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Determination of Attitudes and Opinions of Classroom Teachers about Education of Gifted Students \*

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**Abstract** Keywords

The identification and education of gifted individuals who lead the development of the societies are very important. Classroom teachers play effective roles in both diagnosing and education of gifted students. This research aims to determine the attitudes and opinions of the classroom teachers about the education of the gifted students.

The research model is a descriptive survey model. The combination of qualitative and quantitative methods in the direction of the principles of pragmatist philosophy was used. The mixed method is preferred because it provides a multidimensional and holistic view by balancing the limitations of 'prejudice' in the quantitative method 'inability to understand the context' in the qualitative method. The study group is consist of 220 classroom teachers volunteering to participate in the research working in 16 primary schools, 10 of the public and 6 private in Ankara in the second term of the 2017-2018 academic year. The quantitative data were collected by "Attitude Scale towards Gifted Education". The scale consists of 14 items. There are three sub-dimensions: 'Need and Support Dimension', 'Resistance to Objections Dimension', 'Ability Grouping Dimension'. The qualitative data were collected by semistructured interview form consists of 4 questions about opinions on the education of gifted students in Turkey, and was applied to 35 teachers.

The scores gathered from "Attitude Scale towards Gifted Education"were analyzed according to gender, age, occupational seniority, having a gifted studentin the class, graduated faculty, and type of school of teachers. In the analyzing of quantitative data, t-test and ANOVA were used. The analysis of the data was done with SPSS 20.0 software. Content analysis was performed for qualitative data that was gathered from interviews. In content analysis, similar expressions were organized in the context of certain concepts and themes and interpretations were made Qualitative data were analyzed using frequency distributions and percentages.

Classroom teachers Education of gifted students

## Article Info

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In this study, the average of the total scores of the classroom teachers' attitude scale with respect to gifted education was found 2.91 and the range of this score was evaluated as' ambivalent'. The research also evaluated whether the attitudes of teachers differed according to gender, age, seniority, having a gifted student in the class, graduated faculty and school type variables. The results of the study show that there is no significant difference according to the scores obtained from all the subscales of attitude scale and the total score, between seniority, having a gifted student and graduated faculty variables. Significant differences were found in terms of gender, age and school type variables, according to some sub-dimensions.

The qualitative part of the research, it was tried to determine the views of classroom teachers on diagnosing and education of gifted in Turkey. The results show that classroom teachers have a lack of knowledge about the diagnosing and education of the gifted and need in-service training in this context. In addition, crowded classes and content and application process of the BILSEM exam are the factors that negatively affect the quality of education and need to be solved among the problems in the diagnosis and education of gifted students.

### Introduction

Gifted children constitute an important group within the students who need special education because of the fact that they develop normally faster than others in terms of cognitive characteristics. Although gifted individuals play important roles in the development of societies, they face many challenges in the field of education. Within the scope of special education, the gifted individuals who are out of various inadequacy groups differ from their peers in terms of learning speed, depth of learning and knowledge they possess and therefore have different educational needs. In this context, teachers need to implement different teaching strategies in order to develop their skills in recognition of the cognitive and affective needs of gifted students. However, it is not an accepted fact that gifted people need support. It is observed that some prejudices lay among the reasons why the special education needs of gifted children are not taken into account whereas the special education needs of the disabled groups are taken as usual. According to Ataman (2005), these prejudices can be listed as follows:

- These children are already superior; they do not need any extra training. They can develop themselves in every environment.
- If we give extra training to gifted, we create a class of elites, which creates problems that cannot be overcome.
- Secondary education institutions already choose students by election, are directed at gifted students, so, there is no need an extra special education.
- Special education should not be interested in gifted children.

Due to the prejudices mentioned above, negative attitudes can be seen towards the education of gifted students. This kind of negative attitudes can be seen even in developed counties. For example, in the United States of America, Davis (2006) states that gifted programs and attempts to classify students according to their abilities have been criticized and attempted to be hindered, on the grounds that it is contrary to the principle of equality.

Educational programs designed for students with normal development do not address gifted students and educational programs for gifted students are not applied in public schools. The most widespread institution in our country for gifted students is the Science and Art Center (BİLSEM). BİLSEM, a formal education institution affiliated to the Ministry of National Education (MoNE), which provided support education to gifted and talented students in addition to formal education, was opened in Ankara in 1995 and then increased in number. The students who are nominated by the classroom teachers are accepted to diagnostic process in the areas of general mental, painting and musical ability, and at the end of the process students who are determined to be gifted are taken to BİLSEM. Attitudes of the classroom teachers who have a very important role in the diagnosis of gifted students, is an essential research area (Güneş, 2015).

Davis and Rimm (2004) emphasize that the achievement of programs for gifted students are based on attitudes towards the education of gifted students, and when developing a program for gifted students, firstly, the question "what is our attitude towards the education of gifted students?" should be asked. The researches that examine teachers' attitudes towards the education of gifted students, state that the teachers who have a positive attitude support the gifted students and try to meet their emotional, social and academic needs; the teachers with negative attitudes can lead to impaired ability, loss of motivation and underachievement in gifted students (Al-Makhalid, 2012; Chipego, 2004; Copenhaver & McIntyre, 1992; Lassig, 2009; McWilliams-Abendroth, 2014). In addition, teachers' attitudes towards gifted students affect the way they interact with students and teaching methods they use (Curtis, 2005).

