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### Research Article

## A systematic review of theses on musical talent and creativity in Turkey

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## **Abstract**

Musical talent and creativity is an important field of study in gifted education research. Systematic reviews of musical talent and creativity enable researchers to develop a holistic perspective in this field. In this descriptive study, document analysis method which is one of the qualitative research design, was used. The data source of the research consists of postgraduate theses on musical talent and creativity in the field of music in Turkey between the years 2000-2023 in the database of the Turkish National Thesis Center. As a data collection tool, a total of 18 masters' and 6 doctoral theses in the field of musical talent, 7 master's theses and 3 doctoral theses in the field of musical creativity were obtained by searchning the relevant keywords are "Talent, Gifted, Creativity, and Music". In the analysis of data; Content analysis method was used in subjects such as research method and data analysis method. In addition, descriptive analysis method was used in subjects such as the university and year the thesis was written. As a result of the research, it was determined that the highest number of thesis types was the master's thesis and in 2019. It has been determined that the words music education and musical talent exam are mostly used in the keywords of theses on musical talent and creativity. As for the studies on musical talent, the highest number belongs to the master's thesis and they were mostly written at Marmara University, while it was determined that the majority of doctoral theses were written at Gazi University. On musical creativity, it was seen that primarily master's theses were written at Marmara University. According to the data collection method of the graduate theses on musical talent, mostly qualitative method was used, and according to the data collection method of the graduate theses on musical creativity, quantitative method mostly was used. It has been determined that one of the quantitative techniques of the postgraduate studies on musical talent is descriptive statistics and the qualitative techniques is content analysis. It has been determined that non-parametric tests are mostly used in the analysis of quantitative research in theses on musical creativity, while situation and content analysis is used in the analysis of qualitative research.

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#### Introduction

The number of studies on music, talent and gifted education in Turkey on the examination of musical talent from the perspective on giftedness and creativity has increased after 2000 years. Some of these researches are in the form of direct musical talent and some indirectly examining music education on the axis of gifted students. In research has been found the socio-emotional development of gifted children in music education (Bolat, 2015), identification problems of gifted students in the field of music (Evin, 2007), and the fact that musical talent is recognized at an early age as a result of the

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conscious approach of family members and receiving a correct education (Tuncdemir, 2006; Malkoc, 2004), gifted students in the field of music develop their problem-solving skills related to real life, try to solve their problems instead of escaping from them (Demir, 2019; Ozer, 2020), music talent students prefer the conceptualist style by producing a solution proposal for the determined problem. (Akdeniz & Bangir-Alpan, 2020).

There are many studies on the development of musical talent in developing countries. Clarke and Rowley (2008) determined that the differentiated music education program increased the productivity of gifted students by positively affecting their music learning and teaching processes. Ruokonen & Vikat (2005) investigated the creativity, musical abilities and environmental characteristics of students with high IQ scores and gifted students. They emphasized that in the scale they applied, children's musical talent could be revealed, their natural interaction with the environment was easy, and their creativity could also increase with family support. In his study on technology and creativity, Crow (2006) explained what kind of a process music education programs went through, that they had difficulties in developing consistent approaches to musical creativity in music education, and for this reason, the evaluation of creativity and music technology in redesigned programs should be done with new approaches. Widmer (1994) obtained data that music education increases the IQ of the individual in a study she conducted at the University of Vienna. Since musical talent is one of the components of intelligence, there are studies that show that the increase in music education causes an increase in intelligence.

If attention is paid, a situation arises in the form of deepening of research and institutionalization of practices in developed countries on subjects such as musical talent and giftedness. However, in developing countries, it is necessary to examine issues such as music education, the situation and support of talented individuals in the field of music, the development of creativity in music, practices and research on a certain axis. These investigations can enable the discovery of important problems and determination of trends in music education and development of musical talent.

### Giftedness and Musical Talent in Turkey

Considering the history of gifted education in Turkey, it can be divided into two periods as before and after the Republic (Senol, 2011). The education of gifted/talented children in Turkey started in the Ottoman Empire period and continued to develop at certain stages from the Republican period to the present day. During the Ottoman Empire, Enderun School was opened for gifted individuals, which was founded by II. Murat, but whose development was completed during the reign of Mehmet the Conqueror. This school has been operating for a long time and has been the first institution in the world to provide long-term education in the field of gifted people (Enc, 2005; Akkutay, 1984 cited by Karabulut, 2010). Studies on the education of gifted children in our country; after the proclamation of the Republic, in 1929, the Law No. 1416 on the "Law on Students to be Sent to Foreign Countries" and on July 7, 1948, the Law No. 5248, which was called the "Wonderful Children Law" were enacted (Yavuzyilmaz, 2012). The İdil Biret-Suna Kan law, which was enacted in 1948 for the education of gifted children under the auspices of the state, was expanded in 1956 and the "Law No. 6660 on Children Showing Extraordinary Talents in Music and Plastic Arts" came into effect. With the enacted law, gifted students were educated abroad. Between 1948-1978, 17 world-famous artists were trained by the state. However, the law that entered into force in 1977-1978 was stopped (Enc, 1979 cited by Karabulut, 2010).

There should be a specific plan and program for the education of gifted individuals (Eraslan-Capan, 2010; Sak, 2010). For this purpose, after the proclamation of the republic, Ankara Science High School project for gifted children in the field of fine arts, certain programs were implemented in schools under the leadership of Ankara Guidance and Research Center, and it was accepted that the education of gifted students was different (Karabulut, 2010; Tantay, 2010; Yıldız, 2010). A model developed by Mithat Fenmen and İlhan Baran has emerged with the increase of gifted students in the field of music, especially in the piano branch. In this model, a 'special status' regulation was issued so that they could receive intensive education in conservatories, and some young people who received education in this status and graduated from the conservatory were sent abroad with various scholarships (MoNE, 2013).

