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AN EXAMINATION OF THE EFFECTS OF PEER TEACHING PROGRAM DEVELOPED FOR MUSIC TEACHING GUITAR DEPARTMENT STUDENTS ON THE KNOWLEDGE, ATTITUDE AND PERFORMANCE OF STUDENTS¹

Ümit Kubilay CAN ²



¹ This study is produced from the doctoral thesis of Music Education “An Assessment Of Peer Tutoring Program Developed For Music Education Guitar Students” written by Ümit Kubilay Can under the consultancy of Prof. Dr. Yıldız Elmas in Marmara University Education Sciences Institute.

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INTRODUCTION

People spend the larger part of their time with their family with their peers after their birth during adolescence (Gürler, 2005). Peer relations constitute a forum where values and attitudes are discussed. In this sense, they help cultivate personal independence, which is another developmental task (Pehlivan, 2004). Peer relations contribute to the cognitive, social, emotional, psychological and physical development of children.

Peer relations are an indispensable and important part of children's social development. Establishment of healthy peer relations is a significant component of psychological harmony and lifelong social communication. They develop self-regulation skills, social controls and awareness of social rules and values. Peers emotionally support and relieve each other in stressful situations. The support of peers help children cope with stressful situations and improve their academic performance (Gülay, 2008).

There are education model alternatives used as an intermediary by peers in various fields, such as peer teaching, counseling, peer education, peer assistance, peer mediation and peer feedback. Researchers gradually take more interest in this education model alternative, and it is known that this alternative is used in certain education systems.

Peer teaching is defined as gaining information and skills based on assistance and support activities. Peer teaching involves people of similar social groups who learn by helping each other but are not teachers (Topping, 2005).

Peer teaching helps enhance academic achievement, problem solving, freedom and self-assertiveness skills in students who teach and are taught. This educational tool increases students' eagerness and volunteerism to participate in activities at school, which reveals social skills of teaching students who face social difficulties. Social interaction opportunities largely enable the development of cognitive and psychomotor skills of students (Sheldon, 2001).

Peer teaching involves peer, cross-age and cross-level models. Cross-age peer teaching model is based on the idea of a student more advanced in years or level teaching/consulting a younger student or a student of a lower level.

Peer teaching today is growing rapidly, and this program has been adopted in 180 higher education institutions in the UK. Initial efforts of peer teaching were intended to advance the education of teaching and learning students and motivate school-age children further to raise the quality of education (Potter, 1997).

Teaching and learning students in peer teaching are provided with indirect or direct feedback. Even in the earlier stages of the practice, indirect feedback spontaneously emerges. Active learners in the practice increase the amount of feedback (Topping, 2005).

Latest studies indicated to higher importance of the education of teaching students compared to previous studies. Even when they are elementary school students, the education of teaching students engenders a positive impact on their behavior. Observational data obtained in a set of studies show that the education of teaching students improves the behavior of their learning peers (Robinson et al., 2005; Hunsaker, 2014).

Many teaching-learning models are used in education. However, the fact that the experience of teaching can also serve as a learning instrument is overlooked. The best way to test whether a concept has been understood is to try to teach it to someone else. Information is ready to be taught when it has been comprehended completely. Teaching is one of the basic tenets of peer teaching. In conventional education systems, tests or open-ended questions are used to evaluate a student on a certain subject. The student is assessed on how much the information has been internalized and to what extend the student is able to associate the information with life. However, things can change when the student is given the opportunity to teach the information to someone else. People cannot be superficial about concepts when they have to teach them because they need to go deeper, highlight and exemplify the matter, associate it with other areas and integrate it with life. It is important to use such an educational tool as the steadiest instrument to reinforce a concept. It is believed that the combination of two active instruments like peer mediation and learning by teaching can produce effective results in peer teaching.

According to Audrey Gardner (1998), who uses an effective example on how our different and mostly daily actions affect learning, **“WE LEARN**

20% of WHAT WE READ

30% of WHAT WE HEAR

40% of WHAT WE SEE

50% of WHAT WE SEE AND HEAR

70% of WHAT WE DISCUSS with others

80% of our personal EXPERIENCES, and

90% of WHAT WE TEACH others” (283).

Peer teaching is one of the methods of establishing positive creative interactions among students. A student is paired off with another student who needs assistance in various ways. Students with direct relationships are a valuable part of education throughout peer teaching. Both groups benefit from peer teaching in terms of social acceptance and tolerance through learning. A student who needs help will accept peer assistance with this educational tool, which supports social interaction.

