



Investigation of Giftedness Awareness Level of Parents Whose Children Attend Science and Art Center (SAC) in Terms of Different Variables

Güliz KAYMAKCI¹, İlknur GÜREL²

Abstract

The aim of this study is to determine the level of giftedness awareness of parents whose children attend Science and Art Center (SAC) and to examine their giftedness awareness in terms of different variables. The participants of the current study, which was conducted using the descriptive survey, one of the quantitative research methods, are 436 parents of gifted students who attended Science and Art Center in five different provinces in the 2022-2023 school year. The Parental Awareness Scale (Parents with Gifted Children) and a Personal Demographic Characteristics Information Form the researchers developed were used as data collection tools. Due to the normal distribution of the data in the study, parametric tests and descriptive analysis methods were used to analyze the data. According to the data obtained from the study, the level of giftedness awareness of the participating parents is high. As a result of this study, the unrealistic misinformation, and prejudices of the parents of gifted children will be identified, which will contribute to the early identification of gifted children by their families and the recognition of their characteristics. Early interventions will shorten the way to reach the goals set for these children in the long term. It is thought that studies aiming to determine the factors affecting the awareness of parents with gifted children and enabling them to be examined in terms of different demographic characteristics by other researchers will contribute to the literature.

Keywords

Gifted
Parent
Awareness
Science and Art Center

About the Article

Sending date: 09.01.2025
Acceptance date: 18.05.2025
E-publication date: 31.08.2025

¹ Assist. Prof. Dr., Tokat Gaziosmanpaşa University, Türkiye, gulizkaymakci@gmail.com, <https://orcid.org/0000-0002-3428-5214>

² Teacher, Ministry of National Education, Türkiye, uzm.ilknurgurel@gmail.com, <https://orcid.org/0009-0001-3705-6943>

Introduction

Particularly before the 20th century, the definition of giftedness varied from today's standards due to differences in the study of intelligence and the definitions of intelligence that existed at the time. Historically, the term giftedness has been used to describe outstanding performance or extraordinary achievement and the personal characteristics of those who have achieved success or achievement. According to the Marland Report (1972), giftedness is defined as high performance in one or more general intellectual abilities, academic areas, creative thinking, leadership, drawing and psychomotor skills (Passow, 1993). Gifted individuals are more prepared than their peers and ready to learn advanced materials deeper, faster and earlier than their peers (Makel et al., 2021). In this context, giftedness is a term used to describe individuals who show exceptional ability or have the potential to show extraordinary skills compared to others and who can show high levels of productivity and success (McClain & Pfeiffer, 2012).

According to the Renzulli (2016), the three-ring model of giftedness combines general or special talent, creativity and motivation above the average. Gifted individuals are said to differ from their peers in terms of educational achievement or artistic abilities (Kennedy & Farley, 2018). Galton (1879), by combining the themes of giftedness, genius, brilliance and intelligence, defines it as the ability to fulfil difficult and strenuous tasks with competence, effort and hard work. Giftedness is a characteristic that can be seen in anyone rather than being a characteristic seen only in some people (Akarsu, 2001).

Thurstone states that when the cognitive abilities of the individual come together like different pieces of a jigsaw puzzle, they form intelligence. In this respect, the theory of mental abilities (group factor) advocated by Thurstone states that the intelligence in gifted individuals is formed by the combination of multiple and different mental factors at a high level (Wasserman & Bracken, 2012). As a result of the research on gifted children, it has been revealed that these children have different personality traits from normal children. Grubb (2008) categorized the characteristics of gifted individuals as consistent and possible characteristics. Consistent traits include learning quickly and easily, making good observations, having a strong memory, focusing attention, developing the ability to think correctly, keeping motivation high and performing mathematical operations. Possible characteristics include early reading, a sense of humor, curiosity, imagination and creativity (Hodge, 2006). Like other children, gifted children are children who need others to understand them, who need physical activities beyond their abilities, who need to know their social and emotional needs, and who need to be friends with children with similar characteristics. In comparison, others can show better skills in many places, especially in academic performance (Özbay, 2013). Gifted children think and feel differently from their peers. Gifted children are self-confident and independent, successful in achieving goals, eager to take responsibility, patient, determined and respect others' ideas and feelings. They are susceptible to emotional situations, creative and perfectionist (Baysal et al., 2018; Freeman, 1986). Due to their mental complexity, gifted children can think about what the world should be. They also see how close or far away the world is from their ideals and sometimes feel profoundly disappointed and upset. When they try to share their concerns with others, they may experience reactions such as rejection, contempt, surprise or hostility (Webb, 1998). Children who differ significantly from their peers in creative personality traits may be gifted students (Davis & Rimm, 2004). Gifted children come from upper-class families, and their parents with upper socioeconomic status are usually highly educated and have high-level professions (Avcı, 2005). Families of gifted children have some unique characteristics. When the characteristics of these families are analyzed, it is seen that these families are harmonious, emotionally open, mutually supportive, flexible, inclined to involve their children in the decision-making process, encourage independence and prefer spoken communication rather than physical communication (Wingert, 1997). It has also been found that these families have high standards and tend to show perfectionist characteristics (Enright & Ruzicka, 1989). In addition, the number of children in families at this level is not high; they usually have one or two children (Gallagher, 1960).

The education of the gifted is an essential issue in developed countries because the correct and appropriate education of these students significantly contributes to their countries and humanity (Çitil, 2018). Science, technology, ideas and art movements that can become the turning points of societies are not the products of people with average brain power. Some societies have not given importance to these personalities, and others have not appreciated these treasures. It is seen that various educational models

and practices have been created for gifted people, who are accepted as unique and different groups of our age (Enç, 2005).

According to the Marland Report (1972), which was prepared to determine government policy on gifted students in the United States of America and is still valid, gifted children need differentiated education programs and services in addition to regular school programs to contribute to themselves and society. In Türkiye, there are legal regulations for gifted children. The most well-known of these regulations is the Wonder Children Law (1948), which, although limited, enabled gifted students to be educated abroad for the first time (as cited in Altunya, 2006). It is seen that the countries with legal regulations parallel with the principles of the Convention on the Rights of the Child are developed countries (Levent, 2011). In Türkiye, there are Science and Art Centres (SACs) established by the Ministry of National Education (MoNE) to provide education for gifted children by qualified teachers in their fields of talent during out-of-school time (MoNE, 2019).

SACs are institutions established to provide supportive education to individuals enrolled in formal education institutions and determined by relevant experts to have special talents in the fields of music, painting or general talent, allowing them to use and develop their talents at a high level (Tümen, 2019). In these institutions, individuals are trained in a project-based teaching model appropriate to their ability levels and are expected to undertake projects in accordance with the required qualifications. After being diagnosed with special talent, students continue their education in science and art centers starting from the second grade of primary school until the last grade of high school (Su et al., 2017). Students first receive an adaptation program, followed by a five-stage education consisting of support education, individual talent recognition, special talent development and project production (Sezginsoy, 2007).

With proper education, gifted individuals benefit society and humanity in their countries and the world with their successful research. Countries that have gifted individuals and are aware of their potential change their plans accordingly by considering the characteristics of these students when developing gifted education programs (Cutts & Moseley, 2004). Positive parental interaction with a gifted child promotes the unique needs of parents and children arising from giftedness and improves family functioning. In this regard, it is emphasized that family activities and meetings, in which all family members participate together, should be planned to allow the gifted child and parents to express their feelings and thoughts accurately (Clark, 2013).

Families recognize children who start reading early, have a rich vocabulary, strong memory, creative problem-solving and logical reasoning skills, long attention span, high concentration and curiosity (Worrell & Erwin, 2011). An adequately structured family assessment scale or checklist allows families to understand and evaluate their gifted children even if they know nothing about giftedness (Schader, 2009). The family should understand that they have priority and critical position in developing the child's skills and achievements (Bloom & Sosniak, 1981). Unexpected failures of gifted students are caused by the gifted individual himself/herself and the environment (family, school, teacher, etc.) (Freeman, 2011). Dağlıoğlu and Suveren (2013), in a study conducted with preschool children, their families and teachers, found that parents were better than teachers in identifying gifted children.

As a result of the research conducted by Afat (2013), it was concluded that the training program designed to increase awareness about the general and qualitative characteristics of gifted children and their relationships caused a positive change in parents' awareness. It was found that there was a significant difference in parents' awareness, especially in the stress-conflict, perfectionism and motivation-success sub-dimensions. Acar-Arican (2019) examined the effect of an 8-session bibliotherapy-based family education program given to parents with gifted children on parental awareness and concluded that a bibliotherapy-based family education program increased parental awareness. İpek (2019) conducted a study on the observations of parents of gifted preschool children about their children and concluded that families did not realize that their children were gifted in the preschool period. It was stated that families with gifted children need to realize that these children are gifted and then they should seek for the support required for their cognitive and social development in the best way. On the other hand, the majority of parents and some of the teachers supported the implementation of a differentiated curriculum. According to the study, parents were more positive than teachers about the early identification of gifted children and the implementation of a differentiated curriculum. Kalem and Şentürk (2019) developed an achievement test for parents of gifted students.

