Examining the relationship between the talent and the final grades of undergraduate music education students

Meltem Düzbastılar

Abstract
This study aims to examine the relationship between the talent exam grades (2017) of 2 voice, 3 voice, 4 voice hearing, melody repetition, rythym repetition, dictation, solfege and the final exam grades (2018) of first class undergraduate music education students of a University placed in Blacksea region. The same questions were directed to the students both in talent exam and the final exam of Musical Hearing, Reading and Writing lesson at the end of the second semester of the first year, and the correlation among two exam scores are examined. The study group of the article consists of 50 students who became successful in the talent exam of Music Education Department of Fine Arts Branch of Education Faculty in the year 2017, and 44 of 50 successful students who registered to the faculty as first class students in 2017-2018. The talent exam grades are accessed with the approval of the deanship. The implementation grades are obtained from the final exam of Musical Hearing, Reading and Writing lesson at the end of the second semester of the first year by directing the same questions. The talent exam grades and the implementation grades of study groups are analysed by using analysis programs, and results are compared. As the conclusion of the study, it’s noted that there is a weak relationship between talent exam and implementation exam grades of 2 voice hearing, 3 voice hearing, 4 voice hearing, melody repetition and solfege, and there is almost no relationship between the grades of rythym repetition. The grades of dictation is higher in the implementation exam.

Keywords: Music Education, Musical Hearing, Musical Reading and Writing, Talent Exam.

Introduction
The institutions of Professional Music Education accept the students throughout a talent exam at the beginning of the education. At these exams, it is aimed to define the level of candidates’ “musical behaviour” or/and “musical talent” which is a requirement for the education programme, and each institution implement a unique “musical talent test” to define these basic dimensions (Tarman, 2003, 23). The candidates of professional music education are mostly tested about musical hearing (rythym, voice and melody repetition), musical reading (solfege), musical writing (dictation), and musical performance (singing and playing performance) (Aksu and Kurtuldu, 2016, 193). Candidates take the dictation exam together, and the other exams individually.

---

1 This article is presented in the “6th International Conference on Social Sciences and Education Research” in Kiev, Ukraine (05-07 September 2019).
2 Assoc. Prof. Dr. Trabzon University, Fatih Education Faculty, Branch of Fine Arts, Music Education Department, meltemerol78@yahoo.com 0000-0001-8346-596X.
As one of the professional music education institutions, Music Education Department of Fine Arts Branch of Education Faculty hold a talent exam for the candidates to define their levels of musical talent. The exam consists of musical hearing, reading, writing, playing and singing. The relevant Music Education Department of Fine Arts Branch of Education Faculty held the talent exam at two phases in the year 2017. At the first phase, musical hearing-repetition and dictation exam, and at the second phase solfege, musical singing and playing exams were held. (Exam Guide, 2017).

As it is described in the Exam Guide (2017) in the first phase, there are dictation, 4 two-voice, 4 three-voice, 2 four-voice questions, two tonal and maqam melodies each consist of two motifs, and two rythym sentences each consist of two motifs. Musical Hearing-Repetition and Dictation exams are evaluated as it’s shown in Table-1.

Table 1. The Requirements and the scores of First Phase of Examination (Musical Hearing-Repetition and Dictation)

<table>
<thead>
<tr>
<th>Dictation Score</th>
<th>Two-voice Hearing</th>
<th>Three-voice Hearing</th>
<th>Four-voice Hearing</th>
<th>Rythym Hearing</th>
<th>Melody Hearing</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>4x2=8</td>
<td>4x3=12</td>
<td>2x5=10</td>
<td>8x2=16</td>
<td>8x3=24</td>
<td>100</td>
</tr>
</tbody>
</table>

At the second phase, the candidates were asked to show their abilities about solfege, musical singing and playing. In the Solfege exam, the clear and true solfege reading ability of the candidates which is based on basic note and rythym knowledge is measured. The correctness of notes, intervals, voices and rythym sets during the solfege reading of candidate, is scored over 100 point (Exam Guide, 2017). The musical singing and playing exams are also scored over 100 points.

During scanning of the literature about this subject, it’s been seen that there is no study in which the music education talent exam questions were asked to the students one year later after being accepted to the programme. The studies about the talent exams are usually about comparing the graduates of Fine Arts High Schools and the others, comparing the exam scores and graduation grades, academic success, and comparing the lessons of some high schools and universities. Some of these studies are mentioned below.

Sağer (2007) in his study, examined the success of the students graduated from Fine Arts High Schools and the graduates of other high schools in talent exams of the Music Education Department of Fine Arts Branch of Education Faculty.

Aksu and Kurtuldu (2016), compared the scores of the candidates graduated from Fine Arts High Schools in talent exams and their scores in some lessons in high school. Eroğlu and Ataman (2013) in their study, compared the talent and graduation scores of the graduates of Music Education Department.