Peer teaching also provides information on the shortcomings of a student who needs help from the interaction among students (May, 2005). Music teaching practices can generate significant opportunities to create a positive

interaction among students. In a peer teaching-based program, music teaching can potentially play an active role in the socialization of students.

Music teaching develops individual creativity by music performance, singing, instrument playing and other musical activities and establishes association with other courses, enhancing the behavior and skills of reinforcing and repeating the behaviors gained in the other courses, making it easier to learn, acculturation, recognizing the cultures of other societies and creating common cultures (Şaktanlı, 2007).

The current music education program (Meb, 2018) supports instrument education and group activity-oriented settings for students to gain self-confidence. When peer-modeled education approaches are given opportunity in this type of music education settings, students can gain self-confidence by learning and socializing at the same time.

Music education helps develop and engender musical behavior during the training of individuals. Music education is used to change individual music behavior in the desired direction in terms of psychomotor, cognitive and affective behavior. It is possible to instill the desired behavior with a planned and programmed process of education (Akbulut, 2006).

Various factors affect the learning process in music. Among these, practices like setting an example and teaching are peer behaviors that encourage student efforts. A study on imitation as a peer communication method in the preschool period showed that the music performance of students improved significantly (Flohr and Brown, 1979; cited by Hanser, 1982).

Teachers in elementary music education have certain problems, especially in initial instrument education, such as crowded classes and insufficient time. It is believed that individualized instrument training arrangements can solve these problems. Peer teaching is one of these methods of education and could utilize students for one-on-one instrument training (Alexander and Dorow, 1983).

Various factors affect the learning process in music. Among these, practices like setting an example and teaching are peer behaviors that encourage student efforts. A study on imitation as a peer communication method in the preschool period showed that the music performance of students improved significantly. Early studies on peer teaching in music analyzed high school students creating models for music choices of students and improvement of music appreciation and listening by this method, the effects of peers on musical skills, the effects of peers on instrument playing students, and the effects of peers on singing choices and correct performance perception (Hanser, 1982).

Music teaching education is a large and comprehensive phenomenon that synthesizes concepts like art education, musical technique education, musicology education and teacher training. Therefore, music teaching education is based on an interdisciplinary scientific/artistic foundation in

organization, rules and workings, and stands out as a versatile and multidimensional field of education as it is open to the possibility of benefiting from all technological hardware of the period. Music teaching programs must have an adequate, balanced and satisfactory integrity of theory, practice and teacher training because music teaching does not only consist of subdomains like theory, instrument, sound and teacher training and it is the resultant product of these subdomains (Albuz, 2004).

Today, classical guitar is of academic significance in the music teaching departments of faculties of education, conservatories, faculties of fine arts, and fine arts high schools. Guitar programs of these institutions expect their graduates to become competent in the classical guitar as future teachers in departments of music education, play the instrument well in their professional lives, study as classical guitarists in conservatories, become competent in the classical guitar depending on the fine arts departments they graduate from, and lay the groundwork of the classical guitar in music education departments in fine arts high schools.

It could be important to use peer teaching in music education, which plays an important role in the cultivation of sensitivity, and the training of music teachers, who perform music education. Music Teacher training programs place importance on the specialization of future teachers, but they are inadequate in improving teaching skills. A well-designed peer teaching program could have various benefits prior to the professional lives of prospective teachers.

Paul et al. (2001) found a strong connection between the peer teaching experiences of future teachers and their professional duties. Peer teaching practices are considered to play an effective role in gaining pre-experience prior to the professional careers of music teachers. Wolfgang (1990) analyzed the outcome of peer teaching practices implemented with prospective teachers in various fields, and found a positive relationship towards teachers. Accordingly, peer teaching is an effective arrangement in the education of music teachers (cited by Paul et al., 2001).

It is important to understand the problems of teaching student peers in a well-designed peer teaching program. This will allow the learner to know what they need and what they require to gain competence on the subject. This method could help develop problem-solving skills. Different teaching models and practices could help recognize the available tools, which in turn could enhance the ability to protect and utilize materials. It could be considered that the training of music teachers, which is the subject of the paper, can help improve the skills of problem-solving and protection and utilization of materials, which are required ahead of the professional lives of prospective teachers.

Problem

The ability to teach is one of the most important qualities a teacher is expected to have. Especially in instrument education, people need to use

multiple abilities simultaneously. It is important for teachers to gain certain skills and qualities prior to their professional lives. A teacher needs to learn how to teach. It is a subject of debate to what extent graduates develop the teaching and learning abilities of the programs they participate in as prospective music teachers and, therefore, instrument instructors.