This achievement test is thought to raise awareness about giftedness and help those who want to work on these issues.

In the report prepared by the Grand National Assembly of Türkiye on gifted children (Parliamentary Research Commission Report [MAK], 2012), some misconceptions about gifted children are believed to be changed with the education given in the family and school. Examples of these beliefs are as follows: behavioral and mental problems can be observed in gifted children, gifted children may develop earlier than their peers and sometimes early death may occur, gifted children are overactive, gifted children may have difficulty adapting to society and may be perceived as asocial by society, the last child born in a family is most likely to be gifted, if you educate gifted children very well, we will create a single elite class, gifted children enjoy humiliating others, and gifted children are constantly studying in their class. Families, being ahead of their stunted peers, differ from a very young age (Delisle, 2006). The family's doubts and uncertainty about the child's differences continue until the child starts school, an environment where he/she can be compared better with his/her peers. A child with gifted potential may be caught by his/her teacher at school. For this reason, it may be beneficial to bring the diagnosis to an earlier period (Ihlamur, 2017). Scott et al. (1992) surveyed white, Hispanic and black parents of children in a gifted program in a large urban school district in the United States and found that among the three groups of white, Hispanic and black parents, there were differences between white parents and the two minority groups in terms of the percentage of parents who requested that their children be evaluated for possible placement in the gifted and talented program. Latino and black parents were less likely than white parents to request that their children be evaluated for possible placement in a gifted program.

Ensuring that gifted students are more compatible with society and increasing their competencies by starting education at an early age, like all other special education students, is one of the main objectives of the education system of our country. Early identification of gifted children, especially by their parents, recognition of the characteristics of these children, identification of unrealistic misinformation and prejudices and early intervention with the necessary support will shorten the path to achieving the goals set for these children in the long term. In addition, Çalışkan (2017) stated that parents pay more attention to doing activities related to education when their children are diagnosed as gifted. At this point, based on the fact that in order to achieve the desired behavioural change, awareness should be raised first (Leana-Taşçılar, Özyaprak & Yılmaz 2016). It is important to support families in order to educate gifted students with appropriate parental approaches, and this study is considered to be important because it contributes to the literature by making the qualities and characteristics of gifted children more understandable and contributing more to their education. Considering all these, this study aims to determine the level of awareness of the parents whose children are diagnosed as gifted and to examine the effect of demographic variables on their awareness.

In this regard, the main problem of this study is the level of giftedness awareness of parents whose children are diagnosed as gifted. In this study, answers to the following sub-problems were sought.

1. What is the level of giftedness awareness of the parents whose children attend SAC?
2. Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on whether being a mother or a father?
3. Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the education level of parents?
4. Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the age of parents?
5. Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the occupation of parents?
6. Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the birth order to the gifted child?

Method

Sample

The population of this study consists of the parents of students who are diagnosed as gifted and who receive education in SACs in Türkiye. The study group consists of 436 parents with gifted children who are attending SACs located in five different provinces. In the selection of the participants, the purposive sampling method was used. The strength of this method is that it allows access to people rich in information (Patton, 2002).

Table 1. Characteristics of the parents who participated in the study

Characteristics	Type	N	%
Parenting Status	Mother	188	43.1
	Father	248	56.9
	Total	436	100.0
Mother's Education Level	Primary school	0	.00
	Secondary school	0	.00
	High school	131	69.7
	Bachelor's	23	12.2
	Master's	34	18.1
	Doctorate	0	.00
	Total	188	100.0
Mother's Age	20-25	0	.00
	26-35	18	9.6
	36-45	109	58.0
	46-55	61	32.4
	56-65	0	.00
	Total	188	100.0
Father's Education Level	Primary school	0	.00
	Secondary school	0	.00
	High school	22	56.0
	Bachelor's	139	8.9
	Master's	66	26.6
	Doctorate	21	8.5
	Total	248	100.0
Father's Age	20-25	0	.00
	26-35	9	3.6
	36-45	126	50.8
	46-55	113	45.6
	56-65	0	.00
	Total	248	100.0
Mother's Profession	Health Sector	27	14.4
	Education sector	77	41.0
	Other	0	.00
	Non-working	84	44.7
	Total	188	100.0
Father's Profession	Health Sector	17	56.7
	Education sector	110	44.4
	Other	121	8.5
	Non-working	0	.00
	Total	248	100.0
Number of Children	1 st Child	146	33.5
	2 nd Child	174	39.9
	3 rd Child	116	26.6
	Total	436	100.00

As seen in Table 1, 436 parents participated in the study, 188 (43.1%) of whom were mothers and 248 (56.9%) were fathers. When the education levels of the mothers were examined, it was found that 131 (69.7%) are high school graduates, 23 (12.2%) hold a bachelor's degree and 34 (18.1%) hold a graduate degree. When the ages of the mothers were analyzed, it was found that 18 (9.6%) are aged 26-35, 109 (58.0%) are aged 36-45 and 61 (32.4%) are aged 46-55. When the ages of the fathers were analyzed, it was found that 9 (3.6%) are aged 26-35, 126 (50.8%) are aged 36-45 years and 113 (45.6%) are aged 46-55. When the education level of the fathers was examined, it was found that 22 (56.0%) are high school graduates, 139 (8.0%) hold a bachelor's degree, 66 (26.6%) hold a master's degree and 21 (8.5%) hold a doctoral degree. When the occupations of the mothers were examined, it was seen that 27 (14.4%) of them work in the health sector, 77 (41.0%) in the education sector and 84 (44.7%) do not work. When the occupations of the fathers were analyzed, it was found that 17 (56.7%) are in the health sector, 110 (44.4%) are in the education sector, and 121 (8.5%) are in other occupations. When the number of children of the parents participating in the study was examined, it was found that 146 (33.5%) have the first child as the gifted child, 174 (39.9%) have the second child as the gifted child and 116 (26.6%) have the third child as the gifted child.

Data Collection Tool

This study used two data collection tools: a 'Demographic Characteristics Information Form' and the 'Parental Awareness Scale (Parents with Gifted Children)'. The 'Demographic Characteristics Information Form' developed by the researcher was used as the first data collection tool to elicit information about the demographic characteristics of the parents including whether they are a mother or a father, education level, mother's age, father's age, occupational group and number of children. This study's second data collection tool is the 'Parental Awareness Scale (Parents with Gifted Children)'. The Parental Awareness Scale, developed by Afat and Konik (2018), is a 5-point Likert scale consisting of 39 items and four sub-dimensions developed to measure parents' awareness of the education of their gifted children. Sub-dimensions were defined as Stress-Conflict, Perfectionism, Motivation-Success, Self-Management-Responsibility. The scale is a four-factor awareness scale designed for parents of gifted students. The answers are given on a 5-point Likert type scale as 'Strongly Agree (5)' and 'Strongly Disagree (1)'. There are no negative items on the scale. According to the confirmatory factor analysis (CFA) in the scale development study, it was seen that the model provided a good fit to the data set ($\chi^2/sd = 2$; CFI = .82; GFI = .65; NFI = .69; NNFI = .8; RMSEA = .090). The Cronbach Alpha reliability value obtained in the development study of this scale was .83, and it was determined that the Cronbach Alpha reliability value for the current study was .89. It was seen that the 'Parental Awareness Scale (Parents with Gifted Children)' used in the study was reliable. The lowest score to be taken from the scale is 39 while the highest score is 195. A score between 39 and 91 points means low level of awareness, a score between 92 and 142 points means a medium level of awareness and a score between 143 and 195 means a high level of awareness.

Data Collection

In order to carry out this study, the necessary permissions were obtained, and the implementation of the data collection tools was started. During the collection of the data, the following points were taken into consideration.

- The completion of the data collection tools lasted an average of 20 minutes.
- Before the administration of the data collection tools, the purpose of the study was explained to the participants and data collection tools were introduced.
- After the arrangement of the data collection tools, the participants were asked to read the instructions related to the data collection tools.
- During the application, the participants were accompanied by the researchers to answer any question that might emerge.

Analysis of Data

The parents' awareness level of giftedness was determined through descriptive statistical analyses such as frequency and percentage calculations, arithmetic mean and standard deviation. After

the normality tests of the sample (Kolmogorov Smirnov) were performed, t-tests and ANOVA were used in the data set. SPSS 20 statistical program was used for data analysis.

