



# European Journal of Educational Research

Volume 8, Issue 2, 409-420

ISSN: 2165-8714

<http://www.eu-jer.com/>

## The Analysing of the Emotional Intelligence Scores of the Special Education Teacher Candidates for the Predictor of Multiple Intelligences Areas

Tugba Pursun \*

Necmettin Erbakan University, TURKEY

Erkan Efilti

Necmettin Erbakan University, TURKEY

*Received: November 29, 2018 • Revised: January 26, 2019 • Accepted: January 30, 2019*

**Abstract:** This study aims to analyse the emotional intelligence scores of the special education teacher candidates for the predictor of multiple intelligences areas. This study was conducted through relational scanning model. 211 teacher candidates, 106 females and 105 males, participated in the study. Data were collected through Personal Information Form, Teele Multiple Intelligence Inventory and Schutte Emotional Intelligence Scale. Logistic regression analysis was used to find whether the gender and grade level variables, and optimism, utilization of emotions and the scores of emotion evaluation are statistically significant in defining predominant intelligence areas or not. SPSS 24.0 was used in the data analysis process. The results revealed that while the gender variable and optimism scores are significant variables predicting the determination of individuals in which predominant intelligence is both interpersonal and not, optimism and evaluation of emotions scores are significant variables predicting the determination of individuals whose predominant intelligence is both visual and not. However, the results suggested that demographic variables (gender and grade level) and emotional intelligence scores did not affect kinesthetic, musical, intrapersonal, logical and verbal intelligence areas which were found as the predominant intelligence areas of teachers.

**Keywords:** *Multiple intelligence, emotional intelligence, teacher candidates, special education.*

**To cite this article:** Pursun, T., & Efilti, E. (2019). The analysing of the emotional intelligence scores of the special education teacher candidates for the predictor of multiple intelligences areas. *European Journal of Educational Research*, 8(2), 409-420. doi: 10.12973/eu-jer.8.2.409

### Introduction

The idea that intelligence is the main ability which tells people apart causes people to define intelligence differently. Therefore, there are different views about the effects of environment and heritage on the development of intelligence. According to the theoreticians who try to define intelligence in a traditional point of view, intelligence is a unidimensional, unchangeable and non-improvable structure (Kuzgun & Deryakulu, 2014). Howard Gardner who defends that the intelligence is such a multi-dimensional and complex structure which cannot be defined as a single one carried the definition of intelligence into a different dimension. Instead of this, intelligence is a problem-solving ability or an ability to produce a product which finds its value in its own culture (Baum, Viens & Slatin, 2005; Gardner, 2006; Hoerr, 2000). Howard Gardner who focuses on both biological and cultural aspects of intelligence stated that individuals cannot be seen as similar and the structure called intelligence is a series of mental skills or abilities (Murray & Moore, 2012).

Gardner stated that individuals have eight different intelligence areas. These are verbal intelligence which is the capability of using an effective language, logical-mathematical intelligence which is the ability to use number efficiently and to establish logical connections between events, spatial intelligence which puts the emphasis on the phenomenon such as place, time, color, shape etc., musical/rhythmic intelligence which is the capacity of perceiving, distinguishing and expressing musical forms, bodily/kinesthetic intelligence which is the ability to use his body to express his thoughts and emotions, intrapersonal intelligence which is the ability to know himself, interpersonal intelligence which is the capacity of understanding others' emotions and needs, and finally naturalist intelligence which is the ability of being sensitive to environment (Armstrong, 2003; Ayaydin, 2015; Fleetham, 2006; Saban, 2005). Although all individuals have these eight intelligence areas, their intelligence profiles which explain their strong and weak sides are

\* Corresponding author:

Tugba Pursun, Necmettin Erbakan University, Faculty of Education, Konya, Turkey.

✉ [tugbapursun@gmail.com](mailto:tugbapursun@gmail.com)

never the same (Teele, 2000). However, it is impossible to label individuals as intelligent or successful with IQ tests which measure only one type of intelligence.

Possibility of other factors for the achievement of success has become a subject for discussion after Gardner changed the criteria for individuals' academic success. Being successful at business, family and social life is connected with emotional features such as motivation, empathy, and harmony. Only IQ is insufficient in determining whether the individual will be successful in different areas or not. For example, it is a mistake to suppose that people with a high IQ will be successful (Yuksel, 2006). Emotions and intelligence can unite to process complex information (Mayer, Dipaolo & Salovey, 1990) because most cognitive problems contain emotional information which must be processed and interpreted (Mayer & Salovey, 1993). Therefore, it is necessary to take a look at the emotional intelligence in a broad perspective.

Mayer and Salovey were the first ones to handle emotional intelligence theory (Goleman, 2000) and by building the model they developed on social intelligence they evaluate it as a subset of social intelligence (Salovey & Mayer, 1990; Seal & Brown, 2010). They define emotional intelligence as the ability to monitor their own and others' emotions, distinguishing one from the other, and using this information to direct his emotions and behaviours (Mayer & Salovey, 1993). They examine the emotional intelligence model as a four-sub-dimensional structure. These are; the ability to identify emotions, the ability to use emotions to make the thinking process easier, the ability to understand emotions, and the ability to manage emotions (Aslan, 2009; Mayer & Salovey, 1997). Bar-On defines the emotional intelligence as a cross-section of social and emotional abilities which make someone understand himself and others, express himself, socialize with others and cope with his needs (Bar-ON, 2006). Bar-ON's emotional intelligence model constitutes five sub-dimensions. These are; interpersonal abilities, adaptation ability, stress management, and psychological well-being (Bar-ON, 2000; Koksall, 2007). According to Goleman (2012), emotional intelligence is the ability to take action, keep going in spite of the difficulties, delay gratification by controlling his drives, organizing his psychological well-being, not permit his anxieties to affect his thoughts, put himself in other people's place, and have hope. Goleman examined his emotional intelligence theory in five sub-dimensions. These are; self-awareness, self-regulation, empathy, social skills, and motivation (Mayer, Salovey & Caruso, 2004).