Peer teaching is regarded as an effective educational tool in closing this gap, as stated in studies on how prospective music teachers should gain experience prior to a professional career. According to the studies, peer teaching has obvious advantages. A screening performed within the means of the researcher shows that the studies on peer teaching in Turkey are inadequate, and there are very few studies on the subdomain of instrument education in the literature.

Objective of the Study

This study aims at examining the effects of peer teaching designed for prospective teachers who studied the guitar as their instrument, on the achievements of students, attitudes towards the teaching profession, and instrument performance.

Hypotheses of the study

1. There is a significant difference between the total scores of experimental and control groups in the achievement test.
 - a. There is a significant difference between the pretest scores and posttest scores of the experimental group in the achievement test.
 - b. There is no significant difference between the pretest scores and posttest scores of the control group in the achievement test.
 - c. There is no significant difference between the pretest scores of the experimental and control groups in the achievement test.
 - d. There is a significant difference between the posttest scores of the experimental and control groups in the achievement test.
2. There is a significant difference between the total scores of the experimental and control groups in their attitude towards the guitar class.
 - a. There is a significant difference between the pretest scores and posttest scores of the experimental group in the attitude towards the guitar class.
 - b. There is no significant difference between the pretest scores and posttest scores of the control group in the attitude towards the guitar class.
 - c. There is no significant difference between the pretest scores of the experimental and control groups in the attitude towards the guitar class.

- d. There is a significant difference between the posttest scores of the experimental and control groups in the attitude towards the guitar class.
3. There is a significant difference between the total scores of the experimental and control groups in the observation form.
 - a. There is a significant difference between the pretest scores and posttest scores of the experimental group in the observation form.
 - b. There is no significant difference between the pretest scores and posttest scores of the control group in the observation form.
 - c. There is no significant difference between the pretest scores of the experimental and control groups in the observation form.
 - d. There is a significant difference between the posttest scores of the experimental and control groups in the observation form.

Significance of the Study

Studies show that peer teaching has all-around benefits for both teaching students and in the development of skills of learning students. It is known that peers are important at all ages for individual development. Taking this into account, it is believed that the use of peer-oriented teaching materials adds significant value to all aspects involved in education.

Peer teaching is considered necessary in all instrument training programs of professional institutions of music education in order for prospective teachers to gain experience in teaching.

METHOD

This study employs the experimental method. Research design consists of control and experimental models based on the pretest and posttest models. A pretest-posttest control group model was used to test peer teaching.

Sample Group

First to third year guitar students in the Music Education Department of Marmara University Atatürk Faculty of Education constitute the sample group of the study. Control (n=5) and experimental (n=5) groups were formed from the second and third year guitar students. The experimental group taught first year guitar students (n=5).

Experimental and control groups were matched by the assessment instrument in terms of their achievement and their attitude towards the teaching profession. Different levels were factored in as the student group to be taught by the experimental group was created. Accordingly, experimental and control groups consisted of second and third year students, and the learning group consisted of first year students.

An achievement test, teaching profession attitude scale and an observation form were used to equalize the groups as experimental and control groups were created. Mann Whitney U Test was used to determine the equality of the groups.

Table 1. Descriptive Values of the Total Pretest Scores of Groups in the Achievement Test

	N	\bar{X}	SD
Experimental Pretest	5	23.60	4.45
Control Pretest	5	23.60	2.20

The average of total pretest scores of the experimental group in the achievement test is $\bar{X}=23.60$, standard deviation is $SD = 4.45$, the average of total pretest scores of the control group in the achievement test is $\bar{X}=23.60$, standard deviation is $SD = 2.20$.

Table 2. Results of the Mann Whitney U Test on the Total Pretest Scores of Groups in the Achievement Test

Group	n	Rank Average	Sum of Ranks	Mann Whitney U	z	p
Experimental	5	5.60	28.00	12.000	0,11	p>0.05
Control	5	5.40	27.00			

No significant difference was found between the groups in pretest scores of the groups in the achievement test according to the Mann Whitney U Test.

Table 3. Descriptive Values of the Total Pretest Scores of Groups in Their Attitude Towards the Teaching Profession

	N	\bar{X}	SD
Experimental Pretest	5	134.0	10.98
Control Pretest	5	133.4	3.80

The average of total pretest scores of the experimental group in the attitude towards the teaching profession is $\bar{X}=134.0$, standard deviation is $SD=10.98$, the average of total pretest scores of the control group in the attitude towards the teaching profession is $\bar{X}=133.4$, standard deviation is $SD=3.80$.