Research Ethics

In all the stages of this study, care was taken not to violate ethical rules. Ethics committee permissions for the study were obtained as a result of the decision of Tokat Gaziosmanpaşa University Ethics Committee dated 16.05.2023, session 08 and numbered 01-54.

Findings

This section presents the findings from the analyses for the sub-problems formed in line with the research aim in the tables. The arithmetic means and standard deviations of the level of giftedness awareness of the parents and the frequency and percentage distributions of the level of awareness of the parents obtained as a result of the analyses carried out for the first sub-problem of the study, are given in Table 2.

Table 2. Distribution of the parents' level of giftedness awareness

Child dimensions	Level of Giftedness Awareness						\bar{X}	SD
	Low		Middle		High			
	N	%	N	%	N	%		
Stress conflict	83	19.0	194	14.5	159	36.5	48.33	12.05
Perfectionism	49	11.2	335	76.8	52	11.9	21.37	4.25
Motivation-success	77	17.7	156	35.8	203	46.6	30.07	8.17
Self-management-responsibility	15	3.4	156	35.8	265	60.8	30.20	5.57
Total scale score	44	10.1	253	58.0	139	31.9	129.89	23.98

When Table 2 is examined, it is seen that the arithmetic mean of the parents' level of giftedness awareness in the stress-conflict sub-dimension is 48.33 and the standard deviation is 12.05; the arithmetic mean in the perfectionism sub-dimension is 21.37, and the standard deviation is 4.25; the arithmetic mean in the motivation-success sub-dimension is 30.07 and the standard deviation is 8.17; in the self-management-responsibility sub-dimension, the arithmetic mean is 30.20 and the standard deviation is 5.57. In general, 44 parents (10.1%) have a low level of giftedness awareness, 253 parents (58.0%) have a medium level of giftedness awareness and 139 parents (31.9%) have a high level of giftedness awareness.

The results of the independent samples t-test conducted to answer the research question "Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on whether being a mother or a father?" are given in Table 3.

Table 3. Results of the independent samples t-test conducted to determine whether the parents' levels of awareness vary significantly depending on being a mother or a father

Sub-Dimensions	Mother or Father	N	\bar{X}	SD	t	p	η^2
Stress-conflict	Mother	188	49.26	10.71	4.44	.15	.01
	Father	248	47.61	12.95			
Perfectionism	Mother	188	21.02	4.10	-1.49	.14	.01
	Father	248	21.63	4.34			
Motivation-success	Mother	188	32.45	7.40	5.54	.00	.06
	Father	248	28.27	8.28			
Self-management - responsibility	Mother	188	31.21	4.51	3.47	.00	.03
	Father	248	29.43	6.16			
Total scale score	Mother	188	133.96	20.00	3.25	.00	.02
	Father	248	126.76	26.21			

When Table 3 is analyzed, it is seen that parents' giftedness awareness varies significantly depending on whether being a mother or a father [$t_{(434)} = 3.25$, $p < .05$]. In terms of sub-dimensions, it is understood that there is a significant difference in 'motivation-success and 'self-management-responsibility' sub-dimensions [$t_{(434)} = 5.54$, $p < .05$], [$t_{(434)} = 3.47$, $p < .05$], but there is no significant difference in 'stress-conflict' and 'perfectionism' sub-dimensions [$t_{(434)} = 4.44$, $p > .05$], [$t_{(434)} = -1.49$, $p > .05$]. Accordingly, as a result of the independent sample t-test, significant differences were found between the groups in the "motivation-success" sub-dimension with a medium effect size ($\eta^2 = .06$), in the "self-management-responsibility" sub-dimension ($\eta^2 = .03$) and in the overall scale with a small effect size ($\eta^2 = .02$).

It is seen that 188 of the 436 participants are mothers and 248 are fathers. When Table 3 is analyzed, it is seen that the highest mean score of giftedness awareness is obtained in the 'stress-conflict' sub-dimension for the mothers ($\bar{X} = 49.26$) and in the 'stress-conflict' sub-dimension for the fathers ($\bar{X} = 47.61$). The lowest giftedness awareness mean score for both the mothers and the fathers was obtained in the sub-dimension of perfectionism ($\bar{X} = 21.02$) and ($\bar{X} = 21.63$). In terms of the overall scale, it was found that the mean giftedness awareness score of the mothers ($\bar{X} = 133.96$) is higher than the mean score of the fathers ($\bar{X} = 126.76$).

The sub-problem of the study, 'Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the education level of parents?', was tested with one-way analysis of variance (one-way ANOVA) to see whether the parents' giftedness awareness varies significantly depending on the education level of parents. The findings obtained from the mothers are given in Table 4 and Table 5.

Table 4. Arithmetic mean and standard deviation values of the mothers' giftedness awareness in relation to the education level of mothers

Sub-factors	Education level	N	\bar{X}	SD
Stress-conflict	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	131	50.10	11.2
	Bachelor's	23	53	3.00
	Master's	34	43.47	9.60
	Doctorate	0	.00	.00
	Total	188	49.26	10.1
Perfectionism	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	131	20.50	4.70
	Bachelor's	23	20.91	.41
	Master's	34	23.11	1.53
	Doctorate	0	.00	.00
	Total	188	21.02	4.10
Motivation success	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	131	33.34	7.24
	Bachelor's	23	34	.00
	Master's	34	28	8.87
	Doctorate	0	.00	.00
	Total	188	32.46	7.40

Table 4. Arithmetic mean and standard deviation values of the mothers' giftedness awareness in relation to the education level of mothers (Continued)

Sub-factors	Education level	N	\bar{X}	SD
Self-management - responsibility	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	131	31.51	4.23
	Bachelor's	23	33.30	4.26
	Master's	34	28.67	4.77
	Doctorate	0	.00	.00
	Total	188	31.21	4.51
Total scale score	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	131	135.47	19.79
	Bachelor's	23	141.21	7.07
	Master's	34	123.27	23
	Doctorate	0	.00	.00
	Total	188	133.96	20

When Table 4 is analyzed, it is seen that 131 of the mothers are high school graduates, 23 hold a bachelor's degree and 34 hold a master's degree. The results of the variance analysis on whether the difference between the arithmetic means is statistically significant are presented in Table 5.

Table 5. ANOVA results of giftedness awareness scale scores according to the level of education of the mothers

Sub-factors	Source of Variance	Sum of Squares	df	Mean Square	F	p
Stress-conflict	Between-Groups	1555.26	2	77.62	7.22	.00
	Within-Groups	19902.97	185	107.59		
	Total	21458.23	187	-		
Perfectionism	Between-Groups	184.77	2	92.38	5.77	.00
	Within-Groups	2962.10	185	16.01		
	Total	21458.23	187	-		
Motivation success	Between-Groups	833.12	2	416.56	8.18	.00
	Within-Groups	94119.54	185	50.92		
	Total	10252.67	187	-		
Self-management-responsibility	Between-Groups	331.01	2	165.50	8.80	.00
	Within-Groups	3479.044	185	18.80		
	Total	3810.06	187	-		
Total scale score	Between-Groups	5397.61	2	2698.80	7.20	.00
	Within-Groups	69441.12	185	375.36		
	Total	74838.73	187	-		

The analyses given in Table 5 show a statistically significant difference in the giftedness awareness of the mothers depending on the education level [$F_{(2-185)} = 7.20$, $p < .05$]. When analyzed in terms of sub-dimensions, it was concluded that there was a statistically significant difference in all the sub-dimensions (stress-conflict, perfectionism, motivation-success, self-management-responsibility) [$F_{(2-185)} = 7.22$, $p < .05$], [$F_{(2-185)} = 5.77$, $p < .05$], [$F_{(2-185)} = 7.8.18$, $p < .05$], [$F_{(2-185)} = 8.80$, $p < .05$].

Whether there is a statistically significant difference in the giftedness awareness of the fathers depending on the education level was tested with one-way analysis of variance ANOVA, and the findings are given in Table 6 and Table 7.

