Investigation of the Gifted Education Self-Efficacy of Teachers Work with Gifted Students[1]

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Abstract

The competencies of the teachers of gifted children are important for the quality of gifted education. The aim of this study is to determine the self-efficacy of gifted and talented teachers working in primary and secondary schools in state schools of the Turkish Ministry of National Education. In this study, 45 teachers from 13 different branches working in primary and secondary schools in Melikgazi District of Kayseri Province in the 2017-2018 academic year and having gifted students in their class were taken as samples. The data collection tool was developed by Tortop (2014), and the Gifted Education Self-efficacy Scale for Teachers (GESST) was used. The scale consists of six sub-dimensions and 26 items. The obtained data were analyzed using SPSS 16 program. Mean data, independent sample t test and chi-square test were used in the interpretation of the data. According to the results of the study, it was determined that the mean scores of teachers' self-efficacy were higher than the average level ($\bar{X} = 3.37$). As a result of independent sample t test, no significant difference was found between male and female teachers in terms of sub-dimensions of Gifted Education Self-Efficacy Scale. In the chi-square test, significant differences were found in the gender variable in the academic competency sub-dimension, in the seniority variable in the encouragement of creativity sub-dimension, in the age variable of the teachers in the responsibility competency sub-dimension and in the age variable of the teachers in the instructional planning competency sub-dimension. In the light of the findings, it may be suggested that teachers working with gifted students should be supported continuously by in-service trainings and more self-efficacy related to the education of gifted students within the framework of a certain program, in the light of current data.

Keywords

gifted students, gifted education, gifted education self-efficacy.

1 Part of this study was presented as an oral paper at the International Erciyes Multidisciplinary Scientific Research Congress.

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INTRODUCTION

Education of gifted children is becoming more and more important in today's world. In this sense, very serious progress has been made in our country recently. The number of Science and Art Centers and Support Education Rooms, where gifted children attend, is rapidly increasing. In the resources that make identification through intelligence tests, gifted individuals are individuals whose intelligence department consistently scores 130 and higher (Ersoy & Avcı, 2004).

As a result of the intelligence test conducted in the Guidance and Research Centers, students with a score of 130 or higher are defined as "Individuals with Special Talent". As a result of the intelligence test conducted by the Guidance and Research Centers, a full-time inclusion report is prepared for students with special talent. With this report, students can benefit from Resource Rooms in their own schools (MoNE, Resource Rooms, 2015).

> *"It is obligatory to establish a Resource Room in schools and institutions where special education students and students with special education needs who continue their education in the same class with their peers who do not have disability within the scope of inclusion / integration education practices (MoNE, Resource Rooms Directive, 2015).*

Gifted students can benefit from their own teachers or other teachers in the school in the Resource Rooms, with the help of their peers, in addition to their class-level courses. Therefore, teachers working with these children should be equipped in every sense. In the education of gifted students, it is very important to make early detection and diagnosis of their interests and abilities, but also to provide right mentoring by experts in their field (Tortop, 2013).

Teachers play a key role in the success of gifted education (Summak & Çelik-Şahin, 2014; Plunkett, 2000; Kadıoglu-Ates, 2016). However, in many studies, teachers express their inadequacy and in-service training needs (McCoach & Siegel, 2007; Lassig, 2003; McCoach, 2007). Many studies show that teachers' attitudes towards gifted education and their self-efficacy beliefs about providing education to these individuals are not sufficient (Gallagher, 1996; Gross, 1994; Sak, 2011). There are many studies on determining the attitudes of teachers or prospective teachers about gifted education (Davis & Rimm, 2004; Lassig, 2003; McCoach & Siegle, 2007). Behavior that is still focused on the attitude towards gifted education may be due to lack of knowledge of educators in this field and the lack of adequate training in gifted education (Lewis & Milton, 2005; Gallagher, 2007).