For the education of the gifted, the Ministry of National Education opened an institution named "Additional Course Practice School" in 1992 and later changed to "Science and Art Centers" (Sezginsoy, 2007). In our country, state

institutions, private education institutions, some worldwide organizations and non-governmental organizations related to special talents actively carry out their activities for the education of special talents. One of these active institutions is the Science and Art Center (SAC), affiliated to the Ministry of National Education (MoNE), where individuals with special talents in the field of music are trained (Boke, 2019). "Science and art centers; They are special education institutions opened to provide support education to students who attend formal education institutions and who are diagnosed as gifted in the fields of general mental ability, visual arts or musical talent, in order to improve their abilities and enable them to use their capacities at the highest level" (MoNE, 2018). Science and art centers serve in 81 provinces and 135 centers (Boke, 2019).

1989-1990 Anatolian Fine Arts High Schools were opened except for the education of individuals with superior musical talent (Evin, 2007). Maba and Sakar (2015) stated that there are three different institutions for individuals with special talents in the field of music in Turkey: science and art centers. He also explained that the teacher and student selection criteria of these institutions are different from other formal education institutions.

In higher education programs in Turkey, in institutions that conduct special talent examinations, exams that are similar to each other and consist of several stages are held to determine the musical talent and skill of the candidate taking the exam (Ece & Sazak, 2006). The purpose of the aptitude tests is to determine how adequate the student's musical ability is in the areas of musical hearing, reading, writing, playing and speaking within his musical knowledge, skills and artistic features, and to determine how much these features are in himself by various measurement methods (Yayla, 2006).

As a university-based researcher on gifted education in Turkey, education programs for talented students model (EPTS), which was established by Prof.Dr. Uğur Sak within Anadolu University in Eskişehir and has its own curriculum and definition criteria, were created (Sak, 2009). Also within this scope and within the body of Zonguldak Bülent Ecevit University, The Education Program for Gifted Bridge with University (EPGBU) was created by Assoc.Prof.Dr. Hasan Said Tortop. EPGBU is a university-based program for the education of gifted students in the academic field with an ementoring approach. It is a three-stage program within a 10-12 weeks academic calendar for primary and high school levels. In this program, contemporary models related to gifted education were examined and a model suitable for Turkish culture and education system was created (Tortop, 2013; Tortop & Eker, 2014).

In summary, the establishment of Science and Art Centers in Turkey and the increase in their numbers, the implementation of university-based education programs for gifted students, and the inclusion of programs on giftedness in the graduate education programs of universities have also led to an increase in research on gifted individuals in the field of music.

### Importance of Research

Determining where researches on musical talent and creativity in Turkey are evolving can help us to get an idea about the general trend of these researches. In particular, research conducted at the graduate level may provide an opportunity to make predictions about the training of academics working on creativity and giftedness in the field of music and how their contributions to this field develop. One of the most important ways to achieve this is the systematic examination of postgraduate theses made in recent years. Master's and doctoral theses are one of the most important ways of obtaining scientific knowledge that is systematically and continuously produced in educational sciences (Edyburn, 2000). In this direction, it is aimed to present the situation of the graduate theses on talent and creativity in the field of music in a thematic and methodical way in a systematic way. Cohen, Manion, and Morrison (2007) explained that examining and organizing the researches at regular intervals can guide the determination of the trends in the field and the scientists who work and want to do research in this field. Donmez and Idin (2017) stated that it is important that graduate theses provide comprehensive and in-depth information to researchers in terms of contributing to the field.

When the postgraduate studies on the concepts of talent and creativity in the national literature are examined; studies such as systematic analysis of studies on the use of computer technology in the education of gifted individuals (Witness-Onal & Onal, 2020), an overview of the academic journals operating in the field of gifted students and their education in Turkey (Ozsoy, 2019), an examination of the studies on the education of gifted students in the field of science

education in Turkey (Donmez & Idin, 2017), a study on the thematic analysis of theses conducted in Turkey on the gifted and talented (Ayvaci & Bebek, 2019), classification of academic studies in the field of gifted in Turkey according to the subjects they include (Gucin & Oruc, 2015), researches conducted on gifted individuals in Turkey between 2000-2013 systemically analysed (Demiroglu, Sahin & Dilek, 2013).

#### Research Problem

In this research, it is aimed to systematically analysis the postgraduate studies on musical talent and creativity in Turkey. The problem statement of the research;

- What are the contextual and systematic features of the postgraduate theses on gifted and creativity in the field of musical talent in Turkey? The sub-problem sentences are as follows;
- How is the distribution of postgraduate theses on musical talent and creativity in Turkey according to years, thesis type, keywords, institutes, universities, the method used, the research design used, the sampling method used, the data collection used, the data analysis used and the research topics?

#### Method

#### Research Model

In this study, the document analysis technique, which is one of the qualitative research methods, was used. Document analysis research includes the analysis of written materials containing information about the targeted phenomenon and facts (Yıldırım & Şimşek, 2012). Document analysis is a qualitative research method used to analyze some written materials such as pictures, films, etc., which bear the traces of past phenomena, and some written materials such as books, magazines, etc., which are specified as documentary scanning (Karasar, 2008).

#### **Documents**

The sampling of the study consists of the database of the Turkish National Thesis Center, and the sample consists of postgraduate theses on musical talent and creativity in Turkey between the years 2000-2023.

#### **Data Collection**

As a data collection tool, 18 masters' and 6 doctoral theses on musical talent, seven master's theses and 3 doctoral theses on musical creativity were obtained by searching the "talent, creativity, gifted" on the National Thesis Data site of the Higher Education Institution. Document analysis method was used in the data collection process. Document analysis can be defined as the process of collecting existing documents related to the subject to be examined and then coding/examining according to certain criteria (Yildirim & Simsek, 2011).