Table 6. Arithmetic mean and standard deviation values of the mothers' giftedness awareness in relation to the education level of fathers

Sub-Dimensions	Level of education	N	\bar{X}	SD
Stress-conflict	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	22	1.80	.93
	Bachelor's	139	2.35	.64
	Master's	66	1.48	.61
	Doctorate	21	2.33	.66
	Total	248	2.07	.76
Perfectionism	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	22	2.32	.65
	Bachelor's	139	1.80	.46
	Master's	66	2.17	.41
	Doctorate	21	1.86	.36
	Total	248	2.02	.48
Motivation-success	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	22	2.00	1.02
	Bachelor's	139	2.27	.52
	Master's	66	1.68	.91
	Doctorate	21	1.29	.46
	Total	248	2.09	.74
Self-management - responsibility	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	22	2.27	.63
	Bachelor's	139	2.65	.60
	Master's	66	2.14	.35
	Doctorate	21	2.67	.66
	Total	248	2.48	.60
Total scale score	Primary school	0	.00	.00
	Secondary school	0	.00	.00
	High school	22	123.60	45.43
	Bachelor's	139	134.35	20.99
	Master's	66	110.98	25.40
	Doctorate	21	134.23	19.60
	Total	248	127.16	26.97

When Table 6 is analyzed, it is seen that 22 of the fathers are high school graduates; 139 of them hold a bachelor's degree, 66 of them hold a master's degree, and 21 of them hold a doctoral degree. The results of the variance analysis on whether the difference between the arithmetic means is statistically significant are presented in Table 7.

Table 7. ANOVA results of giftedness awareness scale scores according to the level of education of the fathers

Sub-Dimensions	Source of Variance	Sum of Squares	df	Mean Square	F	p
Stress-conflict	Between-Groups	36.57	3	12.20	27.91	.00
	Within-Groups	106.11	244	.43		
	Total	142.68	247	-		
Perfectionism	Between-Groups	5.10	3	1.70	8.02	.00
	Within-Groups	51.79	244	.21		
	Total	5690	247	-		
Motivation success	Between-Groups	16.24	3	5.43	11.25	.00
	Within-Groups	117.76	244	.49		
	Total	134.04	247	-		
Self-management-responsibility	Between-Groups	13.37	3	4.46	14.60	.00
	Within-Groups	74.53	244	.30		
	Total	87.90	247	-		
Total scale score	Between-Groups	25791.04	3	8597.01	13.63	.00
	Within-Groups	153809.05	244	630.37		
	Total	179600.89	247	-		

The results of the analyses given in Table 7 show a statistically significant difference in the giftedness awareness of the fathers depending on the education level [$F_{(3-244)} = 13.63$, $p < .05$]. When analyzed in terms of sub-dimensions, it was concluded that there was a statistically significant difference in all the sub-dimensions (stress-conflict, perfectionism, motivation-success, self-management-responsibility) [$F_{(3-244)} = 27.91$, $p < .05$], [$F_{(2-244)} = 8.02$, $p < .05$], [$F_{(3-244)} = 11.25$, $p < .05$], [$F_{(3-244)} = 14.60$, $p < .05$].

The sub-problem of the study, ‘Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the age of parents?’ was tested with ANOVA. The findings obtained from the mothers are given in Table 8 and Table 9.

Table 8. Arithmetic mean and standard deviation values of the giftedness awareness scale according to the age of the mothers

Sub-Dimensions	Age	N	\bar{X}	SD
Stress-conflict	26-35 years old	18	58.9	4.30
	36-45 years old	109	47.11	9.03
	46-55 years old	61	50.26	12.97
	Total	188	49.26	10.71
Perfectionism	26-35 years old	18	19.95	3.83
	36-45 years old	109	20.79	3.07
	46-55 years old	61	21.77	4.18
	Total	188	21.02	4.10
Motivation-success	26-35 years old	18	34.61	1.72
	36-45 years old	109	31.08	6.62
	46-55 years old	61	34.27	9.10
	Total	188	32.46	7.40
Self-management-responsibility	26-35 years old	18	30.50	2.81
	36-45 years old	109	31.79	4.73
	46-55 years old	61	30.41	4.42
	Total	188	31.21	4.52

Table 8. Arithmetic mean and standard deviation values of the giftedness awareness scale according to the age of the mothers (Continued)

Sub-Dimensions	Age	N	\bar{X}	SD
Total scale score	26-35 years old	18	143.84	8.35
	36-45 years old	109	130.77	17.54
	46-55 years old	61	136.72	24.85
	Total	188	133.96	20.00

When Table 8 is analyzed, it is seen that 18 of the mothers are between 26 and 35 years old, 109 are between 36 and 45 years old, and 61 are between 46 and 55 years old. The results of the variance analysis on whether the difference between the mean scores of the mothers is statistically significant are presented in Table 9.

Table 9. ANOVA results of the giftedness awareness scale according to the age of the mothers

Sub-Dimensions	Source of Variance	Sum of Squares	Sd	Mean Square	F	p
Stress-conflict	Between-Groups	2233.97	2	1116.98	10.80	.00
	Within-Groups	19224.26	185	103.92		
	Total	21458.23	187	-		
Perfectionism	Between-Groups	60.99	2	30.49	.83	.00
	Within-Groups	3085.88	185	16.68		
	Total	3146.87	187	-		
Motivation success	Between-Groups	491.87	2	245.93	4.66	.00
	Within-Groups	9760.80	185	52.76		
	Total	10252.66	187	-		
Self-management-responsibility	Between-Groups	84.66	2	42.33	2.10	.00
	Within-Groups	3725.40	185	20.13		
	Total	3810.10	187	-		
Total scale score	Between-Groups	3368.27	2	1984.13	4.36	.00
	In-Groups	71410.47	185	386.33		
	Total	71838.74	187	-		

When Table 9 is analyzed, it is seen that there is a statistically significant difference in the giftedness awareness of the mothers depending on their age [$F_{(2-185)} = 4.36$, $p < .05$]. When analyzed in terms of the sub-dimensions, it was concluded that there was a statistically significant difference in all the sub-dimensions (stress-conflict, perfectionism, motivation-success, self-management-responsibility) [$F_{(2-185)} = 10.84$, $p < .05$], [$F_{(2-185)} = 1.80$, $p < .05$], [$F_{(2-185)} = 4.66$, $p < .05$], [$F_{(2-185)} = 2.10$, $p < .05$].

Whether the fathers' giftedness awareness varies significantly depending on their age was tested with one-way analysis of variance (ANOVA), and the findings are given in Tables 10 and 11.

Table 10. Arithmetic mean and standard deviation values of the giftedness awareness scale according to the age of the fathers

Sub-Dimensions	Age	N	\bar{X}	SD
Stress-conflict	26-35 years old	9	2.62	.51
	36-45 years old	126	2.33	.62
	46-55 years old	113	1.74	.78
	Total	248	2.07	.76
Perfectionism	26-35 years old	9	2.78	.44
	36-45 years old	126	1.93	.46
	46-55 years old	113	2.06	.45
	Total	248	2.02	.48

Table 10. Arithmetic mean and standard deviation values of the giftedness awareness scale according to the age of the fathers (Continued)

Sub-Dimensions	Age	N	\bar{X}	SD
Motivation-success	26-35 years old	9	2.78	.44
	36-45 years old	126	2.37	.55
	46-55 years old	113	1.71	.76
	Total	248	2.08	.74
Self-management-responsibility	26-35 years old	9	2.78	.44
	36-45 years old	126	2.57	.59
	46-55 years old	113	2.35	.60
	Total	248	2.47	.60
Total scale score	26-35 years old	9	161.11	25.92
	36-45 years old	126	135.74	17.70
	46-55 years old	113	114.92	29.66
	Total	248	127.16	26.97

When Table 10 is examined, it is seen that 9 of the fathers are between the ages of 26 and 35, 126 are between the ages of 36 and 45, and 113 are between the ages of 46 and 55. The results of the variance analysis conducted to determine whether the difference between the means is statistically significant are presented in Table 11.

Table 11. ANOVA results of the giftedness awareness scale according to the age of the fathers

Sub-Dimensions	Source of Variance	Sum of Squares	df	Mean Square	F	p
Stress-conflict	Between-Groups	23.26	2	11.62	23.76	.00
	Within-Groups	119.43	185	.489		
	Total	142.69	187	-		
Perfectionism	Between-Groups	6.42	2	3.20	15.59	.00
	In-Groups	50.48	185	.20		
	Total	56.90	187	-		
Motivation success	Between-Groups	30.09	2	15.4	35.45	.00
	In-Groups	103.96	185	.42		
	Total	134.05	187	-		
Self-management-responsibility	Between-Groups	3.65	2	1.82	5.30	.00
	In-Groups	84.25	185	.34		
	Total	87.90	187	-		
Total scale score	Between-Groups	36598.52	2	18299.26	31.35	.00
	In-Groups	143002.36	185	583.69		
	Total	179600.89	187	-		

Table 11 shows that there is a statistically significant difference in the fathers' awareness of giftedness according to their age [$F_{(2-185)} = 31.35$, $p < .05$]. When examined in terms of sub-dimensions, it was concluded that there was a statistically significant difference in all the sub-dimensions (stress-conflict, perfectionism, motivation-success, self-management-responsibility) [$F_{(2-185)} = 23.76$, $p < .05$], [$F_{(2-185)} = 15.59$, $p < .05$], [$F_{(2-185)} = 35.45$, $p < .05$], [$F_{(2-185)} = 5.30$, $p < .05$].

