

Research Article

Examination of Pre-School Teachers' Self-Efficacy Beliefs and Self-Efficacy Regarding Gifted Education ¹

Ezgi ORAL²

Received: 20 July 2017Accepted: 07 October 2017

Abstract

This research was conducted to determine the needs of preschool teachers for education of gifted children by examining their overall self-efficacy and self-efficacy regarding gifted-children's education. This study which was conducted in the descripted survey model was carried out in the province of İzmir in the academic year of 2016-2017. The sample of the research is composed of 109 pre-school teachers who were working in public or private schools in İzmir. In order to determine the overall self-efficacy of the preschool teachers "Preschool Teachers Self- Efficacy Beliefs Scale", and to determine self-efficacy regarding gifted children's education "Gifted Education Self-Efficacy Scale for Teachers" was used. Teachers have voted lower scores for self-efficacy beliefs for gifted students than needs of self-efficacy for pre-school. It was observed that the youngest teachers evaluated themselves more efficacious. It is also obtained that students who have associate degree considered more efficacious than high school, graduated and master degree. The results of this study showed that teachers who work at pre-school education institution need education for gifted students.

Keywords

gifted children, preschool teachers, teacher self-efficacy beliefs, self-efficacy regarding gifted education

To cite this article:

Oral, E. (2017). Examination of pre-school teachers' self-efficacy beliefs and self-efficacy regarding gifted education. *Journal for the Education of Gifted Young Scientists*, 5(4), 49-58. DOI: http://dx.doi.org/10.17478/JEGYS.2017.69

¹This study was presented as oral presentations at the International Talented and Gifted Conference: New Approaches and Educational Practices 2017 May 4-6,

²Lec., Vocational School of Health Services, Department of Child Education, İzmir University of Economics, Turkey, ezgi.oral@ieu.edu.tr

Introduction

Since the preschool teachers are the main role model for their students, their self-efficacy beliefs are influential on students' personality development. Teachers with high or low self-efficacy beliefs have significant behavioral differences within the classroom, which directly affects the motivation and success of the learners (Tschannen Moran & Woolfolk Hoy, 2001; Hazır Bıkmaz, 2006).

One of the most important problems in the education of gifted students is the insufficiency of the educational programs which are tailored to students. In addition to that, qualifications of teachers who will provide appropriate educational program is an important factor; thus, it is significant to determine the teachers' competence and needs regarding to education of gifted children (Güneş, 2015).

Since gifted children learn faster than their peers, common educational programs used in classrooms are not sufficient for gifted children; they can easily get bored and distracted from the subject and lose interest for school, and as a result their motivation for academic success decreases. (Güneş, 2015).

A childs' giftedness may not be immediately recognized at school or within the family. Those children who were not recognized as gifted and received the necessary support accordingly, may not be able to enhance their abilities which results in having academic and social problems. In addition, children who are not accepted by both their peers and adults surrounding them struggle with various social and emotional difficulties (Güneş, 2015; Kaya 2013).

Several researches on the educational needs of gifted children reveals the inadequacy of the teachers and their needs about working with gifted students. The qualification of the teacher is the most important factor in the education of the gifted children, as in all the educational implementations. Creativity of the teacher is also crucial in this field. Only the educators, who are able to think creatively and apply different methods of education by considering the individual differences of children, can support gifted children's abilities and development. Also, being able to teach creative thinking skills to the gifted child is very important, in order to help them to enhance their own learning abilities (Tschannen Moran & Woolfolk Hoy, 2001; Kahyaoğlu ve Yangın, 2007; Dağlıoğlu, 2010).

It is also important for teachers to be well informed about gifted children's attitudes and attributes; to have positive attitudes towards gifted children rather than being prejudiced about them, and to be able to recognize the gifted students in the classroom and help them being identified by professionals. Therefore, it is necessary to study further for determining the needs and deficiencies of the teachers about the gifted children subject, and for improving their positive attitudes towards them. Several researches support that this is a very efficient way to increase the gifted children's academic success; and also, teachers who trained about the notion of

gifted children have increased positive attitudes towards them (Tortop & Kunt, 2012; Goodnough, 2001).

Bandura also argued that there is a strong link between the proficiency of the teacher and his / her success as a teacher. This research shows that teachers 'self-efficacy beliefs affect not only the attitudes and academic success of the students, but also the teachers' positive attitudes towards teaching, openness to different ideas, and classroom behaviors (Bandura, 2006).

There are many differences among teachers with low and high self-efficacy beliefs. Teachers with high self-efficacy are tend to try to apply new approaches to education, devote more time to teaching, give feedback to children with learning difficulties, provide correct solutions for students with behavioral problems, provide a successful classroom management, care for their profession and have commitment to their profession. Those characteristics of the teachers directly affects the motivation and academic success of the students (Tepe, 2011; Yeşilyurt, 2013).

