; Binkai, 2012), writing skills (e.g., Quinn, 2014), collocation analysis (Frankenberg-Garcia, 2012), and error-correction (Gaskell & Cobb 2004). But it is still rare to find data about what corpus studies call for the language classroom pedagogy and what teachers do in the classroom (Mukherjee, 2006). More important, a large body of research

remained limited to tertiary education (Chambers, 2007; Braun, 2007). This present study therefore seeks to find, but not limited to, the answers of the following research questions:

RQ1: What do high school learners think about corpus-assisted vocabulary learning activities?

RQ2: How much do those learners feel satisfied with corpus-assisted vocabulary learning activities?

## THE STUDY

### Setting and Participants

This study was carried out at an international high school in Istanbul at the beginning of fall term in 2015-2016 academic years. At the school 350 learners from approximately twenty nationalities were studying from kindergarten to Year 12. The school was a high-tech school, having technologically equipped classes as well as two computer laboratories. The learners were taking more than six hours of English classes, all taught by native American teachers. It was Year-9 learners (N=30) with ages ranging from 13 to 14 (from 11 nationalities) that were conveniently chosen for the study. Prior to the study, the main research goal was explained, and confidentiality was assured. Then, learners were asked to sign that they agreed to participate to the study used for research purposes and possible publication. Except for two students, all were happy to sign and to participate. And as another two missed the instructions, it left 26 learners, of whom sixteen were males (61.5%); ten were females (39.5%).

### Selection of the Target Words

The school curriculum followed Cambridge International Education (CIE), and the school chose an upper-intermediate English course book for learners at the level. To determine the target words, Michigan Proficiency Vocabulary Test (ECPE C2) with 50 vocabulary items was given, according to which words known at and above 7,7% were excluded, leaving at the end 4 target words (see figure 1 as a sample) to be taught by using corpus-assisted vocabulary learning activities (see sample activities below).

words	Correct answer	%	words	Correct answer	%
proponent*	0	0.0	painstakingly	2	7.7
dispel*	0	0.0	voraciously	2	7.7
denigrate*	1	3.8	curb	3	11.5
vie*	1	3.8	adept	3	11.5
crease	2	7.7	looming	5	19.2

Figure 1. The selection of the words (with asterisk) below 7, 7 per cent.

### Instructional Treatment

After the target words were selected, learners were initially trained on how they could take advantage of corpus-assisted vocabulary learning activities. To illustrate, learners were first introduced to British National Corpus – a free-to-access online database containing 100,000,000 English words, and then given some information about how they could search and use themselves concordance lines to learn the meaning of unknown words.

After training was completed, learners were handed out vocabulary activities prepared using concordance lines and following those in Thurston and Candlin (1998) – all prepared to expose learners to the targeted four words in two intact regular classroom hours. Throughout the instructional period, learners received same number and type of activities for all four of the words. They were, for instance, asked to have a look at the concordances and to “familiarize” themselves and to practice at the end (see sample activity types for the word “vie” below).

*Activity 1.* Concordance lines to guess the meaning of the word “vie”

LOOK		
Read the sentences below and try to infer the meaning of the target word.		
carefree surface bitter enmities stir. Factions at the Evercourt	vie	for the favour of the Queen. Old rivalries are barely submerg
let her out canvassing?) They ask these wives, who dutifully	vie	with one another in supportive dullness, many questions, and
rents as an excuse to throw a party, during which they would	vie	with each other in largesse, showing off their wealth as well :
re to fix the eye. Symbols and echoes of celebrated canvases	vie	with original designs and lush flourishes to create an aesthete
urants. Spanish, Chinese, French, Indian, and McDonalds all	vie	for attention against English-run establishments. For those de

*Activity 2. Concordance lines to familiarize learners with the word “vie”*

FAMILIARIZE						
Read the concordance lines again and decide which of the following sentences are true.						
To vie	involves	competing	TRUE	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
To vie	involves	hoping	TRUE	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
To vie	involves	contending	TRUE	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
To vie	involves	striving	TRUE	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
To vie	involves	sleeping	TRUE	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
To vie	involves	criticizing	TRUE	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
To vie	involves	supporting	TRUE	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
To vie	involves	struggling	TRUE	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
To vie	involves	challenging	TRUE	<input type="checkbox"/>	FALSE	<input type="checkbox"/>

After learners were familiar with the meaning of the targeted word, they were given further activities to consolidate the use of the word, for instance, “vie”. Therefore, they were strongly advised to look at the concordance lines, and encouraged to be more careful about the language surrounding the key word. To make them practice, activity 3 was given, and asked learners to decide whether “vie” goes with “for” or “with” by getting help from the activity 1.

PRACTICE		
Find the missing word. Use either “vie for” or “vie with”.		
me apparent whether the case of Ian X was unique. # Landlords		vote of Tweeddale tenants # By William Chisholm # SCO
in character'. It expected that Scott would produce a building to		his great designs abroad and concluded with the hope that'
oint an unrepresentative number of Tories for Scotland. # Rivals		control of home rule campaign # By Joanne Robertson and
# Rosa' Ballerina', pink sidalcea, blue catananche and begonias		attention Along the hedge that backs onto the lane is a mag
pronouns -- or rather, they are created by the pronouns. Critics		each other in discovering the dominant qualities of the Son
a concluded.' Given the acrimony between the parents who both		the children's affection and blacken each other' s character
from the full body to three lone penises (gilded). These examples		other reminders of some of the more arcane uses to which

*Activity 3. Concordance lines to practice prepositional uses of the word “vie”*

After learners were familiarized with filling gaps, or confirming the meaning of the words doing true/false activities, to increase their familiarity further as in Thurstun and Candlin (1998), matching exercises were given as well (see activity 4).



*Activity 4. Concordance lines to match parts of sentences using the word “vie”***PRACTICE**

**Draw lines matching parts of the sentence on the left hand side with the appropriate part on the right using “vie for” or “vie with”.**

g to convince herself that she is still young and nubile enough to		a strategic yet friendly investment in Jaguar. That would c
ated. Their first attempts to invent an anti-hero strong enough to		each other to advertise their copious offerings of wine. To
y sloshed, and you stay that way longer. No wonder the airlines		the title Miss Golden Gate. In last summer's run, actress L
es is ambitious. A more likely scenario is that GM and Ford will		the popularity of Tarzan and Superman, and soft enough t

In the final group activities, learners were asked to write sentences using the target word such as “vie”, generally either creating a new sentence (activity 5) or paraphrasing the sentence (activity 6), so that they could produce a sentence using and testing their knowledge of the target word as well as noticing their different forms and meanings thanks to the earlier activities.

*Activity 5. Supplementary words to produce a new sentence using the word “vie”*

<b>Read the following expressions and make up sentences using “vie for” or “vie with”.</b>				
Samsung	mobile phone	Apple	10 years	best
.....				
Mercedes	BMW	market	car	comfortable
.....				

*Activity 6. Rewrite the sentences using the word “vie”*

<b>CREATE</b>
<b>Use the words you have learnt in this exercise. Read the following sentences and rewrite them using “vie for” or “vie with”.</b>
GPs were encouraged to compete for more patients by offering higher standards of care
It was encouraged that .....
A welding machine designed and produced by Jua Kalis is beginning to compete with the conventional, imported Japanese product
.....

With these series of activities as suggested by Thurstun and Candlin (1998), instructional period was completed, pushing learners into being engaged in corpus-assisted vocabulary activities based on the following processes as “look”, “familiarize”, “practice”, and “create”.

**Data Collection Instruments and Procedure**

As soon as the instruction was over, to explore learners’ perceptions related to corpus-assisted vocabulary learning activities, three data collection instruments were used: reflection papers, semi-structured interviews and persona evaluation scale – all were to triangulate “the validity and reliability of the information” (Johnson, 1992, p. 146). In

the reflection paper, learners were asked twice immediately after classes to write what they thought about corpus-assisted vocabulary learning activities, how they found concordances to learn vocabulary, and whether the activities sufficed to develop their vocabulary knowledge. They all wrote.

In addition, a persona evaluation five-point Likert scale (Fig. 2) was developed to explore how much learners felt satisfied with doing the activities, changing their responses from the least satisfaction level (1= Not at all satisfied) to the most satisfaction level (5= Extremely satisfied).

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1	2	3	4	5
not at all satisfied	slightly satisfied	moderately satisfied	very satisfied	extremely satisfied

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Fig. 2. A persona evaluation scale to measure learners' level of satisfaction

Finally, to collect further qualitative support, 10 learners were randomly selected for semi-structured interview sessions – all were conducted immediately after classes meeting with learners individually in an office at the school and showing learners the activities done in the classroom to remind them. It was semi-structured interview, because it was thought for the study to be 'less rigid' (Mackey & Gass, 2005, p. 173) and the interviewer (the first author) could use a series of written questions to guide him on the one hand, and could feel free to probe into new topics. Some of the main questions, however, addressed in the interviews were as follows:

1. How effective did you find corpus-assisted vocabulary learning?
2. What did you like and dislike most?
3. Did you learn or not? Why?
4. How did you feel when you were doing the exercises?

### Data Analysis

To analyze the qualitative data, a grounded approach (e.g., Glaser & Strauss, 1967; Dörnyei, 2007) was adopted for the analysis of learners' comments collected from reflection papers and of those transcribed from the interviews. According to this approach, the collected data was first analyzed by open coding, an 'interpretive process by which data are broken down analytically' (Corbin & Strauss, 1990, p. 12), followed by axial coding, where the researchers associated the categories with their subcategories and analyzed the relationships among categories, and lastly, by selective coding, where one or more core categories were selected to generate main theme that linked the categories. In the analysis stage, between the researchers some discussions were made for whether to add one more theme to the found already (see the themes found below); but thanks to "peer debriefing" sessions occurring 'between the evaluator and a "disinterested peer" (*author's quotations*) concerning the evaluation findings, conclusions, and tentative hypotheses' (Lynch, 1996, p. 67), the disparities about the inclusion of a possible theme were negotiated and resolved. As to the analysis of persona evaluation scale, descriptive statistics were run; namely, percentages of learners' responses were calculated.

## RESULTS

### Results – Interview and Reflection Data

According to the analyses, five common themes were explored, all describing corpus-assisted vocabulary learning activities: Innovative, autonomous, easy and fun, practical, and complex.

#### Innovative

It was extracted from both reflection papers and semi-structured interviews that learners had their best interests at heart about corpus-assisted vocabulary activities, notably pointing out that they had never used before such a learning tool as corpus to assist them to develop their vocabulary knowledge in English.

Many learners (n=15) stated that they found corpus and concordance a new and a useful vocabulary learning equipment. Some, for instance, specifically stated that

“Concordance helped me know how to expand my knowledge and vocabulary in ways I didn’t know about.”

“It was very effective and new because it changed the way I learn words. It was very helpful.”

“It is really good if you need a sample sentence to help define a word. It is original.”

“Concordance will be very useful in the 21<sup>st</sup> century when people need to learn new things from computer. And this tool is very new to me.”

### **Autonomous**

Concordance lines, searching for words, guessing meanings, confirming/disconfirming the hypotheses – all helped learners to work either individually or in pairs, and to feel more responsible and more autonomous and more independent about their learning, which might not have been attained easily by doing traditional vocabulary learning activities. Learners’ responses (n=17) showed that corpus-based activities enhance autonomy, some of which are given as follows:

“This method is probably the best way of learning because it is very understandable and can be done anywhere at home for instance by yourself.”

“From now on it is my favorite method of learning a new word. I will use this method next time I learn a new word.”

“I found out that there is a new website (BNC) where I can search and learn new words by myself.”

“It helped me to gain great personal initiative. I started learning by myself.”

“I think upper intermediate learners should take charge of their own learning; therefore, I liked this type of activities.”

### **Easy and fun**

The learners also had a lot of fun doing corpus-assisted vocabulary activities. For instance, a large majority of learners (n=24) expressed that they enjoyed concordance lines and related activities. However, similar number of learners still argued that without training, the concordance tool and/or activities would be meaningless and dull. Some specific expressions were as follows:

“I had a great fun doing the activities, searching in the lines and trying to understand the sentences.”

“It is really hard to understand unless you have a tutor. Without anyone to help you, it is very hard to use it.”

“I felt smart while I was doing the exercises. I learned a new word in a few minutes without struggling because it is easier to use rather than a dictionary where you have to look through all those pages.”

“I felt weird since I didn’t understand what they were about but I later understood what they were about and I enjoyed it.

“I felt great and energized as if I drank two large cups of coffee.”

### **Practical**

Learners grasped not only the meaning, but also use of the words. Specifically, they learned collocations; that is, knowledge of how words are essentially combined to build blocks of words. Some learners (n=12) similarly stated, for instance, that

“I liked concordance lines because it helped me improve my English, especially my knowledge of words going together in the sentence. It was simple”

“It gave me great opportunity to practice not only the meaning of new words but also the structure of sentences, tenses, and sentence context.”

“It was an efficient or practical way to use these daily new words in the activities rather than using traditional ways to know their definition.”

“Doing corpus-based activities was very workable for me. They were doable.”

### **Complex**

Although a large number of learners favored corpus-assisted learning activities and liked learning vocabulary doing these activities, almost all learners (n=21) still argued that concordance lines, generally in abbreviated or in an uncompleted form, made it difficult for them to understand the real meaning of the sentence, given further the fact that the sentences in the corpus were collected spoken and written data from native speakers of English. In other words, they found these halved sentences confusing. It was confusing, because learners could not bridge the meaning lying behind the word targeted and that in the front, which led many learners to spend much more time than expected. Some statements are as:

“Many distinct sentences are shown, which overstressed me.”

“It is really hard to find the one you are looking for in the sentences.”

“Sentences were a little bit difficult for me to interpret.”

“I can’t combine the meaning in the sentences.”

“These sentences or words are not for me, they are for native speakers. I paid great effort to understand them.”

### **Results – Persona evaluation scale**

Persona evaluation scale was additionally given to explore how much the learners were satisfied with corpus-assisted vocabulary activities. Only percentages of responses were calculated to find out learners’ satisfaction level. According to the results, it revealed that with corpus-assisted vocabulary learning activities

- 69.2 % of the learners (n=18) were extremely satisfied
- 19.2 % (n=5) very satisfied
- 11.6% (n=3) moderately satisfied

Although a large number of learners (n=21) both wrote in their reflection papers and stated in the interviews that concordance lines caused remarkable difficulty or complexity for them to grasp words or the meaning of the whole sentence, they nevertheless did not show any level of dissatisfaction in the persona evaluation scale. That is, all learners were found satisfied enough with the activities prepared using corpus although the activities were still argued to be difficult, or sometimes complex. To conclude, the results of the satisfaction scale corroborated those of interviews, and reflections of learners.

### **DISCUSSION**

As can easily be noticed from the design of the study, this research set out to explore learners’ perceptions of and attitudes to corpus-assisted vocabulary learning activities, not their effectiveness on vocabulary development in

second language. Data gathered by reflection papers, interviews, and satisfaction scale showed us that learners favored corpus-based activities when learning or discovering the meanings of new words to them, describing the activities with the words as “innovative”, “easy and fun”, “practical”, and “explorative”. Namely, not only did they state that they liked doing the activities, but claimed that they wanted to use corpus in the future when learning new words.

Being an “innovative approach” (Thurstun & Candlin, 1998, p. 277) to second language vocabulary development and providing “a rich experience” (ibid.: p. 277) with multiple examples of words, word groups or collocations in authentic examples, corpus-assisted vocabulary activities helped learners in this study both discover the meaning of the new words and notice different uses of targeted words in different sentences. Schmidt (1990) argued that ‘noticing is the necessary and sufficient condition for converting input to intake’ (1990, p. 129), which might be done only ‘when the demands of a task focus attention on what is to be learned’ (ibid., p. 129). As many learners (n=17), for instance, pointed out that they felt more responsible about their own learning because the activities encouraged them to do further research, they noticed many more different uses of targeted words in the sentences, which may lend support to Schmidt’s (1994) noticing hypothesis.

Authenticity is also an important matter of fact that teachers should consider well, which, according to the results of this study, was achieved by corpus-assisted vocabulary learning activities as with the results of the earlier research (e.g., Gilquin & Granger, 2010; Yoon, 2011). Authenticity appeared, because the more learners were engaged in doing the activities, the more they were exposed to the real uses of the targeted words in authentic sentences either written or spoken by native speakers of English, thus helping learners to notice and practice words in their real uses and in their different forms (e.g., Frankenberg-Garcia, 2014; Leel, 2011). This finding was encountered in the interviews made with the learners, arguing for instance that “*it helped me greatly broadening my vocabulary knowledge in a correct and original way*”, “*it enabled me to produce sentences from the original sentences*” and “*I learned how native speakers used the words in sentences*”. Teachers should therefore think about the degree of authenticity of the materials that they take into their classroom, and seek for much better ways to operationalize authenticity, or to incorporate corpus into material development.

In addition, corpus-assisted learning activities were found to enhance autonomy of the learners, as they found many opportunities ‘to control their own learning’ (Binkai, 2012, p. 135) or to study in pairs working out the meanings of the words. As learners were more engaged, they were more motivated to learning words using a new tool, and by doing so with higher motivation learners gained an ability to become autonomous or an ability to exercise autonomy (e.g., Cotterall, 2008; Wenden, 1991), which Holec (1981) defined as “the ability to take charge of one’s own learning” (p. 3). Given that in today’s classroom as learners generally have smart phones, teachers could take advantage of mobile learning preparing corpus-assisted activities; learners, therefore, may not be restricted to school or classroom only. For instance, one of the learners stated similarly in the interviews that “*I am definitely going to use this tool at home while learning new words. This refreshed my mind on learning new words and collocations.*”

Despite having reached its results by qualitative data collection instruments, the present study can still get support from the similar results of the quantitative studies in the literature. For instance, Geluso and Yamaguchi (2014) asked Japanese learners (n=30) at tertiary level to search for words and phrases using a corpus tool named as Corpus of Contemporary American English (COCA), and their results from a questionnaire, interviews, and reflection blogs showed that although having some “reservations” (p. 240), the learners still stated that they liked using corpora, and described it as “a good tool” (p. 240). Author 2 (2015) likewise reached similar conclusions about the effectiveness of using corpora for vocabulary development, finding out that learners exposed to corpus-based instruction performed much better on the word recognition test than those receiving traditional instruction. In another study, Çelik (2011) used two instructional types, namely comparing corpus to online dictionary use, involving 68 learners at tertiary level, to teach ten collocations in five sessions. Pre/posttest results showed that learners receiving vocabulary instruction through corpora remembered much more than those engaged in online dictionary use.

The use of corpora has been confirmed not only in teaching vocabulary (e.g., Thurstun & Candlin, 1998; Çelik & Keser, 2010) or grammar (e.g., Lin & Lee, 2015), but in developing language skills as well. For instance, Yoon (2008) defined corpus a tool serving as a “meaningful reference” and/or as a “catalyst” (p. 44) to mediate learners in

their writing, and to enhance learners' awareness especially related to "common usage and collocation in writing." (p. 44).

Nevertheless, such type of corpus activities was not without problems. One potential weakness was that learners are more likely to be confused by physical appearance of concordancing lines (Lamy & Klarskov Mortensen, 2007). At first sight, although the learners in this study were trained about concordances, they could not develop immediate strategies to further their vocabulary knowledge. Nor could they extract instantly the real meaning of the targeted word, either because of the complexity of the words or because of the halved sentences. Therefore,

- teachers should bring specifically prepared and carefully selected sentences into the classroom.
- complexity, difficulty, and abstractness of the words should be well thought when preparing corpus-assisted vocabulary activities.
- corpus-based activities should not be the single source of activity; they should be, rather, given whether to provide a fresh start or to meet learners' needs.
- strategy training should be given to learners as to how they can manage to establish the meaning of the sentence or to guess the meaning of the word.

The role of emotions and psychological factors in language learning processes, or affective aspects, have been investigated in recent years (e.g., Brewer, 2010, 2013; Dewaele, 2011). Individual learner differences such as motivation, learner beliefs, attitudes, personality features, and identities (e.g., Soruç & Griffiths, 2015, Dörnyei & Ushioda, 2009) – all these can be related to affect, or emotional level of learners. This situation was also found in the responses of learners gathered by persona evaluation or satisfaction scale, according to which *all* learners were found satisfied with corpus-based activities prepared for the instructional classes. Surprisingly never did a learner state that s/he was not satisfied with the activities. It was due to the fact that the learners felt satisfied, they approached to the activities in a positive manner.

Even though this study was conducted in an EFL setting, the following implications can still be useful for both EFL and ESL learners or teachers.

- Language teachers should find ways to enhance learners' autonomy to make learners use their own potential.
- Excessive or repetitive usage of concordance lines can make learners bored; the instruction monotonous (Thurstun & Candlin, 1998). Therefore, learners' needs should be thought carefully.
- Different ways to mobile learning could be sought, as it can be found simply in today's classrooms.
- Gilquin & Granger (2010) claims the reason why teachers do not benefit from corpus assisted language learning is that they do not know how to take advantage of corpora. Teachers could be trained as to how they can use corpus effectively in the classroom, so that they can have corpus pedagogical knowledge.
- Proficiency level of learners should be carefully considered when preparing or using corpus-assisted vocabulary learning activities. It would be much more efficient in the upper-intermediate and advanced levels.

## CONCLUSION

Although this study is qualitative, having aimed to explore learners' qualitative perceptions of and attitudes to corpus-assisted vocabulary learning activities, and its results are limited to the data collected from one setting in a short instructional period of time, its findings are still consistent with those in the literature (e.g., Thurstun & Candlin, 1998). All learners were found satisfied with the activities; a large majority found the activities innovative, easy and fun, and practical. Although learners were puzzled by the concordancing lines at first sight, they still liked doing the activities on their own. Future research studies can still be carried out to further investigate, if any, greater effectiveness of corpus-assisted learning activities on vocabulary improvement designing more controlled experimental groups.

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## USING DISTANCE LEARNING METHODS FOR INCREASING GEOGRAPHICAL INFORMATION SYSTEMS UTILIZATION CAPACITY

Saye Nihan ÇABUK  
Earth and Space Sciences Institute  
Anadolu University  
Turkey  
sncabuk@anadolu.edu.tr

Saffet ERDOĞAN  
Afyon Kocatepe University  
Turkey  
saffet\_erdogan@hotmail.com

Alper ÇABUK  
Earth and Space Sciences Institute  
Anadolu University  
Turkey  
acabuk@anadolu.edu.tr

### ABSTRACT

This paper aims to give information about the distance education based project performed collaboratively by Anadolu University, Afyon Kocatepe University and Ministry of Environment and Urbanisation, in order to increase and disseminate the utilization of Geographical Information Systems (GIS) in Turkey. The first phase of the project focused on raising and training GIS personnel in the Ministry and was completed in 2015. To fulfil this aim a distance education based GIS training model was developed and used for the online training of 650 personnel. Besides, an open courseware portal and course management system, as well as open courseware, training data and application courses were developed. The second phase comprises the organisation of further and more comprehensive online trainings for the managers and technical personnel within the Ministry and is supposed to be conducted in 2016. The experiences presented in this paper is also considered as a significant massive online open course (MOOC) example, which is utilized by a governmental organization for the dissemination of vocational trainings.

**Key words:** MOOC, Distance Education, Geographical Information Systems, Vocational Training

### INTRODUCTION

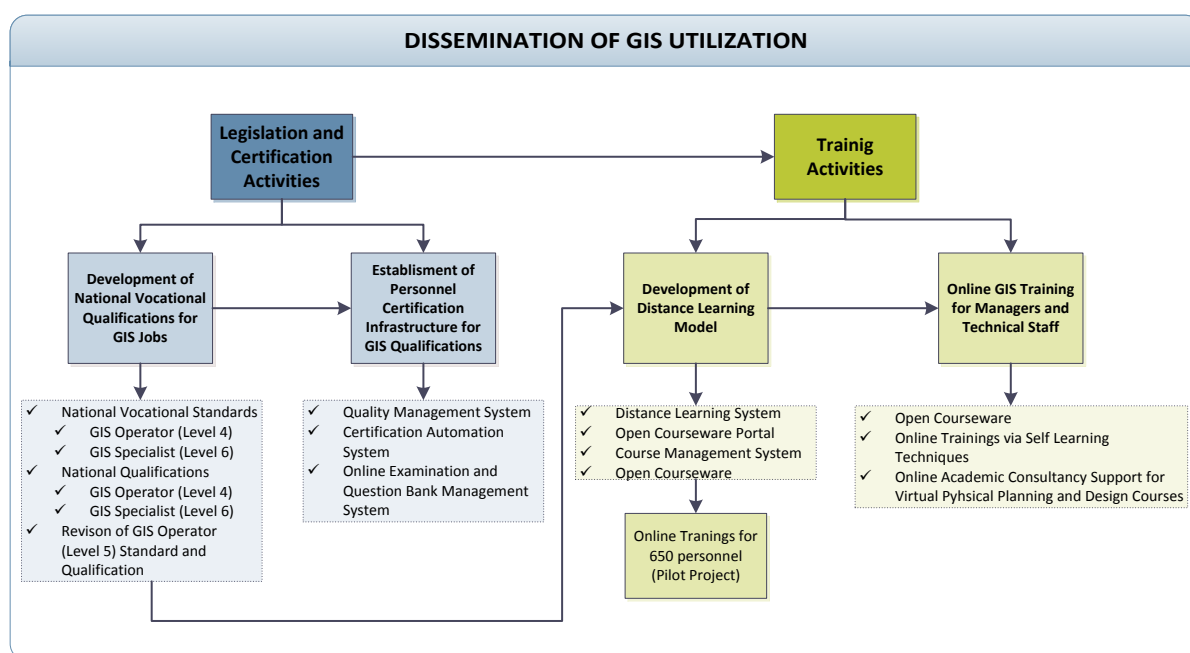
Distance education first emerged to provide learning opportunities for the people unable to attend face-to-face learning environments (Beldarrain, 2006, p. 139). It started with the correspondence courses for vocational training in 1852 in the USA and gained academic recognition in 1892 when the University of Chicago launched its college-level distance learning program (Casey, 2008, p.45-46). The advancements in information technologies, easy access and communication opportunities have expanded distance education in a wide range of fields as a preferred type of training (Çabuk et. all, 2013, p.231; Saba, 2005, p.257). Major concerns such as access and quality control have also been overcome with the development of theoretical foundation and practical understanding of distance education (Garrison, 1993, p. 9). Thus, distance education today has globally become the most essential media education and training. Deperlioğlu and Yıldırım (2009), specify that electronic learning (e-learning) is of great significance for not only academic institutions, but also small and medium sized enterprises which aim to continuously improve the information and experience levels of their personnel (p. 62). Within this context, distance education methods promise effective solutions and enormous opportunities to create training environments for the employed personnel, who are in need of developing their vocational skills and competencies. GIS related vocations are amongst these worldwide. Having been initially developed as a tool for the storage, retrieval and display of geographic information (Rogerson and Fotheringham, 1994, p.3), GIS have rapidly evolved and become an inevitable asset in a wide range of applications and processes, from comprehensive scientific projects to routine and simple operations. This fact, eventually revealed the need for both academic and vocational GIS education/training programs to raise qualified professionals and staff. Çabuk et. all (2004) underline that the spread of GIS courses at different levels in Turkey, especially among the universities is not enough to meet the qualified GIS personnel need in the sector. Moreover, most of the personnel already working in the governmental organizations, who are charged with the responsibilities to perform various GIS related works, lack sufficient knowledge and competency. Therefore a comprehensive education/training program that is compatible with national vocational standards and qualifications, especially

for the mentioned personnel is of great importance to increase the GIS utilization capacity. Regarding the current advancements in technology and the access opportunities, distance learning methods are considered the most suitable solution for the vocational training of the employed GIS personnel. In this respect, the distance education based project focused on the dissemination of GIS use and training of qualified personnel in the public institutions will be presented in this paper.

### THE PROJECT SCOPE AND OBJECTIVE

Urban spaces are the locations where the interaction between geography and people are most intense. The most complicated relations are seen in the urban spaces with the most intense data flow and assessments. Urban population density; distribution and quality of health, education, transportation and cultural services and access to these opportunities determine how liveable the cities are. All branches of science aim to make lives of human beings more relaxed, comfortable, and safe. In that sense, the positive contributions of GIS technologies are abundant in increasing the urban life quality. Consequently, GIS technologies are of great importance in understanding the environment and environmental characteristics for healthy realization of physical designing and planning processes, especially in countries like Turkey, which develops very rapidly and where there are high levels of urban investment and spatial changes. However, the establishment, execution and updating of these systems are only possible with the personnel qualified in this field. Unfortunately, the number of qualified technical personnel with GIS knowledge and skills is inadequate both in public and private sector in the country. Besides, there is a need to employ 15.000 personnel in the Turkish GIS sector in the short term (Çabuk and Çabuk, 2015, p.3; Oflaz et. all, 2013, p.1). This reveals the necessity of the development of vocational standards and qualifications related to GIS jobs, as well as providing education and training activities in the field. The rapid developments in GIS technologies also necessitate the use of efficient and continuous training opportunities so that the GIS personnel are periodically trained on the advancements and innovations in the sector.

In that sense, all sorts of trainings delivered on GIS will undoubtedly contribute greatly to the development of human resources qualified in GIS; thus it will be possible to improve the municipality services in the country. At that point, development of distance training programs on GIS to improve the level of information and skills of the personnel working in the institutions is a requisiteness, as the face-to-face type training is not possible for most of the personnel by means of access and duration. From this point, the Ministry of Environment and Urbanization started an extensive project with the cooperation of Anadolu University and Afyon Kocatepe University in 2014. The main project comprised two essential scopes, respectively legislation and certification activities (development of national vocational standards and qualifications for GIS jobs, development of vocational certification system etc.), and training activities (Figure 1).



**Figure 1:** The Project Components of Dissemination of GIS Utilization and Capacity Project

Being the theme of this paper, the training activities of the project include the following stages:

- Development of a distance learning supported model to disseminate the use of GIS
  - Development of open training courseware course
  - Development of open courseware portal
  - Development of course management system
  - Delivery of an online training to 650 personnel in the central and rural organization of Ministry of Environment and Urbanization
- Online trainings for the managers and the technical personnel of the Ministry
  - GIS Awareness raising trainings for the managers
  - Utilization of self-learning techniques via open training courseware on the portal
  - Providing academic consultancy to the technical personnel working in physical planning and designing departments via virtual tools supported by online academic consultancy.

To sum up, main aims of the project were to generalize the use of GIS for improving the planning, design and engineering activities that shape the physical environment of our country via distance learning based training environment; besides performing research and development for the learning media and material, delivery of necessary trainings, preparation of standards, qualifications and legislation for personnel certification, and working on the certification audit and the online examination systems. Within the project, a virtual learning supported GIS training model based on individual learning media and necessary learning tools have been developed.

## **DISTANCE LEARNING BASED TRAINING ACTIVITIES FOR GIS**

### **Development of Distance Learning Model and Pilot Online Training Activities**

This stage of the project were completed in 2015. In line with the aim of the dissemination of GIS use, this project presents a methodology which ensures the training of technical staff, who take an effective part in decision-making and design processes, on GIS. With this virtual training based methodology, it was aimed to set the basic framework and standards for the preparation of open courseware as well as to provide an inclusive basis for processes such as distance learning portal and simultaneous academic consultancy. It is clear that it is nearly impossible to convey such educational attainments face to face, considering the fact that there are tens of thousands personnel working on this field in various public institutions such as municipalities, local governments, central and provincial bodies of the ministries in Turkey. In this regard, in cooperation with Anadolu University, which is one of the largest universities in the world with the experience of distance learning and training technologies with over two million students, a model was developed in an effort to disseminate GIS training with distance learning technologies.

Within the scope of this stage, a web-based training portal and a training management system were developed as a distance learning model (portal). The system includes both virtual classes for academic consultancy (accessible with a user code and a password by the trainees), and self-learning capabilities for the trainees (Figure 2 & Figure 3). The model comprised;

- design of the process, model structure and the content,
- determination of the courses (modules) and their context in accordance with the basic knowledge and skills presented in the GIS Experts and GIS Operator vocational standards and qualifications,
- preparation and development of open courseware such as videos, vocalized powerpoint files, pdf and word documents, sample test questions, designed applied trainings and relevant application data and homework,
- development of an open courseware portal and
- development of a training/course management system.



Figure 2: Self-learning applications



Figure 3: Academic consultancy applications

After the completion of the system, online trainings for 650 designated trainees from 81 provinces in the country were conducted during the four-month time period. Training was composed of six basic modules (courses) as follows:

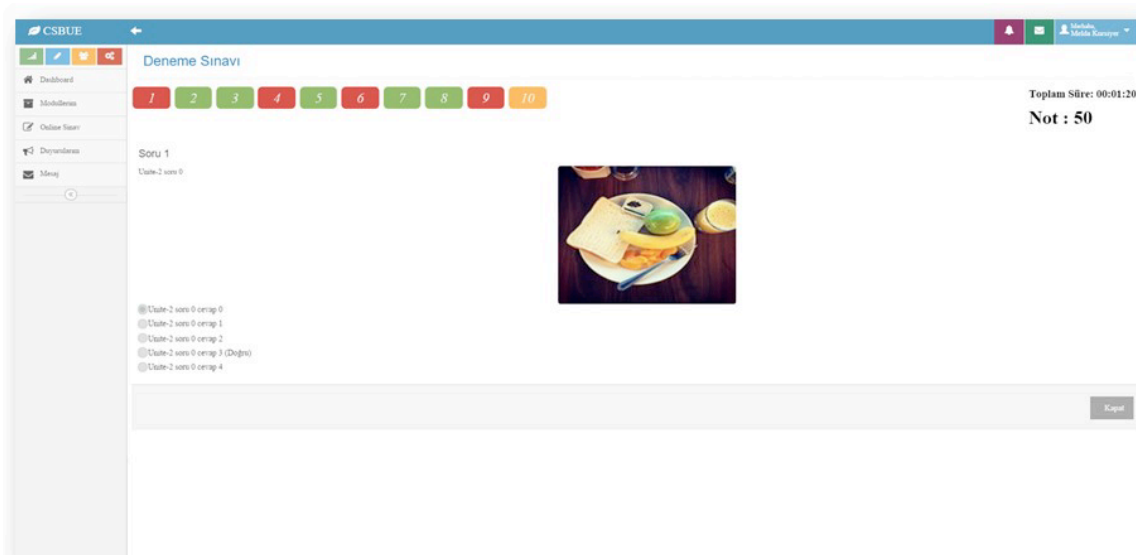
- Introduction to Surveying and Computer Aided Mapping
- Computer Aided Mapping
- GIS
- Database Applications
- Remote Sensing
- Analyses and Interpretation Techniques in GIS

The trainees were supplied with the necessary application software during the training. The training and the communication among trainees were ensured by a training/course management system designed exclusively for this purpose. On the management system, trainees were able to view their module performances, participation to academic consultancy, open courseware, homework/coursework data, academic consultancy entries, frequently asked questions and answers regarding modules. At the end of each module, trainees took an exam for assessment and evaluation purposes. Those who successfully passed all modules, were awarded a certificate.

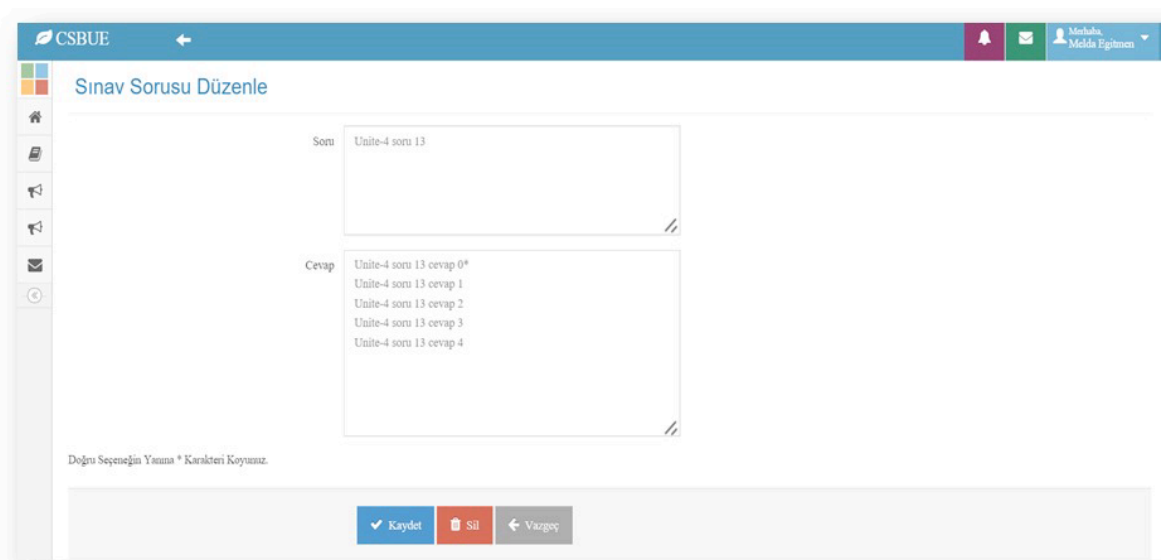
### Online GIS training for Managers and Technical Staff

Focusing primarily on the dissemination of GIS utilization within the Ministry of Environment and Urbanization, this stage of the project is planned to be conducted throughout 2016. The target groups of the project were initially determined as the managers and the technical staff working at the Ministry. However, afterwards, the distance learning model (portal) and its components have been inclusively revised and improved to enable further trainings for the civil servants and the public countrywide, and launch e-certificate programs on GIS.

The improved portal also has advanced capabilities to conduct efficient academic consultancy services, and components such as self-learning applications, open courseware portal, and training/course management system. In accordance with the characteristics and expectations of the target groups, open courseware has been updated, diversified, enriched and improved. Figure 4 and 5 illustrate sample windows from the software, respectively online examination application and test question writing modules.



**Figure :** Online examination module



**Figure 5:** Test question writing module

Regarding the online GIS training for the managers, which is aimed at the awareness raising on GIS and its capabilities, the pilot application will include the below listed courses. The awareness raising trainings is supposed to be performed with the participation of 400 administrators designated by Ministry of Environment and Urbanization, simultaneously in all 81 provinces via training/course management system on the open education materials portal. Training is planned to last for 2 (weeks) and will be conducted by online academic consultancy at least an hour a day. Enrolled personnel will register online.

The courses for the managers are as follows:

1. Introduction to GIS
2. GIS Applications in Geology
  - a. Geophysical Applications
  - b. Geological Applications
  - c. Hydrogeological Applications
  - d. Geotechnical Applications
  - e. Geodesic Applications
3. GIS Applications in Agriculture and Forestry
  - a. Agricultural Applications
  - b. Forestry Applications
4. Urban Information Systems
5. GIS Applications in Disaster Management
6. GIS Applications in Environmental Management
7. GIS Applications in Planning
  - a. Urban and Regional Planning Applications
  - b. Landscape Planning Applications
8. GIS Applications in Civil Engineering
  - a. Construction Management Applications
  - b. Building Inventory Applications

As previously mentioned, the next target group, was determined as the technical personnel in the Ministry. Nonetheless, the online training context, the course content, open courseware and the system infrastructure were exclusively redesigned and developed in a manner to improve the system capacity and efficiency well enough to launch national online GIS trainings and even e-certificate programs. In this respect, e-certificate programs are planned to be provided on the open courseware portal, supported with the help of self-guided learning open courseware (videos, vocalized files, documents, sample tests, application and coursework/homework data etc.) prepared for disseminating the usage of GIS. Similar to the first phase of the project completed in 2015, the courses and the courseware has been developed in accordance with the basic knowledge and skills presented in the GIS Experts and GIS Operator vocational standards and qualifications, so that the objectives and the learning outcomes of the courses/programs are compatible with the national qualifications.

The main courses planned for these trainings/programs are as follows:

- Introduction to Mapping and GIS
- GIS Applications
- Computer Aided Mapping
- Remote Sensing
- Spatial Analyses and Computer Aided Planning
- Databases and Spatial Database Management

The dynamic structure of the system (portal) enables to create new online programs or trainings with differing content and courses, so that the changing requirements are met suitably and the qualified GIS personnel are raised.

## CONCLUSIONS

GIS is the most significant technology today, which facilitates to understand, analyze and model the Earth and its systems to create a sustainable future for both the mankind and the nature. GIS is an important decision-making tool. GIS is not only utilized for planning, engineering and design process, but also for security, logistics, and financial management, education and health applications. We use GIS to conduct global research and scientific projects. We also use GIS to determine the shortest routes between two locations on the internet or mobile applications.

Considering this enormous capacity of this technology, it is today inevitable to adopt GIS to perform public services. It is not surprising to witness that the private enterprises using GIS technologies are ahead their competitors. However, the most important factor preventing the widespread use of GIS is the fact that there is a lack of qualified GIS personnel especially in the developing countries, including Turkey. Meeting this need requires the development and application of GIS education/training programs at different levels of information and competencies in accordance with the designated GIS jobs/duties.

Considering the advancements in the technology, changing expectations and trends, as well as the characteristics of the target groups, efficient education/training systems are of great importance. Within this context, İşman (2011) specifies the significance of distance education and underlines that the distance education model has to be adopted by relevant organizations and institutions such as universities and ministries. Education and training programs must be provided for the public as well as for the employed personnel in such institutions. In this regard, it is required and significant to develop a distance learning model to train the personnel that are charged with GIS related duties and operations in the first place to ensure that the physical planning and design processes as well as other related responsibilities are conducted properly. Thus more livable, sustainable and disaster safe physical environments are created in the country.

To fulfill this aim the Ministry of Environment and Urbanization started a comprehensive project to disseminate the GIS utilization within the ministry and its subunits. One of the phases of this project includes online GIS training activities in which a distance learning model and its components have been developed with the collaboration of Anadolu University and Afyon Kocatepe University. Within the scope of the project the pilot training program was completed in 2015, and the system and the open courseware has been improved for further and more comprehensive online trainings to be conducted by the Ministry.

## ACKNOWLEDGEMENTS

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## USING THE SCAMPER TECHNIQUE IN AN ICT COURSE TO ENHANCE CREATIVE PROBLEM SOLVING SKILLS: AN EXPERIMENTAL STUDY

Omer Faruk ISLIM

Department of Computer Education and Instructional Technology  
Ahi Evran University  
Turkey

Sercin KARATAS

Department of Computer Education and Instructional Technology  
Gazi University  
Turkey

### ABSTRACT

The purpose of this study was to investigate and compare the effects of the SCAMPER technique (directed brainstorming) on the creative problem-solving skills and academic achievements of students. A group of 40 high school students were assigned to either an experimental group or a control group. The hardware components unit of an Information Communication and Technology (ICT) course was taught to all students using case-based learning (CBL), which was supplemented by the SCAMPER technique in the experimental group. Subsequent analyses showed that the SCAMPER technique had a significant effect on the creative problem-solving skills and academic achievement of students.

**Keywords:** Improving classroom teaching, interactive learning environments, pedagogical issues, secondary education, teaching/learning strategies

### INTRODUCTION

The digital age demands technology-competent individuals with creative thinking and problem-solving skills who are also empathetic, collaborative, and able to interpret and use data instead of simply memorizing it (Squire & Dikkers, 2012; Beyers, 2009; Head Council of Education and Morality, 2005). Of these many attributes, one is the most emphasized: creativity (Loveless, Burton, & Turvey, 2006). Creativity is defined as “the skill of solving a problem that has not been previously encountered” (Jang, 2009). Creativity is the ability to formulate, re-arrange, and re-test a hypothesis in order to solve a completely new problem.

According to Sternberg (2003), since some teachers confuse creativity with general intelligence, sufficient importance is not given to creativity in schools. Due to personal, social, and economic reasons, creativity varies from one individual to another. It is important to know how to reveal and develop this skill, which resides at some degree within everyone (Majid, Tan, & Soh, 2003). Taymaz (1995) revealed that teachers in their study believed they would lose control of their classrooms and not be able to teach efficiently if they promoted autonomy. Yet, student autonomy in the classroom environment promotes personal development and increased research, assessment, and decision-making skills. An essential function of school is to help students to make correct decisions by assisting them. Thus, a tolerant class environment should support creativity by encouraging free thinking, open discussion, and smart decision making.

Teachers can develop students' creative thoughts by supporting and rewarding different perspectives and creative connections (Beghetto, 2007). However, it is very difficult to reflect creative thinking in the classroom (Csikszentmihalyi, 1988); new ideas are often not welcomed by peers in discussion. Since new ideas represent unexpected thinking processes, they may also go ignored or unrecognized by a teacher when assessing creativity. However, finding new ideas is a creative activity in itself (Csikszentmihalyi, 1988; Rotherham & Willingham, 2009). In fact, face-to-face classroom discussions provide the ideal environment for developing the creative thinking of students.

Lumsdaine and Lumsdaine (1995) have identified problem solving as an analytic or operative process. The aim of creative problem solving is to develop high level creative, critical, and analytical thinking skills and to use these

developed skills in related processes and disciplines (Ozkok, 2004). Creative problem solving starts by questioning the nature of the problem. Students should act like detectives, seeking out possible solutions and examining evidence. Next, brainstorming begins. The technique applied should be appropriate for the size and structure of the group, taking into account time limitations, environment, and type of problem. At this stage, specific care should be taken to prevent delays in judgment when generating ideas, which should all be recorded. Application of proposed solutions requires creative problem-solving skills (Lumsdaine & Lumsdaine, 1995).

Many educational methods, techniques, and strategies promote creative and critical thinking in the classroom environment, both generally, such as brainstorming, reverse brainstorming, alternatives-probabilities-options, simulations and role playing, attribute listings, analogies, metaphors, forced associations, what-if exercises, and Janusian thinking, and specifically, such as Six Thinking Hats, Semantic Web, Idea Spurring Questions, SCAMPER, Syntectics, and Checkerboarding or Morphological Synthesis (Bonk & Smith, 1998; Barak, 2009). Another such method, case-based learning (CBL), requires the active participation of students to resolve a real or imaginary problem. During the learning process, students are expected to seek and examine information related to a given case, analyze their findings, select relevant data, devise and present solutions, and discuss options with their classmates (Kuçukahmet, 1998). CBL introduces real-life events related to specific educational issues into the classroom environment, where students analyze the events by asking why and how questions to find relationships. Thus, students obtain information while developing skills and attitudes, leading to the rapid discovery of efficient solutions (Yilmaz and Sunbul, 2003). With CBL, students have the opportunity to transfer theoretical knowledge into practice, make decisions, and develop problem-solving skills.

Strategies used to create discussion environments that increase the efficiency of CBL include workshops, brainstorming, problem solving, and cooperative learning. SCAMPER, a brainstorming technique, can be applied together with CBL, and was chosen for this study due to fun of application and a lack of studies featuring this technique in Turkey. The acronym SCAMPER stands for Substitute, Combine, Adapt, Modify/Magnify/Minify, Put to other uses, Eliminate, and Reverse/Rearrange. According to Yildiz and Israel (2002), SCAMPER is a fun, easy-to-apply technique used in developing creative thinking and offers a way out of mental blocks. It encourages creative thinking by encompassing a series of thinking processes about a single object or subject and putting discussion methods into practice. Addressing and brainstorming about a specific object requires the changing of that object (Glenn, 1997). In the technique, questions are directed toward students to encourage them to think about new aspects of the object, developing creativity and thinking skills.

The Council of Education and Morality (CoEM, 2005) of the Republic of Turkey has distinguished the necessity of information and communication technologies education in line with growth in the use of computers and computer-based information, which are perceived as symbols of the information society in Turkey. CoEM further identified the need for creative individuals who access, interpret, use, and produce new information, rather than simply memorizing facts. CoEM has suggested that individuals raised in an information society should be equipped with the skills to use developing technologies, such as accessing, arranging, assessing, presenting, and transposing information, and they should develop competencies in creative thinking and problem solving, critical thinking, empathy, and collaboration.

This course aims to contribute to students' abilities to use new technologies and adapt to a rapidly developing world. Information and Communication Technology (ICT) courses are included in elementary and high school curricula in Turkey, whether obligatory or elective, depending on the status of the school. In such courses, students produce new ideas; share knowledge; and learn, use, and develop current technologies. To this end, specific methods and techniques are incorporated to give students freedom during lessons, to provide them opportunities to participate and produce new ideas, to reinforce their communication with classmates, and to improve overall life competencies.

### **Purpose of the Study**

In today's world, where knowledge and technological developments drive the economic status of countries and creativity plays a key role in technological advancement, many countries have begun to foster the creative thinking of their citizens via the educational system. However, creativity is only a part of the creative problem-solving process. Being creative by itself is not sufficient; creative people also need emotional awareness, critical thinking skills, and developed problem-solving skills. A gap about the SCAMPER technique was found in the literature, yet it is important to assess its effects on students. Therefore, this study was designed to investigate and compare the

effects of the SCAMPER (directed brainstorming) technique on the creative problem-solving skills and academic achievement of students.

### **Limitations**

Participants of the study were 10th and 11th grade students, whose ages ranged between 16 and 18. During the 2008-2009 academic year, they were enrolled for the first time in a high school ICT course in a rural area of Turkey. The 11th grade students were assigned to the experimental group, while the 10th grade students were assigned to the control group. Due to restrictions of the educational system, students could not be mixed across grade levels, so the design of the study was quasi-experimental. The study application was limited to the elective 90-minute ICT course offered in secondary education institutions as specified by the Ministry of National Education. Both experimental and control groups were taught the same content by the same teacher.

## **METHOD**

### **Research Design**

In the implementation of this study, ICT courses taught with and without SCAMPER were compared in terms of the creative problem-solving skills and academic achievement of the students. The common pretest-posttest control group pattern was used to detect the effects of the technique, and participants were subjected to a dependent variable both before and after the application. The pretest-posttest control group pattern is a related pattern since the same people are subjected to measurement in relation to the dependent variable. In addition, it is an unrelated pattern in this instance since comparisons are made between experimental and control groups comprised of different types of participants (Howitt & Cramer, 1997). The independent variables of the study were time of testing (pre vs. post) and method (exp. vs. control); the dependent variables were creative problem-solving skills and academic achievement.

### **Participants**

The study was carried out in a rural public high school in Turkey during the 2008-2009 academic year. The 11th grade participants were the experimental group, while the 10th graders were the control group. The control group was taught the ICT lesson via CBL, and the experimental group via SCAMPER and CBL. All 40 participants in both groups were attending the ICT course for the first time. The experimental group included 20 students (8 female, 12 male) from 16 to 18 years old with a mean age of 16.8, and the control group included 20 students (7 females, 13 males) from 15 to 17 years old with a mean age of 16.2. In face-to-face interviews before the application, it was found that none of the students in either group had previously participated in any course that incorporated creative techniques, creative problem solving, or CBL.

### **Implications**

A one-week orientation session was held prior to application of the study. Both the experimental and control groups received information about the CBL process. In addition, in the experimental group orientation, the SCAMPER technique and its stages were introduced to the students and expectations and related applications were explained. The orientation concluded after the students applied all stages of the SCAMPER technique and assessed and discussed all proposed ideas. Then, both groups were given the first case for the study.

In the first case, participants were asked to act as a student who wanted to buy a desktop computer. Their task was to build the best system they could with a very limited budget. System configurations prepared by the students were examined for errors, and students were provided with the opportunity to correct mistakes. The systems compiled by the students were considered a pre-test and graded by two experts. The application of the first case lasted for two weeks. In this stage, no implementation difference occurred between groups.

In the second case, students faced an imaginary problem with their low-budget computers from the first stage: the system crashed when playing a high-definition video game. Students were asked to determine their problems and produce as many qualified and creative solutions as possible, whether drawn from hardware issues, software trouble, or pure imagination. Students in both groups used CBL to create solutions, while the experimental group also used

SCAMPER. Experimental group students wrote the SCAMPER stages on the blackboard, applied each stage, and suggested ideas.

After the implementation, each student was asked to submit an independent written proposal. The aim was to collect ideas that had not been noted in the classroom environment in order to carry out content analysis. The core of content analysis is to collect similar data related to a certain concept and to categorize and interpret them in a comprehensible way (Yildirim & Simsek, 2003). The data were summarized and interpreted via descriptive analyses and examined in detail to access concepts and relationships.

In order to evaluate students' solutions via content analysis, a rubric was prepared and revised based on information obtained from six experts. However, suggestions that were not present in the scale were encountered during examinations. Such suggestions were presented to the experts, and the rubric was expanded and re-sent to the experts for examination before determining a final version. The final rubric included solutions considered creative by the six experts that would not be thought of easily by high school students in their first ICT course.

As a post-test, students were asked to repeat the first case and build another computer system. The first and second lists were compared to assess student improvement.

## FINDINGS

An independent sample t-test was conducted to compare the pre-test scores of the control and experimental groups in terms of academic achievement. Results indicated no significant difference between the pre-test scores of the control group ( $M = 14.20$ ,  $SD = 3.33$ ) and experimental group ( $M = 13.90$ ,  $SD = 3.57$ );  $t(38) = .28$ ,  $p > .05$ . An independent t-test was also conducted to compare the post-test scores of both groups in terms of academic achievement, due to finding no significant difference in pre-test scores. Results indicated a significant difference between the post-test scores of the control group ( $M = 16.80$ ,  $SD = 1.88$ ) and experimental group ( $M = 18.60$ ,  $SD = 2.06$ );  $t(38) = -2.88$ ,  $p < .05$ ,  $\eta^2 = .18$ . Thus, the SCAMPER technique combined with CBL accounted for 18% of variance.

In addition to academic achievement, creative problem-solving skills were evaluated according to a rubric applied to students' solution suggestions. The scores of the experimental group were higher than those of the control group. An independent sample t-test was conducted to compare content analysis scores. Results indicated a significant difference between the scores of the control group ( $M = 5.50$ ,  $SD = 3.28$ ) and experimental group ( $M = 17.45$ ,  $SD = 12.27$ );  $t(38) = -4.20$ ,  $p < .05$ ,  $\eta^2 = .32$ . The SCAMPER technique can be regarded as effective based on the significantly higher scores of the experimental group students.

## RESULTS and DISCUSSION

A comparison of the creative problem-solving scores of students who were taught an ICT lesson via the SCAMPER technique in addition to CBL and of students who were taught via only CBL produced a statistically significant difference in favor of the experimental group. Therefore, the SCAMPER technique had a positive effect on the problem-solving skills of the students. An increase was observed in the scores of both groups, indicating increased academic achievement regardless of group. Thus, both instructional techniques had a positive effect on learning. However, because the difference was significantly higher in the experimental group, it can be concluded that adding SCAMPER had a greater effect on academic knowledge than proceeding with CBL alone. In addition, the computer system and possible solution lists prepared by students in the present study could be combined with other related work to create a student portfolio, which would be beneficial in terms of process evaluation and monitoring student development.

When carrying out an application related to CBL, if possible, a video of the case should be shown; if this is not possible, a demonstration of the task in the classroom would help students to better understand and analyze task-related expectations. In the present study, the stages of SCAMPER were projected on a screen. However, since it was necessary to project other images from time to time, the stages could not always be displayed. In a class where the SCAMPER technique is used, it would be more beneficial to present the stages on large cards affixed to the wall.

so that students have constant exposure and access to the process. The stages could also be printed on note cards and distributed to students individually or in small groups.

As stated above, a student's ability to be critical, creative, and innovative should be supported under the scope of educational understanding in the 21st century. However, the objective is to ensure both practice and experience with these skills, which was an aim of the current study. While experience means using a skill, practice means trying to carry it out while learning from mistakes and developing new strategies. In practice, feedback from a more competent person is required to improve (Rotherham & Willingham, 2009).

As today's educational systems try to promote creative skills to solve problems, new methods and techniques must be discovered and implemented. SCAMPER, a fun and creative brainstorming method, is one example of a technique that can be used to achieve this objective. The results obtained from the current study indicate that this technique has a positive effect on the academic knowledge and creativity of students in education. SCAMPER is an efficient and easy-to-apply technique that can be used in developing both academic knowledge and creativity, which can produce very surprising results.

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## VALUES AND VALUE ORIENTATION OF HIGH SCHOOL STUDENTS

Blandina SRAMOVA

Comenius University in Bratislava, Slovakia  
[sramovab@fedu.uniba.sk](mailto:sramovab@fedu.uniba.sk)

Anezka HAMRANOVA

Comenius University in Bratislava, Slovakia  
[hamranova@fedu.uniba.sk](mailto:hamranova@fedu.uniba.sk)

### ABSTRACT

In the presented paper, we analyze preferred values and value orientations of high school students. The research sample composed of 168 students of three high schools (99 women and 69 men). To measure values and value orientation of the research sample, we have applied the abridged version of the Portrait Value Questionnaire methodology. We've focused on the value and value orientation preferences as well as onto differences in value preferences considering gender of the respondents. We've found out that the students mostly prefer *hedonism*, *self-direction*, *benevolence*, *stimulation* and *safety*, whereas for women the most important value is *benevolence*, for men *safety* and *power* are of biggest importance. Significant difference in favor of women was demonstrated only in value orientation of *self-transcendence*.

### INTRODUCTION

According to Prunner (2002), value can be understood in its three meanings – value as a quality of things that people strive to achieve (focus onto satisfaction of human needs), value as a positive appreciation of the object of human relations (relationships) and value as a general criterion used to assess various objects. This understanding enables us to define the importance of values to a person as such and becomes a basis for the evaluation of the importance of values for the person when pursuing orientation in social context (Prunner, 2002).

The pedagogical dictionary describes value as a subjective appreciation or an importance rate that the individual aligns to certain things, phenomena, symbols or other people. Values are being adopted in the process of socialization and acculturation. From the pedagogic point of view, the most important are: youth value systems, education as a social value and values and attitudes as a part of goals and content of school education (Průcha, 2008).

After family, the school is the second most important socializing agent. Individuals establish many contacts with same-age students in the school, they get to know ways of social life, integrate in the school collective, create new value structures. Adolescence is particularly sensitive period of time for an individual to construct personal identity. Adolescent confronts his values, goals, attitudes that were presented to him by parents, school, peers or other social groups. As Andreánska a Cabanová state, students are more satisfied in a class with good relationships, what reflects in their learning activities (Andreánska, Cabanová, 2012) However in reality, we witness various problems in schools – risky behavior, disturbed social relationships in family as well as in same-age groups, disinterest in education, lack of hobbies etc. According to Kraus, currently the life passes way too fast and does not create sufficient space for continual incorporation into society, we lack necessary patterns and the whole process of social maturation reduces to practical living. This results into a fact that young people often live from one day to another, not having any long-term goals, not maintaining greater spiritual values, not spending their time valuably (Kraus et al., 2006). The aforementioned makes us pose a question, what kind of value system do high school students live up to?