Table 4. Results of the Mann Whitney U Test on the Total Pretest Scores of Groups in Their Attitude Towards the Teaching Profession

Group	n	Rank Average	Sum of Ranks	Mann Whitney U	z	p
Experimental	5	5.60	28.00	12.000	0.10	p>0.05
Control	5	5.40	27.00			

No significant difference was found between the groups in pretest scores of the groups in the attitude towards the teaching profession according to the Mann Whitney U Test.

Table 5. Descriptive Values of the Total Pretest Scores of Groups in Observation

	n	\bar{X}	SD
Experimental Pretest	5	73.0	4.74
Control Pretest	5	70.4	5.63

The average of pretest scores of the experimental group in observation is $\bar{X} = 73.0$, standard deviation is $SD = 4.74$. The average of pretest scores of the control group in observation is $\bar{X} = 70.4$, standard deviation is $SD = 5.63$.

Table 6. Results of the Mann Whitney U Test on the Total Pretest Scores of Groups in Observation

Group	n	Rank Average	Sum of Ranks	Mann Whitney U	z	p
Experimental	5	5.80	29.00	11.000	0.31	p>0.05
Control	5	5.20	26.00			

No significant difference was found between the groups in pretest scores of the groups in observation according to the Mann Whitney U Test. Based on these results, experimental and control groups appear to be equivalent in total pretest scores in observation.

Data Collection Tools

Achievement Test

Relevant goals and behaviors involved in the guitar class program for the peer teaching practice were specified in the study. 67 questions, which cover information, comprehension, application, analysis and synthesis as subdomains of the cognitive domain, were generated.

The resultant test was taken by 52 guitar students of the Music Education Department of Marmara University Atatürk Faculty of Education and the Music Department of Kocaeli University Faculty of Fine Arts for validity and reliability calculations. Item analysis was performed for internal validity calculations. Cronbach's Alpha reliability coefficient of the test was estimated to be 0.84. Analyses showed that the achievement test scale measured the expected competences. In conclusion, the test was considered reliable. The scale was applied to pre- and post-application groups.

Teaching Profession Attitude Scale

Üstüner's teaching profession attitude scale was used for study goals in the affective domain. Cronbach's Alpha reliability coefficient of the test of 34 propositions was estimated to be 0.93.

Observation Form

An observation form created by the researcher was used to measure the study goals in the psychomotor domain. The observation form consisted of five subsections (A, B, C, D, E) of the scales the education process, two etudes (Mi Minor by M. Giuliani, no. 2 by D. Martincek) and two pieces (Suite Española-La Miñona de Cataluña by G. Sanz, Grande Sonate Op.22 Menuet by F. Sor). The 45-item observation form was rated from 1 to 5 in the Likert scale.

Four experts - three guitar instructors and a researcher - from the Music Education Department of Marmara University Atatürk Faculty of Education rated the data obtained in the observation form. Rater scores were evaluated individually and the Spearman Brown Rank Correlation Coefficient was calculated to detect any discrepancies between the raters. The observation form was applied to pre- and post-education groups.

Table 7. The Correlation Between Observation Form Scores of Raters

Raters	Rater 1	Rater 2	Rater 3	Rater 4
Rater 1	1.00			
Rater 2	0.95**	1.00		
Rater 3	0.88**	0.93**	1.00	
Rater 4	0.89**	0.92**	0.77**	1.00

$P < 0.01^{**}$

A significant correlation of 0.01 was found in the observation form scores given by raters. No statistical difference was observed between the raters in terms of their scores.

Preparation of Modules

A 12-week guitar training curriculum, consisting of four modules, was prepared based on expert opinion of Professor Özcan Demirel, academic of

Hacettepe University Faculty of Education, on curriculum development. Objectives and behaviors relevant to the modules were based on the information, comprehension, application, analysis, synthesis, and assessment subdomains of the cognitive domain.

Implementation of the Study

The experimental and control groups were created and a 12-week curriculum was initiated under the supervision of the researcher as an hour per week in a group work setting. Even though subjects studied with private guitar instructors, they did not intervene in the curriculum of the study. Subjects tried to solve the problems they experienced with the curriculum in cooperation with the researcher.

Available times of paired students were determined and one-on-one lessons were organized for 12 weeks under the supervision of the researcher. Lessons of each of the subjects in the experimental group were supervised by the researcher and data was collected.

It was considered important to have guitars of comparable levels in the study. Therefore, a project of the subject was submitted to the Presidency of Scientific Research Commission of Marmara University and 10 classical guitars were procured for the study.

FINDINGS

Findings on Hypothesis 1

There is a significant difference between the total scores of experimental and control groups in the achievement test.

Findings on the scores of experimental and control groups in the achievement test are presented in the tables below.