The findings of the analyses conducted for the fifth sub-problem of the research, 'Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the occupation of parents?' are given in Tables 12 and 13.

Table 12. Arithmetic mean and standard deviation values of the mothers' giftedness awareness scores according to their occupation

Sub-Dimensions	Occupation	N	\bar{X}	SD
Stress-conflict	Healthcare industry	27	52.81	5.87
	Education sector	77	47.45	11.64
	Non-working	84	49.77	10.78
	Total	188	49.26	10.71
Perfectionism	Healthcare industry	27	23.07	2.40
	Education sector	77	19.40	3.91
	Non-working	84	21.85	4.19
	Total	188	21.02	4.10
Motivation success	Healthcare industry	27	33.37	3.27
	Education sector	77	31.07	8.31
	Non-working	84	33.42	7.34
	Total	188	32.46	7.40
Self-management-responsibility	Healthcare industry	27	33.89	3.75
	Education sector	77	32.27	5.00
	Non-working	84	29.39	3.45
	Total	188	31.21	4.51
Scale overall	Healthcare industry	27	143.15	11.13
	Education sector	77	130.21	20.89
	Non-working	84	134.45	20.56
	Total	188	133.96	20.00

When Table 12 is examined, it is seen that 27 of the mothers are working in the health sector, 77 in the education sector, and 84 are not working. The results of the variance analysis conducted to determine whether the difference between the arithmetic means is statistically significant are presented in Table 13.

Table 13. ANOVA results of the mothers' giftedness awareness scores according to their occupation

Sub-Dimensions	Source of Variance	Sum of Squares	df	Mean Square	F	p
Stress-conflict	Between-Groups	614.36	2	307.181	2.72	.06
	Within-Groups	20843.86	185	112.67		
	Total	21458.23	187	-		
Perfectionism	Between-Groups	374.21	2	187.11	12.48	.00
	In-Groups	2772.66	185	14.99		
	Total	3146.87	187	-		
Motivation success	Between-Groups	248.26	2	124.13	2.29	.10
	In-Groups	10004.40	185	54.08		
	Total	10252.66	187	-		
Self-management-responsibility	Between-Groups	558.09	2	279.04	15.87	.00
	In-Groups	3251.98	185	17.56		
	Total	3810.06	187	-		
Total scale score	Between-Groups	3383.85	2	1691.92	4.38	.00
	In-Groups	71454.90	185	386.24		
	Total	74838.73	187	-		

Table 13 shows that there is a statistically significant difference in the mothers' giftedness awareness scores according to their occupation [$F_{(2-185)} = 4.38, p < .05$]. When examined in terms of the sub-dimensions, it was concluded that there was a statistically significant difference in the sub-dimensions of "perfectionism" and "self-management-responsibility" [$F_{(2-185)} = 12.48, p < .05$], [$F_{(2-185)} = 15.87, p < .05$], and that there was no statistically significant difference in the sub-dimensions of "stress – conflict" and "perfectionism" [$F_{(2-185)} = 2.72, p < .05$], [$F_{(2-185)} = 2.29, p < .05$].

Whether the father's giftedness awareness varies significantly depending on their occupation was tested with one-way analysis of variance ANOVA, and the findings obtained are given in Table 14 and Table 15.

Table 14. Arithmetic mean and standard deviation values of the fathers' awareness scores according to their occupation

Sub-Dimensions	Occupation	N	\bar{X}	SD
Stress-conflict	Healthcare industry	17	2.36	.81
	Education sector	110	2.16	.76
	Other	121	1.95	.74
	Total	247	2.07	.76
Perfectionism	Healthcare industry	17	2.53	.72
	Education sector	110	1.95	.45
	Other	121	2.01	.43
	Total	247	2.02	.48
Motivation-success	Healthcare industry	17	2.59	.80
	Education sector	110	1.93	.64
	Other	121	2.16	.78
	Total	247	2.08	.74
Self management-responsibility	Healthcare industry	17	2.59	.71
	Education sector	110	2.60	.50
	Other	121	2.37	.65
	Total	247	2.48	.60
Total scale score	Healthcare industry	17	146.00	43.42
	Education sector	110	125.91	26.14
	Other	121	125.66	23.88
	Total	247	127.17	26.97

When Table 14 is examined, it is seen that 17 of the fathers work in the health sector, 110 in the education sector, and 121 in other sectors. The results of the variance analysis conducted to determine whether the difference between the arithmetic means is statistically significant are presented in Table 15.

Table 15. ANOVA results of the fathers' awareness scores according to their occupation

Sub-Dimensions	Source of Variance	Sum of Squares	df	Mean Square	F	p
Stress-conflict	Between-Groups	4.18	2	2.09	3.68	.03
	Within-Groups	138.50	245	.57		
	Total	142.69	247	-		
Perfectionism	Between-Groups	5.02	2	2.51	11.86	.00
	Within-Groups	51.86	245	.21		
	Total	56.90	247	-		

Table 15. ANOVA results of the fathers' awareness scores according to their occupation (Continued)

Sub-Dimensions	Source of Variance	Sum of Squares	df	Mean Square	F	p
Motivation-success	Between-Groups	7.36	2	3.68	7.11	.01
	Within-Groups	126.69	245	.51		
	Total	134.04	247	-		
Self-management-Responsibility	Between-Groups	3.19	2	1.60	4.61	.01
	Within-Groups	84.71	245	.35		
	Total	87.90	247	-		
Total scale score	Between-Groups	6475.51	2	3237.76	4.58	.01
	Within-Groups	173125.37	245	706.63		
	Total	179600.89	247	-		

When Table 15 is examined, it is seen that there is a statistically significant difference in the fathers' awareness scores according to their occupation [$F(2-245) = 4.58, p < .05$]. When examined in terms of the sub-dimensions, it was concluded that there was a statistically significant difference in all the sub-dimensions (stress-conflict, perfectionism, motivation-success, self-management-responsibility) [$F_{(2-245)} = 3.68, p < .05$], [$F_{(2-245)} = 11.86, p < .05$], [$F_{(2-245)} = 7.11, p < .05$], [$F_{(2-245)} = 4.61, p < .05$].

The sixth research question, 'Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the birth order to the gifted child?' was tested with one-way variance analysis ANOVA and the findings are given in Table 16 and Table 17.

Table 16. Arithmetic mean and standard deviation values of the giftedness awareness scale scores of the parents according to the birth order of the child diagnosed as gifted

Sub-Dimensions	Birth Order	N	\bar{X}	SD
Stress-conflict	1 st Child	146	47.34	13.51
	2 nd Child	174	47.01	11.36
	3 rd Child	116	51.54	10.54
	Total	436	48.32	12.05
Perfectionism	1 st Child	146	19.56	4.75
	2 nd Child	174	22.13	3.23
	3 rd Child	116	22.51	4.23
	Total	436	21.37	4.25
Motivation-success	1 st Child	146	30.01	8.33
	2 nd Child	174	28.71	8.53
	3 rd Child	116	32.21	6.98
	Total	436	30.07	8.18
Self-Management-responsibility	1 st Child	146	29.02	6.19
	2 nd Child	174	29.74	5.67
	3 rd Child	116	32.40	3.71
	Total	436	30.21	5.58
Total scale score	1 st Child	146	125.93	27.71
	2 nd Child	174	127.60	22.53
	3 rd Child	116	138.22	18.59
	Total	436	129.87	23.98

When Table 16 is examined, it is seen that 146 parents' first children, 174 parents' second children, and 116 parents' third children were diagnosed as gifted. The results of the variance analysis conducted to determine whether the difference between the arithmetic means of the scale scores is statistically significant are presented in Table 17.

Table 17. ANOVA results of the parents' awareness scale scores according to the birth order of the child diagnosed as gifted

Sub-Dimensions	Source of Variance	Sum of Squares	df	Mean Square	F	p
Stress-conflict	Between-Groups	1644.43	2	822.21	5.79	.00
	Within-Groups	61571.31	433	142.20		
	Total	63215.75	435	-		
Perfectionism	Between-Groups	730.43	2	365.22	22.18	.00
	Within-Groups	7127.62	433	16.46		
	Total	7858.06	435	-		
Motivation success	Between-Groups	850.70	2	425.36	6.52	.00
	Within-Groups	28244.64	433	65.23		
	Total	29095.35	435	-		
Self-management-responsibility	Between-Groups	799.36	2	399.68	13.60	.00
	Within-Groups	12728.06	433	29.40		
	Total	13527.42	435	-		
Total scale score	Between-Groups	11254.42	2	5627.21	10.20	.00
	Within-Groups	238917.12	433	551.77		
	Total	250171.54	435	-		

When Table 17 is examined, it is seen that there is a statistically significant difference according to the birth order of the child [$F_{(2-433)} = 10.20, p < .05$]. When examined in terms of the sub-dimensions, it was concluded that there was a statistically significant difference in all the sub-dimensions (stress-conflict, perfectionism, motivation-success, self-management-responsibility) [$F_{(2-433)} = 5.79, p < .05$], [$F_{(2-433)} = 22.18, p < .05$], [$F_{(2-433)} = 6.52, p < .05$], [$F_{(2-433)} = 13.60, p < .05$].