Qualifications of emotional intelligence can be discussed as social and personal abilities. While self-awareness and self-regulation are related to personal abilities, and empathy, social skills and motivation are related to social abilities (Pinarcik, Sali & Altindis, 2016). Although Goleman's emotional intelligence is associated with Gardner's intrapersonal and social intelligence areas, it involves many abilities (Bay & Lim, 2006). Individuals with high emotional intelligence have the ability to solve problems, develop empathy, understand other people's feelings, be happy, and manage stress (Izard, 2001). They do not allow negative feelings and thoughts to happen. According to Balci (2001), those individuals are the ones who aware of their feelings and thoughts, strengths and weaknesses, who avoid momentary success and pleasures, who maintain their optimism in the event of failure, and who are successful at resolving conflicts among people. Therefore, individuals whose emotional intelligence is dominant could form the necessary mental habits for improving their performances and efficiencies.

Yesilyaprak (2001) states that if emotions are recognized and directed in a constructive way, they could improve mental performance. In other words, improving emotional intelligence could contribute to effective use of cognitive intelligence capacity (Lam & Kirby, 2002; Tufan, 2011). Therefore, emotional intelligence related to the mental abilities that individuals have and not placing emphasis on the improvement of emotional intelligence will cause the academic failure of the individuals. Emotional intelligence allows individuals to be successful in all areas and to be creative. Thus, emotional intelligence and multiple intelligence do not only complete each other in achieving success but they also interact with each other. Ozdemir-Yaylaci (2006) suggests that individuals need to rely on their insights and use feelings more effective and need a rationalistic brain to think more wisely. It can be seen that emotional intelligence is the identifier of how better one can use the intelligence and other abilities that he has.

The success at school, family, work and social life can be determined by both cognitive and emotional intelligence. Success and effective learning emerge from the effective use of both the intellectual and emotional areas (Kizil, 2014). Goleman (2012) states that emotional and cognitive minds are placed in different sides of the brain but they are connected with each other. While the left side of the brain is associated with concrete abilities such as arithmetic, language, and reasoning, the right side is associated with abstract abilities such as distinguishing, managing and revealing the feelings. It is necessary for any intelligence or strategies to be successful feelings must be a stimulant which motivates people and make them feel devoted (Yuksel, 2006). Giving students the knowledge which only provides academic benefits makes them vulnerable to the problems they would encounter during their education process. Feelings such as taking a different approach to the problems they encounter, finding solutions, making the right decisions, establishing good communication, empathy, and being thoughtful must be taught. The improvement of emotional intelligence will make students more successful in their academic life by positively affecting mental skills and abilities (Ada, 2009).

When the related body of literature is examined, it is seen that it has been researched to determine the multiple intelligence areas of teacher candidates. Yenice and Aktamis (2010) revealed that the teacher candidates' intelligence

areas were 'moderately developed' in their studies in order to examine the multiple intelligence areas of the class teacher candidates according to their demographic characteristics. Eyyam, Menevis and Dogruer (2010) found out that only 2,50% of the teacher candidates had developed a verbal – linguistic intelligence area in their study in order to reveal the multiple intelligence areas of the teacher candidates in Turkish Teaching Department and to examine whether this has anything related to academic success or not. Aksu, Aktas, Gokmen, Ekici and Gulay-Ogelman (2012) revealed that teacher candidates used logical-mathematical the most; and used social-interpersonal intelligence the least, that the difference between the dominant intelligence areas and gender, class, the type of high school and the academic achievement levels was not meaningful in the study that they conducted in order to evaluate multiple intelligence domains of pre-service teacher candidates according to different variables. Cinkilic and Soyer (2013) have reached that visual-spatial intelligence average of the teacher candidates is the highest, the bodily-kinesthetic intelligence average is the lowest and there is a meaningful difference between multiple intelligence areas and problem solving skills according to gender, age, monthly income of family, the individual's monthly expense amount, living place variables in the study which they conducted in order to examine the relationship between multiple intelligence areas and problem solving skills of the physical education teacher candidates. Kozagac (2015) revealed that teacher candidates had the highest score from logical-mathematical intelligence area while they had the lowest score from verbal-linguistic intelligence area in his studies in order to determine the multiple intelligence areas and to examine the social skills of mathematics department teacher candidates and the attitudes of them towards teaching profession. Ozturk, Ozsoy, Vural and Baysan (2017) revealed that the visual-spatial intelligence areas of the painting teacher candidates; and bodily-kinesthetic intelligence area of physical education teacher candidates are relatively lower in their study in order to determine the perceptions of teacher candidates about multiple intelligences. Yenice, Ozden and Alpak-Tunc (2017) reached the result that science teacher candidates had high scores on the logical-mathematical bodily-kinesthetic intelligence area. Devci and Aydin (2017) reached the result that the visual intelligence area was the most contributing intelligence area for science teacher candidates to predict the entrepreneurial characteristics in the study that they examined the entrepreneurial characteristics of multiple intelligence areas of science teacher candidates. However, it has been revealed that musical intelligence and naturalist intelligence areas do not contribute significantly in terms of predicting entrepreneurial characteristics.

When the literature is reviewed, it is seen that the researches examined the relationship between emotional intelligence and multiple intelligence areas were conducted mostly with different sample groups except for teacher candidates. In their research Bay and Lim (2006) examined the relationship between emotional and multiple intelligence. They examined 360 primary school students whose ages were 10-11. The results revealed that there was no relationship between the emotional intelligence and social intelligence of the students. Skourdi and Rahimi (2010) conducted a research with 66 students to examine the relationship between emotional intelligence and verbal intelligence. Results suggested a positive correlation between emotional intelligence and verbal intelligence. In another research Baba (2012) conducted a research on 447 students from the school of physical education and sports to examine the relationship between the internal and external locus of control of kinesthetic and emotional intelligence. Results revealed that there was a relationship between kinesthetic and emotional intelligence.

It is seen that there is a limited number of studies which examines the relationship between the multiple intelligence areas and emotional intelligence and the studies conducted on teacher candidates are even more limited. Individuals need both emotional intelligence and cognitive intelligence to be successful in their life. Multiple intelligence theory based on the learning experiences which improve different areas of intelligence (Gardner, 2006) and this will contribute to the improvement of emotional intelligence with in and out-of-class activities (Yesilyaprak, 2001). Moreover, individuals' being aware of their strengths and weaknesses influence their success in their educational and work life. Individuals can perform better in one area according to their strengths than in other areas, and in this direction awareness of strengths intelligence helps them to succeed at both education and business life. Emotional intelligence is the predictor of success in daily life or in education, since academic success is not sufficient for solving problems encountered in daily life (Van Der Zee, Thijs & Schakel, 2002). Due to there is no study in terms of examining the relationship between emotional intelligence scores and multiple intelligence areas of special education teacher candidates in the related body of literature, it is thought that the current research will contribute to the body of literature. Especially in a profession that the emotional side should be dominant such as special education teacher, it becomes important for the teacher candidates to identify themselves and to determine the estimated variables that will activate the dominant intelligence areas.