Kurtuldu and Aksu (2017) examined the relationship between the talent grades of the candidates and their academic success grades. Sağer, Zahal and colleagues (2015), examined the relationship between the candidates learning methods and exam success.

Arapgirlioğlu and Tankız (2013) examined the distribution of weighted secondary education average scores and Higher Education Selection scores within the placement scores.

The Aim of the Study
This study aims to examine the relationship between the talent exam grades (2017) of 2 voice, 3 voice, 4 voice hearing, melody repetition, rythym repetition, dictation, solfege and the first class second semester exam grades (2018) of first class undergraduate music education students of Education Faculty, Music Education Department of Fine Arts Branch of related University by directing the same questions in both exams.
In this context, the sub-problems of the study is listed below:

1. **Sub-Problem:** What is the relationship between 2 voice, 3 voice and 4 voice hearing scores in talent tests and implementation exam (directing the same questions to the same students)?
2. **Sub-Problem:** What is the relationship between melody repetition scores in talent tests and implementation exam?
3. **Sub-Problem:** What is the relationship between rhytm repetition scores in talent tests and implementation exam?
4. **Sub-Problem:** What is the relationship between dictation scores in talent tests and implementation exam?
5. **Sub-Problem:** What is the relationship between solfege scores in talent tests and implementation exam?

**The Importance of the Study**

Teaching the musical hearing, reading and writing, is the most basic field of professional music education with its structure aiming behavioural change about musical hearing-perception, musical reading, writing, understanding, thinking (designing), musical creating, musical analysing and musical consideration (Özgür and Aydoğan, 2015, 3).

The study is important because of the implementation it has, and that it has not been done before. When the importance of the musical hearing, writing and reading lessons during the music education process is considered, this study also has importance for showing the difference of the students beginning level and the level after taking musical hearing, reading and writing courses for a year.

**Hypothesis**

This study is based on the following assumptions:

1. It is assumed that the scores which is the base of the research are determined by valid and reliable methods.
2. It is assumed that the searching method and analysing thecnics are proper.

**Boundries**

1. This research is limited with the analyses of the scores which are obtained by directing 2 voice, 3 voice, 4 voice hearing, melody repetition, rhytm repetition, dictation and solfege questions in talent exam and again in the first class second semester exam to the Fine Arts Faculty Music Education Branch first class students of a University in Blacksea Region.
2. The study is limited with the analyses of scores which are obtained by directing the same questions to the first class students of the Fine Arts Faculty Music Education Branch in talent exam and the final exam at the end of the first year (2018).

**Method**

In this part, there is information about research model, study group, collecting data and data analysing methods.

**Research Model**

In this research, corelational research model which is a kind of relational research is used. Corelational researches aim to describe the relationship between two or more variables without intervening them (Karakaya, 2014, 68; Büyüköztürk, Kılıç Çakmak, Karadeniz and Demirel, 2016, 185).
Study Group
The study group of this article consists of 50 students who joined to the talent exam of the related university’s Education Faculty Fine Arts Branch Music Education Department in 2017 and 44 first class students who registered the faculty.

Collecting Data
The data of the research, questions and scores of the related university’s Education Faculty Fine Arts Branch Music Education Department talent exam are obtained with the approval of the dean on the condition that the name of the university is not stated. So the name of the university and the faculty is not stated in the study. The implementation scores are obtained by redirecting the same questions of the talent exam again at the first year second term final exam.

Analysing the Data
The talent exam scores and the implementation exam scores of the study group are analysed and compared by using Pearson’s Correlation Coefficient.