### THE STUDY

#### Research goal and research questions:

The goal of our research was to find out about value preferences and value orientation of high school students considering their gender.

We have formulated following research questions:

1. What kind of value system do high school students maintain?
2. Is there a difference between values of male and female students?

#### Method and research sample:

The research sample composed of 168 students (hereof 99 women and 69 men) of 1<sup>st</sup> and 4<sup>th</sup> grade of various high school types with the average age of 17, 2 years.



The Schwartz values questionnaire (PVQ-Portrait Values Questionnaire) was used to measure the nature of represented values (developed by Schwartz, 1994). From the original 40-item methodology, we've abstracted its abridged 21-item version known as *Portrait Value Questionnaire* (Schwartz, 1994, 2003). The questionnaire consists of 21 characters of persons and the task of participants was to indicate at a 6-point asymmetric unipolar categorical scale (very much like me, like me, somewhat like me, a little like me, not like me, not like me at all), how much they resemble given portraits. Given portraits of people surveyed ten values: power, achievement, hedonism, stimulation, self-determination, universalism, benevolence, tradition, conformity, security (the value of the first order). Ten values were possible to combine into four levels higher, i.e. 2<sup>nd</sup> order – value orientations (Self-Enhancement, Self-Transcendence, Openness to change, Conservation).

## FINDINGS

According to performed measurements, the students prefer following values the most: *hedonism* (being characterized by joy and enjoyment of life), *self-direction* (necessity to stay independent, to make up new things constantly), *benevolence* (readiness to help, loyalty towards own friends), *stimulation* (characterized by excitement, life challenges, life changes, courage, turbulent and exciting life) and *safety* (own family and own nation, adherence to social order). A little less preferred were *success* (ambitions, achievement of own goals, demonstration of own competences and abilities, receiving recognition from others), *tradition* (respect, acceptance of customs and ideas anchored in traditional culture or religion, avoidance of extreme situations in life or behavior, acceptance of circumstances of life), *power* (social status and prestige, feeling of strength, tendency to order and control others, demonstration of own domination), *conformity* (control over own acts, tendencies and impulses – not to break social expectations or social norms, courteous and polite behavior, honoring parents and seniors) and the least preferable value was *universalism* (defined by understanding, appreciation, tolerance, inner harmony, society and nature protection) (Figure 1)

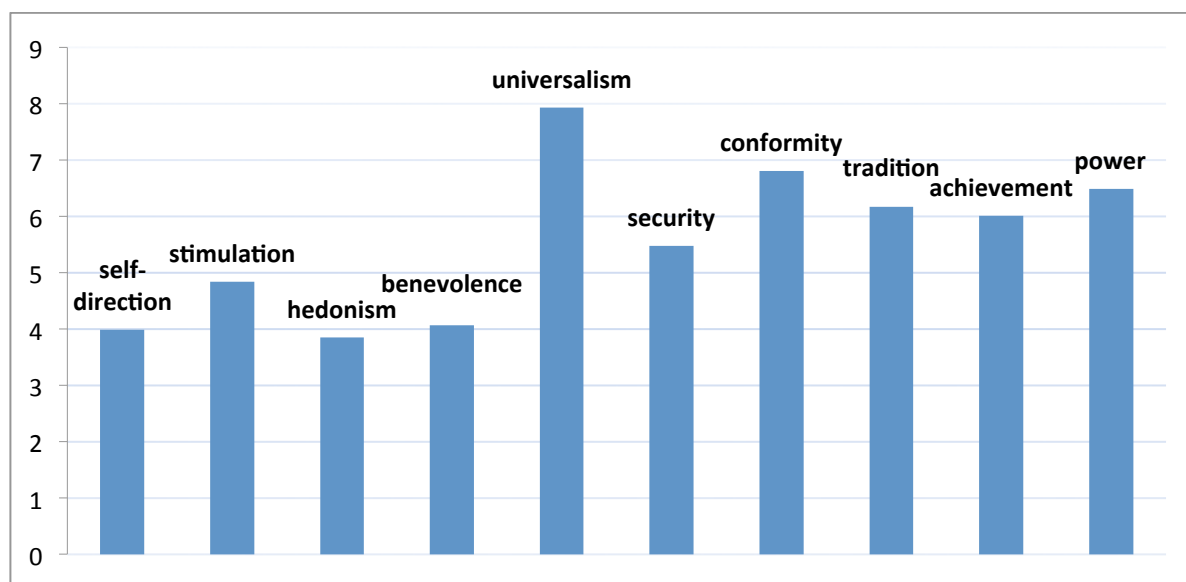
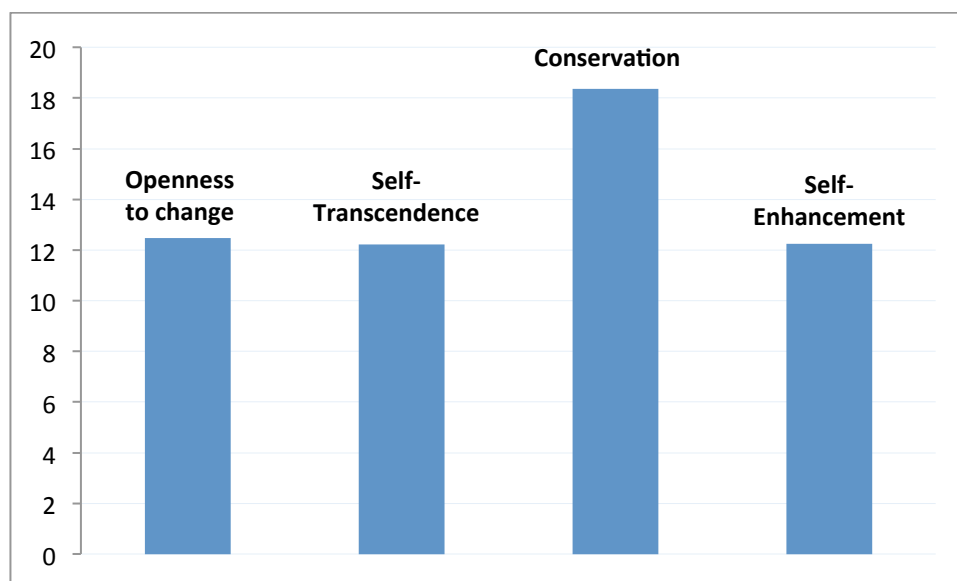


Figure 1 Preferred order of high school students' values (N=168)

Considering preferred value orientation it is obvious that the students incline to *conservation* (composing of values: safety, conformity and tradition). The other value orientations as *openness to change* (infused with hedonism, stimulation and self-direction), *self-enhancement* (determined by success and power) and *self-transcendence* (defined by values: universalism and benevolence) were preferred by respondents in approximately the same ratio (Figure 2).



**Figure 2 Preferred order of high school students' value orientation (N=168)**

Data describing gender differences between the groups of men and women in particular values and value orientations are stated in Table 1. Significant differences were measured in values *benevolence*, *safety* and *power*, whereas for women, the value of *benevolence* being characterized by readiness to help and loyalty towards own friends is more important. For men values of *safety* (own family and nation, adherence to social order) and *power* (directed onto social status and prestige, feeling of strength, tendency to order and control others, demonstration of own domination) were of greater importance. Significant difference in favor of women was witnessed only in one value orientation of *self-transcendence* empowered by values of benevolence and universalism (Table 1).

**Table 1 Difference between high school students' value and value orientation preferences**

Values and value orientation	Mean women (N=99)	Mean men (N=69)	t-test	significance
Self-determination	4,06	3,70	1,365	0,174
Stimulation	4,98	4,45	1,680	0,095
Hedonism	3,91	3,64	0,919	0,359
Benevolence	3,75	4,48	2,764	<b>0,006</b>
Universalism	7,86	8,64	1,808	0,072
Security	5,88	5,06	2,387	<b>0,018</b>
Conformity	6,91	6,39	1,337	0,183
Tradition	6,16	6,06	0,341	0,734
Achievement	5,86	6,14	0,707	0,481
Power	6,90	5,39	3,934	<b>0,000</b>
Openness to change	12,95	11,78	1,866	0,064
Self-Transcendence	11,61	13,12	2,561	<b>0,011</b>
Conservation	18,95	17,51	1,944	0,054
Self - Enhancement	12,76	11,54	1,829	0,069

## CONCLUSIONS

Knowledge about values and value orientation is considered to be one of the key research areas of psychology, but also pedagogy. As Vernarcová (2005) states that a truly universal set of human values does exist and people's attitudes are based on the relatively few, stable values they hold. We aimed to know which values and

value orientations are preferred by high school students and if there is a difference between preferences of men and women.

Based on performed measurements, the most preferred values by students were *hedonism*, *self-direction*, *benevolence*, *stimulation* and *safety*, whereof women found *benevolence* and men *safety* and *power* the most important. Therefore we came to a conclusion that the value orientation of men and the one of women are not so very different, the only significant difference in favor of women was shown in value orientation of *self-transcendence*. Our experience, knowledge and value orientation significantly influence our behavioral patterns. Hierarchy of values is considered to be the most reliable prognostic sign indicating if a person is able to behave in compliance with the environment, so Rosová (Huba, 2002).

Values represent one of the major sources of human motivation, which gives a person meaning and direction of his efforts. They are present during the decision making process, they affect the mental processes of perception; survival and they are transformed into the ruling personalities (Šramová, Džupina, Jurášková, 2013). In the society, the value system of a person is constantly confronted with alternatives, outer pressures and societal changes that have great influence on young people as well as educational system. According to Poliaková, education should be a process of personality cultivation. (Poliaková, 2013). Forming of values and value orientation of students doubtlessly is its important part.

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## VARIABLES AFFECTING EDUCATION FACULTY STUDENTS' SATISFACTIONS ABOUT THEIR INSTRUCTORS

H. Ömer BEYDOĞAN

Ahi Evran University, Education Department, Turkey  
hobeydogan@gmail.com

### ABSTRACT

The purpose of this study was about determining some of the variables affecting Ahi Evran University Education Faculty students' expectations and satisfactions about their instructors. The sample of the study included senior students at Ahi Evran University Education Faculty. The data were collected by using the Instructor Satisfaction Survey that was designed by the author. The reliability coefficient of this survey was calculated to be  $r = .90$ . Based on the collected data, relations between some variables were calculated considering arithmetic mean, standard deviation, one way Anova, LCD and Pearson's correlation tests, and parameters obtained from the survey. The results suggested that students' satisfaction levels were differed according to their departments and this differentiation was related to their department decision, perceptions about the department enrolled and the content of it, level of communication, the way they describe themselves, and the time spent for classes. At the end of the study, some suggestions were provided to the educators, administrators, and families.

**Key words:** *Expectation, department decision, self-acceptance, perceptions about departments and self-defining*

### INTRODUCTION

Student satisfaction in educational institutions has an important place in the image of educational institutions and development of institutional loyalty as well as in the enhancement of student achievement. Student satisfaction in educational institutions is a situation occurring by not only meeting the needs but also the expectations and requirements of students (Zemke, 2000: 33). However, the needs and expectations of students in higher education institutions have a very complex structure (Oldfield & Baron, 2000: 93-94). The complexity of the structure carries student expectations beyond the learning-teaching process.

Expectation and performance in students are two activities functioning coordinately. Satisfaction increases if the expectation in students is in the favor of performance at the end of the performance process, while dissatisfaction increases if it is not in the favor of performance. Ensuring satisfaction in students contributes to institutional development, in addition to the increase in performance. Therefore, while educational institutions are reviewing their goals and visions, they feel the need to restructure their own organizations to ensure the satisfaction of their students. In this restructuring framework, the individual, social, professional, emotional and democratic needs of students are fulfilled and satisfaction levels are increased with new regulations presented (Oğuz, 2002). In the studies conducted on the satisfaction of students at the higher education level from educational services, it is demonstrated that student-instructor relationship facilitates learning, and student satisfaction and learning are very strongly associated with satisfaction provided from the course (Guolla, 1999:87; Cashin and Downey 1992; Marsh 1991). It has been pointed out that there is a direct relationship between the quality of the department and student satisfaction, and the instructor is the most important variable here.

Considering the experiences and developments at the Faculty of Education, the overall satisfaction of students at their faculty and departments affects their individual, social, cultural and professional development along with their mental health. Because dissatisfaction with the school of students who start learning leads to tension, which results in a variety of psychological and psychosomatic disorders among students (Öngider, Yüksel, 2002). Some of the elements that serve the development of the sense of belonging among students include caring about the future of the school, identifying their success with the success of the school, the level of happiness in the preference of department and school, valuing their school and department above other schools and departments, the perception at the point regarding the fact whether the school and department prepare them for business life. As an educational institution, responding to these expectations is very important for the school.

The situations contributing to the quality of education and student satisfaction are the students' way of communication inside and outside of the class, applied curriculum and the content in the programs being aimed at students' professional and cultural attainments, the quality of books and materials used during the lessons, attitude and behaviors of instructors and other staff, peer relationships, social activities carried out, school management showing value to students, the school's existing physical equipment responding the student needs. Making the program applied at school constantly clear for the learning of students, constant updating of the course contents, adapting the courses and course contents to making professional career, preparing the course

contents and practices based on the interaction with students, organizing course contents in accordance with professional services to be given are the practices that increase satisfaction among students as the practical results.

Peer relationships of students and the context of socio-cultural activities, the adequacy of scientific, cultural and artistic events, being satisfied from the time spent at and outside the school, the desire to continue meeting with school friends after graduating are the variables that contribute to the students' subjective well-being and social participation. Other variables such as teaching staff being open to communication, their way of communication in and outside of the classes, their competencies in applying teaching methods and techniques successfully during the lessons, their availability, their acting fairly in measuring and evaluating processes and in this context, belief and persuasion that they create among students considerably affect the student satisfaction. When the satisfaction levels of students from their educational institutions are examined, it can be understood that there are many variables that affect the satisfaction of the students who continue their education in educational institutions. The effect of these variables differs by gender. In some of the studies conducted (Fredericksen et al., 2000; Swan et al., 2000), it has been shown that women have higher satisfaction than men, while in some other studies (Jiang & Ting, 1998; Ory, Bullock, & Burnaska, 1997), it has been determined that there is no difference between men and women in the characteristics such as attitude or success. Blum (1999) and Karuppan (2001) have stated that men have a higher motivation for technical skills. In a study in which students have expressed their perceptions regarding a course and experiences in the curriculum, Kuo et al. (2013) have reached the conclusion that the high level of satisfaction leads to a higher level of persistence, continuity in learning and an increase in motivation. Edwards and Quinter (2011) have found out that in choosing a profession, professional flexibility is important for men while women seek for the opportunity to develop themselves and their skills in the choice of profession. In their study on the satisfaction of business students, Douglas et al. (2015) have determined that the lack of communication is the most important factor in dissatisfaction.

In a study that Ekinçi (2007) has conducted on the satisfaction levels of the students studying at different faculties of Hacettepe University, he has reached the conclusion that students have a high level of expectation and a low level of satisfaction. Uzungören & Uzungören (2007) have evaluated the effects of the variables, such as gender, age, income, family's place of residence, place of residence, faculty or high school at which they study, teaching way, the fact after which exam they have got into university and whether they have willingly started the faculty they are studying at, and the current study processes, on the situation of student satisfaction according to the linear probability model. Sökmen (2001) has classified the factors affecting student satisfaction in four categories which are satisfaction from school, satisfaction from university, satisfaction from personal development and satisfaction from professional education. Onursal et al. (2011) have identified four factors that they have determined as the trust in faculty members, satisfaction with education, satisfaction with the class organization and satisfaction with the relationship among students.

Students studying at universities spend most of their time at the campuses with their friends and instructors. Satisfaction or dissatisfaction arise in time while adapting to this process. In the adaption period to the Faculties of Education, the factors affecting this process are characteristics such as the students' habits that they bring together before starting the faculty, school choice, the department to be studied at, the way of self-perception, the suitability level of the content presented at the department they study at for professional development, the form of communication with the teaching staff, the level of taking responsibility in the teaching process, expectations, the way of self-identification and the time spent on learning as well as their previous experiences and personality traits. In this study, the relationship between some variables such as school choice of the students, the way of perception of the department, finding the presented themes in the content as suitable on behalf of the professional development, their habits, the level of responsibility, the level of expectations met by the school, self-identification and the time spent on learning and the levels of their satisfaction with the attitudes of faculty members among students attending the Faculty of Education has been investigated.

## 2. METHOD

In this study, it is aimed to describe the data obtained based on the relational model. According to Karasar (2010), in the relational descriptive model, the presence and the degree of covariance between two or more variables are attempted to be determined. In this study, within this context, the relationships between the levels of satisfaction with the behaviors of instructors and the characteristics they already have are attempted to be described in the learning-teaching process.

The study has been carried out during the fall semester of the 2015-2016 academic year at the Faculty of Education in Ahi Evran University on the preservice teachers studying in the 4<sup>th</sup> grade of Psychological Counseling and Guidance, Primary School Teaching, Preschool Teaching, Turkish Teaching, Elementary Mathematics Teaching and Science and Social Studies Teaching. The population of the study consists of the

students studying at different faculties of the Faculty of Education. The sample of the study is formed by 228 students randomly selected from the preservice teachers studying in the fourth grade of the Faculty of Education at Ahi Evran University.

### 2.1. Study group

A total of 228 preservice teachers (Female=122, Male=106) who study in the fourth grade of different departments at the Faculty of Education have participated in the study.

#### Assessment tool:

In this study, the 40 question Likert-type "Instructor Satisfaction Scale" is used. As a result of the reliability and validity studies of the scale: the Kaiser-Meyer-Olkin (KMO) value of the "Instructor Satisfaction Scale" (ÖEMÖ) has been found to be 0,904 and Bartlett's test has been found to be significant ( $p < 0.01$ ). These two factors explain 68,437% of the total variance. In addition, when the internal consistency coefficient of each factor is analyzed, it is found to be 0.854 for the "dimension of contemporary instructor behaviors" and 0.854 for the "dimension of traditional instructor behavior". As a result of the confirmatory factor analysis of the instructor satisfaction scale applied to preservice teachers, it has been found that the Cronbach's alpha coefficient is 0.94, the KMO coefficient of 0.904, the Bartlett's Test value ( $422 = 5802.804$ ) and is significant at the level of  $p < 0.01$ . Also, as a result of the confirmatory factor analysis, the goodness of fit criteria have been found to be  $\chi^2 / sd$ : 1.61, RMSEA 0.43, SRMR: 0.096, CFI: 0.95, IFI: 0.94, GFI: 0.91, AGF: 0.89. According to these results, the scale used can be said to be valid and reliable for the sample for which the study has been carried out.

#### Data Analysis

Each item in the scale has been structured as I certainly care (5), I do care (4), I partially care (3), I do not care (2), I certainly do not care (1). The analysis of the data has been made based on the total raw scores obtained from the responses to the five-point Likert-type scale.

#### The research problem and subproblems:

- 1- What is the level of students' satisfaction with the behaviors of faculty members?
- 2- Do the gender of the students, communication styles, study habits, the level of taking the responsibility for doing homework affect their satisfaction with the faculty members' behaviors?
- 3- Do the department choice of the students, thematic structure of the course content presented at the department, studying time, the form of self-definition of the students affect the level of satisfaction with the behaviors of faculty members?

#### The findings obtained from the study

Table 1. The distribution of the students in the sample according to their departments and divisions

Divisions and Departments	f	Percentage
Guidance and Counselling	34	14,9
Turkish Teaching	34	14,9
Primary School Teaching	32	14,0
Primary Mathematics Teaching	42	18,4
Science Teaching	24	10,5
Social Studies Teaching	35	15,4
Computer Technology Teaching	27	11,8
<b>Total</b>	<b>228</b>	<b>100,0</b>

As can be seen from Table 1, the distribution of the students in the sample is as following: 42 students from Primary Mathematics Teaching, 35 students from Social Studies Teaching, 34 students from Psychological Counselling and Guidance, 34 students from Turkish Teaching, 27 students from Computer Technology Teaching and 24 students from Science Teaching, which means 228 students in total.

Table 2. The arithmetic mean and standard shift of the points that the students get from the instructor satisfaction scale

Departments	N	X	SS
Guidance and Counselling	34	74,50	14,77
Turkish Teaching	34	78,61	15,73
Primary School Teaching	32	78,93	18,36
Primary Mathematics Teaching	42	80,00	16,16
Science Teaching	24	79,69	17,98
Social Studies Teaching	35	112,51	38,66
Computer technology teaching	27	140,96	7,08
Total	228	91,15	30,30

When Table 2 is examined, the arithmetic mean and standard shift of the responses given by the students of the departments of Guidance and Counselling ( $X=74,5$ ;  $SS=14,77$ ), Turkish Teaching ( $X=78,61$ ;  $SS=15,73$ ), Primary School Teaching ( $X=78,93$   $SS=18,36$ ), Primary Mathematics teaching ( $X=80$ ;  $SS=16,16$ ) and Science teaching ( $X=79,69$ ;  $SS=17,98$ ) regarding the levels of their satisfaction with the behaviors of faculty members have been found to be close to each other; on the other hand, the arithmetic mean and standard shift of the responses given by the students of the departments of Social sciences teaching ( $X=112,51$ ;  $SS=38,66$ ) and Computer technologies teaching ( $X=140,96$ ;  $SS=7,08$ ) have shown differences.

Table 3. F-values of the scores got by the students from the instructor satisfaction scale according to their departments

	Sum of squares	sd	Square of the averages	F	Sig.
Intergroups	110499,882	6	18416,647	42,139	,000
	79354,476	1	79354,476	181,572	,000
	76866,928	1	76866,928	175,880	,000
	33632,955	5	6726,591	15,391	,000
Intragroups	95274,980	218	437,041		
Total	205774,862	224			

According to the department, there is a significant difference between the variances of the responses given by the students to the satisfaction scale at  $F = (6-218) 437$   $p<000$  level. The LCD test has been used to determine for the favor of which groups the difference is.

Table 4. LCD results related to the differentiation level of the scores got by the students from the instructor satisfaction scale according to their department

(I) Department	(J) Department	Differences between means (I-J)	Standard error	p	95% confidence interval	
					Lower limit	Upper limit
Guidance	Turkish	-4,11765	5,07034	,418	-14,1108	5,8755
	Primary School Teaching	-4,43750	5,14895	,390	-14,5856	5,7106
	Primary Mathematics Teaching	-5,50000	4,87649	,261	-15,1111	4,1111
	Science Teaching	-5,19565	5,64411	,358	-16,3197	5,9283
	Social Sciences	-38,01429*	5,03399	,000	-47,9358	-28,0928
	Comp. Tech. Teaching	-66,46296*	5,38896	,000	-77,0841	-55,8418

The differentiation of the students' satisfaction levels with teaching staff behaviors according to their departments has been examined. It is understood from the LCD test performed that there are significant differentiations in favor of the departments of Social sciences teaching and Computer technology teaching at the  $P<0,05$  significance level.

Table 5. Certain F-values related to the personal characteristics of the students at different departments

ANOVA						
		Sum of squares	sd	Sum of squares	F	Sig.
Preference	Intergroups	35,883	6	5,981	5,030	,000
		7,705	1	7,705	6,481	,012
		5,278	1	5,278	4,439	,036
		30,605	5	6,121	5,148	,000
	Intragroups	262,761	221	1,189		
	Total	298,645	227			
Department perception	Intergroups	8,555	6	1,426	3,933	,001
		2,246	1	2,246	6,196	,014
		1,798	1	1,798	4,958	,027
		6,758	5	1,352	3,728	,003
	Intragroups	80,124	221	,363		
	Total	88,680	227			
Existing habits	Intergroups	4,086	6	,681	2,353	,032
		,883	1	,883	3,049	,082
		,632	1	,632	2,183	,141
		3,454	5	,691	2,387	,039
	Intragroups	63,967	221	,289		
	Total	68,053	227			
Perception of responsibility	Intergroups	11,468	6	1,911	3,519	,002
		3,614	1	3,614	6,653	,011
		3,056	1	3,056	5,625	,019
		8,412	5	1,682	3,097	,010
	Intragroups	120,041	221	,543		
	Total	131,509	227			
The level of doing homework	Intergroups	11,625	6	1,937	3,736	,001
		5,265	1	5,265	10,154	,002
		4,680	1	4,680	9,025	,003
		6,945	5	1,389	2,679	,023
	Intragroups	114,599	221	,519		
	Total	126,224	227			
Time spent on studying daily	Intergroups	15,841	6	2,640	3,236	,005
		5,782	1	5,782	7,088	,008
		4,689	1	4,689	5,748	,017
		11,152	5	2,230	2,734	,020
	Intragroups	180,299	221	,816		
	Total	196,140	227			

In Table 5, it has been observed that there is differentiation at the  $p \leq .05$  significance level with respect to the school choice, department perception, habits, the perception of responsibility, doing homework and the time spent on studying daily in the responses given by the students at different departments according to the characteristics they have. Apart from these, no significant differentiation has been found between gender, the perception of the content presented during the lessons, self-identification and empathy behaviors.

Table 6. Students' *perception of the content* and frequency and percentage related to their way of self-identification

Content perception	Frequency	Percentage	Self-Identification	Frequency	Percentage
Social life	15	6,6	Rational	44	19,3
Professional development	155	68,0	Emotional	75	32,9
Intellectual development	26	11,4	Utilitarian	45	19,7
Beliefs and values	1	,4	Idealist	42	18,4
Technical skills	7	3,1	Skeptical	16	7,0
Other	24	10,5	Nonchalant	6	2,6



When the way of the students' perception of the content presented during the lessons is asked, 68,0% of the students perceive the content predominantly as for professional development, while 11,4% perceive it as for intellectual development, 6,6% as related to social life, and 3,1% of them interpret it as related to technical skills.

When the students are asked about how they define themselves, 32,9% of the students define themselves as emotional, 19,7% as utilitarian (pragmatist), 19,3% as rational (rationalist), 18,4% as an idealist, 7,0% as skeptical and 2,6% as nonchalant.

*Table 7. The effects students' gender, department choice, department perception, the perception of the thematic structure of the content, and their learning style on the level of satisfaction with the behaviors of faculty members.*

Characteristics	N	r	p
Gender	228	-0,285 (**)	0.000
Department choice	228	0,155 (°)	0,019
Perception of department	228	0,256 (**)	.0000
Perception of the thematic structure of the content	228	0,131 (**)	0.48
Learning Style	228	0,041 *	0,539

When the relationships between the levels of student satisfaction with the behaviors of the teaching staff and some characteristics in Table 7 are examined, there has been a significant relationship at the  $p < 0,05$  level between the gender of the students (-0,285), department perception (0,256), department choice (0,155), and the perception of the thematic structure of the content (0,131), while there has been no significant relationship with the learning style (0,041).

*Table 8: The effects of students' habits, taking responsibility, doing homework, empathizing, self-definition, and their spending time on daily studying on the levels of their satisfaction with the behaviors of teaching staff.*

Characteristics	N	R	p
Habits	228	Pearson $r$ ,226 **	0,009
Taking responsibility	228	Pearson $r$ ,174	0,009
Doing homework	228	Pearson $r$ ,061 **	3,63
Empathy	228	Pearson $r$ ,04 *	4,12
Self-definition	228	Pearson $r$ ,32 **	000
Daily study	228	Pearson $r$ ,283 **	,000

In Table 8, it has been shown that there is a significant relationship between the habits (,226), the way of self-definition (0,32), the time spent on daily studying (0,283), taking responsibility (0,174) and the satisfaction levels of the students with the behaviors of teaching staff at the level of  $p < 0,05$ ; while there is no significant relationship between doing homework and empathizing behaviors.

## CONCLUSION AND SUGGESTIONS:

The most important element in providing student satisfaction and in the quality of the Faculties of Education is the quality of the teaching staff. Maintaining the quality of the teaching staff depends on taking some variables under control. Determining student satisfaction is one of the valid, reliable and important ways in increasing the quality of the department and making the teaching staff functional. It is essential to identify possible variables affecting the measurement of these competencies and to take measures regarding minimizing the effect of the variables. It is quite difficult to determine all the variables affecting, because student satisfaction is a multidimensional reality Oldfield & Baron, 2000; Tütüncü & Doğan, 2003; Elliot & Healy, 2008; Onursal et al., 2011; Eren et al., 2013).

In this study, it has been seen that the satisfaction levels of the Faculty of Education students with the behaviors of teaching staff differentiate according to their departments and are at the moderate level. This shows that there is a balance between the student expectations and their performances. The absence of a very large difference between the perception and expectation levels of the students shows that the students have made similar assessments regarding the behaviors of the teaching staff. Preservice teachers have high levels of satisfaction with the teaching staff; however, their expectations are not fully met. The fact that not the same teaching staff give lessons at all departments is an important factor in determining the result but it is not possible to expect for students to be satisfied with all teaching staff at the same level. However, the levels of student satisfaction are

affected by some characteristics that the students potentially bring together when they come to school or the habits they have obtained afterwards. There is a significant difference between the characteristics such as department choice, the way of perceiving the department at which they study, habits, the way of self-identification, the level of establishing communication, the desire to take responsibilities during the lessons, the time spent on studying, the ways of perceiving the content presented at the department thematically. The existence and the height of the relationship show the degree and intensity of the influence. The internal conditions are more effective than external conditions in the satisfaction levels of the students. The reason for the department choice of the student, department perception and caring about it, the level of communication, the way of self-identification and the desire to take responsibility are among the important variables emerging in the study. The findings obtained are consistent with the findings of Yangin and Kırca (2013) who have examined the approach of the students to their school and class. There has been a positive correlation found between the loyalty of the students to school, their motivation and the acceptance of educational values (Karatzias, Power, & Swanson :2001).

## SUGGESTIONS

Student expectations and satisfaction according to their gender can be more deeply investigated.

The fact that students find themselves to be valued and respected make sense with stimuli that they will receive from their surroundings regarding the fact that they are important and valuable. In this context, accomplishing the interaction and practices showing that parents, instructors, and trainers value students can be focused on. A detailed presentation regarding the departments and their functions should be made before the students make their choice; the presentation should not be only at the level of information but rather it should include the realities in the social life. Flexible flat transitions that will facilitate the transition between different departments should be provided after students have made their choice. Each department or division should carry out the activities that emphasize the values peculiar to them and thus, the sense of belonging and perception of the department should be enhanced in students. Moreover, "Vocational career days" in the quality that will appeal to the departments and divisions should be organized and in this way, it should be ensured that students meet the institution and organization in which they will work in person.

The course contents of the departments and their compliance with technical, professional, intellectual and social life and values should be revised.

The curriculums of the departments, the expectations and trends formed according to their function should be improved and rearranged by considering them.

Awareness training can be given to the teaching staff to increase student satisfaction.

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## VOCATIONAL QUALIFICATIONS AND CERTIFICATION SYSTEM DEVELOPMENT FOR GIS JOBS: MINISTRY OF ENVIRONMENT AND URBANIZATION CASE

Saye Nihan ÇABUK  
Earth and Space Sciences Institute  
Anadolu University  
Turkey  
sncabuk@anadolu.edu.tr

Saffet ERDOĞAN  
Afyon Kocatepe University  
Turkey

Alper ÇABUK  
Earth and Space Sciences Institute  
Anadolu University  
Turkey  
acabuk@anadolu.edu.tr

### ABSTRACT

Vocational qualifications are of great significance as they not only define the vocational competences but also provide valuable inputs for the development of education and training programs. Within this context, in 2014, Turkish Ministry of Environment and Urbanization was authorized by the Vocational Qualifications Agency (MYK) for the development of vocational standards and national qualifications in the field of geographical information systems (GIS). The Ministry and Anadolu University together prepared standards and qualifications for GIS Operator (Level 4) and GIS Specialist (Level 6) jobs, followed by a quality management and certification system establishment process undertaken by Anadolu University for the use of Ministry's General Directorate of GIS. The system, which is believed to provide guidance for the certification bodies, consisted of different phases including the development of a software package for quality management, certification automation and examination organization. This paper aims to give information about the overall project and highlights the importance of vocational qualifications and certification works for raising and employment of qualified GIS personnel.

**Key words:** Vocational training, Vocational Standards, Vocational Qualifications, GIS Education

### INTRODUCTION

To provide sustainable growth and development, one of the important issues today is the enhancement of links between labor markets and educational systems, so that the need for the qualified individuals with relevant education and training is met (EFT, 2013, p.5.). This can be realized by improving the vocational education systems and developing vocational standards and qualifications. Qualifications help the labor market to function efficiently, enabling employers and employees to find one another (Grugulis, 2003, p. 459). In other words, vocational qualifications are significant to employ qualified personnel, to ensure quality assurance and guarantee customer satisfaction for the works/services carried out. Vocational qualifications also help individuals certificate and improve their vocational knowledge and skills continuously. Moreover Çabuk and Çabuk (2015), explain that the quality of the vocational education/training programs is directly related with the quality of the vocational standards. The organization of qualifications is considered as one of the most basic features of any system of education and training (Young, 2005, p.8). A vocational education program must be developed and conducted in compatible with the learning outcomes addressing the required knowledge, skills, behaviors and attitudes that one should have to carry out a job or progress in his carrier or education. In other words, a vocational education should help individuals gain the outcomes as defined in the relevant vocational standards. In this sense, Turkish Vocational Qualifications Agency (MYK) explains the benefits of vocational standards for education/training institutions are as follows:

- Determination of the knowledge and skills of the personnel needed by the labor markets,
- Development of educational program context, learning outcomes and success criteria in accordance with the efficient and minimum requirements,
- Comprehension of the knowledge and the competences necessary to be gained with the vocational education/training program,
- Development of a strong relation and interaction between the education and the labor market.

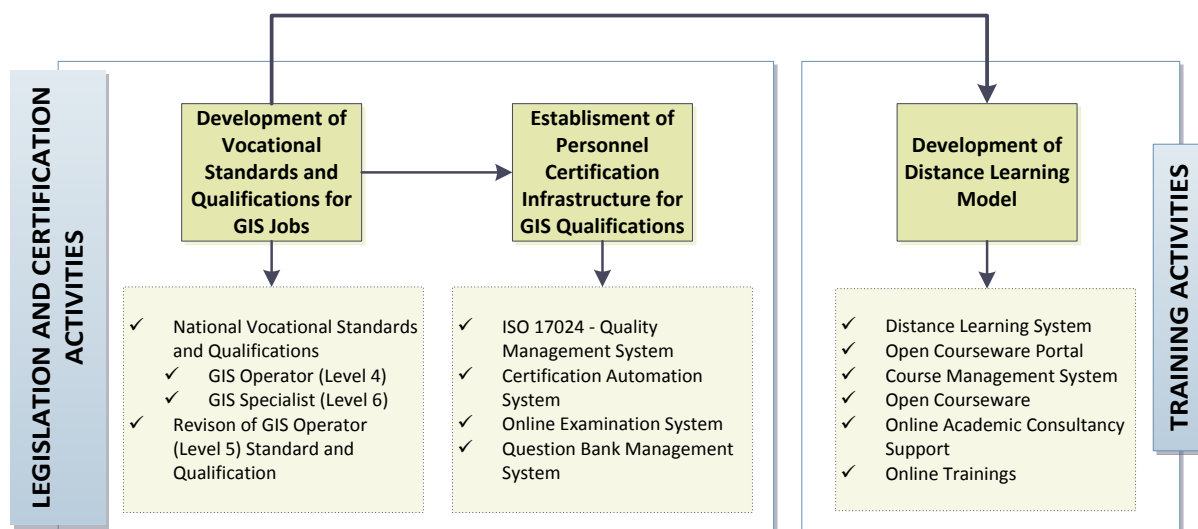
At this point, one of the sectors for which well-defined vocational qualifications, as well as compatible education/training programs should be developed is GIS. GIS is a powerful set of tools to collect, store, retrieve, process, and represent spatial data in the real world for a defined set of objectives (Burrough and McDonnell, 1997). As GIS provides commonly used, interdisciplinary, efficient, extensive and versatile tools and methods applicable in different fields and for a wide range of issues, a great number of personnel to perform various GIS jobs with different levels and requirements of competences are widely and increasingly needed all over the world. In Turkey, there is also a need for qualified GIS personnel to conduct various projects and tasks. To fulfill this aim, Ministry of Environment and Urbanization has started a series of extensive projects to disseminate the use of GIS in the country.

Within this context, this paper explains two of the significant projects conducted with the collaboration of Anadolu University to develop GIS related vocational standards, national qualifications and ISO 17024 (Conformity Assessment – General Requirements for Bodies Operating Certification of Persons) compatible certification body infrastructure supported with a software.

### THE PROJECT SCOPE AND OBJECTIVE

Today, GIS is not only an important but also an inevitable tool for most of the sectors to produce efficient, fast, accurate and proper products and services. It is used to inventory resources and infrastructure, plan transportation routing, improve service response time, segment populations, allocate resources, manage land development, and plan and manage large engineering projects (O’Looney, 1997, p.4). From this point, GIS is necessary and highly utilizable for both private sector and most of the governmental institutions. For example, urban services such as facility management (natural gas, electricity, solid waste, waste water, storm water, telecommunication, etc.), collection of real estate taxes, transportation planning etc. require the establishment of an “information management system” and “management instruments” for the local authorities. In this context, GIS is a significant asset for the integration of numerous graphic and nongraphic urban data in one unique platform, where the data can be stored, analyzed, maintained and managed. It is also a tool for creating coordination among different departments and institutions. In this sense, besides various technical requirements such as gathering and managing the data, software, hardware, network and etc., successful utilization of geographical information technologies and reaching the desired outcomes in accordance with the specific objectives and aims, depends on the presence of qualified personnel to comprehend, establish, use and sustain the system (Çabuk, 2013, p. 116.) Therefore, GIS personnel is the key factor for the success of any GIS project. It is of great importance to have personnel capable of collecting, storing and retrieving data, using the necessary software, hardware, network and database infrastructure, processing spatial operations, and preparing models, maps and documentation at various levels of information and competences compatible with the job definitions (Çabuk, 2014, p. 289). However, though there is an emerging need to employ 15000 GIS personnel in Turkey in the short term, the number of qualified technical personnel with the necessary GIS knowledge, skills and competences is inadequate both in public and private sector (Çabuk and Çabuk, 2015, p.3; Oflaz et. al, 2013, p.1). This reveals the necessity of undertaking two major missions: development and providing of GIS education/training programs, and development of vocational GIS standards and qualifications. These two missions are unavoidably connected with each other, as the learning outcomes, knowledge, skills and competences defined in the standards/qualifications are also the key inputs for the education/training programs. In other words, the learning outcomes of a program are supposed to correspond to the related vocational standards.

For these reasons, Ministry of Environment and Urbanization started a comprehensive project in 2013, comprising the tenders to purchase numerous research and development projects in order to meet the mentioned gap in Turkey, so that the GIS utilization could be disseminated throughout the country. One of the main stage of the project included the development of an online GIS education/training system, courses and courseware followed by pilot online training activities provided for the personnel employed by the Ministry. The other major stage focused on the development of vocational standards and qualifications for the determined GIS jobs, followed by the establishment of a personnel certification and quality management system compatible with ISO 17024. Consequently, the Ministry of Environment and Urbanization has made cooperation with Anadolu University in 2014, to conduct the projects. Figure 1 summarizes the general context of the project.



**Figure 1: Project Context**

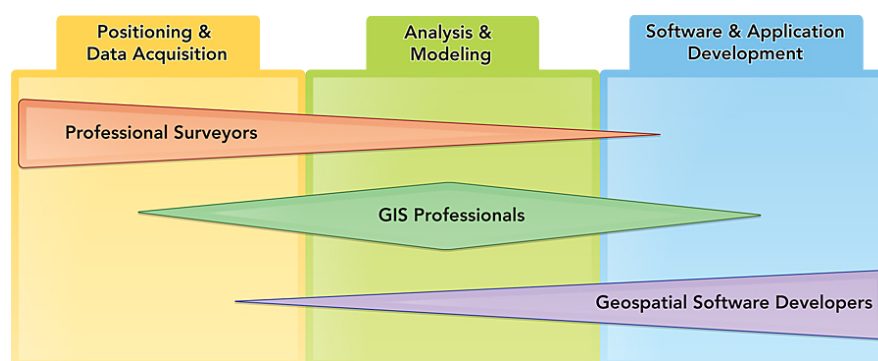
During the legislation and certification activities stage of the project, considering the sector needs, two GIS related jobs, namely GIS Operator (Level 4) and GIS Specialist (Level 6), were determined and in accordance with the legal requirements of MYK, national vocational standards and qualifications were produced by the Ministry in collaboration with the partners. Within the same frame, Anadolu University also undertook the responsibility to establish a personnel certification system compatible with ISO 17024, so that the Ministry could become an authorized certification body for the mentioned GIS qualifications.

The project aims to increase the number of the qualified GIS personnel, disseminate the utilization of GIS and raise awareness in the necessity of the vocational qualifications for the GIS related jobs. As a result of the increase in the number of qualified personnel, the quality of both the public services and scientific studies carried out by academic institutions are expected to increase. This will be reflected positively to the upbringing of new scientists as well as to the number and quality of scientific studies undertaken in all the fields using spatial data such as social sciences, engineering, planning and design. In addition to that, certification of the personnel possessing the minimum qualifications and national qualifications of the related standard will enable employment of qualified workforce. Vocational standards and national qualifications are also important inputs for the definition of learning outcomes of formal and non-formal trainings.

## LEGISLATION AND CERTIFICATION ACTIVITIES

### Development of National GIS Standards and Vocational Qualifications

Although GIS is an extensive and interdisciplinary technology, and can be utilized by a wide range of users without any legal, academic or vocational constraint (Figure 2), it is still essential to define the GIS jobs and develop vocational standards to ensure that the GIS operations are performed suitably to meet the minimum necessary requirements. In this sense, this stage of the project aimed to determine the GIS professions, primarily the ones urgently needed to be employed in the Turkish GIS sector, requiring different level and context of knowledge, skills and competences; and to develop the national vocational standards and qualifications.



**Figure 2:** The Work Roles of Geospatial Professions (Dibiase, 2012).

To fulfill this aim the Ministry of Environment and Urbanization was authorized by MYK for the development of GIS Operator (Level 4) and GIS Specialist (Level 6) national vocational standards and national qualifications in 2014. A core team of experts from the General Directorate of GIS (Ministry of Environment and Urbanization) and the Institute of Earth and Space Sciences (Anadolu University) developed the standard drafts in the first place. The draft documents were then shared with the public and related institutes such as universities, sector stakeholders and non-governmental organizations in order to collect comments and feedbacks. After the revisions and the consensus, the standards were published and put into force on 6<sup>th</sup> June 2014. Figure 3 summarizes the basic vocational responsibilities explained in the standards. Besides, the revision process for previously published GIS Operator (Level 5) vocational standard was also started in 2015.

	CBS OPERATOR (LEVEL 4)	CBS SPECIALIST (LEVEL 6)
Safety and Health At Work Environmental Protection Quality Management	<ul style="list-style-type: none"> <li>✓ Applies safety, health and environmental protection measures at work</li> <li>✓ Works in accordance with quality management documents</li> </ul>	<ul style="list-style-type: none"> <li>✓ Applies safety and health measures at work</li> <li>✓ Ensures the application of environmental protection measures</li> <li>✓ Performs quality management applications</li> </ul>
Technical Responsibilities	<ul style="list-style-type: none"> <li>✓ Makes work organization</li> <li>✓ Gets the necessary software and hardware ready for use</li> <li>✓ Organizes and prepares data</li> <li>✓ Prepares reports and presentations</li> </ul>	<ul style="list-style-type: none"> <li>✓ Makes work organization</li> <li>✓ Gets the necessary software and hardware ready for use</li> <li>✓ Conducts operations related to GIS project</li> <li>✓ Conducts operations related to reporting and presentation</li> </ul>
Vocational Improvement	<ul style="list-style-type: none"> <li>✓ Attends vocational improvement activities</li> </ul>	<ul style="list-style-type: none"> <li>✓ Conducts vocational improvement activities</li> </ul>

**Figure 3:** Basic responsibilities of GIS Operator (Level 4) and GIS Specialist (Level 6)

In harmony with the legal processes determined by MYK, the expert team has continued their works to develop the national qualifications based on the vocational standards. Vocational qualifications are documents that present the necessary knowledge, skills and competences to carry out specific jobs. They also describe the methods, duration and requirements of the certification examination, recertification and surveillance of the certified personnel. Similar to the standard development process, draft vocational qualifications of GIS Operator (Level 4) and GIS Specialist (Level 6) were shared with the related organizations and the public to get feedbacks. Upon consensus, they were both published on 25th May 2016. Table 1 shows the basic outlines of the GIS Operator (Level 4) and GIS Specialist (Level 6) qualifications.

**Table 1:** GIS Operator (Level 4) and GIS Specialist (Level 6) qualifications

		<b>GIS Operator (Level 4)</b>	<b>GIS Specialist (Level 6)</b>
<b>Structure of the Qualification (Units)</b>	<b>A1</b>	Workplace Health and Safety, Environmental Protection Measures, Quality Management System and Work Organization in GIS Operatorship	Workplace Health and Safety, Environmental Protection Measures, Quality Management System and Work Organization in GIS Specialty
	<b>A2</b>	Technical Organization in GIS Operatorship	Information Security in GIS Specialty
	<b>A3</b>	-	Technical Organization in GIS Specialty
<b>Measurement and Evaluation</b>	<b>A1</b>	Multiple Choice Test Covering the Knowledge List in the Unit (A1/T1)	Multiple Choice Test Covering the Knowledge List in the Unit (A1/T1)
	<b>A2</b>	Multiple Choice Test Covering the Knowledge List in the Unit (A2/T1) Performance Application (Examination) Covering the Skills and Competences List in the Unit (A2/P1)	Multiple Choice Test Covering the Knowledge List in the Unit (A2/T1)
	<b>A3</b>	-	Multiple Choice Test Covering the Knowledge List in the Unit (A3/T1) Performance Application (Examination) Covering the Skills and Competences List in the Unit (A3/P1)
<b>Learning Outcomes</b>	<b>A1</b>	<ol style="list-style-type: none"> <li>1. Explains the workplace health and safety measures</li> <li>2. Explains the environmental protection measures</li> <li>3. Explains the operation of quality management system</li> <li>4. Explains the work organization requirements</li> </ol>	<ol style="list-style-type: none"> <li>1. Explains the workplace health and safety measures</li> <li>2. Explains the environmental protection measures</li> <li>3. Explains the operation of quality management system</li> <li>4. Explains the work organization requirements</li> </ol>
	<b>A2</b>	<ol style="list-style-type: none"> <li>1. Defines the technical requirements to make the necessary software and hardware ready for use</li> <li>2. Defines the technical requirements to edit and maintain the GIS data</li> <li>3. Defines the technical requirements to prepare reports and make presentations</li> <li>4. Applies the technical operations to make the necessary software and hardware ready for use</li> <li>5. Applies the technical requirements to edit and maintain the GIS data</li> </ol>	<ol style="list-style-type: none"> <li>1. Defines the requirements related to data and information security</li> <li>2. Defines the determination of in-house security policy related to GIS project</li> </ol>
	<b>A3</b>	-	<ol style="list-style-type: none"> <li>1. Interprets the technical requirements to make the necessary software and hardware ready for use</li> <li>2. Interprets the technical requirements to execute the operations for the GIS project</li> <li>3. Defines the technical requirements to prepare reports and make presentations</li> <li>4. Applies the technical operations to make the necessary software and hardware ready for use</li> <li>5. Applies the technical operations to execute GIS project</li> <li>6. Prepares reports and makes presentations</li> </ol>



## Establishment of Personnel Certification Infrastructure

Certification is part of conformity assessment which is done for products, processes, services and most recently persons (Kelly, 2007, p.182). In this sense, personnel certification system is considered as a means of quality assurance for the labor market. Personnel certification ensures the recognition of vocational skills that are gained by different methods and in various environments, and ensures the employment of qualified personnel. Regarding the structure of the system, certification process provides an environment for continuous improvement for all the parties including the persons to be certified, program owners (and thus, the certification schemes), educational institutions and the certification bodies. In Turkey, MYK, as the owner of the certification schemes, in other words the national vocational qualifications, is the major organization authorizing the certification bodies. Among the terms and conditions of authorization declared by MYK, the primary requirement is the accreditation of the candidate certification body in accordance with ISO 17024 Conformity Assessment – General Requirements for Bodies Operating Certification of Persons. In general terms, ISO 17024 standard comprises the minimum conditions that enable impartial, objective, fair and independent development of practices for personnel certification and its continuity.

Accordingly, this stage of the project involved the development of a quality management system in compliance with the ISO 17024 standard, so that the Ministry's Directorate of GIS could become an authorized certification body and operate impartial, fair and reliable examination and certification processes for GIS related national qualifications. Hence, the execution of certification activities could be secured within such a continuously improving system. To fulfill this aim, with the participation of the experienced certification experts from Anadolu University Personnel Certification Unit (ANAPER), a core team started to work on the development of a quality management and a certification system, as well as a software to manage both, in line with the ISO 17024 standard at this stage. The project team worked collaboratively to determine the physical, organizational, administrative and legal requirements to establish a certification unit within the Ministry and develop the necessary procedures for certification in harmony with the Ministry's capabilities, expectations and the related GIS qualifications. Within the process, examination methods were developed, and examination questions and data sets have been prepared. The software consisted of the following main automation systems:

- **Quality Management System:** The software was intended to make all stages of quality management system such as preparation, revision, distribution and archiving of the internal and external documents, identification and management of corrective and preventive actions, planning and execution of internal audits, and reporting activities, easily manageable. Figure 4 shows a sample window from quality management system application.

Doküman Adı	Doküman Kodu	Yürürlük Tarihi	Revizyon Tarihi - No	Kullanıcı		
uygulama sorusu hazırlama talimatı	PBB-FRM-001	20160302	20160303 -1	Hatice	Görüntüle	Arşiv Bilgisi

**Figure 4:** A sample quality management system window: searching for quality documents

- **Certification System:** The certification automation system have been developed compatible with the ISO 17024 principles and the national qualifications (GIS Operator – Level 4 and GIS Specialist – Level 6) put forward by MYK. This module of the software have been developed to enable the applicants, candidates and certified persons to
  - o submit applications for certification examinations, appeals and complaints,
  - o follow the status of their applications and examination results,

- get information about the status of their certificates,
- upload surveillance documents,
- update personal information

in a fast and efficient manner. Besides these applications, certification system of the software also includes a module manageable by the personnel involved in the certification activities to perform certification functions such as establishment of qualifications and examinations, assessment, approval/rejection of the applications, collecting the complaints, appeals and surveillance documents, publishing results and decisions on certification, creating reports and records. Figure 5 illustrates a sample from the system.

Belgelendirme İşlemleri	
Belgeler	
Genel Raporlar	
Şikayetler	
Aday Arama	
Belge Geçerlilik	
Sabittler	
Yeterlilik/Sınav İşlemleri	
Çıkış	

Sınavlar				
Sınav Adı	Kontenjan (Kalan/Toplam)	Kayıt Başlangıç Tarihi	Kayıt Bitiş Tarihi	Sınav Tarihi
CBS Operatörü (Seviye 4)	10/10	08/02/2016	31/03/2016	13 Şubat 2016
deneme (Seviye 5)	15/15	01/03/2016	31/03/2016	13 Mart 2016
CBS Operatörü (Seviye 4)	29/30	24/03/2016	31/03/2016	1-2 nisan
imd (Seviye 5)	9/10	28/03/2016	01/04/2016	2 Nisan 2016
deneme1 (Seviye 4)	9/10	28/03/2016	01/04/2016	5 Nisan 2016
CBS Operatörü (Seviye 4)	10/10	18/04/2016	22/04/2016	23 Nisan 2016
CBS Operatörü (Seviye 4)	9/10	02/05/2016	06/05/2016	07 Mayıs 2016
yeterlilik1 (Seviye 5)	9/10	02/05/2016	06/05/2016	07 Mayıs 2016

**Figure 5:** A sample certification system window: monitoring certification examination applications

- **Question Bank Management System:** This module was aimed at the preparation, review and approval of the examination questions so that a reliable and a valid question bank could be developed for the online examinations. The question bank management system can be accessed by the test question writers, authorized certification body personnel and the members of the program committee. Figure 6 shows a sample window from the question bank management system. The module also allows the preparation, control and approval of the master test books in accordance with the learning outcomes prior to the examinations.

Soru Bankası	
Sorular	
Soru Girişi	
PY Onayını Bekleyen Sorular	
Komite Onayını Bekleyen Sorular	
Master Kitapçık Oluşturma	
Master Kitapçıkları Görüntüle	

Sorular	
Yeterlilik Seçiniz :	CBS Operatörü(Seviye:4)
Yeterlilik Tür Seçiniz :	A1/T1
1.Soru :	
Acil çıkış ve ilk yardım aşağıdaki renklerden hangisi ile temsil edilir?	
Cevap A:	Yeşil
Cevap B:	Sarı
Cevap C:	Kırmızı
Cevap D:	Mavi
Cevap E:	Turuncu
Doğru Cevap : A	
İlgili Başarım Göstergesi : 1-	

**Figure 6:** A sample question bank management system window: writing test questions

- **Online Examination System:** Theoretical examinations were decided to be realized as computer based examinations. Thus, an online examination system, which would be accessible by the examinees via their passwords, was developed as a part of the system. Besides, an examination organization module was also developed to match the examinees with the physical environments (examination rooms etc.), examiners and other personnel involved in the examinations. Figure 7 shows a sample examination organization window from the software.

Sınav Organizasyon	
Bina ve Salon Bilgileri	
Bina Bilgi Girişi	
Salon Bilgi Girişi	
Oturum Bilgileri	
Oturum Bilgi Girişi	
Oturum Master Kitapçık Eşleştir	
Oturum - Master Kitapçık Görüntüle	
Oturum Salon Eşleştir	
Oturum - Salon Görüntüle	
Aday Sınav Ataması Yap	
Bina Görevli Ataması Yap	
Teorik Salon Görevli Ataması Yap	
Uygulama Salon Görevli Ataması Yap	

Oturum - Salon Eşleştir	
Sınav Seçiniz :	CBS Operatörü(seviye 4) 13 Şubat 2016
Oturum Seçiniz :	deneme oturumu
Bina Seçiniz :	deneme1--026001
Salon Seçiniz :	deneme Salon(Teorik)
<input type="checkbox"/> Engelli Salonudur	
Oturum Salon Eşleştir	

**Figure 7:** A sample window: organization of examinations

## CONCLUSIONS

National qualifications are of great importance for the educational institutions as they define the basic knowledge and competences for vocations. They also provide quality assurance and continuous improvement for the labor market. One of the sectors that is in need of job definitions and qualified personnel employment is GIS. As GIS is an interdisciplinary field utilizing geospatial technologies, methods and tools, a wide range of personnel equipped with different levels and extent of knowledge, skills and competences is highly needed worldwide. A good evidence to that need is the various and confusing job announcements defining similar requirements and job responsibilities under different job titles. Vice versa is also widely seen. Moreover, various GIS education and/or training programs are increasingly launched by institutions, universities and other organizations. However, the learning outcomes, gained knowledge and skills throughout the programs vary in a wide range and mostly fall apart from meeting the sectoral needs. In this sense, national qualifications to GIS related jobs put forward the necessary competences of the personnel for specific GIS jobs and requirements for the development of education programs. Therefore, the General Directorate of GIS, Ministry of Environment and Urbanization, has started comprehensive projects to disseminate and enhance the use of GIS throughout the country. Among the completed projects within this process are the development of national standards and vocational qualifications for GIS Operator (Level 4) and GIS Specialist (Level 6), and the physical, administrative and organizational preparations to establish an authorized certification body under the Directorate of GIS in compatible with ISO 17024 standard and MYK requisites. A team of experts primarily from Anadolu University worked collaboratively with the Ministry to realize the projects. Respected academicians from Afyon Kocatepe University, Yıldız Technical University, Cumhuriyet University, Katip Çelebi University and Erciyes University have also made precious contributions during the process. Within the project, a system design and software solutions were developed. Thus an efficient and continuously improvable infrastructure have been produced to perform qualified and impartial certification activities to meet the sectoral need in Turkey.

The national qualifications are also supposed to be significant inputs for the development of GIS related training activities, not only for the Ministry's online GIS training/education and certification programs, but also for all the interested parties countrywide. The outputs of this project is believed to guide the similar works, and the following personnel certification activities will contribute to the personnel need in Turkish GIS sector.

## ACKNOWLEDGEMENTS

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## WAYS OF ORGANIZING MENTAL ACTIVITY AT THE MATHEMATICS LESSONS

Saida Gurbanova  
School number 14 Baku, Azerbaijan  
intellectschool@rambler.ru

Sevda Sadigova  
School number 167 Baku, Azerbaijan  
sevdasadiqzade69@gmail.com

### ABSTRACT

In order to apply the constructive teaching to the organizing of mental activity of students, we take Pythagoras' substantiation. Take it as a triangle and the "two-thirds of the problem is solved." if ABC denotes the Pythagoras' triangle, then the AC is the base of the triangle, which is considered to be a layer of students' understanding on the subject. AB denotes that students' rising awareness is transformed into new knowledge. On the side of the BC, understanding, comprehension, application, analysis, generation, operationality of acquired knowledge is reflected.

### INTRODUCTION

The teaching strategy of the national curriculum of Azerbaijan i.e. the active form of teaching is being implemented since 2007. In the programs, certain standards of knowledge and skills are required to achieve. The individual ability of every student is not taken into consideration, and as a result, all students learn to think in the same direction by doing the same task. All these are contrary to the natural development of students' thinking and hinder its improvement. And the main task of modern education is to educate fully developed and competitive personality, as in the rapidly developing at a frantic pace the world will demand people with interesting and original ideas. Therefore training should not develop mechanical memory and critical thinking which is characterized by the construction of logical reasoning, the establishment of agreed between a logical models and make informed decisions regarding the order to dismiss any judgment, accept it or defer its consideration (Diane Halpern psychologist) [2].

### THE STUDY

Students' thinking is developed through a constructive approach in the process of learning. Something new is created by transforming of the existing knowledge. Transformation of the knowledge occurs through mental operations (Jean Piaget)[3]. Operational thinking in the educational process is constructed by certain logical tasks and regulations in a constructive teaching (F. Bunyatova)[4]. In order to apply the constructive teaching to the organizing of mental activity of students, we take Pythagoras' substantiation. Pythagoras believed that everything in nature is divided into three parts, and in order to solve any problem, it should be imagined in the form of a triangle diagram. Take it as a triangle and the "two-thirds of the problem is solved." [5] As it can be implemented on a math lesson on "percentage, decimals, common fractions." The lesson delivered through constructive teaching consists of two parts.