Discussion, Conclusion and Suggestions

According to the data obtained from the study, the level of giftedness awareness of the parents is high. When the data belonging to the sub-problem of 'Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on whether being a mother or a father?' were examined, the awareness of the parents showed a statistically significant difference in the whole scale. Analysis by sub-dimensions revealed significant differences between mothers and fathers in "motivation-success" and "self-management-responsibility," whereas no significant differences were found in "stress-conflict" and "perfectionism." According to whether being a mother or a father, it was seen that the highest mean score was in the "stress-conflict" sub-dimension in the mothers and fathers. It was seen that the lowest mean score was in the perfectionism sub-dimension in both the mothers and fathers. In terms of the total scale score, it was found that the mean score of the mothers is higher than that of the fathers. To put it in more straightforward language, the parents tend to realize that their children are different and more intelligent than their peers at an early age. In terms of being a mother and a father, mothers are more aware of the fact that their children may be gifted even before they are diagnosed, and mothers who are motivated by success and who can take responsibility with self-management are more likely to realize whether their children have giftedness than fathers. The reason for this may be that mothers in Turkish society generally spend more time with their children, make more observations and have the opportunity to compare the children of other families and determine whether there is a difference in their children compared to their peers more quickly and accurately than fathers. When the literature is examined, many studies indicate that gifted students are recognized by their families in the pre-school period, and applications are made to the competent authorities for

different situations involving children. Avcı (2005) examined the attitudes of parents towards their gifted children. Parents of students aged between 8 and 9 attending six Science and Art Centers participated in the study. The results showed that their families recognized 46% of SAC students as gifted, and 18% applied to Guidance Research Center. Significant differences were found between the mother's age and cognitive developmental characteristics, the father's age and social developmental characteristics, and family income level and cognitive developmental characteristics.

When the data related to the sub-problem of 'Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the education level of parents?' were examined, it was found that there is a statistically significant difference in the awareness scores of the mothers and fathers according to the level of their education in the whole scale. When examined in terms of the sub-dimensions, it was concluded that there is a statistically significant difference in all the sub-dimensions (stress-conflict, perfectionism, motivation-success, self-management-responsibility). To put it in more straightforward language, it was concluded that the high school graduate mothers of gifted children had higher awareness in the stress-conflict sub-dimension than the mothers at other educational levels, the mothers who hold a master's degree had higher awareness in the perfectionism sub-dimension than the mothers at other educational levels, the mothers who hold a bachelor's degree had higher awareness in the motivation-success sub-dimension than the mothers at other educational levels, and the mothers who hold a bachelor's degrees had higher awareness in the self-management-responsibility sub-dimension than the mothers at other educational levels. On the other hand, it was concluded that the fathers with a bachelor's degree had higher awareness in the stress-conflict sub-dimension than the fathers at the other educational levels, the fathers with a high school degree had higher awareness in the perfectionism sub-dimension than the fathers at the other educational levels, the fathers with a bachelor's degree had higher awareness in the motivation sub-dimension than the fathers at the other educational levels, and the fathers with a bachelor's degree had higher awareness in the self-management sub-dimension than the fathers at the other educational levels. Karakuş's (2014) study, which examined parents' perceptions regarding their educational levels, concluded that parents with postgraduate education perceived themselves at an adequate level, followed by parents with high school and undergraduate education. These results support the findings of the current study. On the other hand, Balbay and Özak (2024), in their study examining the awareness levels of parents with gifted children, found that there was no significant relationship between all the sub-dimensions of perfectionism, stress-conflict, motivation-success, self-management-responsibility and parents' education level. These results differ from the results of the current study.

When the data of the sub-problem 'Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the age of parents?' were examined, it was seen that there is a statistically significant difference in the awareness of the mothers and fathers according to their age. When examined in terms of the sub-dimensions, it was concluded that there is a statistically significant difference in all the sub-dimensions (stress-conflict, perfectionism, motivation-success, self-management-responsibility). In simpler terms, it was concluded that the mothers and fathers in the 36-45 age range had higher awareness in all the sub-dimensions than the parents in the other age groups.

When the data for the sub-problem of 'Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the occupation of parents?' were examined, it was found that there is a statistically significant difference in the awareness of the mothers according to their occupation. When examined in terms of the sub-dimensions, it was concluded that there is a statistically significant difference in the sub-dimensions of "perfectionism" and "self-management-responsibility". In contrast, it was concluded that there is no statistically significant difference in the sub-dimensions of "stress conflict" and "perfectionism". The awareness of the fathers showed a statistically significant difference in the scale in general according to their occupation. When examined by sub-dimensions, it was concluded that statistically significant differences existed across all areas (stress-conflict, perfectionism, motivation-success, and self-management-responsibility). Specifically, non-working mothers of gifted children demonstrated higher self-awareness than working mothers, and fathers employed outside the education and health sectors reported higher self-awareness compared to fathers in those sectors. Karakuş (2014) examined parental awareness according to occupations and concluded that non-working parents perceived their self-awareness at an adequate level, followed by retired parents and parents working as doctors. It was also concluded that non-working parents perceived themselves

as more competent in leading the education of gifted children, followed by retired parents. The common characteristic of both groups is that they are parents who can spend time with their children and care for them. However, it should not be ignored that gifted education is not limited to caring for children and requires specific skills. While these results are similar to the results obtained for the mothers in the current study, they differ from the results obtained for the fathers.

In another study, Balbay and Özak (2024) found no significant difference between non-working and working parents for all the sub-dimensions of perfectionism, stress-conflict, motivation-success and self-management-responsibility. This study differs from the results of the current study.

When the data for the sub-problem of 'Does the giftedness awareness of the parents whose children attend SAC vary significantly depending on the birth order to the gifted child?' were examined, it was found that there is a statistically significant difference according to the birth order of the child diagnosed as gifted. When examined in terms of the sub-dimensions, it was concluded that there is a statistically significant difference in all the sub-dimensions (stress-conflict, perfectionism, motivation-success, self-management-responsibility).

Shayir (2015) examined primary teachers' knowledge about gifted children and found no significant difference in the knowledge levels of teachers about gifted children according to gender. When the departments that the teachers graduated from were examined, there were profound differences between the graduates of the faculty of science and literature and the graduates of the faculty of education, and a significant difference was determined in favor of the graduates of the faculty of education. Shayir (2015) stated that there are significant differences in the level of understanding of gifted children by primary teachers according to their education levels. This difference favors the primary teachers with a master's degree. Akar and Uluman (2013) studied primary teachers' correct nomination of gifted students. The study aimed to reveal how successful primary teachers are in directing their students to science and art centers. This study is a descriptive study with a survey model. The results of the study showed that there are significant differences in the skills of primary teachers (n=334) in correctly naming gifted students according to variables such as the gender of the teacher, the teacher's education level, teaching experience and teaching level. These results support the current study.

Dağlıoğlu (1995), conducted a survey on the basis of teachers' observation form, talent tests and WISC-R test used to determine gifted students and was found that there was a low correlation between teacher observation programs, talent tests and WISC-R. When the education level of the families of gifted individuals and WISC-R scores were compared, a positive relationship was found with the father's education level, but no such relationship was found with the mother's education level. Dağlıoğlu and Metin (2002), in a study conducted to identify gifted children in mathematics among children aged 5-6, concluded that teachers assessed children's skills in mathematics better than families, while families were more successful than teachers in determining intelligence and creativity.

Şahin (2012) investigated whether teachers are aware of their ability to identify potentially gifted students in their classes and found no significant difference between teacher groups according to the last completed school level. Similarly, in the studies of Kıldan and Temel (2008) and Kıldan (2008), it was shown that there was no difference between the groups according to the school that teachers graduated from (undergraduate, master's degree and other (educational institution, associate degree)). These different studies do not show parallelism with the current study.