#### *Purpose of the Study*

This study aims to determine the predictor of the multiple intelligence areas of special education teacher candidates' emotional intelligence scores and demographic variables. In accordance with this purpose, does the special education teacher candidates' emotional intelligence scores and demographic variables predict the multiple intelligence areas? is the problem of research.

#### *Sub-problems*

1. Is the gender variable statistically significant in predicting the predominant area of intelligence?
2. Is the grade variable statistically significant in predicting the predominant area of intelligence?

3. Are the optimism scores statistically significant in predicting the predominant area of intelligence?
4. Are the scores related to utilization of emotions statistically significant in predicting the predominant area of intelligence?
5. Are the scores related to evaluation of emotions statistically significant in predicting the predominant area of intelligence?

## Method

### *Research Model*

In this study, the relationship between dependent and independent variables will be examined; therefore the relational scanning model among the screening models is used. The relational scanning model is used to determine the relationships between the variables and to estimate the possible results (Karasar, 2013). Multiple intelligence areas from variables in which the model was created (interpersonal intelligence, kinesthetic intelligence, musical intelligence, visual intelligence, intrapersonal intelligence, logical intelligence, verbal intelligence predicted (dependent) variable, emotional intelligence sub-dimensions (optimism, utilization of emotions, evaluation of emotions) and demographic characteristics (gender and grade level) was determined as a predictor (independent) variable.

### *Study Group*

211 special education teacher candidates, 106 females and 105 males, participated in the study. 65, 58, 48 and 40 of the special education teacher candidates studies are in first, second, third and fourth grades respectively. The sample of the research is formed of teacher candidates studying at Necmettin Erbakan University Special Education Department. The appropriate sampling method has been adopted in the sample selection. The appropriate sampling method refers to the data collection from a sample that the researchers can easily reach (Buyukozturk, Cakmak, Akgun, Karadeniz & Demirci, 2015). This sampling method was preferred to prevent loss of time, money and labor in this study. Demographic information regarding the study group has shown in Table 1.

*Table 1. Demographic Information Regarding Teacher Candidates*

Variables	f	
Gender	Female	106
	Male	105
	Total	211
Grade	1	65
	2	58
	3	48
	4	40
	Total	211

### *Data Collection Tools*

Data were collected through Personal Information Form, Teele Multiple Intelligence Inventory (TIMI) and Schutte Emotional Intelligence Scale.

#### *Personal Information Form*

Personal Information Form developed by the researchers includes gender and grade level information of teacher candidates.

#### *Teele Inventory of Multiple Intelligences (TIMI)*

TIMI developed by Sue Teele (1992) can be used to measure multiple intelligence areas of people from all ages and it could measure seven areas of intelligence. Inventory is composed of a question book which contains 56 panda pictures, a teacher's guide, answer sheets and clear answer keys. There are two panda pictures in each question and the individual must choose one of the two pictures. There are no right or wrong answers in the inventory.

Inventory measures seven intelligence areas. Sue Teele has seven intelligence areas in the inventory because she thinks that the naturalist intelligence has a common feature of other intelligence areas. There are eight images in the inventory for each intelligence area. Therefore, the number that individuals can take in an area of intelligence is maximum eight. The highest score received by the individuals according to their answers to the questions refers to the dominant intelligence area. After the markings for all the questions are completed, the answers in each intelligence area are counted and the points received by the participants are determined. The scores from the inventory always give 28. It is possible to apply the inventory both individually and for small or large groups. This inventory identifies the strengths or dominant intelligence areas of each participant in the 2 to 82 age range (Calisandemir, 2010).

The reliability and validity of the inventory were conducted by Teele in 1992-1993. The results of the study have done in a primary school revealed that the inventory is valid and the reliability of all the intelligence areas is significant at .01 level. In Turkey, reliability studies were conducted by Oklan-Elibol (2000), Gogebakan (2003), Terzioglu (2005), Ozdemir (2006); and validity study was done by Ozdemir (2006).

*Schutte Emotional Intelligence Scale*

Schutte Emotional Intelligence Scale developed by Schutte et al. (1998) was used to measure the emotional intelligence of the teacher candidates. The scale was adapted to Turkish by Tatar, Tok and Saltukoglu (2011). The reliability and validity of the scale was tested by the researchers who adapted the scale, and the Cronbach Alpha coefficient was determined as .82. The scale involves 41 items, 20 positive (1-2-5-7-9-11-15-16-18-19-21-27-29-30-31-32-33-36-37-38) and 21 negative (3-4-6-8-10-12-13-14-17-20-22-23-24-25-26-28-34-35-39-40-41). The scale is a five point likert scale and the answers can vary from 1 (strongly disagree) to 5 (strongly agree). The Scale has three sub-scales such as optimism/regulation of emotions, utilization of emotions and evaluation of emotions.

*Data Collection*

In order to determine the emotional intelligence and multiple intelligence areas of special education teacher candidates, the data collection tools were applied to 211 special education teacher candidates based on voluntariness. It is stated that the special education teacher candidates should not write their names on the questionnaires in order to reflect their thoughts. Thus, research was conducted with the teacher candidates who accepted to participate in the research. Firstly, they were asked to fill the scale of emotional intelligence and to answer each question. The application lasted 15 minutes. Secondly, TIMI was applied. TIMI, which is used to determine multiple intelligence areas of special education teacher candidates, was applied to the group. It is stated that candidates should choose one of the two panda images in each question in the question booklet. They were asked to choose one of the panda pictures that they saw close or identified with them. To focus on the panda images included in each question during the application process, the panda pictures in the other question were covered with a white paper. It is specifically mentioned that only one picture can be selected for each question. It was stated that teacher candidates should mark their chosen answers to the answer key. The application lasted 35 minutes.