The theme of the lesson rearranged according to the logic of development: "The ordinary fractions, decimals, percent" in the textbook of mathematics grade 5 [6] are ready knowledge. At the first part, the survey is conducted among students and all that they know on the subject are revealed - it is the basis of the triangle. The student has his own mental experience, has certain inherent only to it intellectual perception abilities. In order to determine the level of understanding of the questions are asked, how you can use the number 7 in the recording vulgar fraction and decimal answers are as follows: 0.7; 0.07; what is the difference vulgar fraction of a decimal of the matter revealed the level of understanding of the common and decimal fractions to consolidate this concept model centesimal square are invited to paint and write portions of the ordinary and the decimal is in the process of application of knowledge but no longer exactly a predetermined pattern and randomly it have each student operates their numbers of spatial thinking. such as how to write a one-hundredth of an ordinary fractions, decimals. On model centesimal square shaded areas are invited to write in the form of common fractions and decimals. In this process is the identification of personal knowledge of students through these issues. This first side of the triangle.

The second side of this triangle is the teacher's supplement and conversion of the existing knowledge into new knowledge. This conversion occurs by adding a new element of knowledge, logical regulations and questions to the existing knowledge. To identify the personal knowledge is complemented by a new element of knowledge in the form of the concept of interest are the historical information and step by step explains the concept of interest. Then the following questions are put in series: 1) If the numerator is the number five, and the denominator as a hundred written as a decimal, fraction and common interest? 2) Change the numerator of the percentage you get? 3) Find 25% from 100\$ and 20% from 100\$? 4) The store suit \$ 100, a discount of 30% discount is. How much is the discount costume? 5) It is proposed to create a task about a discount in the store 30%, 40%, 50%.

It may seem that too many tasks associated with the given money, but it was during the initial elaboration of the theme, in explaining children better understood the problem about the money and the food problem as close to their real life. All this work on the issues allows students to build their own personal knowledge, connect with new knowledge. In this part of the lesson they need to fix the received knowledge, and they are given handouts to get solving skills.

One can make open the exercises changing their structure and use in all subject knowledge. For example: at the information lesson if the students know the solution of transform seven numbering system of creative level it can change in this way :

---<sub>10</sub> put in any number you want and transform seven numbering system.

Logically and consecutively constructed questions motivate each student to solve the problem individually. This process intrigues students, surprises them and they respond to the questions with interest and at the same time, they demand the difficult moments to be clarified.

Mental activity in such a pedagogical process is carried out by a logical replacement surgery.

The third side of the triangle is the reflection of the students' constructed knowledge. Teacher prepares worksheets, which are aimed at the reflection of the lower levels of thinking (knowledge, comprehension, application) and the higher levels of thinking (analysis, generation, transformation, estimation). Students work interactively solving problems from simple to complex, and share knowledge. Here work and all the weak and strong student. For example:

### Worksheet

1. Compare 20% of the 200 and 30% of number 100.
2. Paint centesimal square cell in accordance with the portion corresponding to the condition of the problem .30% of the books in the library of novels and stories make up 10% -fairy tales, poems-20%, 7% -Vocabulary, 15% - Scientific literature, and the rest encyclopedia .
3. Express in the form of fractions, decimals and percentages of 25 from 100 notebooks.
4. What percentage of 1cm from 1m?
5. Write numbers in descending order; 80%; 0.65.
6. Make task of finding percent.

An important role in the mental activity of the student during the lesson is playing reflection that encourages self-awareness, self-observation and thinking. Reflection is a manifestation of the high level of development of mental processes. (Piaget) [7] Reflection is closely related to the ability to plan, manage and monitor the progress of thinking, that is very linked with mental operations such as analysis, synthesis and evaluation. Reflection helps the student to build a logical chain, to systematize the experience, to compare their success with the success of other students.

Thus, if ABC denotes the Pythagoras' triangle, then the AC is the base of the triangle, which is considered to be a layer of students' understanding on the subject.

AB denotes that students' rising awareness is transformed into new knowledge. On the side of the BC, understanding, comprehension, application, analysis, generation, operability of acquired knowledge is reflected. The logical connection of the sides in itself reflects the discovery, exposure of the existing knowledge, their transformation into new form and their reflection in new form in thought.

Thus, following the ideas of Pythagoras triangle, in organizing of mental activity of students at the constructive lesson, primary i.e. previous knowledge is logically transformed into new knowledge and the foundation of the future knowledge is constructed.

### CONCLUSIONS

There is a strong competition everywhere and globalization in the world, and it demands three main important qualities: 1) professional skills, so students should turn their knowledge into a form that they are practical and in demand, 2) teamwork collaborate for a common cause, to respect the opinions of others - that they teach interactive lessons, 3) the ability to solve problems, understand them, to choose and see what others can not see, quickly and

independently to seek alternative solutions critical thinking, not be passive participant -That is achieved during on a constructive lessons.

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## WAYS OF TRANSFORMING THE EXISTING KNOWLEDGE INTO NEW KNOWLEDGE

Adela GAFUROVA

Lyceum named after academician Zarifa Aliyeva,  
Baku, Azerbaijan  
adelyaqaf79@gmail.com

Elvina BABAYEVA

Lyceum named after academician Zarifa Aliyeva,  
Baku, Azerbaijan  
elvinababayeva1@gmail.com

Fatma khanim BUNYATOVA

Intellect school-Idrak mektebi, Baku, Azerbaijan  
fatmaxanum@rambler.ru

### ABSTRACT

In the XXI century, modern human being lives in the era of the development of new ICT. From birth, a man is surrounded by rich information of educational field, which is increasingly difficult to be adapted to. At school, it becomes an important issue to give an education to such a person who does not possess encyclopedic knowledge, but he has the ability to understand the essence of knowledge. A person acquires knowledge throughout his / her life. Nowadays, there is a big gap between knowing and comprehending. Therefore, it is necessary to teach the student to learn by understanding. J. Goethe stated that what you do not understand does not belong to you.

### INTRODUCTION

There are many different methods of learning through knowledge, for example, the theory of trial and error by M. A. Danilov, B.P. Esipova, M. I. Makhmutov, L. V. Zankov, D. B. Elkonin, V. V. Davidov [1]. They are all directed to convey information but in our opinion, constructive teaching by F. Bunyatova [2] is the actual, practically oriented, and applicable to the teaching of chemistry.

It is necessary to raise the first layer of the existing of knowledge. It is based on the creation of knowledge through the synthesis of new ideas the existing knowledge. This system of knowledge appears to be the base of discovery of the active life experiences and application of mental actions on them. The main point here is the notion that personal knowledge is created and constructed. The teacher delivers nothing in a prepared way, but only asks students leading questions in a logically sequenced way. Further, the students themselves, by discussing in a team, share their views. These interactive discussions break down the boundaries of the existing knowledge and construct them in a new way.

### THE STUDY

The teacher asks questions (e.g. in order to get it, what can we change, which elements can be selected for the conversion of something, in order to convert it into a new one, whether is it possible to add ...; what changes is possible for transforming it; what innovation can be done to solve the problem ...) and only guides mental and interactive activities of student, directs them to the goal, it helps them to clarify the vagueness. These questions are intended to combine innovation and old knowledge with help of different methods, to create models, to offer alternative solutions [3]. As usual, the questions like What? Where? When? are put in the textbooks. In order to develop a higher level of thinking it is necessary to put the questions like Why? What, in your view, could be changed? From a psychological point of view, these questions motivate them (intrinsic motivation). At this time, the learner acquires and creates something new of his / her own. This expression is appropriate in this situation "teach me to think and I will construct everything for myself". Every person is born with internal creative potential. This capacity depends on the internal ability, potential.

### FINDINGS

We would like to give an example of asking questions to the 9<sup>th</sup> grade students on the theme Hydrochloric acid [4] by applying the methods of constructive teaching. On the 1st stage of the lesson, the stage of knowledge, students reproduce previously learned material by listing the facts, terms, basic concepts, and rules 1. What does the term halogens mean? 2. Where are the halogens in the table? On the 2nd stage of the lesson, the stage of understanding, students demonstrate their understanding of the facts and concepts by comparison,



transformation, explanation, description. Explain how the position of the halogens in the periodic table affects their structure and chemical properties. Describe the general chemical properties of halogens and on this basis assume their particular chemical properties. On the 3rd stage of the lesson, the stage of analysis, students study the material, isolating its parts, establishing relationships, drawing conclusions and generalizations. You are given a substance of sodium chloride. How are their constituent ions? How are they linked? After analyzing the qualitative composition of the compound, experimentally conduct qualitative reactions on ions. On 4th stage of the lesson, the stage of creating, students accumulate information in different ways, create new models, offer alternative solutions. Based on the knowledge of the industrial production of metals, work out methods of industrial production of halogens.

Make a plan of producing halogens in a laboratory. In the last stage of the lesson, the stage of assessment, the students present and argue their views by bringing judgments about information, validity of ideas, the quality of work. Based on the information about the benefits and the harm caused by halogens imagine arguments for and against the halogen.

After delivering a series of lessons with the help of constructive teaching, we may come to the conclusion that education is a discovery, synthesis, dialogue. Education is the search, thinking, critical and creative thinking. The success of the lesson was determined by cognitive and emotional sphere. Advance Program pleased everybody and led to a rapid mental development.

The educational process was planned together with the students. The acquired knowledge was applied immediately. The combination of the pair and group work satisfied everybody, and this greatly increased the success of the educational process. During the lesson, communicative relationships, students' autonomy improved. Students mastered the social roles.

Construction of knowledge, creation of something new is the highest-level creative thinking that is based on the knowledge, understanding and application. Therefore, if we want the younger generation to be helpful to the society, it is necessary to pay attention to the discovery of creative potential of students and its development. In a constructive learning, students are constantly in a dynamic movement: mental activity - practical activity. If in the interactive form, only social skills are formed, but in the mental activity, ways of knowing, transformation of knowledge generated. This creates an introduction for new ideas, the ability to communicate, work in teams, to be responsible and so on.

## CONCLUSIONS

While delivering the same themes in parallel classes through different teaching approaches (active and problem solving) [5], the following results were revealed. In the active and problem-solving teaching approaches, the teacher reveals the previous knowledge, adds to them new knowledge, but in a constructive teaching, by discovering new knowledge, the teacher poses questions to transform this knowledge. If earlier, closed tests with factual answers were set, but now open tests are considered to be more relevant. Thus, in the first approach, the teacher expands the students' knowledge, but in the second approach, the students themselves transform their own knowledge into new, qualitative knowledge with the help of questions posed by the teacher.

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## WEBCAM İLE KULLANICILARIN SAYFA ODAKLANMA NOKTALARININ TESPİTİ

**İsmail Gökhan SELÇUK**

Adıyaman Üniversitesi, Teknik Bilimler MYO. Adıyaman  
iselcuk@adiyaman.edu.tr,

**Harun Darba**

Adıyaman Üniversitesi, Teknik Bilimler MYO. Adıyaman  
hdarbas@adiyaman.edu.tr

### ÖZET

Bilişim teknolojilerinin kullanım alanları hızla artmaktadır. Geliştirilen sistemlerin değerlendirilmesi kullanılabilirlik testleri ile yapılmaktadır. Bu çalışmada, göz hareketlerini izleme yöntemleri ve bu yöntemleri kullanımda yazılım altyapısını oluşturacaktır. Göz izleme teknolojisini gereksinimi, uygulama alanları ve Opencv ile göz izleme yöntemlerinde yapılabilecek uygulamalar incelenecektir. Çalışmamızda geliştiren yazılım ile özel ekipmanlara ihtiyaç duyulmadan basit bir web kamerası ile göz takibi gerçekleştirilmiştir. Göz izleyicisi ile uygulamada kullanıcıların ekranda nereye ne kadar odaklandıkları ve buna bağlı olarak 3-boyutlu sanal ortamlarda göz-izleme teknolojisini hangi özelliklerinin kullanıldığı belirtilmiştir.

**Anahtar Sözcükler:** Göz İzleme Sistemi, Göz Bulma, Bölgesel Analiz

## THE DETERMINATION OF USERS FOCUS POINTS OF THROUGH THE WEBCAM

### Abstract:

The usage area of Information Technology is increasing rapidly. Evaluation of developed systems is carried out thorough usability testing. In this study, methods of tracking eye movements which would create a software infrastructure in the use of these methods will be examined. Requirements of eye-tracking technology, its fields of applications, and the applications that can be conducted in the eye tracking method with OpenCV will be examined as well. In this stuyd, developed eye tracking software is implemented that has not need for special equipment, with use a simple webcam. Where the users focus on the screen will be determined by the application with eye-tracking. Which properties of eye-tracking technology in the 3-dimensional virtual environments used are indicated according to the research findings.

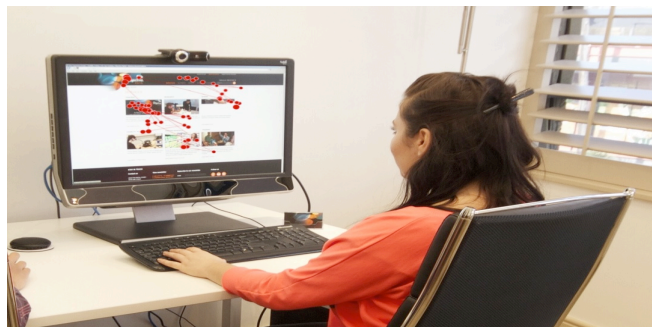
**Keywords:** Eye Tracking System, Eye Discovery, Regional Analysis

### 1.GİRİŞ

Günümüzde, psiko-sosyal davranış birçok inceleme alanında karşımıza gelmektedir. Davranışa ilişkin bir çok ölçüm yapıp teknik geliştirilmesine imkan veren organlardan biride gözdür. [2]

Hem Görmenin gerçekleşmesi hem de ilk bilginin iletildiği organ olmasından ötürü gözün gerçekleştirdiği reaksiyonlar oldukça önemlidir.[2]

Göz İzleme, kullanıcının nereye odaklandığını ve odaklandığı yere ne kadar süre baktığını inceleyen bir yöntemdir. Göz izleme sistemlerinin kullanımı son zamanlarda oldukça yaygınlaşmıştır. Bu yaygınlaşma var olan problemlere de çözüm olmuştur.



Göz izleme sistemlerinin gelişimi dört dönemde incelenebilir.

1. (1879 – 1920 Yılları Arası) : Bu dönemde bakışın basit hareketleri bulunmuştur. Bunlar; hareketlerin gecikmesi, hareketlerin engellenmesi ve idrak alanı kavramları vardır.
2. (1930 – 1958 Yılları Arası) : İncelemeler daha çok uygulamaya dönmüştür. Uygulamalar yapılmıştır ve göz izleme sisteminin davranışsal temelleri araştırılmıştır.
3. (1970 – 1998 Yılları Arası) : Gerçek göz izleme takip ve kayıt cihazları geliştirilmiştir.
4. (2000 – Günümüze ) : Göz izleme sistemi bilgisi bilgisayarla görme ve grafik uygulamalarını kullanmayı gerçekleştirmiştir.[1]

Bu çalışmada Göz izleme teknolojisini kullanmak isteyen kullanıcıları, kullanıcıya özgü cihazlardan kurtarıp basit uygulamalar geliştirerek günümüzde bütün bilgisayarlarda var olan Web Kameralar aracılığı ile gerçekleştirebilmektir.

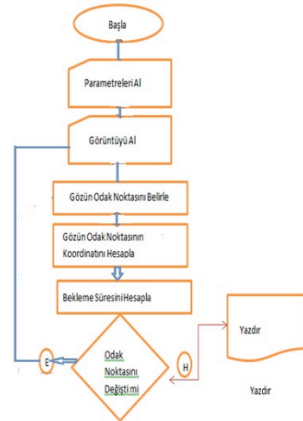
Tasarlanan Sistem sayesinde kullanıcının ekranda odaklandığı noktayı tespit edip ne kadar süre odaklandığını ve daha sonra sıra ile nerelere baktığını hesaplayıp bize ekran üzerinde dikkat çekilen bölge ile ilgili bilgiler sunacaktır. İnsan Bilgisayar etkileşiminde sınırın ortadan kalkmasına yeni bir öncülüğün meydana gelmesine sebep olmaktadır. Bu sistem sayesinde Web sayfalarıyla beraber bir doküman dosyasına kadar gözün daha çok nereye odaklandığı ve adım adım nereleri izlediğini incelenebilecektir.

Bu sayede kullanıcının beyinden algıladığı odağı göz vasıtası ile belirleyip sayfa tasarımlarını, algı koordinatlarını, yazı punto ayarlarını ,metin renklerini ,kullanılacak görsellerin algı yoğunluğunu belirleyerek web sitelerimizi, kullanıcı merkezli sayfa tasarımlarımızı daha efektif şekillendirebiliriz.

Çalışmada OpenCV yazılımını kullanarak Web kamerasını kontrol altına alıp kamera karşısındaki yüz üzerinden göz tespiti yaparak gözün odak sıcaklığının bulunacaktır. Bu çalışma için OpenCV yazılımından , yazılımın entegrasyonundan ve uygulama safhasından bahsedilip elde edilen bulgularla sonuçlandırılacaktır.

## 2. YÖNTEM VE AKIŞ DİYAGRAMI

Bu çalışmanın genel iş akışı Şekil 1. de gösterilmiştir.



Şekil 1. Sistemin genel iş akışı

Bu projedeki amaç gözün nerelerde daha çok odaklandığını hesaplamaktır. Bunun için öncelikle var olan görüntüyü alıp Web kamera ile bir odak noktası belirlenmesidir. Belirlenen odak noktasının koordinatları hafıza alınıp gözün ilk odak noktası olarak belirlenecektir. Bu durumun ardından gözün hareketiyle beraber gözün odak noktasında meydana gelen değişimi lazerin odak noktasına uzaklığı hesaplanıp gözün o alandan ne kadar süre beklediği hesaplanır. Eğer odak noktası değişmiyor ise yazdırma işlemi yani ne kadar süre beklediği hesaplanır değiştiği anda ise odak noktası tekrardan hesaplanıp bekleme süresi hesaplanıp tekrardan yazma işlemi gerçekleşir. Bunun sayesinde hem hangi alanlarda ne kadar çok odaklandığı hem de hangi sırayı takip ettiği hesaplanmış olur.

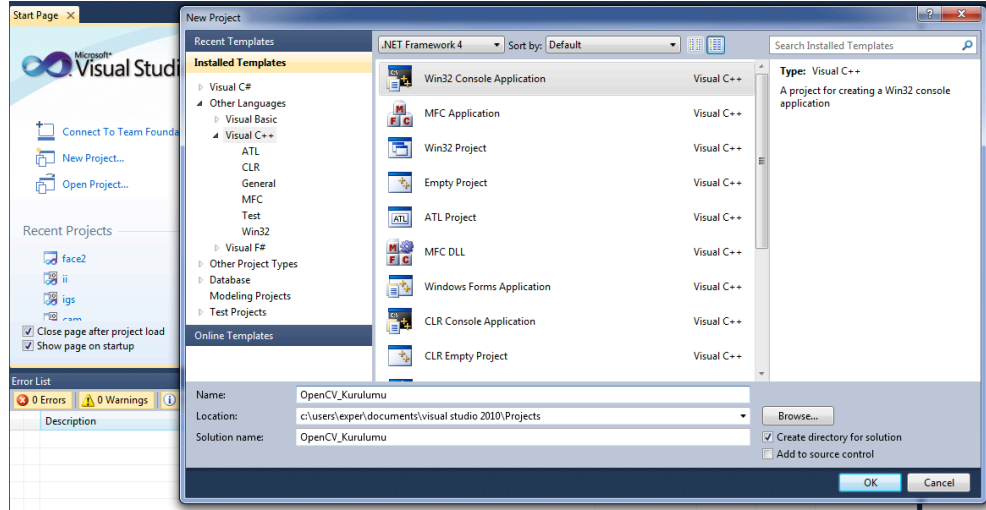
## 3.OPENCv YAZILIMI VE ENTEGRASYONU

OpenCV(Open Source Computer Vision Library) Windows, Linux, Mac OS X, PSP işletim sistemleri üzerinde çalışabilen, C diliyle yazılmış, açık kaynak kodlu bir kütüphanedir. İlk sürümü Intel tarafından 1999'da çıkarılmıştır. Şu anda SourceForge tarafından geliştirilmektedir. Çoğu fonksiyonu platformlardan bağımsız

olarak çalışmaktadır. C ve C++ dilleri ile geliştirilebilir. Özellikle yüz tanıma , işaret dili tanıma, hareket yakalama vb. gibi görüntü işleme algoritmaları ile bizlere kolaylık sağlamaktadır. [3]

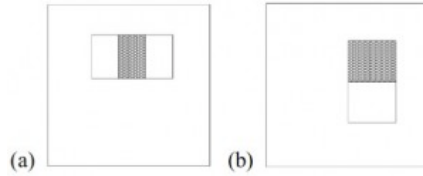
Bu kütüphane ile bir resmi veya video dosyası üzerinde kolaylıkla işlem yapılabilir. Farklı kameralardan alınmış görüntüleri yorumlanarak, herhangi bir nesnenin konumunu belirlenebilir. OpenCV'nin -Machine Learning- adlı bölümünde yapay zeka ve kendiliğinden öğrenmeyle ilgili fonksiyonlar bulunmaktadır. Ayrıca robotik, tıbbi görüntüleme, güvenlik gibi pek çok alanda görüntü işleme için kullanılabilen 500'ün üzerinde yüksek seviyeli ve temel fonksiyon içerir. Bir alt makine öğrenme kütüphanesi (ml) ise örüntü tanıma ve kümeleme gibi görüntü işleme gibi uygulamalarda kullanılabilir.[4]

OpenCV yazılımının Windows işletim sistemi üzerindeki Microsoft Visual Studio Programına entegrasyonunu sağlamak için OpenCv nin uygun sürümünü indirip gerekli Path ayarlamaları yapılır. Visual Studio programında OpenCV kütüphaneleri tanımlanarak sistemimiz C veya C++ dilinde kod yazımına hazır hale getirilir.[5]



#### 4.Göz Odak Noktasının Tespiti

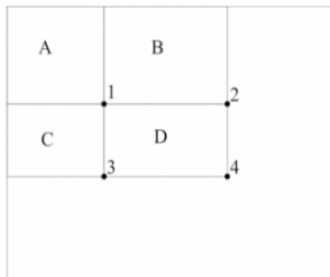
Göz odak noktası tespiti için Haar sınıflandırıcısı kullanılmıştır. Bu teknik uygulanırken intel açık kaynaklı bilgisayar görme kütüphanesi (open source computer vision library - OpenCV) aracından yararlanılmıştır. Haar-benzeri özellikler şeklindeki dikdörtgensel bölgelerin piksel değerlerinin toplamının farkı olarak ifade edilir.



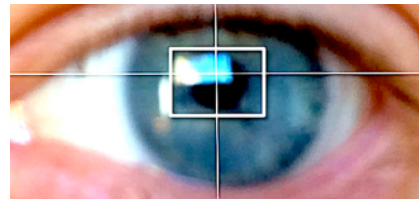
Şekil 5. Haar Öznitelikler

Dikdörtgen özniteliklerin hızlı hesaplanabilmesi için integral imge kullanılır. Integral imgenin (x,y) konumundaki değeri, (x,y)'nin üstünde ve solunda kalan alanın piksel değerleri toplamıdır. Şu formülle ifade edilir:

Burada  $ii(x,y)$  integral imgeyi,  $i(x,y)$  ise orijinal imgeyi göstermektedir. Integral imge kullanarak herhangi bir dikdörtgensel toplam dört referansla hesaplanabilir. Benzer şekilde, Şekil 5b'deki öznitelik, iki komşu dikdörtgensel toplam içerdiği için altı referansla, Şekil 5a'daki fark ise sekiz referansla hesaplanabilir.



Şekil 6. İntegral İmge



Şekil 7. Göz Odak Noktası Tespiti

Şekil 6 A dikdörtgeni içindeki piksel değerleri toplamı, integral imgenin 1 konumundaki değeridir. 2 konumundaki değer A+B, 3 konumundaki değer A+C, 4 konumundaki değer A+B+C+D'dir. D içindeki piksel değerleri toplamı  $4+1-(2+3)$  olarak hesaplanır.

## 5. SONUÇ

Bu çalışma ile yakın geçmişimizde kullanılan Göz izleme teknolojisini zor ekipmanlardan kurtarıp günlük kullanıma uyarlama amaçlanmıştır. Bu teknolojiye faydalanmak için özel tasarlanmış gözlükler , Göz izleme özellikli monitörler ,bu sisteme özel uyarlanan Laboratuvarlara ihtiyaç duyulmadan basit bir Web Kamera ve uygun ve işlevsel bir yazılım ile Pc karşısına oturan kullanıcının açtığı ekranda gezindiği sayfalarda nereye ne kadar baktığını bulabilir ve bu verilerle ekrandaki görüntünün kullanılabilirlik düzeyini artırabiliriz.

Sistem yazılım tabanlı olduğu için geliştirilebilir yazılımlarla daha profesyonel uygulamalar haline getirilebilir.

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## WELL-BEING AT SCHOOL: THE IMPACT OF SCHOOL ORGANIZATIONAL CLIMATE ON TEACHER MORALE

Maria Cristina Orsi, Sara Viotti<sup>1</sup>, Gloria Guidetti, Daniela Converso  
Department of Psychology, University of Turin, Italy

### ABSTRACT

School Organizational Climate is a multidimensional psychological construct specific for schools contexts. Many studies underline its importance in sustaining teacher well-being. However, so far, few studies were addressed at identifying, among its various subdimensions, which are the specific predictors of teachers well-being. Among various tools used to measure organizational climate, the School Organizational Health Questionnaire (SOHQ: Hart et al., 2000) is one of the most comprehensive, consisting of eleven dimensions describing school climate (appraisal and recognition, curriculum coordination, effective discipline policy, excessive work demands, goal congruence, participative decision making, professional growth, professional interaction, role clarity and student orientation) plus one dimension, i.e., morale, which can be considered an important indicator of teacher well-being. According to Hart et al. (2000), morale can be defined as the energy, enthusiasm, team spirit and pride that teachers experience in their school.

The aim of the present paper is to identify in a sample of primary and middle school teachers (n=378), the antecedents of morale, among the eleven subdimensions of SOHQ describing school climate.

Through a multiple linear regression, the results identified three variables that positively affect morale: goal congruence ( $p=0.00$ ), curriculum coordination ( $p=0.00$ ) and participative decision making ( $p=0.09$ ).

In sum, the results show that teacher morale is greatly affected from organizational processes and less from social and work-related factors. Therefore, the present study suggests that measures addressed at fostering the quality of organizational processes may be implemented in order to enhance teacher well-being

### INTRODUCTION

As highlighted in several decades of research in the field of Occupational Health Psychology (OHP), teaching is a highly stressful occupation (Hakanen et al. 2006; Zurlo, Pes, & Cooper, 2007; Converso et al., 2015). Literature showed that sources of stress may include professional isolation, organizational injustice, high relational demands from with children/students, disciplinary problems, work load, disagreement with colleagues or conflict with parents (Zurlo, Pes & Cooper, 2007; Capone & Petrillo, 2016; Viotti et al., 2016).

School organizational climate (SOC, Tsui & Cheng, 1999; Hart et al., 2000; Burns et al., 2013) is a multi-dimensional construct related to the teacher's work conditions at school. Since the 1950s, the study of organizational climate was an important research topic in the OHP. It was defined as a shared perception of how things are done and a set of expectations and incentives that describe the characteristic behavioral processes of a social system in a particular time in a given context. These processes reflect the values, attitudes and beliefs of the organization's members, becoming then part of the climate (Payne & Pugh, 1976).

Many scales have been developed to measure this construct at school (Hoy, Tarter, & Kottkamp, 1991). One of them is the School Organizational Health Questionnaire (SOHQ, Hart et al., 2000; Guidetti et al., 2015). It is a self-reported questionnaire that measure morale and 11 different dimensions of school organizational climate. Morale, being an important component of personal and organizational well-being (Narvaez et al. 2008), is a dimension that was previously studied in the association with climate. Generally, morale is a construct that also may affect job performance, commitment with school and, also, the sense of achievement from job. Morale has been defined as the energy, enthusiasm, team spirit and pride that teachers experience in their school (Hart, Conn, & Carter, 1992; Doherty, 1988; Evans, 1992). There are many studies on primary and middle school teachers that have been used the SOHQ instrument; before the Hart's study, other authors (Doherty, 1988; Evans, 1992) investigated the morale dimension identifying many of its antecedents and its outcomes. However, to date, no study has examined the impact of school climate on teacher morale.

The aim of the present paper is to identify in a sample of primary and middle school teachers, the antecedent of morale, among the eleven subdimensions of SOHQ describing school climate.

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<sup>1</sup>Correspondence concerning this article should be addressed to Sara Viotti, Department of Psychology, University of Turin, Via Giuseppe Verdi 8, 10124, Turin, Italy. Contact: [sara.viotti@gmail.com](mailto:sara.viotti@gmail.com); [sara.viotti@unito.it](mailto:sara.viotti@unito.it).

## METHOD

### Data collection

Teachers from eighteen public school institution in a region of Northern Italy were involved during the academic year 2012/2013. Presentation of the project, sharing of content, objectives and modalities of implementation were first presented to School Leaders, and consequently to all the participants involved in the research project. The self-reported questionnaire was administered, anonymously, to a total sample of 378 teachers, and its completion was based on consent for the processing of the data, conducted in privacy and in accordance with current Italian legislation. It took place during working hours, at the individual sites, in the presence of researchers of the Department of Psychology who were available for clarification about the questionnaire completion.

### Measures

The data were obtained by means of a self-reported questionnaire including a socio-demographic section and the SOHQ (Hart et al. 2000; Italian translation by Guidetti et al., 2015). The original version of SOHQ consisted of 57 items grouped in 12 sub-dimensions: morale ( $m=15.31$ ;  $sd=2.91$ ;  $\alpha=.87$ ; 5 items: "There is good team spirit in this school"), appraisal and recognition ( $m=15.36$ ;  $sd=3.92$ ;  $\alpha=.85$ ; 6 items: "I am regularly given feedback on how I am performing my role"), curriculum coordination ( $m=12.35$ ;  $sd=2.25$ ;  $\alpha=.83$ ; 4 items: "There is sufficient contact between different sections of the school in curriculum planning"), effective discipline policy ( $m=12.4$ ;  $sd=2.15$ ;  $\alpha=.66$ ; 4 items: "The rules and sanctions relating to discipline in this school are well understood by both staff and students"), excessive work demands ( $m=10.89$ ;  $sd=2.75$ ;  $\alpha=.78$ ; 4 items: "Teachers are overloaded with work in this school"), goal congruence ( $m=15.42$ ;  $sd=2.55$ ;  $\alpha=.72$ ; 5 items: "There is agreement in the teaching philosophy of this school"), participative decision making ( $M=11.47$ ;  $Ds=2.48$ ;  $\alpha=.80$ ; 4 items: "I am happy with the decision-making processes used in this school"), professional growth ( $m=10.91$ ;  $sd=2.67$ ;  $\alpha=.80$ ; 5 items: "I am encouraged to pursue further professional development"), professional interaction ( $m=23.08$ ;  $sd=3.56$ ;  $\alpha=.89$ ; 7 items: "There is good communication between staff members in this school"), role clarity ( $m=13.67$ ;  $sd=1.86$ ;  $\alpha=.63$ ; 4 items: "I am always clear about what others at school except of me"), student orientation ( $m=13.34$ ;  $sd=2.09$ ;  $\alpha=.78$ ; 4 items: "This school promotes the concept of students being individuals") and support leadership ( $m=15.85$ ;  $sd=3.32$ ;  $\alpha=.88$ ; 4 items: "There is support from the administration in this school"). Teachers were asked to respond to each item on a 4-point scale, ranging from 'strongly disagree' to 'strongly agree'.

### Participants

Three hundred and thirty-seven teachers correctly filled out the questionnaire and thus were considered for the presented study. Sixty-eight (20.2%) of them were kindergarten teachers, 169 were teachers of primary school (50.1%) and 100 (29.7%) of secondary school. Of them, 90.2% ( $n=308$ ) were female and 6.8% ( $n=23$ ) were male. Participants were aged between 24 and 63 years ( $m=45.32$ ;  $sd=8.83$ ). Educational level were 50.1% had completed high school, 15.4% had a bachelor degree, 18.7% a master degree and 7.4% a PhD or a specialization degree. Most of the participants were married (70.2%), 17.5% single, 5.6% divorced and 1.8% widowed. 65.9% had at least one child. Concerning professional data, participants had a job tenure in the Italian public school system ranging from less than a year to 41 years ( $m=19.67$ ;  $sd=10.68$ ). The majority had a permanent (72.5%) and full-time contract (85.2%).

### Data analyses

All the analyses were conducted by using IBM SPSS 23.

Pearson's correlations were performed in order to check the significance and the direction of the relationships among all the variables under study. A multiple linear regression was performed in order to identify, among the dimensions of the organization school climate, the predictor of morale. Firstly, using the stepwise method, morale was entered as a dependent variable whereas all the 11 variables describing organization school climate as independent variables. Once the algorithm identified the final solution it was adjusted for control variables (i.e., gender, age, and scholastic degree) using the enter method.

## RESULTS

Pearson's correlations are reported in Table 1. All the 11 dimensions describing the school organizational climate showed significant correlations with morale in the expected direction. As expected, the only negative

correlation was found to be between morale and excessive work demands ( $r=-.17$ ). Among the 11 variables of the school climate, excessive work demands was also the weakest correlate of morale. On the other hand, morale showed the strongest associations with goal congruence ( $r=.64$ ), curriculum coordination ( $r=.59$ ), participative decision making ( $r=.57$ ), and professional interaction ( $r=.57$ ).

Table 2 reports the results of the multiple regression analysis. Using the stepwise method, the software identified the final solution in three steps. At step 1, it extracted as best predictor of morale, goal congruence ( $\Delta=.72$ ;  $p=.001$ ), reaching the 51% of the variance explained. At step 2, as the algorithm added curriculum coordination ( $\Delta=.24$ ;  $p=.001$ ), the  $\Delta$  value associated to goal congruence decreased ( $\Delta=.56$ ;  $p=.00$ ), and  $R^2$  reached the value of .54. At step 3, also participative decision making ( $\Delta=.16$ ;  $p=.009$ ) was included. At this step, goal congruence and curriculum coordination showed a  $\Delta$  value of, respectively, .45 ( $p=.001$ ) and .21 ( $p=.001$ ). The final solution thus obtained was adjusted for control variables (i.e., age, gender, and school grade), using enter method. At this step, the variance explained was 56% and whereas goal congruence ( $p=.001$ ), curriculum coordination ( $p=.001$ ) and participative decision making ( $p=.09$ ) kept their significance, none of the control variables considered were found to significantly affect morale.

Table 1. Internal consistency, descriptive statistics, and correlations of the subscales used in the study

	$\alpha$	M(sd)	1	2	3	4	5	6	7	8	9	10	11	12
1. Appraisal and recognition	.85	15.36(3.92)	1	.552**	.463**	-.225**	.667**	.488**	.557**	.507**	.363**	.505**	.565**	.462**
2. Curriculum Coordination	.83	12.35(2.25)	.552**	1	.513**	-.140*	.520**	.352**	.671**	.383**	.436**	.401**	.688**	.598**
3. Effective discipline police	.66	12.40(2.15)	.463**	.513**	1	-.163**	.460**	.317**	.569**	.416**	.533**	.377**	.607**	.498**
4. Excessive work demands	.78	10.89(2.75)	-.225**	-.140*	-.163**	1	-.241**	-.240**	-.106	-.049	-.042	-.265**	-.224**	-.178**
5. Participative decision-making	.80	11.47(2.48)	.667**	.520**	.460**	-.241**	1	.543**	.599**	.464**	.362**	.602**	.666**	.570**
6. Professional growth	.80	10.91(2.67)	.488**	.352**	.317**	-.240**	.543**	1	.378**	.329**	.354**	.534**	.483**	.408**
7. Professional interaction	.89	23.08(3.56)	.557**	.671**	.569**	-.106	.599**	.378**	1	.514**	.495**	.438**	.648**	.570**
8. Role clarity	.63	13.67 (1.86)	.507**	.383**	.416**	-.049	.464**	.329**	.514**	1	.419**	.413**	.489**	.316**
9. Student orientation	.78	13.34(2.09)	.363**	.436**	.533**	-.042	.362**	.354**	.495**	.419**	1	.312**	.519**	.411**
10. Supportive leadership	.88	15.85(3.32)	.505**	.401**	.377**	-.265**	.602**	.534**	.438**	.413**	.312**	1	.544**	.470**
11. Goal congruence	.72	15.42(2.55)	.565**	.688**	.607**	-.224**	.666**	.483**	.648**	.489**	.519**	.544**	1	.674**
12. Morale	.87	15.31(2.91)	.462**	.598**	.498**	-.178**	.570**	.408**	.570**	.316**	.411**	.470**	.674**	1
**Significant correlation at the level .001 (2-tails)														
* Significant correlation at the level .05 (2-tails).														



Table 2. Stepwise regression analysis

Step		t	p
1 ( $R^2=.51$ )	Goal Congruence	15.25	.001
2 ( $R^2=.54$ )	Goal Congruence	8.85	.001
	Curriculum Coordination	3.72	.001
3 ( $R^2=.55$ )	Goal Congruence	6.09	.001
	Curriculum Coordination	3.50	.001
	Participative decision Making	2.62	.009
4 ( $R^2=.56$ )	Goal Congruence	5.77	.001
	Curriculum Coordination	3.33	.001
	Participative decision Making	2.95	.003
	Age	-1.78	.785
	School grade	.27	.075
	Gender	-.68	.492

## CONCLUSIONS

The factors that emerged as predictor of teacher morale represents three aspects describing the organizational processes: goal congruence, curriculum coordination, and participative decision making.

In line with this, results showed that teacher morale was greatly affected by organizational processes and less by social and work-related factors. Therefore, the present study suggests that measures addressed at fostering the quality of organizational processes may be implemented in order to enhance teacher well-being.

The present study has some limitations. The most important is its cross-sectional design. It is assumed that organizational climate are antecedents of morale. However, the opposite could also be true. Therefore, longitudinal study design should be used in the future instead of cross-sectional.

Another limitation is that all of the measures employed were self-reported. Future studies may benefit from the employment of data from multiple sources.

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## WHAT ARE THE COMPETENCIES OF PROSPECTIVE TEACHERS AND SCHOOL COUNSELLORS TO IDENTIFY VIOLENCE AND TO COPE WITH VIOLENCE AT SCHOOLS?

Nilüfer Sehriban ÖZABACI  
Eskişehir Osmangazi University, TURKEY  
niluferozabaci@hotmail.com

### ABSTRACT

The main purpose of this study was to investigate the school counsellors' and prospective teachers' awareness level of violence and the ways they use to cope with violence at school. The research was designed according to survey method. In the study, participants were selected by simple random sampling. The group of study consisted of 239 university students in 3<sup>rd</sup> and 4<sup>th</sup> class from primary school teaching and guidance and psychological counselling programs at the faculty of education of Eskişehir Osmangazi University. In collecting the data, the Personal Information Form, Violence Management Question Form and Scale of Conflict and Violence Awareness (SCVA) (Sargin, 2010) developed as a form by Ohio Department of Education and the Ohio Commission on Dispute Resolution and Conflict Management were used. During the analysis of findings qualitative methods were employed. Results and implications were discussed in the light of relevant literature and research findings.

**Key Words:** school violence, awareness of conflict and violence

### 1. INTRODUCTION

Due to its both physical and psychological threatening role, school violence is a crucial and prevalent issue for children, youths and school staff all over the world. School violence is acted against students by school staff, among students (Cenkseven, Önder & Yurtal, 2008, Pişkin, 2002), against school staff by students (Daniels, Bradley & Hays, 2007) and by school staff against each other and it comes out in different forms such as emotional, verbal, physical, sexual or economical violence.

School is one of the fundamental areas in which violence is acted. Teachers and school managers overemphasize that violence behavior between school staff and students appear at various levels on daily basis and school violence is a multi-faceted problem (Mallet & Paty, 1999). The term of multi-faceted is used here to refer to the perpetrators of violence, victims of violence, feelings of fear and insecurity, crime and antisocial behaviors. In addition, this term comprises the factors like a disciplinary system developed by the school to deal with violence. The definition of school violence has changed in the last ten years. School violence can be considered as a multi-faceted concept harming to school climate deeply because of inhibitory and crime based actions and aggression behaviors to prevent development and effective learning environment (Furlong & Morrison, 2000).

Since the 1980s, school violence has become an extensive research area. Most researches on this subject have focused on three main areas. The first research subject is about the types of violence among age groups (Sullivan, 2000, Benbenishty & Astor, 2005). The latter research subject is about the evaluation of school violence prevention programs (Gottfredson & Gottfredson'un, 2001). The majority of school violence prevention programs have focused on the studies made at the individual level (Howard, Flora & Griffin, 1997; Gottfredson'un & Gottfredson, 2001).

In their studies with school counsellors, Holcomb-McCoy and Mitchell (2005) found that problem students mostly come from families with low family functions and those students experience further academic failure and poverty (Ascher, 1988). Research findings suggest that violence is seen most intensively in high school adolescents and the reason why they tend to use violence is because the deficiency in communication skills, inability of boys-girls for making friendships, lack of self-confidence, failure and only thinking themselves and their own benefits. It is observed that adolescents and children who met violence or victims of violence show a higher rate of violence compared to their peers (Pişkin, 2002) and they are in difficulty with controlling their anger.

Violence and aggression are generally used in order to harm others and they are considered to be anti-social behaviors containing serious and high level of destructive behaviors. The first school-wide preventive actions might include activities such as conflict resolution, teaching emotional literacy and anger management skills to all students to create a positive school climate. Individuals who have suffered from violence are more likely to show anti-social behaviors compared to others. Providing those ones with psychological counselling and

guidance, academic support and small group social skills training are extremely important for positive school environments (D'Andrea, 2004).

Training school counsellors and teachers to make them meet the needs of children with special needs and as practitioners becoming well-prepared for future and also performing effective studies about the society and family education reform are extremely important (Ascher, 1988). School counselors are both expected to prevent violence and provide professional assistance to individuals who have committed violence, suffered from violence or indirectly affected from violence after witnessing violence events. However, it is seen that the studies investigating the school counsellors' efforts to get ready for fulfilling the requirements of their roles are considerably limited in literature. It is claimed that the violence and aggression are considered by school counselors and teachers as being a substantial issue needed to be addressed in-service training and the majority of them state that they feel ready enough to cope with moderate school violence; but still, most of them need to be trained since they haven't had an opportunity to take courses about coping with school violence during their undergraduate studies. In a study, school violence is pointed out to be a problem resulting generally from social conflicts at the student level. In this regard, teachers have a vital role to enable students to get conflict resolution skills. To teach the principles and skills of conflict resolution is related to basic functions of the school and it is necessary for students to take part in life in an effective manner. These life-sustaining skills contribute to broaden the individual perspective, to establish more constructive relations, and to enhance the learning success (Longaretti & Wilson, 2006). Once students cannot resolve a conflict with their peers or teachers in the school setting by using constructive solutions, the possibility of having a good quality of learning and teaching environment and building up healthy interpersonal relationships lessen (Taştan, 2006).

In our country, school counselors identify violence mainly as a kind of psychical violence and they discuss it in terms of damaging to school materials and teachers expect that just a very small number of students would ask for help from school counselor and these findings are consistent with each other (Taştan, 2006).

School violence is a worrying matter for school counselors in our country since they are expected to have the most effective role for both preventing and coping with this type of violence. Findings from one of the extremely limited studies (Uzbaş, 2009) suggest that % 40 of school counselors feel inadequate in competency to prevent school violence and %70 of them need to have in-service training. The other finding of this study reveals that the counselors' perception of inefficacy is related to the years they work. The ones who work for 5-10 years feel more inadequate than the ones with longer working years. In our country, school counselors confine the school violence to the acts of damaging school materials and the victims of violence take place in the bottom of the rankings preferring to receive social support and with these findings in mind, school counselors can be interpreted as being not effective in coping with the problem of school violence (Pişkin, 2002).

Teachers are required to take on major tasks to resolve and manage conflicts at schools. Teachers with no conflict management skills training use personal resolution methods to deal with problems. Teachers demonstrated medium level conflict resolution skills in a research conducted in Canada (Longaretti and Wilson 2006). As Opatow (1991) claims, teachers perceive physical assaults and fighting talks as conflicts. Longaretti and Wilson (2006) stated in their study that simple conflicts can be suppressed by teachers; teachers' interventions are usually resulted in discipline because they use their authority and they don't let students resolve conflicts by themselves. However, conflicts should be perceived in a correct way and they should be intervened and governed with proper methods by teachers. Otherwise, misdirected conflicts turn out to be violence quite easily. First and foremost, teachers should have awareness related to conflict and violence in these processes. In investigations related to awareness of prospective teachers about conflict and violence, there could not be met any study made on this issue. Similarly, there is no study found to explain the readiness level of psychological counselors in our country to be able to work on the problem of violence. Because of the complicated nature of violence, supports should be given with professional problem solving skills in the process of solving out the problems. Considering this fact, a detailed analysis has been made and it is found that students studying in guidance and psychological counselling have low problem solving skills, but their competency in problem solving increases as their class level goes up (Uzbaş, 2009). For this reason, in the current study it was tried to examine the awareness levels of prospective teachers about conflict and violence and to investigate whether prospective teachers' the conflict and violence awareness levels vary by gender, age and departments they study in.

With the intend of determining the Guidance and Psychological Counselling and Primary School Teaching students' awareness level of violence, six research questions were raised. The questions are as follows:

1. Is there any difference between Guidance and Psychological Counselling (GPC) students and Primary School Teaching (PST) students regarding to their violence awareness level, gender and class level?
2. Do students' attitudes towards conflict and violence vary by departments they study in?

3. When the departments of students considered, is there any difference between the students' attitudes towards conflict and violence and the answers given to the following question which takes place in the first case "What type of violence is this case described here?"
4. Is there a relationship between the scores of the Conflict and Violence Awareness Scale and the answers given to the question in the first case "What would you do if the student consulted with you about the situation he/she experienced?"
5. Is there a relationship between the scores of the Conflict and Violence Awareness Scale and the answers given to the question in the first case "Which of the following statement is true for you about this situation?"
6. Are GPC and PST students' scores of the Conflict and Violence Awareness Scale predicted by their gender, class level and departments they study in?

## 2.METHOD

As the primary goal of the study was to evaluate the relationships among variables, correlational research design was employed. In 'correlational research' data is collected in order to identify the degree to which a relationship comes into existence between two or more variables (Büyükoztürk,2010).

### 2.1. Study Group

The group of study consisted of 239 university students from primary school teaching and guidance and psychological counselling programs, in the faculty of education at Eskisehir Osmangazi University, in 2015-2016 academic years. The random sampling method was used for the selection of the participants in the study. 181 of the participants (%75, 7) were female while 56 of them (%23, 4) were male and their ages were between 20 and 24 years. 164 of the participants (%68, 6) were the students of GPC and 75 of them (31, 4) were PST students. In addition, 26 of the participants (%10, 9) were second graders, 191 of them (%79, 9) were third graders and the rest 22 of them (%9, 2) were fourth graders.

**Table 1. The Characteristic Distributions of the Participants**

	N	%
<b>Gender</b>	239	
Female	181	75,7
Male	56	23,4
<b>Class</b>	239	
2 <sup>nd</sup> class	26	10,9
3 <sup>rd</sup> class	191	79,9
4 <sup>th</sup> class	22	9,2
<b>Age</b>		
20	11	4,6
21	72	30,1
22	29	12,1
23	9	3,8
24	5	2,1
<b>Department</b>		
GPC	164	68,6
PST	75	31,4
<b>Total</b>	<b>239</b>	<b>100</b>

### 2.3. Instruments

The data in the present study were obtained from various instruments for two main groups. As data collection tools, the Case Report Form/Student Related to the Attitudes towards Violence and the Scale of Conflict and Violence Awareness, developed as a form by Ohio Department of Education (2002) and validity and reliability tests were conducted by the researcher, were used.

#### 2.3.1. The Scale of Conflict and Violence Awareness

During the reliability and validity tests of the Scale of Conflict and Violence Awareness (SCVA), the questionnaire form developed by Ohio Department of Education and the Ohio Commission on Dispute Resolution and Conflict Management (2002) was used. The reliability and validity of the measures in the

questionnaire form were not tested by the Ohio Commission. The SCVA was designed as a 5 point Likert scale ranging from 1. Strongly disagree, 2. Disagree, 3. Somewhat agree, 4. Agree, 5. Strongly agree. There is no reverse item included. There were 28 items in total but following the statistical analysis, which was performed in order to reveal the psychometric properties, one item was removed from the scale. The SCVA is used for adolescents and adults and includes 27 categorical indicators items. A construct with eight factors were obtained as a result of analyses. By considering the contents of the items that were aggregated suitably under the factors, the first factor was named 'Conflict awareness' and consisted of 6 items (8, 7, 6, 17, 26, 5) while the second factor was named 'Violence awareness' and covered 4 items (14, 13, 12, 27). By using the same criterion, the third factor including 5 items (10, 18, 9, 4, 11) was named 'Influencing factors on violence and resolution awareness' and the fourth factor consisting of 3 items (21, 22, 23) was named 'Awareness of empathy'. Similarly, the fifth factor containing 2 items (24, 25) was named 'Awareness of physical responses during the conflict' while the sixth factor containing 2 items (16, 15) was named 'Awareness of effect and size of violence'. Lastly, the seventh factor including 2 items (19, 20) was named 'Awareness of feelings during the conflict' while the eighth factor including 3 items (1, 3, 2) was named 'Awareness of the natures of violence and conflict'. The common opinion of the three experts was that the use of scale in the area would be appropriate. The reliability of the measures obtained from SCVA was calculated using Cronbach alpha. The Cronbach alpha coefficients were found to be .87 (Sargin, 2010).

### 2.3.2. The Case Report Form/Student Related to the Attitudes towards Violence

The case report form related to the attitudes towards violence was developed for the present study. Within the form, there were three cases and three students with the experiences about violence. After each case, the students were asked three questions. One case was used for this research. The questions were: "What type of violence is this case described here?" "Which of the following statement is true for you about this situation?" "What would you do if the student consulted with you about the situation he/she experienced?" Under each question, the answer choices were given. To answer the first question, the students were supposed to choose one option about the types of violence. For the other two questions, there were five different behavior options and the students were expected to respond on a five-point Likert type grading scale (Türküm, Özabacı & Hamacı, 2012). Case studies are as follows:

#### 1<sup>st</sup> Case:

*"A fifth grade girl constantly talks about her parents' lack of interest. She has three siblings. She is middle sister. Her mother and father are teachers. Her father works in the school where she studies. She says that her father has never time for his daughter and never gives her money. Even, she has difficulties with meeting her own basic needs. She usually goes to school with rags and worn-out shoes and she becomes often sick owing to inadequate food intake. Therefore, she has to be absent from school. Once she tells her teachers about her feelings, they say "You're wrong; your dad is one of the nicest people in the world. We believe he is also a good father."*

### 2.3.3. DATA ANALYSIS

During the analysis of the data, the groups' percentages, averages and standard deviations will be calculated. If a normal distribution is observed in determining the differentiations and relationships between the groups, one-way ANOVA, t test, correlation analysis and multiple regression analysis techniques will be used. The level of significance will be accepted to be .05 in interpreting the findings.

### 3. Findings

The findings related to the answers given to the question 'Do the conflict and violence awareness levels of GPC and PST students vary by gender?' can be seen in Table 2. Table 2 is illustrated as follows:

**Table 2. The T- Test Results of the Conflict and Violence Awareness Scale Scores According to Gender**

Gender	N	X	sd	t	p
Female	181	103,98	18,37	1,49	,13
Male	56	107,93	12,59		

As the results reveal, students' attitudes towards conflict and violence do not vary by gender.

**Table 3. The T- Test Results of the Conflict and Violence Awareness Scale Scores According to Department**

Discipline	N	X	sd	t	p
GCP	164	109,17	12,76	6,07	,000
PST	75	95,62	21,51		

According to the results illustrated in Table 3, students' attitudes towards conflict and violence vary by the department they study in. The results indicate that the GCP students' the conflict and violence awareness levels score (X=109, 17) is higher than the score (X=95, 62) of the ones in PST program.

**Table 4. The ANOVA Results Related to Students' Attitudes towards the Conflict and Violence and the Answers Given to the Question in the First Case "What type of violence is this case described here?"**

Source of the Variance	Sum of squares difference	sd	Average of squares	F	p	Significant																																			
groups	5455,62	3	1818,542	6,597	,000	3-4																																			
Inter-																																									
<table border="1"> <tr> <td><b>What would you do if the student consulted with you about the situation he/she experienced"</b></td><td>SCVA Total</td><td>I wouldn't be concerned about the student's situation.</td><td>I would request a meeting with the student's parents.</td><td>I would get the student into the psychological consultation.</td><td>I would try to resolve the problem by examining it in depth with the school manager and teachers.</td><td>Since the problem doesn't come within my area of expertise, I would lead the student to go an expert.</td></tr> <tr> <td>Pearson Correlation</td><td>1</td><td>-,139*</td><td>,406**</td><td>,396**</td><td>,376**</td><td>-,140*</td></tr> <tr> <td>Sig. (2-tailed)</td><td></td><td>,032</td><td>,000</td><td>,000</td><td>,000</td><td>,030</td></tr> <tr> <td>SCVA Total</td><td>239</td><td>239</td><td>239</td><td>239</td><td>239</td><td>239</td></tr> <tr> <td>N</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>							<b>What would you do if the student consulted with you about the situation he/she experienced"</b>	SCVA Total	I wouldn't be concerned about the student's situation.	I would request a meeting with the student's parents.	I would get the student into the psychological consultation.	I would try to resolve the problem by examining it in depth with the school manager and teachers.	Since the problem doesn't come within my area of expertise, I would lead the student to go an expert.	Pearson Correlation	1	-,139*	,406**	,396**	,376**	-,140*	Sig. (2-tailed)		,032	,000	,000	,000	,030	SCVA Total	239	239	239	239	239	239	N						
<b>What would you do if the student consulted with you about the situation he/she experienced"</b>	SCVA Total	I wouldn't be concerned about the student's situation.	I would request a meeting with the student's parents.	I would get the student into the psychological consultation.	I would try to resolve the problem by examining it in depth with the school manager and teachers.	Since the problem doesn't come within my area of expertise, I would lead the student to go an expert.																																			
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Sig. (2-tailed)		,032	,000	,000	,000	,030																																			
SCVA Total	239	239	239	239	239	239																																			
N																																									

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

In-groups	64779,01	235	275,655
Total	70234,64	238	

As it is shown in Table 4, the results indicate that there is a significant difference in the scores between the students' attitudes towards the conflict and violence and the answers given to the question in the first case "What type of violence is this case described here?"  $F_{(3-235)} = 6,59$ . In other words, the students' attitudes towards conflict and violence vary significantly by depending on the answers given to the question in the first case "What type of violence is this case described here?" With the purpose of finding out the interdisciplinary differences between groups, Scheffe test was performed. The findings of the test revealed that there is a higher awareness in the ones responding 'emotional violence' (insult, humiliation) (4) (X=109, 23) than the ones responding 'other' (5).

**Table 5. The Results of Correlational Analysis Related to the Answers Given to the Question “What would you do if the student consulted with you about the situation he/she experienced?” and the Conflict and Violence Awareness Scale Scores**

As it can be seen in Table 5, there is a significant negative relationship between the conflict and violence awareness and the way of responding to the first case “I wouldn’t be concerned about the student’s situation” ( $r=-0,139$ ,  $p<.01$ ). In this case, as the level of conflict and violence awareness increases, the probability of responding to the case like “I wouldn’t be concerned about the student’s situation” decreases. Additionally, a high and significant positive relationship is observed between the conflict and violence awareness and the form of responding to the case “I would request a meeting with the student’s parents” ( $r=-0,406$ ,  $p<.01$ ). It shows that the increase in the level of conflict and violence awareness leads to an increase in the probability of responding to the case as following, “I would request a meeting with the student’s parents”. Similarly, the results reveal that there is a high and significant positive relationship between the conflict and violence awareness and the responding statement for the case “I would get the student into the psychological consultation” ( $r=-0,396$ ,  $p<.01$ ). In the same as the previous finding, as the level of conflict and violence awareness increases, the likelihood of responding to the case like “I would get the student into the psychological consultation” increases, too. In a similar manner, the results indicate that there is a high and significant positive relationship between the conflict and violence awareness and the way of responding to the case “I would try to resolve the problem by examining it in depth with the school manager and teachers” ( $r=-0,376$ ,  $p<.01$ ). Invariably, as the level of conflict and violence awareness increases, the possibility of responding to the case like “I would try to resolve the problem by examining it in depth with the school manager and teachers” also increases. In other respects, the results indicate that there is a significant negative relationship between the conflict and violence awareness and the responding statement for the case “Since the problem doesn’t come within my area of expertise, I would lead the student to go an expert” ( $r=-0,140$ ,  $p<.01$ ). It can be deduced from this finding that as the level of conflict and violence awareness increases, the probability of responding to the case like “Since the problem doesn’t come within my area of expertise, I would lead the student to go an expert.” decreases.

**Table 6. The Results of Correlational Analysis Related to the Answers Given to the Question in the First Case “Which of the following statement is true for you about this situation?” and the Conflict and Violence Awareness Scale Scores**

Which of the following statement is true for you about this situation?”	The student might act in this way to attract the attention of the teachers and the school counselor. Therefore, we should pay no attention.	In such cases, the family should be informed.	Legal procedures must be initiated by applying to security.	Psychological counselor should make contact with social services	The psychological counselor does not have any legal rights	SCVA Total
PearsonCorrelation	-,153*	-,037	-,037	,004	-,288**	1
Sig. (2-tailed)	,018	,574	,567	,948	,000	
N	239	239	239	239	239	239

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

According to the results in Table 6, there is a significant negative relationship between the conflict and violence awareness and the way of responding to the first case “The student might act in this way to attract the attention of the teachers and the school counselor. Therefore, we should pay no attention.” ( $r=-0,153$ ,  $p<.01$ ). In this sense, the results reveal that as the level of conflict and violence awareness increases, the likelihood of responding to the case like “The student might act in this way to attract the attention of the teachers and the school counselor. Therefore, we should pay no attention” decreases. Similarly, a high and significant negative relationship is observed between the conflict and violence awareness and the responding statement for the case as following “The psychological counselor does not have any legal rights” ( $r=-0,288$ ,  $p<.05$ ). It means that the increase in the level of conflict and violence awareness leads to a decrease in the probability of responding to the case like “The psychological counselor does not have any legal rights”.



