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The Factors Affecting Emotional Intelligence of Gifted Children

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Abstract

In this study it is aimed to identify the factors affecting emotional intelligence of gifted children. 27 female and 76 male gifted children whose ages range from 8 years to 13 years attending Sivas Science and Arts Centre in 2013 participated in this study voluntarily. In this study which is a descriptive study appropriate to general survey method, Emotional Intelligence Scale adapted to Turkish by Göçet was used as data collection tool. In the analysis of the data obtained, One-Sample Kolmogorov-Smirnov test, independent t test, One Way ANOVA, correlation analysis were applied and descriptive statistics (means and frequencies) were utilized. As a result, there is no significant difference between the variables of gifted children's age, gender, doing sports and educational status of parents and emotional intelligence features ($p>0.05$) whereas it is ascertained that there is a significant difference between the children playing and not playing computer games in terms of their emotional intelligence levels ($p<0.05$). In this context, it can be said that playing computer games affects emotional intelligence negatively.

Keywords: Gifted / talented children, emotional intelligence, social and emotional development.

Introduction

Emotional and social elements have also strong influence within the concept of intelligence as well as cognitive elements. Intelligence seen as a source of differences between people denotes a process in which all of these elements are required to be managed effectively. So intelligence is a whole in itself in spite of its versatility[1]. Therefore, the concept of giftedness is associated with cognitive, emotional and social potential levels. However it is not possible to talk about a compromised definition of superior intelligence when variety of definitions was taken into consideration[2]. The superior and special aptitudes of the individual can be expressed as being more advanced than their peers observed/measured in one or more of the fields of cognitive, social, emotional, aesthetic, language and action development which exist in the individual's genotype and develop with environmental stimuli[3]. It should be noted that these potentials strengthened by rich experiences are composition of various skills. Therefore, it should be given particular importance to develop all capacities covered by intelligence with each other as a whole.

We have four main types of capacity used in every area of life. The first one is accumulation of knowledge and experience which we begin to develop since birth. Our second capacity is the analytical skill that affects our capacity to use our accumulation of knowledge. The third one is our creative skill that helps us to transform our accumulation to production. The fourth capacity of ours is practical skill that helps us to use our accumulation in daily life[4]. When taking into consideration that development of these capacities whose lower and upper limits are specified by inheritance is shaped mainly by the influence of environment, the importance of experience richness becomes more prominent.

Using a high level of intellectual potential is not a guarantee that emotional and social potential are used high level as well. In this context, the main issue to be considered is the ability to transform possessed high intellectual, emotional and social potential to skill which is used effectively. In this study in which the level of using emotional potential compared to intellectual potential emotional intelligence characteristics of gifted children are examined. Emotional intelligence is a joint product of cognitive and emotional systems[5]. Emotional intelligence is the ability to understand emotions, using emotions to help thoughts, understanding emotional information and providing emotional and intellectual growth. Within this framework, emotional intelligence is defined as recognizing the meanings of emotions and the relationship between them, reasoning based on these emotions and as problem solving skills[6]. Individuals with high levels of emotional intelligence are the ones being self-aware, being aware of their strengths and weaknesses, can control their emotions and can communicate effectively with other people[7].

Gifted children who constitute the privileged group among their peers have different emotional and social characteristics. If their education is left to chance and they are subjected to education below their level, they can be induced to develop in a disadvantageous manner[8]. Thus, gifted children's not only cognitive but also emotional and social development should be examined and observed. Concordantly, to determine gifted children's level of using emotional intelligence potential is required. Then, the factors affecting the features of gifted children's emotional intelligence should be known. As a result, studies need to be done towards developing these children's ability to use their emotional intelligence potential. In this way we can make contribution to these children with regards to

developing their productive thinking skills, becoming better decision makers throughout their lives, developing their interpersonal relationships positively.