One of the most important issues in the education of gifted students is the qualifications of teachers who train them. Teachers of gifted students should be more talented and more imaginative than other teachers (Lewis, 1982). In order to make the identification of gifted students healthy, classroom teachers should have enough information about gifted students and have a positive attitude (Tortop &

Kunt, 2012). Teachers' approach to different children and their education and their philosophical point of view is very important because the teacher's view of education has a great effect on teaching approaches (Dağlı, 2014). Gifted Education Self-efficacy is very important for teachers working with gifted students. It was observed that teachers with high self-efficacy in gifted education increased their willingness to use instructional strategies for these students (Dixon et al., 2014; Rambo & McCoach, 2012; Siegel, Moore, Mann, & Wilson, 2010).

Problem of Study

The aim of the study is to examine the teachers' gifted education self-efficacy. At the same time, it is aimed to investigate whether teachers' self-efficacy regarding gifted education differs according to gender, branch, occupational seniority, graduated school and age. The research problem is that what is the level of gifted education self-efficacy of teachers work with gifted students?

METHOD

Research Model

This study is a survey model in quantitative research types. The self-efficacy of the teachers working with gifted students regarding the education of gifted students was tried to be determined.

Sampling

The sample of the study consists of 45 teachers from 13 different branches working in primary and secondary schools in Melikgazi District of Kayseri. As a criterion, it was determined to be a teacher who had gifted students and worked with gifted students.

Table 1.

Demographic Characteristics of Teachers in the Study Group

	Branch	Female	Male	Undergraduated	Graduate
1	Classroom Teacher	10	13	22	1
2	Preschool Teacher	2	-	1	1
3	Religious Culture and Ethics Teacher	2	-	2	-
4	EFL Teacher	4	-	4	-
5	Turkish Language Teacher	1	1	2	-
6	Social Sciences	1	-	1	-

7	Mathematic	1	1	1	1
8	Science Teacher	2	1	2	1
9	Technology and Design Teacher	1	-	1	-
10	ICT Teacher	-	1	-	1
11	Music Teacher	1	-	1	-
12	Art Teacher	1	-	1	-
13	Counseling Teacher	1	1	2	-
Total	13	27	18	40	5

Data Collection Tools

Gifted Education Self-efficacy Scale for Teachers (GESST): This scale was used to determine the self-efficacy of gifted education teachers. GESST was developed by Tortop (2014). The scale consists of 26 items. Academic Qualification Dimension, Mentorship Qualification Dimension, Responsibility Dimension, Appropriate Personality Feature Qualification Dimension, Creativity Encouragement Dimension, Instructional Design Dimension.

Data Analysis

SPSS 16 program was used to analyze the data obtained from the scales. Statistical analyzes such as percentage, frequency, scale mean, t-test, chi-square test were used in the analysis of the data.

RESULTS

This section presents the findings obtained by the data collection tool.

Table 2.

Mean and Standard Deviation of The Gifted Education Self-Efficacy Scale Subscales

	Gender	N	Mean	S.d.
Academic Competence	Female	27	2,9753	1,00395
	Male	18	2,5000	,82644
Mentoring Competence	Female	27	2,9815	1,12431
	Male	18	2,5833	1,01460
Responsibility	Female	27	3,2840	1,02825
	Male	18	3,0000	,73208
Suitable	Female	27	3,8307	,70325

Personality Traits	Male	18	3,8492	,44768
Promoting Creativity	Female	27	3,6370	,85582
	Male	18	3,7667	,64077
Instructional Design Competence	Female	27	3,2840	1,13116
	Male	18	3,1481	,93040
GESS Score Mean	Female	27	3,4245	,77611
	Male	18	3,2906	,52392

The mean of the sub-dimensions of the Gifted Education Self-efficacy Scale was $\bar{X}$=3.42 in female and $\bar{X}$ = 3.29 in male. When the total score average is considered, it is slightly above the average such as $\bar{X}$ =3.37. As can be seen in Table 2, the self-efficacy mean score of the teachers regarding the education of gifted students has the highest "Suitable Personality Trait" dimension ($\bar{X}$= 3.83). The lowest dimension was "Academic Competence" ($\bar{X}$ = 2.76). The lowest dimension of the GESS in female and male was in the "Academic Competence" dimension (respectively $\bar{X}$ = 2.97 and $\bar{X}$ = 2.50). The highest dimension of self-efficacy scale in women and men was in the "Suitable personality trait" dimension (respectively $\bar{X}$ = 3.83 and $\bar{X}$ = 3.84).