In Turkey, it cannot be said that the number of research related to this issue is enough. Also some of the studies have been carried out with prospective teachers, not with in-service teachers (Evin Gencel & Satmaz, 2017; Metin, Şenol, & İnce, 2017; Tortop, 2014b; Yıldırım & Öz, 2018). In these studies "Attitude scale for gifted education" developed by Gagné and Nadeau (1985) was used. Tortop (2014b) conducted a study with 120 prospective teachers and found that their attitudes towards the education of gifted children according to the scoring of the scale is slightly less positive than the average level, Evin Gencel and Satmaz (2017) found that the attitudes of 449 prospective teachers are between the positive and positive range of the middle level. In the study conducted by Metin et al. (2017), the attitudes of 490 prospective teachers were found to be positive. In the study conducted with 189 preservice teachers, the attitudes were found to be positive, and it was found that the scores of special education department students and those who took special education courses were higher (Yıldırım & Öz, 2018).

In Turkey, there are limited numbers of research that explores attitudes towards the education of gifted. The survey study carried out by Tortop and Kunt (2013) was conducted with 323 teachers from different branches in Isparta. As a result of the study, it was determined that the teachers' attitudes about the gifted education were slightly positive. There was no significant difference between the mean scores according to gender, age and branch. Güneş (2015) aimed to determine classroom teachers' self-efficacy and attitudes towards gifted education. In the research, 222 classroom teachers working in Diyarbakır were reached and their attitudes were found to be slightly positive. Sönmez (2017) conducted research with 20 teachers in order to reveal primary school teachers' attitudes towards gifted students and their education. According to findings, most of the teachers think that gifted students are important for our society, gifted students need special attention and support and the schools are not sufficient for them. However, it has been determined that they are uncertain about methods of monitoring the education of gifted individuals. The study by Kunt and Tortop (2017) showed that the attitude points of 111 science and technology teachers for the education of gifted students is slightly above the ambivalent level.

One of the most important factor underlying teachers' attitudes towards students with special education needs is to be knowledgeable about the subject. Teachers may have negative attitudes if they do not have enough knowledge about the group of students to work with, because they do not know what to do. For this reason, in order to be able to provide a good education to these students, teachers should have basic knowledge about these students at any stage (Dağlıoğlu, 2010). The result of the study conducted by Endepohls-Ulpe and Ruf (2005) showed that when experienced and inexperienced teacher groups were compared according to the negative judgments about gifted students, the inexperienced group of teachers has higher negative judgments than the experienced group. Similarly, in the study of Al-Makhalid (2012), it was concluded that there was a significant and positive relationship between the attitudes of teachers about gifted students and their knowledge about the subject. The study conducted by Yıldırım and Öz (2018) also shows that teacher candidates who have knowledge about the subject have a more positive attitude.

However, academic studies in our country show that teachers do not have sufficient knowledge in this respect (Akar & Şengil Akar, 2012; Alemdar, 2009; Altıntaş & Özdemir, 2013; Erişen, Yavuz Birben, Sevgi Yalın, & Ocak, 2015; Gökdere & Ayvacı, 2004; Kutlu Abu, Akkanat, & Gökdere, 2017; Şahin, 2012; Şahin & Levent, 2015). A study conducted by Akar and Şengil Akar (2012) in order to investigate the perceptions of primary school teachers about giftedness, pointed out that teachers working in primary schools, did not have enough knowledge about the gifted students. It may also be regarded as a sign that teachers' inadequate or misinformed knowledge of gifted and talented students will not be as successful in nominating or directing their students as their candidates to private educational institutions or out-of-school programs. Alemdar (2009) found significant differences in observation scores between the teachers and experts while predicting gifted children, which show the teachers' inadequacies about the subject. In the research conducted by Altıntaş and Özdemir (2013), knowledge levels and ideas of primary and secondary school teachers about gifted students were examined. In this context, inquiry form was applied to 139 primary and secondary school teachers from 7 regions in Turkey. The results of the research show that primary and secondary school teachers are not aware of the institutions and the models and programs applied to gifted children. They have also come to the conclusion that knowledge about gifted children is inadequate, they do not know which ways they have to follow if they meet a gifted child, and that they believe that in-service training for gifted children is necessary. Likewise, the study by Gökdere and Ayvacı (2004), aiming to determine the level of knowledge about classroom teachers' gifted children and their characteristics, shows that the classroom teachers are lack of knowledge about the subject. It is emphasized that in order to prevent gifted students from the negative effects of lack of this knowledge, the teachers should be trained about gifted education process in both pre-service and in-service training.

There are also some studies examining the effect of the training given to the teachers on this subject based on the lack of knowledge of the teachers about the gifted students, In the study by Erişen et al. (2015), 87 teachers were trained to gain awareness about the characteristics of gifted students, in order to determine the effect of the training about awareness and support of the gifted children on the teachers. The results have shown that the training program enhances teachers' knowledge levels and is useful in raising awareness of gifted students. A similar study by Şahin (2012) examined the effectiveness of a training program on the identification of gifted students in primary schools. In the study, it was determined that classroom teachers need information and training according to the scores they have taken before the application of information tests on the identification of gifted students. The training program was found to be effective in raising teachers' knowledge about gifted students.