In this study aimed to investigate the levels of using emotional intelligence potential of gifted children with a high level of cognitive potential gifted and talented children's emotional intelligence capabilities are discussed in terms of several variables. Knowing the variables that both affect and are affected by emotional intelligence levels of gifted children is very important in terms of education and guidance of these children. Therefore, in this research the relationship between the emotional intelligence level and the factors such habits as age, gender, parental educational status, doing sports and playing computer games are examined.

Methodology

Research Design: This study in which the relationship between the emotional intelligence features of gifted children and several variables are examined in detail is a descriptive study in general survey method and carried out on the basis of quantitative research method.

Sample: In this research, 27 female and 76 male, in total 103 gifted children whose ages range from 8 years to 13 years, attending Sivas Arts and Science Centre in 2012-2013 school year, spring term participated voluntarily.

Table -1
Characteristics of participants

Independent Variables	Dependent Variables	f	%
Gender	Male	76	73.8
	Female	27	26.2
Age groups	8-10 years	48.5	48.5
	11-13 years	51.5	51.5
Case of doing sports	Doing sports	37.9	37.9
	Not doing sports	62.1	62.1
Case of playing computer games	Playing games	78	75.7
	Not playing games	25	24.3

Research Instruments: In this study, as data collection tool "Emotional Intelligence Scale" developed by Schutte et al., modified by Austin et al. and adopted to Turkish by Göçet[9] was used in order to determine the characteristics of emotional intelligence of gifted children. Cronbach's Alpha (α), the internal consistency coefficient of 41 items 5-pointLikert scale which consists of three factors; benefit from emotions, expression of emotions and optimism was found .81. In our study, Cronbach's Alpha coefficient reliability analysis of the scale was found .85. Because this value is over .80 the scale is said to be highly reliable[10].

Data Analyses: Statistical analysis of the data obtained as a result of this research SPSS 15.00 for Windows software package was used. Before determining basic statistical analysis we use in this research One-Sample Kolmogorov-Smirnov test was used to analyze whether the data are suitable for normal distribution or not. Because the data obtained in this study fit the normal distribution (p>0,05) Independent t tests to compare the mean of two independent variables, One Way ANOVA to compare the mean of three or more independent variables were used. The correlation analysis was applied to examine the relationship between the subscales. In addition, descriptive statistics (means and frequencies) were utilized.

Results and Discussion

Means of benefiting from emotions of the participants 16.09±5.44 points, means of expressions of emotions 37.88±10.93 points, means of optimism 53.77±19.40 points are found while the total scores of emotional intelligence are found 118.60±23.53 points. Participants benefit from emotions in medium-level. Similarly, characteristics of the participants' expressing their emotions and the level of optimism are also in medium-level. Total emotional intelligence scores of the participants are in medium level as well.

The mean score of male participants benefiting from emotion is 16.66±4.81 points, female participants' is 15.77±5.97, mean score of male participants expressing emotions is 38.40±10.62, female participants' is 37.40±11.31, and male participants' optimism mean score is 53.42±18.70 and female participants' is found 54.11±20.23 points. Male participants' emotional intelligence total score is found 119.56±21.35 points while female participants' is found 117.70 ±25.60. There is no statistically significant difference between the scores of male and female participants benefiting from emotions, expressing emotions, optimism and total emotional intelligence scores (p>0.05).

Table -2
Emotional intelligence means of participants

Sub-dimensions	N	Lowest	Highest	X	Ss
Benefit from emotions	103	6.00	30.00	16.09	5.44
Expression of emotions	103	14.00	70.00	37.88	10.93
Optimism	103	17.00	85.00	53.77	19.40
Total scores of emotional intelligence	103	41.00	205.00	118.60	23.53