In the Chi-square test, self-efficacy scale related to the education of gifted students was at the academic level (X^2 = 23,611, p> 0.05). In terms of professional seniority (X^2 = 1,143, p> 0.05) in the competency to encourage creativity sub-dimension. According to the age of teachers in the responsibility competence sub-dimension (X^2 = 1,045, p> 0.01). In the instructional planning competency sub-dimension, significant differences were observed according to the age of the teachers. (X^2 = 99.472, p> 0.05).

DISCUSSION AND CONCLUSION

As a result, in the light of the findings obtained in this study, it was tried to determine the gifted education self-efficacy of teachers working with gifted students. According to the results of the study, it was determined that the mean scores of teachers' self-efficacy were higher than the average level ($\bar{X}$ = 3.37). As a result of independent sample t test, no significant difference was found between male and female teachers in terms of sub-dimensions of Gifted Education Self-Efficacy Scale. In the Chi-square test, self-efficacy scale related to gifted education was found to be significantly different in terms of academic seniority sub-dimension, in terms of professional seniority in creativity sub-dimension, in terms

of teachers 'age in responsibility sub-dimension and in terms of teachers' age in instructional planning proficiency sub-dimension.

Armağan (2015) found the average of self-efficacy scores of gifted classroom teachers as "Promoting Creativity" ($\bar{X}$= 3.83) and the lowest sub-dimension as "Academic Competence" ($\bar{X}$ = 2.76). When the total score average is considered, $\bar{X}$ = 3.43 is obtained. Armağan (2015) study results and the findings of this study are similar.

In developed countries, the number of legal regulations and researches related to the education of gifted people is increasing (Mönks and Pfluger, 2005). Increasing research in this area will increase the quality of education given to gifted students. The indecisive attitude of gifted education teachers in some subjects may arise from the general policy of gifted education in Turkey (Tortop & Kunt, 2012). Kulaksızoğlu (2004) also states that special education should be adopted as national education policy for gifted students because of their strategic and economic importance.

The education of gifted children should be carried out entirely by the family, the classroom teacher, a mentor, academics and psychological counselor. Families and classroom teachers should receive training for gifted students and develop themselves in this field. The expert (mentor) should be a person who has knowledge in many ways, developed himself and trained in gifted education. The gifted child should be well-equipped to answer many questions from different areas or interests. There should be a differentiated (enriched) education model for gifted children and individualized enriched activities should be implemented (Dinçer, 2018).

It is suggested that the quality and quantity of in-service training activities for teachers with gifted students should be increased and the application of theoretical knowledge should be included more. Teachers should be given training to increase their self-efficacy in gifted education. It is inevitable to give 30-hour trainings on gifted education to the teachers who have gifted students in their class and to specialize the teachers in this field. Teachers need high quality and more practical in-service trainings in this field (Tortop & Dinçer, 2016).

In future studies, in-service training activities and content for teachers working with gifted students can be done. The need for the education of gifted children, who should be effective, productive and more practical, can be examined from the perspective of teachers, mentors who are experts in their fields and gifted students.

Biodata of Author

Gifted Specialist Sedat DİNÇER, I was born in 1981 in Kayseri. I completed my primary, secondary and high school education in Kayseri. In 2002, I graduated from Niğde University, Faculty of Education, Classroom Teaching Department. I have been interested in the Education of Gifted / Intelligent Children for 12 years. I attended many courses, seminars, workshops, congresses, TÜBİTAK Projects, European Union Projects, Original Material and Event Development Activities, Special Education, Astronomy Education and Ministry of National Education courses in the field of Gifted / Special Talented. I am also the Ministry of Education Special / Gifted Trainer and Special / Gifted Support Training Chamber Trainer Training Provincial Trainer. I give courses and seminars to School Administrators and Teachers as Education Officer within the Provincial Directorate of National Education for Gifted / Special Talented. I am currently working as a Classroom Teacher at Kayseri Çetin Şen Science and Art Center. There are international papers, articles and book works about gifted / talented.

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