A teacher's general self-efficacy belief may not give us accurate information about his/her self-efficacy belief in a particular area. For that reason, teachers' self-efficacy beliefs in the specific areas should be measured separately and their needs and competencies must be determined accordingly.

The aim of this research is to examine the pre-school teachers' overall self-efficacy beliefs and their self-efficacy for the education of the gifted students, and to determine the differences of their perceptions related to the variables in demographic data. I / we hypothesized that teachers who gain awareness about the education of gifted children will have the opportunity to improve themselves to support these children's education in a more advanced way. They will be able to recognize gifted children and support their academic skills, as well as help them to integrate with their peers.

Method

Research Model

In this study, descriptive survey model was used in order to determine the teachers' current self-efficacy beliefs about overall pre-school education and about gifted children's education in preschool.

Population and Sample

This study was carried out in the districts of province of İzmir (Konak, Karşıyaka, Çiğli, Bornova, Balçova, Karabağlar, Gaziemir) in the academic year of 2016-2017. The sample is selected by convenience sampling method which is a form of non-random sampling method. The sample consisted of 109 pre-school teachers who worked in public or private schools located in a convenient area for researcher to access at the time of this study was being conducted. Scales that are used for the

study and demographic information surveys distributed to the participants as electronic surveys via internet.

 Table 1.

 Demographic Information of the Participants

Group	Demographic Factors	9/0
	Age	
1	20-30	64,5
2	31-40	30,9
3	41-50	4,6
	Graduation Degree	
1	High School	10
2	Associate Degree	28,2
3	Undergraduate	54,5
4	Post Graduate	7,3
	Year of service	
1	1-5 Years	10
2	6-10 Years	58,2
3	11-15 Years	22,7
4	21-25 Years	5,5
5	26-30 Years	3,6
	Worked With a Gifted Child Before	
1	Yes	83,6
2	No	16,4

The sample consisted of 109 pre-school teachers, the demographic information of the sample is displayed in Table 1. Most of the sample (64,5 %) is consisted of relatively young teachers who are aged from 20 to 30 years-old. More than half of the sample (54,5 %) has undergraduate degree and 58,2 % of the sample has been at the service for 6 to 10 years. Majority of the sample (83,6 %) indicated that they worked with gifted children before.

Data Collection

Data gathered with "Gifted Education Self-Efficacy Scale for Teachers" which is developed by Tortop (2014) and "Preschool Teachers Self-Efficacy Beliefs Scale" which is developed by Tepe and Demir (2012).

Preschool Teachers Self-efficacy Beliefs Scale: This scale was used for determining the self-efficacy beliefs of the participants. Scale was consisted of 37 items. Scale consisted of 6 subdimensions as following: learning and teaching process, communication, family involvement, planning, accommodations of learning and teaching environments and classroom management. The alpha internal

consistency coefficient was calculated 0.97 for preschool teachers' Self-Efficacy Beliefs scale (Tepe & Demir, 2012).

Gifted Education Self-efficacy Scale for Teachers (GESST): This scale was used for determining the self-efficacy beliefs of the participants regarding to gifted children education. Scale consisted of 26 items. Scale consisted of 6 subdimensions as following: Academic efficiency, mentorship (guidance) efficiency, responsibility efficiency, appropriate personal characteristics efficiency, encouraging the creativity efficiency, educational planning efficiency. The Cronbach alpha coefficient was calculated as 0.90 for Gifted Education Self-Efficacy Scale (Tortop, 2014).

Data Analysis

Data were collected from participants via internet, and analyzed with SPSS programming. The Paired Sample T test was used to analyze participants' data.

Results

Preschool Teachers Self- Efficacy Beliefs Scale Scores

Participants' Preschool Teachers Self- Efficacy Beliefs Scale scores according to subdimensions can be found in Table 2.

Tablo 2.

Preschool Teachers Self-Efficacy Beliefs Scale Scores

Preschool Teachers Self- Efficacy Beliefs Scale Subdimensions	Mean	Min.	Max.
Learning and teaching process	37	9	45
Communication	30	7	35
Family involvement	20	5	25
Planning	25	6	30
Accommodations of learning and teaching environments	20	5	25
Classroom management	20	5	25
Total	153	37	185

According to Preschool Teachers Self- Efficacy Beliefs Scale, total of highest and lowest score can be 185 and 37, respectively. After analyzing the data, total of mean score of the participants was found as 153. When subdimensions analyzed; it is indicated that learning and teaching process subdimension obtained the lowest score.

Gifted Education Self-Efficacy Scale for Teachers Scores

Gifted Education Self-Efficacy Scale for Teachers scores according to subdimensions can be found in Table 3.