**Table 7. The Results of Multiple Regression Analysis Related to the Conflict and Violence Awareness**

	B	Standard Error B	$\beta$	t	p	Dual r	Partial r	Variable
Constant	99,610	10,226			9,741	,000		
Department	-11,043	2,475	-,298	-4,462	,000	-,367	-,281	
Class	5,630	2,541	,147	2,216	,028	,272	,144	
Gender	2,469	2,461	,061	1,003	,317	,097	,066	
<hr/>								
R=	,394	R <sup>2</sup> =	,156					
F <sub>3-233</sub>	=14,309	p=	,000					

When the results are examined in Table 7, it can be observed that the conflict and violence awareness scores present a high and significant correlation with discipline, class and gender variables. According to the standardized regression coefficient ( $\beta$ ), the relative order of importance of predictor variables on the conflict and violence awareness is; gender, class and department. In the analysis of t-test results related to the significances of regression coefficients, it can be seen that the department of students is a significant predictor of conflict and violence awareness.

#### 4. DISCUSSION

The present study was conducted with the purpose of comparing the Guidance and Psychological Counselling and Primary School Teaching students in terms of their conflict and violence awareness levels and competencies. In recent years, the counselors and teachers are in a position to meet the school violence, resolve or try to find out possible solutions to overcome the problem. Because of that crucial role, how the school counselors and primary school teachers are trained and whether they have sufficient competency to achieve the goals or not became the focus of this study. With those in mind, the importance of this study cannot be underestimated since the current study serves to identify how those processes work. According to the findings of this study, conflict and violence awareness did not vary by gender. In this manner, our findings are consistent with the ones in literature. To illustrate, Sargin (2010) also claimed in her study that there were no significant differences observed in the scores of conflict and violence awareness by gender. Besides, findings demonstrated that the levels of conflict and violence awareness of the students in GPC program were higher than those in PST program. Similarly, Sargin (2010) found that the conflict and violence awareness of prospective teachers at verbal departments were higher than those at numerical ones. So, this finding is also parallel with the findings of Sargin (2010). In this study, the GPC students' levels of awareness were found to be high, and that shows they are more sensitive and prepared to work on the problems on their own. Moreover, the departments of the participants were observed to be a significant predictor of conflict and violence awareness.

The significant negative relationship between the conflict and violence awareness and the way of responding to the first case "I wouldn't be concerned about the student's situation" revealed a decrease in the probability of responding to the case like "I wouldn't be concerned about the student's situation". Because of the increase in the level of conflict and violence awareness, there was a low level of participation for this choice. For this reason, a significant negative correlation was revealed in the findings. It presents that the students are aware of their responsibilities. Additionally, the results indicated a high and significant positive relationship between the conflict and violence awareness and the form of responding to the case "I would request a meeting with the student's parents". This finding shows that the participants know about the first place or people to get in contact with are the family. Furthermore, the responding statement as "I would get the student into the psychological consultation" shows up the students' consciousness about doing what needed to be done as GPC students. Lastly, the findings indicated a high and significant positive relationship between the conflict and violence awareness and the way of responding to the case "I would try to resolve the problem by examining it in depth with the school manager and teachers". As it can be understood from this finding, the need for cooperation with the respective departments in the school is considered by the participants. In other words, the participants are conscious of the necessity of not remaining insensitive to the case and they take it seriously by stating the need of a team to be able to get necessary support.

During the recent years, the conflicts and violence have been observed to become intense in Turkey like all around the world. In parallel to the increase in conflict and violence events, this issue has become an area of interest and a growing body of research and scientific papers in recent years (Tor & Sargin, 2007; Sargin, Tor, Bozoğlu & Koroğlu, 2007; Taştan, 2006; Türnüklü, 2006; Öğülmüş, 2001; Bozoğlu, 2010). The goal of this

study was to determine the conflict and violence awareness levels of prospective teachers. To be able to prevent violence and resolve the conflicts through constructive methods, the awareness levels of individuals should be identified clearly. If an attempt is made on the problem without noticing or comprehending the nature of conflicts and violence, the conflicts may grow or turn out to be violence; and as a result, some irrepressible or undesired outcomes may appear. In this regard, this study points out the necessity of focusing on this issue to improve the awareness levels of prospective teachers about the problem of conflict and violence to which they might face in the upcoming years.

The need for courses in education programs providing the GPC and PST students with awareness of conflict and violence is seen obviously by means of this study. The teachers and psychological counselors with high awareness and competency will be able to cope with those types of problems at first hand. In this respect, the existence of these kinds of courses in education faculties is highly important.

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## WHAT ARE THE PROSPECTIVE MIDWIFES' VIEWS ON TEACHING NORMAL BIRTH AND MIDWIFERY SKILLS THROUGH SIMULATION: A CASE STUDY IN AYDIN-TURKEY

Funda Çitil CANBAY  
Adnan Menderes University Faculty of Health Science  
Department of Midwifery, Turkey  
midwifefunda23@gmail.com

Elif Tuğçe ÇİTİL  
Istanbul University, Turkey  
midwifeelif23@gmail.com

### ABSTRACT

**Purpose:** The research was carried out to determine the views of midwife candidates about developing their skills of normal birth and midwifery by teaching through simulation.

**Methodology:** The sample of the research was formed through criterion-based sampling which is a kind of purposive sampling, organized and carried out in qualitative pattern. It is “a single case study” as a pattern. 21 voluntary Midwifery undergraduate senior students from the Faculty of Health Sciences of Adnan Menderes University were incorporated into the sampling group between 16 November, 2015 and 28 February, 2016. The study was practiced in a qualitative pattern and depth interview was implemented as the data collection tool.

**Findings:** Most of the students state that the skill development practices, which are provided in the environments of laboratory and classroom before attending to the internships of delivery room and clinical practice, are useful. However, students think that the laboratory training before delivery room and clinical internship training is deficient since the models in skill development areas are useless, the number of instructors is few, the contingent of midwifery department is crowded, the duration of practice is little and the simulation materials are insufficient with regard to the number of students. Majority of the students express that they feel themselves inadequate when they attend to the clinics, and they have problems with the pregnant women, patients, midwives, nurses and other team members for this reason.

**Conclusion:** It was identified that teaching through simulation improves delivery and clinical practice skills of midwife candidates and suggestions for the defects in practice are included.

**Key Words:** Birth, Birth Center, Clinical Simulation, Midwifery Education.

### INTRODUCTION

According to the International Midwifery Federation, midwife is a reliable and responsible professional who provides the care of the woman, gives necessary advices to her, carries out the deliver, provides the care of the newborn and works with the woman in collaboration in the periods of pregnancy, delivery and postpartum (ICM, 2005). Concordantly, midwifery is a profession which has a scope of regular application (Lay, 2000).

As midwifery is an operative occupation, knowledge should be turned into skill during the training of midwifery. Midwifery trainers can try alternative ways of training to bring midwifery skills to midwifery students in this sense (Lathrop et al., 2007). One of these training ways is simulation.

Meaning of the word “simulation” is “analogy” which refers to teaching something which actually exists through imitation (TDK, 2015). In terms of health, simulation is defined as a method which makes a clinical situation easily understandable and manageable by reflecting it in a real-like way as far as possible (Şendir, 2012). Simulation is a teaching and learning process which adopts students to actions which provide real life conditions without any risk and constitutes an artificial experience (Cass, 2011). A simulation-based learning provides understanding of knowledge and skills, improves permanence and active use of knowledge and decreases students’ stress before practice and increases their self-confidence (Driscoll, 2005; Tiffen et al., 2009).

The use of simulation provides development of basic and advanced levels of skill training together with cognitive knowledge level by adding innovation to the training program. The transfer of skills from laboratory environment to clinical conditions is encouraged and competence of students is increased. Thus, it is possible to mention about an increase in quality of the training programs and newly graduates (Şendir, 2012). An institution which uses simulation method will be regarded as an organizational structure which respects and cares about the autonomy of healthy

individuals/patients, takes ethical applications into consideration and reflects them to its philosophy of education (Midik & Kartal, 2010). The fact that patient safety and patient rights are in the rising values and the efforts for increasing student competence makes the use of simulation obligatory in the training of health professionals (Gardner, 2007). Concordantly, the use of simulation is an ethical obligation in order not to harm patients in simulation practices (Cass, 2011).

Maternity wards are physically insufficient and gradual increase of the student number also makes supporting student training, which is the professional duty of midwives and nurses, insufficient due to their heavy work load. This situation is one of the obstacles which becloud catching the opportunities of learning midwifery science and art (Wilford and Doyle, 2006). The fact that practice areas do not have the sufficient equipment for student training and the gradual increase in the student number make learning midwifery science and art difficult. Health professionals also cannot support student training enough. On the other hand, the use of simulation may provide students with learning by experiencing the learning activities which present real life conditions without taking any risk.

In this sense, it can be thought that knowing the ideas of the midwifery students towards midwifery training through simulation method will improve effective learning and therefore, the quality of midwifery training and midwifery services will increase.

### **Purpose of the Research**

The purpose of this research is to investigate the views of midwife candidates about teaching through simulation in developing skills of normal delivery and midwifery.

The research questions are presented below:

- 1) What are the perceptions of students about simulation concept?
- 2) What are the views of students towards the sufficiency of skill development areas before going to clinical practices?
- 3) What are the views of students about the use of simulation methods?
- 4) How is the effectiveness of midwifery instructors on teaching through simulation?
- 5) What are the views of students about using theoretical knowledge in clinical environment?

### **METHODOLOGY**

The research was organized and carried out in qualitative pattern. It is a single case study. The sample of the study was formed through criterion based sampling which is one of the purposive sampling methods. The study was done with the participation of 21 senior midwifery students who are willing to participate in the study. The data were gathered at Adnan Menderes University Health High School between November 16, 2015-February 28, 2016 through an informal interview which was done with the senior students of midwifery department and took 25 minutes on average. Interview questions were designed by getting expert opinion after scanning literature. Semi structured interview was provided by asking midwife candidates extra questions during the interviews when necessary. Each question was prepared to get a different data. 12 open ended semi structured questions in the interview form were decreased to 9 after expert correction and content validity was gained. In the research, the interviews were realized face to face through semi structured interview form and by getting voice records. The data were analyzed through content analysis. The data which gathered in the interviews were divided into subgroups in accordance with the themes which were generated by the researchers. As a result of the interviews which were done with midwifery department students, **five themes** were identified and the questions about the themes are presented below:

#### **1. Theme: What are the perceptions of students about simulation concept?**

- ☐ What does the concept of "simulation" mean to you?
- ☐ What are your expectations? Can you give some examples?

#### **2. Theme: What are the views of students towards the sufficiency of development areas in laboratory environment for normal delivery skills and basic midwifery practices before going to delivery rooms and clinical practices?**

- ☐ According to you, how do the trainings of skill and competence development given you during the classroom education prepare you for normal delivery practice?
- ☐ Do you benefit from practice skill laboratory? When? How many hours?
- ☐ What do you think about midwifery training?
- ☐ What kind of a training of midwifery would you like to get before going to delivery rooms and gynecology clinics? According to you, how should midwifery training be?
- ☐ What are your suggestions about this subject?

**3. Theme:** What are your views about using skills in practice areas?

- ☐ Did you encounter any difficulty about using midwifery skills in clinical practices of delivery room and gynecology?

**4. Theme:** What are your views about the use of simulation method?

- ☐ What do you think about the use of simulation in midwifery training?
- ☐ What can be positive and negative sides of this method?
- ☐ How is the effect of midwifery instructors' support on learning in training through simulation?

**5. Theme:** How is the effect of midwifery instructors and faculty members on learning through simulation in simulation training?

- ☐ What is your expectation?

## FINDINGS

This study was done for the purpose of identifying the simulation concept perceptions of midwife candidates, the effectiveness of simulation method before going to delivery room and clinical environment, the condition of simulation use and the effectiveness of simulation training. It was based on one to one interviews which were carried out with the midwife candidates. Findings were examined firstly by providing the general ideas and then presenting directly the interesting statements.

### Theme 1. Views towards the perception of simulation concept

The midwife candidates generally agree on practicing, models, impersonation of practices, the environments in which practice skill are gained and the decrease of error rate in practices, visual activities and the places for studying lesson regarding their perceptions of the simulation concept. Senior students of Adnan Menderes University Health High School Midwifery Department state the views which are presented below about this subject:

*“Student 13: Seeing these materials before going to a practice provides us to be familiar with the practice. It allows us to have idea about the operations and what we should do when we encounter a similar or extraordinary situation. I think they are useful materials.”*

*“Student 8: I think using simulation materials before making one to one contact with the living is more advantageous. Because, I think it decreases the rate of making mistake at any practice and medical malpractice.”*

*“Student 14: I feel panic when I practice on a real human. I feel more relax when I practice on models. We learn the right thing by doing without having any idea of harming or hurting the model.”*

### Theme 2. Views towards the sufficiency of skill development areas (classroom environment, skill development laboratory) before delivery room and clinical practices

The midwife candidates generally think simulation method is beneficial, but they agree on the technical defects in models, the low number of practices, models and instructors, and the crowded and noisy classrooms regarding their views towards the sufficiency of skill development areas (classroom environment, skill development laboratory) before delivery room and clinical practices. Some senior students of Adnan Menderes University Health High School Midwifery Department state their views which are presented below about this theme:

*“Student 13: I would like to get more training for practice before going to clinics. For example, I would like to use the simulation materials freely out of the lesson. We went to laboratory once a week because of time problem and our class size was high but the number of instructors was low. We would be given extra time regarding this problem. We would be said that the laboratory was open and could use it on a specific day other than the laboratory day. We should not have tried to get permission from somebody. Training of midwifery should continue in this way. I can*

*suggest making contact with other universities and get information about their practices. Novelties can be better with interdisciplinary cooperation."*

**"Student 18:** *Experiencing the knowledge in laboratory is nice. However, it is necessary that we practice more with simulation materials and the simulation materials increase much more. The learning which is based on practice is more permanent than teaching with power point. There should be a specific training for midwives. I think I have a good undergraduate education in midwifery. Getting education with these simulation materials was beneficial for us. But if I had had more materials and more practicing opportunity, I could have visualized them better while experiencing them. I can suggest increasing simulation materials, regulating the physical conditions of laboratory as I said before and increasing laboratory hours."*

### **Theme 3. Views towards using skills in delivery rooms and clinical internships**

Midwife candidates agree on the fact that they cannot see the practices at hospitals despite the up to date and evidence based knowledge which they learned at school in terms of their views towards using skills in delivery rooms and clinical internships. They also had a dilemma, were confused and had problems with midwives and nurses in this regard. Some senior students of Adnan Menderes University Health High School Midwifery Department state their views about this theme as presented below:

**"Student 13:** *We had problems about health professionals (midwives and nurses). We could not make a practice which we wanted since they regard this situation differently. For instance, the things which we learned were new information. The things which they wanted us to do were old knowledge. They perceived our practices different. They did not act based on evidence. In the simplest term, we did not want to do enema, however as it was routinized and doctors wrote it down on order papers, we had to perform the practice. We were at the beginning of our second year at the school and we did not know about pregnancy physiology much. We had a great trouble at the beginning of internship. The model was not alive, but we had to be much more careful in pregnant living tissues in the internship.*

**"Student 7:** *I had such a trouble that we were in dilemma between the practice methods of midwives and nurses who work there and our practices because they were acting with their experiences as they were taught based on master-apprentice relationship. They were acting in accordance with the rules of their institutions. They were saying us to act like them there when we said them that we learned evidence based knowledge."*

**"Student 12:** *Midwives were setting us to drudgery. They do not give us enough opportunity for improving our professional skills. I also think that our profession will not be able to develop due to the traditional attitudes of midwives. They experience many contrast situations among one another. Additionally, I think that they do not respect one another."*

### **Theme 4. Views about the use of simulation method**

Most of the midwife candidates state that they feel themselves good in simulation practices because there is no risk of malpractice, however, they agree that classrooms are crowded and model tissues do not resemble real human tissues in terms of their views about the sufficiency of the use of simulation method in classroom environment and skill development laboratory. Some senior students of Adnan Menderes University Health High School Midwifery Department provide their views about this theme as presented below:

**"Student 13:** *Our profession is based on practice and our knowledge does not fall into place without using simulation material. We learn better by doing. These methods have both positive and negative sides. On the one hand, we have foresight about the situations which we will encounter. The woman can also give a kick while delivering. We can practice our technique on the model. On the other hand, a tissue difference emerges. There are also reactions of a living human. But, we do not have the opportunity of asking questions to the model. In addition, the simulation materials are too old and some of the materials are not useful."*

**"Student 2:** *We are passing a little bit fast. These practices are nice, but some things are pressed for a week. I think some things should be repeated more. We cannot see everything in theory at the hospitals. Some things do not fall into place. We can get ready for many situations by means of simulation method. Because we cannot know how the patients will behave and which services they are expecting us. We can learn all phases of practices even if there is not a real situation. I do not approach the practices anxiously. I can make a mistake, but this does not harm the model. I may not succeed at the first try, I may not achieve at the second try either. But I can do practices as many as*

*I wish such as establishing vascular access and delivering. I am free to practice the correct theoretical knowledge which I learned. I think these practices decrease the medical malpractice rates. Their negative sides are the fact that they are fast, the classrooms are crowded and the time is not enough. Role playing is quite effective, but it is done little."*

#### **Theme 5: Views towards the effectiveness of midwifery faculty members and instructors in learning through simulation**

Midwife candidates state that they are generally very pleased with the academic staff at Adnan Menderes University with respect to their views towards the effectiveness of midwifery faculty members and instructors on learning through simulation. However, they agree on the fact that the student quota in midwifery department is too high and the number of instructors is low decrease instructor effectiveness. Some senior students of Adnan Menderes University Health High School Midwifery Department present their views about this theme as stated below:

*"Student 5: Yes, the class is crowded and the number of instructors is low. A practice can be performed twice maximum if you manage to find opportunity. As the medical faculty students also use these laboratories, they are given priorities. We should see the laboratory when they do not have lesson. When you make a mistake in a practice, you cannot find enough time for the second practice. You do not have enough time for asking question. You should move very quickly since there are almost 20 people who wait behind you."*

*"Student 14: Yes, firstly our instructors show us how to do the practice and then they expect us to do it. What I mean is that they observe us while performing the practice. They also interfere in our practice when we have a problem. They show us how we should do it."*

*"Student 3: Of course, we got. But, I have doubts about how much the support was. As we were a crowded group, it was obvious that our instructors were insufficient for us. We could not get one to one education."*

#### **DISCUSSION**

The results of the research show that using methods of teaching through simulation before going to delivery room and clinical practices has a positive influence on permanent learning as understood from the perceptions of midwifery students about the simulation concept, decreases their anxiety and increases their self-confidence. Many studies, which touches upon that training with simulation provides permanent learning, increases effectiveness of training and enhances self-confidence of students, were encountered in the literature (Watters et al., 2016; Pilkerton et al., 2015; Phillippi et al., 2015; Mackey et al., 2014; Terzioğlu et al., 2012). Overall, the views of midwife candidates towards the perception of simulation concept seem to be as it was expected. All of the students express that they got training as if they were in a real medical situation. Thus, Issenberg et al. (2005) define simulation as a way in which students need to move as if they were in a real situation. The students point out that they can move freely and learn more easily during the simulation practices as they do not have any risk of harming the patient when they make a mistake. The studies, which touch upon that training through simulation will decrease the risk of medical malpractice and increase the quality of training, were encountered in the literature (Freeth et al., 2009; Phillipp et al., 2015; Watters et al., 2015). The schools which give education through simulation method also increase their prestige by following the ethical rules of not harming the patient. Because the institution will be thought as an organizational structure which follows innovation programs and takes ethical practices into consideration (Bradley, 2006; Ziv, 2005).

The midwife candidates express that they learn evidence based knowledge at school, but they do not see most evidence based practices in the delivery rooms and the clinical areas where they went. Therefore, the fact that the practices of midwives and delivery room practices are evidence based will provide development of the individual-centered care which is the main philosophy of the profession. This approach will influence patient care positively by limiting the mistakes and it will also support both health professionals and the woman in making conscious decisions by informing the woman who is in the action of giving birth (Albers, 2001; Başgöl and Beji, 2015; Yıldırım and Güngör, 2009). Additionally, in the literature there are studies which indicate that learning through simulation is evidence-based (Freeth et al., 2009, Vermeulen et al., 2015). However, majority of the midwifery students state that they could not see the theoretical knowledge which they learned at school in internship areas, and for this reason they had problems with midwives and nurses. In the literature some studies, in which it was identified that students from nursery and midwifery departments had problems with health professionals due to the difference between their knowledge learned at school and the thing which they saw in internship areas, were encountered (Terzioğlu et al., 2012; Mackey et al., 2014).



Nonetheless, the midwife candidates express that before going to delivery room and clinical practice, they cannot get simulation training at a reasonable length of time as the class is too crowded and they have a high level of anxiety since they are confused, in a dilemma and have a low self-confidence. In a study in the literature it was identified that the number of models which exist in the skill development laboratory is insufficient in comparison with the number of students (Terzioğlu et al., 2012).

## CONCLUSION AND SUGGESTIONS

Most of the midwifery department students state that skill development practices given them in the setting of classroom before delivery room and clinical practices are beneficial for them. However, they suggest increasing laboratory studying hours, changing the models with the models which are developed and have similar tissues with humans and increasing course presentations with visual activities and role playing in order to feel themselves more sufficient in the setting of classroom before they go to delivery room and clinical practices. Additionally, midwifery department students state that crowded classrooms and insufficient number of midwifery department instructors decrease the effectiveness of learning through simulation. Most of the students point out that they feel themselves insufficient in the internship practices at delivery rooms and clinical practices and for this reason they have problems with midwives, nurses, patients and other health team members. They also state that they are in a dilemma between their knowledge which they learned at school and the knowledge which exists at hospital and they claim that this stems from the fact that the midwives act based on the knowledge which was gathered with traditional experiences instead of the evidence based knowledge. According to the results of our research, adding this method to student training can be suggested due to the use of teaching techniques through simulation for the development of students' skills and competencies before delivery room and clinic and the positive views of students about simulation training. The students state that they adopt training through simulation, but they provide some doubtful statements such as the education system which is based on rote learning and the technical problems which can emerge because of inadequacy of the models, crowdedness of the students and insufficient number of the instructors. They also express that the suitable places for their learning were not adequate and they had problems due to the attitudes of the midwives and nurses whom they encountered in internship environments. Making group meetings to overcome students' prejudgments, wrong knowledge and opinions about this practice before simulation training can be suggested. In addition, a great step can be taken when midwives and nurses overhaul their knowledge with the advancing technology and act based on evidences. This can be a good role model for the midwives of the future.

In this regard, it should not be forgotten that the midwives who work in the area of community health are significant health professionals in decreasing maternal and fetal death rates and reducing abdominal delivery rates to %10-15 which is suggested by the World Health Organization (1985). It gains importance that the members of midwifery profession take opinions of the midwifery department instructors, who are the experts of the subject, about the current condition of the profession (Güner et al., 2015).

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## WHAT DO STUDENTS THINK ABOUT FLIPPING THE CLASSROOM?

Georgina RODRIGUEZ  
Facultad Regional San Nicolás  
Universidad Tecnológica Nacional, República Argentina  
gie@frsn.utn.edu.ar

Marta CALIGARIS  
Facultad Regional San Nicolás  
Universidad Tecnológica Nacional, República Argentina  
gie@frsn.utn.edu.ar

Lorena LAUGERO  
Facultad Regional San Nicolás  
Universidad Tecnológica Nacional, República Argentina  
gie@frsn.utn.edu.ar

### ABSTRACT

The flipped classroom model changes the way of traditional learning. In this model, lecture content is taken out from the class to allow classroom time to be used for active learning. Students access to the content that was pulled out via on-line videos. In this way, lecture occurs outside the class, mainly at home. During classes students build active learning, such as problem solving and collaborative work.

This paper shows the opinion of students of a numerical analysis course in Industrial Engineering, before and after a flipped class experience. The model of flipped classroom is presented to students – that never had a class in this way – and opinions of what they think about the model are gathered. After that, some issues of the course are tackled in a flipped way. Then, a survey is conducted among students, inquiring about details of their experience. Learning results are also measured, in comparison to other courses with usual classes.

### INTRODUCTION

Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter (FLN, 2014). In this way, students acquire information in an autonomous way, at their own pace, from the materials proposed. Besides, academics have to work both on the selection or design of the activities to be done outside the classroom, and on the design of the activities to be done inside the classroom, promoting active learning. Moreover, faculty must become facilitators and leaders of the learning process. In this way, class work involves superior levels of Bloom's Taxonomy, like analysis and synthesis, requiring discussion and decision. Therefore, interaction between professors and students acquires value, it becomes necessary (Jordan Lluch et al., 2012).

Taking the approach of See & Conry (2014), the flipped classroom model can be thought as a proposal that comes out by moving the content located on the lower levels of the revised Bloom's Taxonomy (Krathwohl, 2002) –understanding and memorizing- out of the class, and use the class time for the upper levels –creation, evaluation, analysis-, not necessarily using technology.

But nowadays attraction and involvement of young people in technology should be taken into account to increase the student's engagement when studying, particularly mathematics. The World Wide Web makes available a great variety of resources to engage students in mathematical learning. Web pages are linked to each other via hyperlinks, containing text, graphics, sounds and videos. Applets, JavaScripts, and other type of apps enable Web pages to be interactive (Loong & Herbert, 2012). CDF files developed with Mathematica are an example, the Wolfram Demonstration Project has a wide range of apps and some particular about numerical analysis can be found in the Virtual Laboratory of Numerical Analysis, developed by the research group GIE, Grupo Ingeniería y Educación (Caligaris et al., 2016a). Also, lots of educational material can be found in video repositories, like YouTube and others like Coursera or Kahn Academy, and MIT open courseware.

As Heyborne and Perret (2016) say, this instructional strategy depends completely on student buy-in, because a successful implementation requires that students truly engage with the lecture material outside of class, and this is not always guaranteed. Therefore, a research project about the impact of the methodology of flipped classroom in engineering careers' courses is being carried out by the research group GIE. Information about students' opinions is gathered in every step of the project. In the frame of this project, some experiences of flipped classroom are being held in a numerical analysis course of Industrial Engineering at Facultad Regional San Nicolás, Universidad Tecnológica Nacional (Caligaris et al, 2016b). The tools selected for the work outside the

classroom are tailor made videos and Websites specially designed (Caligaris et al., 2015, 2016c). Videos were designed using different tools like Doceri, which lets record simultaneously voice explanations and what is being written on a tablet, and PowerPoint where voice can be added while presenting, and then exporting the file as a video. In this paper, the students' opinion about their first experience of flipping the classroom, when teaching Newton's method, is presented. Some other experiences will be held with this group of students, so as to observe the evolution of students' opinion about flipping the classroom, and to gather data about the influence of flipped classroom in the learning.

## THE STUDY

A numerical analysis course was chosen to apply the model of flipped classroom in one topic, to explore students' opinion about this methodology. The professor-student relationship was ideal: three academics for 30 students. The issue selected was Newton's method for solving nonlinear equations. Some videos were developed, using Doceri ([www.doceri.com](http://www.doceri.com)), a software that converts a tablet into an interactive board and a screencast recorder with sophisticated tools for hand-drawn graphics. This software records both what's happening on the screen and sound, so a speech can be made to accompany the writings on the board.

Before applying the flipped methodology, a survey was conducted between students in order to gather information about:

- ☐ their habits of studying mathematics at the university,
- ☐ their opinion about theory classes and the practices done in class,
- ☐ their opinion about using videos and intensifying the practices in class.

Then, the videos about the Newton's Method were assigned to be seen by students for a given date: videos no longer than 7 minutes, explaining the development of the method, sufficient conditions for applying the method, the algorithm in pseudo-code and some solved exercises. In the class, a brief summary of the topic was made, emphasizing the key points, and then students were invited to solve problems by themselves, alone or working in groups.

Finally, another survey was conducted in students, to gather information about their opinion of flipping the class. In this survey, the information sought was related to the experience of students about both watching the videos at home, and the changes made on the work in class.

## FINDINGS

The first part of the initial survey inquired about the students' habits for studying mathematics in the previous years at the university, and some questions to ascertain whether students would like to study with videos and flip the class. In Table 1, some information about how frequently this group of students studied mathematics is shown.

**Table 1:** The habits of studying mathematics at the university

	Always	Sometimes	Never
Have you read material before classes?	0%	88%	12%
Have you followed the subject class to class?	42%	58%	0%
Have you completed the practice between classes?	23%	58%	19%
Have you studied only for evaluations?	42%	35%	23%

In particular, about their attitude towards the daily study, it was found that in general they are not used to keep on studying mathematics day-to-day. They are not used to read material before going to class, and only the 23% of students said that they always completed the exercises assigned from one class to the next. Besides, more alarming is that the 42% of the students said that they only studied for mid-term exams.

Related to the study habits of students, a question was included about the materials they prefer when studying mathematics at the university. Results can be seen in [Table 2].

**Table 2:** The kind of material students used for studying mathematics at the university

For studying in the previous years, did you...	Always	Sometimes	Never
use the lecture notes?	77%	23%	0%
use printed books?	19%	54%	27%
consult e-books?	15%	66%	19%
use resources (notes and sites) of other universities?	8%	54%	38%

search and watch videos about the issues you study?	19%	73%	8%
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The second part of the first survey gathered information about what students think about theory in math's classes and the amount of practice done in class, and the way it is approached. [Table 3] shows that students consider the classes useful, as the 65% think that theoretical classes were useful for them, and only the 8% answered they would not assist if they were not obliged. On the other hand, more than the 50% said that they would have preferred to make more exercises in class.

**Table 3: Students' opinion about the techniques used in flipped classroom**

About classes in previous years...	Yes	Perhaps	No
If you hadn't had to fulfill assistance, would you have attended classes anyway?	77%	15%	8%
Were theoretical classes useful for you?	65%	31%	4%
Would you have preferred making more exercises in class?	58%	31%	11%

The last part of this survey was intended to inquire about what students think about the techniques used in the mode of flipped classroom, using videos and making more practice in class, before their first experience on this type of methodology. Their opinions can be seen in [Table 4].

**Table 4: Students' opinion about the techniques used in flipped classroom**

Would you like that in this subject...	Yes	Perhaps	No
videos for studying are offered	77%	15%	8%
More exercises are solved in class	58%	31%	11%
In practice classes work is organized in groups, with assistance from the teacher, rather than the teacher solving exercises on the blackboard	12%	50%	38%

It can be seen in [Table 4] that students choose videos as a way to access information. But, they are not very convinced of working by themselves, assisted by professors, they prefer to have the exercises solved on the chalkboard.

The second survey was conducted after the flipped classroom was carried out. It gathered data about how students lived the experience. Results are exposed here.

First, a question about the previous knowledge of the issue addressed was included. The 30% of students that have seen the issue before, were those that have started to attend numerical analysis classes in a previous year.

A question asking if students had seen the videos was included, and over the ones that answered they had done so, it was interesting to know how many times they did so, and when. [Table 5] and [Table 6] gather data about this.

**Table 5: The times students have watched the videos**

How many times have you seen the videos assigned?		
Once	Twice	More than twice
43%	43%	14%

Besides it was noticed that when the flipped classroom started, many students have not fulfilled the task of watching the assigned videos, almost 90% of the students fulfilled the task of watching the videos, and [Table 5] shows that more than the 50% of this group watched them more than once. Confirming the perception about the previous watching of the videos, [Table 6] shows that only 57% of the students saw the videos before the indicated class. Also, it can be seen that 48% of students saw them for the test, the first time for many of them, all of the students that have not seen the videos for the indicated date, watched them before the test. Also, almost half of the group watched other videos about the issue.

**Table 6: The moment students watched the videos**

	Yes	No
I've seen them for the indicated date	57%	43%

I've seen them before the test	48%	52%
I've seen some other videos about the issue	43%	57%

How did students react to the videos? 90% of the students said they at least quite understood the Newton's method by watching the assigned videos, as it can be seen from data exposed in [Table 7].

**Table 7:** The understanding from the videos

Have you understood the issue from the videos?			
Yes	Quite	A bit	Nothing
22%	70%	8%	0%

Lack of interactivity when watching a class can be perceived as a disadvantage in the flipped classroom, but it seems that students tried to overcome it: the 81% of the group said that some questions arose when watching the videos, [Table 8] shows that almost the 90% of those who had questions watched the videos again to find the answer to their doubts, but not so many –only the 35%– took note of them to raise a discussion in class. Perhaps this action must be reinforced in future experiences.

**Table 8:** The understanding from the videos

If question arose when watching the videos...	Yes	No
Did you write them?	35%	65%
Did you see the video again to find the answer?	88%	12%

About the development of the class, as it can be seen in [Table 9], almost 80% of students considered useful the summary made at the beginning of the class. About the experience of trying to solve exercises by their own, instead of watching them being solved on the chalkboard, they were not too convinced, coinciding with what they expressed before the flipped classroom experience.

**Table 9:** About the activities in classroom

	Yes	Perhaps	No
Have you considered useful the summary made at the beginning of the class?	88%	12%	0%
Was it useful for you to try solving the exercises by yourself, instead of watching how they are being solved on the blackboard?	65%	35%	0%

## CONCLUSIONS

This group of students in general (like others studied in previous years) does not have the habit of studying the different subjects periodically, following the issues day by day. In particular this happens with mathematics. And it looks like they study for the exams, they try to standardize evaluations, by asking “what is going to be asked in the exam?”, “This demonstration, may be asked?” and so on.

Flipping the classroom demands a change of these habits, and this is not an easy task to accomplish from the teaching position. This experience showed some points that have to be strengthened by faculty, to get more advantages when flipping the class, for example give the students some tips, like taking notes as if they are assisting a lecture, and registering in a paper the doubts that arise, when watching assigned videos, to have the possibility of asking them in class later.

Students seemed to be predisposed to use videos for learning, but not so much when solving exercises by their own in class. Perhaps, more experiences of flipping the classroom will change their passive participation to an active one, which will result in benefits for their learning. So, some other issues will be addressed in flipped classrooms in this course, taking into account all the observations made.

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## WHAT EDUCATORS HAVE TO KNOW ON CYBER BEHAVIORS OF 21ST CENTURY LEARNERS?

Mehmet FIRAT

Open Education Faculty ,Department of Distance Education  
Anadolu University, Turkey  
mfirat@anadolu.edu.tr

### ABSTRACT

Growing impacts of Internet and computer technologies on learning process of nowadays' students led to a re-discussion of teachers' skills. Cognitive overload, disorientation, hyper-connectivity, internet addiction and cyberbullying are some examples of learners' cyber behaviors. Teachers have important difficulties in understanding these new behaviors. The growing gap between teachers and learners has led to the emergence of new problems between students and educators. However, these critical issues are not included extensively in teacher education process. Because of the new generation of teachers is in a key role in building 21st century education, this topic has an immediate priority. In this context the purpose of this study was to determine the necessary skills of teachers to manage the cyber behaviors of 21st century learners. As a result of the study recommendations were presented for educators on cyber behaviors of 21st century learners.

**Keywords:** 21st century learners, cyber behaviors, educators

### INTRODUCTION

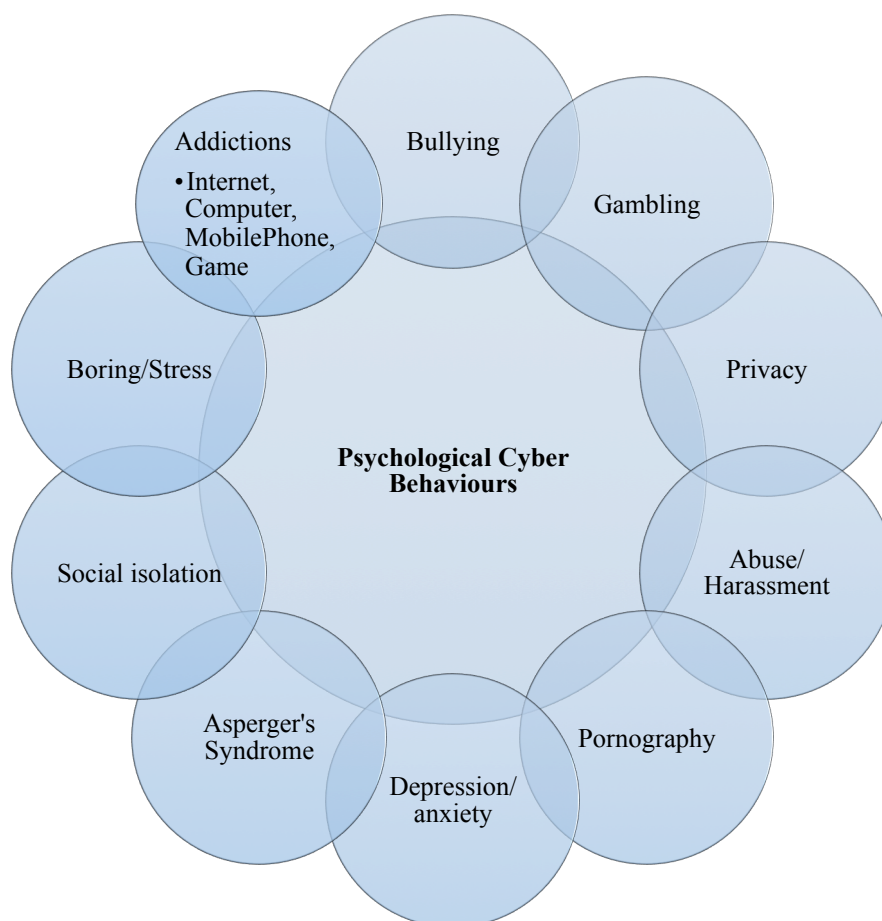
Advancements in information and communication technologies at past three decades have effected learning in different ways. Instructional technologies including multimedia learning, e-learning, online learning, hypermedia learning, game based learning, networked learning extended learning types for 21th century learners. Parallel to these developments, educational practices evolved to digital environments. Growing impacts of Internet and computer technologies on learning and instruction process of nowadays' students led to a re-discussion of educators' skills for 21<sup>st</sup> century education.

Besides the internet complexity driven problems like cognitive overload, disorientation and attention problems, it is possible to mention many other psychological, cognitive and social cyber behaviors like internet addiction, bullying, pornography, abuse, privacy as well. New literacies, hyper connectivity, multitasking, digital citizenship, global awareness can be listed as cyber behaviors of 21<sup>st</sup> century learners. Because of the different positive and negative effects of these behavior it is better to categorize these cyber behaviors in accordance to their field. In this context, cyber behaviors of 21<sup>st</sup> century learners analyzed under three topics.

- Psychological Cyber Problematics
- Cognitive Cyber Problematics
- Social Cyber Behaviors

These three type of cyber behaviors examined here. Psychological cyber behaviors that have potential to effects 21st century learners are provided in Figure 1 below.

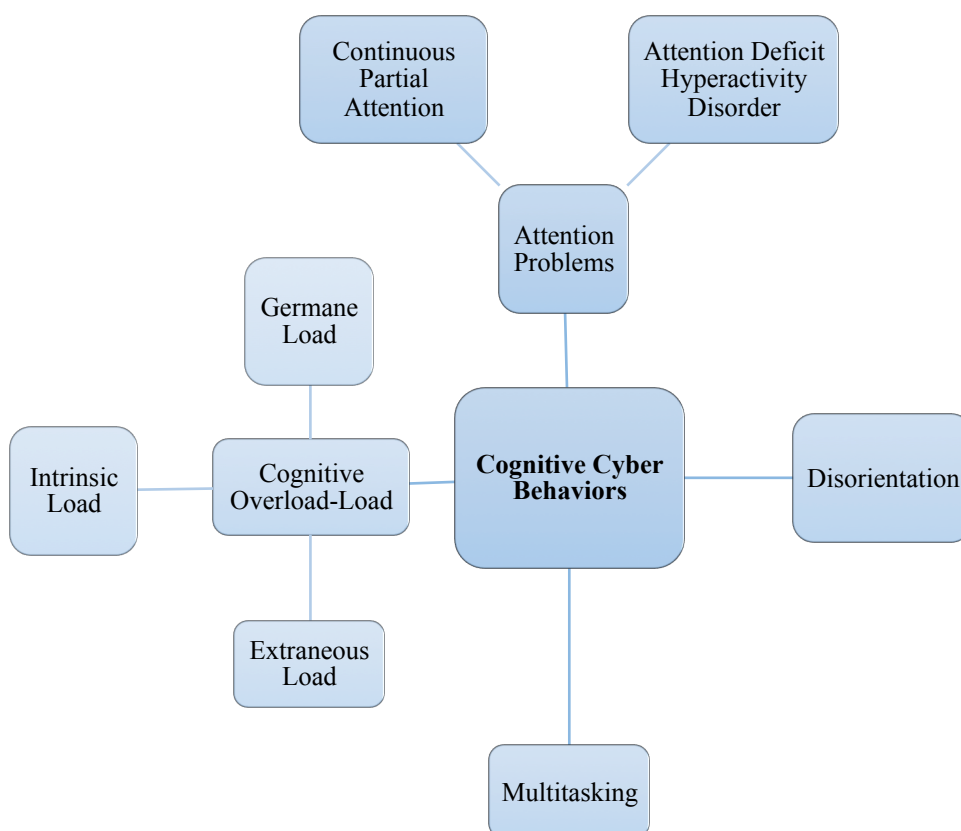




**Figure 1.** Psychological cyber behaviors of 21st century learners

As can be seen on Figure 1, it is possible to discuss different kind of cyber behaviors which have psychological effects. Here in this study addictions, bullying, gambling, privacy, abuse/harassment, pornography, depression/anxiety, Asperger's syndrome, social isolation, boring/stress covered as psychological cyber behaviors of 21st century learners.

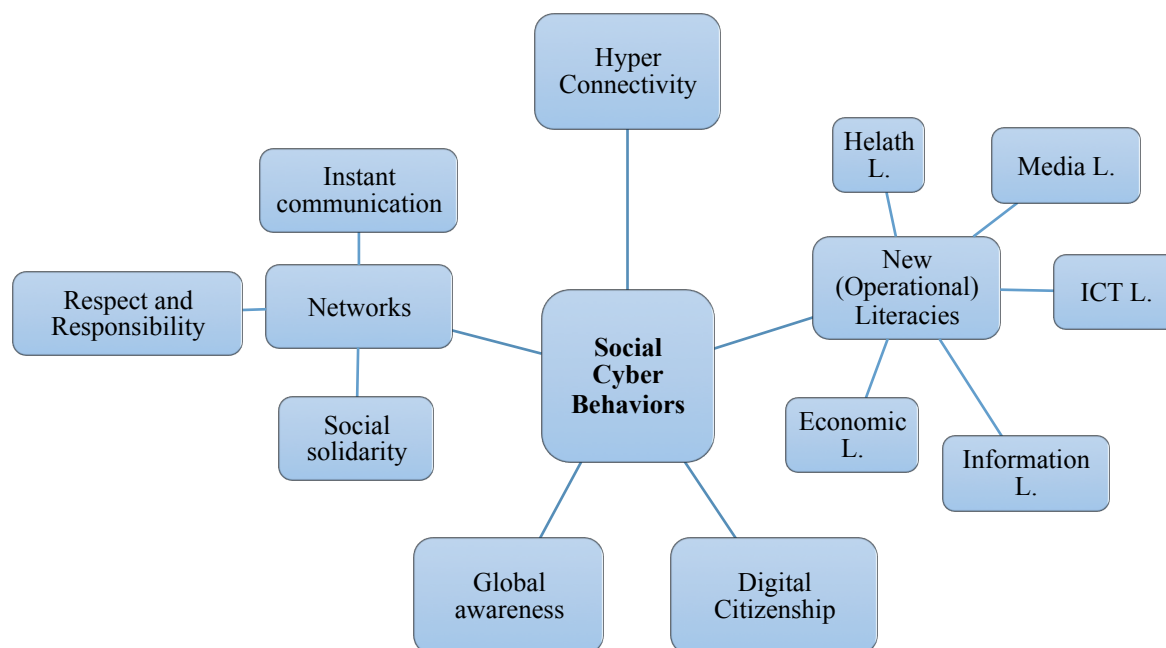
The flexibilities provided by Web-based learning environments may cause significant problems for learners because flexibility increases complexity. Among the most important problems that occur due to this complexity of Internet are those related to divided attention (Kane & Engle, 2000), cognitive overload (Mayer & Moreno, 2003) and disorientation in hypermedia (Dias & Sousa, 1997; Firat & Kabakçi, 2010). Some of these cognitive cyber behaviors provided in Figure 2 below.



**Figure 2.** cognitive cyber behaviors of 21<sup>st</sup> century learners

Among the most important problems that occur due to the complexity of Internet are those related to cognitive overload. Cognitive load can be defined as mental sources used in a memory that works simultaneously. People can process 7 units of information in average at a time in a working memory. Disorientation is defined as a situation in which due to cognitive overload and to the complexity of the environment, learners do not know where they are or how they can reach the place they want. In other words, disorientation means that learners are not aware of their places within the whole structure and do not know how they have reached that place and how and where they will go. Attention also is a problematic cyber behaviors of new learning environments. Final behavior is multitasking. Discussed as a myth in recent years multitasking also covered here in this study as cognitive cyber behavior.

In addition to psychological and cognitive cyber behaviors it is possible to add a category of social cyber behaviors for 21st century learners. The development and spread of digital media also has led to the expansion of existing maladaptive behaviors such as bullying, gambling, pornography and pedophilia. Social cyber behaviors that are related to 21st century learners are given in Figure 2 below.



**Figure 3.** Social cyber behaviors for 21st century learners

In the new era, required skills and needed human profile have been changed. In the current information age, needed human profile cover keep track of updated technologies, production-sharing-use of the information skills, lifelong learning and self-learning skills, critical and creative thinking skills. All these skills require a continuous learning, e-learning abilities, open and distance learning opportunities and different kind of literacies such as information literacy, media literacy, computer and internet literacy (Firat, 2012).

It is obvious that educators have and critical role to educate students with new era required skills and abilities in 21<sup>st</sup> century. In this context, educators also need to have new skills and abilities to understand 21<sup>st</sup> century learners. Thus, educators will be able to cope with new cyber behaviors of learners. At this point it is open to research to investigate what educators have to know on cyber behaviors of 21st century learners?

### Purpose

The main purpose of this study was to determine the views of academicians on what educators have to know on cyber behaviors of 21<sup>st</sup> century learners.

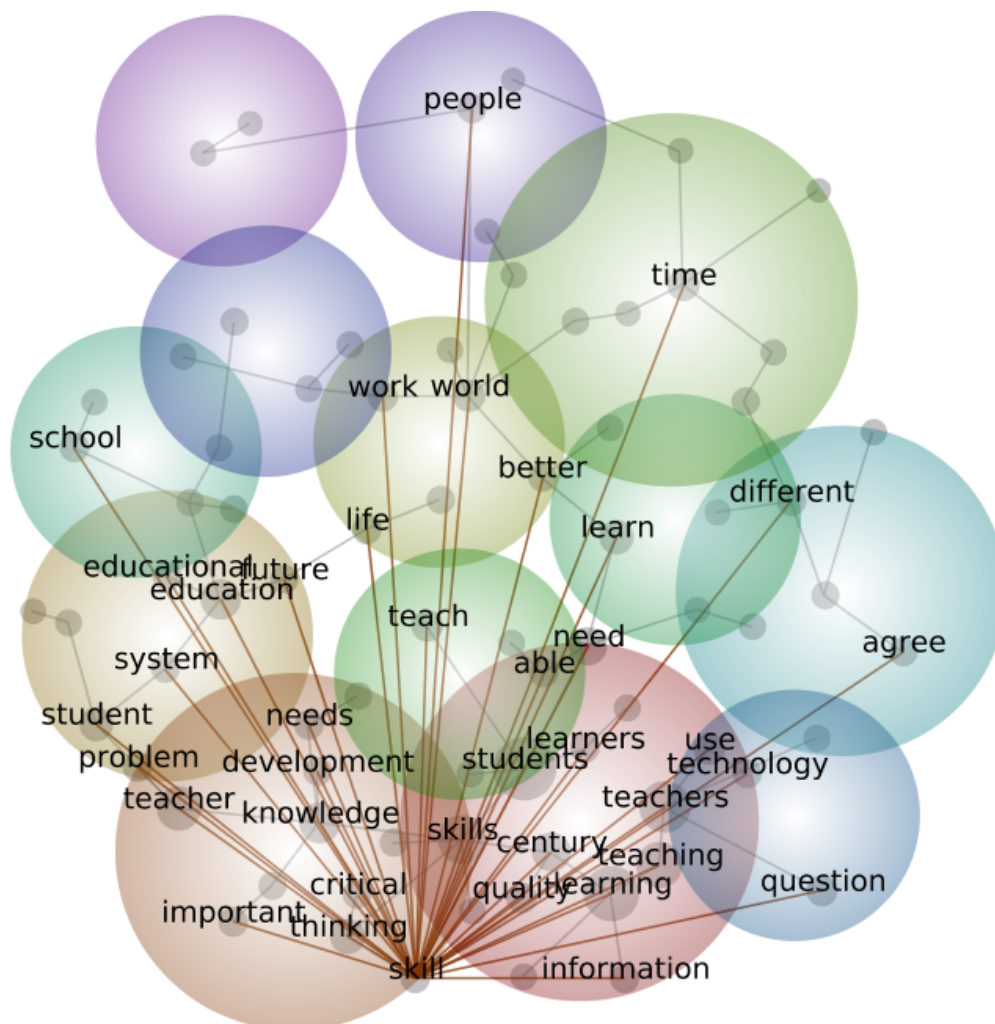
### METHOD

In accordance with the research purpose academicians' views collected from ResearchGate ([www.researchgate.net](http://www.researchgate.net)) academic sharing platform by an open ended question "What Educators Have to Know on Cyber Behaviors of 21st Century Learners?". Totally 1769 answers collected from the online environment. Funded in 2008, mission of ResearchGate is to connect researchers and make it easy for them to share and access scientific output, knowledge, and expertise (ResearchGate, 2016).

In the data analyze process, 531 missing (repeated and unrelated) answers was excluded from analysis. Content analysis procedures were applied to the 1238 answers of academicians. Content analysis procedures were applied to the answers given to the question. Leximancer text analytic tool used in data analyze and visualization. Leximancer is a text mining software that can be used to analyze the content of collections of textual documents. This software can also be used to visually display the extracted information in a browser.

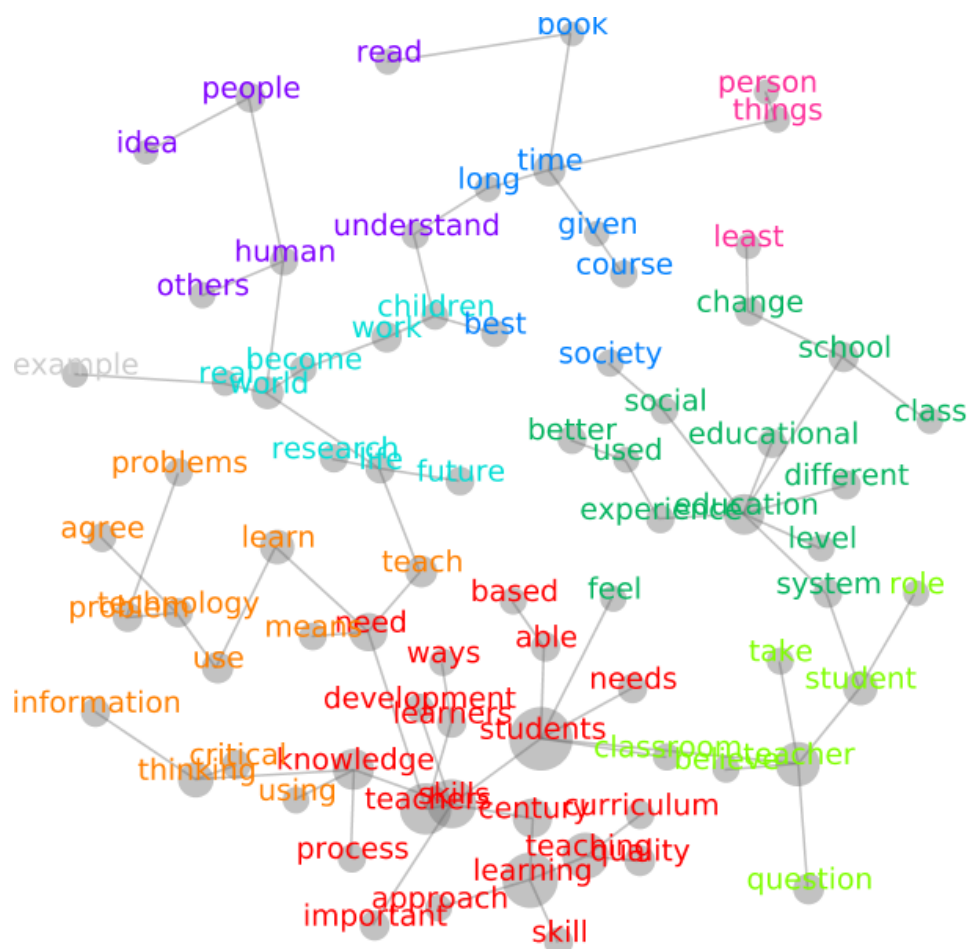
## FINDINGS

This study examined the content of answers posted by academicians in Research Gate online academic research sharing environment. Collected data categorized, classified and reduced in the process of preparing data for text analyze. In the Leximancer software information is displayed by means of a conceptual map that provides an overview of the material, representing the main concepts contained within the text and how they are related. The conceptual map derived from the 1238 answers of academicians given below in Figure 4.



**Figure 4.** Conceptual map of academicians' views

As can be seen the conceptual map there is related conceptions with size and colors. Such conceptual maps need to be analysed in accordance with the purpose of the research and asked questions. To better understand the conceptions and relations between these conceptions a second concept map drawn in Leximancer. Second map given in Figure 5 below.



**Figure 5.** Second conceptual map of academicians' views

After the analyze of these to maps and related raw data some important findings revealed. These findings show that academicians criticize the education of educators, skills and perceptions of educators. According to academicians, educators should have;

- critical thinking skills,
- cyber communication skills,
- New (media, ICT, healt, economy...) literacies,
- lifelong learning vision,
- global awareness,
- cross-cultural education skills,
- cyber behavior knowledge,
- cyber environment experiences and
- innovative learning methods

to answer new problems and lead quality learning process of 21st century learners.

## CONCLUSION AND SUGGESTIONS

Because of the new generation of teachers is in a key role in building 21st century education, this topic has an immediate priority. In this context the purpose of this study was to determine the necessary skills of teachers to manage the cyber behaviors of 21st century learners. Base on the rich related literature it is possible to summarize that the 21<sup>st</sup> century learner is

- a self-directed learner,
- globally aware,
- a communicator,
- an innovator,
- civically engaged,
- a problem solver
- financially and economically literate,

- information and media literate,
- a collaborator and
- a critical thinker.

Compared to these skills and abilities academicians' mentioned educators' skills and abilities are very close to each other's. It was founded that academicians think that educators should have to be a critical thinker, cyber communicator, new media and environments literate, globally aware, lifelong learner, cross cultural educator, educational innovator. But, in order to equip educators with these skills and abilities our teacher education system need to re-discussed. Education systems need to enrich and diversify their e-learning tools and environments in accordance with the principle of equality of educational opportunity for cyber learning behaviors, lifelong learning and continuous education.

Teachers have important difficulties in understanding cyber behaviors of 21st century learners. The growing gap between teachers and learners has led to the emergence of new problems in education. However, these critical issues and innovative methods are not included in teacher education process. Because of the new generation of teachers is in a key role in building 21st century education, this topic has an immediate priority not only for educators but also for governments, families, international organizations and students themselves.

About the future research it is possible to suggest different research topics with different methodologies. Some of most critical suggestion provided here. Thus, future researches can be conducted on;

- educators' views on cyber behaviors of 21st century learners,
- educators' cyber learning behavior qualifications,
- educators and students views on the future of education,
- classification/modelling studies on cyber behaviors of 21st century learners
- integration of 21st century skills in teacher education.

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## WHAT EFFECTS OF A COMMUNITY OF INQUIRY ARE THERE ON TEACHING IN A BLENDED LEARNING MODE?

Elson SZETO

The University of Hong Kong  
eszeto@ied.edu.hk

### ABSTRACT

The instructional effects of the Community of Inquiry (CoI) framework on teaching in blended learning contexts are yet to be fully explored. This paper reports on a case study of a course instructor who adopted the framework as an instructional approach to designing a course on creative music teaching. This course was delivered in a blended learning mode in a university context. How did the instructor practise the framework as an instructional approach to course design in a university context? What journey has the instructor experienced in teaching the course as a community of inquiry in the blended learning mode? The findings show that the instructor experienced the leading instructional role of teaching presence in fostering students' collaborative participation in learning as if in a blended learning community. However, the potential instructional challenges facing the instructor were context-specific, depending on differences in individual student groups and variations in university contexts. Implications for the enhancement of course design with the CoI instructional approach in the blended learning mode are discussed.

### INTRODUCTION

University instructors explore different instructional designs to facilitate students' learning in flexible modes of course delivery. With the advent of technology, blended learning has emerged as an effective mode as opposed to entirely live face-to-face teaching on campus or full online learning on a learning management platform (Al-Qahtani & Higgins, 2012; Bicen, Ozdamli & Uzunboyulu, 2014). However, it is argued that an appropriate instructional design is yet to be identified for providing the advantages of delivering courses in a blended learning mode.

