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## **Superdotación: visiones y percepciones de los educadores**

Mukaddes Sakalli Demirok,

*Near East University, North Cyprus*

### **Journal for Educators, Teachers and Trainers, Vol. 9 (2)**

<http://www.ugr.es/~jett/index.php>

Date of reception: 19 November 2018

Date of revision: 24 December 2018

Date of acceptance: 28 December 2018

Demirok, M.S. (2018). Giftedness: Educators views and perceptions. *Journal for Educators, Teachers and Trainers*, Vol. 9(2), pp. 72 – 84.



**Journal for Educators, Teachers and Trainers, Vol. 9 (2)**  
**ISSN 1989 – 9572**

<http://www.ugr.es/~jett/index.php>

**Giftedness: educators views and perceptions**

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Mukaddes Sakalli Demirok, Near East University, North Cyprus  
[mukaddes.sakalli@neu.edu.tr](mailto:mukaddes.sakalli@neu.edu.tr)

**Abstract**

Teachers have the highest responsibility in education. Each student has different learning styles. Teachers need to have sufficient knowledge for student characteristics and organize education environments of students. There are students with different cognitive styles in every class. Gifted students have specific characteristics different from their peers. Teachers are expected to prepare appropriate learning environments and materials for gifted students. This study was aimed at determining the perceptions and opinions of teachers towards gifted students. Stratified sampling method was determined and 490 teachers constituted the sample of the study. Data of the research were collected with “*Perceptions scale towards gifted students*” and “*Point of view scale towards the gifted*”. The results showed that teachers have positive perceptions and positive opinions regarding gifted students. The findings revealed that there was a positive and significant relationship among teachers’ perceptions and opinions about gifted students.

**Resumen**

Los profesores tienen la mayor responsabilidad en la educación. Cada alumno tiene diferentes estilos de aprendizaje. Los maestros deben tener conocimientos suficientes sobre las características de los estudiantes y organizar los entornos educativos de los estudiantes. Hay estudiantes con diferentes estilos cognitivos en cada clase. Los estudiantes dotados tienen características específicas diferentes de sus compañeros. Se espera que los maestros preparen ambientes de aprendizaje apropiados y materiales para estudiantes dotados. Este estudio tuvo como objetivo determinar las percepciones y opiniones de los maestros hacia los estudiantes dotados. Se determinó el método de muestreo estratificado y 490 docentes constituyeron la muestra del estudio. Los datos de la investigación se recopilaron con “*Escala de percepciones hacia estudiantes superdotados*” y “*Escala de punto de vista hacia los dotados*”. Los resultados mostraron que los maestros tienen percepciones positivas y opiniones positivas con respecto a los estudiantes dotados. Los hallazgos revelaron que había una relación positiva y significativa entre las percepciones y opiniones de los maestros sobre los estudiantes dotados.

**Keywords**

Giftedness; Teacher; perception; Views; Special education; Gifted students.

**Palabras clave**

Superdotación profesor; Percepción; Puntos de vista; Educación especial; Estudiantes superdotados

## 1. Introduction

The development of a country to a level of civilisation is directly related with the community using its human resources, in other words, building blocks effectively. One of the most important responsibilities of the contemporary education system is to discover the gifted children who can play an important role in the development of society and educate them in a way that will contribute to the development of the society.

'Gifted' can be explained as perceiving the world in a different way in different fields. In the world that they are in with the many challenges to be faced in their future lives. Therefore, the concept of gifted and different abilities may be open to cultural diversity. The needs of gifted individuals in different cultures, diagnostic programmes and training practices should be implemented to upgrade the potential of the gifted individuals that will play an important role in the development of society and educate them in a way that will contribute to the development of the society.

There are many different characteristics distinguishing gifted individuals from normal developing individuals. These characteristics include an advanced level of language development when compared to their peers, differences in concentration and focusing, a higher level of memory and activity performance, interest levels, goals and high levels of perfectionism (Berger, 2006; Sak, 2010). These differences among gifted students also affect their learning processes. These students require comprehensive educational opportunities and services which may not always be provided through standard education programmes because of these different characteristics (Renzulli & Reis, 1985).

Early identification of gifted individuals and the development of their talents play an important role for their development and improvement. Therefore, there is a big burden on teachers concerning their responsibilities due to this early identification and developing their special talents. Awareness of the families is an important issue which affects children's reactions compared to their peers and also teachers have roles in discovering different competencies of these children (Capan, 2010).

Identification of gifted individuals allows provision for appropriate education and for their learning speed. In this context, class teachers' evaluations of their students behavioural characteristics in terms of giftedness enable them to be directed to related centres for identification (Hunsaker et al., 1997). The efficiency and efficacy of this process are parallel with teachers' professional development (Rohrer, 1995). The situation of gifted students with different learning characteristics compared to their peers needs to be considered in the planning process of education programmes (Davis & Rimm 2004; Tomlinson, 1999).

Gifted children have special educational needs (Van-Tassel-Baska, 2005; Delisle, 2003; Clark, 2002; Chan, 2001; Maker & Nielson, 1996; Tomlinson, 1999). In order to meet learning needs of these children, motivating, flexible and creative activities that can develop their interests and competencies should be provided (Koshy, 2002). According to Renzulli and Reis (1985), these students require comprehensive education which may not be provided through standard programmes. Otherwise, these students might become bored with school or loose interest in school (Clark, 2002; Colangelo, 1991).