In Turkey, gifted students mostly, continue formal education with students with normal development. In this context, it is important that classroom teachers use the educational strategies that can be applied for gifted students. However, studies show that teachers have wrong attitudes and lack of the knowledge. For example, Şahin and Levent (2015) have examined the methods and strategies used by classroom teachers for gifted students and point out that classroom teachers do not have enough knowledge about the subject and need in-service training in this context. In another study in which teachers' opinions regarding the education of gifted students in normal classes were investigated, semi-structured interviews were made with ten classroom teachers who have gifted students in Amasya (Kutlu Abu et al., 2017). As a result of the study, teachers revealed that any differentiation in the education of gifted students was unnecessary and that the existing curriculum was sufficient for gifted students This research result shows that the classroom teachers have false prejudices and lack of knowledge about the education of gifted students.

The role of classroom teachers cannot be denied in the education of gifted students who need to be diagnosed correctly and then need to be educated according to their needs, in order to be able to give original works in the field of science and art (Clark, 2002). Furthermore, Young (2019) found that positive attitudes towards giftedness, and a shared responsibility for the identification process, among the school leadership and teachers leads to effective identification of gifted students in a study conducted in Australian Catholic primary schools. Chipego (2004) states that the positive attitudes of the classroom teachers towards the education of gifted children have a positive effect on the social acceptance in the classroom. In this context, classroom teachers' attitudes towards the education of gifted students are an issue to be investigated. In this study, it is assumed that the classroom teachers are sincere in applying the measurement tools, that they express their real thoughts and that the chosen study group represents the universe. However, this research is limited due to self-report and the fact that it includes only the classroom teachers in Ankara. However, when considering the scarcity of studies conducted in Turkey on this issue, it is thought that this study will contribute to the literature; the results will be useful for future research and applications.

This research aims to determine the attitudes and opinions of the classroom teachers regarding the education of the gifted students. The problem of the research is "What are the attitudes and opinions of the classroom teachers about the education of the gifted students?" In addition, the following subproblems have been searched:

- 1. Do the scores of classroom teachers gathered from attitudes towards education of gifted scale show significant differences according to gender variable?
- 2. Do the scores of classroom teachers gathered from attitudes towards education of gifted scale show significant differences according to age variable?
- 3. Do the scores of classroom teachers gathered from attitudes towards education of gifted scale show significant differences according to the occupational seniority variable?
- 4. Do the scores of classroom teachers gathered from attitudes towards education of gifted scale show significant differences according to the variable of having a gifted student in the class?
- 5. Do the scores of classroom teachers gathered from attitudes towards education of gifted scale show significant differences according to graduated faculty variable?
- 6. Do the scores of classroom teachers gathered from attitudes towards education of gifted scale show significant differences according to the type of school variable?
- 7. What are the opinions of classroom teachers on studies for the identification of gifted in Turkey?
- 8. What are the opinions of classroom teachers on the adequacy of the classroom teachers about diagnosis of gifted in Turkey?

- 9. What are the opinions of classroom teachers on studies for education of gifted in Turkey?
- 10. What are the opinions of classroom teachers on the adequacy of classroom teachers about gifted education in Turkey?

### Method

The research model is a descriptive scanning model. In this model, the subject, individual or object, which is chosen as the subject, is tried to be depicted in its own conditions and as it is (Karasar, 2002). Classroom teachers' attitudes and opinions about the education of gifted students have been tried to be described. Mixed method, the combination of qualitative and quantitative methods in the direction of the principles of Pragmatist philosophy is used. (Yıldırım & Şimşek, 2013). The mixed method is preferred because it provides a multidimensional and holistic view by balancing the limitations of 'prejudice' in the quantitative method 'inability to understand the context' and qualitative method (Fırat, Kabakçı Yurdakul, & Ersoy, 2014).

# Study Group

The universe of the study consists of classroom teachers working in Ankara. The study group, which consisted of 220 classroom teachers working in 16 primary schools, 10 of the public and 6 private, was selected from Çankaya and Etimesgut districts in Ankara by convenience sampling due to the time and labor limitations. The data were collected from 220 classroom teachers who were volunteering to participate in the study in the second term of the 2017-2018 academic year.

### **Data Collection Instruments**

In this research Personal Information Form for the demographic characteristics of teachers, "Attitude Scale towards Gifted Education" and interview forms related to the education of gifted students in Turkey were used. The quantitative data were collected using the scale "Attitude Scale towards Gifted Education" developed by Gagné and Nadeau (1985). The original of the scale consists of 34 items and 6 sub-dimensions. The scale was adapted to Turkish by Tortop (2012), revised and shortened by the same researcher (Tortop, 2014a). The scale is five-point likert –type and consists of 14 items, 7 of which are positive and 7 of which are negative. There are three sub-dimensions of the scale: 'Need and Support Dimension', 'Resistance to Objections Dimension' and 'Ability Grouping Dimension'. An average of 2.00 points and below is evaluated as negative attitudes, 2.00 to 2.74 points means a very low negative attitude, 2.75 and 3.25 points reflect ambivalent attitude, 3.26 to 4.00 points between the positive attitude and 4.00 points and above is considered as a positive attitude.

A reliability analysis was performed to determine the reliability level of the scale used in the study and the Cronbach's alpha coefficient was obtained. Accordingly, the Cronbach's alpha coefficient for 'Needs and Support for Talent' is 0.710; for 'Responding to special services to high talents' is 0.660; for 'Special Ability Class Creation Dimension' is 0.796. For the total scale, it is 0.828. The results show that the subscales of the scale together with the scale are a reliable measurement tool.