Before the correlational measurements, normality of the data is checked and kurtosis and skewness coefficients of the data are controlled. The results of kurtosis and skewness analysis of the data is given in Table-2.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Kurtosis Measurement SS</th>
<th>Kurtosis Measurement SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent Test 2 Voice Hearing</td>
<td>-1,660,337,1,327,662</td>
<td></td>
</tr>
<tr>
<td>Talent Test 3 Voice Hearing</td>
<td>-1,392,337,1,690,662</td>
<td></td>
</tr>
<tr>
<td>Talent Test 4 Voice Hearing</td>
<td>0,92,337,-0,412,662</td>
<td></td>
</tr>
<tr>
<td>Implementation Test 2 Voice Hearing</td>
<td>-1,358,357,0,653,702</td>
<td></td>
</tr>
<tr>
<td>Implementation Test 3 Voice Hearing</td>
<td>-0,178,357,-0,670,702</td>
<td></td>
</tr>
<tr>
<td>Implementation Test 4 Voice Hearing</td>
<td>0,593,357,-1,152,702</td>
<td></td>
</tr>
<tr>
<td>Talent Test Melody Repetition</td>
<td>-0,691,337,0,389,662</td>
<td></td>
</tr>
<tr>
<td>Talent Test Rythym Repetition</td>
<td>0,263,337,-0,264,662</td>
<td></td>
</tr>
<tr>
<td>Implementation Test Melody Repetition</td>
<td>0,338,357,-0,157,702</td>
<td></td>
</tr>
<tr>
<td>Implementation Test Rythym Repetition</td>
<td>0,432,357,0,052,702</td>
<td></td>
</tr>
<tr>
<td>Talent Test Dictation</td>
<td>-1,259,337,0,826,662</td>
<td></td>
</tr>
<tr>
<td>Talent Test Solfege</td>
<td>-0,775,337,-0,160,662</td>
<td></td>
</tr>
<tr>
<td>Implementation Test Dictation</td>
<td>-1,291,357,1,684,702</td>
<td></td>
</tr>
<tr>
<td>Implementation Test Solfege</td>
<td>-0,561,357,-1,026,702</td>
<td></td>
</tr>
</tbody>
</table>

If the kurtosis and skewness coefficient is 0, it shows that distribution is standart normal distribution; if it is different from 0, it shows standart normal distribution changes (Köklü and Büyüköztürk, 2000, 68; Baykul, 1999, 134; Altmısık vd., 2005, 156). In analyses, it’s important that the variance of the scores shouldn’t be high. If the variance is between +1 -1, it indicates that the scores doesn’t show an important variance from the normal distribution ((Köklü vd. 2006, 63; Keskin and Çiçek, 2005, 54). In theoretical normal distribution, distribution is continuous and begins from (-) infinite, ends (+) infinite. 99.74 % of the subjects are between the borders of +3 -3
Examining the relationship between the talent and the final grades of undergraduate music education students. *Journal of Human Sciences*, 17(1), 380-388. doi:10.14687/jhs.v17i1.5948

(Alpan-Arpacık, 1990, 58; Arıcı, 2005, 198) Albayrak (2005), noted that the kurtosis may be between the borders of +3 ile -3.

**Findings and Comments**
In this part the findings of the study are presented in the same order with the sub-problems. In tables, the average of the talent test scores and the implementation exam scores are taken, and the difference between two average scores are given in percent. The minus values in this column shows the decrease at the scores, and plus values indicates the increase of the scores.

**The Findings and Comments About the First Sub-Problem**
The first sub-problem of the study is “What is the relationship between 2 voice hearing, 3 voice hearing, 4 voice hearing scores in talent tests and implementation exam (directing the same questions to the same students)?” According to this:

<table>
<thead>
<tr>
<th>Two Voice Hearing</th>
<th>Pearson Correlation Coefficient</th>
<th>The Difference Between The Average Scores Of Talent Test And Implementation Exam (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>,223</td>
<td>% -0,04</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Three Voice Hearing</th>
<th>Pearson Correlation Coefficient</th>
<th>The Difference Between The Average Scores Of Talent Test And Implementation Exam (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>,239</td>
<td>% -0,26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Four Voice Hearing</th>
<th>Pearson Correlation Coefficient</th>
<th>The Difference Between The Average Scores Of Talent Test And Implementation Exam (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>,003</td>
<td>% -0,19</td>
</tr>
</tbody>
</table>

When the correlation coefficients in Table 3 are considered, it’s seen that there is a weak relationship between the two voices and three voices scores of Talent Test and Implementation Exam. There is almost no relationship between four voices scores. When the averages of talent and implementation test scores are considered, it’s seen that two voice hearing, three voice hearing, four voice hearing scores decreased in implementation exam when they’re compared to talent exam scores. The highest decrease is observed in three voice scores (% -0,26).

**The Findings and Comments About the Second Sub-Problem**
The second sub-problem of the study is “What is the relationship between melody repetition scores in talent tests and implementation exam?” According to this:

<table>
<thead>
<tr>
<th>Melody Repetition</th>
<th>Pearson Correlation Coefficient</th>
<th>The Difference Between The Average Scores Of Talent Test And Implementation Exam (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>,258</td>
<td>% -0,1</td>
</tr>
</tbody>
</table>

The Correlation Coefficient between melody repetition scores in talent tests and implementation exam is ,258. It means that there is a weak relationship between two exam scores. It’s seen that in implementation exam melody repetition scores decreased 0,1% when they’re compared to talent exam scores.
The Findings and Comments About the Third Sub-Problem

The third sub-problem of the study is “What is the relationship between rythym repetition scores in talent tests and implementation exam?” According to this:

Table 5. The Relationship Between Talent Test Scores and Implementation Exam Scores (Rythym Repetition)

<table>
<thead>
<tr>
<th>Rythym Repetition</th>
<th>Pearson Correlation Coefficient</th>
<th>The Difference Between The Average Scores Of Talent Test And Implementation Exam (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>,006</td>
<td>%-0,03</td>
</tr>
</tbody>
</table>

In Table 5 Rythym Repetition takes place. In Rythym Repetition, the correlation coefficient between talent and implementation exam scores is ,006. This coefficient indicates that there is almost no relationship between talent and implementation exam scores. The average scores of rythym repetition decreased -0,03 % at the end of the year.