Researchers who are accepted as authorities in the area of the education of gifted individuals claim that teachers need to know the characteristics of these students in order to meet their special needs and receive sufficient training about the differentiation of instruction (Toll 2000; Gallagher 2000; Griffin 1999; Copenhaver & McIntyre 1992; Feldhusen 1991; Cross & Dobbs 1987; Davalos & Feldhusen 1997; Feldhusen & Huffman 1988; Hanninen 1988; Hansen & Feldhusen 1990; Lyon, Vaassen, & Toomey, 1989; Parke 1989; Pigge & Marso 1987).

Lack of appropriate training related to gifted students' education remains insufficient support in meeting the needs of these students (Archambault et al., 1993; Westberg & Daoust, 2003). Unfortunately, adequate training about giftedness is not provided to teachers during their undergraduate education (Copenhaver & McIntyre, 1992). Teachers without enough special education knowledge and awareness face the probability of experiencing difficulties in understanding and eliminating problem behaviours of the gifted in the classroom.

Literature (Sari, 2014; Sak, 2010) reveals that more studies should be conducted in different countries compared to the past with various projects and models being developed for the education of gifted

students. In Cyprus, topics such as the educational needs of gifted children, rules and regulations and insufficiency requirements of educational environments for gifted students seemed to be ignored and studies related to these issues are limited, although there are new developing challenges on their effective education.

Technology develops rapidly and the concepts of democracy and governance have varied recently. Accordingly, concepts of “*knowledge*” and “*science*” also vary. In order to adapt to these changes, the expected individual skills of the gifted within society should also need to reflect these changes on the worldwide basis (The Ministry of National Education Report, 2005). Therefore, Turkish Cypriot society is in need of new planning and development of the human resources and infrastructure to keep up with the latest developments of the world. Providing required education to upgrade intelligence and emphasising research for creativeness with an approach based on “*life-long learning*”. Formal and informal educational might pave the way to Turkish Cypriot society competitiveness in the international education fields.

All students during their school lives in Cyprus are exposed to common learning experiences regardless of their interest, competency and status. Today, students share the common learning experiences in the first stage of all elementary schools and first and second stages of elementary education in some countries. In some countries, students follow educational programmes which are not differentiated in other words, not enriched and not individualised during their regular education. Even if this leads to equality of opportunity in education for all this allows inequality for all individuals with special needs (Davasligil, 2004).

Nowadays, the studies related to gifted students in Northern Cyprus are given importance. However, few studies on perceptions and opinions of teachers towards gifted students show the need for practices in education of gifted students. Therefore, it is important to explore the perceptions and opinions of teachers. This study aims to determine the perceptions and opinions of teachers working at different education fields in terms of gifted students. The study tries to explore the following research questions:

1. What are the teachers' perceptions about gifted students'?
2. What are the teachers' opinions about gifted students'?
3. What is the relationship between the teachers' perceptions and their opinions in terms of gifted students?
4. How do perceptions of teachers differ in terms of gender about the gifted students?
5. How do perceptions of teachers differ in terms of age about the gifted students?
6. How do perceptions of teachers differ in terms of work experience about the gifted students?
7. How do opinions of teachers differ in terms of gender about the gifted students?
8. Is there a significant difference in the teachers' perceptions of gifted students in relation to previously received training about the gifted?
9. Is there a significant difference of the teachers' opinions of gifted students in relation to whether a special programme is required or not?

## **2. Method**

### **2.1. Research method**

Survey method, as one of the quantitative research methods, was used in this research to be able to investigate perceptions and opinions of teachers working at different education fields in terms of gifted students.

### **2.2. Participants**

Participants in the study are teachers selected from Cyprus. 1330 teachers teaching at primary schools were the target population due to being unable to reach the whole population. The stratified sampling and simple random sampling methods were used to choose 30 percent of the target population. Thirty percent was equal to 520 teachers. Thus, the research was administered with 490 teachers, since 30 scales were eliminated from the research due to various reasons. Information

related with the demographic characteristics of the participants was also gathered. In the study, 66.5% of the teachers were female and 33.5% were male.

Age distribution among the participants revealed that 33.6% of the participants' age ranged from 21 to 30, 36.3% ranged from 31 to 40, 22.0% ranged from 41 to 50 and 5.3% of them were 51 years old and above. Besides, 26.9% of the participants' work experience ranged from 1 to 5 years, 19.6% of them ranged from 6 to 10 years, 21.0% of them ranged from 11 to 15 years, 19.4% of them ranged from 16 year to 20 years, 13.1% of them were 21 years and above.

### **2.3. Instruments**

In the present study, 'Perceptions scale towards gifted students' and 'Opinion scale towards the Gifted' developed by Uzunboylu and Demirok (2012) were administered to the participants. The development process of the 'Perceptions scale towards gifted students' and 'Opinion scale towards the Gifted' is explained in details in the next section.