Qualitative data was collected from 35 classroom teachers selected within the study group, by a semi-structured interview form consisting of 4 questions about the education of gifted in Turkey, prepared by the researcher. While preparing the interview form, first of all, the literature review was done in accordance with the purpose of the study and then opinions are received from three academicians who are the field experts. The questions in the interview form are given below.

- 1. What are your opinions on studies to identify the gifted in Turkey?
- 2. What are your opinions on the adequacy of classroom teachers about the identification of gifted in Turkey?
- 3. What are your opinions on work related to education of gifted and talented in Turkey?
- 4. What are your opinions on the adequacy of classroom teachers on the education of gifted in Turkey?

### **Data Collection Process**

After the purpose of the study was explained by the researcher, 220 classroom teachers who were willing to participate in the study were applied the "Attitude Scale towards Gifted Education". It took an average of 15 minutes to apply the scale. Afterwards, qualitative data were collected by conducting semi-structured interviews with 35 classroom teachers who volunteered from within the study group. The interviews lasted about 20 minutes.

# Data Analysis

Quantitative data of the study were analyzed with SPSS 20.0 program. It was determined by Kolmogorow-Smirnow test whether the scores obtained from the scale showed normal distribution. As a result of this test, the level of significance was found to be .200 and it was determined that the scores obtained from the scale were normally distributed as it was greater than .05. Therefore, t-test and ANOVA was used for data analysis.

Content analysis was conducted to analyze the qualitative data obtained from the interviews. In the content analysis, data similar to each other are organized by bringing together certain concepts and themes and interpretation of the data is performed (Yıldırım & Şimşek, 2013). Qualitative data were analyzed using frequency distributions and percentage. To ensure validity and reliability, two experts also analyzed separately from the researcher. According to the reliability formula of Miles and Huberman (1994), it is concluded that over 70% of the consensus is reliable.

### Results

This study was conducted with 220 classroom teachers. The data collected within the research were gathered from classroom teachers volunteering to participate. Distribution of demographic information of classroom teachers in the study group is shown in Table 1.

Table 1. Distribution of Demographic Information of Classroom Teachers in the Study Group

Demographic variables	·	n	%
Cardan	Female	175	79.5
Gender	Male	45	20.5
	22-30	22	10.0
Age	31-39	59	26.8
	40 and over	139	63.2
	0-10 years	40	18.2
Seniority	11-19 years	60	27.3
Seniority	20 years and over	120	54.5
I I sain a saifted standard in the sleep	Yes	52	23.6
Having a gifted student in the class	No	168	76.4
Conducted Families	Faculty of Education	152	69.1
Graduated Faculty	Other	68	30.9
Calcallana	State	185	84.1
School type	Private	35	15.9

As shown in Table 1, %79.5 of participants are female and % 20.5 are male. When the distribution according to age groups is examined; the proportion of those aged 22-30 years is %10 and the proportion of those aged 31-39 is %26.8 and those who are over age group are %63.2. When the distribution according to seniority is examined; the proportion of those who have 0-10 years seniority is %18.2; while the proportion of those who have 11-19 years of seniority is %27.3, it is %54.5 who have over 20 years and over. %23.6 of the participants had gifted students, while %76.4 did not have gifted students. %69.1 of participants were graduated from the faculty of education while %30.9 were graduated from other faculties. When the distribution according to working school type is examined; %84.1 of the participants are working in public school and %15.9 are in private school.

"Attitude Scale towards Gifted Education" was applied to classroom teachers in the study group. The scores gathered from the total and subscales were analyzed statistically. The means and standard deviations (S. d.) of the scores are given in Table 2.

**Table 2.** Descriptive Statistics of Scores of Teachers' Attitudes towards Gifted Education According to Dimensions

Dimension	n	Mean	S.d.
Need and Support	220	3.55	0.51
Resistance to Objections	220	2.23	0.79
Ability Grouping	220	2.94	0.56
Attitude towards Gifted Education (Total)	220	2.91	0.38

When Table 2 is examined, it can be seen that the mean of teachers' scores gathered from the dimensions of subscales differs from 3.55 to 2.23. The mean of the score gathered from the total scale is 2.91, while the standard deviation is 0.38. Given that the highest possible score is 5, it can be said that the teachers' attitudes are ambivalent.

The t-test and one-way ANOVA test results were given in independent groups to determine the mean and the significance of the difference between the means of attitude scale scores and sub-dimensions, in terms identified variables. A t-test was conducted in order to answer the first sub-question of the study as "Do the scores of classroom teachers gathered from attitudes towards education of gifted scale show significant differences according to gender variable?" The results obtained are given in Table 3.

Table 3. t-test Results of Teachers' Attitudes towards Gifted Education According to Gender Variable

Dimension	Gender	n	Mean	S.d.	t	p
Need and Current	Female	175	3.52	0.51	-1.299	0.195
Need and Support	Male	45	3.63	0.49	-1.299	
Pasistance to Objections	Female	175	2.26	0.77	1.007	0.315
Resistance to Objections	Male	45	2.13	0.84	-1.006	0.313
Ability Crouning	Female	175	3.00	0.55	2.729	0.007*
Ability Grouping	Male	45	2.74	0.57	2.729	0.007*
Attitude towards Gifted Education	Female	175	2.93	0.37	1 456	0.147
(Total)	Male	45	2.83	0.41	1.456	0.14/

<sup>\*</sup>p<0,05

As shown in Table 3, there were no significant differences between the scores of female and male teachers (p> 0.05) for the subscales of need and support dimension and resistance to objections dimension and the total score of attitude towards gifted education scale. There is a significant difference between the scores of female and male teachers for the ability grouping dimension (p <0.05). The female teachers' scores are significantly higher than the male teachers' scores.