## **Data Analysis**

The data were analyzed by content analysis method. Content analysis is a scientific approach that allows for the objective and systematic analysis of verbal, written and other materials (Tavsancil & Aslan, 2001). According to Bogdan and Biklen (2007), content analysis is the objective and systematic examination of oral, written, and other materials and their arrangement according to certain themes. Summarizing data according to categories is defined as content analysis (Merriam, 2018). With the coding made in content analysis, characteristics such as orientation, frequency, density and area are determined according to the research questions (Neuman, 2010).

## Reliability and Validity

For the reliability of the research, the researcher and a researcher who is an expert in the field of measurement systematically coded independently of each other and then the codes were compared. For reliability, Miles and Huberman's (1994) Reliability=Agreement/Agreement + Disagreement formula was used. In the study, it was determined that the percentage of reliability was over percent 80. If the reliability of the data is 70 and above in the percentage of agreement, it means that the data is reliable (Miles & Huberman, 1994). In the validity of the research, the findings and results are reported in detail.

## Results

In this section, the relevant documents regarding the research problems are examined and the findings are presented.

## Analysing of the postgraduate theses on musical talent and creativity in Turkey by years

Table 1. Distribution of graduate theses on musical talent and creativity by years

Graduate Thesis Topic	Year	f	%
	2001	1	4.00
	2002	1	4.00
	2001 1 4.00	9.00	
	2005	2001       1       4.00         2002       1       4.00         2004       2       9.00         2005       1       4.00         2007       1       4.00         2009       1       4.00         2014       2       8.00         2015       1       4.00         2017       3       13.00         2018       2       8.00         2019       4       17.00         2021       2       8.00         2022       3       13.00         24       100.0         2003       1       10.0         2008       1       10.0         2009       1       10.0         2010       2       20.0         2017       2       20.0         2019       2       20.0         2021       1       10.0	4.00
	2007		4.00
	2009		4.00
Musical talent	2014	2	8.00
Musical talent	2015	1	4.00
	2017	3	13.00
	2017       3         2018       2         2019       4	8.00	
	2019	2015     1     4.00       2017     3     13.00       2018     2     8.00       2019     4     17.00       2021     2     8.00       2022     3     13.00	
	2007 2009 1 4.00 2014 2 2014 2 8.00 2015 1 4.00 2017 3 13.00 2018 2 2018 2 8.00 2019 4 17.00 2021 2 8.00 2022 3 13.00  204  100.0  2003 1 10.0 2008 1 10.0 2009 1 10.0		
2019 2021 2022	2022	3	13.00
_	Total	24	100.0
	2001	10.0	
	2001	10.0	
	2009	1	10.0
Musical amostivity	2010	2	20.0
Musical creativity	2017	2	20.0
	2019	2	20.0
	2021	02       1       4.00         04       2       9.00         05       1       4.00         07       1       4.00         09       1       4.00         14       2       8.00         15       1       4.00         17       3       13.00         18       2       8.00         19       4       17.00         21       2       8.00         22       3       13.00         24       100.0         03       1       10.0         08       1       10.0         10       2       20.0         17       2       20.0         19       2       20.0         19       2       20.0         21       1       10.0	10.0
_	Total	10	100.0

In Table 1, when the distribution of graduate theses on musical talent and creativity in Turkey is analyzed by years, the highest increase in the field of musical talent is 8% (n=2) in 2004, 2014, 2018 and 2021, 13% (n=3) in 2017 and 2022, it is seen to be in the first place with a rate of 17% (n=4) in 2019. It has been determined that only one thesis study was made in the other years in the field of musical talent. When the theses in the field of musical creativity are examined in the table, 2 postgraduate theses were determined between 2010, 2017 and 2019. In other years, it is seen that only one study was carried out.

# Analysing of postgraduate theses on musical talent and creativity in Turkey according to their academic degrees

**Table 2.** Distribution of graduate theses by academic degrees

Graduate Thesis Topic	Thesis Type	f	%
	Masters' thesis	18	75.0
Musical talent	Doctoral thesis	6	25.0
	Total	24	100.0
	Masters' thesis	7	70.0
Musical creativity	Doctoral thesis	3	30.0
	Total	10	100.0

When Table 2 is examined, according to the academic degrees of the postgraduate theses on musical talent and in Turkey; In talent detected 75% (n=18) master's thesis 25% (n=6) doctoral thesis, in creativity 70% (n=7) master's thesis and 30% (n=3) doctoral thesis.

Analysing of the postgraduate theses on musical talent and creativity in Turkey according to the used keywords

Table 3. Distribution of postgraduate theses on musical talent and creativity in Turkey according to the used keywords

Graduate Thesis Topic	Most Used Keywords	f	%
	Music education	17	39.00
	Musical talent exam	9	20.00
	Music teaching	5	11.00
	Music education 17  Musical talent exam 9  Music teaching 5  Science and Art Center (SAC) 5  Musical skills 2  Attitude 2  Private music course 2  Educational program 2  Total 44  Music education 5  Curriculum 3  Music lesson 3	11.00	
Musical talent	Musical skills	17 9 5 5 2 2 2 2 44 5 3 3 3 2 2	5.00
	Attitude	2	5.00
	Private music course	2	5.00
	Educational program	2	4.00
	Total	44	100.0
	Music education	5	28.00
	Curriculum	3	16.00
	Music lesson	3	17.00
Musical creativity	Orff - schulwerk pedagogy	3	17.00
	Pre-school	2	11.00
	Music perception	2	11.00
	Total	18	100.0

As seen in Table 3, when the keywords of 34 theses are examined according to the keywords used except for the keywords that are the subject of the research written on talent and creativity; It was determined that a total of 106 most repeated keywords were used in theses. Except for the keywords that are the subject of the research, it was seen that the keyword "music education" was used the most in seventeen theses with a rate of 39% in the field of talent among the keywords identified and used. Apart from this keyword, the most used keywords are; "musical talent exam" in nine theses with a rate of 20%, "Science and Art Center" in five theses with a rate of 11%, "music education" in five theses with a rate of 11%, "curriculum" in two theses with a rate of 5%, "musical skills" "private course" and "attitude" is used. In addition, key words not included in the table are instrument education, cognitive skills, computer based learning, student opinion, skills, skill acquisition, social skills, social development, child development, vocational music education institutions, diagnosis, fine arts music students, COVID- 19, conservatory, fine arts, music department, intelligence, faculty of education, academic success, candidate teacher, cognitive, manager, belief, talent management, exam method, voice and pitch were used once.