*Data Analysis*

In order to find out whether the gender and grade variables and the scores of optimism, utilization of emotions and evaluation of emotions are statistically effective in predicting the predominant area of intelligence, logistic regression analysis or not. Logistic regression analysis; it is a method used to determine cause and effect relationship with explanatory variables in case of dependent variable is in the categorical, double, triple and multiple categories (Ozdamar, 1999). Seven different areas of intelligence were included in the study such as interpersonal, kinesthetic, musical, visual, intrapersonal, logical and verbal intelligence. After determining their predominant area of intelligence, individuals were grouped according to their predominant area of intelligence. Then by creating puppet variables for each area of intelligence, they were included in the analysis as separate dependent variables. SPSS 24.0 was used in data analysis. The results were interpreted with 95% confidence level.

**Findings**

Table 2 shows that the results of the logistic regression analysis found out how effective are the gender and grade variables and the scores of optimism, utilization of emotions and evaluation of emotions in predicting individuals whose predominant area of intelligence is both interpersonal and not. The regression model has found significant statistically ( $\chi^2=13,05$ ;  $Sd=5$ ;  $p<0,05$ ).

*Table 2. The Predictor of Emotional Intelligence Scores and Demographic Variables in Interpersonal Intelligence*

	B	S.E.	Wald	Sd	p	Exp (B)	EXP (B) 95% Confidence Interval	
							Lower Bound	Upper Bound
Gender <sup>a</sup>	0,578	0,293	3,883	1	0,049	1,782	1,003	3,164
Grade	0,030	0,131	0,054	1	0,816	1,031	0,797	1,333
Optimism	0,893	0,383	5,453	1	0,020	2,443	1,154	5,172
Utilization of Emotions	-0,311	0,270	1,331	1	0,249	0,733	0,432	1,243
Evaluation of Emotions	-0,398	0,316	1,589	1	0,207	0,672	0,362	1,247
Fixed	-1,304	1,158	1,269	1	0,260	0,271		

<sup>a</sup>1=Female, 2=Male

It is understood from the Table 2 that among the variables included in the regression analysis only gender ( $B=0,578$ ;  $p<0,05$ ) and optimism ( $B=0,893$ ;  $p<0,05$ ) are the meaningful variables which predict the determination of individuals whose predominant intelligence is both interpersonal intelligence and not. The variables included in the regression analysis explain 7% of determination of individuals whose predominant intelligence is both interpersonal intelligence and not (Nagelkerke  $R^2= 0,072$ ). According to the results, being a man increases the possibility of having interpersonal intelligence as a predominant intelligence 1,782 (78,2%) times. One point of increase in optimism score increases the possibility of having interpersonal intelligence as a predominant intelligence 2,443 (144,3%) times.

Table 3 shows that the results of the logistic regression analysis to find out how effective are the gender and grade variables and the scores of optimism, utilization of emotions and evaluation of emotions in predicting individuals whose predominant intelligence is both kinesthetic and not. The regression model has not found significant statistically ( $\chi^2=1,97$ ;  $Sd=5$ ;  $p>0,05$ ).

Table 3. The Predictor of Emotional Intelligence Scores and Demographic Variables in Kinesthetic Intelligence

	B	S.E.	Wald	Sd	p	Exp (B)	EXP (B) 95% Confidence Interval	
							Lower Bound	Upper Bound
Gender <sup>a</sup>	-0,237	0,397	0,357	1	0,550	0,789	0,362	1,717
Grade	-0,205	0,183	1,246	1	0,264	0,815	0,569	1,167
Optimism	-0,144	0,449	0,103	1	0,748	0,866	0,359	2,089
Utilization of Emotions	0,121	0,348	0,122	1	0,727	1,129	0,571	2,233
Evaluation of Emotions	0,045	0,422	0,011	1	0,915	1,046	0,457	2,393
Fixed	-1,180	1,510	0,611	1	0,434	0,307		

<sup>a</sup>1=Female, 2=Male

As seen in Table 3, all the demographic variables and emotional intelligence scores included in the regression analysis are not meaningful in predicting individuals whose predominant intelligence is both kinesthetic and not ( $p>0,05$ ). The variables included in the regression analysis express 2% of determination of individuals whose predominant intelligence is both kinesthetic intelligence and not (Nagelkerke  $R^2= 0,016$ ).

Table 4 shows that the results of the logistic regression analysis to find out how effective are the gender and grade variables and the scores of optimism, utilization of emotions and evaluation of emotions in predicting individuals whose predominant intelligence is both musical and not. The regression model is not found significant statistically ( $\chi^2=6,81$ ;  $Sd=5$ ;  $p>0,05$ ).

Table 4. The Predictor of Emotional Intelligence Scores and Demographic Variables in Musical Intelligence

	B	S.E.	Wald	Sd	p	Exp (B)	EXP (B) 95% Confidence Interval	
							Lower Bound	Upper Bound
Gender <sup>a</sup>	-0,132	0,641	0,042	1	0,837	0,877	0,249	3,082
Grade	0,103	0,296	0,121	1	0,728	1,108	0,621	1,979
Optimism	1,594	1,017	2,456	1	0,117	4,921	0,671	36,099
Utilization of Emotions	0,493	0,635	0,602	1	0,438	1,637	0,472	5,680
Evaluation of Emotions	-0,735	0,699	1,105	1	0,293	0,479	0,122	1,888
Fixed	-8,417	3,016	7,789	1	0,005	0,000		

<sup>a</sup>1=Female, 2=Male

As seen in Table 4, all the demographic variables and emotional intelligence scores included in the regression analysis are not meaningful in predicting individuals whose predominant intelligence is both musical and not ( $p>0,05$ ). The variables included in the regression analysis explain 9% of determination of individuals whose predominant intelligence is both musical intelligence and not (Nagelkerke  $R^2= 0,094$ ).

Table 5 shows that the results of the logistic regression analysis to find out how effective are the gender and grade variables and the scores of optimism, utilization of emotions and evaluation of emotions in predicting individuals whose predominant intelligence is both visual intelligence and not. The regression model is found significant statistically ( $\chi^2=11,03$ ;  $Sd=5$ ;  $p<0,05$ ).