This paper reports on a case study of a course instructor's journey of course instructional design for a group of in-service music teachers' further study in a university context. This was a core course of a Master's programme in creative education. The instructor identified the CoI framework (Garrison, Anderson, & Archer, 2000) as an instructional design for enriching the students' experiences of achieving the intended learning outcomes. As the framework has been widely used for the study of blended/online learning, he explored whether or not the framework could be practised as an instruction approach to designing the course to be taught as a blended learning course. The questions are:

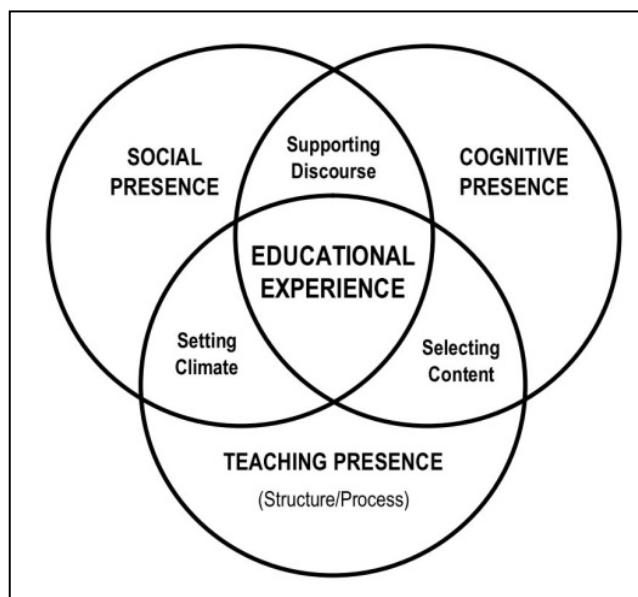
1. How did the instructor practise the framework as an instructional approach to course design in a university context?
2. What journey has the instructor experienced in teaching the course as a community of inquiry in a blended learning mode?

The findings of this study are expected to inform the instructional effects of practising the CoI framework on the instructor's teaching in a university context. This can provide empirical evidence for adopting the framework as an instructional approach to course design for flexible learning modes with the advent of ICT.

### THE CONCEPTUAL FRAMEWORK OF COMMUNITY OF INQUIRY

The conceptual framework of Community of Inquiry (Garrison et al., 2000) has been widely adopted for understanding student learning experiences which are placed at the conceptual intersection of teaching, social and cognitive presences in the centre of the framework. Figure 1 shows the CoI framework.

The figure shows the three presences contributing to shaping student experiences in which deeper levels of learning can be reached to achieve the intended learning outcomes. '[C]ognitive processes and outcomes [i.e. students' learning experiences] are at the core of the transactions. Social presence and even teaching presence are, in most respects, facilitators of the learning process' (Garrison & Anderson, 2003, p. 55). Social presence is regarded as 'the ability of participants [students] in a community of inquiry to project themselves socially and emotionally, as "real" people through the medium of communication being used' (p. 94). Cognitive presence is defined as 'participants [students] in any particular configuration of a community of inquiry [being] able to construct meaning through sustained communication' (Garrison et al., 2000, p. 89). It also 'provides a description of the progressive phases of practical inquiry leading to resolution of a problem or dilemma' in learning (Akyol & Garrison, 2011, p. 235).



**Figure 1:** The Community of Inquiry framework.

Source: Garrison et al., (2000) Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3): 87-105.

### THE COI FRAMEWORK IN ONLINE TEACHING AND LEARNING

The framework was first applied in text-based instructional communication in asynchronous online teaching and learning (e.g., Garrison & Anderson, 2003). Then, its application spanned different types of online learning activities including a/synchronous group discussions and collaborative tasks mediated by videoconferencing and other learning platforms on the Internet (e.g., Bower, Dalgarno, Kennedy, Lee & Kenney, 2015). The framework was then further operationalized in blended teaching and learning (Garrison & Vaughan, 2008; Vaughan, Cleveland-Innes, & Garrison, 2013). The key components are the interwoven teaching, social and cognitive presences in the process of teaching and learning for enriching educational experiences.

### THE THREE-PRESENCE INSTRUCTIONAL COMPONENTS

The teaching presence instructional component is argued to lead to social engagement in cognitive involvement for critical thinking at a deeper level (Vaughan et al., 2013). Other empirical studies have evidenced the importance of cognitive presence in student learning achievement (e.g., Kozan & Richardson, 2014; Yang, Quadir, Chen & Miao, 2016) in contrast to those emphasizing the leading role of teaching presence (Author, 2015; Kupczynski, Ice, Wiesenmayer, & McCluskey, 2010; Vaughan et al., 2013). So far, there is no definitive answer regarding the contribution of each CoI presence. The teaching, social and cognitive presences can be interwoven as integrated instructional effects on deeper learning experiences of student collaboration (Garrison, 2016). As instructional components, the presences can trigger balanced, flexible and integrative learning effects in a community of inquiry depending on the modes of course delivery.

Despite the above conceptual understandings and initial practices, the instructional effects of the framework are yet to be fully contextualized for course design and teaching in different university contexts, while blended learning has emerged with the advent of ICT. This requires additional empirical evidence of instructors' experiences of teaching courses designed with the CoI instructional approach in the blended learning mode.

### THE BLENDED LEARNING MODE OF COURSE DELIVERY

Different scholars have different interpretations of blended learning, be it a learning process, a teaching strategy or a mode of course delivery. Bernard et al.'s (2014, p.91) meta-analysis of blended learning research studies argued:

BL [Blended learning] is thus defined as instructional conditions in which at least 50% of total course time is face-to-face CI and students working online outside of the classroom spend the remainder of time, up to the additional 50%, online.

Blended learning relates to modes of course delivery comprising the advantages of face-to-face classroom



teaching and online learning mediated by ICT support for flexible course delivery and learning (Bonk & Graham, 2006; Garrison & Vaughan, 2008). Thus, the growing popularity of the modes is evident in the recent empirical studies in different institutional contexts, be it asynchronous or synchronous (e.g., Author, 2016; Picciano et al., 2014). An instructor, for example, can form a blended learning mode with the use of face-to-face teaching with asynchronous or synchronous online learning. There are many possibilities to form different blended learning modes on the Internet mediated by ICT devices. The key is instructors' instructional approach to course design for the purpose of achieving deeper levels of learning in a blended learning mode.

## METHODOLOGY

This study is a qualitative case study derived from an instructor's instructional experiences of adopting the CoI framework to teach a core course of a postgraduate programme in creative education. The students were in-service music teachers teaching in primary schools in Hong Kong. Interviewing was the main research method for building the case (Yin, 2014) based on the instructor's experience of adopting the blended learning mode in a university context. These are valuable data that can answer the two research questions.

## DATA COLLECTION

Data collected from multiple sources were used for triangulation to ensure data integrity in this study (Denzin, 1989; Flick, 2009). Individual interviews with the instructor were conducted at the beginning, during and after the course delivery. As the major qualitative method of data collection (Creswell 2012), these interviews were unstructured to foster the instructor's practice of the CoI framework in the design of and reflection on teaching the course in a blended learning mode. Each individual interview lasted for 1 to 1.5 hours. All interviews were transcribed verbatim. Then, notes of observation on the face-to-face teaching and online learning activities mediated on the Blackboard Learning Management System (LMS) were also collected as supplementary data.

## DATA ANALYSIS

The project team of this study adopted thematic coding for data analysis (Corbin & Strauss, 2015). The coding was based on a coding scheme adapted from Garrison's (2011) sub-items of the three presences for the studies of students' experiences in blended/online learning. This set of sub-items was also used in other empirical studies for measuring the effects of cognitive outcomes and student satisfaction in online learning (e.g., Carlon et al., 2012) and exploration of initial practice of the CoI framework as an instructional approach to blended learning (e.g., the Author, 2015). Table 1 shows the coding scheme of the CoI instructional approach.

**Table 1:** The coding scheme of the CoI instructional approach.

CoI instructional component		
Teaching presence	Social presence	Cognitive presence
Instructional management	Emotional expression	Triggering events
Building understanding	Open communication	Exploration
Direct instruction	Group cohesion	Integration
		Resolution

Instructional sub-items of teaching, social and cognitive presences are shown in the table. Sub-items of the three presences constitute the coding scheme for data analysis. The researcher analysed the data in NVivo 11. By using the software package, the process of qualitative data analysis can be tracked by other team members in order to reach a consensus.

## THE CASE STUDY

The course instructor accepted the invitation to adopt the CoI framework for the course design in a blended learning mode. He already intended to enhance the core course on creative music teaching, but blended learning was then new to him. A total of 31 students enrolled in the course offered by a university in Hong Kong. This was the first time the instructor's practice of the framework as an instructional approach to redesigning the course was mediated by ICT. The instructor reported on his experiences of designing and teaching the course. He also believed that blended learning is neither simply done by integrating ICT tools nor by combining face-to-face teaching and online learning. Challenges were expected in the practice of the framework in a blended learning mode in the university context.

## AN ASYNCHRONOUS BLENDED LEARNING MODE

First, the instructor identified an asynchronous blended learning mode that met the students' learning needs. He shared the general understanding of blending face-to-face teaching and online learning beyond the university classroom (Graham, 2006; Bernard et al., 2014). Thus, the proportion of blending face-to-face teaching in a

classroom and asynchronous online learning activities was 80% and 20%, respectively. This blended learning combination only required the existing ICT infrastructure provided by the university.

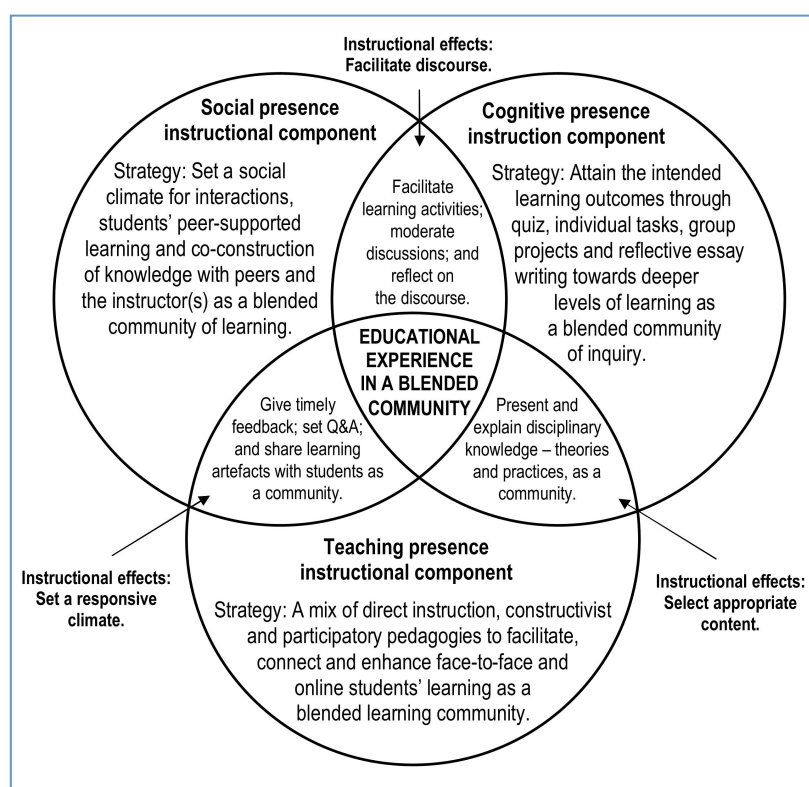
For this study, a general classroom was assigned for the course where a piano was placed for music demonstration opposite the teaching console installed in the classroom. A teacher's computer, video and real-object projectors, and an audio system are linked to the console from where all of the education technology, including the LCD video projector and projector screen, is controlled. Seating was arranged as 4 rows of 10 chairs with table tops. A Wi-Fi network was already available on the campus and there was no need for particular technical reconfiguration. The reason for using the existing classroom and ICT setting of the university was so that the blended mode could be repeated in different university contexts.

## FINDINGS

In this section, the two research questions are answered. First, the way the instructor practised the CoI framework as an instructional approach to course design is delineated. Then, the instructor's experience of teaching the course as a blended community of inquiry is described.

## PRACTICE OF THE COI FRAMEWORK

Common to university instructors, instructional design can be a major factor of effective course delivery in a blended learning mode (Halverson, Graham, Spring, Drysdale, & Henrie, 2014). In this study, the instructor critically reviewed the CoI framework to reposition the students' learning experiences at the centre when practising the framework as an instructional approach to the course design. He shared Biggs and Tang's (2007) notion of constructive alignment as a guide to contextualizing the teaching, social and cognitive presences of the CoI framework with the aim of teaching the students in a communal context. Thereby, the teaching presence could engage the students in individual learning and collaborative learning activities, and course assessment. In fact, the presence components were interwoven in alignment with the instructor's intended instructional effects. Figure 2 shows intended instructional effects interwoven with the CoI instructional components.



**Figure 2:** Intended instructional effects interwoven with the CoI instructional components.

The instructor perceived the teaching presence component as taking the leading role in the tripartite relationship with the other two presences. This is actually good practice for facilitating and supporting students' achievement in learning on the basis of enriching social and cognitive experience. He argued:

Such instructional effects on enriching blended learning experiences will not be achieved by individual students' self-learning. The enrolled students are rather a collaborative community of

inquiry learning in well-connected, coherent face-to-face teaching and online interactive learning activities mediated by ICT.

The instructor realised the important role the teaching presence component played in facilitating social engagement for triggering cognitive outcomes. The CoI instructional effects in practice are inextricably interwoven in the face-to-face teaching on the campus and online learning activities on the Internet.

### **INSTRUCTIONAL EXPERIENCE IN A BLENDED COMMUNITY OF INQUIRY**

By contextualizing the CoI framework in the redesign of the course, the instructor experienced different instructional experience. He felt that the students' learning was situated in face-to-face teaching on the campus and asynchronous online learning via the LMS as a community of knowledge inquiry. Indeed, this was a blended community comprising the face-to-face community in the classroom and the online community of learning on the Internet. Most importantly, the instructor was also engaged in the blended community where he and the students collaboratively inquired about the knowledge. The instructor reflected:

We [the instructor and students] were situated in an interconnected and coherent relationship between the face-to-face teaching and the online learning as a connected process of scaffolding students' knowledge from simply directing, clarifying and demonstrating content to collaborative construction of musical aesthetic knowledge. We collaborated in the blended community of knowledge inquiry.

This reflection delineates the instructional experience of the face-to-face and online learning activities for the knowledge inquiry. This likes a spiral pattern of the instructor and students' collaborative involvement in a social climate that triggered cognitive instructional activities. Similar to Garrison's (2016) collaborative critical thinking of knowledge in a communal context, the instructor's experience was situated in a blended community of inquiry. The face-to-face teaching emphasized practices of creative music teaching, while the online learning activities linked the practice to collaborative construction of multiple perspectives on the aesthetic knowledge on the LMS.

The instructional experience may evidence the CoI instructional effects which could bring about deeper levels of learning in the blended mode. Teaching presence directed the socially-shaped exchange of and reflections on knowledge. Collaborative participation or involvement in teaching and learning facilitated online dialogues, group projects and online presentation of project reports as formative assessment supplemented by a mid-term quiz as summative assessment. The instructor came to term it 'collaborative participation in learning' in a blended community of inquiry. Thus, the students might have deeper levels of learning for achieving the intended outcomes.

### **DISCUSSION**

The discussion covers the experiences of collaborative participation in learning in a blended community of inquiry and the potential challenges to the practice of the CoI instructional design approach. The main limitation of the study is then highlighted.

### **COLLABORATIVE PARTICIPATION IN LEARNING**

The instructor experienced a sense of collaborative participation in learning and teaching the course. Upon further reflection, the realignment of the three CoI components cultivated not only student learning but also the instructor's involvement in the blend of face-to-face teaching and asynchronous online learning. This incubated the sense of collaborative participation as if in a blended learning community that proactively engaged in a blended social climate to trigger both the instructor's and students' cognitive functions in the connected and coherent face-to-face teaching and online learning activities.

Thus, the teaching presence instructional components demonstrated a leading role representing that "All participants in a collaborative learning environment must assume various degrees of teaching responsibilities depending on the specific content, developmental level, and ability" (Vaughan et al., 2013, p.14). Such experience reflects the instructor's collaborative participation with the students in the blended community of knowledge inquiry which echoes the representation of teaching presence as 'all participants in a collaborative learning environment'. This inspires a new notion of collaborative participation in learning in a blended communal context. Student-student, student-instructor and student-content interactions are enhanced to build rapport between the instructor and the students in the community of inquiring knowledge.

### **POTENTIAL CHALLENGE TO THE COI INSTRUCTIONAL DESIGN**

The instructor could have adopted the CoI instructional approach to designing connected activities linking the face-to-face teaching in the classroom to the asynchronous online learning. It is worth noting that the instructional effects are rather more dynamic than static in a course design. In a different context, the effects may rely more on the social and cognitive presences than on the teaching presence. With this in mind, the same CoI instructional approach to course design in different university contexts can have different impacts on instructors' teaching and students' learning experiences. Other scholars (e.g., Kozan & Richardson, 2014; Yang et al., 2016) have argued for the important role of cognitive presence in enriching student experiences for achieving intended outcomes with deeper levels of learning in the contexts in which they conducted their studies. Paradoxically, the findings may not be repeatable with different cohorts of students, educational disciplines or institutional cultures. The CoI instructional approach requires continuing adaptation and development for different learning modes with the advent of ICT.

## LIMITATION

The study reported in this paper was conducted in a Chinese context. Its findings are not intended for generalization of practising the CoI framework in course design. Despite this, it does provide a single case study of an instructor's practice of the CoI framework as an instructional approach in which collaborative participation in learning was experienced in a blended community of inquiry. As such, the CoI instructional effects are contextually specific.

## CONCLUSION

The findings of this study shed light on the instructor's instructional experience in practice of the CoI instructional design approach in the blended learning mode. The practice reflects the sense of collaborative participation in learning in the blended community of knowledge inquiry. It has evidenced the realignment of the teaching, social and cognitive presences in the blend of 80% face-to-face teaching and 20% online learning in contrast with the broad understanding of a 50/50 blend (Graham, 2006; Bernard, 2014). The challenge to the CoI instructional approach is: How feasible is it that the three presences can accommodate different instructors' pedagogic preferences across various university learning contexts with the advent of ICT? Further research on the CoI instructional effects interwoven with the teaching, social and cognitive presences is needed.

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## WHATSLEARN: THE USE OF WHATSAPP FOR TEACHING AND LEARNING

Simon So, PhD

Department of Mathematics and Information Technology

The Education University of Hong Kong

Hong Kong

swwso@eduhk.hk

### ABSTRACT

Educational establishments continue to seek opportunities to provide learners with effective facilities and tools to use in their learning. WhatsApp is one of these tools. The approach of using WhatsApp to support instruction and learning in the author's research projects and teaching is called WhatsLearn. In this paper, the theories underpinning WhatsLearn are examined. The salient characteristics and supporting features of WhatsApp for education are discussed. The setup of WhatsLearn, such as with the use of QR codes and cloud technologies, is also illustrated. Examples of WhatsLearn are provided. One of the research results generated with WhatsLearn is discussed by So (2016).

### INTRODUCTION

WhatsApp is a versatile mobile instant messaging (MIM) application (Church & de Oliveira, 2013). As of February 1, 2016, WhatsApp has a user base of one billion (WhatsApp, 2016). It is the most popular messaging tool that competes with other messaging applications such as Line, Viber, WeChat, QQ, KakaoTalk, BBM, Telegram, Twitter, Instagram, Skype, Facebook Messenger, and Google Messenger. These messaging technologies have the potential to engage and motivate students in higher education. A literature review shows that WhatsApp can be applied to content learning (So, 2016), language learning (Gutiérrez-Colon et al., 2013; Salem, 2013), formal or informal interaction and discussion (Rambe & Bere, 2013; Tarighat & Khodabakhsh, 2016), collaborative and social interaction (Amry, 2014; Ngaleka & Uys, 2013), and administrative support (EduHK, 2016).

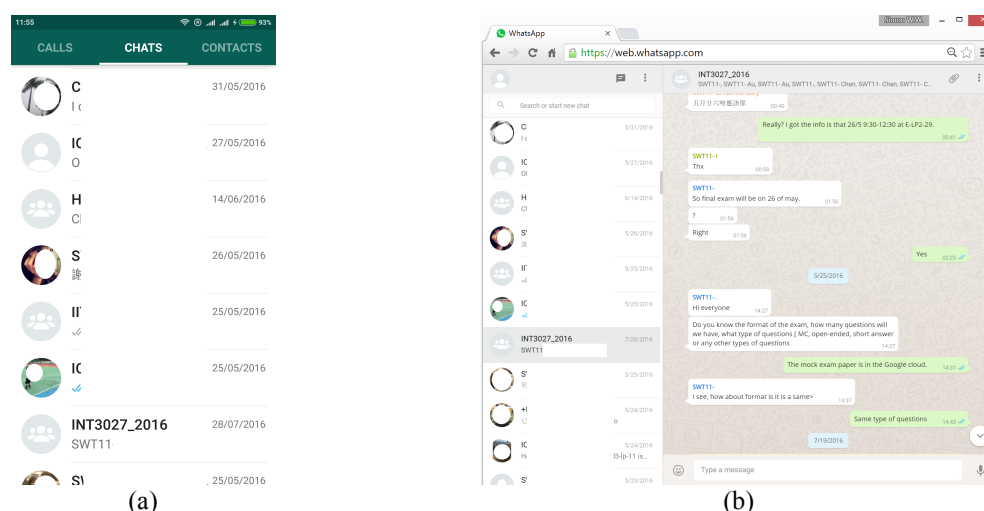
The author uses WhatsApp to communicate with his students regularly and extensively. Over the past few years, he has integrated his courses with WhatsApp as part of the teaching process. WhatsApp is a natural extension for various educational activities outside the author's physical classrooms. WhatsLearn is a term coined by the writer to signify the use of WhatsApp in education. WhatsLearn is also a term that refers to the communication of the author with his students by using WhatsApp in all types of educational and research activities. This term enables researchers to focus on the MIM tools for teaching and learning.

In this paper, a holistic view of WhatsLearn is provided, which includes highlighting the salient characteristics and supporting features of WhatsApp for instructing and studying. The theories relevant to WhatsLearn are examined. To establish the use of WhatsLearn efficiently and productively, the author revealed a number of his practices on setting up WhatsLearn. The web tools that he used were explained. Lastly, various examples of WhatsLearn from his teaching are demonstrated.

### SALIENT AND SUPPORTING FEATURES

WhatsApp is a cross-platform messaging application that enables users to send text and audio messages, images, video, and documents to other users for free (Figure 1(a)). It supports quasi-synchronous communication (Garcia & Baker Jacobs, 1999) across the globe. Recently, users are able to make direct voice calls as it works in a manner similar to voice-over-IP platforms. It is a form of over-the-top (OTT) service. OTT services refer to the delivery of media content over the Internet rather than through dedicated mobile carriers. In this section, WhatsApp features that can support teaching and learning are highlighted.

Nowadays, WhatsApp enables sending and receiving messages from desktop computers. The official web-based client allows users to exchange messages directly from the web platform and synchronize it with the handset (Figure 1(b)). This feature is useful for teachers because they can send media files and documents directly from their computer storage, and can cut-and-paste images from their desktops, to group learners and members. It also helps to relieve one-finger interaction and typing on mobile devices when the teachers have to deal with messages from many students.



**Figure 1.** (a) Mobile version of WhatsApp; (b) The Web-based WhatsApp software synchronizes to the handset.

In the past, WhatsApp could only support 30 members per group. This restriction prevented teachers from organizing a class group greater than 30. Then, the size was increased to 100 members from 50 members after Facebook's acquisition of WhatsApp. Users can create a group chat with up to 256 members now. Teachers can accommodate large class sizes if the large class can be combined in a single group.

The push aspect of WhatsApp enables teachers and students to respond to the received messages immediately and fosters ubiquitous learning. Text messages are delivered instantaneously. Images, voice messages, and video clips are kept locally once the data are downloaded onto the handsets. This feature helps the learners to revisit their learning materials easily and quickly. This mode of storing learning materials is better than the client/server approach of the traditional content management systems. Some educators may argue that the flat messaging structure may not be desirable compared with the format of discussion forums. This argument is valid. Although structured discussions are impossible in WhatsApp, a new feature enables users to directly reply to a specific message by selecting the particular message.

## THEORETICAL FRAMEWORK

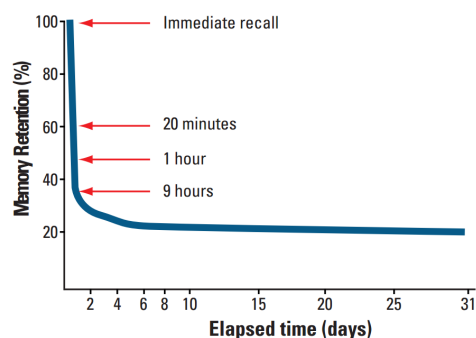
### Bite-sized Learning

Bite-sized learning is an eLearning approach that provides short and bite-sized resources to learners. The bite-sized methodology involves the use of short videos, voice broadcasts, succinct images, brief text messages, and concise multimedia contents which will be delivered as bite-sized learning materials to the learners. The approach to learning is increasingly popular and proven to be effective (Stahl et al., 2010; Tattersall, Beecroft, & Freeman, 2013). To take the bite-sized learning concept further, the website Bitesize produced by BCC has created a mobile app for download. This mobile app facilitates learning from the kindergarten level up to the GCSE curriculum (BBC, 2016). It is well-known in cognitive psychology that humans have limited capacity to process information. Therefore, information presented as small chunks are most likely to be meaningfully processed (Miller, 1956). Furthermore, the Ebbinghaus savings function informs us that the course of forgetting can best be described by a power curve of time (Wixted & Ebbesen, 1991; Wixted & Carpenter, 2007). Under typical conditions, Wickelgren (1974) derived an equation (Wixted & Carpenter, 2007) as follows:

$$m = \square(1 + \beta t)^{-\varphi},$$

where  $m$  is memory strength,  $t$  is time (i.e., retention interval),  $\square$  is the state of long-term memory at  $t = 0$  (i.e., degree of learning),  $\varphi$  is the rate of forgetting, and  $\beta$  is a scaling parameter. This equation provides an accurate description of forgetting information. Hermann Ebbinghaus proved the occurrence of an exponential loss of memory, as shown in Figure 2. To effectively retain new information, learners should review their learning materials and revisit those materials regularly, as demonstrated by the Ebbinghaus that is illustrated in Figure 3. Overlearning, immediate recall, and spaced repetition are some of the learning strategies to “fight” the forgetting curve.

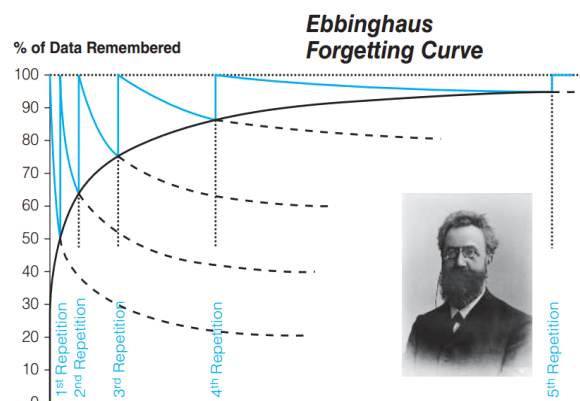
WhatsApp can be an ideal medium to support bite-sized learning. Small chunks of learning multimedia materials can be exchanged easily and ubiquitously. Materials saved on the learners' mobile devices can be conveniently revisited at their own time and pace.



The "forgetting curve" was developed by Hermann Ebbinghaus in 1885. Ebbinghaus memorized a series of nonsense syllables and then tested his memory of them at various periods ranging from 20 minutes to 31 days. This simple but landmark research project was the first to demonstrate that there is an exponential loss of memory unless information is reinforced.

**Figure 2.** The forgetting curve

Source: Stahl et al., 2010



**Figure 3.** The Ebbinghaus forgetting curves show the first few repetition results of remembered words.

Source: Sternberg & Sternberg, 2012

### Multimedia Learning

WhatsApp allows the "unlimited" sharing of audio, video, and images. Just-in-time materials and instructions can be provided to learners. Clark and Mayer (2007) contended that if specific instructional guidelines and principles can be met, humans can integrate information from different sensory modalities into one meaningful experience, and rich media can promote effective cognitive processes in learners. In general, multimedia learning is defined as learning from presented words (such as printed or spoken text) and pictures (such as illustrations, photos, animation, or video) (Mayer, 2005). The cognitive theory of multimedia learning draws on dual coding, cognitive load, and constructivist learning theories. The dual coding theory suggests that information can be encoded, stored, and retrieved from independent verbal and visual processing systems. The cognitive load theory asserts that cognitive resources, such as working memories, are limited in both capacity and duration. The amount of information that can be processed by an individual at a given time can impede learning. Constructivist learning occurs when learners actively construct meaningful mental representations from presented information. Humans engage in active learning by attending to relevant incoming information, organizing selected information into coherent mental representations, and integrating mental representations with other forms of knowledge (Mayer, 2001).

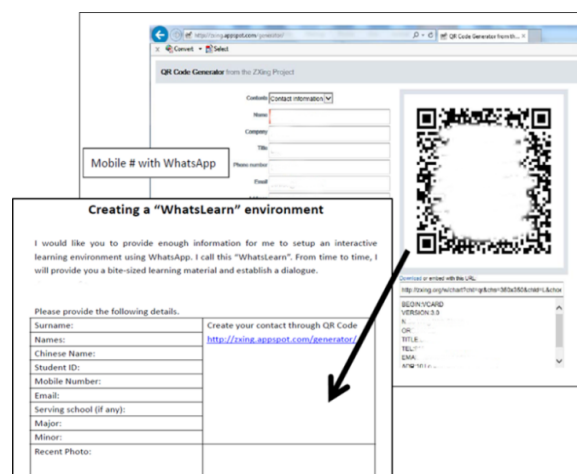
The cognitive theory of multimedia learning entails the design principles of providing coherent verbal and pictorial information, and reducing the cognitive load for a single processing channel. WhatsApp can support such an environment as multimedia instructional messages can be delivered to learners. These messages can be in different modalities. Hyperlinked multimedia materials can also be shared. Learners can study and revisit materials at their desired time and place. If selective multimedia materials adhere to Mayer's multimedia principles and are delivered via WhatsApp, deeper learning is likely to occur (Mayer, 2005).

### SETTING UP WHATSLEARN

#### Establishing a group of students on WhatsApp

WhatsApp uses mobile phone numbers for user identification. However, entering students' contact information into the teacher's mobile device is tedious. To establish a class group on WhatsApp, students were asked to fill out the information sheet shown in Figure 4. This activity served two purposes. First, the information and photographs of the students (possibly taken using their own smartphones) allowed the instructor to know them quickly. Second, the students created a QR code containing their own contact information and pasted them onto the information sheet. This procedure was an efficient method in setting up the group on WhatsApp. With only two clicks per student, the instructor could feed all relevant contact information (e.g., names and phone numbers) in the vCard-XML format into the mobile device of the instructor using the QR code scanner (e.g., i-nigma). The application removed the need to type the important data to set up the contact information.

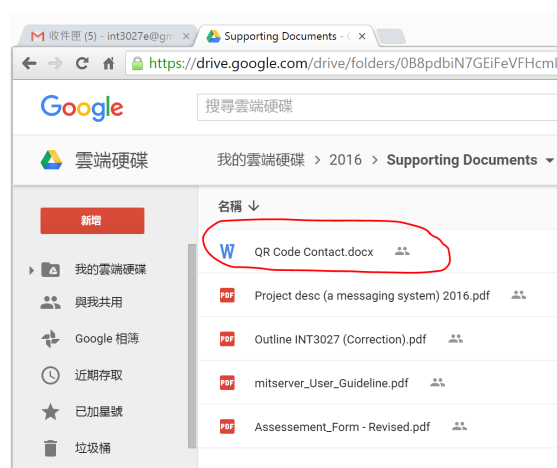




**Figure 4.** Information sheet with an embedded QR code of a student's contact information

### Linking with Cloud Technologies

The use of cloud technologies in teaching and learning enables teachers to share notes, presentation slides, reference papers, instructional materials, software, and other items with their students. Teachers can facilitate collaboration among students by using cloud services. Together with WhatsApp, cloud technologies offer new and innovative methods for education. Teachers can provide seamless support to learners. Furthermore, the web-based WhatsApp client enables interaction with efficient cloud technologies. Figure 5 illustrates an example of using Google Cloud together with WhatsApp to support a course in Web Technologies.

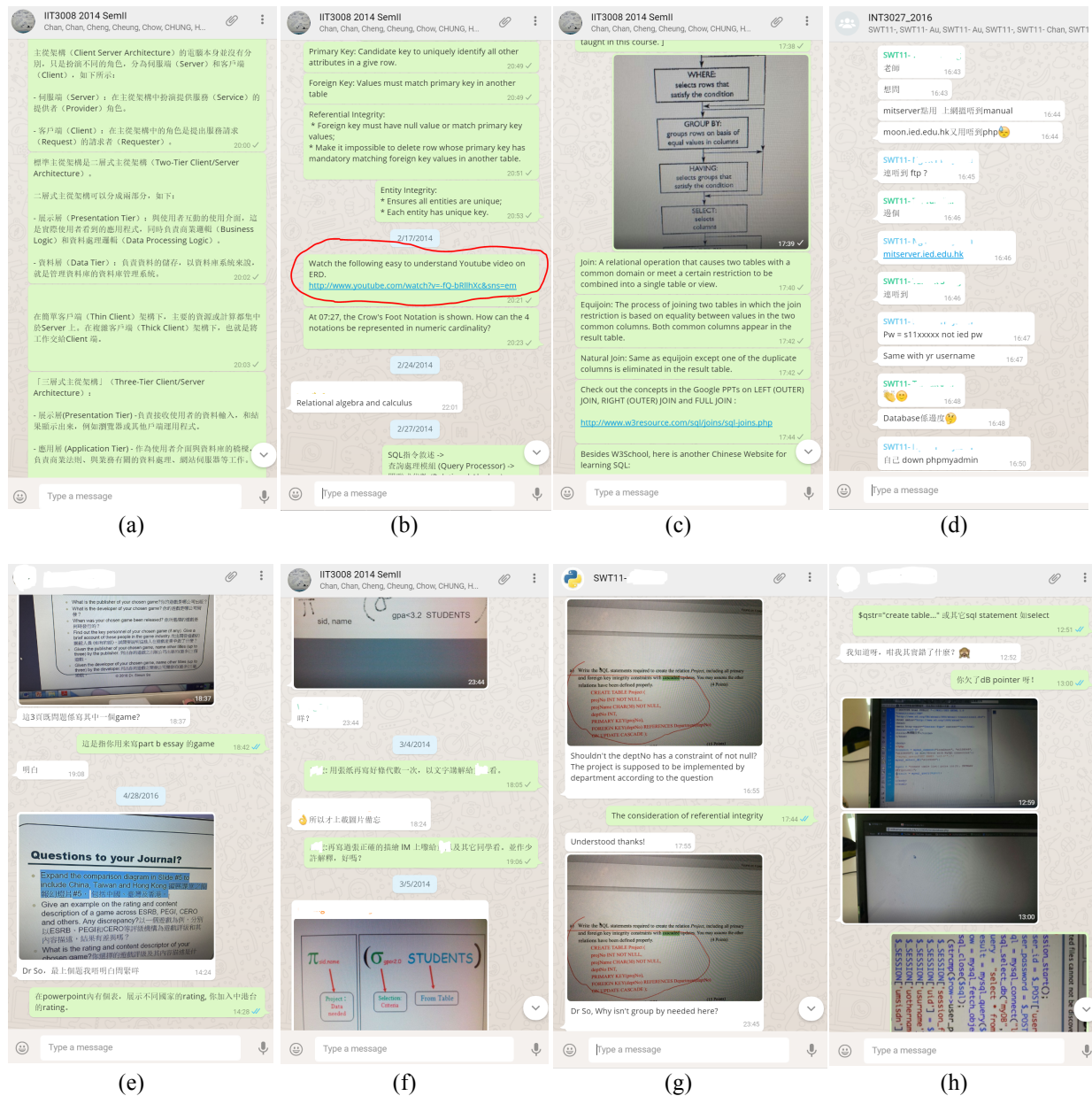


**Figure 5.** Teachers share documents and lecture materials with students through Google Cloud

### EXAMPLES OF WHATSLEARN

The author of this paper recently taught several IT courses in Database, Web Technologies, and Digital Games for a teacher-training institute in Hong Kong. Figure 6 presents the various teaching and learning activities occurred in these courses. The traditional methods of teaching such as face-to-face lectures and tutorials were still conducted. The captured screens using the web-based WhatsApp illustrated some of the interactions outside school hours. Figure 6(a) illustrates the bite-sized materials in point-form notes that summarize and supplement the teachings in class. Multimedia materials of video links to YouTube or other cloud platforms were frequently posted to the students for them to study at their own pace and time, as shown in Figure 6(b). Considering the limited storage and low bandwidth of students' handsets, the teacher rarely sent raw video clips to their devices. Figure 6(c) shows that the teacher used numerous diagrams to support student learning. These images can be captured by using the built-in camera of the device, and these images can come from computers or printed materials that can be quickly posted to the students. The social presence and motivation among the students were usually high and they collaborated in most of the educational activities. Figure 6(d) shows students helping each other with issues and problems that they faced. Some students preferred to ask questions about their assignments individually, which is similar to what is shown in Figure 6(e). The students described and clarified their doubts

on the lessons and the teacher responded to their queries quickly. The teacher also posted questions regularly and encouraged students to respond. Figure 6(f) shows that the teacher invited a student to respond to a question, and was able to help another student to clarify his confusion. Learning materials such as trial examination papers were often posted to Google Cloud. The teacher privately received many queries about the trial exam just before the examination date, as shown in Figure 6(g). With the programming tasks, students would ask the teacher to debug their programs. They took screen shots and posted the images to WhatsLearn. Figure 6(h) shows a problem in database programming and the response by the teacher. The teacher also used other communication tools such as Skype to help students to debug their programs remotely by using screen sharing.



**Figure 6.** (a) The teacher provided bite-sized learning materials to students; (b) the teacher requested students to watch a video clip on YouTube; (c) the teacher provided diagrams and URL links for students to learn; (d) a few students actively solved a web technology issue in the dialogue; (e) a student asked some questions about the e-journal assignment for a digital game course; (f) a student responded to the author's question and provided peer teaching on a database concept; (g) a student highlighted his doubt about some database concepts; and (h) the teacher resolved a student's programming errors.

## RESEARCH RESULTS FOR WHATSLEARN

The author's formal research on the use of WhatsApp for teaching and learning in higher education can be found in the work of So (2016). Readers who are interested in the details of the study can refer to the research paper. Briefly, a total of 61 students who are enrolled in a teacher-training institute were divided into experimental and control groups. For the experimental group, instructive support through WhatsApp was provided outside school hours. Only administrative support was provided to the participants in the control groups. The teacher methodologically supplied bite-sized multimedia learning materials and activities to the participants in the experimental group. Pre-test and post-test were administered to the participants in both the treatment and control groups before and after a course. A questionnaire was designed by the author to measure the acceptance and the perceived usefulness of WhatsApp in supplementing their lessons from the perspective of the participants. The statistical analyses utilized for the pre-test and post-test and the questionnaire were the ANCOVA and t-tests, respectively. With the pre-test scores as the covariate, the marginal means on the post-test scores showed that the participants in the experimental group performed better than those in the control group. This result confirmed that the intervention of WhatsApp for teaching and learning improved their performance. From the survey results of the questionnaire, the participants expressed positive perception and acceptance on the use of WhatsApp as a mode of receiving additional support. Details of the statistical results are presented in the paper.

## CONCLUDING REMARKS

This paper aims to provide a holistic view of using WhatsApp for teaching and learning in the courses that the author taught. The author named this strategy WhatsLearn. The MIM tool has been extensively used with his students for the past few years. This approach was well-received by the students, as shown in the work of So (2016).

The salient characteristics and supporting features such as the nature of communication, web-based client, group size, and push aspect of WhatsApp for education are highlighted. As for the theories supporting WhatsLearn, the bite-sized approach to learning is significant. Learning in small chunks and providing learning materials that can be revisited anytime are important to WhatsLearn. Furthermore, supporting learners with multimedia pieces and delivering instructional materials in different modalities can enhance their learning.

The author explained an easy way of entering the student's contact information into the mobile devices. He used QR codes and outlined the processes involved. Integrating cloud technologies with WhatsApp were also explored and applied practically. Various examples of activities using WhatsApp were illustrated. The purpose of the illustration is to highlight the diversity of educational activities that can be conducted with WhatsApp. Readers were also referred to the research results of WhatsLearn. The author hopes that the readers of this paper will be encouraged to use WhatsApp for education and eventually administer their own innovative use of this versatile tool.

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## WHY UNIVERSITY STUDENTS PROCRASTINATE THEIR ACADEMIC TASKS

Valeria DE PALO  
Department of Humanities  
University of Foggia  
Italy  
[valeria.depalo@unifg.it](mailto:valeria.depalo@unifg.it)

Pierpaolo LIMONE  
Department of Humanities  
University of Foggia  
Italy  
[pierpaolo.limone@unifg.it](mailto:pierpaolo.limone@unifg.it)

Lucia MONACIS  
Department of Humanities  
University of Foggia  
Italy  
[lucia.monacis@unifg.it](mailto:lucia.monacis@unifg.it)

### ABSTRACT

Considerable attention has been given to university settings in order to understand and treat those factors that positively or negatively affect students' awareness about learning and study strategies. The aim of the present research was to analyze the role played by anxiety on metacognitive beliefs about procrastination, decisional procrastination, and time management. 281 students of the University of Foggia, Italy ( $F = 260$ ,  $M = 21$ ;  $M_{age} = 21.26$ ;  $SD = 4.2$ ), were enrolled during the first semester. They were asked to fill out a questionnaire composed by: socio-anagraphic section, the Metacognitive Beliefs About Procrastination Questionnaire, the procrastination subscale of the Melbourne Decision Making Questionnaire, and two subscales of the Learning and Study Strategies Inventory, i.e., the Anxiety and the Time Management scales. Correlational analyses showed that anxiety was associated negatively with positive and negative beliefs about procrastination and decisional procrastination and positively with time management; positive beliefs about procrastination were associated negatively with time management and positively with decisional procrastination. As these results highlighted the influence of anxiety on the above mentioned factors that are important for raising academic achievement levels, further studies are needed to better explore this issue related to students' performance.

### INTRODUCTION

Procrastination is generally defined as a trait or behavioral disposition consisting in the tendency to delay the start or completion of a task because of the lack of self-regulation (Milgram & Tenne, 2000; Tuckman, 1991). In his meta-analytic review, Steel affirmed: "definitions for procrastination tend to be almost as plentiful as the people researching this topic. [...] All conceptualizations of procrastination recognize that there must be a postponing, delaying, or putting off of a task or decision" (Steel, 2007, p. 66). Thanks to the empirical research, different kinds of procrastination have been identified and referred to task avoidance, that includes academic and life routine procrastination, and to decision avoidance, that includes decisional and compulsive procrastination (Milgram, Mey-Tal, & Levison, 1998; Milgram & Tenne, 2000).

Despite of the considerable number of investigations on the nature of the phenomenon, its causes and effects remain an interesting research field, on which psychologists are increasingly engaged (Kim & Seo, 2015; Klassen, Krawchuk, & Rajani, 2008). The empirical work establishing the nomological network of procrastination can be generally divided into four sections: (1) task characteristics referred to the possible environmental causes of procrastination; (2) individual differences concerning personality traits linked to procrastination; (3) outcomes indicating the proximal effects of procrastination; and (4) demographics, i.e., the physical and cohort moderators (Steel, 2007).

As for the outcomes of procrastination, this construct has been found to be a factor influencing psychological well-being, life satisfaction, mood, and performance especially when analyzed in academic settings (Balkis & Duru, 2015; Steel, 2007). Various studies have shown that students who procrastinate are more depressed, stressed, and less satisfied with general and academic life (Balkis, 2013; Çapan, 2010; Deniz, 2006; Özer & Saçkes 2011; Sirois, 2014; Stöber & Joormann, 2001). According to Balkis and Duru (2015), higher levels of procrastination are related to higher levels of negative affect and to lower levels of both positive affect and academic life satisfaction. The authors have also found that procrastination plays a mediator role between self-

regulation, negative and positive affect, and academic life satisfaction. With regard to performance, inconsistent findings concerning the relationship between procrastination and performance have emerged: some investigations have reported negative effects of procrastination on learning and achievement (e.g. Aremu, Williams, & Adesina, 2011; Balkis, 2013), whereas other studies have shown no associations or even positive associations between procrastination and academic performance (Schraw, Wadkins, & Olafson, 2007; Seo, 2011; Van Eerde, 2003). The positive relationship could be explained by the use of procrastination as an adaptive strategy which helps students to cope with the task and to achieve maximum efficiency (Tice & Baumeister, 1997). Procrastinators have been also found to be more likely to cram, thus increasing levels of flow experience and sense of challenge during task performance (Brinthaupt & Shin, 2001).

In scientific literature a particular attention has been paid to the role played by individual differences in the tendency to procrastinate: higher levels of anxiety, lower levels of self-esteem, self-efficacy and self-regulation resulted associated with higher levels of procrastination (Howell, Watson, Powell, & Buro, 2006; Klassen, Krawchuk, & Rajani, 2008; Schraw, Wadkins, & Olafson, 2007; Wolters, 2003). In terms of self-regulation, two different approaches have dealt with procrastination: in the first the construct is intended as a misregulation form of self-regulation failure involving emotional regulation in the short term when an individual tends to postpone starting a task that causes anxiety and negative feelings (Baumeister & Heatherton, 1996; Sirois & Pychyl, 2013), whereas in the second procrastination is interpreted as an underregulation form of self-regulation failure reflecting poor self-regulation in estimating, organizing, and managing skills (Baumeister, Schmeichel, & Vohs, 2007). According to this last approach, procrastination reflects deficiencies in evaluating, structuring, and managing time (Rabin, Fogel, & Nutter-Upham, 2011; Terry & Doolittle, 2008). However, Klassen, Krawchuk, and Rajani have argued that the interpretation of procrastination as a failure of self-regulation is simplistic because it “neglects the important role that self-efficacy plays in cognitive and metacognitive functioning [...] and in the adoption of important metacognitive strategies” (Klassen, Krawchuk, & Rajani, 2008, p. 928).

In this perspective, metacognitive beliefs have been found to be important factors in both forms of procrastination, i.e., behavioral and decisional procrastination (Ferne & Spada, 2008; Fernie, Spada, Nikčević, Georgiou, & Moneta, 2009). In particular, metacognitive beliefs about cognitive confidence predict behavioral procrastination, whereas positive beliefs about worry predict decisional procrastination (Spada, Hiou, & Nikčević, 2006). On the basis of these results, Fernie and Spada (2008) have identified two types of metacognitive beliefs about procrastination referred to both the usefulness of procrastination in improving cognitive performance (positive metacognitive beliefs) and the uncontrollability of procrastination (negative metacognitive beliefs). In analyzing the relationship between metacognitions and decisional procrastination, a recent study has demonstrated a link between the latter and negative affect, metacognitive beliefs, and attentional control factors (Ferne, McKenzie, Nikčević, Caselli, & Spada, 2016).

To shed more light into the determinants of decisional procrastination, the current research aimed at assessing the extent to which metacognitive beliefs about procrastination, time management, and anxiety in learning and study strategies may predict decisional procrastination in university students. Particularly, it was hypothesized that decisional procrastination will be predicted positively by positive and negative metacognitive beliefs and by anxiety in learning and study strategies, and negatively by time management in learning and study strategies. These hypotheses were justified by the lack of integrated investigations on the association between the variables of interest.

## METHOD

### Participants and procedures

The sample was initially composed of 303 University students. 22 incomplete questionnaires were excluded from the subsequent analyses. The final sample was composed of 281 participants ( $M_{age} = 21.26$ ,  $SD = 4.2$ ; 260 females and 21 males). Data were collected during the first semester of the academic year 2015/2016.

Ethics approval for the study was obtained from the Institution. Written informed consent was obtained from the respondents who were asked to complete an anonymous questionnaire during an ordinary 50-min classroom lesson.

### Measures

The *Anxiety* and *Time Management* subscales of the *Learning and Study Strategies Inventory* (LASSI - 2<sup>nd</sup> Ed., Weinstein & Palmer, 2002; 1<sup>st</sup> Ed., Weinstein, Schulte, & Palmer, 1987) were used to assess the degree to which students worry about school/university and their academic performance (Anxiety, ANX) and the application of time management principles to academic situations (Time Management, TM). Each subscale consisted of 10

items rated on a 5-point Likert scale (from 1 = *Not at all typical of me* to 5 = *Very much typical of me*). Low scores in the ANX and TM scales indicate high levels of anxiety and of difficulty in the use of time management techniques. The internal consistency was found to be satisfactory for ANX and TM scales (Cronbach's alpha = .85 and .67, respectively).

The *Metacognitive Beliefs About Procrastination Questionnaire* (MCPQ; Fernie et al., 2009), consisting of two-factors, measures positive and negative metacognitive beliefs about procrastination. Each factor is composed of eight items rated on a 4-point Likert scale (from 1 = *Do not agree* to 5 = *Agree very much*). Higher scores on both factors indicate higher levels of maladaptation in metacognitive beliefs. The internal consistency was acceptable for the two factors (Cronbach's alpha = .71 for the Positive beliefs dimension and .82 for the Negative beliefs dimension).

The *Procrastination* subscale of the Italian version of the *Melbourne Decision-Making Questionnaire* (MDMQ; Mann, Burnett, Radford, & Ford, 1997; Nota & Soresi, 2000) was used to assess the decisional procrastination. This subscale, included in a 22-items questionnaire, is constituted by 5 items rated on a 3-point Likert scale (from 1 = *Not true for me* to 3 = *True for me*). Higher scores indicate the tendency to postpone the moment in which individuals have to face a decisional problem. The scale reliability was good (Cronbach's alpha = .79).

### Analysis strategies

Descriptive statistics included minimum, maximum, mean, and standard deviation of the scores of each scale. Correlational analyses were performed to assess the pattern of association between the variables of interest. Finally, stepwise regression using the forward method was run to verify which of the independent variables (anxiety, time management, and positive and negative metacognitive beliefs) better predicted the dependent variable (decisional procrastination). Analyses were performed using SPSS 20.0 for Windows.

## RESULTS

Descriptive statistics (minimum, maximum, mean, and standard deviation) of the variables taken into account are reported in Table 1.

**Table 1:** Descriptive statistics of the variables of interest.

	Minimum	Maximum	Mean	Stand. Deviation
<b>Anxiety</b>	8	40	20.58	6.71
<b>Time management</b>	16	40	28.67	4.77
<b>Negative beliefs about procrastination</b>	9	32	21.25	4.92
<b>Positive beliefs about procrastination</b>	8	32	19.09	3.99
<b>Decisional procrastination</b>	1	3	1.44	.44

Correlational analyses were run to analyze the association between the variables of interest. Results revealed that ANX was related positively to TM and negatively to positive and negative beliefs about procrastination, as well as to decisional procrastination; TM was negatively associated with positive and negative beliefs and decisional procrastination; positive beliefs about procrastination was positively related to decisional procrastination. No significant association between negative beliefs about procrastination and decisional procrastination emerged (Table 2).

**Table 2:** Bivariate correlations between the variables of interest.

	1	2	3	4
<b>1. Anxiety</b>	-			
<b>2. Time management</b>	.164**	-		
<b>3. Positive beliefs about procrastination</b>	-.212**	-.196**	-	
<b>4. Negative beliefs about procrastination</b>	-.164**	-.026	-.193**	-
<b>5. Decisional procrastination</b>	-.307**	-.443**	.240**	.066

\*\*  $p < .001$



A stepwise linear regression (forward technique) was calculated to predict decisional procrastination based on anxiety and time management in learning and study strategies and metacognitive beliefs about procrastination. Results showed that Model 3, which included TM, ANX, and Positive beliefs, explained 25.8% of the total variation in the dependent variable, i.e., decisional procrastination. In particular, decisional procrastination was predicted negatively by TM ( $\beta = -.384, p < .001$ ) and ANX ( $\beta = -.220, p < .001$ ), and positively by Positive beliefs about procrastination ( $\beta = .118, p < .05$ ). Among these variables, TM resulted the best predictor of decisional procrastination. As the dimension of Negative beliefs about procrastination was not associated with decisional procrastination, it was excluded from the regression analyses.

## CONCLUSIONS

The purpose of the current study was to analyze the extent to which metacognitive beliefs about procrastination, anxiety and time management in learning and study strategies predicted decisional procrastination in a sample of University students. The hypotheses were partially confirmed. As expected, decisional procrastination was predicted negatively by time management and positively by the positive beliefs about procrastination. Contrary to the stated hypothesis, anxiety was positively related to decisional procrastination, whereas the relationship between negative beliefs about procrastination and decisional procrastination was not significant. As in the scoring procedure of the Anxiety scale, low scores indicated high levels of anxiety, the negative relationship was justified. This result was in line with previous research according to which general anxiety is a determinant factor of procrastination (Haycock, McCarthy, & Skay, 1998). In the academic context, too, the tendency to escape difficult decisions by procrastinating was determined by the degree to which students worried about their academic performance. Similarly, the difficulty in the use of effective scheduling and monitoring techniques useful for managing time in the completion of academic tasks predicted procrastination when students had to face decisional problems. Among the variables taken into account, time management explained the higher variance in decisional procrastination. That is, postponing decisional situations was a result of the difficulty in planning and controlling the time needed to efficiently complete academic tasks. In this sense, procrastination could be considered as an underregulation form of self-regulation, reflecting deficiencies in evaluating, structuring, and managing time (Rabin, Fogel, & Nutter-Uptham, 2011; Terry & Doolittle, 2008).

As for metacognitive beliefs about procrastination, only positive beliefs significantly predicted decisional procrastination, corroborating the prior study of Spada, Hiou, & Nikcevic (2006). In other words, beliefs concerning the usefulness of procrastination in improving cognitive performance positively influenced the tendency to postpone decisions. From a metacognitive perspective, the positive beliefs involve the delay of a task as a form of coping (Ferne & Spada, 2008). Likewise, decisional procrastination is intended as one of the five basic patterns of coping with stress generated by a difficult decision (Mann et al., 1997). Contrary to expectations, negative beliefs about procrastination concerning the uncontrollability of procrastination did not predict decisional procrastination perhaps because they fixed attention on procrastination itself (Ferne et al., 2009) rather than on the decisional situation.

Overall the results obtained in the current study not only corroborated previous research on the relationships of individual factors, in terms of anxiety and self-regulation, with metacognitive beliefs and procrastination (Ferne & Spada, 2008; Ferne et al., 2009; Howell et al., 2006; Klassen, Krawchuk, & Rajani, 2008; Schraw, Wadkins, & Olafson, 2007; Wolters, 2003), but also they contextualized these relationships within academic tasks. Moreover, these findings provided an insight into the effect of some aspects of learning and study strategies and metacognitive beliefs on the tendency to delay decision problems in the academic context. In this setting, the decision to take an exam could be stressful: students unable to cope with anxiety, to reduce the levels of worry, and to employ time management principles are more likely to dropout since they tend to postpone the exams.

Although this study contributed to the body of knowledge about the relationship between the above mentioned factors, it is not without limitations. The sample had an unequal gender distribution: the prevalence of females did not allow to assess gender differences in the scores. In addition, the use of self-report scales might lead to biased responses. Future studies should overcome these limitations by using a larger sample with an equal distribution of males and females and with students from different courses. A further indicator of academic performance (for example the Grade Point Average) should be included in the data collection to examine a broader causal model of the effects and consequences of procrastination.

Despite these limitations the current investigation has several implications for research and practice: as for the research, it could be considered a starting point for a more integrated model of individual differences in learning and study strategies, metacognitive beliefs about procrastination, and procrastination; as for the practice, the findings could be helpful to the development of adaptive coping strategies aimed at avoiding procrastination and



dropout risks in the academic career.

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## WORKING ENVIRONMENT PREPARATION PROCESS OF HEARING IMPAIRED YOUTHS AT HIGHER EDUCATION

Sema ÜNLÜER  
Anadolu University, Turkey  
[semaunluer@gmail.com](mailto:semaunluer@gmail.com)

Ayşe TANRIDİLER  
Anadolu University, Turkey  
[aysetanridiler@gmail.com](mailto:aysetanridiler@gmail.com)

### ABSTRACT

For the development of a country, there is a need for qualified manpower and it can be provided by well-structured learning environments. Also hearing impaired individuals need well-structured learning environments for taking place at working places independently, productively and effectively. In Turkey, Anadolu University, The School for the Handicapped is the only higher education institute that gives vocational education to hearing impaired youths. At the School for the Handicapped, to help to overcome difficulties arising from, inadequate language development and insufficient educational experiences of hearing impaired students and to prepare them to the workplaces, collaborative instruction carried out and also applications made as to the real purpose are systematically examined. One of the studies conducted for this purpose is “Preparation of Hearing Impaired Youths for the Working Places”. In this study, how the theoretical base of the courses structured in the framework of collaboration and experiences in a real work environment of hearing impaired college students are explained. The preparation of hearing impaired youths for the working places based on the cooperation of the vocational courses and for the real purpose by this structured learning environment seemed to be appropriate for taking place at working places independently, productively and effectively.

**Keywords:** *collaborative teaching, hearing impaired individual, preparing to workplaces, the school for the handicapped*

### INTRODUCTION

For the development of a country, there is a need for qualified manpower. Qualified manpower can be defined as people who trained in any matter or any industry and well know the business. Qualified manpower provides the necessary infrastructure to individuals in a specific business area, and also provides proficiency, competency and specialization in business. In terms of business environment, qualified manpower ensures the quality of the work done, timely delivery of business, customer satisfaction, and the finally continuity of work (Yoruk, Dikici & Uysal, 2002).

Vocational education has an indisputable role in the provision of qualified manpower. However; in order to provide qualified manpower, vocational education environment is also required that it is qualified and well-structured. Authentic activities and environments provide a rich array of opportunities to organize and index of the acquired knowledge in a well-structured vocational education environment. Authentic activities such as experience to working environment preparation process are giving the opportunities in the transfer of vocational knowledge in the classroom thus, become permanent of vocational knowledge. The authenticity of activities and environments also play a role in the construction of knowledge. (Billett, 1996b). At the same time mentors, direct instruction, everyday activities, other workers, observing and listening were consistently perceived to be of great utility for the resolution of problems and securing of goals in the workplace (Billett, 1996a). Therefore, the vocational education environments should be functional, meaningful and purposeful and also should be examined and analyzed systematically (Johnson, 2012).

Such as hearing individuals, to ensure the development of the hearing impaired individuals, they need to be well educated, equipped with skills and creating a suitable environment for employment in the future (Kayacı, 2007). In addition to this, hearing impaired individuals need well-structured learning environments for taking place at working places independently, productively and effectively. In this regard, the role of the educators is to guide to

hearing impaired students pleasure in learning, developing, successfully use the knowledge and the skills required for a particular profession, self-confident, and also responsible individuals.