The second sub-question of the study is "Do the scores of classroom teachers gathered from attitudes towards education of gifted scale show significant differences according to age variable?". ANOVA was conducted to determine whether there was a meaningful difference between the means of teachers' attitude scores in terms of age. The results obtained are given in Table 4.

Table 4. ANOVA Results of Teachers' Attitudes towards Gifted Education According to Age Variable

Dimension	Age	n	Mean	S. d.	t	p
	22-30	22	3.50	0.48		
Need and Support	31-39	59	3.61	0.49	0.595	0.553
	40 and over	139	3.53	0.52		
	22-30	22	2.27	0.88		
Resistance to Objections	31-39	59	2.10	0.75	1.225	0.296
	40 and over	139	2.29	0.80		
	22-30	22	3.23	0.56		
Ability Grouping	31-39	59	2.85	0.49	3.753	0.025*
	40 and over	139	2.94	0.58		
A 1	22-30	22	3.00	0.42		
Attitude towards Gifted Education (Total)	31-39	59	2.85	0.35	1.320	0.269
Education (Total)	40 and over	139	2.92	0.38		

<sup>\*</sup>p<0,05

As seen in Table 4, there is no significant difference between the averages of age groups for the need and support dimension and resistance to objections dimension and total scores of the Attitude Scale for the Education of the Gifted (p>0.05). There is a significant difference between the averages of age groups for the ability grouping dimension (p <0.05). According to the LSD test for determining which group the difference originates from; the level of participation of the 22-30 age group is significantly higher than the participation level of the age group of 31-39 and 40, and there is no significant difference between the participation levels of the age groups of 31-39 and 40 and above.

In order to answer the third sub-question of the study, it was determined whether there was a meaningful difference between the means of teachers' attitude scores in terms of seniority. ANOVA was conducted for analysis. The results are given in Table 5.

**Table 5.** ANOVA Results of Teachers' Attitudes towards Gifted Education According to Seniority Variable

Dimension	Seniority	n	Mean	S. d.	t	p
	0-10 years	40	3.51	0.47		
Need and Support	11-19 years	60	3.60	0.55	0.422	0.656
	20 years and over	120	3.53	0.50		
	0-10 years	40	2.15	0.79		
Resistance to Objections	11-19 years	60	2.15	0.74	1.083	0.341
	20 years and over	120	2.31	0.82		
	0-10 years	40	3.05	0.56		
Ability Grouping	11-19 years	60	2.85	0.52	1.583	0.208
	20 years and over	120	2.96	0.58		
A	0-10 years	40	2.90	0.38		
Attitude towards Gifted	11-19 years	60	2.86	0.37	0.677	0.509
Education (Total)	20 years and over	120	2.93	0.38		

In Table 5, the scores attained by teachers on the "Attitude Scale for the Education of the Gifted" are examined by seniority. According to the results of one way ANOVA, attitudes scale of the gifted and talented students were not different between the scores of general and all sub-dimensions and when they were examined according to the seniority of teachers (p> 0.05). In Table 6, the t-test results conducted to determine whether there was a meaningful difference between the teachers' attitude score means according to having a gifted student in the class are presented.

**Table 6.** t-test Results of Teachers' Attitudes towards Gifted Education According to Having Gifted Student in the Class Variable

Dimension	Having gifted student in the class	n	Mean	S. d.	t	p
Need and Current	Yes	52	3.50	0.58	-0.718	0.474
Need and Support	No	168	3.56	0.48	-0.716	0.474
D : 1 Ol: 1:	Yes	52	2.22	0.83	0.157	0.876
Resistance to Objections	No	168	2.24	0.78	-0.156	
Abilita Cassaina	Yes	52	3.03	0.60	1 240	0.213
Ability Grouping	No	168	2.92	0.55	1.249	
Attitude towards Gifted	Yes	52	2.92	0.42	0.100	0.850
Education (Total)	No	168	2.90	0.37	0.190	0.630

As seen in Table 6, according to t-test results, there is no significant difference between the mean scores of all sub-dimensions and total attitude scores of teachers with and without gifted students in their class (p>0.05). In order to determine whether there was a meaningful difference between the teachers' attitude score means according to graduated faculty, t-test was conducted. The obtained results are given in Table 7.

**Table 7.** t-test Results of Teachers' Attitudes towards Gifted Education According to Graduated Faculty Variable

Dimension	<b>Graduated Faculty</b>	n	Mean	S. d.	t	p
N. 1 10	Faculty of Education	152	3.55	0.52	0.200	0.600
Need and Support	nd Support Other		3.52	0.48	0.399	0.690
Resistance to Objections	Faculty of Education	152	2.22	0.82	0.500	0.710
	Other 68 2		2.27	0.71	-0.500	0.618
Altility Commission	Faculty of Education	152	2.92	0.57		0.472
Ability Grouping	Other	68	2.98	0.54	-0.719	0.473
Attitude towards Gifted	Faculty of Education	152	2.90	0.40	0.524	0.601
Education (Total)	Other	68	2.93	0.33	-0.524	0.601

As seen in Table 7, there is no significant difference between the education faculty graduates and the other faculty graduates' averages (p>0.05) for both the total points of the scale and all sub-dimensions of the scale. In order to determine whether there was a meaningful difference between the teachers' attitude score means according to school type, t-test was conducted. The results are shown in Table 8.