The mean scores of benefiting from emotions of the participants at the age of 8-10 years is 16.12±5.79 points, 11-13 years old participants' is 16.04±4.42, mean score of the expression of emotions of participants at the age of 8-10 years is 37.99±11.82, 11-13 years old participants' is 37.59±8.10, the mean score of optimism of the 8-10 years old is 52.68±19.97, 11-13 years old participants' is found 56.85±17.73 points. Total emotional intelligence scores of the participants at the age of 8-10 is 117.50±26.36 points, 11-13 years old participants' is found 121.70±12.4 points. There are differences between the participants' benefiting from emotions, expression of emotions, optimism and total emotional intelligence scores. However these differences are not statistically significant (p>0.05)

The mean scores of benefiting from emotions of the participants doing sports is 15.15±5.12 points while the ones' who don't do sports is 16.67±5.59, the mean score of the expression of emotions of participants doing sports is 37.0±10.02 points, the ones' who don't do sports is 38.42±11.50, the mean score of optimism of the participants who do sports is 56.18±20.18 points, the ones' who don't do sports is found 52.31±18.93 points. Total emotional intelligence scores of the participants doing sports is 118.28±19.68 points, the scores of the ones who don't sports is found 118.80±25.75 points. There is no statistically significant difference between the participants' benefiting from emotions, expression of emotions, optimism and total emotional intelligence scores (p>0.05).

The mean scores of benefiting from emotions of the participants who play computer games is 16.01±5.76 points, while the ones' who don't play is 16.36±4.38, the mean score of the expression of emotions of participants who play computer games is 37.85±11.46 points, the ones' who don't play is 38.0±9.33, the mean score of optimism of the participants who play computer games is 50.41±20.28 points, the ones' who don't play is found 64.28±11.36 points. Total emotional intelligence scores of the participants doing sports is found 114.90±24.62 points while the scores of the ones who don't is 130.16±15.04 points. While there is no statistically significant difference between the scores of participants' benefiting from emotions and their expression of emotions (p>0.05), there is statistically significant difference between their total emotional intelligence scores and optimism (p<0.05).

Table-3
Comparison of emotional intelligence characteristics in terms of gender

Sub-dimensions	Gender	N	X	Ss	t	p
Benefit from emotions	Male	50	16.66	4.81	1.026	.307
	Female	53	15.57	5.97		
Expression of emotions	Male	50	38.40	10.62	.464	.644
	Female	53	37.40	11.31		
Optimism	Male	50	53.42	18.70	-.180	.857
	Female	53	54.11	20.23		
Total scores	Male	50	119.56	21.35	.400	.690
	Female	53	117.70	25.60		

Table-4
Comparison of emotional intelligence characteristics in terms of age

Sub-dimensions	Age groups	N	X	Ss	t	p
Benefit from emotions	8-10 years	76	16.12	5.79	.066	.947
	11-13 years	27	16.04	4.42		
Expression of emotions	8-10 years	76	37.99	11.82	.160	.873
	11-13 years	27	37.59	8.10		
Optimism	8-10 years	76	52.68	19.97	-.958	.340
	11-13 years	27	56.85	17.73		
Total scores	8-10 years	76	117.50	26.36	-1.089	.279
	11-13 years	27	121.70	12.47		

Table-5
Comparison of emotional intelligence characteristics in terms of doing sports

Sub-dimensions	Case of doing sports	N	X	Ss	t	p
Benefiting from emotions	Doing sports	39	15.15	5.12	-1.379	.171
	Not doing sports	64	16.67	5.59		
Expression of emotions	Doing sports	39	37.00	10.02	-.638	.525
	Not doing sports	64	38.42	11.50		
Optimism	Doing sports	39	56.18	20.18	.981	.329
	Not doing sports	64	52.31	18.93		
Total scores	Doing sports	39	118.28	19.68	-.107	.915
	Not doing sports	64	118.80	25.75		

Table-6
Comparison of emotional intelligence characteristics in terms of playing computer games etc