The Findings and Comments About the Fourth Sub-Problem

The fourth sub-problem of the study is “What is the relationship between dictation scores in talent tests and implementation exam?”. According to this:

Table 6. The Relationship Between Talent Test Scores and Implementation Exam Scores (Dictation)

<table>
<thead>
<tr>
<th>Dictation</th>
<th>Pearson Correlation Coefficient</th>
<th>The Difference Between The Average Scores Of Talent Test And Implementation Exam (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0,056</td>
<td>% (+)0,05</td>
</tr>
</tbody>
</table>

The correlation coefficient between two exams dictation scores is -0,056. This rate means that there is a little relationship between talent test scores and implementation scores in a negative way. In addition, contrary to decline in other results, dictation scores increased 0,05% at the end of the year.

The Findings and Comments About the Fifth Sub-Problem

The fifth sub-problem of the study is “What is the relationship between solfege scores in talent tests and implementation exam?” According to this:

Table 7. The Relationship Between Talent Test Scores and Implementation Exam Scores (Solfege)

<table>
<thead>
<tr>
<th>Solfege</th>
<th>Pearson Correlation Coefficient</th>
<th>The Difference Between The Average Scores Of Talent Test And Implementation Exam (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0,330</td>
<td>% -0,08</td>
</tr>
</tbody>
</table>

When the solfege scores which takes place within the musical hairşng, reading and writing section, are considered it's seen that the correlation coefficient between talent test and implementation exam is -0,330. This rate means that there is a little relationship in a negative way. In comparison with the talent test scores, the average solfege scores in implementation exam decreased -0,08 %.

Conclusions and Discussion

There is a weak relationship between the two voice hearing and three voice hearing scores of Talent Test and Implementation Exam. There is almost no relationship between four voice hearing scores. It’s seen that two voice hearing, three voice hearing, four voice hearing scores decreased in implementation exam when they’re compared to talent exam scores.

There is a weak relationship between melody repetition scores in talent tests and implementation exam. It’s seen that melody repetition scores in implementation exam decreased when they’re compared to talent exam scores.

In rhythm repetition, the correlation coefficient between talent and implementation exam scores, which is .006, indicates that there is almost no relationship between talent and implementation exam scores. There is a decline in average scores of rhythm repetition in implementation exams.

In dictation, there is a little relationship between talent test scores and implementation scores in a negative way. In addition, contrary to decline in other results, dictation scores increased in implementation exam in comparison to the talent test scores.

It’s seen that the correlation coefficient between talent test and implementation exam is -.330. This rate means that there is a little relationship in a negative way. In comparison with the talent test scores, the average solfege scores in implementation exam are lower.

Güneştan and Ayrancıoğlu (2018), examined the comparing of talent tests scores according to the graduated schools and the relationship with the academic success in field lessons. Polat in his dissertation completed in 2013, studied the success in field lessons during the undergraduate education and the results of the talent exam scores.

Coşkun (2008) in his graduate report, examined the melody hearing and rhythm hearing success levels of the students who became successful in qualification exams of music education branches of faculties Bağcık in 2003, completed his graduate report titled as the effect of the talent exam grades and the education programs on the creativity levels of the students.

Özal (1995) in his graduate report, examined the relationship between successes in talent exams and main instrument lessons of Gazi University Fine Arts Faculty Music Education Branch the students. Tankız in 2011, examined the success of the candidates who applied for the Music Teaching talent exam, according to some variables.

Avşar in his graduate report (2014), examined the relationship between the musical hearing, reading and writing successes in talent exams and academic successes of the Music Teacher candidates.

Recommendations

In musical hearing and writing lessons, more melodical memory exercises may take place.
In musical reading lessons, more rhythmic memory exercises may take place.
For improving the melodical and rhythmic memories of the students, it may be beneficial to make them memorize the compositions in their individual instrument lessons, voice education lessons and group performances.
In musical hearing and writing lessons, interval and chord knowledge, solfege-dictation, hearing and repetition exercises may take more place.
The students may be warned and guided about continuing their efforts for improving melodical and rhythmic memories of them also after registering the Faculty.
Similar studies may be done for the schools or branches which accept students throughout talent exam.

**References**