### **2.4. The perceptions scale towards gifted students**

'The Perceptions Scale Towards Gifted Students' was developed to explore the teachers' perceptions about gifted students. The determination of the perceptions of teachers towards gifted students, 20 teachers working at elementary schools with 10 and more years of teaching experience were asked to write a composition including their perceptions and behaviors towards gifted students. Then, a draft form was constituted through an item pool for the instrument. 15 expert opinions were received for this form. The scale developed was based on an extensive review of the literature and experts' opinions which were administered to 175 teachers as a pre-test. This was a pilot study and the validity and reliability of the scale were tested. The structure validity, factor analysis of the scale and internal consistency reliability test were examined with Cronbach Alpha Coefficient. Based on the statistical analysis, ten items with which load factor was estimated below 0.40 were excluded from the scale and therefore, the final draft version of the scale included 33 items. The scale consisted of two sections. The first section consisted of information about the teachers' gender, age, work experience and previously received training about gifted students.

The second section consisted of 33 items which focused on five themes including "*willing to learn (9 items)*", "*expression factors (8 items)*", "*personality factors (6 items)*", "*learning factors (6 items)*" and "*mental factors (4 items)*". The scale used a 5-point Likert scale in which 1 represented strongly disagree and 5 represented strongly agree. The scale consisted of positive statements which were scored as 5,4,3,2 and 1. The Cronbach's alpha score was calculated as 0.956. Cronbach's alpha values of the scale's sub-dimensions were calculated as "*willing to learn*" (0.929), "*expression factors*" (0.896), "*personality factors*" (0.907), "*learning factors*" (0.861) and "*mental factors*" (0.680).

### **2.5. The opinion scale towards the gifted**

"*The Opinion Scale Towards the Gifted*" was developed to explore the teachers' opinions about gifted students. In order to determine the opinions of teachers about gifted students, 20 teachers working at elementary schools were asked to write a composition related to gifted students. Then, a draft form was constituted through an item pool for the instrument. 15 expert opinions were received for this form. The scale was developed based on an extensive review of the literature and experts' opinions were administered to 175 teachers as a pre-test. This was a pilot study and the validity and reliability of the scale were tested. The structure validity, factor analysis of the scale and internal consistency reliability test were examined with Cronbach Alpha Coefficient. Based on the statistical analysis, the ten items with which load factor was estimated below 0.40 were excluded from the scale and therefore the final draft version of the scale included 31 items. The scale consisted of two sections. The first section yielded information about the participant teachers' gender, age, work experience and previously received training about the gifted. The second section consisted of 31 items which focused on five themes: "*educational features*" (11 items), "*educational policies*" 6 (items), "*education programmes*" (7 items), "*requirements in education*" (4 items) and "*the duty of the ministry*" (3 items).

The five-point Likert-type scale was applied, 1 representing strongly disagree and 5 representing strongly agree. The scale consisted of positive statements which were scored as 5,4,3,2 and 1. Cronbach Alpha internal consistency was calculated as 0.89 based on item analysis for the reliability

of the scale and split-half reliability was calculated as 0.93. According to these results, the scale has reliability characteristics.

Cronbach's alpha values of the scale's sub-dimensions were calculated as '*educational features*' (0.94), '*educational policies*' (0.88), '*education programmes*' (0.86), and '*requirements in education*' (0.73, '*the duty of the ministry*' (0.72).

## **2.6. Data collection**

The data were collected after getting permission from the Ministry of National Education school administrators. The instruments were administered to the teachers while the researcher visited each school.

## **2.7. Data analysis**

After the data were gathered, the data were analyzed with using SPSS 18 version. In addition, Pearson Correlation, percentages, means and Standard Deviations were used to analyse the data taken from the teachers. In the situations, where the obtained data, towards the sub-aims of the study show normal distribution, t-test and single-factor variance technics (One-Way ANOVA) were used. If the ANOVA results are significant, Dunnet C test is used to specify the significant difference among the means of the groups if the group variances are not equal and Scheffe test is applied when group variances are equal.

Mann-Whitney U test was applied because of the nonparametric distribution. The findings were interpreted at the 0.05 significance level.

## **3. Results**

### **3.1. The teachers' perceptions of gifted students**

Teachers' general perceptions mean scores of gifted students were  $M=3.74$ ,  $SD=.584$ . The item "*willing to learn*" is  $M=3.66$ ,  $SD=.589$  for "*expression factors*" is  $M=3.71$ ,  $SD=.660$ , as for "*personality factors*" is  $M=3.65$ ,  $SD=.672$ , for "*learning factors*" is  $M=3.83$ ,  $SD=.628$  and "*mental factors*" is  $M=3.83$ ,  $SD=.643$ . Perception mean scores of teachers related with factors in the scale were within "agree" option borders. The results showed that teachers have positive perceptions regarding gifted students.

### **3.2. The teachers' opinions about gifted students**

Teachers' general opinions about gifted students were calculated as  $M=3.72$ ,  $SD=.535$ . The item "*educational features*" is  $M=4.00$ ,  $SD=.705$ , for "*educational policies*" is  $M=3.88$ ,  $SD=.730$ , for "*education programs*" is  $M=3.85$ ,  $SD=.723$ , as for "*things to be considered in education*" is  $M=3.47$ ,  $SD=.672$ , and "*responsibilities of the ministry*" is  $M=3.24$ ,  $SD=.812$ . Mean scores of teachers towards opinions of gifted students related with factors in the scale were within "agree" option borders. The results revealed that teachers have positive opinions about gifted students.