When Table 3 is examined, in the field of musical creativity, "music education" in five theses with a rate of 28%, "curriculum", " Orff - schulwerk pedagogy " and "music lesson" in three theses with 17%, and "music course" with a rate of 11% in the field of musical creativity. It was determined that the keywords "music perception" and "preschool" were used. Apart from these, it was determined that keywords were not used in two masters and one doctoral thesis. In addition, among the keywords, the words not included in the table are Instrument training, Cognitive skills, Computer based learning, Student' view, Skills, Skill acquisition, Social skills, Social development, Child development, Institutions for vocal training, Identification, Fine art schools' students, COVID-19, Conservatory, Music department, Intelligence, Faculty of Education, Achievement, Pre-service teacher, Cognition, Administrator, Belief, Talent management, Exam method, Voice, Intonation, Curriculum evaluation, Art education, Mentor, Creative thinking, Measurement and evaluation, Drama, Primary school students, Mood, Improvisation, Playing techniques, Flow, Instructional model, Music-assisted educationn. It has been found that it has been used once.

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<sup>&</sup>lt;sup>2</sup> Science and Art Centers (SACs) are institutions that provide supportive education for gifted students in Turkey.



Figure 1. Word cloud for postgraduate theses on musical talent and creativity in Turkey according to the used keywords

According to the word cloud shown in Figure 1, the most frequently used words in the study are included. In word cloud analysis, it is seen that the words music education, talent exam, knowledge, music teaching, education program, musical hearing, special courses and attitude come to the fore in theses on talent and creativity. Keywords with low frequency are only expressed in the comments below the table.

## Analysing of postgraduate theses on musical talent and creativity according to institutes in Turkey

**Table 4.** Distribution of Graduate Theses by Institutes

Graduate Thesis Topic	Institute	Masters'		Doctoral	
		f	%	f	%
	Institute of Educational Sciences	11	61.0	5	83.0
M - 1 - 1 - 1	Social Sciences Institute	6	33.0	33.0 - 5.00 1	-
Musical talent	Graduate Institute	1	6.00	1	17.0
	Total	17	100.0	00 1	100.0
	Institute of Educational Sciences	5	71.0	2	67.0
Musical creativity	Social Sciences Institute	2	29.0	1	33.0
	Total	7	100.0	3	100.0

As seen in Table 4, it was determined that the most postgraduate theses were written in the distribution of postgraduate theses on talent and creativity by institutes. In the distributions according to the institutes, the master's theses on talent; n=11 in the institute of educational sciences, n=6 in the institute of social sciences, n=1 in the graduate institute, and doctoral theses; it was observed that n=6 in the institute of educational sciences and n=1 in the graduate institute. Looking at the table, the distribution of master's theses on creativity by institutes; n=5 in the institute of educational sciences, n=2 in the institute of social sciences, and doctoral dissertations; it was determined that n=2 in the institute of educational sciences and n=1 in the institute of social sciences.

## Analysing of postgraduate theses on musical talent and creativity in Turkey according to universities

Table 5. Distribution of graduate theses by universities

<b>Graduate Thesis Topic</b>	University	Masters'	Doctoral

		f	%	f	%
	Pamukkale University	2	11.0	-	-
	Dokuz Eylul University	1	5.00	1	17.0
	Fırat University	1	5.00	-	-
	Marmara University	3	17.0	1	16.0
	Gaziantep University	1	5.00	-	-
	Inonu University	1	5.00	1	17.0
	Gazi University	2	11.0	2	33.0
Musical talent	Kırıkkale University	Solution	-		
Musical talent	Istanbul Medeniyet University	1	6.00	-	-
	Bahcesehir University	1	6.00	-	-
	Abant Izzet Baysal University	1	6.00	1	17.0
	Amasya University	1	6.00	-	-
	Istanbul Technical University	1	6.00	-	-
Musical talent  Musical creativity	Cumhuriyet University	1	6.00	-	-
	Total	18	100.0	6	100.0
	Ataturk University	1	15.0	1	-
	Gaziantep University       1       5.00       -         Inonu University       1       5.00       1         Gazi University       2       11.0       2         Kırıkkale University       1       5.00       -         Istanbul Medeniyet University       1       6.00       -         Bahcesehir University       1       6.00       -         Abant Izzet Baysal University       1       6.00       -         Istanbul Technical University       1       6.00       -         Cumhuriyet University       1       6.00       -         Total       18       100.0       6         Ataturk University       1       15.0       -         Marmara University       1       14.0       -         Abant Izzet Baysal University       1       14.0       -         Mehmet Akif Ersoy University       -       -       1         Gazi University       -       -       1         Selcuk University       -       -       1	-	-		
	Galatasaray University	1	14.0	-	-
V1	Abant Izzet Baysal University	1	14.0	-	-
Musical creativity	Mehmet Akif Ersoy University	-	-	1	33.0
	Gazi University	1       5.00       -         3       17.0       1         1       5.00       -         1       5.00       1         2       11.0       2         1       5.00       -         1       6.00       -         1       6.00       -         1       6.00       -         1       6.00       -         1       6.00       -         1       6.00       -         1       15.0       -         4       57.0       -         1       14.0       -         1       14.0       -         -       -       1         -       -       1         -       -       1         -       -       1         -       -       1         -       -       1         -       -       1         -       -       1         -       -       1         -       -       1         -       -       1         -       -       1         -	33.0		
	Selcuk University	_		1	34.0
	Total	7	100.0	3	100.0

As seen in Table 5, when the distribution of postgraduate theses on talent and creativity in the field of music in Turkey according to universities is examined, it is seen that there are 24 studies on talent and 10 studies on creativity in total. It was determined that the university with the most studies was Marmara and Gazi University in the field of talent and there were four postgraduate studies in the field. In the field of creativity, it has been determined that there is a Marmara University with four postgraduate theses.