**Table 8.** t-test Results of Teachers' Attitudes towards Gifted Education According to School Type Variable

Dimension	School type	n	Mean	S. d.	t	P
N. 1. 10	Public	185	3.54	0.51	-0.013	0.990
Need and Support	Private	35	3.55	0.51	-0.013	0.990
Paristance to Objection	Public	185	2.29	0.80	2.280	0.024*
Resistance to Objections	Private	35	1.96	0.64	2.200	
Ability Commission	Public	185	2.94	0.57	-0.268	0.789
Ability Grouping	Private	35	2.97	0.53	-0.268	0.789
Attitude towards Gifted Education	Public	185	2.92	0.38	1.426	0.155
(Total)	Private	35	2.82	0.32	1.426	0.133

<sup>\*</sup>p<0.05

There is no significant difference between Need and Support Dimension, Ability Grouping Dimension and the total scores of attitudes towards the education of gifted in terms of working in public and private schools (p>0.05). There is a significant difference between Resistance to Objections Dimension in terms of scores of teachers working in public and private schools (p<0.05). The mean of scores of teachers working in public schools are significantly larger than the mean of scores of teachers working in private schools.

The qualitative research data was collected by semi-structured interview form consists of 4 open ended questions about views on the education of gifted in Turkey, that was applied to 35 volunteer teachers in the study group. The data obtained from the interview form were examined and the themes and categories were determined. Then content codes were determined and the data were analyzed using frequency distributions and percentages. Teachers' opinions on practices on diagnostics of gifted in Turkey are given in Table 9.

Table 9. Teachers' Opinions about Practices on Diagnostics of Gifted in Turkey

Themes	Categories	Content Codes	Frequency (f)	Percentage (%)
Opinions on	Opinions on the inadequacy of the practices due to the conditions	<ul><li>Crowded classes make it hard to diagnose</li><li>No institution for gifted, except for BİLSEM</li></ul>	8	22.86
insufficiency of practices	Opinions about insufficiency of the practices due to lack of information	- Parents do not have enough information about the subject	4	11.43
	Negative views on the content of the BİLSEM exam	<ul><li>The evaluation should be done process focused.</li><li>Creativity should be evaluated.</li></ul>	5	14.29
Negative Opinions on BİLSEM exam	Negative views on the application process of the BİLSEM exam	<ul> <li>Should be done in earlier ages</li> <li>Should be done by experts.</li> <li>The presence of those who cannot attend because the exam is paid</li> <li>The examination should be done in a comfortable environment to reduce anxiety</li> <li>Since BİLSEM teachers' children mostly win, it is not believed to be objective</li> <li>Frequent change of exam rules</li> </ul>	13	37.14

Table 9. Continued

Themes	Categories	Content Codes	Frequency (f)	Percentage (%)
Positive opinions about practices	Opinions about the studies are sufficient and important	<ul><li>Practices are enough.</li><li>Practices are important.</li></ul>	2	5. <i>7</i> 1
Having no knowledge about practices	Having no knowledge	<ul><li>I do not have enough knowledge.</li><li>I have no knowledge.</li></ul>	3	8.57
		Tota	ıl 35	100

As seen in Table 9, 22.86% of the teachers have the opinion on inadequacy of the practices due to the conditions about the diagnosis of gifted in Turkey. The content of this category includes the handicap of diagnose because of crowded classes and the absence of institutions for gifted students other than BILSEM. For example Teacher 7 answered this question as "There are 40 students in the class. I cannot know who is gifted." 11.43% of the teachers reported opinions about insufficiency of the practices due to lack of information. In this content, parents do not have sufficient knowledge on the subject. Teacher 4 answered this question as "Parents have a great role in diagnostics of gifted, but they do not have enough information.

14.29% of the teachers reported a negative opinion about the content of the BILSEM exam. Process-oriented evaluation is required and creativity should be measured are opinions stated in this category. For example Teacher 2 said "I think the exam is not appropriate. It doesn't measure creativity. Creativity must be measured. 37.14% of the teachers expressed their negative opinions about the application process of the BILSEM exam. Opinions like exam should be done at an earlier age, should be done by the experts, the presence of those who cannot attend because the exam is paid, the examination should be done in a comfortable environment to reduce anxiety, since BİLSEM teachers' children mostly win, it is not believed to be objective and frequent change of exam rules are included in this category. Teacher 19 replied that, "In order to prevent the test anxiety, the child should feel comfortable and should be observed in the classroom." The ratio of teachers who gave a positive opinion about the studies was 5.71% and they stated that the studies were adequate and important. For example, Teacher 1 answered, "I think the studies are sufficient." 8.57% of the teachers stated that they had no knowledge about the subject.

The answer to the sub-problem of the study as "What are the teachers' opinions about the adequacy of classroom teachers in identifying gifted in Turkey?" was searched. The answers were analyzed according to the content codes and divided into themes and categories. The results of the analysis are given in Table 10.