### **3.3. The relationship between teachers' perceptions and opinions about gifted students**

According to the results, there was a positive and significant relationship between teachers' perceptions and opinions about gifted students ( $r^2=.311$ ,  $p<0.01$ ). When the determination coefficient is considered, it is seen that explained variance between these two variables is 31.1%. Therefore, it can be said that the two variables affect each other at a moderate level.

### **3.4. Teachers' perceptions of gifted students in relation to gender**

Gender variable was specified by t-test aiming to determine in the teachers' perceptions Table 1 shows the results related with the teachers' ( $n=490$ ) perceptions regarding gifted students according to gender.

**Table 1.**

The teachers' perceptions of gifted students in relation to the gender of the teachers

	Gender	N	M	SD	df	t	p
<b>Willing to learn</b>	Female	326	3.68	.59	488	.975	.330
	Male	164	3.63	.56			
<b>Expression Factors</b>	Female	326	3.73	.67	488	1.042	.298
	Male	164	3.67	.62			
<b>Personality Factors</b>	Female	326	3.66	.66	488	.820	.412
	Male	164	3.61	.68			
<b>Learning Factors</b>	Female	326	3.86	.62	488	1.568	.118
	Male	164	3.77	.65			
<b>Mental Factors</b>	Female	326	3.86	.63	488	1.547	.122
	Male	164	3.77	.65			

As it can be seen in Table 1, the scores of the female teachers' perceptions of "*willing to learn*" (M=3.68, SD=.59) were higher than the male teachers' perceptions (M=3.63, SD=.56). The mean scores of male teachers' perceptions related to expression factors of gifted students were (M=3.67, SD=.62) and female teachers' perceptions were (M=3.73, SD=.67). Besides, the mean scores of male teachers' perceptions related to personality factors were (M=3.61, SD=.68) and female teachers' perceptions were (M=3.66, SD=.66). The mean scores of male teachers' perceptions related to learning factors were (M=3.77, SD=.65) and female teachers' perceptions were (M=3.86, SD=.62). The mean scores of male teachers' perceptions related to mental factors regarding the students were (M=3.77, SD=.65) and female teachers' perceptions were found to be (M=3.86, SD=.63). These results indicated that the gender of the teachers do not affect their perceptions towards gifted students.

### 3.5. The teachers' perceptions of gifted students in relation to the age of the teachers

Table 2 demonstrates the teachers' perceptions of gifted students regarding to age (Please see Table 2 for detailed information).

**Table 2.**

The teachers' perceptions of gifted students in relation to age

Dimension	Age	N	M	SD	df	F	p
<b>Willing to learn</b>	21-30	178	3,62	,61	3	1,113	,343
	31-40	178	3,69	,57			
	41-50	108	3,65	,56			
	51 and above	26	3,82	,60			
<b>Expression factors</b>	21-30	178	3,65	,70	3	1,162	,324
	31-40	178	3,75	,65			
	41-50	108	3,71	,58			
	51 and above	26	3,85	,68			
<b>Personality Factors</b>	21-30	178	3,56	,69	3	1,651	,177
	31-40	178	3,72	,63			
	41-50	108	3,65	,67			
	51 and above	26	3,72	,75			
<b>Learning Factors</b>	21-30	178	3,77	,67	3	1,562	,198
	31-40	178	3,87	,60			
	41-50	108	3,80	,59			
	51 and above	26	4,02	,55			
<b>Mental factors</b>	21-30	178	3,79	,67	3	,740	,528
	31-40	178	3,86	,63			
	41-50	108	3,83	,61			
	51 and above	26	3,97	,60			

As Table 2 shows, the teachers' age range is between 21- 51 and above. As can be seen from Table 2, no significant difference was observed between the teachers' ages and their perceptions regarding the gifted students' willingness to learn ( $F_{(3;486)}=1.113$ ,  $p>0.05$ ), their perceptions regarding the gifted students' expression factors ( $F_{(3;486)}=1.162$ ,  $p>0.05$ ), their perceptions regarding the gifted students' personality factors ( $F_{(3;486)}=1.651$ ,  $p>0.05$ ), their perceptions regarding the gifted students' learning factors, their perceptions regarding the gifted students' mental factors ( $F_{(3;486)}=.740$ ,  $p>0.05$ ) and their

general perceptions regarding the gifted students ( $F_{(3;486)}=1.366$ ,  $p>0.05$ ). These obtained results revealed that teachers' perceptions towards gifted students are positive and ages of teachers do not significantly affect their perceptions towards gifted students.

### 3.6. Teachers' perceptions of gifted students in relation to work experience

Table 3 shows the statistical findings of the teachers' perceptions of gifted students regarding work experience (Please see Table 2 for detailed information).