## Analysing of postgraduate theses on music, talent, gifted and creativity in Turkey according to data collection method

**Table 6.** Distribution of graduate theses on musical talent and creativity by data collection method

Graduate Thesis Area	Method	Mas	Masters'		Doctoral	
		f	%	f	%	
	Qualitative Method	9	47.0	-	-	
M + Lalas	Quantitative Method	6	32.0	f	80.0	
Musical talent	Mixed Method	4	21.0	1	20.0	
	Total	19	100.0	4 1 5 - 2 1	100.0	
	Qualitative Method	1	15.0	-	-	
	Quantitative Method	4	57.0	2	67.0	
Musical creativity	Mixed Method	1	14.0	f - 4 1 5 - 2 1	33.0	
·	Unspecified	1	14.0	-	-	
	Total	7	100.0	3	100.0	

When Table 6 is examined, according to the data collection method; It was determined that qualitative method was used in nine theses, quantitative method was used in six theses and mixed method was used in five theses in the field of musical talent in postgraduate thesis studies. In the field of musical creativity, it was seen that the qualitative method was used in one thesis, the quantitative method was used in six theses, and the mixed method was used in one thesis. In

addition, it has been determined that one master's thesis on creativity, whose method is not clear, has been studied. It was noted that the qualitative method was not used in the postgraduate studies.

## Analysing of the postgraduate theses on music, talent, gifted and creativity in Turkey according to their research design

**Table 7a.** Distribution of graduate theses on musical talent and creativity by quantitative method design

Graduate Thesis Topic	Quantitative Research Models	Mast	ters'	Do	ctoral
		f	%	f	%
	Semi-experimental pattern	-	•	2	33.0
	Descriptive Research	6	40.0	1	16.0
	Survey model	8	53.0	1	16.0
Musical talent	Status Detection	1	7.00	-	-
	Relational survey model	-	-	1	16.0
	Prediction	-	-	1	16.0
	Total	15	100.0	f	100.0
	Experimental design	2	29.0	2	50.0
	Semi-experimental design	1	14.0	-	-
	Field study	1	14.0	-	-
Musical creativity	Descriptive study	1	14.0	1	25.0
·	Survey model	2	29.0	-	-
	Sequential Explanatory Pattern	-	-	1	25.0
	Total	7	100.0	4	100.0

As seen in Table 7a, among the postgraduate theses examined within the models among the quantitative research methods; It was determined that two semi-experimental design studies were carried out on musical talent, one doctorate study was conducted on descriptive, predictive, relational and survey models, six descriptive research models on talent, eight survey models and one master's study in case determination.

When Table 7a is examined, it has been determined that two master's theses and two doctoral theses are designed as a full experimental design in the postgraduate theses on creativity. In addition, it was determined that one quasi-experimental study on creativity was done in master's degree. Looking at the table, it is understood that one master's thesis is in field research, one master's and doctorate studies in descriptive research, two master's theses in survey model and one doctoral thesis in sequential explanatory design.

**Table 7b.** Distribution of graduate theses on talent and creativity by qualitative method models

Graduate Thesis Topic	Qualitative Research Models	Mas	ters'	Do	octoral
		f	%	f	%
	Case study	4	27.0	1	34.0
	Inductive analysis	-	-	1	33.0
	Descriptive research	6	40.0	<b>f</b>	-
Musical talent	Observation	-	-		33.0
Musical talent	Document analysis	2	13.0	-	-
	General survey	2	13.0	-	-
	Ethnographic research	1	7.00	-	-
	Total	15	100.0	3	100.0
Maraia annativita	Case study	2	100	1	100.
Music creativity	Total	2	100.0	f 1 1 1 - 1	100.0

As seen in Table 7b, among the postgraduate theses examined in the models that are among the qualitative research methods; It has been determined that four case study, six descriptive research, two document analysis, two general survey, one ethnographic research. In the field of doctorate on musical talent; It has been determined that 1 study has been done

as situation determination, observation and inductive analysis design. It was determined that two master's theses and one doctoral thesis were designed as case study in the postgraduate theses on musical creativity.

## Analysing of postgraduate theses on musical talent and creativity in Turkey according to the study group

**Table 8.** Distribution of graduate theses on musical talent and creativity by study group

Graduate Thesis Topic	Study Group/Sample	f	%
	Music teacher (Science and Art Center)	3	11.0
Docum Music Minist	Document (thesis, book, article, internet, music aptitude exams)	4	15.0
	Music educators in the course	2	7.00
	Ministry of Education lesson administrator	3	11.0
	Student	13	48.0
	Branch teacher	1	4.00
	Academician	1	4.00
	Total	27	100.0
Music Creativity	Students	9	90.0
	Document (thesis, book, article, internet, music talent exams)	1	10.0
	Total	10	100.0

As seen in Table 8 the most of the postgraduate thesis studies on musical talent and creativity are conducted with students (musical talent, n=13; musical creativity, n=9). It was determined that studies were carried out with documents, music teachers, administrators, teachers and academicians, respectively. It was noted that the sample selection generally used in the examined theses was not specified.