Table 5. The Predictor of Emotional Intelligence Scores and Demographic Variables in Visual Intelligence

	B	S.E.	Wald	Sd	p	Exp (B)	EXP (B) 95% Confidence Interval	
							Lower Bound	Upper Bound
Gender <sup>a</sup>	0,667	0,513	1,692	1	0,193	1,948	0,713	5,319
Grade	-0,076	0,218	0,121	1	0,728	0,927	0,604	1,422
Optimism	-1,455	0,516	7,940	1	0,005	0,233	0,085	0,642
Utilization of Emotions	-0,152	0,432	0,123	1	0,725	0,859	0,369	2,003
Evaluation of Emotions	1,208	0,538	5,041	1	0,025	3,346	1,166	9,605
Fixed	-1,014	1,841	0,303	1	0,582	0,363		

<sup>a</sup>1=Female, 2=Male

It is understood from the Table 5 that among the variables included in the regression analysis only optimism score ( $B=-1,455$ ;  $p<0,05$ ) and evaluation of emotions score ( $B= 1,208$ ;  $p<0,05$ ) are the meaningful variables which predict the

determination of individuals whose predominant intelligence is visual intelligence and not. The variables included in the regression analysis explain 11% of determination of individuals whose predominant intelligence is visual intelligence and not (Nagelkerke  $R^2= 0,107$ ). According to the results, 1 point of increase in optimism score decreases the possibility of having visual intelligence as a predominant intelligence 0,233 (76,7%) times. The results also revealed that 1 point of increase in evaluation of emotions score increases the possibility of having visual intelligence as predominant intelligence 3,346 (234,6%) times.

Table 6 shows that the results of the logistic regression analysis to find out how effective are the gender and grade variables and the scores of optimism, utilization of emotions and evaluation of emotions in predicting individuals whose predominant intelligence is intrapersonal and not. The regression model has not found significant statistically ( $\chi^2=8,20$ ;  $Sd=5$ ;  $p>0,05$ ).

Table 6. The Predictor of Emotional Intelligence Scores and Demographic Variables in Intrapersonal Intelligence

	B	S.E.	Wald	Sd	p	Exp (B)	EXP (B) 95% Confidence Interval	
							Lower Bound	Upper Bound
							Gender <sup>a</sup>	-1,006
Grade	0,192	0,222	0,752	1	0,386	1,212	0,785	1,873
Optimism	-0,842	0,505	2,777	1	0,096	0,431	0,16	1,16
Utilization of Emotions	0,526	0,436	1,459	1	0,227	1,692	0,721	3,973
Evaluation of Emotions	0,427	0,529	0,652	1	0,42	1,533	0,543	4,323
Fixed	-2,609	1,857	1,974	1	0,16	0,074		

<sup>a</sup>1=Female, 2=Male

As seen in Table 6, all the demographic variables and emotional intelligence scores included in the regression analysis are not meaningful in predicting individuals whose predominant intelligence is intrapersonal and not ( $p>0,05$ ). The variables included in the regression analysis explain 8% of determination of individuals whose predominant intelligence is intrapersonal intelligence and not (Nagelkerke  $R^2= 0,080$ ).

Table 7 shows that the results of the logistic regression analysis to find out how effective are the gender and grade variables and the scores of optimism, utilization of emotions and evaluation of emotions in predicting individuals whose predominant intelligence is logical intelligence and not. The regression model has not found significant statistically ( $\chi^2=9,71$ ;  $Sd=5$ ;  $p>0,05$ ).

Table 7. The Predictor of Emotional Intelligence Scores and Demographic Variables in Logical Intelligence

	B	S.E.	Wald	Sd	p	Exp (B)	EXP (B) 95% Confidence Interval	
							Lower Bound	Upper Bound
							Gender <sup>a</sup>	-0,963
Grade	-0,243	0,324	0,564	1	0,453	0,784	0,415	1,48
Optimism	0,437	0,743	0,346	1	0,557	1,548	0,361	6,634
Utilization of Emotions	0,111	0,592	0,035	1	0,851	1,118	0,35	3,569
Evaluation of Emotions	-0,232	0,324	0,564	1	0,464	0,135	0,025	0,739
Fixed	2,739	2,561	1,143	1	0,285	15,465		

<sup>a</sup>1=Female, 2=Male

As seen in Table 7, all the demographic variables and emotional intelligence scores included in the regression analysis are not meaningful in predicting individuals whose predominant intelligence is logical and not ( $p>0,05$ ). The variables included in the regression analysis explain 14% of determination of individuals whose predominant intelligence is logical intelligence and not (Nagelkerke  $R^2= 0,142$ ).

Table 8 shows that the results of the logistic regression analysis to find out how effective are the gender and grade variables and the scores of optimism, utilization of emotions and evaluation of emotions in predicting individuals whose predominant intelligence is verbal intelligence and not. The regression model has not found significant statistically ( $\chi^2=2,94$ ;  $Sd=5$ ;  $p>0,05$ ).

Table 8. The Predictor of Emotional Intelligence Scores and Demographic Variables in Verbal Intelligence

	B	S.E.	Wald	Sd	p	Exp (B)	EXP (B) 95% Confidence Interval	
							Lower Bound	Upper Bound
Gender <sup>a</sup>	-0,414	0,525	0,624	1	0,430	0,661	0,236	1,847
Grade	0,174	0,231	0,572	1	0,449	1,191	0,758	1,871
Optimism	-0,377	0,573	0,432	1	0,511	0,686	0,223	2,111
Utilization of Emotions	-0,206	0,439	0,221	1	0,638	0,813	0,344	1,924
Evaluation of Emotions	0,636	0,540	1,389	1	0,239	1,889	0,656	5,444
Fixed	-2,805	1,942	2,087	1	0,149	0,061		

<sup>a</sup>1=Female, 2=Male

It is understood from the Table 8 that all the demographic variables and emotional intelligence scores included in the regression analysis are not meaningful in predicting individuals whose predominant intelligence is verbal intelligence and not ( $p > 0.05$ ). The variables included in the regression analysis explain 3% of determination of individuals whose predominant intelligence is logical intelligence and not (Nagelkerke  $R^2 = 0,031$ ).