**Table 3.**

The teachers' perceptions of gifted students in relation to work experience

Dimension	Experience	N	M	SD	df	F	p	Explanation
<b>Willing to learn</b>	1-5 years	132	3,58	,57	4	1,905	.105	p>0.05 Insignificant
	6-10 years	96	3,60	,63				
	11-15 years	103	3,73	,55				
	16-20 years	95	3,70	,57				
	21 years and above	64	3,77	,58				
<b>Expression factors</b>	1-5 years	132	3,60	,66	4	1,928	.105	p>0.05 Insignificant
	6-10 years	96	3,65	,69				
	11-15 years	103	3,77	,68				
	16-20 years	95	3,78	,60				
	21 years and above	64	3,81	,60				
<b>Personality Factors</b>	1-5 years	132	3,53	,63	4	1,855	.117	p>0.05 Insignificant
	6-10 years	96	3,62	,67				
	11-15 years	103	3,69	,66				
	16-20 years	95	3,71	,70				
	21 years and above	64	3,76	,68				
<b>Learning Factors</b>	1-5 years	132	3,74	,65	4	1,851	.118	p>0.05 Insignificant
	6-10 years	96	3,75	,67				
	11-15 years	103	3,91	,60				
	16-20 years	95	3,87	,61				
	21 years and above	64	3,92	,53				
<b>Mental factors</b>	1-5 years	132	3,73	,63	4	2,973	.019	p<0.05 Significant 1-3,1-4, 1-5,2-3,2-4, 2-5
	6-10 years	96	3,72	,67				
	11-15 years	103	3,94	,59				
	16-20 years	95	3,91	,65				
	21 years and above	64	3,92	,61				

As can be seen in Table 3, the teachers' work experience range is between 1- 21 and above. Also, One- Way ANOVA was applied to find out whether there was a significant relationship between the teachers' perceptions of gifted students and their work experience.

As can be seen from Table 3, there is a significant difference between work experience of teachers and their perceptions regarding the gifted students' mental factors ( $F_{(4;485)}=2.973$ ,  $p<0.05$ ). These results indicated that teachers' work experience affects their perceptions regarding gifted students. A Scheffe test was applied in order to figure out in which groups these differences exist and it was revealed that there is a significant difference regarding teachers' perceptions of gifted students' mental factors among teachers with 1-5 years of work experience and 21 years and above; teachers with 1-5 years of work experience and 16-20 years; teachers with 1-5 years of work experience and 11-15 years of work experience. In addition, there is a significant relationship between teachers' perceptions of gifted students' mental factors among teachers with 6-10 years and 11-15 years of work experience, teachers with 6-10 years and 16-20 years of work experience, 6-10 years and 21 and above years of work experience. In the light of these obtained results, it can be said that teachers' work experience significantly affects their perceptions of gifted students.

### 3.7. Comparison of teachers' perceptions with their participation in training about gifted students

A t-test was applied in order to determine whether teachers' perceptions regarding gifted students significantly differ based on their previous participation on a training course on gifted students. In

Table 4, results on teachers' perceptions and their participation in a training course on gifted students are provided.

**Table 4.**

Comparison of mean scores of teachers' perceptions with their participation in a training course on gifted students

		N	M	SD	df	t	p	Explanation
<b>Willing to learn</b>	Attend	137	3,68	,51	488	.367	.714	p>0.05
	Not Attend	353	3,66	,61				Insignificant
<b>Expression factors</b>	Attend	137	3,70	,61	488	.152	.879	p>0.05
	Not Attend	353	3,71	,67				Insignificant
<b>Personality Factors</b>	Attend	137	3,60	,64	488	.897	.370	p>0.05
	Not Attend	353	3,66	,68				Insignificant
<b>Learning Factors</b>	Attend	137	3,84	,55	488	.407	.707	p>0.05
	Not Attend	353	3,82	,65				Insignificant
<b>Mental factors</b>	Attend	137	3,82	,58	488	.300	.777	p>0.05
	Not Attend	353	3,84	,66				Insignificant

No significant difference was observed ( $t=.367$ ,  $p>0.05$ ) between the scores on perceptions of teachers who did not participate in training related to gifted students towards gifted students' willingness to learn ( $M=3.68$ ,  $SD=.51$ ) and the scores on perceptions of teachers who participated in training related to gifted students towards gifted students' willingness to learn ( $M=3.66$ ,  $SD=.61$ ). Therefore, it can be interpreted that teachers' previous participation in a training course on gifted students does not affect their perceptions towards gifted students.

### 3.8. Comparison of teachers' opinions towards gifted students with regard to the gender of the teachers

An independent t-test was used to determine whether teachers' perceptions regarding gifted students significantly differ based on their gender. Table 5 demonstrates descriptive data related to teachers' perceptions towards gifted students and their gender.

**Table 5.**

Comparison of general mean scores of teachers' opinions towards gifted students with regard to the gender of the teachers

	Gender	N	M	SD	df	T	p	Explanation
<b>Instructional Properties</b>	Female	326	4.03	.65	488	1.499	.135	p>0.05
	Male	164	3.93	.79				Insignificant
<b>Education Policy</b>	Female	326	3.89	.68	488	.419	.675	p>0.05
	Male	164	3.86	.80				Insignificant
<b>Curriculum</b>	Female	326	3.90	.69	488	2.015	.044	p<0.05
	Male	164	3.76	.77				Significant
<b>Requirements in Education</b>	Female	326	3.48	.66	488	.420	.674	p>0.05
	Male	164	3.45	.70				Insignificant
<b>The duties of the Ministry</b>	Female	326	3.24	.83	488	.071	.943	p>0.05
	Male	164	3.23	.77				Insignificant