Table 8. Descriptive Values of the Total Scores of Groups in the Achievement Test

	n	\bar{X}	SD
Experimental Pretest	5	23.60	4.45
Experimental Posttest	5	32.40	0.89
Control Pretest	5	23.60	2.20
Control Posttest	5	22.80	0.45

The average of total pretest scores of the experimental group in the achievement test is $\bar{X} = 23.60$, standard deviation is $SD = 4.45$, the average of posttest scores is $\bar{X} = 32.40$, standard deviation is $SD = 0.89$. The average of total pretest scores of the control group in the achievement test is $\bar{X} = 23.60$,

standard deviation is $SD = 2.20$, the average of posttest scores is $\bar{X} = 22.80$, standard deviation is $SD = 0.45$.

The highest average of scores in the achievement test, $\bar{X} = 32.40$, was obtained in the posttest scores of the experimental group, and the lowest average, $\bar{X} = 22.80$, was obtained in the posttest scores of the control group. Comparable scores were observed in the average pretest scores of the groups.

In the analysis of descriptive values, posttest averages of the groups indicate to a difference in favor of the experimental group with peer teaching. Pretest averages of the groups indicate that the groups were equivalent prior to the training.

There is a significant difference between the pretest scores and posttest scores of the experimental group in the achievement test.

Table 9. Results of the Wilcoxon Signed Ranks Test on the Total Pretest-Posttest Scores of the Experimental Group in the Achievement Test

Experimental Group pretest - posttest	N	Rank Average	Sum of Ranks	z	p
Negative Rank	0	.00	.00		
Positive Rank	5	3.00	15.00	2.02	$p < 0.05$
Equal	0				

A significant difference of 0.05 was found in the Wilcoxon Signed Ranks Test results between the pretest and posttest scores of the experimental group in the achievement test. Based on these results, the experimental group with peer teaching improved in knowledge level through peer teaching.

There is no significant difference between the pretest scores and posttest scores of the control group in the achievement test.

Table 10. Results of the Wilcoxon Signed Ranks Test on the Total Pretest-Posttest Scores of the Control Group in the Achievement Test

Control Group pretest - posttest	N	Rank Average	Sum of Ranks	z	p
Negative Rank	3	2.50	7.50		
Positive Rank	1	2.50	2.50	1.00	$p > 0.05$
Equal	1				

No significant difference was found in the Wilcoxon Signed Ranks Test results between the pretest and posttest scores of the control group in the achievement test. Based on these results, there is no significant increase in

the pretest-posttest knowledge levels of the control group with conventional teaching.

There is no significant difference between the pretest scores of the experimental and control groups in the achievement test.

Table 11. Results of the Mann Whitney U Test on the Total Pretest Scores of Groups in the Achievement Test

Group	n	Rank Average	Sum of Ranks	Mann Whitney U	z	p
Experimental	5	5.60	28.00	12.00	0.11	p>0.05
Control	5	5.40	27.00			

No significant difference was found in the Mann Whitney U Test results in the pretest scores of groups in the achievement test. Based on these results, experimental and control groups appear to be equivalent in total pretest scores in the achievement test.

There is a significant difference between the posttest scores of the experimental and control groups in the achievement test.

Table 12. Results of the Mann Whitney U Test on the Total Posttest Scores of Groups in the Achievement Test

Group	n	Rank Average	Sum of Ranks	Mann Whitney U	z	p
Experimental	5	8.00	40.00	0.00	2.73	p<0.01
Control	5	3.00	15.00			

A significant difference of 0.01 was found in the Mann Whitney U Test results in the posttest scores of the groups in the achievement test. Based on these results, there is a significant difference in the achievement scores of the groups in favor of the experimental group with peer teaching over the control group with conventional teaching.

Findings on Hypothesis 2

There is a significant difference between the total scores of the experimental and control groups in their attitude towards the guitar class.

Findings on the scores of experimental and control groups in their attitude towards the guitar class are presented in the tables below.

Table 13. Descriptive Values of the Total Scores of Groups in Their Attitude Towards the Teaching Profession

	n	\bar{X}	SD
Experimental Pretest	5	134.0	10.98
Experimental Posttest	5	150.0	7.01
Control Pretest	5	133.4	3.80
Control Posttest	5	133.0	3.68

The average of total pretest scores of the experimental group in teaching profession attitude is $\bar{X}=134.0$, standard deviation is $SD=10.98$, the average of total posttest scores is $\bar{X}=150.0$, standard deviation is $SD=7.01$. The average of total pretest scores of the control group in teaching profession attitude is $\bar{X}=133.4$, standard deviation is $SD=3.80$, the average of total posttest scores is $\bar{X}=133.0$, standard deviation is $SD=3.68$.