### Discussion and Conclusion

In this study, it was tried to determine the gender and grade level variables and emotional intelligence scores predicting multiple intelligence areas of special education teacher candidates. According to the findings obtained from the study, the first dominant intelligence area of gender and optimism is meaningful variables predicting the interpersonal intelligence area. Thus, it is seen that teacher candidates are male and that the first dominant intelligence area increases the probability of being interpersonal intelligence. However, it has reached that only the optimism and emotion evaluation scores of the variables included in the regression analysis are meaningful variables predicting the first dominant intelligence areas of the teacher candidates to be visual intelligence. However, it has revealed that the demographic variables and emotional intelligence scores included in the regression analysis did not predict the first dominant intelligence areas of teacher candidates as being kinesthetic intelligence, musical intelligence, intrapersonal intelligence, logical intelligence and verbal intelligence. In the related body of literature, it is seen that there are research results that reached different results. In his research which examines the relationship between emotional intelligence and interpersonal relationship styles, Enginsoy (2002) found that there was a significant relationship between the emotional intelligence of university students and their interpersonal relationship styles, and the grade which they were studying in partly affected the emotional intelligence and interpersonal relationship styles, and the average scores of subjects differentiated according to gender. Bay and Lim (2006) has reached that there was no relationship between students' interpersonal intelligence and emotional intelligence. Shearer (2006) stated that there is a relationship between interpersonal intelligence and emotional intelligence in the study he examines the relationship between multiple intelligence and emotional intelligence. It is possible that emotional intelligence is predictor of interpersonal intelligence when it is considered that the individual has the ability to manage his own feelings, to show positive attitude in social relations and to understand his inner world (Goleman, 2006; Teele, 2000). Since emotional intelligence includes social abilities, it is known that these abilities are closely associated with sharing, communicating positively and maintaining this communication (Stein & Book, 2000). In other words, individuals who have the adaptation ability and high interpersonal intelligence can adapt to different environments quickly (Eren-Yavuz, 2004) and individuals who have high emotional intelligence participate in social activities more. These two facts show that socializing and emotional intelligence are associated with each other (Ergin, Kaynak, Pinarcik & Aslan, 2013). Individuals who have high emotional and interpersonal potential are expected to be optimistic. The results revealed that the increase in optimism scores also increase the possibility of having interpersonal intelligence as a predominant intelligence. Since the interpersonal intelligence is associated with social abilities which are seen as the ability to communicate and interact with others, it is known that it is also associated with understating and managing others' feelings (Bay & Lim, 2006). Because the individuals who have high interpersonal intelligence have an ability to approach other people's emotions, fears, and interests with empathy (Basaran, 2004), it is remarkable that this area of intelligence is considerably improved among teachers. Individuals who have high emotional intelligence are described as socially balanced (Kocayoruk, 2004) and optimistic. Moreover, considering that emotional intelligence can develop with different experiences and different needs in different environments according to a person's request, opportunities for the development of visual intelligence areas in educational environments show that emotional intelligence can predict this intelligence area.

In this study, it is seen that demographic variables and emotional intelligence scores did not predict the state of being kinesthetic intelligence, musical intelligence, intrapersonal intelligence, logical intelligence and verbal intelligence. There are researches that reached both similar and different results in the related body of literature. Ferrandiz, Ferrando, Bermejo and Prieto (2005) reached that there is no relationship between emotional intelligence and multiple intelligence areas apart from the relationship between the use of emotions variable and logical intelligence. Rahimi, Sadighi and Fard (2011) reported that there is no meaningful relationship between emotional intelligence and verbal

intelligence of university students. Shearer (2006) reached that logical intelligence is associated with optimism. Emotional intelligence scores and demographic variables do not predict the areas of kinesthetic intelligence, musical intelligence, intrapersonal intelligence, logical intelligence and verbal intelligence can be explained that although each individual has each area of intelligence, the intelligence potential of each individual is different and each intelligence area has a different structure. The effect of cultural structure on the development of intelligence areas can explain the fact that demographic variables are not predictive of intelligence areas. Therefore, the use of emotional intelligence and multiple intelligence in educational environments should be included.

Emotional intelligence is quite important for the teaching profession. If, as Gardner says, it is possible to improve individuals' intelligence areas, it may be suggested for curriculum developers to implement programs to improve teacher candidates' multiple intelligence areas and emotional intelligence in faculties of education where there are initial teacher training programs and teachers are raised. The present study was conducted merely on the special education teacher candidates. Considering the importance of the issue in this study, the answers of the teacher candidates from a special education department at a university to the data collection tools are assumed as their own sincere thoughts constitutes the limitations of the research. It may be suggested that similar studies can be conducted on teacher candidates who are studying in other areas and on the teachers.

### References

- Ada, S. (2009). *Beden egitimi ogretmenlerinin duygusal zeka duzeyleri ve yetkinliklerinin belirlenmesi* [Determination of emotional intelligence levels and competencies of physical education teachers] (Unpublished master's thesis). Yeditepe University, Istanbul, Turkey.
- Aksu, O., Aktas, M., Gokmen, A., Ekici, G., & Gulay-Ogelman, H. (2012). Okuloncesi ogretmen adaylarinin coklu zeka alanlarinin farkli degiskenlere gore degerlendirilmesi [Evaluation of pre-school pre-service teachers' multiple intelligences according to different variables]. *Bayburt Egitim Fakültesi Dergisi* [Bayburt University Faculty of Education], 7(2), 20-38.
- Armstrong, T. (2003). *The multiple intelligences of reading and writing making the words come alive*. Alexandria, VA: ASCD.
- Aslan, S. (2009). *Duygusal zeka ve donusumcu, etkilesimci liderlik* [Emotional intelligence and transformational, interactive leadership]. Ankara, Turkey: Nobel.
- Ayaydin, A. (2015). *Coklu zeka tabanlı gorsel sanatlar egitimi* [Multiple intelligences-based visual arts education]. Ankara, Turkey: Nobel.
- Baba, H. (2012). *Beden egitimi ve spor yuksekokulundaki ogrencilerin kinestetik ve duygusal zekalarının, ic-dis kontrol odaklarının akademik basarilarina etkisi* [The effect of the kinesthetic and the emotional intelligence, interior-exterior control center of the students in physical education and sport academy to their academic achievement] (Unpublished master's thesis). Gazi University, Ankara, Turkey.
- Balci, I. (2001). *Ilkogretim okulu yoneticilerinin duygusal zeka becerilerini kullanabilme duzeyleri konusunda yoneticilerin ve ogretmenlerin gorusleri* [Elementary school administrators and teachers opinions about the level of elementary school administrators skills in using their emotional quotient] (Unpublished master's thesis). Hacettepe University, Ankara, Turkey.
- Bar-On, R. (2000). Emotional and social intelligence: Insight from the emotional quotient inventory. In R. Bar-On & J.D.A. Parker (Eds.), *The handbook of emotional intelligence*. San Francisco, CA: Jossey-Bass.
- Bar-On, R. (2006). The bar-on model of emotional-social intelligence (ESI). *Psicothema*, 18(Supl.), 13-25.
- Basaran, B. I. (2004). Etkili ogrenme ve coklu zeka kurami: Bir inceleme [Effective learning and multiple intelligence theory: A review]. *Ege Journal of Education*, 5(1), 7-15.
- Baum, S., Viens, J., & Slatin, B. (2005). *Multiple intelligences in the elementary classroom a teacher's toolkit*. New York, NY: Teachers College Press.
- Bay, G. K. S., & Lim, M.K. (2006). Correlations of multiple intelligences and emotional intelligence: A closer analysis of theoretical assumptions. *The Korean Journal of Thinking & Problem Solving*, 16(1), 53- 64.
- Buyukozturk, S., Cakmak, E. K., Akgun, O. E., Karadeniz, S., & Demirel, F. (2015). *Bilimsel arastirma yontemleri* [Scientific research methods]. Ankara, Turkey: Pegem Akademi.
- Calisandemir, F. (2010). *Anasinifi cocuklarının coklu zeka alanlarının gelismine deney yontemiyle verilen egitimin etkisinin incelenmesi* [A study on affects of education with experimental method on multiple intelligences areas of preschool children] (Unpublished doctoral dissertation). Hacettepe University, Ankara, Turkey.
- Cinkilic, I., & Soyer, F. (2013). Beden egitimi ogretmen adaylarinin coklu zeka alanlari ile problem cozme becerileri arasindaki iliskinin incelenmesi [An investigation the relation between multiple intelligence areas of pre-service