As can be seen from the Table 5, female teachers' scores on Instructional Properties factors were ( $M=4.03$ ,  $SD=.65$ ) higher than male teachers' scores on their opinions related to Instructional Properties factors ( $M=3.93$ ,  $SD=.79$ ). However, this score does not reveal a significant difference ( $t=-1.499$ ,  $p>0.05$ ). View scores of female teachers related to policy factors were calculated as  $M=3.89$   $SD=.68$  and View scores of male teachers were calculated as  $M=3.86$ ,  $SD=.80$ . This result showed that the opinions of both male and female teachers on the statements in this factor are in the "agree" option borders and gender differences do not result in a significant difference on education policy. It was seen that view scores of female teachers related to curriculum factors ( $M=3.90$ ,  $SD=.69$ ) were higher than view scores of male teachers ( $M=3.76$ ,  $SS=.77$ ). This result reveals a significant difference between the opinions of female and male teachers towards this factor ( $t=-2.015$ ,  $p<0.05$ ). No significant difference was observed between the view scores of female and male teachers regarding

Requirements in Education and the duties of the Ministry factors ( $p>0.05$ ). According to this result, it can be interpreted that gender variables do not affect teachers' opinions.

### 3.9. Comparison of teachers' opinions towards gifted students with their participation in training on gifted students

An independent t-test was used to determine whether teachers' opinions regarding gifted students significantly differ based on their participation in training on gifted students. Table 6 shows the results related to teachers' perceptions towards gifted students and their participation in training on gifted students.

**Table 6.**

Comparison of general mean scores of teachers' opinions towards gifted students with their participation in training on gifted students

	Gender	N	M	SD	df	T	p	Explanation
<b>Instructional Properties</b>	Attended	137	4,07	,67	488	1.416	.188	$p>0.05$
	Not Attended	353	3,97	,71				Insignificant
<b>Education Policy</b>	Attended	137	3,96	,71	488	1.651	.099	$p>0.05$
	Not Attended	353	3,84	,73				Insignificant
<b>Curriculum</b>	Attended	137	3,99	,67	488	2.572	.010	$p<0.05$
	Not Attended	353	3,80	,73				Significant
<b>Requirements in Education</b>	Attended	137	3,47	,68	488	-.064	.949	$p>0.05$
	Not Attended	353	3,47	,67				Insignificant
<b>The duties of the Ministry</b>	Attended	137	3,22	,79	488	-.375	.708	$p>0.05$
	Not Attended	353	3,25	,81				Insignificant

As can be seen from Table above, no significant difference was observed between the scores on opinions of teachers who participated in training related to gifted students towards first factor ( $M=4.07$ ,  $SD=.67$ ) and the scores on opinions of teachers who did not participate in training related to gifted students towards first factor ( $M=3.97$ ,  $SD=.71$ ), ( $t=1.416$ ,  $p>0.05$ ).

Nevertheless, no statistically significant difference was observed between the scores on opinions of teachers who participated in training related to gifted students towards Education Policy factor ( $M=3.96$ ,  $SD=.71$ ) and the scores on opinions of teachers who did not participate in training related to gifted students towards Education Policy factor ( $M=3.84$ ,  $SD=.73$ ), ( $t=1.651$ ,  $p>0.05$ ).

A statistically significant difference was observed between the scores on opinions of teachers who participated in training related to gifted students towards the third factor ( $M=3.99$ ,  $SD=.67$ ) and the scores on opinions of teachers who did not participate in training related to gifted students towards the third factor ( $M=3.80$ ,  $SD=.73$ ), ( $t=2.572$ ,  $p<0.05$ ). It can be interpreted that teachers who participated in training related to gifted students have positive opinions when compared to teachers who did not participate in training related to gifted students.

No statistically significant difference was observed between the scores on opinions of teachers who participated in training related to gifted students towards requirements in the education factor ( $M=3.47$ ,  $SD=.68$ ) and the scores on opinions of teachers who did not participate in training related to gifted students towards requirements in the education factor ( $M=3.47$ ,  $SD=.67$ ), ( $t=-.064$ ,  $p>0.05$ ). In addition, no statistically significant difference was observed between the scores on opinions of teachers who participated in training related to gifted students towards the duties of the ministry factor ( $M=3.22$ ,  $SD=.79$ ) and the scores on opinions of teachers who did not participate in training related to gifted students towards the duties of the ministry factor ( $M=3.25$ ,  $SD=.81$ ), ( $t=-.375$ ,  $p>0.05$ ).

Furthermore, there was a significant difference between the scores on opinions of teachers who participated in training related to gifted students towards the sixth factor ( $M=2.83$ ,  $SD=.93$ ) and the scores on opinions of teachers who did not participate in training related to gifted students towards the sixth factor ( $M=2.59$ ,  $SD=.91$ ), ( $t=2.597$ ,  $p<0.05$ ). It can be interpreted that teachers who participated in training related to gifted students have positive opinions when compared to teachers who did not participate in training related to gifted students before. Therefore, it can be interpreted that teachers' previous participation in training on gifted students does not affect their opinions towards gifted students.

### 3.10. Comparison of teachers' opinions towards gifted students with their willingness to prepare separate programmes for gifted students

A Mann-Whitney U test was applied in order to determine whether teachers' opinions regarding gifted students significantly differ based on their willingness to prepare separate programmes for gifted students.