In Turkey, Anadolu University, The School for the Handicapped (SfH), as can be seen in Picture 1, is the only higher education institute that gives vocational education to hearing impaired youths. At the School for the Handicapped, to help to overcome difficulties arising from, inadequate language development and insufficient educational experiences of hearing impaired students to prepare them to the workplaces, collaborative instruction carried out and also applications made as to the real purpose are systematically examined. To this end, studies at the SfH can be listed as *newspaper, magazine, movie, poster, advertisement, brochure, and real working environment*. As you can see one of the studies based on the cooperation of the vocational courses and for the real purpose is “Preparation of Hearing Impaired Youths for the Working Places”.



**Picture 1.** The School for the Handicapped

### THE STUDY

The aim of this study is to examine the ‘Working Preparation Process’ of hearing impaired students at higher education. For this purpose, the following questions asked:

1. What were the components of the working preparation process of hearing impaired youths at higher education?
2. How was the working preparation process of hearing impaired youths at higher education work?

As mentioned before SfH is the first and only higher education institute for hearing impaired students in Turkey. It provides education since 1993. Educational programs at the SfH are Graphic Arts Bachelor’s Degree Program, Ceramic Arts Bachelor’s Degree Program in the Department of Applied Fine Arts; Computer Operator Training Associate Degree Program in the Department of Administrative Vocations; and Architectural Drafting Associate Degree Program in the Department of Architecture. This study was conducted at Computer Operator Training Associate Degree Program. Computer Operator Training Program computer laboratory was used in the teaching learning process of the courses (Picture 2). There was a computer for each student and each computer have Internet connections in the computer lab. There was a smart board in the computer lab.



**Picture 2.** Classroom Environment

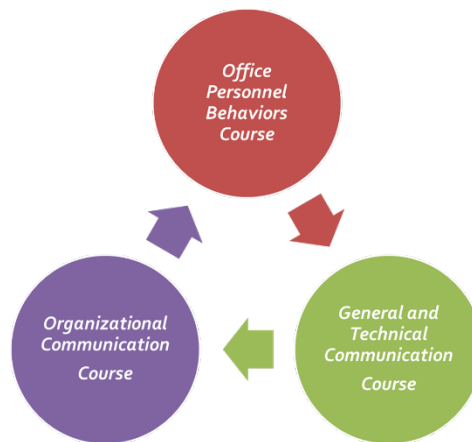
First year Computer Operator Training Program students at the SfH in the academic year of 2015–2016 were the participants of the study. Of the ten students, three of them were female, and seven of them were male. All of the students have bilateral, sensorineural hearing loss and have ear level hearing aids. Five of them were profound and the rest of the students were severe. The age range of the students was between 19 and 26, with a mean of 21,5. They all voluntarily participated in the study. Mostly verbal communication was used, also sign and writing was used as needed. The authors of this study were the instructors. They have been working at the SfH and have experienced in education of hearing impaired students at least 15 years.

The process of the study will be presented by answering the research questions in the findings section.

## FINDINGS

### 1. How was the “Working Preparation Process” realized?

“Office Personnel Behaviors”, “Organizational Communication”, and “General and Technical Communication” Courses constitute the components of the working preparation process of hearing impaired youths at higher education, and can be seen in Figure 1.



**Figure 1.** The Components of the Working Preparation Process of Hearing Impaired Youths at Higher Education

#### ***Office Personnel Behaviors Course:***

Office Personnel Behaviors Course is one of the components of Working Preparation Process. It is a vocational elective course in the 2nd term of Computer Operator Training Program. The content of the Office Personal Behaviors course can be listed as follows:

- Definition of essential terms related with the course like Office, behavior and etc.
- Overview of office environment
- Definition and characteristics of personality
- Definition and properties of the tasks of offices
- Interaction and agreement
- Determining attitude and behavior
- Determining the objective and being successful
- Communication in the workplace, dealing with problematic people

#### ***Organizational Communication Course:***

Organizational Communication course is the second component of Working Preparation Process. It is an essential course in the 2nd term of Computer Operator Training Program. The content of the Organizational Communication course can be listed as follows:

- What is communication?
- Types of communication
- Organizational Communication

- The communication process in organizations
- Types of organizational communication and communication tools
- Developing the organizational communication
- Organizational Culture and communication
- Obstacles to effective organizational communication

#### ***General and Technical Communication Course:***

The last component of the Working Preparation Process is the General and Technical Communication course. It is an essential course in the 2nd term of Computer Operator Training Program. The content of General and Technical Communication course can be listed as follows:

- Communication and types of communication
- Definition of Official Letters.
- What is petition? Petition writing rules.
- Examples of petitions.
- Sections of official Letters: Head, Number and record numbers. Date and subject.
- Examples of official letters.
- Part of official letters. Appendix, distributing, privacy degree, hastiness condition, sending and acceptance of official letters

## **2. How was the working preparation process of hearing impaired youths at higher education work?**

For the working of the components of the working preparation process of hearing impaired youths at higher education, as can be seen at Figure 1, at the beginning of the second semester the instructors of the focused courses decided to work collaboratively as for the real purpose of the common issue 'Working Preparation'. The instructors decided to constitute an 'OFFICE' in the school with the help of the students. When the instructors went to the School Principal to take permission about this issue she gave a very helpful suggestion about not constituting a new Office but working in a real Office at the school.

The students were informed about the final product of the 3 courses will be an OFFICE and how will the process occurs. Lesson notes for each course prepared and used in the related course. Instructors of the courses that collaborated to make an Office, prepared their lesson plans and course materials. 12 weeks instruction for each course conducted. Instructors could communicate face to face at any time they need, before or after any of the courses.

#### ***How was the Collaboration Work?***

To prepare the students for working areas by working in a real Office the instructors collaborated in focused courses and the following studies performed collaboratively:

- The Student Affairs Office at SfH determined for working as a real working place.
- The general working plan of students prepared as suitable to the students' timetable (5 weeks, Thursdays 09.00-12.00 and 14.00-16.00). The working plan of the students' has given at Table 1.

**Table 1.** The Working Plan of the Student's at The Student Affairs Office

<i>Date</i>	<i>Time</i>	<i>Student Name</i>	<i>Tasked Student</i>	<i>Required Document</i>
<b>07.04.2016</b> <b>Thursday</b>	9.00 - 12.00	<b>Merve</b>	Sadık	Student certificate for SSK
			Uğur	Student certificate for scholarship
<b>07.04.2016</b> <b>Thursday</b>	14.00- 16.00	<b>M. Emin</b>	Memduh	Student certificate for scholarship
			Ethem	Student certificate for scholarship
<b>14.04.2016</b> <b>Thursday</b>	The Office Chief at Suburban Office			
<b>21.04.2016</b> <b>Thursday</b>	9.00 - 12.00	<b>Ethem</b>	M. Emin	Student certificate for TESYEV
			Samet	Exam Schedule
<b>21.04.2016</b> <b>Thursday</b>	14.00- 16.00	<b>Memduh</b>	Gülnur	Student certificate
			Merve	Transcript
<b>28.04.2016</b>	9.00 - 12.00	<b>Sadık</b>	Ethem	Document for internship



<b>Thursday</b>		Uğur		Transcript Honor certificate
<b>28.04.2016 Thursday</b>	14.00- 16.00	<b>İlkay</b>	Sevim	Disabled health report copy for KYK
				High Honor certificate
<b>05.05.2016 Thursday</b>	9.00 - 12.00	<b>Uğur</b>	Günnur	Written information for internship
				High Honor certificate
<b>05.05.2016 Thursday</b>	14.00- 16.00	<b>Sevim</b>	İlkay	Disabled health report copy for ESCARD
				Disabled health report copy for Erasmus Honor certificate
<b>12.05.2016 Thursday</b>	9.00 - 12.00	<b>Samet</b>	Merve	Disabled health report copy for Erasmus High Honor certificate
				Honor certificate
<b>12.05.2016 Thursday</b>	14.00- 16.00	<b>Gülnur</b>	Sevim	Transcript for scholarship
				Disabled health report copy for KYK

- The working plan of the students shared by instructors in a meeting with student affairs Office chief, faculty secretary and the principal and it was approved by them.
- The general working plan shared and personal working plan prepared with the students. Each week who will work, which works to do, in the related day which 2 students will want which work determined.
- A check list for checking the working of the students at student affairs office prepared by the instructors. It was introduced to the students. Control lists delivered to the Student Affairs Chief to control the students
- Between the dates 07.04.2016-12.05.2016 each of the students worked at the Student Affairs Office (Picture 3).



**Picture 3. The Students Working at the Office**

- The students delivered the control lists signed by the chief to the instructors. Also they wrote their thoughts and feelings about working in real Office and delivered to the instructors.
- Instructors evaluate the students' working performance weekly with the Student affairs office chief.
- All of the control lists evaluated by the instructors and at the end of the term they had given to the principal to sign.

## CONCLUSION

By this study which was made collaboratively and for the real purpose the hearing impaired higher education students experienced real working environments. They prepared to work places. They had found the opportunity to apply their theoretical knowledge. They have the opportunity to be able to transfer the knowledge learned in class through some purposeful and authentic activities (Billett, 1996a; Billett, 1996b). By monitoring and listening the chief and other staff at real working environment, they were able to increase their proficiency in the ability to produce instant solutions to everyday problems (Billett, 1996a; Billett, 1996b). They also said, read and write real experiences meaningfully, purposefully and functionally (Kretschmer & Kretschmer, 1978). This situation will contribute to their future working life as an independent individual at working places. They had increased their motivation both in class and workplace. They developed their ability to work as a group. They affected positively by the collaborative relationship between the instructors. They expressed their willingness to do other projects.

In conclusion, preparation of hearing impaired youths for the working places based on the cooperation of the vocational courses and for the real purpose by this structured learning environment seemed to be appropriate for taking place at working places independently, productively and effectively.

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## **XIXTH CENTURY SPANISH SOCIETY IN LOVERS OF TERUEL (LOS AMANTES DE TERUEL), A PLAY BY JUAN EUGENIO HARTZENBUSCH**

Neslihan ORTAÇ  
Social Sciences University of Ankara, Turkey  
neslihan.kocaman@asbu.edu.tr

### **ABSTRACT**

XIXth Century Spanish Romance has several literary works reflecting the chaotic era it was going through. Lovers of Teruel, one of the most detailed flares of XIXth Century Spanish society, government, class structure, pressures on the individuals and families, and their problems, enjoys being the most eligible and popular theatre play which is favoured even today. In this study, XIXth Century Spanish society and individuals are examined through aforementioned play; the characters that are brought up and via reader oriented approach the effects and reflections of this chaotic environment on the social structure and individuals are presented. As the result of this examination, it is found out that at the first half of the XIXth century in the absolute monarchy period starting with Ferdinand VII, Spanish Society had been through a politically upheaval time; had stacked to strict ethical norms; had created a gap between classes and increased the value that was already attached to class; and as a result, families which was the core element of the society started to put pressure on their children with the common sense norms, which was expected to end in unhappiness and misery.

**Keywords:** Romanticism, theatre, XIXth century

### **INTRODUCTION**

Romanticism is associated with natural, sincere, concise narratives and was born as a reaction to the Neoclassicism which was characterised by structured, noble, idealized discourse and high preciousity. Romanticism is a revolt against neoclassicism's order, harmony, balance, rationalism and idealism. The effects of Romanticism, which became widespread in nineteenth century, started to be felt in Spain in the years of 1830s and there had been a lot of national and foreign factors affecting it. Among the foreign factors, the most important ones were the clash between aristocracy and sovereignty, between aristocracy and individualism/subjectivity, and finally rise of the bourgeois. Romanticism could be considered as the art of bourgeois and it is a guide of a nation's history. It is subjective and individual.

From a reader-centred perspective, this piece of work delves into the play Lovers of Teruel by romantic period dramatist Juan Eugenio Hartzenbusch, the oppressive and discriminatory aspects of nineteenth century Spain. Although this play takes place in the medieval ages, it is actually a reflection of early nineteenth century Spain society. This paper aims to touch upon the problems of society, families and young people of those times, just like what Romeo and Juliet does.

### **THE STUDY**

Lovers of Teruel was based on a myth which was thought to have taken place in thirteenth century. Although there have been many other works of art taking this myth as their subject and putting this myth in the centre, this play by Juan Eugenio Hartzenbusch has always been the most impressive one; therefore, it has been chosen as the main source for this paper. What makes this play more important than the others is the historical background and coherence of the narration.

In pursuit of finding themselves, satisfying their ideals and dreams, the individuals had to deal with the religion, morals, politics and social values of the time they live in. Class differences, gaps in income, and the concerns about maintaining the social status were among the main reasons of social crisis.

Nineteenth century, when Romanticism showed itself in the literature, was also the period when many genres started to appear and genres like novel and story, which had started to lose attention, reappeared. This period enriched the structured language of Neoclassicism with exotic, exaggerated elements and started to look for new aruz prosody. Unlike Enlightenment period which was marked by didactic genres, it focused on poetry and drama. Also, in this period, there had been many important works in historical novel which was initiated by Scottish novelist Walter Scott. Moreover, it is worth mentioning that Mary Shelley's Frankenstein or The Modern Prometheus, which was written in Romantic period, was the first science-fiction novel.

When compared to other European countries, it can be said that the arrival of Romanticism was later in Spain and it can be said that it was triggered by foreign factors. Thanks to the translated works of the late eighteenth

century, romantic streams were introduced to the Spanish people and their literature. Chateaubriand's works were started to be translated in 1803 and *Die Leiden des Jungen Werthes* (The Sorrows of Young Werther) by Goethe had started to be read in Spanish language in the same year. Although it was thought that the translation of the works of important writers such as Rousseau, Voltaire and Hugo were like the initial period for the arrival of the Romanticism into the Spanish culture, it was mostly because of the foreign factors.

As mentioned above, translated works of literature had been great influence in letting romantic trends widespread in Spain. Lord Byron and Walter Scott were among the most important figures in Spanish Romanticism. The first work of Lord Byron which was translated into Spanish was *The Siege of Corinth* and it was in 1818. Ramón López Soler praises Byron in his *Los Bandos de Castilla*, which was published in 1830. Also José de Espronceda took Byron as a model for his art from 1837 on.

Another person who was associated with Romanticism and was considered to be the father of it in France was French artist François-René de Chateaubriand. He was appreciated as representative of religion and ethics in Spain. He was thought to be loved in Valencia most although most of the translations of his work was published in Barcelona. *Revista de Barcelona* aimed to praise him and wrote that he was among the most prominent nineteenth century writers.

Romanticism, as a term, appeared initially in June 26, 1818 in Joaquín de Mora's periodical *Crónica Científica y Literaria*. The editor of the periodical, Joaquín de Mora and novelist Fernán Caballero's father, Cádiz Prussia Ambassador Juan Nicolás Böhl de Faber came up with a discussion about Romanticism in Spain. Böhl de Faber was a fan of monarchy while Mora was a true liberal; therefore, it was not inevitable that this discussion turned out to be a political one in the end. Böhl de Faber is an eminent figure in Spanish literature and he is known to have been successful in letting Romanticism become widespread systematically. He took August Wilhelm Schlegel and Friedrich Schlegel brothers' art and literature aesthetics as a model for himself through his journeys to Germany.

Schlegel brothers translated Pedro Calderón de la Barca's works into German and in return Böhl de Faber, in 1814, wrote an article titled as "Reflexiones de Schlegel sobre el teatro traducidas del alemán". In this article, Böhl de Faber associated Romanticism with totalitarianism and argued that Romanticism's conventional way of thinking should be an action of return to totalitarianism. In his conferences, *Sobre el Arte Dramático y la Literatura*, which were held between the years of 1809 and 1811, he openly expressed his reaction to the Enlightenment and he declared Calderón theatre as a true reflection of Spanish spirit and he would consider the ones who would disagree with this idea as the traitors. The reason behind this thought is Böhl totalitarian and over-Christianized mind set and all these led him to find the true reflections of Spanish tradition. Also, he wanted these to regenerate through a literature which would mirror the era's ideas; surely, this literature would be braver, more totalitarian and stick with Christianity. Böhl de Faber's conventional ideas argued that Spanish people should go back to their traditions, their ancestors' beliefs and also Spanish nation should value Christianity more. On the other hand, Mora, in his *Crónica Científica y Literaria*, assumed that Enlightenment Age was the most successful one and he argued that Calderón was the first representation of degeneration.

Böhl de Faber's conventionalist and totalitarian views were pronounced in 1805 in his journey to Germany. His religious concerns and Napoleonic politics forced him to be Catholic in 1813 and he wrote his aforementioned article – "Reflexiones de Schlegel sobre el teatro traducidas del alemán" – which was declaring Romanticism as a way to totalitarianism when he went back to Cádiz, where he worked as an ambassador. As an answer to this, Mora wrote an article considering neoclassic art as the prominent one and he reacted to the way Böhl assuming Calderón as the only representative of Spanish literature. Böhl did not refrain from writing a response to this and declaring Mora as a traitor in his new article "Donde las dan las toman in 1814". In this article, Böhl created a link between religiosity and poetry and argued that the ones who appreciated poetry were religious and pious people.

The way that Böhl was affected by Friedrich Schlegel's ideas is obvious in his hatred against French and the way that he associated Neoclassicism with republican ideas. Schlegel, in his Vienna conferences, declared Spanish monarchy as the most fascinating and the biggest in Europe; also, he described Calderón as the most romantic writer of the seventeenth century because of his religious implications. Schlegel disliked Voltaire as being among the most important figures of Enlightenment Age, which also affected Böhl and led him associate Neoclassicism with non-religiosity and republican views.

Among the most important aspects of this discussion is the birth of the concept Spanish Romanticism. With the effect of Schlegel, Böhl described Romanticism as a literature trend of Christianity, unlike classical Greek and

Roman traditions. Donald L. Shaw criticises this description as follows;

The way that Böhl associates Romanticism with Christianity and the way he considers the idea behind Romanticism as a tradition which started in the Medieval Ages and continued until nineteenth century is a total mistake. The difference between the historical Romanticism that he suggests and liberal, revolutionary or modern Romanticism has been accepted some time ago.

Shaw, found Böhl's ideas related to this topic useless and expressed that these conceptions suggested by Böhl led to misconceptions. Also, he associated true Romanticism with revolutionary elements.

On the other hand, Ramón López Soler supported Böhl's ideas in his article "Análisis de la cuestión agitada entre románticos y clasicistas" which was published in Barcelona's periodical *El Europeo* and he commented as follows;

"Who can disregard the obvious change in the social life which triggered the birth of Christianity?... This is the source of Romanticism."

In the second half of the nineteenth century, there was another type of Romanticism, which was historical and which aimed at emphasizing the national values. Among these values, there were cultural and educational values which were exported from French Enlightenment period and Spanish Neoclassicism values. If we are to talk about the second half of the nineteenth century, the close relationship between nationalism and Romanticism is also worth mentioning.

Napoleon's dictatorship and the revolts against Napoleon Wars were highly important factors which triggered the birth of nationalism. There had been nationalistic actions in terms of culture, politics and artistry. German nationalist Johann Gottfried Herder expressed his views on romantics' opposition to neoclassicists' rationalism as follows; "while a rationalist considers two people who have different skin colours as two different individuals, a romantic sees them as black and white". As obvious, romantics highlighted individualistic characteristics and nationalistic uniqueness, unlike neoclassicists who judge the differences in a much broader sense. This view of romantics gave way to nationalism and sovereignty of the nations.

Of course this uniqueness and national identity put importance in the concept of language because nationalism goes parallel with the idea of having a language as a nation. This led to the birth of local languages and there had been research on literature of the local people and their works of art. Also, exported terminology was avoided so that national identity was arisen.

Another important result of nationalism is the phenomenon of Common History which this goes back to the Medieval Ages for Spanish people. In other words, romantic period takes Medieval Ages as a model for itself because in those times, there was the division of powers and as a result, there was more free space for the public. According to romantic period writers, the kingdoms that was born after the collapse of Roman Empire gave way to the historical European nations. Late eighteenth century and early nineteenth century German intellectuals though that their cultures were caused by the combination of chivalric ideology and the literature born out of this ideology. For the German intellectuals, the Medieval Ages turned out to be as real as Greek-Roman period. As a result, there occurred a distinction between the classicism which was based on Roman Empire which was pagan and was dominant in the south of Europe; and romanticism which was based on Christianity and chivalric Medieval Ages.

Romantic period was marked by the activity of collecting national history documents and reading those was among the most common activities. Because of this trend, dramatists made use of historical myths and built on them in their plays. Apart from these, nationalism resulted in mother tongue studies and history was unearthed through these studies.

Nationalism in each country led to the philological studies to learn more about the mother tongue. Epics and traditions were analysed and public was made aware of these. Romantic writers who dignified alleged liberties were key in this mission. In their works, they referred to the freedom concept which should have already settled in the society. However, nationalism had not always gone hand in hand with liberalism and Romanticism. It stood against the aristocratic rights but it helped Medieval History to be idealized, too.

The importance of Medieval Ages for nineteenth century nationalists and romantic period writers was the role of kingdoms who appeared after the collapse of Roman Empire and affected Spain. Also, Spanish Medieval Age witnessed how three different cultures lived together for more than seven hundred years. Muslims, Christians and Jews were all together until the Modern Ages and they helped main features of Spain to be born.

These cultures were interconnected and affected each other and also enriched the Spanish culture as a whole. This is the reason why *Lovers of Teruel* includes both the Christian characters and Muslim ones too. The dramatist wanted the enriched culture and several cultural groups of Medieval Ages to appear in the play.

This shed light on why Romantic period writers chose to take Medieval Ages as their main sources. Romanticism which valued individuals, individual liberties and their rights, took Medieval Ages which preserved the human identity and individual liberties. The rise of nationalism in this way stood as a reaction to the globalisation which was introduced to Europe by Napoleon.

Nineteenth century Spanish society was parted into social classes because of the political revolutions and industrialisation. Social mobility which started to appear in the nineteenth century was caused by this social structure. One of these classes was the bourgeois which included the people who had high culture and better education. This class people married either bourgeois people or aristocracy people to preserve their wealth and their standards in education.

In the nineteenth century Spain, people were not supposed to have the right to choose. At this point, we can highlight the importance of education because a good education determines the quality of the decisions made by the societies and individuals. It is possible to say that the church had a great impact on education; that's why, the traditions were still passing on to the next generations. Also, Fernando the VII was in rule and the reforms related to the women were interrupted.

The education that was provided for women were more related to the domestic work, not to academic knowledge. Church shaped the framework of this education to women and included Christianity values in it, which did not aim at arising the social status of women but only the literacy level so that they can manage the house much better. In other words, bourgeois did not want the women to be fully educated; instead it wanted them to be good housewives and mothers. Until the first half of the nineteenth century this system kept going because bourgeois was not interested in the quality of education provided to women.

Stuart Mill, in an article of his, writes about women rights and education as follows;

"All the women are trained to be different from the men thanks to their natural characteristics; they have been taught not to be in the front and not to make decisions depending on their own wishes. Instead, they are supposed to behave as the way others want them to. It is a rule that a good woman is the one who lives for others because it is the nature of them. Women should disregard herself and should not live for herself. Her husband and her kids should be the ultimate link between the husband and wife."

When we have a look at the laws of the time, it seems that the girls had the right to have education. However, when we have a deeper look, it is obvious that they only had the training for stitching, embroidery, knitting, and hygiene rules. And obviously there was nothing else for women in education.

The Parliament prepared a legislation about public education in March 7, 1814. This legislation aimed at educating the girls in terms of morals and also it had an agenda concerning the training for how to be a good wife, good mother and how to raise kids. Not only this legislation separated girls from boys in terms of content but also it gave way to the separation in terms of physical environment.

## FINDINGS

When we take all these into consideration, we can easily see that women were discriminated even in terms of education. Nineteenth century writer realized the fact that education was among the most important things and they included education in their works, especially the education for women and young people who were in turn going to be effective in developing the social structure.

The writers highlighted in their works that if women were not in charge of their own personal development, the society would not improve and progress.

## CONCLUSIONS

By reinterpreting an already known work, the writer highlighted that two lovers can stand against pressure, assumed norms and they can face even the death when they go after their feelings and each other. By making use of the first characters who stood up for their individuality, which Romanticism was fond of, the writer showed what the period's writers think about politics and social life.

If there is a political, moral and so a social oppression is dominant in a period, it is inevitable for the writers to

include those topics in their works. Therefore, in Spanish literature it was common and crucial to demonstrate in which conditions the society lives in, how the politics affect people and their daily lives, relationships and choices.

The play by Juan Eugenio Hartzenbusch presents political and social conflicts and how these affect people and how people are unable against those changes and effects. The work is also sensitive to the social and cultural changes, the problems of free will and the problems caused by strict rules, and daily life, local problems and conflicts between people. The societies which were dominant in Spain put pressure on the weak and unable either through political rule or economic power. In other words, the so-called war between good and evil turned out to be in the framework of political rule and class differences. *Lovers of Teruel* is play which has the realistic overview of those issues and it conveys those in a narrative which fits for the purpose of realistic display.

However, there are some basic problems which were realized in the process of studying. There is limited information about how the social classes and political life looked like in those times but the way the dramatist narrates the stories help the reader and the audience fill in the gaps relating to the social classes and political life. The information that are included in this paper and the gaps that are left for the audience and the reader in the play are going to be guiding for the researchers who would like to study Spanish Romanticism and nineteenth century Spanish literature and political life.

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## YABANCI DİL OLARAK TÜRKÇE ÖĞRENERLERİN DİNLEME KAYGILARI: BETİMSSEL BİR ANALİZ

Doç. Dr. Havva YAMAN  
Sakarya Üniversitesi, Eğitim Fakültesi  
Türkçe Eğitimi Bölümü, Türkiye  
hyaman@sakarya.edu.tr

Öğretmen, Alaattin CAN  
Milli Eğitim Bakanlığı, Türkiye  
alaattincan@mynet.com

### ÖZET

Bu araştırmanın amacı, Türkçe öğrenen yabancı öğrencilerin Türkçe dersine yönelik dinleme kaygılarını belirleyip çeşitli değişkenlerle ilişkisini belirlemektir. Araştırmanın evrenini 7 TÖMER, 1 YATÖP olmak üzere 8 farklı dil merkezi, örneklemini ise bu merkezlerde öğrenim gören 72 ülkeden gelen B2 ve C1 düzeyindeki 302 öğrenci oluşturmaktadır. Veri toplam aracı olarak Yaman ve Can (2015) tarafından geliştirilen Yabancı Dil Olarak Türkçe Öğrenen Öğrenciler İçin Dinleme Kaygısı Ölçeği kullanılmıştır. Araştırma sonuçlarında katılımcıların orta düzeyde dinleme kaygısı taşıdıkları; farklı değişkenlere göre (cinsiyet, algılanan sosyoekonomik düzey, ülke, öğrenim düzeyi, yaş) dinleme kaygıları puanları arasında istatistiksel olarak anlamlı bir farklılık olmadığı belirlenmiştir. Bu durum dinleme kaygısının bireylerin kişisel özellikleriyle bir ilgisi olmadığını ve beceri boyutunda bir durum olarak algılandığını göstermesi bakımından önemlidir.

**Anahtar Kelimeler:** dinleme kaygısı, değişken, betimsel analiz

## LISTENING ANXIETY FOR TURKISH LEARNERS AS A FOREIGN LANGUAGE: A DESCRIPTIVE ANALYSIS

### ABSTRACT

This research is identifying listening anxiety study for Turkish lesson of foreign students who learn Turkish. The scope of this research consists of 8 different language centers, including 7 TOMER and 1 YATOP, while the sampling comprises 302 students who come from 4 continents and 72 countries, and who have studied at the same language centers. This research is carried out to determine whether the listening anxiety experienced by foreign students while learning Turkish differentiates or not according to various parameters. The listening anxiety of participants have been measured through the prepared scale of listening anxiety according to various parameters like gender, perceived socio-economic level, country, level of education and age, and statistically, no meaningful difference has been found between the scores of listening anxiety of participants. This state is important in terms of showing the listening anxiety of individuals has no relation to their personal characteristics and it is perceived as a state in the skill dimension.

**Key Words:** listening anxiety, parameter, descriptive analysis

### 1. GİRİŞ

UNESCO raporlarına göre, Türkçe dünya dilleri arasında beşinci sırada yerini almıştır. İki yüz milyondan fazla nüfus 12 milyon kilometre kare alanda Türkçe konuşmaktadır (Gökçora, WEB1). 2012 yılında yapılan bir araştırmaya göre de 25 ülke ve bölge şirketi arasında yapılan çalışmada Türkçe en çok tercih edilen 20 dil arasında Türkçe 10. sıradadır. Dünyada gazete dilleri arasında 7. sırada, dünyadaki kamu hizmetleri alanında 10. sırada, şirketlerde kullanılan İngilizce dili dışında 10. sıradadır. Bu rakamlar da göstermektedir ki Türkçe dünya dilleri arasında çok saygın bir konumda yer almaktadır (Yağmur, 2013:195-196).

Son 40 yıl içinde dinleme becerisine ilgi artmış, öğretimdeki yeri anlaşılmıştır. Geriye bakıldığında, öğretimde dinleme ve dinleme eğitimi odağı üzerinde nasıl bir değişim yaşandığını görmek mümkündür (Goh, 2008). Dinleme algılama, anlama, anımsama, değerlendirme ve tepki verme olmak üzere beş aşamada gerçekleşmektedir. Bu aşamaların gerçekleşmesi sonucu sağlıklı bir iletişim ortaya çıkar (Cihangir, 2011: 1-29).

Dil öğrenmede dinlemenin kritik rolü göz önüne alındığında, öğrencilere "dinlemeyi" öğretmenin önemi ortaya çıkmaktadır (Vandergrift, 2004). Yabancı dili öğrenirken dinleme yöntemlerinin ne olduğu ve öğretmenlerin de dinleme kavramına olan inanç ve tutumları etkili bir dinleme ve dinlenileni anlamada önemlidir. Dinleme etkinlikleri, gerçek dinleme yöntemi yerine görev tamamlamaya yönelik dinlemeler şeklinde yapılmaktadır. Gerçek dinleme yöntemleri ise çok az kullanılmaktadır (Graham, Santos, Francis-Brophy, 2014: 44-54). Öğretmen, öğrencilerinin hoşlandığı ve hoşlanmadığı şeyleri bilerek, dinleme öncesinde, dinleme sırasında ve

dinleme sonrasında yapacağı ilginç, renkli etkinlikler (müzik vb.) öğrencilerin dinleme becerilerini aktif kılarak derslerin daha renkli, daha güzel geçmesini sağlayacaktır (Pospieszyńska, 2000).

*Kaygı*, bireylerin toplumsal kümelerin herhangi bir güçlü istek ya da güdülerinin gerçekleşmemesi olasılığı karşısında duydukları tedirginlik (TDK) olarak tanımlanmaktadır. *Yabancı dil kaygısı*, Gardner ve MacIntyre (1991) tarafından, yabancı dilde tamamen yeterli olmayan birey tarafından dilin kullanımını gerektiren durumlarda ortaya çıkan bir korku olarak tanımlanmaktadır. Dil öğrenmek doğası gereği canlı bir süreçtir, bilişsel ve davranışsal özelliklerin yanı sıra duygusal faktörleri de içerisinde barındırır. Bu süreçleri etkileyen birçok faktör vardır. Bu faktörler arasında *kaygı* dikkat çekici bir etkiye sahip büyük bir değişken olarak göze çarpmaktadır. Bir öğrencinin yabancı dilde çalışması beklenirken oluşan korku ya da kaygı olarak adlandırılan yabancı dil kaygısı, çeşitli çalışmalarda dil öğreniminde önemli bir rol oynadığı için büyük ilgi görmektedir (Capan, Karaca, 2013).

Dört beceri alanı olan dinleme, konuşma, yazma ve okumanın kaygılarının da birbirinden farklı olduğu istatistiksel olarak kanıtlanmıştır. Her beceri alanının kendine özgü bir kaygı türü bulunmaktadır (Pae, 2013: 232-250).

Yabancı bir dili öğrenmek, kaygı artışına zemin hazırlamaktadır. Soru cevap etkinlikleri en sorunlu ve kaygı tetikleyici olanlardır ve kaygının başlıca sebebi dinleme ve konuşmadır. Dil kaygısı devam etmekte olan bilişsel işleyişe etki ederek ikinci bir dil öğrenen öğrenciler için sürekli sorun oluşturur. Bunun neticesinde, öğrenilen dili işleme becerisini engellemekte ve edinim sürecini olumsuz etkilemektedir (Yang, 2010: 177-186).

Ergür'e (2004: 48) göre bu alanda yapılan araştırma sonuçları, kaygı ve özgüven eksikliğinin yabancı dil öğreniminde başarıyı olumsuz yönde etkileyen iki ana neden olduğunu göstermektedir. Kaygı; öğrencilerin kendilerini, sınıf içi kuralları, öğrenilenlerin algısını ve katılımcıları etkiler. Sosyo-psikolojik baskılar, dış motivasyon, doğrulama ve hatalar, öğretmen tarafından olumsuz değerlendirme gibi unsurlar kaygıyı artırıcı nedenlerdir (Gkonou, 2012: 51-66). Yabancı dil kaygısı öğrenci performansını etkileyen psikolojik bir faktördür. Kaygı konusuyla ilgili çok fazla araştırma olmasına rağmen dinleme kaygısıyla ilgili çok az araştırma vardır. Öğrenciler yabancı dil derslerine karşı, diğer derslere göre daha fazla kaygı taşımaktadır. Kaygı yaşayan bu öğrenciler ödev yapmaktan kaçınır ve sınıfta hep arka sıralarda oturmayı isterler (Bekleyen, 2009: 664-672). Başlangıç ve orta düzeyde dil öğrenen öğrenciler için dinleme becerisi strese sebep olabilir. Dil öğretmenlerinin bu zorlu süreçteki görevleri öğrencilerini geliştirme, onların yeteneklerinin ortaya çıkmasında yardımcı olmak olduğu gibi gözlemlenemeyen öğrenci davranışlarını kapsayan -duygular gibi- süreçleri içerir. Öğretmenler, hem zihinsel ve duygusal olarak öğrenme süreçlerinde öğrencilere yardımcı olmalıdır. Onların dinleme sürecinde becerilerini keşfetmelerinde rehberlik yapmalıdırlar (Goh ve Taib, 2014: 222-232).

Dinleme en önemli iletişim yeteneğidir ve iletişim etkinliklerinde en sık kullanılanıdır. Dil öğrenmede önemli bir rol oynar (Zhang, 2013: 164-175). Dil öğretimiyle öğrenci girdiler alır. Bu girdiler olmadan öğrenme başlamaz. Bu girdilerin doğru alınması, dinlemenin doğru yapılmasına bağlıdır. Öğrencinin dinleme becerisi ne kadar gelişmişse ikinci dili anlama seviyesi o derece yükselecek ve kaygı düzeyi o derece azalacaktır (Han, 2014: 2484-2495). Dinleme performansını etkileyen birçok kişisel özellik (yaş, cinsiyet, ulus vb.) vardır. Ama dinleme performansını etkileyen en önemli özellik sınav kaygısıdır. Sınav kaygısı sınav performansını olumsuz etkilemektedir. Sınav kaygısı sınava girenlerin eksik bilgisinden ya da çalışma tekniğinden kaynaklanmaktadır (In'nami, 2006: 317-335).

Bu bağlamda araştırmanın amacı, Türkçe öğrenen yabancı öğrencilerin Türkçe dersine yönelik dinleme kaygılarının belirlenmesi ve bu kaygının farklı değişkenlere göre (cinsiyet, algılanan sosyoekonomik düzey, ülke, öğrenim düzeyi, yaş) istatistiksel olarak farklılaşıp farklılaşmadığını belirlemektir.

## 2. YÖNTEM

### 2.1. Araştırmanın Modeli

Bu çalışmada, betimlemeye dayalı nicel tarama modeli kullanılmıştır. Tarama modelleri, geçmişte veya halen var olan bir durumu var olduğu şekliyle betimlemeyi amaçlayan araştırma yaklaşımlarıdır. Araştırmada tarama modellerinden karşılaştırma yoluyla elde edilen "ilişkisel tarama modeli" kullanılmıştır. Bu modelde iki ya da daha çok değişken arasındaki birlikte değişimin varlığı ya da derecesi belirlenmeye çalışılır. (Karasar, 2000). Bu çalışmada, yabancı dil olarak Türkçe öğrenen öğrencilerin dinleme kaygıları, çeşitli değişkenlerle ilişkisi açısından incelenmiştir.

### 2.2. Evren ve Örneklem

Bu araştırmanın evrenini 7 TÖMER, 1 YATÖP olmak üzere 8 farklı dil merkezi, örneklemi ise bu merkezlerde öğrenim gören 4 kıta, 72 ülkeden gelen B2 ve C1 düzeyindeki 302 öğrenci oluşturmaktadır. Araştırmaya katılan öğrencilerin % 34'i (104 kişi) bayan, % 76'sı (198 kişi) erkektir. Algılanan sosyoekonomik düzey bakımından % 11'i (32 kişi) alt düzey; % 78'i (235 kişi) orta düzey; % 11'i (35 kişi) üst düzeydedir. Katılımcıların % 20'si (59

kişi) Afrika kıtasından; % 67'si (203 kişi) Asya kıtasından; % 11'i (33 kişi) Avrupa kıtasından; % 2'si (7 kişi) Amerika kıtasından Türkiye'ye gelmiştir. Öğrencilerden % 62'si (188 kişi) lisans düzeyinde; % 28'i (84 kişi) yüksek lisans düzeyinde; % 10'u (30 kişi) doktora düzeyinde eğitim görmektedir. Diğer yandan % 39'u (116 kişi) 15-20 yaşında; % 34'ü (101 kişi) 21-25 yaşında; % 22'si (67 kişi) 26-30 yaşında; % 5'i (14 kişi) 31-35 yaşındadır.

### 2.3. Veri Toplama Araçları

Bu araştırmada veri toplama aracı olarak Dinleme Kaygısı Ölçeği (Yaman ve Can, 2015) kullanılmıştır. Ölçekte 5'li Likert tipi dereceleme kullanılmıştır. Bu dereceleme "Tamamen Katılıyorum (5), Kısmen Katılıyorum (4), Kararsızım (3), Katılmıyorum (2) ve Kesinlikle Katılmıyorum (1)" şeklinde oluşturulmuştur. Ayrıca öğrencilerin Kişisel Bilgiler Formu (cinsiyet, algılanan sosyoekonomik düzey, ülke, öğrenim düzeyi, yaş) kullanılmıştır. Hazırlanan anketin ikinci bölümünde yirmi beş madde yer almaktadır. Dinleme Kaygısı Ölçeği iki alt boyuttan oluşmaktadır. Ölçeğin "güven eksikliği" faktörü ile ilgili yedi madde yer almakta ve maddelerin faktör yük değerleri .505 ile .761 arasında değişmekte ayrıca toplam varyansın % 30.19' unu açıklamaktadır. İkinci faktör ise "metni anlama ve çözümleme" olup bu faktörle ilgili yedi madde yer almakta ve maddelerin faktör yük değerleri .461 ile .680 arasında değişmekte ayrıca toplam varyansın % 10.97' sini açıklamaktadır. Buna göre, altı faktörün açıkladığı varyans miktarı % 41.16'dır. Ölçeğin Cronbach's  $\alpha$  güvenirlik katsayısı .90 bulunmuştur.

### 2.4. İşlem

Ölçekle elde edilen verilere hangi testlerin uygulanacağını belirlemek için Shapiro Wilk Testi ile verilerin dağılımının normalliği incelenerek verilerin normal dağılım gösterdiği bulunmuş ( $p > .05$ ) ve bu çalışmada parametrik testler kullanılmıştır. Öncelikle ölçeğin tümünden ve alt boyutlarından alınan puanların aritmetik ortalama ve standart sapma değerleri hesaplanmıştır. Cinsiyet değişkeni için T Testi; sosyoekonomik düzey, geldikleri kıta, eğitim düzeyi ve yaş değişkenleri için Tek Yönlü Varyans Analizi kullanılmıştır.

## 3. BULGULAR

**Tablo 1.** Dinleme Kaygısı Ölçeği'nin Tümünden ve Alt Boyutlarından Alınan Ortalama Puanlar ve Standart Sapma Değerleri

Alt Boyutlar	N	$\bar{X}$	Ss
Güven eksikliği	302	21,41	5,482
Metni anlama ve çözümleme	302	22,81	5,109
<b>Dinleme Kaygısı (Toplam)</b>	<b>302</b>	<b>44,22</b>	<b>9,086</b>

Yukarıdaki tablo incelendiğinde araştırmaya katılan öğrencilerin Dinleme Kaygısı Ölçeği'nden aldıkları toplam puanın aritmetik ortalamasının 44,22 olduğu görülmektedir. Bu ortalama, ölçeğin toplam madde sayısı olan 14'e bölündüğünde 3,1 sayısı elde edilmektedir. Bu işlem sonucunda elde edilen puan, öğrencilerin orta düzeyde dinleme kaygısı taşıdığını göstermektedir. Diğer yandan "güven eksikliği" boyutundan alınan puan, boyutun madde sayısı olan 7'ye bölündüğünde 3 sayısı; "metni anlama ve çözümleme" boyutundan alınan puan, boyutun madde sayısı olan 7'ye bölündüğünde 3,2 sayısı elde edilmiştir. Bu bulgular da yabancı dil olarak Türkçe öğrenen öğrencilerin güven eksikliği ve metni anlamaya/ çözümlemeye yönelik, orta düzeyde dinleme kaygısı taşıdığını göstermektedir.

**Tablo 2.** Kadın ve Erkek Katılımcıların Dinleme Kaygısı Ölçeği Puan Ortalamaları, Standart Sapma Değerleri ve t Testi ile İlgili Bulgular

Alt Boyutlar	Cinsiyet	N	$\bar{X}$	Ss	t	p
Güven eksikliği	Kadın	104	22,93	5,17	-1,805	,072
	Erkek	198	20,61	5,48		
Metni anlama ve çözümleme	Kadın	104	23,10	5,48	-1,849	,066
	Erkek	198	22,66	4,90		
<b>Dinleme Kaygısı (Toplam)</b>	Kadın	104	46,03	9,10	-1,444	,150
	Erkek	198	43,27	8,95		

Tablo 2 incelendiğinde, kadın ve erkek katılımcıların dinleme kaygılarının farklılaşıp farklılaşmadığını belirlemek için t testi uygulanmış ve ölçeğin alt boyutları ve tamamından alınan puanlar arasındaki fark, cinsiyet değişkeni açısından  $p > 0.05$  önem düzeyinde istatistiksel olarak anlamsız olarak bulunmuştur. Bu bulgu, kadın ve erkeklerin dinleme kaygılarının değişmediğini göstermektedir.



**Tablo 3a.** Katılımcıların Sosyoekonomik Düzeylerine Göre Dinleme Kaygısı Ölçeği Puanlarına İlişkin Tek Yönlü Varyans Analizi

Alt Boyutlar	Ekonomik Düzey	N	$\bar{X}$
Güven eksikliği	Alt	32	22,62
	Orta	235	21,17
	Yüksek	35	21,94
	Toplam	302	21,41
Metni anlama ve çözümleme	Alt	32	23,06
	Orta	235	22,71
	Yüksek	35	23,22
	Toplam	302	22,81
<b>Dinleme (Toplam)</b>	Alt	32	45,68
	Orta	235	43,88
	Yüksek	35	45,17
	Toplam	302	44,22

Araştırmaya katılan katılımcıların sosyoekonomik düzeylerine göre dinleme kaygı ölçeğinden aldıkları puan ortalamaları Tablo 3a 'da verilmiştir.

**Tablo 3b.**

Alt Boyutlar		Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Güven eksikliği	Gruplararası	70,684	2	35,342	1,177	,310
	Gruplariçi	8976,577	299	30,022		
	Toplam	9047,262	301			
Metni anlama ve çözümleme	Gruplararası	10,106	2	5,053	,192	,825
	Gruplariçi	7849,510	299	26,253		
	Toplam	7859,616	301			
<b>Dinleme (Toplam)</b>	Gruplararası	126,265	2	63,133	,763	,467
	Gruplariçi	24724,970	299	82,692		
	Toplam	24851,235	301			

\* p<.05, \*\*p<.01

Tablo 3b'de görüldüğü gibi, katılımcıların sosyoekonomik düzeylerine göre dinleme kaygısı ölçeğinin alt boyutları ve tamamından aldıkları puanlarının farklılaşıp farklılaşmadığı tek yönlü varyans analizi ile incelenmiş; katılımcıların sosyoekonomik düzeylerine göre dinleme kaygıları puanları arasında istatistiksel olarak anlamlı bir farklılık bulunmamıştır.

**Tablo 4a.** Katılımcıların Kıtalarına Göre Dinleme Kaygısı Ölçeği Puanlarına İlişkin Tek Yönlü Varyans Analizi

Alt Boyutlar	Ülke	N	$\bar{X}$
Güven eksikliği	Afrika	59	20,94
	Asya	203	21,63
	Avrupa	33	21,18
	Amerika	7	20,00
	Toplam	302	21,41
Metni anlama ve çözümleme	Afrika	59	22,45
	Asya	203	22,99
	Avrupa	33	22,00
	Amerika	7	24,42
	Toplam	302	22,81
<b>Dinleme (Toplam)</b>	Afrika	59	43,40
	Asya	203	44,63
	Avrupa	33	43,18
	Amerika	7	44,42
	Toplam	302	44,22

Araştırmaya katılan katılımcıların ülkelerine göre dinleme kaygı ölçeğinden aldıkları puan ortalamaları Tablo 4a 'da verilmiştir.

**Tablo 4b.**

Alt Boyutlar		Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Güven eksikliği	Gruplararası	38,480	3	12,827	,424	,736
	Gruplariçi	9008,781	298	30,231		
	Toplam	9047,262	301			
Metni anlama ve çözümleme	Gruplararası	54,262	3	18,087	,691	,558
	Gruplariçi	7805,353	298	26,192		
	Toplam	7859,616	301			
<b>Dinleme (Toplam)</b>	<b>Kaygısı</b> Gruplararası	109,084	3	36,361	,438	,726
	Gruplariçi	24742,151	298	83,027		
	Toplam	24851,235	301			

\* p&lt;.05, \*\*p&lt;.01

Tablo 4b’te görüldüğü gibi, katılımcıların kıtalarına göre dinleme kaygısı ölçeğinin alt boyutları ve tamamından aldıkları puanlarının farklılaşıp farklılaşmadığı tek yönlü varyans analizi ile incelenmiş; katılımcıların kıtalarına göre dinleme kaygıları puanları arasında istatistiksel olarak anlamlı bir farklılık bulunmamıştır.

**Tablo 5 a.** Katılımcıların Öğrenimlerine Göre Dinleme Kaygısı Ölçeği Puanlarına İlişkin Tek Yönlü Varyans Analizi

Alt Boyutlar	Ülke	N	$\bar{X}$
Güven eksikliği	Lisans	188	21,73
	Yüksek Lisans	84	20,48
	Doktora	30	21,96
	Toplam	302	21,41
Metni anlama ve çözümleme	Lisans	188	23,19
	Yüksek Lisans	84	22,46
	Doktora	30	21,40
	Toplam	302	22,81
<b>Dinleme (Toplam)</b>	<b>Kaygısı</b> Lisans	188	44,93
	Yüksek Lisans	84	42,95
	Doktora	30	43,36
	Toplam	302	44,22

Araştırmaya katılan katılımcıların eğitim düzeylerine göre dinleme kaygı ölçeğinden aldıkları puan ortalamaları Tablo 5a’da verilmiştir.

**Tablo 5b.**

Alt Boyutlar		Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Güven eksikliği	Gruplararası	101,078	2	50,539	1,689	,186
	Gruplariçi	8946,183	299	29,920		
	Toplam	9047,262	301			
Metni anlama ve çözümleme	Gruplararası	97,805	2	48,902	1,884	,154
	Gruplariçi	7761,811	299	25,959		
	Toplam	7859,616	301			
<b>Dinleme (Toplam)</b>	<b>Kaygısı</b> Gruplararası	253,225	2	126,612	1,539	,216
	Gruplariçi	24598,010	299	82,268		
	Toplam	24851,235	301			

\* p&lt;.05, \*\*p&lt;.01

Tablo 5b’te görüldüğü gibi, katılımcıların öğrenimlerine göre dinleme kaygısı ölçeğinin alt boyutları ve tamamından aldıkları puanlarının farklılaşıp farklılaşmadığı tek yönlü varyans analizi ile incelenmiş; katılımcıların öğrenimlerine göre dinleme kaygıları puanları arasında istatistiksel olarak anlamlı bir farklılık bulunmamıştır.

**Tablo 6a.** Katılımcıların Yaşlarına Göre Dinleme Kaygısı Ölçeği Puanlarına İlişkin Tek Yönlü Varyans Analizi

Alt Boyutlar	Yaş	N	$\bar{X}$
Güven eksikliği	15-20	116	21,10
	21-25	105	21,61
	26-30	67	21,20
	31-35	14	23,42
	Toplam	302	21,41
Metni anlama ve çözümleme	15-20	116	22,08
	21-25	105	23,51
	26-30	67	22,98
	31-35	14	22,78
	Toplam	302	22,81
Dinleme (Toplam)	15-20	116	43,18
	21-25	105	45,13
	26-30	67	44,19
	31-35	14	46,21
	Toplam	302	44,22

Araştırmaya katılan katılımcıların yaş düzeylerine göre dinleme kaygı ölçeğinden aldıkları puan ortalamaları Tablo 6a'da verilmiştir.

**Tablo 6b.**

Alt Boyutlar		Kareler Toplamı	Sd	Kareler Ortalaması	F	p
Güven eksikliği	Gruplararası	75,238	3	25,079	,833	,477
	Gruplariçi	8972,024	298	30,107		
	Toplam	9047,262	301			
Metni anlama ve çözümleme	Gruplararası	114,907	3	38,302	1,474	,222
	Gruplariçi	7744,709	298	25,989		
	Toplam	7859,616	301			
Dinleme (Toplam)	Gruplararası	266,439	3	88,813	1,077	,359
	Gruplariçi	24584,796	298	82,499		
	Toplam	24851,235	301			

\* p<.05, \*\*p<.01

Tablo 6b'de görüldüğü gibi, katılımcıların yaşlarına göre dinleme kaygısı ölçeğinin alt boyutları ve tamamından aldıkları puanlarının farklılaşıp farklılaşmadığı tek yönlü varyans analizi ile incelenmiş; katılımcıların yaşlarına göre dinleme kaygıları puanları arasında istatistiksel olarak anlamlı bir farklılık bulunmamıştır.

#### 4. SONUÇ VE TARTIŞMA

Kaygı ve yabancı dil öğrenimi arasındaki ilişki geçmişten beri araştırmacıların ilgisini çeken bir konudur. Bu araştırmanın ortaya çıkardığı ilk bulgu, kız ve erkek katılımcıların dinleme kaygılarının değişmediğini göstermektedir. Çubukçu (2008), yabancı dil bölümünde okuyan 20-22 yaş aralığındaki 100 üniversite öğrencisi ile yaptığı çalışmada erkek ve kız öğrencilerin kaygı düzeyleri arasında anlamlı bir farklılık olmadığı görülmüştür. İn'nami (2006), yaptığı çalışmada kişisel özelliklerin, dinleme kaygısı performansını etkilemediğini görmüştür. Söz konusu sonuçlar, bu çalışmanın bulgularıyla benzerlik göstermektedir. Diğer yandan bu araştırmaların tersine, Tsai'nın (2013) çalışmasında, Tayvan'da üst düzey bir yüksekokulda öğrenim görmekte olan 102 öğrenci arasında İngilizce dinleme kaygısı farklılıkları araştırılmış ve İngilizce dinleme kaygıları açısından kız ve erkek öğrenciler arasında anlamlı bir fark olduğu belirlenmiştir. Aydın, Yavuz ve Yeşilyurt'un (2006) yaptığı çalışmada da katılımcıların cinsiyetlere göre dinleme kaygıları puanları arasında istatistiksel olarak anlamlı bir farklılık bulunmuş, kız öğrencilerin, erkek öğrencilerden daha kaygılı oldukları görülmüştür. Araştırmanın ortaya çıkardığı bulgulara göre katılımcıların sosyo-ekonomik düzeylerine, yaşlarına, kıtalarına ve öğrenimlerine göre dinleme kaygıları puanları arasında istatistiksel olarak anlamlı bir farklılık bulunmamaktadır.

Özetle söylemek gerekirse hazırlanan dinleme kaygısı ölçeğiyle katılımcıların farklı değişkenlere göre (cinsiyet, algılanan sosyo-ekonomik düzey, ülke, öğrenim düzeyi, yaş) dinleme kaygıları ölçülmüş ve dinleme kaygıları puanları arasında istatistiksel olarak anlamlı bir farklılık bulunmamıştır. Bu durum, dinleme kaygısının bireylerin kişisel özellikleriyle bir ilgisi olmadığını ve beceri boyutunda bir durum olarak algılandığını göstermesi bakımından önemlidir.

Yabancı dil olarak Türkçenin öğrenilmesini engelleyecek, kaygıyı ortaya çıkaracak olan nedenler, hazırlanacak olan kaygı ölçekleri ile tespit edilmeli ve bir an önce ortadan kaldırılmalıdır. Türkiye'de yabancı öğrencilerin

dinleme kaygılarını ölçmek için her seviyede "dinleme kaygısı ölçeği" hazırlanmalı ve bu alanda akademik çalışmalar yapılmalıdır. Bu çalışmada B2, C1 ve C2 seviyesindeki öğrencilerin dinleme kaygılarını ölçmek amaçlanmıştır. Diğer seviyedeki öğrencilerin de dinleme kaygılarını ölçmek için de ölçekler hazırlanmalıdır. Diğer yandan Türkçenin öğrenilmesini engelleyecek, kaygıyı ortaya çıkaracak olan nedenler, nitel gözlemler ve görüşmelerle derinlemesine araştırılabilir.

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## YABANCI DİL OLARAK TÜRKÇE ÖĞRENENLERİN DİNLEME ÖZ YETERLİĞİ İLE DİNLEME KAYGISI ARASINDAKİ İLİŞKİ

Havva YAMAN

Sakarya Üniversitesi, Eğitim Fakültesi, Sakarya, Türkiye  
[hyaman@sakarya.edu.tr](mailto:hyaman@sakarya.edu.tr)

Fatih Mehmet TULUMCU

Sakarya Üniversitesi, Eğitim Fakültesi, Sakarya, Türkiye  
[ftulumcu@sakarya.edu.tr](mailto:ftulumcu@sakarya.edu.tr)

Feride İdi TULUMCU

Sakarya Üniversitesi, Eğitim Fakültesi, Sakarya, Türkiye  
[ferideidi@sakarya.edu.tr](mailto:ferideidi@sakarya.edu.tr)

### ÖZET

Eğitimde bireysel farklılıklar psikolojik durumları olumlu ve olumsuz etkileyen tetikleyiciler olarak karşımıza çıkabilmektedir. Bir eğitimci, öğrenme süreçlerini dikkate alındığında bireyin deneyimleri, gözlemleri, tutumları, korkuları, endişeleri; bireyin maruz kaldığı telkinler gibi hayatın içinde en doğal haliyle var olan duygu ve düşünce yapılarını göz önünde bulundurması gerekir. Dil becerilerinin kazandırılmasında bireyin ilk önce maruz kaldığı, geliştirilmesi gerekliliğinin en önce ortaya çıktığı beceri dinleme becerisidir. Dinleme becerisinin en verimli şekilde kazanılabilmesinde en önemli göstergelerden biri bireyin dinleme becerisine yönelik öz yeterlik algısıdır. Eğitimde öz yeterlik algısı, bireyin olası durumlarla baş edebilmek için gerekli etkinlikleri ne kadar iyi yapabileceklerine ilişkin bireysel yargılarını ifade eder. Bunun yanında dinleme kaygısı düzeyi de dinleme becerisini etkiler. Bu araştırma yabancı dil olarak Türkçe öğretiminde dinleme kaygısı ile dinleme öz yeterliği arasındaki ilişkinin bireyin sahip olduğu doğal özellikler (yaş, cinsiyet vb.), bildikleri yabancı dil sayıları, Türkçe ve Türkiye ile temas durumları, Türkçe öğrenme amaçları, Türkçeye bakış açıları ve dil becerilerini (dinleme, konuşma, yazma, okuma) kullanma sıklıkları gibi farklı değişkenler çerçevesinde ortaya koymaktadır. Bu amaçla Gaziantep Üniversitesi Türkçe Öğretimi Uygulama ve Araştırma Merkezinde eğitim gören 92 öğrenciden, “Yabancı Dil Olarak Türkçe Dinleme Becerisi Öz Yeterlik Ölçeği”, “Yabancı Dil Olarak Türkçe Öğrenen Öğrencilere Yönelik Dinleme Kaygısı Ölçeği” ve farklı değişkenlerin yer aldığı kişisel bilgi formu kullanılarak veri toplanmıştır. Veriler SPSS programı ile analiz edilmiştir ve sonuçlar tartışılmıştır.

**Anahtar Kelimeler:** dinleme öz yeterliği, dinleme kaygısı, yabancılara Türkçe öğretimi

## THE RELATION BETWEEN LISTENING ANXIETY AND LISTENING SELF-EFFICACY OF LEARNERS OF TURKISH AS A FOREIGN LANGUAGE

### ABSTRACT

It is highly possible to encounter individual differences as positive and negative triggers of psychological states in education. An educator is supposed to consider feelings and way of thinking, which already exist in its natural form in life, such as an individual's experiences, observations, attitudes, fears, worries and suggestions the individual is exposed to while taking learning processes into consideration. Listening skill is the skill to which an individual is primarily exposed, which appears to be the most essential one to be improved in helping individuals gain language skills. One of the most significant indicators in helping listening skill to be gained most efficiently is an individual's sense of self-efficacy towards listening skill. Sense of self-efficacy in education means individualistic judgement about how well an individual can manage to perform necessary activities in order to cope with possible situations. In addition, level of listening anxiety influenced listening skill. This study indicates the relation between listening anxiety and listening self-efficacy in learning Turkish as a foreign language depends on such variables as natural characteristics of an individual (age, gender etc.), the number of foreign languages they know, their contact with Turkish and Turkey, their aims to learn Turkish, their perspectives over Turkish and language skills (listening, speaking, writing, reading), frequency of use. For this aim, data was collected from 92 students who have been trained in Turkish Teaching Application and Research Center of Gaziantep University via personal information forms on which there are “Scale of Self-Efficacy of Listening Skill of Turkish as a Foreign Language”, “Scale for Listening Anxiety of Students Learning Turkish as a Foreign Language” and different variables are written. Data was analyzed through SPSS program and results were discussed.