Table 3.Gifted Education Self-Efficacy Scale for Teachers Scores

Gifted Education Self-Efficacy Scale for Teachers Subdimensions	Mean	Min.	Max.
Academic efficiency	9	3	15
Mentorship (guidance) efficiency	12	4	20
Responsibility efficiency	9	3	15
Appropriate personal characteristics efficiency	24	7	35
Encouraging the creativity efficiency	20	6	30
Educational planning efficiency	10	3	15
Total	85	26	130

According to Gifted Education Self-Efficacy Scale for Teachers, total of highest and lowest score can be 130 and 26, respectively. After analyzing the data, the total of mean score of the participants was found as 85. When subdimensions analyzed; it is indicated that; mentorship (guidance) efficiency, appropriate personal characteristics efficiency, and encouraging the creativity efficiency subdimensions obtained the lowest scores.

Results showed that, there is a positive correlation between overall scores of the two scales (r=0,436; p=0,000). Therefore, participants who obtained high scores on Preschool Teachers Self- Efficacy Beliefs Scale also obtained high scores on Gifted Education Self-Efficacy Scale for Teachers.

Table 4.Participants' Average Scores Related to Demographic Data

Demographic Information Scale Point Average		Preschool Teachers Self- Efficacy Beliefs Scale	p	Gifted Education Self-Efficacy Scale for Teachers	p
Age	20-30	155		93	
	31-40	147	<u> </u>	72	_
	41-50	161	_	63	_
	50 above	-	252	-	000
	High School	149		54	

	Associate Degree	138	.000	63	.000
Graduation	Undergraduate	159		96	
degree	Post Graduate	176		116	
Year of service	1-5	155		98	
	6-10	150		87	
	11-15	156		75	
	16-20	-		-	
	21-25	160	.537	100	.008
	26-30	166		54	
	30+	-			
Worked with a gifted child	Yes	148		52	
before	No	161	.008	84	.009

When Preschool Teachers Self- Efficacy Beliefs Scale scores analyzed; it is found that there is no significant difference between the self efficacy levels of participants from different age groups? However, the results of the Gifted Education Self-Efficacy Scale for Teachers demonstrated that younger teachers' (aged between 20 to 30) self-efficacy scores are significantly higher than older age groups.

For both scales, the analyzed data stated that there is a difference in self efficacy beliefs between the graduation degree groups (P = 0,000). Participants with associate degree tend to obtain lowest scores on both scales. There is a positive correlation between the graduation degree of the participants and their self-efficacy beliefs in overall education and in gifted children education fields.

There is no significant difference between the year of service of the participants and their self-efficacy beliefs (p=0,537). However, participants' self-efficacy beliefs regarding gifted children education showed difference between the subgroups (p=0,008). Participants with minimum year of service (1-5 years) tend to obtain higher scores while participants with maximum year of service (26-30 years) obtained lowest scores.

For both scales, analyzed data indicated that participants who did not worked with a gifted child before tend to have higher self-efficacy beliefs than the other group.

Discussion and Conclusion

When Preschool Teachers Self- Efficacy Beliefs Scale examined according to its subdimensions, participants tend to see themselves more qualified in learning and teaching process than the other subdimensions. Therefore, it is clear that participants need further training on subjects such as preparing an appropriate learning environment, support students for their active participation and creating learning opportunities.

Participants score themselves lower on the Gifted Education Self-Efficacy Scale than pre-school self-efficacy for Teachers. When this scale examined according to its subdimensions; the lowest scores obtained at Mentorship (guidance) efficiency, appropriate personal characteristics efficiency, and encouraging the creativity efficiency subdimensions. As a result, it is stated that pre-school teachers think that they need further training on subjects such as being able to provide personal guidance to the gifted child, to direct the gifted child according to child's individual needs and interests, to provide necessary emotional support, to help the gifted child to obtain appropriate personal characteristics, to create learning experiences which provide the gifted child to expand his/her creative thinking skills with different perspectives, to motive gifted child to study longer periods of time, to support the gifted child to self-assessment.

When self-efficacy beliefs examined according to the age group of the participants, it is clear that younger teachers tend to see themselves more qualified. This outcome might be a result of the recent changes in the training curriculum of teachers. Since there are more subjects regarding the children with special needs in the field of educational profession; recently graduated teachers might be more informed about the educational needs of the gifted children. However, with another perspective, this outcome might be a result of level of experience. Since more experienced teachers worked with various kind of children and faced with different problems; they might evaluate themselves objectively and be able to see their deficiencies.

When self-efficacy beliefs regarding to year of service examined, it is found that the most inexperienced group of participants tend to believe they are more sufficient in the gifted child education, as a contrast to the other groups with higher year of service. This outcome might be result of their lack of experience regarding to work with a gifted child. Less experienced teachers tend to be the younger teachers in general; thus, this result might be correlated with the training curriculum of the teachers as mentioned above. It can be concluded that the less experienced teachers has formed stronger bonds with their professions and feel more capable when encounter with a difficulty since they are not tired of their profession yet.