Analysing of postgraduate theses on musical talent and creativity in Turkey according to data collection tools

Table 9. Distribution of graduate theses by data collection tool

Graduate Thesis Area	Data Collection Tool	f	%
	Semi-structured interview form	7	19.0
	Scale	6	17.0
	Observation	1	3.00
Musical talent	Document (form, book, article, exam instructions etc.)	6	17.0
	Questionnaire	6	17.0
	Interview (telephone, internet, source scan, etc.)	4	11.0
	Detection test	1	3.00
	Musical hearing test	2	5.00
	Musical aptitude test	2	5.00
	Expert opinion	1	3.00
	Total	36	100.0
	Observation scale	3	20.0
	Scale	7	46.0
	Questionnaire	1	7.00
Musical creativity	Document (picture, form, book, article, exam instructions etc.)	2	13.0
	Semi-structured interview form	1	7.00
	Test	1	7.00
	Total	15	100.0

<sup>\*</sup>The total number was higher because more than one data were collected in the same theses.

As seen in Table 9 the graduate studies on musical talent; semi-structured interview form 19% (n=7), document, scale and questionnaire 17% (n=6), interview 11% (n=4), musical hearing and musical aptitude test 5% (n=2), observation, perception test, and expert opinion 3% (n=1) are frequently used. In postgraduate studies on musical creativity; it was

determined that the scale 46% (n=7), the observation scale 20% (n=3), the document 13% (n=2), questionnaire, test and semi-structured interview form 7% (n=1) was used.

## Analysing of postgraduate theses on musical talent and creativity in Turkey according to data analysis techniques

**Table 10.** Distribution of graduate theses by data analysis technique

<b>Graduate Thesis Topics</b>		Analysis Technique	f	%
Musical talent	Quantitative	Descriptive Statistics (Frequency, Percentage, Average)	12	39.0
		ANOVA	2	7.00
		t- Test	5	16.0
		Mann-Whitney U Test	2	7.00
		Wilcoxon Signed Rank Test	1	3.00
		Correlation	4	13.0
		Kruskal Wallis Test	2	6.00
		Cross Tabulation	1	3.00
		Chi-square	1	3.00
		MANOVA	1	3.00
		Total	31	100.0
	Qualitative	Content Analysis	6	50.0
		Inductive Analysis	1	8.00
		Document Analysis	2	17.00
		Descriptive Analysis	3	25.00
		Total	12	100.0
	Quantitative	Descriptive Statistics (Frequency, Percentage, Average)	3	18.0
		T Test	2	12.0
		ANOVA	1	6.00
		Mann-Whitney U Test	5	29.0
		Kruskal Wallis H test	1	6.00
Musical creativity		Wilcoxon Signed Rank Test	4	23.0
		Friedman Test	1	6.00
		Total	17	100.0
		Case Study	1	50.0
	Qualitative	Content Analysis	1	50.0
		Total	2	100.0

As seen in Table 10, it was determined 39% (n=12) of the postgraduate studies on musical talent are used in descriptive statistics (frequency, percentage, mean...) analysis of quantitative techniques and 50% (n=6) in content analysis of qualitative techniques. Considering the graduate quantitative techniques working on musical creativity, it was determined that the analysis rate of non-parametric tests (Mann-Whitney U Test- Wilcoxon Signed Rank Test) was 52% (n=9), and the rate of qualitative statistical situation and content analysis was 50% (n=1).

The answers to the aims and subjects of the postgraduate theses on musical talent and creativity in Turkey are given in the appendices.

#### **Discussion and Conclusion**

When the distribution of postgraduate theses on music, talent, talent and creativity in Turkey is analyzed by years, the highest increase in the field of talent is 8% in 2004, 2014, 2018 and 2021, 13% in 2017 and 2022 and 17% in 2019 appears to be in the first place.

The first sub-problem of the research; When the distribution of postgraduate theses on talent and creativity in the field of music in Turkey is analyzed by years, the highest increase in the field of talent is 8% in 2004, 2014, 2018 and 2021, 13% in 2017 and 2022, and 17% in 2019 appears to be in the first place. It has been determined that only 1 thesis study was made in the other years in the field of talent. When the theses in the field of creativity were examined, it was

determined that the postgraduate thesis made between 2010, 2017 and 2019. studies on talent and creativity were more intense in 2019. Tanık-Onal and Onal (2020) reached the same conclusions in their systematic study.

It has been determined that the majority of postgraduate theses on musical talent and creativity in Turkey are master's theses according to their academic degrees. The high number of master's theses can be explained as the focus of attention of young researchers in their field of expertise. Ayvaci and Bebek (2010) stated in their study that the distribution of theses according to their academic degrees is more intense in master's theses, and the reason for this is the need for specialization in master's theses. Ozenc and Ozenc (2013) stated in their study that doctoral theses are few in number.

As a result of examining the keywords of the theses made in Turkey about musical talent and creativity; It has been determined that the words music education, musical talent exam, music teaching, Science and Art Center, curriculum, music lesson, Orff-schulwerk pedagogy are frequently used. As seen in the first conceptualization of the gifted education field (Maryland Report), musical talent and creativity exist as a talent field. Fine arts high schools, conservatories and Science and Art Centers stand out in the institutionalization of the musical talent field in Turkey. The curriculum of these institutions, and therefore the subject of music education, is seen as a rising trend in research. Another issue is the selection of students for these theories, namely the identification of musical talent. That's why musical talent exam is among the most studied topics.

In the distribution of postgraduate theses on musical talent and creativity in Turkey according to institutes, it was determined that the most postgraduate theses were written. In the distributions according to the institutes, it seen that the master's theses written on musical talent were in the institute of educational sciences, the institute of social sciences and graduate institute, and the doctoral theses were in the institute of educational sciences and graduate institute. It was determined that the master's theses written on musical creativity were in the institute of education sciences and social sciences, and the doctoral theses were in the institute of educational sciences and social sciences institute.