The highest average of scores in teaching profession attitude, $=150.0$, was obtained in the posttest scores of the experimental group, and the lowest average, $=133.0$, was obtained in the posttest scores of the control group. Comparable scores were observed in the average pretest scores of the groups.

In the analysis of descriptive values, posttest averages of the experimental and control groups indicate to a significant difference in favor of the experimental group. Pretest averages of the groups indicate that the groups were equivalent prior to the training.

There is a significant difference between the pretest scores and posttest scores of the experimental group in the attitude towards the guitar class.

Table 14. Results of the Wilcoxon Signed Ranks Test on the Total Pretest-Posttest Scores of the Experimental Group in Teaching Profession Attitude

Experimental Group pretest - posttest	n	Rank Average	Sum of Ranks	z	p
Negative Rank	0	.00	.00		
Positive Rank	5	3.00	15.00	2.03	$p<0.05$
Equal	0				

A significant difference of 0.05 was found in the Wilcoxon Signed Ranks Test results between the pretest and posttest scores of the experimental group in teaching profession attitude. Based on these results, the experimental group with peer teaching improved in the attitude towards the teaching profession.

There is no significant difference between the pretest scores and posttest scores of the control group in the attitude towards the guitar class.

Table 15. Results of the Wilcoxon Signed Ranks Test on the Total Pretest-Posttest Scores of the Control Group in Teaching Profession Attitude

Experimental Group pretest - posttest	n	Rank Average	Sum of Ranks	z	p
Negative Rank	2	4.00	8.00		
Positive Rank	3	2.33	7.00	-.137	p>0.05
Equal	0				

No significant difference was found in the Wilcoxon Signed Ranks Test results between the pretest and posttest scores of the control group in teaching profession attitude. Based on these results, the control group with conventional teaching does not improve the attitude towards the teaching profession.

There is no significant difference between the pretest scores of the experimental and control groups in the attitude towards the guitar class.

Table 16. Results of the Mann Whitney U Test on the Total Pretest Scores of Groups in Their Attitude Towards the Teaching Profession

Group	n	Rank Average	Sum of Ranks	Mann Whitney U	z	p
Experimental	5	5.60	28.00	12.000	0.10	p>0.05
Control	5	5.40	27.00			

No significant difference was found between the groups in pretest scores of the groups in the attitude towards the teaching profession according to the Mann Whitney U Test. Based on these results, experimental and control groups appear to be equivalent in total pretest scores in their attitude towards the teaching profession.

There is a significant difference between the posttest scores of the experimental and control groups in the attitude towards the teaching profession.

Table 17. Results of the Mann Whitney U Test on the Total Posttest Scores of Groups in Their Attitude Towards the Teaching Profession

Group	n	Rank Average	Sum of Ranks	Mann Whitney U	z	p
Experimental	5	7.40	37.00	3.000	1.99	p<0.05
Control	5	3.60	18.00			

A significant difference of 0.05 was found in the Mann Whitney U Test results in the posttest scores of the groups in teaching profession attitude in favor of the experimental group.

Findings on Hypothesis 3

There is a significant difference between the total scores of the experimental and control groups in the observation form.

Findings on the scores of experimental and control groups in observation are presented in the tables below.

Table 18. Descriptive Values of the Total Scores of Groups in Observation

	n	\bar{X}	SD
Experimental Pretest	5	73.0	4.74
Experimental Posttest	5	142.8	2.59
Control Pretest	5	70.4	5.63
Control Posttest	5	119.0	10.53

The average of total pretest scores of the experimental group in observation is $\bar{X}=73.0$, standard deviation is $SD = 4.74$, the average of total posttest scores is $\bar{X}=142.8$, standard deviation is $SD = 2.59$. The average of total pretest scores of the control group in observation is $\bar{X}=70.4$, standard deviation is $SD = 5.63$, the average of total posttest scores is $\bar{X}=119.0$, standard deviation is $SD = 10.53$.

The highest average of scores in observation, $\bar{X} = 142.8$, was obtained in the posttest scores of the experimental group, and the lowest average, $\bar{X} = 70.4$, was obtained in the posttest scores of the control group. Comparable scores were observed in the average pretest scores of the groups.

In the analysis of descriptive values, posttest averages of the experimental and control groups indicate to a significant difference in favor of the experimental group. Pretest averages of the groups indicate that the groups were equivalent prior to the training.

There is a significant difference between the pretest scores and posttest scores of the experimental group in the observation form.