- physical education teacher and their problem solving skills]. *Spor Yonetimi ve Bilgi Teknolojileri Dergisi*, 8(1), 1306-4371.
- Deveci, I., & Aydin, F. (2017). Fen bilimleri ogretmen adaylarinin coklu zeka alanlarinin girisimci ozellikleri yordama durumu [Multiple intelligence as a predictor of the entrepreneurial characteristics of prospective science teachers]. *Inonu University Journal of the Faculty of Education*, 18(3), 175-188.
- Eren-Yavuz, K. (2004). *Ogrenen ve gelisen egitimciler icin coklu zeka teorisi uygulama rehberi [Multiple intelligence theory application guide for learning and developing educators]*. Ankara, Turkey: Ceceli.
- Ergin, B., Kaynak, B., Pinarcik, O., & Arslan, E. (2013). Okul oncesi ogretmen adaylarinin duygusal zekalari ve yasam doyumlari arasindaki iliskinin incelenmesi [Evaluation of relationship between emotional intelligence and life satisfaction of pre-school teacher candidates]. *Journal of Research in Education and Teaching*, 2(2), 35-42.
- Erginsoy, D. (2002). *Duygusal zeka ve kisilerarası iliskiler tarzları arasindaki iliskinin incelenmesi* [Investigation of the relationship between emotional intelligence and types of interpersonal relations] (Unpublished master's thesis). Ataturk University, Erzurum, Turkey.
- Eyyam, R., Menevis, I., & Dogruer, N. (2010, November). *Coklu zeka ve akademik basari arasindaki iliski* [The relationship between multiple intelligence and academic achievement]. Paper presented at the International Conference on New Trends in Education and Their Implications, Antalya, Turkey.
- Ferrandiz, C., Ferrando, M., Bermejo, R., & Prieto, L. (2005, September). *Emotional intelligence: An empirical work*. Paper presented at the European Conference on Educational Research, University College Dublin.
- Fleetham, M. (2006). *Multiple intelligences in practice: Enhancing self-esteem and learning in the classroom*. Cornwall, Great Britain: MPG Books.
- Gardner, H. (2006). *Coklu zeka yeni ufuklar* [Multiple intelligence, new horizons] (A. Hekimoglu-Gul, Trans.). Istanbul, Turkey: Optimist. (Original work published 2006)
- Goleman, D. (2000). *Is basinda duygusal zeka* [Emotional intelligence at work] (H. Balkara Trans.). Istanbul, Turkey: Varlik. (Original work published 1999)
- Goleman, D. (2006). *Social intelligence: The new science of human relationships*. New York, NY: Bantam Books.
- Goleman, D. (2012). *Duygusal zeka neden IQ'dan daha onemlidir?* [Why emotional intelligence is more important than IQ]. (B.S. Yuksel, trans.). Istanbul: Varlik. (Original work published 1996)
- Gogebakan, D. (2003). *How students' multiple intelligences differ in terms of grade level and gender* (Unpublished master's thesis). Middle East Technic University, Ankara, Turkey.
- Hoerr, T.R. (2000). *Becoming a multiple intelligences school*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Izard, C. E. (2001). Emotional intelligence or adaptive emotions. *Emotions*, 1(3), 249-257.
- Karasar, N. (2013). *Bilimsel arastirma yontemi* [Scientific research method]. Ankara, Turkey: Nobel.
- Kizil, S. (2014). *Ogretmenlerin duygusal azekalari ile orgutsel adanmisliklari arasindaki iliski (Balikesir ili ornegi)* [The relationship between teacher's emotional intelligence and organizational commitment (A case study in Balikesir)] (Unpublished master's thesis). Okan University, Istanbul, Turkey.
- Kocayoruk, A. (2004). *Duygusal zeka egitiminde drama etkinlikleri* [Drama activities in emotional intelligence education]. Ankara, Turkey: Nobel.
- Kozagac, B. Z. (2015). *Matematik bolumu ogretmen adaylarinin coklu zeka alanlarinin belirlenmesi ve sosyal becerileri ile ogretmenlik meslegine iliskin tutumlarının incelenmesi* [The determination of multiple intelligence area of preservice teacher of the department of mathematics and examination of attitude with regard to social abilities with teaching profession] (Unpublished master's thesis). Adnan Menderes University, Aydin, Turkey.
- Koksal, A. (2007). *Ustun zekali cocuklarda duygusal zekayı gelistirmeye donuk program gelistirme calismasi* [A program development study for developing emotional intelligence in gifted children] (Unpublished doctoral dissertation). Istanbul University, Istanbul, Turkey.
- Kuzgun, Y., & Deryakulu, D. (Eds.) (2014). *Egitimde bireysel farkliliklar* [Individual differences in education]. Ankara, Turkey: Nobel.
- Lam, L. T., & Kirby, S. L. (2002). Is emotional intelligence an advantage? An exploration of the impact of emotional and general intelligence on individual performance. *The Journal of Social Psychology*, 142(1), 133-143.