Since teachers' willingness status did not show normal distribution, a non-parametric test was used. In Table 7, results related to teachers' opinions towards gifted students and their willingness to prepare separate programmes for gifted students are provided.

**Table 7.**

Comparison of teachers' opinions towards gifted students with their willingness to prepare separate programmes for gifted students

		N	Mean Rank	Sum of Ranks	U	p	Explanation
<b>Instructional Properties</b>	Required	453	252,33	114307,00	5285	.000	p<0.05 Significant
	Not Required	37	161,84	5988,00			
<b>Education Policy</b>	Required	453	253,11	114660,00	4932	.000	p<0.05 Significant
	Not Required	37	152,30	5635,00			
<b>Curriculum</b>	Required	453	250,22	113350,50	6241,5	.009	p<0.05 Significant
	Not Required	37	187,69	6944,50			
<b>Requirements in Education</b>	Required	453	249,62	113076,50	6515	.023	p<0.05 Significant
	Not Required	37	195,09	7218,50			
<b>The duties of the Ministry</b>	Required	453	247,86	112278,50	7313,5	.193	p>0.05 Insignificant
	Not Required	37	216,66	8016,50			

There was a significant difference between teachers' opinions on instructional properties factor and teachers' opinions who would like to prepare a separate programme for gifted students (Mean Rank=252,33) and teachers' opinions who would not like to prepare a separate programme for gifted students (Mean Rank=161,84), ( $u=5285$ ,  $p<0.05$ ).

There was a significant difference between teachers' opinions on the education policy factor and teachers' opinions who would like to prepare a separate programme for gifted students (Mean Rank=253,11) and teachers' opinions who would not like to prepare a separate programme for gifted students (Mean Rank =152,30), ( $u=4932$ ,  $p<0.05$ ).

There was a significant difference between teachers' opinions on the curriculum factor and teachers' opinions who would like to prepare a separate programme for gifted students (Mean Rank=250,22) and teachers' opinions who would not like to prepare a separate programme for gifted students (Mean Rank =187,69), ( $u=6241$ ,  $p<0.05$ ).

There was a significant difference between teachers' opinions on requirements in the education factor and teacher opinions who would like to prepare a separate programme for gifted students (Mean Rank=249,62) and teacher opinions who would not like to prepare a separate programme for gifted students (Mean Rank =195,09), ( $u=6515,5$ ,  $p<0.05$ ).

There was a significant difference between teachers' opinions on requirements in the education factor and teachers' opinions who would like to prepare a separate programme for gifted students (Mean Rank=247,86) and teacher opinions who would not like to prepare a separate programme for gifted students (Mean Rank =216,66), ( $u=7313$ ,  $p>0.05$ ).

#### 4. Conclusions and recommendations

In conclusion, the present study aimed to explore the perceptions and opinions of teachers towards gifted students. It is important to understand and reveal the perceptions and opinions of teachers since they determine the attitudes and behaviours of teachers towards gifted students. The results of the study provide sufficient information about the teachers' perceptions and opinions towards gifted students in North Cyprus. Innovations and performances of the individuals open the door to a required framework for gifted education. Individuals possessing such abilities need to be empowered for the sake of their country's future.

Overall, the study showed that teachers have positive perceptions and opinions relating to gifted students. This study, when compared with other studies in different countries, revealed educational implication differences. Gifted students would benefit if teachers could provide appropriate and effective educational programmes which will meet the educational needs of gifted students.

Recommendations are provided based on the results of the study:

1. A special education network might be constituted for gifted students in order to provide them with an appropriate and qualified education.
2. There should be more courses related to providing the educational needs of gifted students offered by the universities' faculties of education and teacher training programmes.
3. Educational policies and programmes should be developed in order to improve teachers' knowledge, understanding and awareness of gifted students.
4. An instruction programme might be developed for gifted students and experimental research might be conducted to test the effectiveness of the programme.

In relation to the pertinent recommendations, the authors would consider necessary to address:

1. Further research might investigate the opinions, knowledge and awareness levels of special education teachers in order to reveal the current situation.
2. Future research might include more schools in order to have more generalised results and make comparisons.

#### 5. References

- Archambault, F. X., Westberg, K. L., Brown, S. W., Hallmark, B. W., Zhang, W. & Emmons, C. L. (1993). Classroom practices used with gifted third and fourth grade students. *Journal for the Education of the Gifted*, 16, 103-119.
- Berger, S. (2006). *College planning for gifted students: Choosing and getting into the right college* (3rd ed.). Waco, TX: Prufrock Press.
- Capan, E.B. (2010). Metaphoric perceptions of teacher candidates towards gifted students. *Journal of International Social Research*, 3(12), 140-154.
- Chan, D.W. (2001). Learning styles of gifted and nongifted secondary students in Hong Kong. *Gifted Child Quarterly*, 45(1), 35-44.
- Clark, B. (2002). *Growing up gifted: Developing the potential of children at home and at school*, 6th ed. Upper Saddle River, NJ: Prentice Hall.
- Colangelo, N. (1991). *Counseling gifted students*. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 273-284). Boston: Allyn and Bacon.
- Copenhaver, R.W. & McIntyre, D.J. (1992). Teachers' perceptions of gifted students. *Roepers Review*, 14, 151-153.
- Cross, J.A., Dobbs, C. (1987). Goals of a teacher training program for teachers of the gifted. *Roepers Review*, 9(3), 170-171.
- Davalos, R. & Griffin, G. (1999). The impact of teachers' individualized practices on gifted students in rural, heterogeneous classrooms. *Roepers Review*, 21(4), 308-314.
- Davaslıgil, U. (2004). Üstün zekâli çocukların eğitimi [Training of gifted students]. *Birinci Türkiye Üstün Yetenekli Çocuklar Kongresi Seçilmiş Makaleler Kitabı*, No:63, İstanbul: Çocuk Vakfı Yayınları.