Table 19. Results of the Wilcoxon Signed Ranks Test on the Total Pretest-Posttest Scores of the Experimental Group in Observation

Experimental Group pretest - posttest	n	Rank Average	Sum of Ranks	z	p
Negative Rank	0	.00	.00		
Positive Rank	5	3.00	15.00	2.02	p<0.05
Equal	0				

A significant difference of 0.05 was found in the Wilcoxon Signed Ranks Test results between the pretest and posttest scores of the experimental group in observation. Based on these results, the experimental group with peer teaching improved in observation scores, which indicates that the group that performs the peer teaching program shows better guitar performance after teaching activities.

There is no significant difference between the pretest scores and posttest scores of the control group in the observation form.

Table 20. Results of the Wilcoxon Signed Ranks Test on the Total Pretest-Posttest Scores of the Control Group in Observation

Experimental Group pretest posttest	n	Rank Average	Sum of Ranks	z	p
Negative Rank	0	.00	.00		
Positive Rank	5	3.00	15.00	2.02	p<0.05
Equal	0				

A significant difference of 0.05 was found in the Wilcoxon Signed Ranks Test results between the pretest and posttest scores of the control group in observation. Based on these results, the control group with conventional teaching shows improvement in pretest and posttest observation scores.

There is no significant difference between the pretest scores of the experimental and control groups in the observation form.

Table 21. Results of the Mann Whitney U Test on the Total Pretest Scores of Groups in Observation

Group	n	Rank Average	Sum of Ranks	Mann Whitney U	z	p
Experimental	5	5.80	29.00	11.000	0.31	p>0.05
Control	5	5.20	26.00			

No significant difference was found between the groups in pretest scores of the groups in observation according to the Mann Whitney U Test. Based on

these results, experimental and control groups appear to be equivalent in total pretest scores in observation.

There is a significant difference between the posttest scores of the experimental and control groups in the observation form.

Table 22. Results of the Mann Whitney U Test on the Total Posttest Scores of Groups in Observation

Group	n	Rank Average	Sum of Ranks	Mann Whitney U	z	p
Experimental	5	7.60	38.00	2.000	2.19	p<0.05
Control	5	3.40	17.00			

A significant difference of 0.05 was found in the Mann Whitney U Test results in the posttest scores of the groups in observation in favor of the experimental group.

CONCLUSION, DISCUSSION AND SUGGESTIONS

A significant difference was found in the achievement test between posttest scores of the experimental group with peer teaching and the control group with conventional teaching in favor of the experimental group. Based on these results, the experimental group with peer teaching reinforces the knowledge level of subjects relevant to the pieces studied, whereas the control group does not give adequate attention to learn the fundamentals of the pieces studied. It can be concluded that students in the experimental group reached an adequate comprehension level on the fundamental outcome concerning the pieces studied. The practice of peer teaching improves the knowledge level of students on their studies. Moreover, as students can overlook theoretical content of the pieces when they only concentrate on performance as they study the instrument, it is believed that peer teaching can offer a new perspective and study habit for students.

According to a review of the musical studies on whether peer teaching affects cognitive achievements of students, Johnson (2017) states that education supported with peer teaching has a significant impact on the theoretical musical knowledge of orchestra students in terms of the cognitive aspect of the quasi-experimental research performed with seventh-year orchestra students, but no significant difference was observed between the groups. Darrow, Gibbs and Wedel (2005) evaluated whether peer teaching affects students of general music courses across the class. The model, without experimental and control groups, investigated the potential impact of peer teaching on the achievement levels of teaching and learning students. It was observed that peer teaching is an effective educational tool in the teaching of the treble clef in music. Among other studies on peer teaching, significant results were obtained in favor of the peer teaching group in studies where Top and Osguthorpe (1987) measured the impact on the reading skills of

fourth year students with learning disabilities and behavior disorders, Tokgöz (2007) measured the effects on the attitudes and recollection levels of sixth year students on the subject of flowing electricity in the science class, Greenwood et al. (1987) measured the impact on reading skills of students, and Eryılmaz (2004) analyzed the effects of peer teaching enriched with concept tests on the achievement of tenth year students in the physics class and their attitude towards the class. It is seen that these studies, which measured the potential effects of peer teaching on the achievement levels of students, overlap with the results of this research.