Sub-dimensions	Case of playing game	N	X	Ss	t	p
Benefit from emotions	Playing game	78	16.01	5.76	-.276	.783
	Not playing game	25	16.36	4.38		
Expression of emotions	Playing game	78	37.85	11.46	-.061	.952
	Not playing game	25	38.00	9.33		
Optimism	Playing game	78	50.41	20.28	-4.293	.000
	Not playing game	25	64.28	11.36		
Total scores	Playing game	78	114.90	24.62	-2.924	.004
	Not playing game	25	130.16	15.04		

Table-7
Comparison of emotional intelligence characteristics in terms of educational status of their fathers

Sub-dimensions	Educational status of the father	N	X	Ss	F	p
Benefit from emotions	Secondary school and lower educations	13	16.69	4.88	.221	.802
	High school	23	16.61	6.19		
	Graduate and Postgraduate	65	15.88	5.39		
Expression of emotions	Secondary school and lower educations	13	38.31	11.51	.326	.723
	High school	23	39.57	11.27		
	Graduate and Postgraduate	65	37.42	10.90		
Optimism	Secondary school and lower educations	13	48.77	15.94	.550	.578
	High school	23	53.91	19.13		
	Graduate and Postgraduate	65	54.97	20.14		
Total scores	Secondary school and lower educations	13	115.00	27.97	.304	.739
	High school	23	121.39	13.28		
	Graduate and Postgraduate	65	118.97	25.44		

The mean scores of benefiting from emotions of the participants whose fathers' educational status is secondary school and lower educations is 16.69±4.89 points, whose educational status is high school 16.61±6.19, and whose is graduate and postgraduate 15.88±5.39, the mean score of the expression of emotions of participants whose educational status is secondary school and lower educations 38.31±11.51 points, whose educational status is high school is 39.57±11.27, whose educational status is graduate and postgraduate is 37.42±10.90, the mean score of optimism of the participants whose educational status is secondary school and lower educations is 48.77±15.94 points, whose educational status is high school is 53.91±19.13, whose educational status is graduate and postgraduate is found 54.97±20.14 points. Total emotional intelligence scores of the participants whose fathers' educational status is secondary school and lower is 115.0±27.97 points, whose educational status is high school is 121.39±13.28, whose educational status is graduate and postgraduate is found 118.97±25.44 points. There is no statistically significant difference between the participants' fathers educational status in benefiting from emotions, expression of emotions, optimism and total emotional intelligence scores ($p>0.05$).

The mean scores of benefiting from emotions of the participants whose mothers' educational status secondary school and lower educations is 16.76±5.16 points, whose educational status is high school 17.0±5.84, and whose is graduate and postgraduate 15.32, the mean score of the expression of emotions of participants whose educational status is secondary school and lower educations is 37.69±10.23 points, whose educational status is high school is 41.56±10.25, the ones whose educational status is high school is 36.34±11.58, the mean score of optimism of the participants whose educational status is secondary school and lower educations is 52.28±17.45 points, whose educational status is high school is 54.72±20.09 whose educational status is graduate and postgraduate is found 54.53±20.40 points. Total emotional intelligence scores of the participants whose mothers' educational status is secondary school and lower is 117.69±21.99 points, whose educational status is high school is 125.08±11.51, whose educational status is graduate and postgraduate is found 116.60±28.39. There is no statistically significant difference between participants' benefiting from emotions, expression of emotions, optimism and total emotional intelligence scores in terms of their educational status ($p>0.05$).