When the literature is examined, studies aimed at increasing parents' awareness and skills regarding the general behaviors of gifted children are encountered (Adler, 2006; Afat, 2013; Alvino, 1995; Applebaum, 1998; Bricklin, 1983; Kurtulmuş, 2010; Saranlı, 2011). Rimm (1996), Adler (2006), Robinson et al. (2006), Şahin & Kalburan (2009) mention the effectiveness of different educational programs for parent education in the world. It has been determined that the developmental characteristics of gifted children, different parenting approaches, development of communication skills with the child, prevention of behavioral problems, and intervention in issues contribute to parents with similar needs coming together.

Colangelo & Dettman (1983) argued that the most critical need of parents regarding gifted children is to understand the concept of "giftedness". Solow (1995) and Delisle (2002) stated that parents do not have sufficient information about the factors affecting their children's development and do not

know how children will react to different behavioral patterns. Gifted students need more guidance from adults than average students and generally benefit more from a supportive family environment than other students (Van Deur, 2011). Families need to be supported in raising gifted students with appropriate parenting practices based on the need to create awareness to ensure the desired behavioral changes in their children (Leana-Taşasçılar et al., 2016). According to Afat's (2024) study, the results revealed that the awareness level of gifted parents was insufficient to effectively encourage their children across various aspects of giftedness. Furthermore, the results showed that parents' awareness levels did not differ significantly by gender (mother or father), age, education level, or whether the child was a boy or a girl.

The findings obtained in this study should be analyzed by considering some limitations. Firstly, a scale based on self-assessment was used in this study. This scale was used to determine the awareness levels of parents. This study was conducted by collecting quantitative data, but a more comprehensive study can be conducted using qualitative data. There is a need for research on the characteristics and needs of families at different grade levels. It is thought that studies to be conducted in different age groups will contribute to parents and the literature.

Based on the results obtained, the following recommendations can be made:

Within the framework of programs prepared for parents, the characteristics of gifted children can be introduced through courses, seminars and trainings organized by the MoNE local governments, universities and civil society organizations on the subjects of their characteristics, needs and expectations.

- Skills that can be applied (through economic and practical activities) to determine the talent areas of their children (such as intelligence, creativity, music, art, mathematics, and sports skills) and to ensure the development of these areas can be provided to parents of gifted children.
- Recreational areas where gifted children can share with their mothers and fathers and do activities can be provided for gifted children.
- Efforts can be made to meet the needs of gifted students in formal education by considering their common characteristics.
- In-service training can be designed for teachers and administrators on the education of gifted students and their character traits in SACs, where students receive education outside school hours.
- Parents can be recommended articles, books and films about special talent.

References

- Acar-Arican, S. A. (2019). *The effect of bibliotherapy technique on parents of gifted children's awareness and parenting practices about their children*. (Unpublished Ph.D. Thesis). Bahçeşehir University Institute of Educational Sciences, Istanbul.
- Adler, D. M. (2006). *The effects of participating in support groups focusing on parenting gifted children: doctoral dissertation*, Kent State University, Ohio.
- Afat, N. (2013). *Testing the effectiveness of the family education program developed for the self-fruits of gifted children* (Unpublished Ph.D. Thesis). Istanbul University Institute of Social Sciences, Istanbul.
- Afat, N. and Konik, A. K. (2018). Awareness of parents with gifted children: a scale development study. *Journal of National Education*. 47 (220), 79 – 104. <https://dergipark.org.tr/tr/pub/milliegitim/issue/40715/488436>.
- Afat, N (2024). Analysis of the gifted's parents' awareness in Turkey. *International Journal of Progressive Education*, 20(3), 12-25. Doi number:10.29329/ijpe.2024.664.2
- Akar, I., and Uluman, M., (2013). Classroom teachers' ability to correctly nominate gifted students. *Journal of Gifted Education Research*, 1(3), 199-212.
- Akarsu, F. (2001). *Gifted children, families and their problems*, Ankara: Eduser Publications.
- Altunya, N. (2006). *Veteran educational institute. Gazi Institute of Secondary Teachers and Education (1926-1980)*, Gazi University Faculty of Communication Printing House, Ankara.
- Alvino, J. (1995). *Considerations and strategies for parenting the gifted child* (RM95218). Storrs: University of Connecticut, The National Research Center on the Gifted and Talented.

- Applebaum, A.S. (1998). *Learning to parent the gifted child: Developing a model parenting program to prevent underachievement and other related emotional difficulties in gifted children*. Doctoral thesis, Widener University, Pennsylvania.
- Avcı, A. (2005). *Examining parents' views on the awareness of their gifted children* (Unpublished Master's Thesis). Gazi University Institute of Educational Sciences, Ankara.
- Balbay, C., & Özak, H. (2024). Özel yetenekli çocukları olan ebeveynlerin farkındalık düzeylerinin incelenmesi. *Batı Anadolu Eğitim Bilimleri Dergisi*, 15(3), 2223-2243. <https://doi.org/10.51460/baebd.1452821>
- Baysal-Metin, N., Dağlıoğlu, H.E. and Saranlı, A.G. (2018). *Gifted children from a child development perspective*, Ankara: Hedef Publications.
- Bloom, B. S. & Sosniak, L. A. (1981). Talent development vs. schooling. *Educational Leadership*, 39(2), 86-94.
- Bricklin, P. M. (1983). *Working with parents of learning-disabled/gifted children*. In L. H. Fox, L. Brody, & D. Tobin (Eds.), *Learning disabled/gifted children: Identification and Programming*, 243–260. Baltimore, MD: University Park Press.
- Clark, B. (2013). *Growing up gifted: Developing children's potential at school and home*, Boston: Pearson Education, Inc.
- Colangelo, N. & Dettman, D. (1983). A review of research on parents and families of gifted children. *Exceptional Education*, 50(1), 20-27.
- Cutts, N. E. & Moseley, N. (2004). *How to prevent the education of gifted and gifted children from wasting one of the nation's most significant resources* (Translator: İsmail Ersevimi), Özgür Yayınları, İstanbul.
- Çalışkan, M. (2017). *Üstün yetenekli çocuklara sahip ailelerin aile işlevselliği*. Yüksek Lisans Tezi. Hasan Kalyoncu Üniversitesi, Sosyal Bilimler Enstitüsü, Gaziantep.
- Çitil, M. (2018). Evaluation of the policies of the education of the gifted in Turkey. *Journal of National Education, Education of the Gifted*, 143–172. <https://dergipark.org.tr/tr/pub/milliegitim/issue/40518/48001>.
- Dağlıoğlu, E. & Metin, N. (2002). Determination of those gifted in mathematics among children aged five to six attending kindergarten. *Abant İzzet Baysal University Journal of Education Faculty*, 2(1). <https://dergipark.org.tr/tr/pub/aibuefd/issue/1508/18284>
- Dağlıoğlu, E. & Suveren, S. (2013). Determining the consistency of teachers' and parents' views and children's performances in identifying gifted children in the preschool period. *Educational Sciences in Theory and Practice*, 13(1), 431- 453.
- Dağlıoğlu, E., (1995). *Identification of gifted children attending the 2nd-5th grades of primary school* (Unpublished Master's Thesis). Hacettepe University Institute of Health Sciences, Ankara.
- Davis, G. A. & Rimm, S. B. (2004). *Education of the gifted and talented*. Boston, MA: Pearson Education.
- Delisle, J. R. (2002). *Barefoot Irreverence: A collection of writings on gifted child education*, Prufrock Press Inc.
- Delisle, J. R. (2006). *Üstün yetenekli çocuklara ebeveynlik*. Prufrock Press, Referans Çeviri Hizmetleri ve Yayıncılık Ltd.
- Enç, M. (2005). *Superior brain power*, (2. Print), Ankara: Gündüz Education Publishing.
- Enright, K. M. & Ruzicka, M.F. (1989). Relationships between perceived parental behaviours and the Self-Esteem of gifted children. *Psychological Reports*, 65(3), 931–937.
- Feldhusen, J. F. (2005). Giftedness, talent, expertise, and creative achievement, In Sternberg, R. J. & Davidson, J. E. (Eds) *Conceptions of giftedness* (2nd ed., 64-79), Cambridge University Press, Cambridge.
- Freeman, J. (1986). *The psychology of gifted children*. UK: John Wiley and Sons.
- Freeman, J. (2011). *Psychology for the sake of the environment*. In Mendonca, A., Cunha, A., & Chakrabarti, R. (Eds.) Dordrecht: Springer.
- Gallagher, J. J. (1960). *Gifted child in the elementary school*. Department Of Classroom Teacher. American Educational Research Association of National Education Association.
- Galton, F. (1879). *Hereditary genius: An inquiry into its laws and consequences*. New and rev. Ed. New York: D. Appleton.
- Grubb, K. E. (2008). *An examination of the experiences of gifted preschool and primary-age children*. (Doctorate of Philosophy), RMIT University, Australia.
- Hodge, K. (2006). Vulnerability of young gifted children: How do you recognise giftedness? What do children do? Paper presented at the Early Childhood Education Conference, Melbourne, June.
- Ihlamur, Ş. (2017). *Üstün yetenekli çocuklara sahip ailelerin danışmanlık ihtiyaçlarının saptanması*. (Yayınlanmamış Yüksek Lisans Tezi). Sosyal Bilimler Enstitüsü, İstanbul Ticaret Üniversitesi, İstanbul. <file:///C:/Users/Administrator/Downloads/a55dccf7-3a2b-48ff-b5f4-a0712767ad0f.pdf>