When the distribution of postgraduate theses on musical talent and creativity in Turkey according to universities is examined, it is seen that there are 24 studies on talent and 10 studies on musical creativity in total. It was determined that the university with the most studies was Marmara and Gazi universities in the field of musical talent. In the field of musical creativity, it has been determined that Marmara University is in the first place. It can be said that the lack of postgraduate studies in some universities is affected by the fact that the university has a foundation year and postgraduate education.

According to the data collection method of postgraduate theses on musical talent and creativity in Turkey; In the graduate thesis studies, it was determined that the most qualitative method, quantitative method and mixed method were used in the field of musical talent, respectively. In the field of creativity, it was seen that the quantitative method was used the most, while the qualitative and mixed methods were equally used. In addition, it has been determined that 1 master's thesis on musical creativity, whose method is not clear, has been studied. In the postgraduate studies, it was noted that the qualitative method was not used in doctoral theses. It can be said that the reason for the difference in the data collection status of the theses studied on musical talent and creativity is due to the change in purpose, event and point of view for each research done. In the study conducted by Ayvaci and Bebek (2010), determined that the quantitative method was preferred the most compared to the data collection method of the theses. While the related study of this study showed parallelism with the theses on creativity, the study with talent showed an opposite result. Gucin (2014) stated that quantitative methods are frequently preferred in her study.

Among the models that are among the quantitative research methods according to the pattern of postgraduate theses on musical talent and creativity in Turkey; it determined that doctoral studies have been done on talent as semi-experimental design, descriptive, predictive, relational and survey model, and postgraduate studies have been done on descriptive research model, survey model and situation determination on musical talent. It was determined that it was designed as a full and semi-experimental design in master's and doctoral thesis studies in postgraduate theses on musical creativity. Besides, descriptive research model master's and doctoral thesis were studied in survey model, doctoral thesis in the exploratory sequential design. It can be said that in studies on musical talent and creativity, researchers want to

convey the existing situation as it is, describe it and compare it in terms of relationship. Donmez and Idin (2017) stated that the control group pretest posttest model and due diligence patterns were intense in their study.

According to the pattern of postgraduate theses on musical talent and creativity in Turkey, among the models that are among the qualitative research methods, on musical talent in master's degree; It has been determined that case study, descriptive research, document, field research, case study, realistic ethnography design are designed and studies, while in the doctoral field, case study, inductive analysis and observation studies are carried out. It has been determined that the postgraduate theses on musical creativity are designed as case study in master's and doctoral theses. Tanik-Onal and Onal (2020) stated that experimental studies from the quantitative research method as the research design and case study techniques in the qualitative are predominant in the theses examined in the study.

According to the study group of the postgraduate theses on musical talent and creativity in Turkey, it was observed that most of the postgraduate thesis studies on musical talent and creativity were conducted with students (musical talent, n=13; musical creativity, n=9). It was determined that the studies were carried out respectively with documents, music teachers, administrators, teachers and academicians. The fact that the students are in the first place in the study group can be explained as it is related to the aims of the studies and the trends predominate in that direction. In Ayvaci and Bebek (2010), Tanık-Onal and Onal (2020), and Gucin's (2014) study parallel with the my study in terms of the students' ranking. It was noted that the sample selection generally used in the examined theses was not specified. As a result of this situation, it can be explained that it may pose a qualitative methodological problem in the studies conducted. In addition, in order to increase validity and reliability, it should be reported clearly where, when and by whom the research was conducted (Sezgin & Sonmez, 2018, p. 270).

In postgraduate theses on musical talent and creativity in Turkey, it is seen that semi-structured interview form, document, scale, questionnaire, interview, musical hearing, musical aptitude test, observation, perception test and expert opinion form are frequently used in postgraduate studies on musical talent as a data collection tool. In postgraduate studies on musical creativity; It was determined that scale, observation scale, document, questionnaire, test and semi-structured interview form were used frequently. It has been determined that there are similar studies in parallel with my findings (Ayvaci & Bebek, 2010; Donmez & Idin, 2017; Tanik-Onal & Onal, 2020; Ozenc & Ozenc, 2013).

When analyzed according to the data analysis method used in postgraduate theses on musical talent and creativity in Turkey; It has been determined that the postgraduate studies on musical talent are descriptive statistics (frequency, percentage, average...) analysis of quantitative techniques and content analysis of qualitative techniques. Looking at the quantitative techniques in the postgraduate theses on musical creativity, it was found that the analysis rate of non-parametric tests was intense, while the qualitative statistical technique had situational and content analysis. Tanık-Onal and Onal (2020) reached similar results in their study.

Distribution of postgraduate theses on musical talent and creativity in Turkey according to their purpose and subject is given in the appendices. When the current topics within the scope of the research are examined, in the field of musical talent and creativity; It has been seen that themes such as opinion, influence, attitude, social skills, problems encountered, talent exams and examination of resources, current situation, academic success, relational situation, skill development, belief in learning, musical creativity, process and performance have been studied. Determining the studies on certain themes, subjects and purposes in graduate studies is a situation that needs to be determined, and it is very important to create a new product in this context.

## Conclusion

As a result of the research, it was determined that most studies were in the graduate field and in 2019. It has been determined that the words music education, musical talent exam are mostly used in the keywords of the studies on

musical talent and creativity. In the studies on musical talent, it has been determined that Marmara University has the majority of master's theses and Gazi University has the doctor's theses. On musical creativity, it was seen that master's thesis was studied at most and it was at Marmara University. According to the data collection method of the graduate theses on musical talent, the most qualitative method was used mainly, and according to the data collection method of the graduate theses on musical creativity, the most principally the quantitative method was used. Most of the postgraduate thesis studies on musical talent and creativity were conducted with students. It has been determined that the quantitative technique of the graduate studies on musical talent are descriptive statistics and the qualitative techniques are content analysis. The quantitative techniques in the postgraduate theses on musical creativity, it was mostly determined that the analysis rate of non-parametric tests, while the qualitative statistical technique was situational and content analysis.