Table 10. Teachers' Opinions about Qualifications of Classroom Teachers in Diagnostics of Gifted

Themes			Frequency	Percentage
Themes			<b>(f)</b>	(%)
Opinions on	Opinions on the inadequacy of the practices due to the conditions	<ul><li>Crowded classes make it hard to diagnose</li><li>Criteria are ambiguous</li></ul>	21	60
insufficiency of classroom teachers	Opinions about insufficiency of the practices due to lack of information	Not having enough knowledge due to not giving enough courses in	8	22.86
Opinions on classroom teachers' sufficiency	Opinions about sufficiency of classroom teachers	<ul><li>Classroom teachers have a long relationship with the child</li><li>Experienced teachers can recognize giftedness</li></ul>	6	17.14
		Tota	1 35	100

As seen in Table 10, more than half of the teachers believe that the conditions are inadequate to determine their gifted students. It has been stated that having crowded classes is a problem in diagnosing and that the criteria are unclear. Teacher 5 stated that "The criteria are ambiguous. Classroom teachers may be unstable. Concrete methods and techniques should be used in the determination phase." 22.86% of the teachers have opinions about insufficiency of the practices due to lack of information, as that they do not have sufficient knowledge due to lack of adequate courses in education faculties, and that in-service training is inadequate. Teacher 21 stated that "Class teachers lack adequate training in this regard. They should be trained by specialist academicians." 17.14% of the class teachers stated that the class teachers were able to realize long-term coexistence with the child and the ability of the experienced teachers and that the class teachers were sufficient in this context. For example, Teacher 12 answered as "Since the classroom teachers have a long time with students, they can identify the gifted.".

The sub-problem of the study as "What are the teachers' opinions about practices on education of gifted in Turkey?" was tried to answered. For this purpose, teachers' answers to this question were analyzed. The results of the analysis are given in Table 11.

Table 11. Teachers' Opinions about Practices on Education of Gifted in Turkey

Themes	Categories	Content Codes	Frequency (f)	Percentage (%)
Opinions on insufficiency of practices	- Inadequacies in quantity	<ul><li>Inadequate number of establishments</li><li>Deficiencies in education</li></ul>	14	40
	- Inadequacies in quality	<ul> <li>Lack the same quality     of education in Turkey     Conditions are not the     same everywhere</li> </ul>	14	40
Opinions about sufficiency of practices	- Opinions on sufficiency of practices	<ul><li>Practices are good</li><li>Experienced teachers</li><li>can recognize</li><li>giftedness</li></ul>	2	5.71
Having no knowledge about practices	- Having no knowledge	- I have no knowledge.	5	14.29
		Total	35	100

When Table 11 is examined, it is seen that 40% of teachers stated that the number of institutions is insufficient and that there are deficiencies in education as inadequacies in quantity. Under the inadequacies in quality category contains the opinions as quality of education in Turkey is not the same everywhere and the lack of same conditions everywhere. For example, Teacher 2 answered this question as, "I do not think that conditions are the same in all cities." 5.71% of the teachers stated that the work was good and that the experienced teachers could determine the gifted. Teacher 15 said, "Good studies are being done for gifted students." 14.29% of the teachers stated that they do not have any information.

The tenth sub problem of the study is "What are the opinions of classroom teachers on the adequacy of classroom teachers about gifted education in Turkey?". The opinions of the teachers are analyzed. The results are presented in Table 12.

Table 12. Teachers' Opinions about Qualifications of Classroom Teachers in Education of Gifted

Themes	Categories	Content Codes	Frequency (f)	Percentage (%)
Opinions on the inadequacy of classroom teachers	- Opinions on the inadequacy due to the conditions	<ul><li>The fact that crowded classes prevent individual work</li><li>Inadequate classroom environment and lack of material</li></ul>	20	57.14
	- Opinions on the inadequacy of due to lack of information	<ul> <li>Not having enough knowledge due to not giving enough courses in education faculties</li> <li>Inadequate in-service training</li> </ul>	10	28.57
Opinions on the sufficiency of classroom teachers	- Opinions on the sufficiency of classroom teachers	<ul><li>Classroom teachers become sufficient with self- development</li><li>Acting in cooperation</li></ul>	5	14.29
		Total	35	100

As seen in the table, 57.14% of the teachers think that classroom teachers are inadequate due to conditions in this respect and that crowded classes prevent individual studies, the classroom environment is inadequate and that there is a material shortage are stated. For example Teacher 4 stated "The classroom environment is inadequate. There is no appropriate material." In the category of opinions on the inadequacy of due to lack of information, it is stated that teachers are lack of information because of inadequate courses related to the subjects in faculty of education and inadequate in-service training. For example, Teacher 1 answered as "Classroom teachers are not given enough training in this regard." 14.29% of the teachers think that the class teachers are sufficient if the class teachers develop themselves and act in cooperation. Teacher 32 responded, "If a teacher has such a student in the class, the teacher can develop and direct the child."