Table-8
Comparison of emotional intelligence characteristics in terms of educational status of their mothers

Sub-dimensions	Educational status of the mother	N	X	Ss	F	p
Benefit from emotions	Secondary school and lower educations	29	16.76	5.16	1.019	.365
	High school	25	17.00	5.84		
	Graduate and Postgraduate	47	15.32	5.47		
Expression of emotions	Secondary school and lower educations	29	37.69	10.23	1.892	.156
	High school	25	41.56	10.25		
	Graduate and Postgraduate	47	36.34	11.58		
Optimism	Secondary school and lower educations	29	52.28	17.45	.147	.864
	High school	25	54.72	20.09		
	Graduate and Postgraduate	47	54.53	20.40		
Total scores	Secondary school and lower educations	29	117.69	21.99	1.134	.326
	High school	25	125.08	11.51		
	Graduate and Postgraduate	47	116.60	28.39		

Conclusion

As a result, total emotional intelligence scores of the participants were determined as medium level. In other words, participants benefit from emotions in medium-level. Similarly, characteristics of the participants' expressing their emotions and the level of optimism are also in medium-level. There are differences between the participants' benefiting from emotions, expression of emotions, optimism and total emotional intelligence scores. However, these differences are not statistically significant ($p>0.05$). There is no statistically significant difference between the scores of male and female participants benefiting from emotions, expressing emotions, optimism and total emotional intelligence scores ($p>0.05$). In several studies conducted it is expressed that age[11] and gender characteristics[12-14] do not affect emotional intelligence. However, many studies conducted on individuals of different ages and professions emotional intelligence scores of women have been found higher than men[15-18]. It is considered that the main reason of this is women give more value to emotions than men.

In this study there is no significant difference between participants' emotional intelligence levels and their sports participation. There is no statistically significant difference between the participants' benefiting from emotions, expression of emotions, optimism and total emotional intelligence scores ($p>0.05$) in terms of the case they do sports or not. In the studies conducted considering that sports improves personal and interpersonal skills[19,20] contributes to their psychological development[21,22,23] affects emotional intelligence levels positively[24]. We can say that our findings differ from the literature. The main reason for this situation can be explained by the age of the participants in this study are young and emotional characteristics of them have not been fully developed.

It is ascertained in this study that there is no significant difference between the participants' parents' educational status and emotional intelligence levels of them. However it should be expected that as the educational levels of the parents increase, emotional intelligence of the children increase as well. As the educational status of the parents increase, their communication levels with their children also increases. In their similar studies[25], state that a significant decrease occurs in emotional intelligence levels of the children as the educational status of their parents become lower. In this context, it can be said that it would be useful to examine the multi-dimensional relationships of gifted children with their siblings and friends besides their intra-family relations.

It is established in this study, that while there is no statistically significant difference between the scores of participants' benefiting from emotions and their expression of emotions ($p>0.05$), there is statistically significant difference between their total emotional intelligence scores and optimism ($p<0.05$). Total emotional intelligence scores and optimism sub-dimension scores of the children who do not play computer games are found higher than those of children who play computer games. Today, computers are known to be used in the children's educational life[26-30]. Hence computers can be expected to contribute to children's cognitive and emotional development. However, nowadays computers are mostly used out of purpose. Especially children use computers as a tool for play and communication. In this study the reason of the low level of emotional intelligence of the children who play computer games is because that these children spend a long time with computer games and playing the same games constantly may cause narrowing their world of imagination. On the other hand it can

be said that the effects on mental development of this situation which affects social and emotional development of gifted children negatively should be questioned.

As a result, it is determined that there is no significant difference between the gifted and talented children's age, gender, doing sports, parental educational status and their emotional intelligence characteristics ($p>0.05$), whereas has been found that there is a significant difference between the emotional intelligence levels of children who play computer games and who do not ($p<0.05$). In this context, it can be argued that parental educational status, age and gender characteristics and the case of doing sports do not affect the emotional intelligence level of gifted children however playing computer games affect the emotional intelligence negatively. This study in which emotional intelligence of the gifted children is questioned demonstrates that even if the gifted children's ability to use their intellectual capacity high level they do not use their emotional intelligence capacity at the same rate.

Based on the findings of the research, it can be suggested that in the education of gifted children studies aiming to develop their ability to use their emotional intelligence potential affectively should be conducted. Developing their ability to use their emotional intelligence potential will contribute to increase their life skills.

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