There is a positive correlation between the graduation degree of the participants and their self-efficacy beliefs in overall education and in gifted children education fields. When teachers become more informed about the field of child education, they gain more self-esteem regarding their profession. According to the results;

instead of year of experience, the graduation degree is more important for teachers to have higher self-esteem.

In conclusion, this study showed that pre-school teachers need further training about the educational needs of the gifted children. In order to be more competent at recognizing the gifted children in classroom environment and be able to provide them the necessary and appropriate support both emotionally and academically; pre-school teachers' needs must be determined and they must be provided appropriate in-service trainings. Universities where train teachers, must enrichen their curriculum and add new topics related to gifted children education. Detailed resources which provide help to teachers in order to recognize, support and guide the gifted child must be prepared by the professionals and these sources must be shared with all the teachers. Since the early recognition and identification of the gifted children is crucial for their future educational lives in terms of expand their abilities, form healthy social and emotional relationships and gain academic success; it is very important to determine the needs of pre-school teachers in this area and make further studies regarding this issue.

Acknowledgement

The author would like to thank Ezgi Çinçin, Yrd. Doç. Dr. Funda İfakat Tengiz, Öğr. Gör. Türkan Alkan Özbay and Öğr. Gör. Hasan Durmuş for their indispensable help.

Biodata of the Authors



Lec. Ezgi ORAL completed high school education in İzmir. then she moved to Ankara and graduated from Gazi University Vocational Education Faculty, Department of Children Development and Education, Department of Preschool Education. For 3 years after graduation from university; she have worked with unique child or group of children who needs special education. Then she worked as a Lecturer at İstanbul Kavram

Graduated School, in the department of Child Development Program, at the same time she was the head of the Program. She was a part of the Universities Without Obstacles Platform. She have continued to work with children who have Specific Learning Disabilities, Pervasive Developmental Disorders, and Mental Disorders. This year (2017), She completed her master degree at the Okan University, Institute of Social Sciences, Preschool Education program. From 2015, She have been working as a Lecturer at İzmir University of Economics, Child Development Program.

Affiliation: İzmir University of Economics, Vocational School of Health

Services,

Department of Child Education **E-mail:** ezgi.oral@ieu.edu.tr

Phone: +90 (232) 488 82 43

References

- Bandura, A. (2006). Guide for constructing self-efficacy scales. Self-efficacy beliefs of adolescents, 5(307-337).
- Goodnough, K. (2001). Changing teacher beliefs about giftedness and differentiation practices. *Gifted and Talented International*, 16(2), 115-121.
- Güneş, A. (2015). Examination of the attitudes and self-sufficiency of classroom teachers regarding the education of gifted students, *Journal of Gifted Education and Creativity*, 2(1), 12-16. doi: 10.18200/JGEDC.2015111169
- Kaya, N. G. (2013). Training of gifted students and BİLSEM. Erzincan University Faculty Journal of Education, 15(1), 115-122.
- Tepe, D., Demir, K. (2012). Preschool Teachers' Self Efficacy Beliefs Scale. *Abant İzzet Baysal University Faculty Journal of Education*, 12(2), 137-158.
- Tepe, D. (2011). Preschool Teachers' Self Efficacy Beliefs Scale, M.Sc. Thesis. Burdur: Mehmet Akif Ersoy University, Graduate School of Social Sciences.
- Tortop, H. S., Kunt, K. (2012). Investigation of Primary School Teachers' Attitudes Towards Gifted Education. *International Online Journal of Educational Sciences*, 5(2), 441-451.
- Tortop, H.S. (2014). Examining the effectiveness of the in-service training program for the education of the academically gifted students in Turkey: A case study. *Journal for the Education of the Young Scientist and Giftedness*, 2(2), 67-86.
- Yeşilyurt, E. (2013). Teacher Self-Efficacy Perceptions Of Teacher Candidates, Electronic Journal of Social Sciences, 12(45).
- Tschanen-Moran, M., Woolfolk A. H. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching And Teacher Education*, 17, 783-805.
- Hazır-Bıkmaz, F. (2006). Science Teaching Self-Efficacy Beliefs and Viezvs about Effective Science Courses, 6 (25), 34–44.
- Kahyaoğlu, M., Yangın S. (2007). Views Of Prospective Teachers In Elementary School Teaching Departments About Professional Self-Efficacy, *Kastamonu Education Journal*, 15(1), 73–84.
- Dağlioğlu, H. E. (2010). Education of Gifted Children Teacher Competencies And Their Characteristics. *National Education*, 72.