#### Recommendations

This research, in which the theses in the field of musical talent and creativity are analyzed systematically, can provide the administrators in institutions providing graduate education in these fields to have an idea about the deficiencies and weaknesses of the theses. In this respect, it can also be a guide for academics who are thesis supervisors in related fields. The aspect of systematic analysis studies to give an idea about general trends can also guide academics who are trying to do research in the field to create their own equipment. Young scientists who will start researching in the field of musical talent and creativity can present the findings of my research as a seminar. The suggestions of this research for future research may be to investigate the impact factors of the theses made in the field of musical talent and creativity. In this way, it can be determined which subjects and research areas have a high impact factor. In addition, I had difficulty in making systematic analysis due to the mistakes and deficiencies of the researchers in the writing of these sections, while doing the systematic analysis, especially about the method part, in the theses I examined during my research. In this respect, it can be recommended that postgraduate students receive self-improving training, especially during the thesis writing process on scientific research methods.

#### Limitations

This research is limited to 34 theses made in universities between 2000-2023 on musical talent and creativity.

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Masters'

Masters'

PhD Thesis

2019

2019

2021

**Appendix 1.** Theses included in the research

	Subject and Purposes of Musical Talent-Related Theses	
Year	Subject Distributions	Degree
2001	Reveal the success situation of the candidates who applies the entrance examinations of the musical training departments depending on the question types	Masters'
2002	Reliability and validity assesment and evaluation of Gazi University department of music education 'enterence-musical aptitude exams'	PhD Thesis
2004	Anadolu Güzel Sanatlar Liseleri ve Özel Güzel Sanatlar Liselerindeki müzik öğrencilerinin müzik ön yaşantıları, müzik yetenekleri, müziğe yönelik tutumları ve eğitim programlarını değerlendirme özelliklerinin karşılaştırılması	Masters'
2004	The Evaluation of the situation of music teachers'orientation of their students who are at the primary schools in Bolu and capable of music to the anatolian high school of fine arts	Masters'
2005	The students Fine Arts Faculties is to compare the success in the entry ability exam 2003 year and musical perceiving and reading lessons success at the end of first class	Masters'
2007	A study of problems music teachers who work in centers of science and arts face while diagnosing musically gifted student	Masters'
2009	The evaluation of category of musical audition-perception in the special ability entrance examinations for the students of music departments of anatolian fine arts high schools in Turkey	PhD Thesis
2014	Türkiye'de müzik alanında potansiyel üstün yetenekli bireylerin eğitimlerinin incelenmesi A study on the education of potentially musically gifted individuals in Turkey	Masters'
2014	The relationship between music teacher candidates special skill test success with musical reading writing hearing and academic achievement	Masters'
2015	The effect of music education on the development of gifted and talented students' social abilities	PhD Thesis
2016	İngilizce yabancı dil öğrenimi öğrencilerinin konuşma yeteneklerini geliştirmek için drama ve müzik portfolyosu alternatif sı nav sistemi olarak kullanmak	Masters'
2017	Gifted and talented students' opinions and attitudes towards visual arts and music courses	Masters'
2017	The acceptable pitch range(s) for single note repetitions in music aptitude examinations	Masters'
2017	The examination of fine art faculties music special talent examination manuals and current situation of institutions providing professional music education in Turkey	Masters'
2018	Talent management of music teachers at private schools	Masters'
2018	The investigation between the attitutes of prospective class teachers on teaching music, their self-efficiency beliefs and self efficiencies about their music abilities	Masters'
2019	Examining the effects of computer aided music education program developed for gifted students on their musical creativity	PhD Thesis
2019	Evaluation of amateur music education in terms of talent examinations	Masters'
2019	Evaluation of amateur music education in terms of talent examinations	Masters'
2019	The effect of musical history of children with special talent in the field of music on the preferred processes of science and art centers	Masters'
2019	Investigation for determination of Erzincan province music talent map	PhD Thesis
2019	Examining the effects of computer aided music education program developed for gifted students on their musical creativity	PhD Thesis
2021	A review on the resources used for musical hearing, read and written education in institutions providing special music education in the process of preparation for special talent exams of music departments in Turkey	Masters'
2021	Examination of the opinions of the administrators of science and art centers on education of students in field of music talent	Masters'
2022	Opinions of music teachers working at BILSEM on instrument education of gifted children	Masters'
2022	Analysis of music special talent exams in Turkey during the COVID-19 global epidemic	Masters'
2022	The beliefs of preservice music teachers about musical ability and music learning	PhD Thesis
	Subject and Purposes of Theses on Musical Creativity	
2003	The relationship between performances and musical creativity of trainee music teachers	Masters'
2008	Determining the emotional states evoked in children and adults by music and using these states in the field of musical creativity in primary school music lessons	Masters'
2009	The effect of elementary school musical education with Orff-Schulwerk improvisation studies on musical creativity process	Masters'
2010	An evaluation on the relationship between the learning fields 'musical perception and acquainting' and 'musical creativity' based on teaching program of 2006 primary education music classes of sixth grade level	Masters'
2010	The effects of creative drama on acquisition of the attainments of musical creativity learning domain in third grade music lessons in primary education	Masters'
2017	Improvisationon the development of students'violin performanceand musical creativity (A case of Buca School of Education)	PhD Thesis
2017	Orff - schulwerk pedagogy aided music education program for children age 5 effect of creativity	PhD Thesis
2010	Cut shirist music like from the Dougl Onion and Transformation 1 and 1 and 1 and 1 and 1	M ?

Créativité musico-littéraire chez Pascal Quignard : Tous les matins du monde et la leçon de musique

Evaluation of BİLSEM students' musical creativity and flow experiences through distance education application

The effect of musical stories and fairy tales on the creativity of children in preschool education