- Davis, G.A. & Rimm, S.B. (2004). *Educated of the Gifted and Talented*. (fifth edition). Boston: Pearson Education.
- Delisle, J.R. (2003). To be or to do: Is a gifted child born or developed? *Roepers Review*, 26(1), 12-13.
- Feldhusen, J.F., Huffman, L. (1988). Practicum experiences in an educational program for teachers of the gifted. *Journal for the Education of the Gifted*, 12, 34-45.
- Feldhusen, J.F. (1991). Full-time classes for gifted youth. *The Gifted Child Today*, 14(5), 10- 13.
- Feldhusen, J.F. (1997). *Educating teachers for work with talented youth*. In N. Colangelo & G. A. Davis (Eds.), *Handbook of Gifted Education* (pp. 547-555).
- Gallagher, J.J. (2000). Unthinkable thoughts: Education of gifted students. *Gifted Child Quarterly*, 44, 5-12.
- Hanninen, G.E. (1988). A study of teacher training in gifted education. *Roepers Review*, 10(3), 139-144.
- Hansen, J.B & Feldhusen, J.F. (1990). Off campus training of teachers of the gifted: A program model. *Gifted International*, 6, 54-62.
- Hunsaker, S.L, Finley, V.S & Frank, E.I. (1997). An analysis of teacher nominations and student performance in gifted programs. *Gifted Child Quarterly*, 41 (2), 19-24.
- Koshy, V. (2002). *Survey of infant school teachers on provision for gifted children*. UK: Brunel Able Children's Education Centre: Brunel University.
- Lyon, G.R, Vaassen, M. & Toomey, F. (1989). Teachers' perceptions of their undergraduate and graduate preparation. *Teacher Education and Special Education*, 12(4), 164-169.
- Maker, J.N. & Nelson, A.B. (1996). *Curriculum Development and teaching Strategies Gifted Students*. (2. Ed): Pro-Ed, Austin, Tex.
- Özdemir, N. N. & Demirel, S. (2012). Üstün zekâ kavramları: sosyokültürel bakış açıları. *Türk Üstün Zekâ ve Eğitim Dergisi*, 2(1), 77-82.
- Parke, B.N. (1989). *Gifted students in regular classrooms*. Needham Heights, MA: Allyn & Bacon.
- Pigge F.N. & Marso R.N. (1987). Relationships between student characteristics and changes in attitudes, concerns, anxieties, and confidence about teaching during teacher preparation. *Journal of Educational Research*, 81, 109-115
- Renzulli, J.S, Reis, S.M. (1985). *The schoolwide enrichment model: A comprehensive plan for educational excellence*. Mansfield Center, CT: Creative Learning Press.
- Rohrer, J.C. (1995). Primary teacher conceptions of giftedness: image, evidence, and nonevidence, *Journal For The Education Of The Gifted*, 18 (3), 269-283.
- Sak, U. (2010). *Üstün zekalılar, özellikleri tanılanmaları, eğitimleri (Characteristics, diagnosis and education of gifted individuals)*. Ankara: Maya Academia Publishing.
- Sarı, H. (2014). 'What is the Future of Special Talented Children in Turkey' (Unpublished Conference Paper), Necmettin Erbakan Üniversitesi, Erol Gungor Konferans Salonu, 16 May 2014.
- The Ministry of National Education, (2005). Kuzey Kıbrıs Türk Cumhuriyeti, Milli Eğitim ve Kültür Bakanlığı. Kıbrıs Türk Eğitim Sistemi. <[talimterbiye.mebnet.net/kibristurkegitimsistemi.pdf](http://talimterbiye.mebnet.net/kibristurkegitimsistemi.pdf)> (Retrieved on 15 June 2015).
- Toll, M.F. (2000). The importance of teacher preparation programs to appropriately serve students who are gifted. *Understanding Our Gifted*, 12, 14-16.
- Tomlinson, C. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA:ASDC.
- Uzunboyulu, H. & Demirok, M. (2012). *Üstün yetenekli öğrencilere yönelik görüş, algı ve eğitim ihtiyaçlarının belirlenmesi*. Yakın Doğu Üniversitesi, PhD Thesis, Unpublished. North Cyprus. Nicosia: Near East Univeristy
- Westberg, K.L., Daoust, M.E. (2003). The results of the replication of the classroom practices survey replication in two states. *The National Research Center on the Gifted and Talented Newsletter*, Fall: 3-8.
- VanTassel-Baska, J. (2005). *Domain-specific giftedness: Applications in school and life*. In R. J. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (2nd ed., pp. 358-377). New York: Cambridge University Press.