# **Discussion, Conclusion and Suggestions**

Gifted students show significant differences in the cognitive domain from normally developing students and therefore have different educational needs in this context. However, the reason why gifted children need special education is not easily adopted, and therefore the training of gifted students is neglected while the more intensive studies are carried out for the inadequacy groups. On the basis of the problems in the education of the gifted, Ataman (2005) argues that there is no need for extra training in the gifted, because they can develop themselves in everywhere, there are some prejudices about developing a class of elites with extra education and this will cause major problems in the society. Due to these prejudices, there are problems in the training of the gifted. Given the fact that classroom teachers have a crucial role in the training of both gifted and talented students, the importance of classroom teachers in determining the attitudes and views of gifted students in education will be better understood. Teachers' attitudes towards gifted students and their education affect their behavior, ways of communication and even teaching methods (Curtis, 2005) thus reflect on their motivation and achievement. Research in Turkey about this subject suggests that teachers' attitudes towards gifted education are somewhat above neutral attitude (Güneş, 2015; Sönmez, 2017; Tortop & Kunt, 2013). In this study, the average of the total scores of the class teachers' attitude towards gifted education was found to be 2.91 and the range of this score was evaluated as 'ambivalent'. This situation can be considered as an indication of the uncertainty in attitudes toward gifted education of teachers in Turkey. This result can be explained by the fact that teachers do not have to go through adequate in-service training about the training of gifted; because the results in the literature show that there is a positive

relationship between knowledge of gifted students and positive attitude (Al-Makhalid, 2012; Clark, 2002; Lassig, 2009). More positive attitude score is observed in the researches that determine the attitudes of pre-service teachers about the education of the gifted (Evin Gencel & Satmaz, 2017; Metin et al., 2017; Tortop, 2014b). This may have been due to the addition of courses on the education of gifted students in the faculty of education in recent years.

The research also evaluated whether the attitudes of teachers differed according to gender, age, seniority, having a gifted student in the class, graduated faculty and school type variables. According to statistical analysis, there is no significant difference between the scores obtained from all the subscales of attitude scale and the total score, between seniority, having a gifted student in the class and graduated faculty variables. Bégin and Gagné (1994), in their extensive study of 35 studies in the literature, examined the 50 variables used by researchers to elaborate attitudes towards the education of gifted and stated that none of them had a systematic and substantial predictor of their attitudes towards the education of gifted people. In this context, there are studies showing that there is no significant relationship between teachers' seniority and attitudes (Allodi & Rydeliuss, 2008; Chessman, 2010). In the study conducted by Lassig (2009), it was concluded that the variables such as gender, age, seniority and teacher qualifications were not related to attitudes towards gifted children and their education.

When examined by gender variable, there is no significant difference between female and male teachers' total scores and for the subscales of the need and support and resistance to objections dimensions. Studies conducted by Chipego (2004), Lassig (2009) and Tortop and Kunt (2013) show that the teacher attitudes did not differ according to gender. In this study female teachers' scores are significantly higher than male teachers' scores only according to ability grouping dimension. In the literature, there are studies that concluded that female teachers have a more positive attitude than male teachers (Allodi & Rydelius, 2008; Curtis, 2005). This may be because of female teachers being more sensitive than male teachers.

According to the age variable, there is no significant difference between the averages of the age groups for the total scores and need and support dimension and resistance to objections dimension. However, in the ability grouping dimension of the attitude scale, the average of 22-30 age group is significantly larger than the average age of 31-39 age group. This may be due to the fact that the education of gifted students has gained importance in recent years and the addition of courses on the education of gifted students in the faculties of education.

It was revealed that the attitudes of the teachers were not differentiated according to seniority, having a gifted student in the classroom and graduated faculty. These results also coincide with the results of the study by Lassig (2009). According to Lassig (2009), teacher attitudes are not related to variables such as seniority and teacher qualifications. However, the results of the research conducted by McWilliams-Abendroth (2014) show that the attitudes of teachers who teach gifted students are more positive.

There is no significant difference between the averages of teachers working in government and private schools for the needs and support of gifted talents, ability grouping dimensions and total scores of scale. For the resistance to objections dimension, the average of teachers working in public schools is significantly higher than the average of teachers working in private schools. This may be due to that teachers working in public schools are more sensitive than the teachers of private schools about special services for gifted students.

In the qualitative part of the research, it has been tried to determine the views of classroom teachers about the identification and education of gifted individuals. The majority of teachers have stated that there are problems in both education and identification. The fact that the classes are crowded affects both the quality of the diagnosis and the quality of the education. Having less than 20 general classroom attendances will increase the quality of education for both gifted and normal students (Çınar, 2004). In addition, having no institutions other than BİLSEM and the problems that are expressed about the content and application process of the exam is also awaiting a solution. The results show that

classroom teachers have a lack of knowledge about the education of the gifted and need in-service training in this context. Copenhaver and McIntyre (1992) state that teachers who have a knowledge of attending to the training of gifted students have a more positive attitude. This is important in terms of showing the consistency of the qualitative and quantitative data of the research.

One of the problems that the classroom teachers who attend the research are paying attention is that the diagnosis should be done at an earlier age. As stated in the Law on Children with Special Needs Education No. 2916, one of the basic principles of special education is 'early diagnosis'. In addition, although Article 5 of the MoNE (2016) Directive on Science and Art Centers states that "BİLSEMs are for gifted students in pre-school, primary school, secondary school and high school...", the diagnosis is made in primary school. This contradiction is also one of the problems that must be solved.

In further research, experimental studies can be conducted to improve the positive attitude of the classroom teachers on the education of gifted students. In addition, studies comparing the attitudes of teachers from different branches and the attitudes of BILSEM teachers can be done. In order for prospective teachers to be knowledgeable about gifted students, it will be useful to open site-specific courses in their training faculties. In-service training is also crucial for teachers to make up for inadequacies of recognizing both gifted students and directing them to their talent-oriented programs and supporting their development in the direction of their interests and abilities. There is a need for more sophisticated and comprehensive policies in the education of gifted students.

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