- Mayer, J. D., DiPaolo, M., & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of Personality Assessment*, 54(3&4), 772-781.
- Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence*, 17, 433-442.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence* (pp. 3-31). New York, NY: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings and implications. *Psychological Inquiry*, 15(3), 197-215.
- Murray, S., & Moore, K. (2012). Inclusion through multiple intelligences. *Journal of Student Engagement: Education Matters*, 2(1), 42-48.
- Oklan-Elibol, F. (2000). *Anasinfina devam eden alti yas grubu cocuklarin coklu zeka teorisine gore degerlendirilmesi [Assesing 6 years old preschool children according to multiple intelligences theory]* (Unpublished master's thesis). Hacettepe University, Ankara, Turkey.
- Ozdamar, K. (1999). *Paket programlarla istatistiksel veri analizi 1 [Statistical data analysis with package programs 1]*. Eskisehir: Kaan.
- Ozdemir, B. (2006). *4-6 yas grubu cocuklarin ogrenme surecinde coklu zeka teorisinin yeri [Determining multiple intelligences pre-school children (4-6 age) in learning process]* (Unpublished master's thesis). Onsekiz Mart University, Canakkale, Turkey.
- Ozdemir-Yaylaci, G. (2006). *Kariyer yasaminda duygusal zeka ve iletisim yetenegi [Emotional intelligence and communication skills in career life]*. Istanbul, Turkey: Hayat.
- Ozturk, A. A., Ozsoy, N., Vural, R. A., & Baysan, S. (2017). Ogretmen adaylarinin coklu zeka bolumlerine iliskin algilarinin karsilastirmali perspektiften incelenmesi [A multi-perspective comparison of prospective teacher's self perceptions of their multiple intelligence areas]. *Adnan Menderes University, Journal of Institute of Social Sciences*, 4(3), 18-32.
- Pinarcik, S., Sali, G., & Altindis, M. N. (2016). Okul oncesi ogretmen adaylarinin duygusal zekalari ve iletisim becerileri arasindaki iliskinin incelenmesi [Study of the relationship between emotional intelligences and communication skills of pre-school teacher candidates]. *Asian Journal of Instruction*, 4(1), 34-44.
- Rahimi, M., Sadighi, F., & Fard, Z. H. (2011). The impact of linguistic and emotional intelligence on the reading performance of Iranian efl learners. *The Journal of Teaching Language Skills*, 30(1), 151-171.
- Saban, A. (2005). *Coklu zeka teorisi ve egitimi [Multiple intelligence theory and education]*. Ankara, Turkey: Nobel.
- Salovey, P., & Mayer, J. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211. doi: 10.2190/DUGG-P24E-52WK-6CDG
- Seal, R. C., & Brown, A. A. (2010). An integrative model of emotional intelligence: Emotional ability as a moderator of the mediated relationship of emotional quotient and emotional competence. *Organizational Management Journal*, 7(2), 143-152. doi: 10.1057/omj.2010.22
- Shearer, C. B. (2006). *Reading skill and the multiple intelligences: An investigation into the mi profiles of high school students with varying levels of reading skill*. Unpublished paper. Retrieved from [http://insingerinsightskids.com/wp-content/uploads/2013/10/Reading\\_MI.doc](http://insingerinsightskids.com/wp-content/uploads/2013/10/Reading_MI.doc)
- Skourdi, S., & Rahimi, A. (2010). The relationship of emotional intelligence and linguistic intelligence in acquiring vocabulary. *California Linguistic Notes*, 35(1), 1-24.
- Stein, S. J., & Book, H. E. (2000). *EQ duygusal zeka ve basarinin sirri [EQ emotional intelligence and secret of success]*. (M. Isik, Trans.). Istanbul, Turkey: Ozgur. (Original work published 2000)
- Tatar, A., Tok, S., & Saltukoglu, G. (2011). Gozden gecirilmis schutte duygusal zeka olceginin Turkce'ye uyarlanmasi ve psikometrik ozelliklerinin incelenmesi [Adaptation of the revised schutte emotional intelligence scale into Turkish and examination of its psychometric properties]. *Bulletin of Clinical Psychopharmacology*, 21(4), 325-338.
- Teele, S. (2000). *Rainbows of intelligence: Exploring how students learn*. Oaks, CA: Corwin Press.
- Temiz, N. (2013). *Kimim? 2 Coklu zeka kurami evde ve ailede [Who am I? 2 multiple intelligences theory at home and in the family]*. Ankara, Turkey: Nobel.
- Terzioglu, E.C. (2005). *Proje yaklasiminin uygulayan ve uygulamayan okullara devam eden 5-6 yas grubundaki cocuklarin sosyal gelism ve zeka alanlarinin incelenmesi [Analyses of 5-6 years old children's social development and intelligences areas in schools of using project approach and not using project approach]* (Unpublished master's thesis). Hacettepe University, Ankara, Turkey.

- Tufan, S. (2011). *Gelistirilen duygusal zeka egitimi programinin ortaogretim dokuzuncu sinif ogrencilerinin duygusal zeka duzeylerine etkisi* [The effect of developed emotional intelligence training programme on the levels of emotional intelligence of 9th grade students at high school] (Unpublished master's thesis). Ankara University, Ankara, Turkey.
- Van Der Zee, K., Thijs, M., & Schakel, L. (2002). The relationship of emotional intelligence with academic intelligence and the big five. *European Journal of Personality*, 16(2), 103-125. doi: 10.1002/per.434
- Yenice, N., & Aktamis, H. (2010). Sinif ogretmeni adaylarinin coklu zeka alanlarinin demografik ozelliklere gore incelenmesi [Examination of multiple intelligences of class teacher candidates according to demographic characteristics]. *Journal of Turkish Science Education*, 7(3), 86-99.
- Yesilyaprak, B. (2001). Duygusal zeka ve egitim acisindan dogurgulari [Emotional intelligence and results for education]. *Educational Administration: Theory and Practice*, 7(1), 139-146.
- Yuksel, M. (2006). *Duygusal zeka ve performans iliskisi (bir uygulama)* [The relationship between emotional intelligence and performance (An application)] (Unpublished master's thesis). Ataturk University, Erzurum, Turkey.