**Key words:** listening self-efficacy, listening anxiety, teaching Turkish to foreigners

## GİRİŞ

Bandura'nın Sosyal Bilişsel Kuram'ı öz yeterlik ve davranış arasındaki ilişkiyle ilgili önemli bulgular sağlar. Bandura (1986) bu kuramında “ İnsanların ne düşündükleri, neye inandıkları ve neler hissettikleri nasıl davranacaklarını etkiler.” diye belirtmiştir (Akt. Mills, Pajares, Herron, 2007). Bandura'nın (1986) Sosyal Bilişsel Kuramına göre, bireylerin yetenekleri hakkındaki kendi düşünceleri ve uğraşlarının performansları üzerinde olduğunu ortaya koymuştur (Pajares, 1996). Öz yeterlik inançları, Bandura ve Schunk (1981) tarafından “İnsanların yeteneklerine ait düşüncelerini düzenlemek ve hedeflenen türdeki performanslarını elde etmek için gerekli davranış biçimini gerçekleştirmek” olarak tanımlanmıştır (Akt. Magogwe & Oliver, 2007).

Pajares (1996), yüksek öz yeterliliğe sahip bireyler daha zor görevler seçerken, düşük öz yeterliliğe sahip bireylerin kendilerini yeterli ve emin hissettikleri görevler seçtiklerini söylemiştir. Bu yüzden, Pajares (1996) bireylerin öz yeterlik inançlarını ifade ettiği ya da bireylerin başarı derecelerini belirlediği için öz yeterlik ile başarı arasında bir ilişki olduğunu belirtir. Bandura (1995), öz yeterlik inancının dört temel kaynağı olduğunu ifade etmektedir. Bireyin öz yeterliği, deneyimlerinden, yaptığı gözlemlerinden, telkin amaçlı ifadelerden ve psikolojik durumundan etkilenir. İnsan, her hangi bir durum karşısında karar vermek durumunda kaldığında ilk önce kendi deneyimlerini aklı getirir. Eğer geçmiş yaşantısında karşılaştığı durum ile ilgili benzer durumların varlığı söz konusu ise yeni durumlar karşısında kişinin öz yeterlik algısı etkilenir. Yabancı dil olarak Türkçe eğitimi alan bir öğrenci geçmiş yaşantısında Türkçe ile ilgili olumlu tutum, motivasyon araçlarına sahipse bu durum öz yeterliğini ve Türkçe öğrenebilme başarı potansiyelini etkiler. Deneyimlerden sonra kişinin öz yeterliğini en çok etkileyen kaynak gözlemlerdir (Tulumcu, 2014). Gözlemlerden kasıt Bandura'nın Sosyal Bilişsel Kuram ile ifade ettiği öğrenmeyi temelde etkileyen geniş kapsamlı bir kavramdır. Bandura'ya göre gözleyerek öğrenme, sadece bir kişinin diğer kişilerin etkinliklerini basit olarak taklit etmesi değil, çevredeki olayları bilişsel olarak işlemesiyle kazanılan bilgidir (Senemoğlu, 2012: 94).

Verilen bir işi tam olarak yapabilecek yeteneklere sahip olan ve bu yönde çevreden sözel mesajlar alan bireyler bir problemle karşılaştıklarında kuşkularını ve kişisel yetersizliklerini düşünmek yerine problemi çözmek için daha fazla çaba harcarlar ve bu cabayı sürdürme azmi gösterirler (Bıkmaz, 2006: 294). Bu anlamda sözlü ikna, kişinin öz yeterliğini ve dolayısıyla öğrenme kapasitesine olan inancını etkiler. Türkçe öğrenme amacı olan bir öğrenciye Türkçenin gerekli çaba gösterdiği zaman başarılı olacağı telkinlerinin yapılması o kişinin dil becerilerini kazama noktasındaki çalışma verimini, Türkçe öğrenmeye karşı olan motivasyonu etkileyebilir (Tulumcu, 2014). Bunun yanı sıra kişiye dil öğrenmede rehberlik eden öğretmenin öğrencinin geri planda kaldığı durumlarda destekleyici tavırlar sergilemesi kişinin Türkçe dersi için kaybolan ilgisini tekrar canlandırabilir.

Kişinin öz yeterlik algısını oluşmasını etkileyen diğer bir durum kişinin psikolojik durumudur. Kişinin kaygı düzeyi, endişe, karamsarlık, baskı, başarılı olamama korkusu gibi durumlar öz yeterlik inançlarını etkiler. . Kişilerin kendileriyle ilgili olumlu duygular beslemelerinde iletişim kurdukları kişilerden aldıkları geribildirimler çok önemli bir yere sahiptir. Söz konusu ilişkilerde yaşanan herhangi bir olumsuzluk kişinin özgüvenini sarsmaktadır. Hatta huzursuzluk yaratan olaylardan kaçtıkça, suçluluk duygusu artmakta, kaygı duygusu daha da ön plana çıkmaktadır. Dolayısıyla kişli potansiyel olarak kaygı yaratan başka olaylardan da kaçınma durumuna girmektedir (Ergür, 2005: 50). Kaygı ve kaygı düzeyine bağlı gerçekleşen psikolojik durumlar birçok sebebe bağlanmaktadır. Yabancı dil öğrencilerinin yeterlilik düzeyleri, sınav uygulamaları, öğretmenlerin davranışları, yabancı dil derslerinin zorluk düzeyi, öğrencilerin dildeki yetenek düzeyleri ve kültürel farklılıkların kaygı doğuran unsurlar olduklarını göstermektedir (Aydın & Zengin, 2008:86). Tuncel (2014: 146) ülkemizde kaygı üzerine çalışacak araştırmacıların özellikle yabancı dil olarak Türkçenin öğretimi/öğrenimi üzerinde araştırma yapabileceklerini ifade etmektedir. Bu çalışma da yabancılara Türkçe öğretiminde dinleme kaygısı ile dinleme öz yeterliği arasındaki ilişkiyi farklı değişkenler açısından incelemeyi amaç edinmiştir.

## YÖNTEM

Bu araştırmanın amacı Türkçeyi yabancı dil olarak öğrenen öğrencilerin dinleme kaygısı ile dinleme öz yeterliği arasındaki ilişkiyi incelemektir. Bu amaca ilişkin olarak ilişkisel tarama modelleri kullanılmıştır. İlişkisel tarama modelleri, iki ve daha çok sayıdaki değişken arasında birlikte değişim varlığını ve/veya derecesini belirlemeye çalışan araştırma modelleridir (Karasar, 2013: 81). Çalışma grubunu ise B2 ve C1 seviyelerinde öğrenim görmekte olan 30'u kız 62'si erkek olmak üzere 92 öğrenci oluşturmaktadır. Verilerin toplanmasında kişisel bilgi formu ile birlikte “Yabancı Dil Olarak Türkçe Öğrenen Öğrencilere Yönelik Dinleme Kaygısı Ölçeği” ve “Yabancı Dil Olarak Türkçe Dinleme Becerisi Öz Yeterlik Ölçeği” kullanılmıştır. Kişisel bilgi formu ile öğrencilerin Türkçe ve anadili dışında konuştuğu dil sayısı, Türkçe öğrenme amaçları, Türkiye'ye gelmeden önce Türkçe eğitim

alma durumları, Türkçe eğitiminin zorluğuna ilişkin algıları, Türkiye’de bulunma süreleri, Türkçeyi belli ortam ve durumlarda kullanım sıklığı hakkında bilgi toplanmıştır.

Yabancı Dil Olarak Türkçe Öğrenen Öğrencilere Yönelik Dinleme Kaygısı Ölçeği, Yaman ve Can (2015) tarafından B2 ve C1 düzeyinde öğrenim gören yabancı dil olarak Türkçe öğrenenler için geliştirilmiştir. Dinleme Kaygısı Ölçeği iki alt faktörden oluşmaktadır. Ölçeğin “güven eksikliği ” faktörü ile ilgili yedi madde yer almakta ve maddelerin faktör yük değerleri 0,505 ile 0,761 arasında değişmekte ayrıca toplam varyansın % 30,19’ unu açıklamaktadır. İkinci faktör ise “metni anlama ve çözümleme” olup bu faktörle ilgili yedi madde yer almakta ve maddelerin faktör yük değerleri 0,461 ile 0,680 arasında değişmekte ayrıca toplam varyansın % 10,97’ sini açıklamaktadır. Buna göre, altı faktör açıkladıkları varyans miktarı % 41,16’dır. Cronbach’s  $\alpha$  güvenirlik katsayısı 0,90 bulunmuştur.

Yabancı Dil Olarak Türkçe Dinleme Becerisi Öz Yeterlik Ölçeği, Yaman ve Tulumcu (2016) tarafından B2 ve B2 seviyesi üzerindeki Türkçe öğrenen yabancılar için dinleme becerisine yönelik öz yeterliğini ölçmek amacıyla geliştirilmiştir. Ölçek, üç alt boyuttan oluşan 18 maddelik bir ölçektir. Birinci alt boyut “temel bilgi düzeyi”, ikinci alt boyut “kavrama-sentez”, üçüncü alt boyut “üst düzey değerlendirme” olarak karşımıza çıkmaktadır. Birinci alt boyut için güvenirlik katsayısı 0,931; ikinci alt boyut için güvenirlik katsayısı 0,802; üçüncü alt boyut için 0,650 Bu üç boyutun (faktörün) açıkladıkları toplam varyans %63,389’dur. Maddelerin faktör yükleri 0,647 ile 0,783 değerleri arasındadır. Ölçeğin Cronbach Alfa güvenirlik katsayısı 0,941 olarak bulunmuştur.

Kişisel bilgi formu, “Yabancı Dil Olarak Türkçe Öğrenen Öğrencilere Yönelik Dinleme Kaygısı Ölçeği” ve “Yabancı Dil Olarak Türkçe Dinleme Becerisi Öz Yeterlik Ölçeği” ile toplanan veriler SPSS 22.0 Windows paket programı ile analiz edilmiştir. Araştırmanın amacı ve alt amaçları doğrultusunda veriler analiz edilirken normal dağılım, varyansların eşitliği gibi kriterler göz önünde bulundurularak parametrik nonparametrik testler kullanılmıştır.

## BULGULAR

### 1. Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Öz Yeterliği ve Dinleme Kaygısı Arasındaki İlişki

Tablo 1: Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Konuşma Kaygısı ve Dinleme Kaygısı

		Dinleme Öz yeterliği	Dinleme Kaygısı
Dinleme Öz Yeterliği	Korelasyon Katsayısı	1,000	0,201
	p		0,055
	N	92	92
Dinleme Kaygısı	Korelasyon Katsayısı	0,201	1,000
	p	0,055	.
	N	92	92

Yabancı dil olarak Türkçe öğrenenlerin dinleme kaygıları ile konuşma kaygıları arasında bir ilişkinin olup olmadığını ortaya koymak için yapılan Spearman Brown Korelasyon Katsayısı işlemi, dinleme kaygıları ile dinleme öz yeterlikleri arasında ilişki olmadığını göstermektedir ( $r=0,201$ ,  $p>0,05$ ).

### 2. Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygıları ve Dinleme Öz Yeterliklerinin Önceden Bildiği Yabancı Dil Sayısı Değişkenine Göre İncelenmesi

#### 2.1 Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygılarının Bildiği Dil Sayısı Değişkenine Göre İncelenmesi

Tablo 2: Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygılarının Bildiği Dil Sayısına Göre Farklılaşp Farklılaşmadığını Gösteren Kruskal Wallis H Testi Sonuçları

Dil Sayısı	N	$X_{\text{sıra}}$	$x^2$	sd	p	Anlamlı Fark
0	23	35,76	8,304	4	,081	-
1	46	50,90				
2	18	51,22				
3	4	29,38				
4	1	74,50				

Yabancı dil olarak Türkçe öğrenen öğrencilerin dinleme kaygılarının önceden bildiği dil sayısına göre farklılaşp farklılaşmadığını gösteren Kruskal Wallis H testi sonuçlarına göre istatistiksel olarak anlamlı bir fark bulunmamıştır ( $p>.05$ ). Öğrencilerin önceden bildikleri dil sayısı dinleme kaygılarını etkilememektedir.

## 2.2 Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Öz Yeterliklerinin Bildiği Dil Sayısı Değişkenine Göre İncelenmesi

Tablo 3: Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Öz Yeterliklerinin Bildiği Dil Sayısına Göre Farklılaşp Farklılaşmadığını Gösteren Kruskal Wallis H Testi Sonuçları

Dil Sayısı	N	$X_{\text{sıra}}$	$x^2$	sd	p	Anlamlı Fark
0	23	43,11	2,286	4	,683	-
1	46	50,14				
2	18	43,33				
3	4	44,25				
4	1	23,00				

Yabancı dil olarak Türkçe öğrenen öğrencilerin dinleme öz yeterliklerinin önceden bildiği dil sayısına göre farklılaşp farklılaşmadığını gösteren Kruskal Wallis H testi sonuçlarına göre istatistiksel olarak anlamlı bir fark bulunmamıştır ( $p>.05$ ). Öğrencilerin önceden bildikleri dil sayısı dinleme öz yeterliklerini etkilememiştir.

## 3. Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygıları ve Dinleme Öz Yeterliklerinin Türkçe Öğrenmenin Zorluğuna İlişkin Algısı Değişkenine Göre İncelenmesi

### 3.1 Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygılarının Türkçe Öğrenmenin Zorluğuna İlişkin Algısına Göre İncelenmesi

Tablo 3: Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygılarının Türkçe Öğrenmenin Zorluğuna İlişkin Algısına Göre Farklılaşp Farklılaşmadığını Gösteren Kruskal Wallis H Testi Sonuçları

Türkçe öğrenmek zor	N	$X_{\text{sıra}}$	$x^2$	sd	p	Anlamlı Fark
Kesinlikle katılıyorum	13	52,00	5,343	4	,254	-
Katılıyorum	29	39,67				
Kararsızım	14	32,82				
Katılmıyorum	22	44,70				
Kesinlikle katılmıyorum	6	50,08				

Yabancı dil olarak Türkçe öğrenen öğrencilerin dinleme kaygılarının Türkçe öğrenmenin zorluğuna ilişkin algılarına göre farklılaşp farklılaşmadığını gösteren Kruskal Wallis H testi sonuçlarına göre istatistiksel olarak anlamlı bir fark bulunmamıştır ( $p>.05$ ).

### 3.2 Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Öz Yeterliklerinin Türkçe Öğrenmenin Zorluğuna İlişkin Algısına Göre İncelenmesi

Tablo 4: Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Öz Yeterliklerinin Türkçe Öğrenmenin Zorluğuna İlişkin Algısına Göre Farklılaşp Farklılaşmadığını Gösteren Kruskal Wallis H Testi Sonuçları

Türkçe öğrenmek zor	N	$X_{\text{sıra}}$	$x^2$	sd	p	Anlamlı Fark
Kesinlikle katılıyorum	13	57,50	6,748	4	,150	-
Katılıyorum	29	38,74				
Kararsızım	14	45,29				
Katılmıyorum	22	38,32				
Kesinlikle katılmıyorum	6	37,00				



Yabancı dil olarak Türkçe öğrenen öğrencilerin dinleme öz yeterliklerinin Türkçe öğrenmenin zorluğuna ilişkin algılarına göre farklılaşıp farklılaşmadığını gösteren Kruskal Wallis H testi sonuçlarına göre istatistiksel olarak anlamlı bir fark bulunmamıştır ( $p>.05$ )..

#### 4. Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygıları ve Dinleme Öz Yeterliklerinin Türkçe Eğitimi Almış Olma Durumu Değişkenine Göre İncelenmesi

##### 4.1 Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygılarının Türkçe Eğitimi Almış Olma Durumu Değişkenine Göre İncelenmesi

Tablo 7: Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygılarının Türkçe Eğitimi Almış Olma Durumuna Göre Farklılaşıp Farklılaşmadığını Gösteren Mann Whitney U Testi Sonuçları

Türkçe Eğitimi Alma	N	Sıra Ortalaması	Sıra Toplamı	Z	Mann Whitney U	p
Hayır	83	46,14	3829,50	-,161	320,500	, 872
Evet	8	44,56	356,50			

Tablo 7 incelendiğinde yabancı dil olarak Türkçe öğrenen öğrencilerin dinleme kaygıları ile önceden Türkçe eğitimi almış olma durumuna göre istatistiksel açıdan anlamlı bir fark bulunmamıştır ( $U=320,500$ ;  $p>0,05$ ). Önceden Türkçe eğitimi almış olanlar ile almayanların dinleme kaygıları farklılaşmamaktadır.

##### 4.2 Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Öz Yeterliklerinin Türkçe Eğitimi Almış Olma Durumu Değişkenine Göre İncelenmesi

Tablo 8: Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Öz Yeterliklerinin Türkçe Eğitimi Almış Olma Durumuna Göre Farklılaşıp Farklılaşmadığını Gösteren Mann Whitney U Testi Sonuçları

Türkçe Eğitimi Alma	N	Sıra Ortalaması	Sıra Toplamı	Z	Mann Whitney U	p
Hayır	83	44,96	3732,00	-1,206	246,000	, 228
Evet	8	56,75	454,00			

Tablo 8 incelendiğinde yabancı dil olarak Türkçe öğrenen öğrencilerin dinleme öz yeterlikleri ile önceden Türkçe eğitimi almış olma durumuna göre istatistiksel açıdan anlamlı bir fark bulunmamıştır ( $U=246,000$ ;  $p>0,05$ ). Önceden Türkçe eğitimi almış olanlar ile almayanların dinleme öz yeterlikleri farklılaşmamaktadır.

#### 5. Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygıları ve Dinleme Öz Yeterliklerinin Türkiye’de Kalma Süresi Değişkenine Göre İncelenmesi

##### 5.1 Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygılarının Türkiye’de Kalma Süresi Değişkenine Göre İncelenmesi

Tablo 3: Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Kaygılarının Türkiye’de Kalma Süresine Göre Farklılaşıp Farklılaşmadığını Gösteren Kruskal Wallis H Testi Sonuçları

Türkiye’de Kalma Süresi	N	$X_{\text{sıra}}$	$x^2$	sd	p	Anlamlı Fark
1-3 ay	23	41,52	,952	2	,621	-
4-6 ay	13	49,92				
7-9 ay ve üzeri	51	43,61				

Yabancı dil olarak Türkçe öğrenen öğrencilerin dinleme kaygılarının Türkiye’de kalma süresine göre farklılaşıp farklılaşmadığını gösteren Kruskal Wallis H testi sonuçlarına göre istatistiksel olarak anlamlı bir fark bulunmamıştır ( $p>.05$ ).

## 5.2 Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Öz Yeterliklerinin Türkiye’de Kalma Süresi Değişkenine Göre İncelenmesi

Tablo 3: Yabancı Dil Olarak Türkçe Öğrenen Öğrencilerin Dinleme Öz Yeterliklerinin Türkiye’de Kalma Süresine Göre Farklılaşp Farklılaşmadığını Gösteren Kruskal Wallis H Testi Sonuçları

Türkiye’de Kalma Süresi	N	X <sub>sıra</sub>	x <sup>2</sup>	sd	p	Anlamlı Fark
1-3 ay	23	49,13				
4-6 ay	13	53,04	4,325	2	,115	-
7-9 ay ve üzeri	51	39,38				

Yabancı dil olarak Türkçe öğrenen öğrencilerin dinleme öz yeterliklerinin Türkiye’de kalma süresine göre farklılaşp farklılaşmadığını gösteren Kruskal Wallis H testi sonuçlarına göre istatistiksel olarak anlamlı bir fark bulunmamıştır (p>.05).

### SONUÇ

Dinleme becerisi, dilin aktif olarak kullanımında temel dil beceri içerisinde bireyin en çok gerçekleştirdiği, eğitim sürecinde dilin aktif olarak kullanılmasına imkân sağlayan önemli bir konumda bulunmaktadır. Bireyin dinleme eğitiminde kaygı ve öz yeterlik yabancı dil öğretiminin daha verimli olması için önemli bir psikolojik gösterge olarak ortaya çıkmaktadır. Yapılan bu araştırma yabancı dil olarak Türkçe öğretiminde dinleme kaygısı ve dinleme öz yeterliği arasında istatistiksel anlamlı bir ilişki ortaya çıkmamıştır. Özellikle bireyin dinleme öz yeterliğini etkileyebileceği düşünülen farklı değişkenler açısından da istatistiksel anlamlı bir farkın ortaya çıkmadığı görülmektedir.

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## YAZILI SINAV PUANLARININ TEOG SINAV PUANLARINI YORDAMA DURUMUNUN İNCELENMESİ

Hakkı KONTAŞ  
Adıyaman Üniversitesi, Eğitim Fakültesi  
Adıyaman/Türkiye  
hakkikontas@hotmail.com

Esen TURAN ÖZPOLAT  
Adıyaman Üniversitesi  
Eğitim Fakültesi  
Adıyaman/Türkiye  
esen.turan@hotmail.com

### ÖZET

Bu araştırmanın amacı sınav puanlarının, Temel Eğitimden Ortaöğretime Geçiş (TEOG) sınav puanlarını yordama durumunu incelemektir. Araştırma verileri, 2015-2016 eğitim-öğretim yılının birinci döneminde sekizinci sınıfta öğrenim gören 1035 öğrencinin e-okul sistemindeki kayıtlarından elde edilmiştir. Araştırma ilişkisel tarama modelindedir. Verilerin analizinde doğrusal regresyon analizi kullanılmıştır. Analiz sonuçları, sınav puanları ile TEOG sınav puanları arasında yüksek düzeyde ve anlamlı ilişkiler olduğunu göstermiştir.

Anahtar kelimeler: Yazılı sınav puanı, TEOG puanı, ortaokul öğrencileri

### GİRİŞ

Eleştirel bir gözle olaylara farklı açılardan bakabilen, var olan problemlere ilişkin yaratıcı çözüm yolları üretebilen, esnek ve analitik düşünebilen bireylerin yetişmesi yaşadığımız çağda ülkeler için birer ihtiyaç haline gelmiştir. Ülkeler çağın gerektirmiş olduğu nitelikli yetişmiş insan gücünü karşılamak amacı içine girmişlerdir. Sönmez'in (2012) belirttiği gibi devleti yönetecek, fabrikaları planlayıp kurup ve işletecek, ürünleri dağıtıp tüketecek, okul, yol, baraj yapacak, nesne ve olaylar ile ilgili sorun yaratıp bu sorunlar karşısında çözümler üretecek kişi insandır ve bu nedenle insanın tutarlı davranışlarla donatılıp problem çözücü bilgi ve becerilerle donatılması gerekmektedir. Çünkü yaşadığımız çağa ayak uydurabilmenin ön koşulu, toplumsal kalkınmanın ve gelişmenin temel öğelerinden biri olan yetişmiş insan gücünü oluşturan bireylere çağın gerektirdiği yeni bilgi ve becerilerin yeterli düzeyde verilmesidir (Yüksel ve Sağlam, 2014). Bu amacı gerçekleştirmenin ilk adımı da kaliteli bir eğitimden geçmektedir. Kaliteli eğitim ise ancak çağdaş, formal eğitim kurumları olan okullarda verilebilir (Özkan, 2011). Bu nedenle geleceğin mirasçıları olan çocuklara nitelikli, donanımlı eğitimciler tarafından bilgi ve teknoloji çağının ihtiyaçlarına göre kaliteli bir eğitimin verilmesine olan ihtiyaç, her geçen gün artmakta ve önem kazanmaktadır. Okullarda öğrencilerin ilgi ve yeteneklerine hitap eden ve kendi içinde çeşitliliğe giden esnek, üst düzey düşünme becerilerinin kullanmasını hedefleyen kaliteli bir eğitim ise eğitim programı aracılığıyla gerçekleşmektedir (Balay, 2004). Bireylerde istendik yönde davranış değişikliği meydana getirme amacı taşıyan eğitim programının önemli boyutlarından biri de programlarda belirtilen hedeflere bireylerin ne derecede ulaşmış olduğunu belirlediği ölçme ve değerlendirme boyutudur (Ornstein and Hunkins, 2014). Ölçme, bir büyüklük veya özelliğin, uygun ölçme araçlarıyla gözlenip sonuçlarının sayı ve sembollerle gösterilmesi iken (Akpınar, 2013:169), değerlendirme ise ölçme sonuçlarını bir ölçüte vurup yargıya varma sürecidir (Sönmez, 2012; Özçelik, 1981). Ölçme ve değerlendirmenin amacı, öğrencide öğrenmeyle oluşan davranış değişikliğinin niteliğini ölçmek ve bunu sayısal olarak belirleyip değerlendirmektir (Başaran, 1994:307). Eğitimde başarının sadece öğrencilerin sınavlarda göstermiş oldukları sonuçlara bakılarak değerlendirilmemesi gerekmesine (MEB, 2014) rağmen, Türkiye'de iyi bir gelecek için çaba sarf eden öğrencilerin eğitim yaşamlarında öğrenci başarısını ölçüp değerlendirerek gelecekteki akademik eğitimlerini ve mesleklerini belirleyen merkezi sınavlar önemli bir yere sahiptir (Sür, 2014; Yorgancı, 2015). Bu nedenle Türkiye'de daha iyi eğitim alma isteği sınavsız bir seçme ve yerleştirme sistemi olmadan düşünülemez (Karaman 2014; Yıldırım, 2015).

Eğitimde başarının sadece öğrencinin sınavlarda göstermiş olduğu performansa göre değerlendirilmemesi gerekse de, ülkemizde geçmişte öğrencilerin gelecekteki mesleklerinin seçiminde en önemli basamak olan ortaöğretime geçiş sürecinde başarılarının ölçülüp değerlendirildiği birçok sınav yapılmıştır. Sınav sisteminde bu kadar sık yapılan değişiklikler başta öğrenciler olmak üzere, veliler ve öğretmenler açısından maddi ve manevi olarak bazı olumsuzluklar getirmektedir (Akyüz, 2012). Bununla birlikte ortaöğretim kurumlarına öğrencilerin alınması için yapılan sınavlara bakacak olursak zaman içinde bu sınavların isimlerinin, içeriklerinin, şekillerinin, değerlendirmelerinin ve sınava kabul edilen öğrencilerinin yaş gruplarının değiştiğini görebiliriz. 2000'li yıllarda

LGS (liselere geçiş sınavı), 2004 yılından 2008 yılına kadar OKS (ortaöğretim kurumları sınavı), 2008 den 2013 yılına kadar ise elemeye dayalı SBS (seviye belirleme sınavı) ve son olarak 2013 yılından günümüze kadar ise TEOG (Temel Eğitimden Ortaöğretime Geçiş Sınavı) isimleri altında ortaöğretime öğrenci alımlarında birçok sınav sistemi denenmiştir (Dalak, 2015; Erol, 2016; Karaca, 2015; Karaman, 2015; Süer, 2014; Yıldırım, 2015; Yılmaz, 2014; Yorgancı, 2015).

TEOG içerik bakımından 8. sınıf öğrencilerine yönelik 6 dersi (Türkçe, Matematik, Fen ve Teknoloji, Din Kültürü ve Ahlak Bilgisi, İngilizce ve T.C. İnkılap Tarihi ve Atatürkçülük kapsayacak şekilde uygulanan bir sınavdır. Öğrencilere her bir dersten 20’şer adet soru sorulduğu TEOG Sınavı, dönemsel olarak uygulanan bir sınav olup sınava giremeyen öğrenciler için mazeret sınavı şansı da vermektedir. Bu özelliğiyle önceki sınavlara göre daha az stresli bir sınav olduğunu söylemek mümkündür (MEB, 2014). Erol’un (2016) yapmış olduğu bir çalışmada ise öğretmenlere göre daha önce yapılan ortaöğretime geçiş sınavlarına nazaran TEOG sınavının, öğrencilerdeki sınav kaygısını ve stresini azaltacak yenilikler getirmesi ve sınav sorularının ders kazanımlarıyla uyumlu olması bakımından daha kapsamlı ve daha az stresli bir sınav oldukları sonucuna varmıştır. Bununla birlikte Öztürk ve Aksoy (2014) da yapmış olduğu araştırmada öğrencilerin TEOG sınavı hakkında olumlu görüşler bildirdiği sonucuna varmıştır. Ortak sınavlar, her dönem iki yazılı olan derslerden birincisi, üç yazılı olan derslerden ise ikincisi olmak üzere akademik takvime göre işlenen müfredatı kapsayacak şekilde yapılmaktadır; bu nedenle bu sınav bir önceki sınavların aksine bir eleme-sıralama sınavı değil, bir kazanım değerlendirme sınavı olarak kabul edilebilir. TEOG ile ilgili yukarıda belirtilen olumlu görüşlerin yanı sıra Öztürk ve Aksoy (2014), bu sınav sisteminin kesinlikle terkedilmesi gerektiğini belirtmiştir. Nitekim Milli Eğitim Bakanlığı’nın TEOG ile ilgili yayınlanan yönetmelikte sorularla ilgili olarak “sorular, sınavların yapılacağı tarihe kadar işlenen öğretim programlarının belirlenen kazanımları esas alınarak öğrencinin eleştirel düşünme, analiz yapma, problem çözme, sonuç çıkarma, yorumlama ve benzeri becerilerini ölçecek nitelikte hazırlanır” ifadesi yer almaktadır (MEB, 2014). TEOG’un her öğrenciyi adil bir şekilde değerlendirdiği bir gerçek olsa da, ortaöğretime geçiş için TEOG tek bir ölçüt olarak görülmemektedir; bunun yanında okul yazılı sınav notlarında etkisi de bulunmaktadır. Bu yüzden öğrencilerin iyi bir ortaöğretim kurumuna gidebilmesi için okullarda yapılan kazanım değerlendirme sınavları olan yazılı sınavlardan ve merkezi kazanım değerlendirme sınavı olarak kabul edilen TEOG’dan alınan notların birbirlerine uyumlu olması beklenmektedir. Böyle bir uyumun olup olmadığını anlamak için dönem içinde 3 yazılı sınav yapılan derslerin ilk yazılı sınav notlarına bakarak TEOG notlarını sonuca en yakın şekilde yordamanın mümkün olup olmadığını belirlemek gerekmektedir. Ertürk’e göre (1972) eğitim faaliyetlerinin amaca hizmet edip etmediğini, olumsuz yan ürünlerin olup olmadığını ve faaliyet süresince enerjinin israf edilip edilmediğini belirlemeyi, değerlendirme olanaklı kılmaktadır.

Alanyazında yapılmış olan yurt içindeki çalışmalara bakıldığında TEOG sınavı ile ilgili birçok araştırmaya rastlanmıştır. Ancak bu araştırmaların çoğunluğu TEOG sınavında yer alan derslerin sadece biri ele alınarak çeşitli değişkenler açısından incelenmiştir. Bu araştırmaların bir kaç TEOG sınavını öğrenci gözüyle değerlendirirken (Öztürk ve Aksoy, 2014; Özkan ve Karataş, 2016), bir kaç ise TEOG sınavını öğretmen gözüyle değerlendiren çalışmalara yer vermiştir (Atıla ve Özeken, 2015; Erol, 2016; Yılmaz, 2014). Aynı zamanda TEOG sınavı hakkında hem öğretmenlerin hem de öğrencilerin görüşlerine birlikte yer veren çalışmalara da rastlanılmıştır (Karaca, 2015). TEOG sınavı hakkında öğretmen ve öğrenci görüşleriyle birlikte veli görüşlerinin de incelendiği bir çalışmaya rastlanmıştır (Şad ve Şahiner, 2016). Bunun yanı sıra TEOG sınavında belirli bir dersin sorularının çeşitli açılardan incelendiği çalışmalara da rastlanmıştır (Arı ve İnci, 2015; Cayhan ve Akın, 2015; Karadeniz, Eker ve Ulusoy, 2015; Kaşıkçı, Bolat, Değirmenci ve Karamustafaoğlu, 2014). TEOG ile ilgili yapılan çalışmalara bakıldığında ayrıca TEOG sınavındaki belirli derslerin kapsam geçerliliğin incelendiği çalışmaların olduğu görülmüştür (Koğar ve Aygun, 2015; Yılmaz, 2014).

TEOG ile ilgili yukarıda yapılan çalışmalara bakıldığında ve alanyazın tarandığında sekizinci sınıf öğrencilerinin derslerden aldıkları sınav puanlarının, Temel Eğitimden Ortaöğretime Geçiş (TEOG) puanlarını yordama gücünü inceleyen herhangi bir araştırmaya ise rastlanmamıştır. Ancak, Parlak ve Tatlıdil’in (2014) SBS sınavına giren ilköğretim 8. sınıf öğrencilerinin Türkçe, matematik, fen bilgisi, sosyal bilgiler ve İngilizce derslerinden yılsonunda aldıkları başarı puanları ile 8. sınıf SBS puanları arasındaki ilişkiyi inceledikleri bir çalışmaya rastlanmıştır.

Eğitim-öğretim süreci içinde eğitim programlarında önceden belirlenerek bireylere kazandırılması gereken kazanımların ne kadarını kazandıkları, kazanmış iseler ne seviyede kazanmış olduklarının belirlenmesi için ülkemizde Milli Eğitim Bakanlığı tarafından merkezi olarak sınavlar yapılmaktadır. Bu sınavlarda öğrencinin göstermiş olduğu başarı düzeyi ise çocuğun ileriki akademik hayatı ve geleceğine yön vermesi açısından büyük önem taşımaktadır. Ülkemizde bu tür sınavlar bireylerin geleceği için bu kadar önemli iken, sınavların bireylerin

ileriki akademik sınavlardaki başarısı üzerindeki yordayıcılık gücünün belirlenmesi amacıyla TEOG puanlarını yordama gücü incelenmiştir.

### Araştırmanın Amacı

Bu araştırmanın amacı sekizinci sınıfta TEOG kapsamındaki derslerden alınan yazılı sınav puanlarının TEOG puanlarını yordayıp yordamadığını, yorduyorsa ne derece yordadığını belirlemektir.

### YÖNTEM

#### Araştırmanın Modeli

Ortaokul öğrencilerinin yazılı sınav puanlarının TEOG puanlarını ne derece yordayıp yordamadığını belirlemeye yönelik olan bu çalışmada ilişkisel tarama modeli kullanılmıştır. İlişkisel tarama modelleri, iki ve daha çok sayıdaki değişken arasında birlikte değişim varlığını ve/veya derecesini belirlemeyi amaçlayan araştırma modelleridir (Karasar, 2005).

#### Çalışma Grubu

Araştırmanın verileri Adıyaman il merkezinde 7 ortaokulda öğrenim gören 1035 sekizinci sınıf öğrencisine ait kayıtlardan elde edilmiştir. Çalışma grubunun okullara göre dağılımı Tablo 1’de gösterilmiştir.

**Tablo 1.** Çalışma grubunun okullara göre dağılımı

Okullar	Frekans (N)	%
1	257	24.8
2	137	13.2
3	134	12.9
4	104	10.0
5	226	21.8
6	121	11.7
7	56	5.4
Toplam	1035	100

### Verilerin Toplanması

Araştırma verilerinin toplanması için Adıyaman il merkezindeki ortaokul sekizinci sınıfta öğrenim gören öğrencilerin e-okul sisteminden altı dersten almış olduğu yazılı sınav puanları ile TEOG sınavının birinci aşamasında alınan puanlar çalışmaya dahil edilmiştir. TEOG sınavı açıklandıktan sonraki yazılı ve sözlü sınavlardan alınan puanlar araştırma dışında tutulmuştur. TEOG sınavından alınan puanlar, dönem içinde üç yazılı sınavı olan dersler için ikinci yazılı, iki yazılı sınavı olan dersler için de birinci sınav yerine geçmektedir (Tablo 2).

**Tablo 2.** TEOG sınavının derslere göre sınav yerine geçme durumu

	Türkçe	Matematik	Fen ve Teknoloji	Din Kültürü ve Ahlak Bilgisi	Yabancı Dil	İnkılap Tarihi
Birinci Sınav	Yazılı sınav	Yazılı sınav	Yazılı sınav	TEOG	Yazılı sınav	TEOG
İkinci Sınav	TEOG	TEOG	TEOG	Yazılı sınav	TEOG	Yazılı sınav

### Verilerin Analizi

Sınav puanlarının TEOG puanlarını ne derece yordadığını belirlemek için araştırma verilerinin analizinde regresyon analizi kullanılmıştır.

### BULGULAR

Araştırmaya ilişkin bulgulara aşağıda yer verilmiş olup, elde edilen veriler tablolar halinde sunulmuştur.

**Tablo 3.** Sınav puanı ve TEOG sınav puanlarının ders türüne göre betimsel istatistikleri ve korelasyonları

	Türkçe 1	Türkçe 2	Matematik 1	Matematik 2	Fen Bilimleri 1	Fen Bilimleri 2	Din Kültürü ve Ahlak Bilgisi 1	Din Kültürü ve Ahlak Bilgisi 2	Yabancı Dil 1	Yabancı Dil 2	İnkılap Tarihi ve Atatürkçülük 1	İnkılap Tarihi ve Atatürkçülük 2
Türkçe 1	1											
Türkçe 2	.808*	1										
Matematik 1	.681*	.674*	1									
Matematik 2	.712*	.727*	.806*	1								
Fen Bilimleri 1	.742*	.740*	.744*	.740*	1							
Fen Bilimleri 2	.745*	.791*	.731*	.750*	.808*	1						
Din K. ve A.B. 1	.764*	.790*	.621*	.613*	.705*	.748*	1					
Din K. ve A.B. 2	.698*	.684*	.591*	.582*	.629*	.663*	.733*	1				
Yabancı Dil 1	.711*	.692*	.680*	.695*	.707*	.676*	.603*	.590*	1			
Yabancı Dil 2	.708*	.699*	.656*	.696*	.704*	.692*	.635*	.575*	.806*	1		
İnk. T. ve A. 1	.750*	.770*	.660*	.691*	.720*	.782*	.772*	.644*	.659*	.696*	1	
İnk. T. ve A. 2	.709*	.696*	.671*	.654*	.685*	.728*	.669*	.661*	.650*	.644*	.777*	1
$\bar{x}$	74.16	66.66	63.45	51.75	69.32	65.81	82.27	82.06	69.05	64.81	66.79	69.23
Ss	22.19	22.64	27.68	27.43	23.01	22.53	21.41	18.08	23.62	24.70	24.20	23.51
N	1035	1035	1033	1035	1035	1035	1035	1034	1026	1026	1034	1029

\* p&lt; .01

Tablo 3 incelendiğinde en yüksek korelasyonların Türkçe ve fen bilimleri derslerinin yazılı sınav puanları ile TEOG sınav puanları arasında olduğu (.81), en düşük korelasyonların da din kültürü ve ahlak bilgisi (.73) ve inkılap tarihi ve Atatürkçülük (.77) dersinin sınav puanları ile TEOG sınav puanları arasında olduğu bulunmuştur.

**Tablo 4.** Türkçe sınav puanı ile TEOG sınav puanı regresyon analizi sonuçları

Değişken	B	Standart Hata <sub>B</sub>	$\beta$	t	p
Sabit	5.559	1.448	-	3.838	.000
Türkçe Sınav Puanı	.824	.019	.808	44.032	.000
R=.808	R <sup>2</sup> =.652	F <sub>(1, 1033)</sub> =1938.847	p=.000		

Tablo 4'teki analiz sonuçlarına göre Türkçe dersi sınav puanı ile TEOG puanı arasındaki ilişki miktarının R=.808, R<sup>2</sup>= .652; açıklanan varyansın F(1, 1033)=1938.847 ve anlamlılık düzeyinin p<.001 olduğu görülmektedir. Bu sonuçlara göre, TEOG sınavı Türkçe puanına ilişkin varyansın % 65'inin bu dersin sınavından alınan puanlarla açıklandığı ifade edilebilir.

**Tablo 5.** Matematik sınav puanı ile TEOG sınav puanı regresyon analizi sonuçları

Değişken	B	Standart Hata <sub>B</sub>	$\beta$	t	p
Sabit	1.106	1.263	-	.875	.382
Matematik Sınav Puanı	.799	.018	.806	43.783	.000
R=.806	R <sup>2</sup> =.650	F <sub>(1, 1031)</sub> =1916.927	p=.000		

Tablo 5'teki analiz sonuçlarına göre matematik dersi sınav puanı ile TEOG puanı arasındaki ilişki miktarının R=.806, R<sup>2</sup>= .650; açıklanan varyansın F(1, 1031)=1916.927 ve anlamlılık düzeyinin p<.001 olduğu görülmektedir. Bu sonuçlara göre, TEOG sınavı matematik puanına ilişkin varyansın % 65'inin bu dersin sınavından alınan puanlarla açıklandığı ifade edilebilir.

**Tablo 6.** Fen bilimleri sınav puanı ile TEOG sınav puanı regresyon analizi sonuçları

Değişken	B	Standart Hata <sub>B</sub>	$\beta$	t	p
Sabit	10.961	1.311	-	8.359	.000
Fen Bilimleri Sınav Puanı	.791	.018	.808	44.070	.000
R=.808	R <sup>2</sup> =.653	F <sub>(1, 1033)</sub> =1942.126	p=.000		

Tablo 6'daki analiz sonuçlarına göre fen bilimleri dersi sınav puanı ile TEOG puanı arasındaki ilişki miktarının  $R = .808$ ,  $R^2 = .653$ ; açıklanan varyansın  $F(1, 1033) = 1942.126$  ve anlamlılık düzeyinin  $p < .001$  olduğu görülmektedir. Bu sonuçlara göre, TEOG sınavı fen bilimleri puanına ilişkin varyansın % 65'inin bu dersin sınavından alınan puanlarla açıklandığı ifade edilebilir.

**Tablo 7.** Din kültürü ve ahlak bilgisi sınav puanı ile TEOG sınav puanı regresyon analizi sonuçları

Değişken	B	Standart Hata <sub>B</sub>	$\beta$	t	p
Sabit	31.112	1.520	-	20.463	.000
Din Kültürü ve Ahlak Bilgisi Sınav Puanı	.619	.018	.733	34.627	.000
R=.733	$R^2=.537$	$F(1, 1032)=1199.020$	$p=.000$		

Tablo 7'deki analiz sonuçlarına göre din kültürü ve ahlak bilgisi dersi sınav puanı ile TEOG puanı arasındaki ilişki miktarının  $R = .733$ ,  $R^2 = .537$ ; açıklanan varyansın  $F(1, 1032) = 1199.020$  ve anlamlılık düzeyinin  $p < .001$  olduğu görülmektedir. Bu sonuçlara göre, TEOG sınavı din kültürü ve ahlak bilgisi puanına ilişkin varyansın % 54'ünün bu dersin sınavından alınan puanlarla açıklandığı ifade edilebilir.

**Tablo 8.** Yabancı dil sınav puanı ile TEOG sınav puanı regresyon analizi sonuçları

Değişken	B	Standart Hata <sub>B</sub>	$\beta$	t	p
Sabit	6.594	1.410	-	4.676	.000
Yabancı Dil Sınav Puanı	.843	.019	.806	43.630	.000
R=.806	$R^2=.650$	$F(1, 1024)=1903.617$	$p=.000$		

Tablo 8'deki analiz sonuçlarına göre yabancı dil dersi sınav puanı ile TEOG puanı arasındaki ilişki miktarının  $R = .806$ ,  $R^2 = .650$ ; açıklanan varyansın  $F(1, 1024) = 1903.617$  ve anlamlılık düzeyinin  $p < .001$  olduğu görülmektedir. Bu sonuçlara göre, TEOG sınavı yabancı dil puanına ilişkin varyansın % 65'inin bu dersin sınavından alınan puanlarla açıklandığı ifade edilebilir.

**Tablo 9.** İnkılap tarihi ve Atatürkçülük sınav puanı ile TEOG sınav puanı regresyon analizi sonuçları

Değişken	B	Standart Hata <sub>B</sub>	$\beta$	t	p
Sabit	18.923	1.354	-	13.978	.000
İnkılap Tarihi ve Atatürkçülük Sınav Puanı	.754	.019	.777	39.532	.000
R=.777	$R^2=.603$	$F(1, 1027)=1562.795$	$p=.000$		

Tablo 9'daki analiz sonuçlarına göre inkılap tarihi ve Atatürkçülük dersi sınav puanı ile TEOG puanı arasındaki ilişki miktarının  $R = .777$ ,  $R^2 = .603$ ; açıklanan varyansın  $F(1, 1027) = 1562.795$  ve anlamlılık düzeyinin  $p < .001$  olduğu görülmektedir. Bu sonuçlara göre, TEOG sınavı inkılap tarihi ve Atatürkçülük dersi puanına ilişkin varyansın % 60'ının bu dersin sınavından alınan puanlarla açıklandığı ifade edilebilir.

## TARTIŞMA, SONUÇ ve ÖNERİLER

Ortaokulda öğrenim gören öğrencileri ilgi alanları ve kabiliyetlerine göre mesleğe, iş hayatına ve yükseköğretime hazırlamak olan ortaöğretim kurumlarına dolayısıyla yükseköğretime daha donanımlı ve nitelikli öğrenciler yetiştirmek üzere uzun yıllardan beri ortaöğretime geçiş sınavları yapılmaktadır (Sarier, 2010). Süer'e (2014) göre ülkemizde kaliteli bir gelecek için çaba sarf eden ailelerin ve öğrencilerin yaşamlarında okulda yapılan sınavlar ile merkezi sınavlar önemli bir yere sahiptir. Çünkü sınavlardan alınan puanlara göre öğrencilerin ileriki akademik yaşamlarında öğrenim görecekları lise, hatta üniversitelerde alacakları eğitimin kalitesi de değişmektedir. Bu nedenle yapılan bu çalışmada sekizinci sınıf öğrencilerinin ilgili derslerden (Türkçe, matematik, fen bilimleri, din kültürü ve ahlak bilgisi, yabancı dil, inkılap tarihi ve Atatürkçülük) aldıkları sınav puanlarının, TEOG puanlarını yordama gücü incelenmiştir. Araştırma sonuçları, ortaokul sekizinci sınıf öğrencilerinin TEOG sınav puanları ile yazılı sınav puanları arasında pozitif yönde anlamlı ilişkilerin olduğunu göstermektedir. Regresyon analizi sonuçları incelendiğinde, TEOG sınav puanları ile yazılı sınav puanları arasında yüksek düzeyde ve anlamlı bir ilişki gözlenmiştir.

Araştırma sonucunda, yazılı sınavlardan alınan puanların TEOG sınav puanlarının anlamlı birer yordayıcısı olduğu belirlenmiştir. Elde edilen sonuçlar, Türkçe, matematik, fen bilimleri ve yabancı dil sınavlarından alınan puanların TEOG sınavından alınan puanları yordamada yakın değerlere sahip olduğunu göstermektedir. Ancak din kültürü ve ahlak bilgisi dersi ile inkılap tarihi ve Atatürkçülük derslerinin yazılı sınav puanlarının TEOG sınav puanlarını diğer derslere göre daha düşük düzeyde yordadığı belirlenmiştir. Bu iki dersin birinci yazılı sınavı TEOG sınavından alınan puan olarak kullanılmakta, ikinci sınav öğretmenler tarafından yapılmaktadır.



Dolayısıyla bu durumdan kaynaklı olarak, din kültürü ve ahlak bilgisi dersi ile inkılap tarihi ve Atatürkçülük dersinin yazılı sınavlarında öğretmenlerin yazılı sınav notlarını belirlerken, TEOG sınavından alınan puanlardan etkilendiği düşünülmektedir.

Sekizinci sınıf öğrencilerinin derslerden aldıkları sınav puanlarının, TEOG puanlarını yordama gücünün incelendiği bu araştırma sonuçlarına göre öğrencilerin okullarda yapılan sınavlarda aldıkları yazılı sınav puanları ile TEOG sınavında Türkçe, matematik, fen ve teknoloji, din kültürü ve ahlak bilgisi, yabancı dil ve inkılap tarihi ve Atatürkçülük derslerinden alınan puanların, bu derste alınan puanları yordadığı sonucuna varılmıştır. Elde edilen bu sonuç Parlak ve Tatlıdil'in (2014) de yapmış oldukları çalışmayla benzer bir sonuca sahiptir. Parlak ve Tatlıdil (2014) SBS sınavına giren ilköğretim 8. sınıf öğrencilerinin Türkçe, matematik, fen bilgisi, sosyal bilgiler ve İngilizce derslerinden yıl sonunda aldıkları başarı puanları ile 8. sınıf SBS puanları arasındaki ilişkiyi inceledikleri çalışmanın sonuçlarına göre 8. sınıf SBS deki başarıyı açıklamada en önemli yordayıcı derslerin Türkçe, Fen ve Teknoloji dersleri olduğu sonucuna varılmıştır. Ancak SBS'den önce herhangi bir merkezi sınav sisteminde yer almayan İngilizce dersinin yordama gücü ise daha düşük çıkmıştır. Yapılan bu araştırmadan hareketle şu önerilerde bulunulabilir:

- Bu araştırma okullarda yapılan yazılı sınavlar ile TEOG sınavının uyumluluğu hakkında nicel bir çalışma olup, bu konuda nitel araştırmaların da yapılarak duruma daha farklı bakış açıları kazandırılması sağlanabilir.
- Alanyazında okullarda yapılan yazılı sınavlarının TEOG sınavından alınan ders puanlarını yordayıp yordamadığı hakkında yeterli çalışmaya rastlanmamıştır. Bu nedenle bu konu ile ilgili daha kapsamlı araştırmalar daha sonraki yıllarda tekrarlanarak yapılabilir. Böylelikle TEOG sınav içeriğinin ve sınav uygulama niteliğinin gidişatı hakkında güncel bilgiler elde edilebilir.
- TEOG sınavı ile okulda yapılan sınav sonuçlarının tutarlı olması amacıyla öğrencilere okul sınavlarında verilen notların daha objektif ve adil verilmesi konusunda gerekli önlemler alınabilir.
- Ortaokulda okuyan öğrencilerin öğretim programında bulunan ancak TEOG'da yer almayan derslerdeki başarıları da TEOG kapsamında göz önünde tutulmalıdır.
- TEOG ve benzeri sınavlar ile okullarda yapılan sınavlarla ilgili akademik anlamda yapılan çalışmaların sonuç ve önerileri Milli Eğitim Bakanlığı tarafından ele alınarak ölçme ve değerlendirme işleminin iyileştirilmesi amacıyla kullanılabilir.
- TEOG sınavında çoktan seçmeli soruların yanı sıra öğretim programlarının da öngördüğü öğrencilerin yorumlama ve analitik düşünme beceri düzeylerini belirleyecek açık uçlu sorular sorulabilir. Bu da öğretmen ve öğrencileri süreçte sadece teste bağımlı olmaktan alıkoyacaktır.
- Öğretmenler, öğretim programlarının uygulanması konusunda daha duyarlı davranmalıdır. Bu da öğrencilerin TEOG başarılarına katkı sağlayacaktır.
- Bu konuda daha fazla katılımcıdan oluşan araştırmalar yapılabilir.

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## YERELDE PERSONEL YÖNETİMİNDE HİZMET ÖNCESİ VE HİZMET İÇİ EĞİTİM SORUNSALI

Yrd. Doç. Dr. Ahmet GÜVEN

Gaziosmanpaşa Üniversitesi İİBF Kamu Yönetimi Bölümü, TOKAT

[ahmetguvenn@gmail.com](mailto:ahmetguvenn@gmail.com)

Öğr. Gör. Çağatay ALAN

Gaziosmanpaşa Üniversitesi Almus MYO Hukuk Bölümü, TOKAT

[cagatay.alan@gop.edu.tr](mailto:cagatay.alan@gop.edu.tr)

Deniz GÜVEN

Gaziosmanpaşa Üniversitesi SBE Yüksek Lisans Öğrencisi, TOKAT

[denizguvennn@gmail.com](mailto:denizguvennn@gmail.com)

### ÖZET

Yerel yönetimlerin günümüzde artan öneminin yanı sıra sorunlarının da benzer yönde arttığı görülmektedir. Bu sorunların bir kısmı yapısal/örgütsel bir kısmı ise yönetsel/kişisel sorunlardan kaynaklandığı düşünülmektedir. İnsan unsurunun olduğu yönetsel birimlerde insanlardan kaynaklanan sorunların olması kaçınılmazdır. Yerel yönetimlerde insan kaynağının seçiminden kullanılmasına kadar insan faktörünün dikkatle ele alınması gerekmektedir. İnsanlardan kaynaklanacak sorunların en aza indirilmesi eğitim kalitesinin ön plana çıkarılmasıyla mümkündür. Bu nedenle yerel yönetimlerde çalışacak olan personelin işe alınması ve devamında görev süresi içerisinde alacağı hizmet öncesi ve hizmet içi eğitimin önemi çok büyüktür. Yerel yönetimlerin karşı karşıya kaldığı yönetsel ve kişisel sorunların en aza indirilmesinde bu eğitimlerle amaçlanan hedeflerin ne olduğu ve nasıl ele alındığı bu çalışmanın amacını oluşturmaktadır.

**Anahtar kelimeler:** yerel yönetimler, hizmet içi eğitim, personel yönetimi

### ABSTRACT

#### Question of Pre-Service and in-Service Training in Personnel Management at Local Authorities

Nowadays, it can be clearly seen that as the significance of the local authorities increase, their problems increase as well. It is thought that some of these problems result from structural/orgnasitional problems and some result from administrative/personal ones. It is inevitable to have human-based problems at the local units where people exist. At local authorities it is necessary to handle the human factor carefully from selection of human sources to usage. Keeping the problems that may arise due to human sources at a minumum level can be possible by putting a great deal of emphasis on the quality of training. Therefore, the employment of the personnel who will work at the local authorities and afterwards pre-service and in-service training the personnel will take are of great importance. In minimising the administrative and personal problems that the local authorities face, what the objectives of these trainings and how they are handled comprise the aim of this study.

**Key Words:** local governments, service training, personnel management

### GİRİŞ

Türkiye’de merkezi yönetim karşısında yerel yönetimlerin yetki, görev ve sorumluluk alanında güçlendirilmesine yönelik çok sayıda yasal düzenleme yapılmaya çalışılsa da halen istenilen düzeye ulaşamadığı gözlemlenmektedir. Bununla birlikte yasal olarak yerel yönetimlerin istenilen seviyeye çekilmeye çalışılmasıyla birlikte bu birimlerin örgütsel yapılarının yanında çalışanların niteliği, eleman yetersizlikleri vb. konularda da ciddi sorunlarla karşılaşmaktadır. Yapılan yasal değişikliklerle birlikte yerel yönetimlerin iş yükü artırılırken, bu yükü kaldıracak nitelikli personel temini ve bu personelin eğitimi konusuna aynı öncelik verilememektedir. Yerel yönetimler alt yapı hizmetleri, çevre düzenlemesi, imar planlaması, sosyo-ekonomik faaliyetlerin yapılması ve cenaze hizmetlerinin yerine getirilmesi gibi birçok alanda hizmet gerçekleştirmektedir. Bu denli geniş yelpazede görev alanına sahip yerel birimlerin yerel hizmet sunumunda kullanmaya çalıştığı iş gücünün saptanmasında, yetiştirilmesinde kendilerinden beklenen verimin sağlanmasında oldukça ciddi sorunlarla karşılaşmaktadır. Yerel yönetimlerle ilgili yapılan birçok araştırmada yerel yönetimlerin temel sorunları arasında insan kaynağından kaynaklanan sorunların ön planda yer aldığı görülmektedir.

Bu nedenle hazırlanan bu çalışmada yerel yönetimlerin insan faktöründen kaynaklan sorunların giderilmesinde hizmet öncesi ve hizmet sonrası personel eğitiminin önemi konusuna yer verilecektir. Bu kapsamda Türkiye ‘de yerel yönetimler üzerinde mevcut olana eğitim kanalları ve hizmet içi ve sonrası eğitimin düzeyi konuları ele alınarak bu eğitimin içeriği ve

gerekliliği sorgulanarak, yerel yönetimlerin amaç ve hedeflerine ulaşmada eğitimin rolü ve işlevi örneklendirilerek açıklanmaya çalışılacaktır.

### KAVRAMSAL ÇERÇEVE

Yaşadığımız çağda hızla gelişen bilim, teknoloji ve haberleşme kanalları insanlar üzerinde önemli etkiler ortaya çıkarmaktadır. Bu etkileşim sürecinde insanlığın bilgilerini sürekli güncellemesi hem kendi varlığı hem de toplumsal varlığı için kaçınılmazdır. Bu bağlamda bilgileri güncellemenin en önemli yolunun eğitim olduğu görülmektedir. Eğitim konusunun insanın doğduğu andan ölünceye kadar devam ettiği düşünüldüğünde bu eğitimin insanlık için ne derce önemli olduğu bir kez daha anlaşılmaktadır.

İnsanların yaşamlarının önemli bir kısmını iş hayatında geçirdikleri düşünüldüğünde, iş dünyasında insanların işe başlamadan ve iş esnasında aldıkları eğitimlerin de ayrı bir önemi olduğu söylenebilir. İş yaşamına hazırlık ve iş yaşamı esnasında alınacak eğitimler hem bireylerin verimliliğini artırırken hem de çalıştıkları örgütlerin verimliliği ve etkinliği üzerinde oldukça önemli bir yere sahip olduğu görülmektedir. Bu doğrultuda hizmet öncesi ve hizmet içi eğitim konularının üzerinde durulması gereken önemli konuları oluşturmaktadır.

Hizmet öncesi eğitim, kişilerin meslek hayatlarında yapacakları işlerle ilgili iş öncesi aldıkları temel eğitimi ifade etmektedir. Örneğin tıp doktorlarının tıp eğitimi alması yanında, hâkim olacak personelin hukuk eğitimi alması gibi örnekleri verebiliriz. Bu eğitimlerin bazıları çok teknik olabileceği gibi bazılarının da genel bir eğitimle verilmeye çalışıldığını görmemiz mümkündür.

Hizmet içi eğitim denildiğinde ise; hizmet sunumunda, hizmet verirken etkin ve verimli olmak, hizmet gerçekleştiğinde meydana gelebilecek kazaları azaltmak, maliyetleri düşürmek ve çalışanlara iş hayatı boyunca davranış, bilgi ve davranış düzeyini yükseltici programlı eğitim faaliyetlerinin verilmesini kapsadığı görülmektedir(meb.gov.tr, 2015).