- İpek, Y. (2019, December 1-3) Okul öncesi dönemde özel yetenekli çocukların ailelerinin gözlemleri ve karşılaştıkları sorunlar [Observations of the parents of private skills in the preschool period and the problems] [Paper presentation]. International Congress on Gifted and Talented Education, Malatya, Türkiye.
- Kalem, M. & Şentürk Ş. (2019). Developing an achievement test for gifted awareness training. *Gazi Journal of Educational Sciences*, Doi number: 10.30855/gjes.2019.05.02.009. 5(5), 160-175.
- Karakuş, F. (2014). Üstün yetenekli çocukları olan anne babaların çocuklarının eğitime yönelik algıları. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 33(1), 289-304. <https://dergipark.org.tr/tr/pub/omuefd/issue/20251/214909>.
- Kennedy, K. & Farley, J. (2018). Counselling gifted students: school-based considerations and strategies. *International Electronic Journal of Elementary Education*, 10(3), 361–367.
- Kıldan, O., A., (2008). *According to the constructivist approach, the effect of in-service training given to preschool teachers on teacher-child and teacher-parent relations*. (Unpublished PhD Thesis), Gazi University, Department of Child Development Education, Ankara.
- Kıldan, O., A., Temel, Z., F., (2008). The effect of in-service training based on a constructivist approach on some teachers' teaching views. *Kastamonu Journal of Education*, 16(8), 25-36.
- Kurtulmuş, Z. (2010). *Investigation of the effect of computer-based education given to the families of gifted children attending the science and art centre on family members' perceptions of family relationships and children's perfectionism levels* (Unpublished Doctoral Thesis). Gazi University Institute of Educational Sciences, Ankara.
- Leana-Taşçılar, M. Z., Özyaprak, M. and Yılmaz, Ö. (2016). An online training program for gifted children's parents in Turkey. *Eurasian Journal of Educational Research*, Doi number:10.14689/ejer.2016.65.09. 65(1), 147-164.
- Levent, F. (2011). Üstün yetenekli çocukların hakları el kitabı anne baba ve öğretmenler için. İstanbul: Çocuk Vakfı Yayınları.
- MAK, *Parliamentary Commission of Inquiry. Report of the parliamentary research established to discover gifted children, identifying the problems related to their education and ensuring their effective employment to contribute to the development of our country*. Ankara: TBMM, 2012 <http://hdl.handle.net/11543/129>.
- Makel, M.C., Rinn, A.N. & Plucker, J.A. (2021). Athletic talent development from theory to practice: the self-regulated talent development process (Eds.). *From giftedness to gifted Education: Reflecting theory in practice*, Routledge. Doi number:10.4324/9781003235262.
- Marland, S. P. (1972). *Education of the gifted and talented. Report To The Congress Of The United States By The U. S. Commissioner Of Education*. Washington. <https://files.eric.ed.gov/fulltext/ED056243>.
- McClain, M.C. & Pfeiffer, S. (2012). Identifying gifted students in the United States today: a look at government definitions, policies, and practices. *Journal of Applied School Psychology*, Doi number: 10.1080/15377903.2012.643757. 28(1), 59–88,
- Ministry of Industry and Technology of the Republic of Turkey (2017). *Socio-Economic development ranking surveys*. <https://www.sanayi.gov.tr/merkez-birimi/b94224510b7b/sege>.
- Ministry of National Education [MoNE]. (2019). *Science and art centers directive*.
- Özbay, Y. (2013). *Gifted children and their families*. Ankara: Republic of Turkey Ministry of Family and Social Policies, General Directorate of Family and Community Services. Pdf book. ISBN: 978-605-4628-54-4.
- Passow, A.H. & Rudnitski, R.A. (1993). *State policies regarding the education of the gifted are reflected in legislation and regulation*. Storrs, CT: National Research Center on the Gifted and Talented.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods*. (3rd ed.). Thousand Oaks, California: Sage Publications.
- Renzulli, J. S. (2016). The three-ring conception of giftedness: A developmental model for promoting creative productivity. In *Reflections on gifted education: Critical works by Joseph S. Renzulli and colleagues*, 55-90. Waco, TX, US: Prufrock Press Inc.
- Rimm, S. B. (1996). Parenting for achievement. *Roeper Review*, 19(1), 57-59.
- Robinson, A., Shore, B. M., & Enersen, D. L. (2006). *Best practices in gifted education: An evidence-based guide*. Sourcebooks, Inc. Doi number:10.4324/9781003233244.
- Saranlı, A. G. (2011). *Investigation of the effectiveness of family guidance programs developed for families of gifted children* (Unpublished Ph.D. Thesis). Hacettepe University Institute of Health Sciences, Ankara.
- Schader, R. (2009). Parent nominations. Kerr, B. A. (Ed.), *Encyclopedia of giftedness, creativity and talent*, 2(2), 673–675. Thousand Oaks, Ca: Sage Publications.

- Scott, M. S., Perou, R., Urbano, R., Hogan, A., & Gold, S. (1992). The identity of giftedness: a comparison of white, Hispanic and black families. *Gifted Child Quarterly*, 36(3), 131–139. Doi number:1177/001698629203600303.
- Sezginsoy, B. (2007). *Bilim ve sanat merkezi uygulamasının değerlendirilmesi*. (Yayınlanmamış Yüksek Lisans Tezi). Balıkesir Üniversitesi, Balıkesir.
- Shayir, T. (2015). *Examination of the knowledge levels of classroom teachers about gifted children*. (Unpublished Master's Thesis). Yıldız Technical University, Istanbul.
- Solow, R. E. (1995). Parents' reasoning about their intellectually gifted children's social and emotional development. *Roeper Review*, 18(2), 142-146.
- Su, Ş., Sağlam, A. ve Mutlu, Y. (2017). Bilim ve Sanat Merkezi öğrencilerinin “BİLSEM” ve “Okul” kavramlarına ilişkin algı düzeylerinin metaforlarla karşılaştırılması. *Üstün Zekâlılar Eğitimi ve Yaratıcılık Dergisi*, Aralık, 4(3), 91-108
- Şahin, F. T., and Kalburan, F. N. C. (2009). Family education programs and their effectiveness: What is being implemented worldwide? *Pamukkale University Journal of Education Faculty*, 25(25), 1-12.
- Şahin, F., (2012). *The effectiveness of the training program is to increase classroom teachers' level of knowledge about gifted students and their characteristics* (Unpublished Doctoral Thesis)—Ankara University Institute of Educational Sciences, Ankara.
- Şimsek, F. and Şahin, M. (2023). Parental perceptions of gifted students and their education. *Gazi University Journal of Gazi Faculty of Education*, Doi number: 10.17152/gefad.1187856. 43(1), 475-496.
- Tekin, H. (1996). *Measurement and evaluation in education*. Ankara: Judicial Publications.
- Tümen, D.S. (2019). Bilim ve Sanat Merkezi öğrencilerinin öğrenmeye ilişkin tutumları: Bolu BİLSEM Örneği. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi (ASEAD) Eurasian Journal of Researches in Social and Economics (EJRSE)* ISSN: 2148-9963.
- Van Deur, P., (2011). Views of gifted elementary students about self-directed learning. *Gifted and. Gifted International*, 26(12), 111-120.
- Wasserman, J D., & Bracken, B. A. (2013). Fundamental psychometric considerations in assessment. In J. R. Graham & J. A. Naglieri (Eds.) *Handbook of psychology: Assessment psychology* (2nd ed., Vol:10, pp. 50-81) Hoboken, NJ: John Wiley.
- Webb, J. T. (1998). Existential depression in gifted individuals. *Communicator*, 29(3) 25–26.
- Wingert, H. (1997). Parent beliefs transmission of beliefs and impact on the child. (Unpublished doctoral dissertation). Simon Fraser University, Canada.
- Worrell, F.C.& Erwin, J.O. (2011). Best practices in identifying students for gifted and talented education programs. *J. Appl. Sch. Psychol.* 27, 319–340.

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