Yine 657 Sayılı Devlet Memurları Kanununda 214. md. hizmet içi eğitimden “Devlet memurlarının yetişmelerini sağlamak, verimliliğini artırmak ve daha ileriki görevlere hazırlamak amacıyla uygulanacak hizmet içi eğitim...” şeklinde söz edildiği görülmektedir. Bu maddeden de anlaşılacağı üzere kurumlar kendi çalışanlarının verimliliğini artırabilmek ve kurumun gelecekteki hedeflerine hizmet edecek şekilde çalışanlarını çeşitli eğitimlere tabi tutacaklarından söz edilmektedir. Hizmet içi eğitimin görülen kamu hizmetiyle yakın ilişkisinin bulunması olmazsa olmaz bir unsurunu oluşturmaktadır(Akgüner,2014:125). 657 sayılı yasanın 217. md de hizmet içi eğitim etkinliğine yön vermek için Devlet Memurları Eğitim Genel Planının yapılmasını öngörmektedir. Bu plana göre hizmet içi eğitim bir bütün olarak hizmet içi ve hizmet öncesi diye ikiye ayrılarak kabul edilmektedir. Planın kamuda nitelikli ve donanımlı eleman yetiştirilebilmesi için önce eğitim ve öğretim kurumlarının kamunun gereksinimlerine yanıt verecek şekilde eleman yetiştirmesi gerektiğini sonrada kamu kurumları ile öğretim kurumları arasında yakın bir ilişki kurulmasının öneminden bahsettiği ifade edilmektedir (Akgüner,2014:127).

Hizmet içi eğitimin üç temel hedefinden bahsedilebilir (Tortop,2005:197) Bunlar;

- Personele yapacağı işi daha iyi yapması için gerekli bilgi ve beceri kazandırmak ve geliştirmek
- Çalışanın çalıştığı kurum ve işe karşı tutumunu pozitif yönde değiştirmek
- Personelin daha üst bir noktaya geçebilmesi için gerekli donanıma sahip olmak(Bilgin vd., 2007: 12).

Şeklinde ifade edilebilir. Bunların yanında hizmet içi eğitimin amaçlarının daha detaylı bir şekilde açıklayacak olursak;

- Kamu çalışanlarının verimliliğini artırmak(Canman, 2000: 97)
- Kuruma hareketlilik ve saygınlık sağlamak,
- Kurumun yapısını dışarıdan gelecek değişimlere yönelik daha bir esnek hale getirmek,
- Personeller ve bölümler arasındaki iletişimi güçlendirmek,
- Performansa dayalı çalışanları tetikleyici unsurları belirlemek,
- İş aksaklıklarını giderip eksikleri yerine getirmek, (Canman, 2000:98)
- Personeli üst kadrolar için teşvik etmek, (Bilgin vd., 2007: 12)
- İşe geç gitme ve işe gitmemeyi azaltmak,

Şeklinde sıralamak mümkündür.

Türkiye’de kamu hizmetlerinde istihdam edilecek personelin belirlenmesinde iki eğitim kaynağının önemi rolü olduğu görülmektedir. Bunlardan birincisi genel eğitim ve öğretim kurumları olarak bilinen; ilk, orta, lise ve yüksek öğrenim kurumlarıdır ve ikincisi ise, devlet elemanı yetiştiren meslek okullarıdır(Akgüner,2014:127). Türkiye’de genel eğitimin 12 yıla çıkarılarak zorunlu hale getirildiği düşünüldüğünde, üniversite ve meslek okullarının verecekleri eğitimin daha da önemli bir hale geldiği görülecektir.

## YEREL YÖNETİMLER VE MESLEKİ EĞİTİM

Yerel yönetimler, coğrafi alanda üzerinde yerelde yaşayan insanların ortak ihtiyaçlarını gidermek amacıyla oluşturulan, yetki ve görevleri kanunlarla belirlenmiş, bütçesi ve özel gelirleri olan ve kendine ait örgüt yapısı ve personeli bulunan(Urhan, 85: 2008), kamu tüzel kişiliğine sahip demokratik kuruluşlardır(Çöpoğlu, 2015: 167). Aynı zamanda yerel yönetimler, yönetme yetkisinin ülkenin belli bir bölgesinde yaşayanların kendileri tarafından seçtiği organlar tarafından yerine getirilmesini ifade etmektedir(Yakar, 2003: 34). Genellikle “yerinden yönetim” ve “âdemi merkeziyet” kavramları yerel yönetimleri ifade etmek için kullanılan kavramlardır(Uzun ve Kurt, 2002: 76).

Yerel yönetimler Türkiye’ de Anayasal kurumlardır. Anayasanın 123. Maddesinde “idarenin kuruluş ve görevleri merkezden yönetim ve yerinden yönetim esaslarına dayanır” ve 127. maddesinde “Mahalli idareler; il, belediye ve köy halkının mahalli, müşterek ihtiyaçlarını karşılamak üzere kuruluş esasları kanunla belirtilen ve karar organları genel kanunda gösterilen, seçmenler tarafından seçilerek oluşturulan kamu tüzel kişileridir.” hükmü ile varlıkları yasal bir kimlikle belirlenmiş ve güvence altına alınmıştır(Yüceyılmaz vd., 2015: 42).

Yerel yönetimlerde Osmanlı dönemini başlangıç noktası olarak kabul ettiğimizde ülkemizde yerel yönetim anlayışının sorunlarla başladığını(Aktel ve Memişoğlu, 2005: 22), ve bu sorunların devam ettiğini ifade görmemiz mümkündür. Bu sorunların kaynağında eğitim faktörünün olduğunu söylemek mümkündür.

Ülkemizde yerel düzeyde örgütlenen yerel yönetim birimlerinde çalışan personelin eğitimleri düşünüldüğünde hem genel eğitim kanallarının hem de mesleki eğitim kanallarının araştırılması ve günümüzde personel kaynaklı sorunların kökenine inilmesi konusunda önemle üzerinde durulması gereken konuların başında geldiği görülmektedir.

Yerel Yönetim bünyesinde bulunan personellerin kendilerine verilen görevleri yerine getirebilmeleri için bilgi ve beceri açısından yetiştirilmiş ve aynı zamanda insan kaynağı açısından donanımlı olması gerekir. Bu bilgi ve beceriyi kazanma konusunda hizmet öncesi eğitim ve hizmet içi eğitim konuları üzerinde ağırlıklı durulması gerekmektedir. Hizmet içi eğitim, yerel yönetimler içerisindeki personelin bilgi ve beceriye sahip olmanın yanında, kendisini geliştirme ve kurum içerisinde daha iyi bir noktaya gelmesini amaçlayan bir dönemdir(Bilgin vd., 2007: 11). Nitelikli hizmet içi eğitim yereldeki personelin kariyer geliştirmesinde fayda sağlayacaktır(Canman, 1992: 8).

Ülkemizde yerel yönetimler 1982 Anayasasında da gösterildiği gibi üç kümede sınıflandırılmaktadır(Güven,2014:51).Yerel yönetimler denildiğinde köyler, belediyeler ve il özel idareleri şeklinde hukuki bir ayrım yapılsa da, toplum tarafından belediyelerin bir adım daha ön planda olduğu görülmektedir. Belediyelerde genel olarak üç çeşit personel sistemi uygulanmaktadır. İlk olarak ifade edeceğimiz “ayrı personel” sisteminde belediyelerin personel yönetimi merkezi idareden tamamen ayrı olarak yürütülmektedir. İkincisi olan “tek personel” sistemindeki personel merkezi idare personelinin farkı yoktur, bu sistemde merkezi idare istediği personeli bir kamu kurum ya da kuruluşuna görevlendirebilir. Üçüncüsü ise “kamu personel” sistemi her iki sisteminin arasında yer alıp, çalışanları belediyede istihdam etmektedir(Eken ve Şen, 2004: 609). Ayrıca belediyelerde sözleşmeli personelden daha çok geçici işçinin de istihdam edildiği ifade edilebilir(Aslan,2005: 412).Bunun yanı sıra il özel yönetimlerinde de benzer bir durumdan bahsedilmesi mümkün iken köy yönetimlerinin personel konusunda en sıkıntılı yerel birimler arasında yer almaktadır.

## YEREL YÖNETİMLERDE HİZMET ÖNCESİ VE HİZMET İÇİ EĞİTİMİN GEREKLİLİĞİ

Günümüzde insan hayatını etkileyen unsurlar her geçen gün artmaktadır. Bunlardan en önemlileri teknolojik, ekonomik ve sosyal gelişmelerin oluşturduklarıdır. İnsanın içinde bulunduğu topluma ayak uydurabilmesi için öğretim kurumlarından gerekli bilgi ve becerileri kazanması gerekir(Taymaz, 1981: 7).

Ülkemizde personel yönetiminin yaşadığı güçlük ve aksaklıklarının nedeni sistemimizin siyasal, sosyal ve ekonomik alanlarda gerçekleşen değişim ve gelişime ayak uyduramamasıdır(Altan, 2005: 147). Başka bir açıdan baktığımızda merkezi yönetim yerel sorunları çözmede etkisiz ve hantal bir noktaya gelmiştir(Toksöz vd.,2009: 8).

Yerel yönetim hizmetlerinde personel ihtiyacı gereği insan kaynaklarının geliştirilmesi ve zenginleştirilmesi önemli bir konudur(Esen, 2010: 18). Türkiye’ de yerel yönetimlerde gerçekleşecek hizmetler nitelikli insan gücüne bağlıdır. Nitelikli insan gücünün oluşturulması için insan kaynaklarının geliştirilmesi gerekir ve gelişen insan kaynaklarıyla hizmet içi eğitime olan talep artacağı görülecektir(Bilgin vd., 2007: 11). Aynı zamanda yerel yönetimlerde performans denetimi odaklı çalışmalara önem verilmelidir(Köseoğlu, 2008:24). Yerel yönetimlerde kaliteli hizmet alması için performans yönetiminin başarısı artırılmalıdır (Çukurçayır ve Eroğlu, 2004: 157).

Avrupa Yerel Özerklik Şartı 6. maddesinin ikinci fıkrasında da ifade edildiği gibi, yerel yönetimlerde görevlilerin çalışma koşulları ve liyakat ve yeteneğe göre yüksek nitelikli eleman istihdamına imkan verecek ölçüde olmalıdır; bu ilkeye uygun şekilde, yerel yönetim çalışanlarının bu amaçla yeterli eğitim olanaklarıyla, ücret ve mesleki ilerleme imkanlarıyla desteklenmesi gerekmektedir(Esen, 2010: 21).

Yerel yönetimlerde yeterli ve bilgili personel çalıştırılması bakımından; yükseltme, değerlendirme, işe alma ve seçme gibi konularda modern insan kaynakları yönetimine dair uygulamaların yetersiz kaldığı bilinmektedir(Yalçındağ, 1995: 36).

Personel hizmete başlamadan önce o işte çalışmak için ne kadar çok bilgi sahibi olması lazım ise bu durumu işe alınmasından itibaren devam ettirmelidir. Bu amaçla da hizmet etmeye başladıktan sonra yerine getirmesi gereken görevler için günceli takip etmeli ve kendisini yenilemelidir(Bilgin vd., 2007: 13). Bu doğrultuda yerel yönetimlerde personelin değişen teşkilat yapısına, teknolojiye ve mevzuata uygun, örgütsel sorunların giderilmesi yönelik yetiştirilmesi gerekmektedir(Lamba vd., 2015: 111).

### TÜRKİYE’DE YEREL YÖNETİMLERDE HİZMET ÖNCESİ VE HİZMET İÇİ EĞİTİM UYGULAMALARI

Yerel yönetimler için üniversitelerde meslek yüksekokullarının yerel yönetimler ön lisans programı bulunmaktadır. İki yıllık eğitim süreci ile birlikte yerel yönetimlere meslek elemanı yetiştirmektedir. Yerel yönetimler bölümü öğrencilerinin stajları sonucunda yapabilecekleri işlemler şöyle ifade edilebilmektedir:

- Yerel yönetim bünyesindeki kentsel, siyasal ve sosyo-ekonomik konuları tanımlayabilmesi,
- Yerel yönetim idarecilerin mali, teknik ve yöresel alanda aldıkları kararların sürecini organize edebilmesi
- Yerel Yönetimlerde sosyo-kültürel çalışmaları organize edebilmesi
- Kamu kurumlarının aralarında gerçekleşen yazışmaları düzenleme, dosyalama ve arşivleme işlemlerini yapabilmesi
- Yerel yönetimlerde vatandaşların dilekçelerini ilgili birime iletebilmesinin yönlendirilmesi
- Çevre sorunları, kentleşme süreci ve sosyal sorumluluk konularında incelemelerde bulunabilmesi
- Yerel yönetimlerin mali kaynaklarını gelirlerini, harcamalarını ve ihale süreçlerini takip edebilmesi olarak ifade edebiliriz. (Bostancı, 2011: 57).

Ülkemizde mahalli idareler alanında mesleki eğitim veren lise ve dengi okullardan mezun olan ya da diğer bölümlerden meslek yüksek okullarını kazanana ve bu bölümlerde okuyan öğrencilerin ösym verilerine göre son yıllardaki dağılımı aşağıdaki tabloda verilmiştir.

**Tablo 1: Yerel Yönetim Ön lisans Programı Öğrenci Sayısı**

Yıllar	Öğrenci sayıları	Yeni kayıt	Toplam Mezun
2008-2009	1.685	3.539	1.412
2009-2010	1.933	3.899	1.381
2010-2011	2.217	4.510	1.459
2011-2012	2.793	5.699	1.760
2012-2013	3.601	7.390	....
2013-2014	...	4295	....
2014-2015	...	4637	....
<b>Toplam</b>	<b>12229</b>	<b>33966</b>	<b>6012</b>

**Kaynak:** [www.osym.gov.tr](http://www.osym.gov.tr)

Tablo1 İncelendiğinde sadece yerel yönetimler bölümü adı altında bir araya gelen öğrenci sayısının toplamda 5000 civarında olduğu görülmektedir. Bunlara ilave olarak 4 yıllık benzer programları da hesaba katacak olursak önemli sayıda öğrencinin bu alanlarda eğitim gördüğü görülecektir. Bu olumlu bir gelişmedir. ancak ülkemizde yerel düzeyde çalışan personelin eğitim geçmişi incelendiğinde çok azının bu ve benzeri programlardan mezun olmuş olması ayrı bir handikabı yaratmaktadır.

Ancak buna rağmen yerel düzeyde çalışmayı planlayan kişilerin, meslek liselerinin “Mahalli İdareler” bölümünden mezun olanlar “Yerel Yönetimler” ön lisans ya da kamu yönetimi gibi lisans programlarına daha sonra ilgili alanlarda mastır ve doktora programlarına giderek mesleki eğitimlerini geliştirmeleri daha kaliteli bir yerel yönetim personelinin yetiştirilmesinde meslek öncesi eğitim alanında önemli katkılar sağlayacağı düşünülmektedir.

Yerel yönetimlerde fiili olarak çalışan personelin eğitim durumuna bakıldığında ise daha farklı bir durumla karşı karşıya kalınmaktadır. İster daha önce mesleki eğitim almış olsun ister almasın, fiili olarak yerel yönetim birimlerinde çalışan personeller için hizmet içi eğitimlerle personellerin mesleki deneyimleri güçlendirilmeye çalışılmaktadır. Bu kapsamda ülkemizde gerek kurum içi gerek kurum dışı birçok birimin hizmet içi eğitim verdiği görülmektedir.

Türkiye’de yerel yönetimlerde çalışan kamu çalışanlarına verilecek hizmet içi eğitimde yasal durum gereği, şu üç amaca yönelik olarak eğitim verildiği görülmektedir(Bilgin vd.,2007:29).

- Aday personelin yetişmesini sağlamak (eşik eğitimi),
- Asıl personelin verimliliğini artırmak (hizmet içi eğitim),
- Personeli üst görevlere hazırlamak (görevde yükselme eğitimi).

### **Yerel Yönetimlerde Hizmet İçi Eğitim Veren Kurum ve Kuruluşlar**

Türkiye’de belediyeler ve diğer yerel yönetimler için hizmet içi eğitim programları hazırlayan ve uygulayan merkezi bir kurum bulunmamakta, eğitim faaliyeti birçok kurum ve kuruluş tarafından gerçekleştirilmektedir. Belediyelere hizmet içi eğitim programı sunan kurumları(Zengin, 2013:125) şu şekilde sıralamak mümkündür(Bilgin vd.,2007:32)

#### ***İçişleri Bakanlığı'nın Planladığı ve Yürüttüğü Zorunlu Programlar***

Diğer bakanlıkların, kamu kurum veya kuruluşlarının eğitim programları: Başbakanlık Devlet Personel Dairesi Başkanlığı, Başbakanlık İdareyi Geliştirme Başkanlığı, Bayındırlık ve İskan Bakanlığı, Kültür ve Turizm Bakanlığı, Milli Eğitim Bakanlığı, Sağlık Bakanlığı, Çevre ve Orman Bakanlığı, Enerji ve Tabii Kaynaklar Bakanlığı, Sanayi ve Ticaret Bakanlığı, Tarım Bakanlığı ve Ulaştırma Bakanlığı, İller Bankası Genel Müdürlüğü, Türkiye İş Kurumu Genel Müdürlüğü’nün programları,

- Belediyelerin kendi bünyelerinde düzenlediği programlar,
- Gönüllü kuruluşlar, sivil toplum örgütleri, dernekler, meslek odalarının yürütmüş olduğu eğitim

programları,

#### ***Türkiye ve Orta Doğu Amme İdaresi Enstitüsü (TODAİE)***

Kurumun amacı, kamu yönetiminin modern yaklaşımlar ve düşüncelere dayalı gelişmesini ve kamu görevlilerinin uzmanlaşmalarını gerçekleştirmektir. TODAİE yerel yönetimlerde çalışanlarına yönelik hizmet içi eğitimleri “Yerel Yönetimler Merkez-YERYÖM” birimiyle gerçekleştirmektedir. 1989 da kurulan bu merkez Yerel Yönetimler alanında şu hizmet içi eğitimleri vermektedir:

Belediye başkanları belediye yönetimi, yerel yönetimlerde imar hizmetleri ve mevzuatı, yerel yönetimler ve Avrupa Birliği, yerel yönetimlerde proje yönetimi, yerel yönetimlerde norm kadro, yerel yönetimlerde muhasebe işleri, yerel yönetimlerde analitik bütçe, yerel yönetimlerde tahakkuk esaslı muhasebe, yerel yönetimlerde insan kaynakları yönetimi, yerel yönetimlerde açık ve yeşil alan yönetimi, yerel yönetimlerde stratejik planlama ve performans, yerel yönetimlerde halkla ilişkiler, yerel yönetimlerde protokol ve resmi yazışma, belediyelerde zabıta hizmetleri, yerel yönetimlerde sosyal hizmetler, yerel yönetimlerde coğrafi ve kent bilgi sistemleri, yerel yönetimlerde çevre yönetimi ve mevzuatı, yerel yönetimlerde afet yönetimi, yerel yönetimlerde e-belediye e-imza ve bilgi teknolojileri eğitimleri gibi yerel yönetimlerde bir çok konuda hizmet içi eğitimi vermektedir.(Zengin, 2013:125)

#### ***Mahalli İdareler Araştırma ve Geliştirme Merkezi (Miargem)***

Yerel yönetimler için gerçekleşen hizmet içi eğitimler, sadece bu alanda görev yapan personele yönelik olarak yürütülmektedir. Katılımcıların aynı kurumdaki olmasıyla kurumsal işleyişin değerlendirilmesine fırsat tanınması ve konu üzerinde daha fazla odaklanılmasına katkı sağlamaktadır. Merkezde belediye kanunundan, il özel idaresi kanununa, norm kadro ve görevde yükselme uygulamalarından, sözleşmeli personel istihdamına kadar birçok alanda ayrıntılı olarak hizmet içi eğitim verilmektedir. Ayrıca toplantı, panel, açık oturum, konferans, seminer, forum ile sergi düzenlemektedir. Üyelerinin daha iyi meslek bilgisi ve deneyimi olması için mahalli idarecilik ve yerel kalkınma anlayışının geliştirilmesi ve yerleştirilmesine yönelik geziler düzenler; bülten, dergi, gazete ve kitaplar ile bu amaca hizmet eden bir merkezdir(miargem.org.tr, 2015).

### **SONUÇ**

Yerel yönetimler halkın beklentilerine, anında ve yerinde cevap arayan, bu misyonu kendine görev kabul eden kurumların başında gelmektedir. Bu amaca hizmet etmek için bünyesinde çok sayıda insanı istihdam etmesi gerekmektedir. Yerel

yönetimlerde çalışacak olan personelin seçimi, iş esnasında edineceği deneyim ve eğitimler çalışma hayatlarında yerel hedeflerin etkili şekilde gerçekleşmesinde önemli bir unsur oluşturmaktadır. Yerel yönetim çalışanlarının yetiştirilmesi ülkemizde meslek liseleri, meslek yüksek okulları ve dört yıllık fakültelerin lisans ve doktora programları ile şekillenmektedir. Bunun yanında kurum içinde ve kurumlar arası verilen hizmet içi eğitim faaliyetleri ile son halini almaktadır. Ülkemizde yerel yönetimler üzerinde merkezi yönetimin merkeziyetçi etkisi göz önüne alındığında personelin yetiştirilmesi, atanması, aldığı eğitimin şekli üzerinde belirleyici faktörün merkezi idare olduğu açık bir şekilde görülmektedir. Merkezi yönetimin bu etkisi kadro tahsisi, başta olmak üzere, lise ve üniversitede okuyacak öğrenci sayılarından, bu öğrencilerin istihdamına kadar birçok kararda belirleyici etkinin merkezi yönetimde olduğunu göstermektedir. Yine ülkemizde belirtilen bölümlerden mezun olan yerel çalışanların yerel düzeyde çalışan personel içindeki oranının son derece düşük olması da ayrı bir sorun kaynağıdır. Bu sorunun giderilmesi amacıyla kurumların başvurduğu hizmet içi eğitim faaliyetlerinin kapsamı ve içeriği ülkemizde hizmet içi eğitime verilen değer ve çalışanların bakışı da dikkate alındığında beklenen amaca ve başarıya ulaşamadığı görülmektedir. Eğitim konusunun tartışılmaz önemi karşısında yerel yönetim çalışanlarının mesleki eğitimi ve hizmet içi eğitimleri konusunda kapsayıcı orta ve uzun vadeye hizmet eden adımların atılması hem çalışan profilinin güçlü olmasına hem de yerel yönetimlerden halkın beklentilerine daha sağlıklı cevap verilmesine katkı sağlayacağı düşünülmektedir.

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## **BİLİŞİM TEKNOLOJİLERİ ÖĞRETMEN ADAYLARININ OKUMA DAVRANIŞLARININ GÖZ İZLEME TEKNİĞİ İLE İNCELENMESİ**

**Selçuk HÜNERLİ**

İstanbul Üniversitesi, Hasan Ali Yücel Eğitim Fakültesi,  
Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü  
shunerli@gmail.com

**İrfan ŞİMŞEK**

İstanbul Üniversitesi, Hasan Ali Yücel Eğitim Fakültesi,  
Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü  
irfan@istanbul.edu.tr

Okuma davranışı, bireylerin zihinsel ve toplumsal gelişimlerine çok yönlü katkıda bulunması işlevini, yaşanan hızlı toplumsal değişim sürecinde de sürdürmektedir. Ancak, son dönemlerde Bilişim Teknolojileri (BT) öğretmen adaylarının bilgisayar kullanım oranlarının fazla olması sebebi ile, onların okuma davranışlarının ve okuma için seçmiş oldukları cihazların değiştiği görülmeye başlanmıştır. Olumlu ya da olumsuz yönde olabilecek bu etkinin belirlenmesi ve bu yönde çözümler üretilmesi büyük önem taşımaktadır.

Bu çalışma, BT öğretmen adaylarının okuma ilgi ve davranışlarının hangi düzeyde geliştiğini araştırmak, gelişen bilgi teknolojilerinin öğretmen adaylarındaki okuma davranışlarını ne derece etkilediğini ve değiştirdiğini gözlemlemek amacıyla göz izleme tekniği kullanılarak araştırmak amacı ile yapılmıştır. Aynı zamanda öğretmen adaylarının televizyon izleme ve bilgisayar kullanmalarının, onların okuma davranışları üzerine etkisini ne derece değiştirdiği de gözlemlenecektir.

Araştırmada her sınıftan 10 öğrenci olmak üzere toplam 40 BT öğretmen adayı örneklem olarak seçilmiştir. Araştırma süresince, deneyler ve analizler İstanbul Üniversitesi, Açık ve Uzaktan Eğitim Fakültesi'nde hizmet vermekte olan İnsan-Bilgisayar Etkileşim Laboratuvarı'nda gerçekleştirilmiştir. Verilerin kayıt edilmesi esnasında, göz ve fare hareketlerini gösteren ekran kayıtları alınmıştır. Verilerin analizinde, kılavuzlanmış ilgi alanlarında gözün odaklanma sayısı, bakış sırası ve gözün durma süresi, bütünde odaklanma sayısı, ısı haritaları ve gözün tarama yolu değerlerine bakılmıştır.

**Anahtar Kelimeler:** İnsan-Bilgisayar Etkileşimi, göz izleme, okuma davranışı

## **GEOMETRİK YAPILARDAN CEBİRSEL DENKLEMLERE BİR YOLCULUK: ELİPS ÖRNEĞİ**

Doç. Dr. Aytaç KURTULUŞ  
Eskişehir Osmangazi Üniversitesi, Eğitim Fakültesi  
agunaydi@ogu.edu.tr

Doç. Dr. Tuba ADA  
Anadolu Üniversitesi, Eğitim Fakültesi  
tyuzugul@anadolu.edu.tr

### **ÖZET**

Geometrik yer belirli şartları sağlayan geometrik noktalar kümesidir. Bu noktalar kümesi şeklin geometrik yapısını oluşturur. Geometrik yapıların özelliklerini belirlemek için denklemler kullanılır. Bunun için dik koordinat sistemi kullanılarak düzlemdeki her bir nokta koordinatlanarak geometrik yapıları oluşturan noktaların koordinatlarını belirlemek gerekir. Bu şekilde geometrik şekiller cebirsel denklemler ile karakterize edilebilir. Konik kesitlerinden biri olarak tanımlanan elipsin geometrik yeri ise iki noktaya uzaklıkları toplamı eşit olan noktalar kümesi olarak tanımlanır. Buna göre noktaların oluşturduğu geometrik şekil bellidir. Bu çalışmada analitik geometri derslerinde elipsin geometrik yapısına karşılık gelen cebirsel denklemi bulmayı öğrenen Öğretmen adaylarından farklı pozisyonlardaki elipsleri içeren yapılara karşılık gelen cebirsel temsillerin bulunması istenmiştir. Bu sayede öğretmen adaylarının uygulama ve analiz adımlarındaki başarılarının belirlenmesi amaçlanmıştır. Bulgular, öğretmen adaylarının verilen geometrik şekillerdeki elipslerin birbirine göre konumlarını dikkate alarak uygun bir koordinat sistemi kullanmada farklı stratejiler belirlediğini ortaya çıkarmıştır. Bu koordinat sistemlerinde geometrik temsillere karşılık gelen özel noktalar seçerek geometrik şekilde verilen farklı yapıların cebirsel denklemlerini bulmada başarılı olanların yanında uygun koordinat sistemi belirleyemeyenlerin cebirsel denklemleri bulmada hatalar yaptıkları ortaya çıkmıştır.

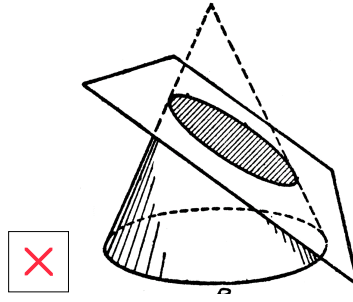
### **A JOURNEY FROM THE GEOMETRICAL STRUCTURE TO ALGEBRAIC EQUATIONS: ELLIPSES EXAMPLE**

### **ABSTRACT**

In geometry, loci are a set of geometric points whose location satisfies specified conditions. These points consist of a geometric structure of the shape. Equations used to determine the properties of geometric structure. That each point in the plane using the Cartesian coordinates to determine the coordinates of points defining the geometric structures. This form of geometric shapes can be characterized by algebraic equations. Ellipse that results from the intersection of a cone by a plane is defined as a curve on a plane that surrounds two focal points such that the sum of the distances to the two focal points is constant for every point on the curve. According to this, the geometric shape formed by point is known. In analytic geometry course, mathematics teachers candidates learn to find the algebraic equations corresponding to the geometric structure of the ellipse. In this study, teacher candidates has been requested to find algebraic representation corresponding to structures containing ellipses in different positions. Thus, it aimed to determine the success of teacher candidates in the application and analysis steps. Results have revealed that the teacher candidates used different strategies choosing an appropriate coordinate system to determine geometric shapes. In this coordinate system by selecting specific points corresponding geometric representation given in geometric shapes have been successful in finding the different structures of algebraic equations. Some candidates who can not determine the appropriate coordinate system made some mistakes in finding algebraic equations.

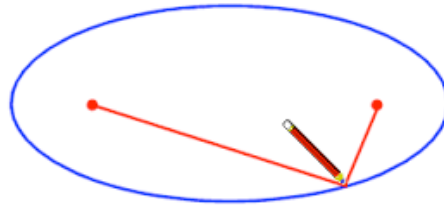
### **GİRİŞ**

Geometrik yer belirli şartları sağlayan geometrik noktalar kümesidir. Bu noktalar kümesi şeklin geometrik yapısını oluşturur. Geometrik yapıların özelliklerini belirlemek için denklemler kullanılır. Bunun için dik koordinat sistemi kullanılarak düzlemdeki her bir nokta koordinatlanarak geometrik yapıları oluşturan noktaların koordinatlarını belirlemek gerekir. Bu şekilde geometrik şekiller cebirsel denklemler ile karakterize edilebilir. Konik kesitlerinden biri olarak tanımlanan elips örneği Şekil 1 de verilmiştir.



Şekil 1. Konik kesitlerinden elips örneği

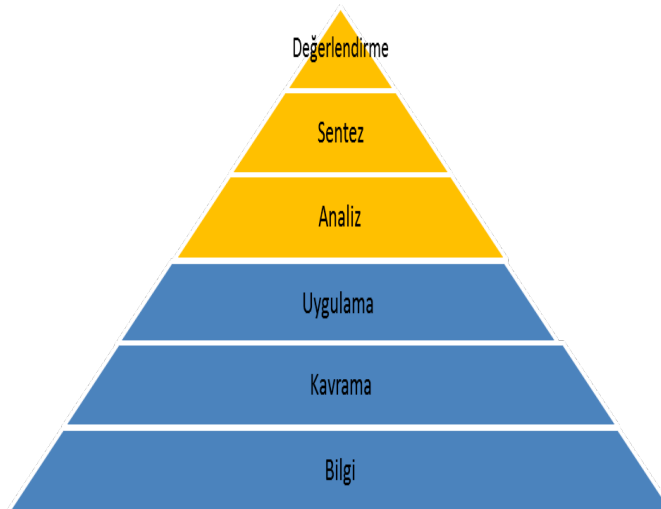
Elipsin geometrik yeri ise iki noktaya uzaklıkları toplamı eşit olan noktalar kümesi olarak tanımlanır (Riddle, 1996). Buna göre noktaların oluşturduğu geometrik şekil bellidir (Şekil 2).



Şekil 2. Elipsin geometrik yeri

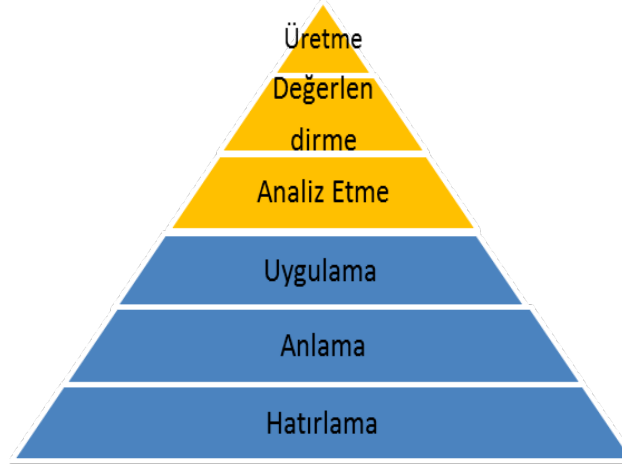
Bu çalışmada analitik geometri derslerinde elipsin geometrik yapısına karşılık gelen cebirsel denklemi bulmayı öğrenen matematik öğretmen adaylarından farklı pozisyonlardaki elipsleri içeren yapılara karşılık gelen cebirsel temsillerin bulunması istenmiştir. Bu sayede öğretmen adaylarının uygulama ve analiz adımlarındaki başarılarının belirlenmesi amaçlanmıştır.

Her derste olduğu gibi matematik derslerinde de kazanımların bilişsel süreçte gerçekleşme düzeyinin belirlenmesi önemlidir. Bloom 1956 yılında bilişsel öğrenme alanına ilişkin geliştirdiği taksonomide bilişsel öğrenme basamaklarını tek boyutta Bilgi, Kavrama, Uygulama, Analiz, Sentez ve Değerlendirme olarak belirlemiştir (Bloom, 1956). Şekil 3 te Bloom Taksonomisinin adımları verilmiş olup ilk üçü olan Bilgi, Kavrama ve Uygulama temel beceriler iken Analiz, Sentez ve Değerlendirme üst düzey düşünme becerileri olarak tanımlanmaktadır.



Şekil 3. Bloom Taksonomisi Basamakları

Eğitimdeki yeni anlayışlar doğrultusunda Bloom taksonomisi yenilenmiştir (Anderson, Kratwohl, 2001). Yeni taksonomide bilişsel öğrenme alanı bilgi ve bilişsel süreç olmak üzere iki boyutlu ele alınmıştır. Burada bilgi boyutu hedeflerin(kazanımların) içeriğini gösterip Olgusal, Kavramsal, İşlemsel ve Biliş üstü bilgi olmak üzere dört bilgi türünden oluşmaktadır. Diğer yandan bilişsel süreç boyutunda basamaklarda isim yerine fiil biçiminde kullanılmıştır. Ayrıca bu boyutta orijinal taksonomide son iki basamakta yer alan sentez ve değerlendirmede sentez basamağının değerlendirmeyi içerdiğinden bu iki basamağın sırası değişmiştir(Amer, 2006). Bu bağlamda orijinal taksonomideki Bilgi, Kavrama, Uygulama, Analiz, Sentez, ve Değerlendirme şeklinde belirlenen altı basamak, fiil formunda sırasıyla Hatırlamak(remember), Anlamak(Understand), Analiz etmek( analyze), Değerlendirmek(evaluate) ve Üretmek(create) olarak yeniden adlandırılmıştır(Arı, 2011; Yurdabakan, 2012; Birgin, 2016). Bu basamaklarda ilk üçü olan Hatırlamak, Anlama, ve Uygulamak temel beceriler iken Analiz etmek, Değerlendirmek ve Üretmek üst düzey düşünme becerileri olarak tanımlanmaktadır (şekil 4).



Şekil 4. Yenilenen( revize edilmiş) Bloom Taksonomisi basamakları

Yenilenen taksonominin üst düzey düşünme becerilerini ortaya çıkarması açısından önemli bir ölçme değerlendirme aracı olduğu söylenebilir (Birgin, 2016).

Bu çalışmanın amacı, matematik öğretmen adaylarının bilişsel süreç boyutunun temel basamaklarından uygulama ve üst düzey basamaklardan analiz, değerlendirme ve üretme basamaklarında elips konusundaki bilgilerini nasıl kullandıklarını incelemektir.

#### YÖNTEM

Araştırma nitel bir çalışma olup doküman incelemesi yöntemi kullanılmıştır. Doküman incelemesi, bir metnin içerik çözümlemesiyle incelenmesi olup yazılı materyallerin analizidir.(Yıldırım ve Şimşek, 2005).

Bu çalışma 2015-2016 öğretim yılı güz döneminde bir devlet üniversitesinin eğitim fakültesinde öğrenim gören 3. Sınıf ilköğretim matematik öğretmen adayına uygulanmıştır. Araştırmaya toplam 42 öğretmen adayı katılmıştır.

Öğretmen adaylarının üst düzey düşünme basamaklardan analiz, değerlendirme ve üretme basamaklarında elips konusundaki bilgilerini nasıl kullandıklarını belirleyebilmek amacıyla “Elipsin Analitik İncelenmesi” konusunun da bir test geliştirilmiştir. Veri kaynağı olarak öğretmen adaylarının cevaplarını içeren yazılı dokümanlar kullanılmıştır.

Her iki üniversitede öğrenim gören matematik öğretmen adaylarına hazırlanan test dağıtılmış ve sorular üzerinde yeterince düşünceleri için zaman verilerek testi çözmeleri istenmiştir. Daha sonra çözümler toplanarak incelemeye alınmıştır. Öğretmen adaylarının cevaplarını içeren yazılı dokümanlar araştırmacılar tarafından ayrı ayrı incelenmiş ve betimsel analiz yapılmıştır. Her bir soruda fikir birliğine sağlanmaya çalışılmış olup fikir birliğine varılan 42 çözüm incelenmiştir. Öğretmen adayları kodlanarak analiz sonucunda bulundukları bilişsel süreç basamakları belirlenmiştir.

Üst düzey basamaklardan analiz, değerlendirme ve üretme basamaklarında elips konusundaki bilgilerini nasıl kullandıklarını belirleyebilmek için ölçme-değerlendirme aşamasında öğretmen adaylarına aşağıda Şekil 5 de

verilen şekli kullanarak soru 1 ve 2 üzerinde düşünceleri ve çözmeleri istenmiştir.



Şekil 5. 1. ve 2. Soruda verilen çoklu geometrik yapıların resmi

Öğretmen adaylarından öncelikle verilen şekli bir koordinat sistemine yerleştirmesi istendi.

- 1) Şekildeki her bir elipsin denklemini ve kirişlerin uzunluklarını yazmak için gerekli verileri belirterek denklemlerinin yazılması istendi.
- 2) Her bir elipsin dış merkezliklerini bularak basıklıklarını karşılaştırmaları istendi.

Bu çalışmada revize edilmiş Bloom taksonomisine göre bilişsel öğrenme, bilişsel süreç boyutunda ele alınmaktadır. Çalışmanın bilişsel süreç basamaklarında kazanımların elde edilme süreci aşağıda açıklanmıştır.

*Hatırlamak:* Elips tanımını, denklemin bulunması için gerekli olan köşe noktalarının ve odakların, dış merkezliğinin hatırlanması

*Anlamak:* Elipsin denklemine, grafiğine örnek vererek, denklemini verilen elipsin merkezli olması, olmamasını yorumlayabilmesi, dış merkezliği oluşturan bileşenleri bulabilmesi

*Uygulamak:* Verilen problem durumunda elipsin temel elemanlarını dikkate alarak elips denklemini bulma, kirişlerin uzunluğunu bulma, birbiriyle ilişkili birden fazla elipste gerekli verileri kullanıp dış merkezliklerin bulunması

*Analiz etmek:* Bütün olarak birkaç elipsi ve doğru parçalarını içeren bir grafik durumunda bütün ile bu bütünü oluşturan elipslerin arasında bir ilişki kurarak herbirinin asal, yedek köşelerinin, odaklarının belirlenerek denklemlerinin bulunması, dış merkezliklerinin karşılaştırılması

*Değerlendirmek:* Bütünü oluşturan elipslerin ve doğru parçalarının birbirine göre durumu irdelenerek bir sonuca ulaşılması, dış merkezliklerin karşılaştırarak basıklık durumlarının yorumlanması

*Üretmek :* Özgün bir koordinatlama kullanarak çözüme ulaşma, koordinatlamada harflendirme kullanarak soyut ilişkiler ile elips denklemleri, doğru parçalarının uzunluğu ve dış merkezlikler açısından çözümü yorumlama

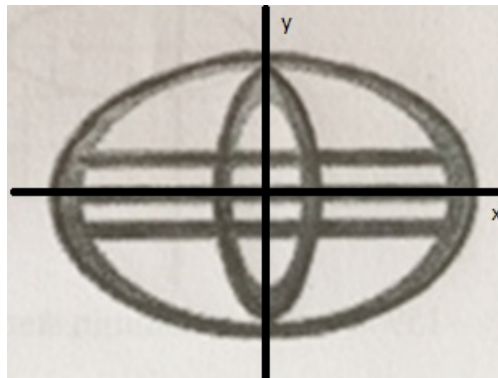
## BULGULAR

Şekil 5 te gerekli verileri belirleyerek elipslerin denklemlerini, dış merkezlikleri ve doğru parçalarının uzunluklarını bulunması istenen sorunun yenilenen BloomTaksonomisine göre öğrenme aktiviteleri, eylemler Tablo 1 de verilmiştir. Verilen soruda öğretmen adaylarının elips konusundaki bilgilerinin bilişsel süreç boyutundaki basamaklara göre nasıl kullandıklarının betimsel analizi yapılmış ve öğretmen adaylarının bu basamaklara göre dağılımı Tablo 1 de verilmiştir.

Tablo 1. Yenilenen BloomTaksonomisine göre dağılım tablosu

	Öğrenme aktiviteleri	Eylemler	Öğretmen Adayları	Frekans (f)
Üretme (create)	Geometrik ilişkiyi yansıtan bir koordinatlamada harflendirme ile elipsin temel elemanları olan asal eksen, yedek eksen uzunlukları ve odaklarını belirleyerek elipslerin denklemlerini ve dış merkezlikleri bulma ve yorumlama	Oluşturma Planlama üretme	T28, T33, T39, T40, T41, T24	6
Değerlendirme (evaluate)	Geometrik durumu yansıtan bir koordinatlama kullanma ve iki elipsin ve kırıların birbirine göre ilişkisini dikkate alarak denklemlerini doğru bulma, elipslerin dış merkezliklerini yorumlama	Kritik etme Kontrol etme	T17, T32, T34, T36, T2, T3, T5, T6, T7, T10, T11, T12, T13	13
Analiz etmek (analyze)	Geometrik durumdaki iki elipsin birbirine göre durumunu dikkate alarak denklemlerini doğru bulma ve büyük kırıların uzunluğunu elipslerle ilişkisini dikkate alarak analiz etme, elipslerin dış merkezliklerini karşılaştırma	Ayrıştırma (parçalama) Organize etme atfetme	T14, T16, T18, T27, T29, T30, T31, T35, T37, T38, T42, T23, T26	13
Uygulama (apply)	Koordinatlama yaparak sadece merkez elipsin denklemini ve elipslerin asal ve yedek eksen uzunluklarını belirleyerek dış merkezlikleri bulma	Yürütme uygulama	T15, T19, T1, T4, T8, T9, T20, T21, T22, T25	10
Anlama (understand)	Bir tek elips verilince denklemini bulma, dış merkezlik formülünü kullanarak bulma	Yorumlama Örneklendirme Çıkarım yapma		
Hatırlama (remember)	Elips tanımını, dış merkezlik tanımını hatırlama	Fark etme Çağırışım yapma		

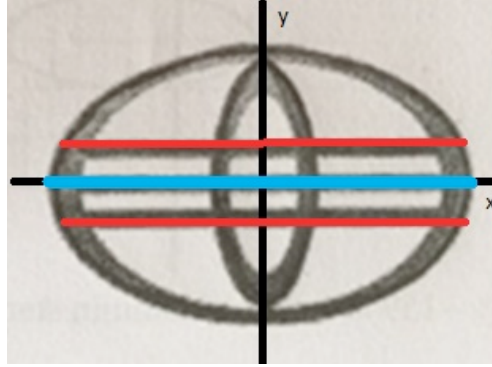
Tablo 1 incelendiğinde öğretmen adaylarının 10 tanesinin temel basamaklardan *uygulama* basamağında olduğu görülmektedir. Buna göre öğretmen adaylarının standart bir koordinatlama kullandıkları görülmüştür. Buna göre seçilen koordinat sisteminin başlangıç noktası elipslerin merkezi olacak şekilde belirlenmiştir.



Şekil 6. Verilen şekil için kullanılan standart koordinat sistemi

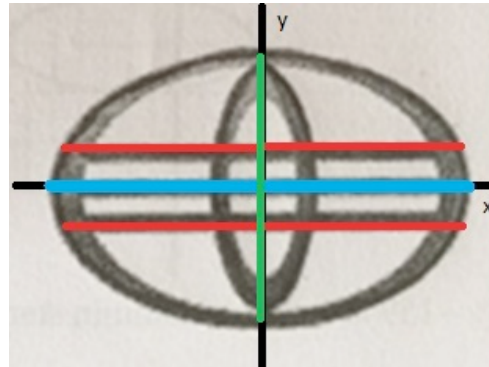
Uygulama basamağında elipslerin eksenleri kestiği noktalara özel sayısal değerler verilmiştir. Buna göre elipslerin asal eksen ve yedek eksen uzunlukları belirlenerek merkezli iki elipsin denklemi bulunmuştur. Dış merkezlik için gerekli odaklar arası uzaklık bulunarak formül yardımı ile elipslerin sadece dış merkezlikleri bulunmuştur. Fakat şekilde yer alan kirişlere ait hiç bir işlem yapılmamıştır.

*Analiz* basamağında 13 öğretmen adayı vardır (bkz. Tablo 1). Bu basamakta bulunan öğretmen adayları uygulama basamağındaki yolu takip ederek hem elipslerin denklemlerini bulmuş hem de dış merkezlikleri bulup dış merkezliklerini karşılaştırmışlardır. Ayrıca şekildeki kirişlerden x-ekseni üzerinde olan mavi kirişin büyük elipsin asal eksen olduğunu fark etmişler ve kiriş uzunluğunu asal eksen uzunluğuna eşit olarak bulmuşlardır.



Şekil 7. Verilen şekilde uzun kirişin(mavi) analizi

*Değerlendirme* basamağında bulunan 13 öğretmen adayı ise analiz basamağından farklı olarak kırmızı kirişlerin seçtikleri standart koordinat sisteminde asal eksene göre simetrik olduğunu fark etmişlerdir.  $y=a$  ve  $y=-a$  doğruları ile elipsin kesim noktalarını belirleyerek kirişin birinin uzunluğunu bulmuş diğeride simetrik olacağı için aynı uzunlukta olacağını belirtmişlerdir. Merkezli iki elipsin denklemlerini bulurken elipslerin eksenleri kestiği noktaları orantılı sayısal değerler vererek elipslerin köşe noktalarını belirlemişlerdir. Burada büyük elipsin yedek eksen (yeşil doğru parçası) uzunluğunun küçük dikey elipsin asal eksen uzunluğuna eşit olduğunu dikkate alarak sayısal değerler verdikleri görülmüştür (bkz. Şekil 8).



Şekil 8. Dikey elipsin asal eksen uzunluğu yeşil doğru parçası ve kirişler

Bu basamakta şekli oluşturan elipslerin ve kirişlerin birbiri ile ilişkisi dikkate alınarak elipslerin denklemleri, kirişlerin uzunlukları ve dış merkezlikler doğru olarak bulunmuş ve yorumlanmıştır.

Son olarak betimsel analize göre üst bilişsel öğrenme *üretme* basamağında 6 öğretmen adayı olduğu belirlenmiştir (Bakınız Tablo 1). Üretme basamağında bulunan öğretmen adayları değerlendirme basamağından bulunandan farklı olarak elipse ait temel elemanlar olan köşe noktaları ve odakları belirlerken harflendirme kullanmışlardır. Öğretmen adaylarının koordinatlamada harflendirme kullanarak soyut ilişkiler ile elips denklemlerini, kirişlerin uzunluklarını kullandıkları harflendirmeye bağlı doğru olarak buldukları tespit edilmiştir. Şekildeki elipslerin ve kirişlerin birbiriyle olan ilişkilerini dikkate alarak doğru harflendirme kullandıkları görülmüştür. Harflendirmeye göre dış merkezliklerinin doğru bularak yorumlayabildikleri için bu basamakta değerlendirilmişlerdir.



## SONUÇ

Öğretmen adaylarının tamamı standart bir şekilde verilen geometrik durumda büyük elipsi ve dikey elipsi merkezli olacak şekilde bir koordinat sistemine yerleştirmişlerdir. Seçtikleri bu koordinat sisteminde her bir elipsin ve kırıların birbirine göre durumlarını gözönüne alarak elipslerin eksenleri kestiği noktaları ve merkezlerini işaretlemişlerdir. Şekil üzerinde bu tespitlerinden sonra elipslerin denklemini yazabilmeleri için gerekli olan asal ve yedek eksen uzunluklarını her bir elips için bulmuşlardır. Her bir elipsin denklemini birbirine göre dikliğini ve iç teğetliğini gözönüne alarak asal eksen ve yedek eksen uzunluklarında uyumlu değerler veren ve parçadan bütünü ilişkisini temsil eden denklemleri doğru bulan öğretmen adayları üst düzey düşünme basamağı olan analiz basamağında oldukları tespit edilirken kırıların elips ile ve birbiri ile ilişkisini inceleyen ve doğru bir şekilde yorumlayanlar değerlendirme basamağına çıkabilmişlerdir.

Öğretmen adaylarının bir kısmı ise standart koordinat sisteminde köşe noktalarını harflendirme ile belirterek iki elipsin ve üç kırıların birbirine göre durumunu dikkate alarak genellemeye gitmişlerdir. Ayrıca dış merkezlikleride kullandıkları harfler yardımıyla bularak sonuçları yorumlayabildikleri için üretme basamağında oldukları söylenebilir.

Öğretmen adaylarının bir kısmı ise iki elipsin oluşturduğu geometrik şekilde belirledikleri koordinat sisteminden yararlanarak sadece yatay konumda bulunan büyük elipsin denklemlerini doğru bulabildikleri elipslerin asal ve yedek eksen uzunluklarını belirleyerek dış merkezlikleri bulabildiler. Öğretmen adaylarının bu basamakta ikinci elipsin denklemini yazarken asal eksenin y- eksenini üzerinde olduğunu belirtmediği gözlemlenmiştir. Öğretmen adaylarının bir tek elips denklemi bulmalarını gerektiren diğer sorularda merkezli olmayan elips denklemini doğru buldukları ya da asal eksenini y- eksenini üzerinde olan elips denklemlerini doğru buldukları görülmüştür. Bu öğretmen adaylarının koordinatlama yaparak asal eksen yedek eksen ve odaklar arası uzunlukları ve merkezli yatay elipsin denklemini doğru bularak dış merkezlikleri bulabildikleri kırıların elipslerle ilişkisini kuramayıp sadece verilen durumda bir işlemi yapabildiği için uygulama basamağında oldukları söylenebilir.

Çalışmamızın sonunda üretme basamağına ulaşan öğretmen adaylarının olduğunu gördük. Bu sonuç öğretmen adayları için bir başarıdır.

Öğretmen adaylarına üst düzey düşünme becerisi kazandırılması için öğretim ortamlarının planlanmasında onların ortama katılarak sık sık sorular sorularak sorular üzerinde akıl yürütmelerine fırsatlar verilmelidir.

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## **OKULLARDAKİ BİLGİSAYAR LABORATUVARLARI VE TEKNOLOJİ KULLANIMINA İLİŞKİN SORUNLAR**

**Kerim KARABACAK**

İstanbul Üniversitesi  
kerimk@sakarya.edu.tr

**İrfan ŞİMŞEK**

İstanbul Üniversitesi  
simsek.irfan@gmail.com

**Subhan EKŞİOĞLU**

Sakarya Üniversitesi  
eksioglu@sakarya.edu.tr

**Zeynep EKER**

Milli Eğitim Bakanlığı  
turuncukule\_z\_c@hotmail.com

Bu araştırma orta öğretim kurumlarındaki bilgisayar laboratuvarlarına ve aynı okullardaki teknoloji kullanımına ilişkin sorunları belirlemek amacı ile gerçekleştirilmiştir. Bu nedenle araştırma orta öğretim kurumları ile sınırlandırılmıştır. Bir yıl önce orta öğretim kurumlarında mezun olmaları nedeni ile amaçlı örnekleme yöntemine göre belirlenmiş olan örneklem, 2015-2016 öğretim yılında Sakarya Üniversitesi Eğitim Fakültesi Bilgisayar ve Öğretim Teknolojileri Bölümü'nün birinci sınıfında öğrenim gören öğrencilerden oluşmaktadır. Veri toplama aracı olarak yarı yapılandırılmış görüşme formu kullanılmıştır. Bu görüşme formunda öğrencileri “Okullardaki bilgisayar laboratuvarlarının sorunları nelerdir” ve “sizce okullardaki teknoloji kullanımına ilişkin sorunlar nelerdir?” soruları yöneltilmiştir. Her öğrencinin her iki konuda en önemli gördüğü beş sorunu önem sırasına koyması istenmiştir. Ayrıca bu sorunlardan en az bir tanesini açması istenmiştir. Elde edilen veriler tasnif edildikten sonra bilgisayar ortamına aktarılmıştır. Verilerin analizinde SPSS programında yararlanılmıştır. Bu programda öncelikli olarak betimsel istatistik işlemleri gerçekleştirilmiş, ardından çapraz tablolar oluşturulmuştur. Elde edilen bulgulara göre, bilgisayar laboratuvarlarında en çok karşılaşılan sorunların, “bilgisayarların sürekli bozuk olması”, “her öğrenciye yetecek sayıda bilgisayar olmaması nedeni ile bir bilgisayarın en az iki öğrenci tarafından kullanılması, bilgisayarların donanımlarının yetersiz olması” gibi sorunların olduğu sonucuna ulaşılmıştır. Teknoloji kullanımına ilişkin ise “yönetici, öğretmen ve öğrencilerin teknoloji konusunda bilgisizlik”, “teknolojinin asıl amacının dışında kullanılması” ve teknoloji kullanımına yeterli zaman ayrılmaması gibi sorunların ön plana çıktığı belirlenmiştir. Ulaşılan bu sonuçlar doğrultusunda bir takım önerilerde de bulunulmuştur.

**Anahtar Kelimeler:** Anahtar Kelimeler: Bilgisayar laboratuvarları, Okullarda teknoloji kullanımı, ortaöğretimde teknoloji,

## **PEDAGOJİK FORMASYON SERTİFİKA PROGRAMINA KATILAN ÖĞRENCİLERİN DİJİTAL PEDAGOJİK YETERLİKLERİNİN BELİRLENMESİ**

**Sezer KÖSE BİBER**

İstanbul Üniversitesi, Hasan Ali Yücel Eğitim Fakültesi,  
Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü  
sezer.kose@gmail.com

**İrfan ŞİMŞEK**

İstanbul Üniversitesi, Hasan Ali Yücel Eğitim Fakültesi,  
Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü  
simsek.irfan@gmail.com

Bu araştırma ile öğrenme ortamlarında gerçekleşen teknolojik değişimler kapsamında, üniversitelerin eğitim fakülteleri dışındaki fakültelerinden mezun olan ve pedagojik formasyon eğitimi alan öğretmen adaylarının dijital araçları kullanabilme ve oluşturabilme yeterliliğini belirleyebilmek amaçlanmıştır. Bu doğrultuda araştırmada veri toplama aracı olarak Yaman, Aydemir ve Demirtaş (2013) tarafından geliştirilen “Öğretmen Adaylarının Dijital Pedagojik Yeterlilikleri Ölçeği” kullanılmıştır. Araştırmanın örneklemini 2014-2015 eğitim öğretim yılında İstanbul’da bulunan bir devlet üniversitesinin düzenlediği pedagojik formasyon eğitim programına katılan 1032 öğretmen adayı oluşturmaktadır. Araştırma kapsamında elde edilen bulgular, pedagojik formasyon eğitimi alan öğretmen adaylarının, öğrenme ortamlarında gerçekleşen teknolojik değişimler kapsamında hangi açıdan eksik olduklarını ve öğretmen adaylarının eğitimlerinde nelere öncelik verilmesinin daha uygun olacağını ortaya çıkarmaktadır. Sonuç olarak öğretmen adaylarının öğretimsel ve web dijital pedagoji alanları ile genel dijital pedagoji alanlarının hepsinde orta düzeyde yeterliliğe sahip oldukları görülmüştür. Diğer yandan araştırmada bilgisayar ve interneti iyi düzeyde bilen öğretmen adaylarının dijital pedagoji bakımından da yeterli düzeye sahip olduğu görülmektedir.

**Anahtar Kelimeler:** dijital pedagoji, dijital pedagojik yeterlilik, pedagojik formasyon

## **PRE-SERVICE SCIENCE TEACHERS VIEWS ON 3-DIMENSIONAL AND DIGITAL MATERIALS CONSTRUCTED IN INSTRUCTIONAL TECHNOLOGIES AND MATERIAL DEVELOPMENT COURSE**

Ali ÇETİN  
Elementary Science Education Department  
Faculty of Education, Siirt University  
Turkey  
alicetin@siirt.edu.tr

Technology related aims of education includes that educate individuals to develop their skills about the use of technology and to follow the technological developments. Pre-service teachers have gained some opportunities to apply new technologies in a classroom setting and must also be shown that the use of technology can be more efficient and effective than traditional methods with the course of "instructional technology and material development". Although science teachers know the importance of instructional material use in class, they do not make an effort to enrich the classroom environments by using these materials.

The aim of this study was to introduce digital and three-dimensional materials to pre-service science teachers and obtain their views about these materials. So, This research was conducted to address the following research questions:

1. What are the pre-service science teachers' views about digital and three dimensional materials?
2. Which types of materials are preferred by pre-service science teachers in their future teaching life?

This qualitative study was designed to introduce 3-dimensional and digital materials to pre-service science teachers and identify their views about them. In this context, three projects was performed with 42 pre-service science teachers (13 male- 29 female) who took Instructional Technologies and Material Development course in Elementary Science Education Department in Siirt University. First project was to prepare a movie by using photos and music, second one was to prepare a power-point presentation that contains an animation and their own sound and third one was a 3 dimensional material that can be used during class time. Four open ended questions were asked to all participants to obtain their views about these materials.

The results were analyzed with the conventional content analysis. Results indicated that most of the participants believe that the digital material prepared in project 1 enhance retention and take students' attention. In project two, participants thought that the digital material facilitates learning and save class time for teacher. In project 3, while 78% of participants thought positive for the 3 dimensional materials and claim that they facilitate learning and enhance retention, 22% of participants thought negative about these materials and claim that preparing these materials need too much time and effort. In the last finding, "which type of material are preferred by pre-service science teachers in their future life" were asked and 57 % preferred 3 dimensional materials, 19 % preferred digital materials and 24 % preferred both.

As a conclusion, pre-service science teachers mostly thought to prefer three-dimensional materials in their future teaching life but the effort and time that they should spend to prepare these materials are engrossing. Pre-service teachers to develop their creativities to construct new materials easily and quickly. Instructional development and material development course is a good chance to improve their creativity in education faculties. The instructor of this course should perform new projects to develop pre-service teachers' creativities.

**Keywords:** Material Development, Instructional Technologies and Material Development, Digital Course Materials