A significant difference was found in attitude towards the teaching profession between posttest scores of the experimental group with peer teaching and the control group with conventional teaching in favor of the experimental group. Based on these results, there is a significant difference in attitude towards the teaching profession between the experimental group with peer teaching and the control group with conventional teaching. This indicates that the subjects in the experimental group with peer teaching saw positive effects on their attitudes through the behaviors they gained from teaching activities, whereas there was no similar difference in the control group. It can be said that this educational tool, used with subjects who are also prospective teachers, improved teaching skills in favor of the experimental group, and created a valuable prelude into their profession with other positive behaviors they gained.

Curricular and extracurricular activities are used abundantly in music education. Future teachers are expected to gain professional skills in a short period of time in music teaching education. Students who enroll in music teaching departments undergo an effective training process from the start of their education to their graduation. Therefore, music teachers need to cultivate professional motivation, commitment and responsibility during their own education process. Acquisitions in this direction help music teachers change the behavior of students according to the objectives of music education.

Music education is based on the training of appreciation. Throughout their education process, students gain various skills and learn how to appreciate music. Accordingly, a music teacher needs to be enthusiastic and motivated professionally and towards the students in order to be active in the class. It is observed that peer teaching practices positively guide the attitudes of prospective music teachers towards their profession.

Among studies on future music teachers, Ercan and Orhan (2016) organized a four-week peer teaching program for private instrument education courses of prospective music teachers, interviewed the students after the program, and gathered qualitative data. Results of the study showed that prospective teachers who gave lessons in peer teaching gained broader professional experience, recognized their shortcomings and improved in this way. Although there is a limited number of studies on prospective and active music teachers, it is observed that applications with peer teaching models are rapidly integrated into teacher education practices. Peer-modeled studies on

future and current teachers in various disciplines (Woolhouse 1999; Sluijsmans et al. 2002; Sluijsmans et al. 2004, Wen and Tsai. 2008; Demirci and Şekercioğlu 2009; Madsen, 2011, Mirzeoğlu and Özcan 2015; Ercan and Yıldırım, 2016) have been increasing in number in recent years.

Baker (2008) analyzed the effects of peer teaching on the piano sight-reading skills and attitudes among the undergraduate music department students, and found a significant difference in piano sight-reading skills in favor of Piano IV students, who constituted the teaching group, compared to the control students, and attitude of the students in the Piano II experimental group changed towards higher confidence in piano sight-reading compared to the control students.

A significant difference was found in the posttest scores in the observation form between the experimental group with peer teaching and the control group with conventional teaching in favor of the experimental group. Based on these results, there is a significant difference in observation scores between the experimental group with peer teaching and the control group with conventional teaching. In instrument training, vocalization of the pieces or etudes studied in the class by the teacher is considered important for the training process. It can be said that the experimental group with peer teaching studied with a higher sense of responsibility compared to the control group with the aim of displaying guitar performance during teaching activities. A significant difference in performance was observed in favor of the experimental group.

A significant difference was found between the total pretest and posttest observation scores of the control group. Based on these results, there was an increase between the pretest and posttest observation scores of the control group with conventional teaching. The researcher while designing the study hypothesized that there would be no significant difference between the pretest and posttest scores of the control group. Both groups were given a similar training by the researcher. Although it was observed that the training would naturally improve performance, the analysis on the effects of peer teaching was expected to show a significant difference in favor of the experimental group between the pretest and posttest scores of the two groups. The actual outcome of the study was the question whether there would be a difference between the posttest scores of the groups. An improvement in guitar performance was observed after the teaching activities of the peer teaching group of the study.

There is a limited number of studies in literature on the effects of peer teaching on music and instrument training. The study by Alexander and Dorow (1983) featured two experiments to measure the effects of peer teaching on the instrument training of fourth year elementary school students. In the first experiment, there was no significant difference between teaching students and the control students, but a significant difference emerged between the learning group and the control group in favor of the learning group. In the second experiment, teaching students were divided into two groups of affirmation or no affirmation of students during the

lessons. At the end of the study, there was a significant difference between the affirmed group and the control group. However, there was no significant difference between the unaffirmed students and the control students. Johnson (2017) conducted a quasi-experimental study on seventh year orchestra students, and found a significant effect of peer teaching on the sight-reading skills of orchestra students, but there was no significant difference between groups. Kusek (2017) investigated the effects of peer teaching on the rhythm counting skills of sixth, seventh and eighth year secondary school orchestra students. The study showed that there was no difference between groups compared to teacher-oriented training, but pretest and posttest scores of students were higher with both educational tools. According to these studies, peer teaching creates significant differences for teaching and learning students and it was concluded that peer teaching is an effective educational tool with profound impact on music training. These studies showed no significant difference between the posttest performances of experimental and control groups. It is believed that the reason behind the incompatibility between these studies and the results of this research is certain inadequacies in the temporal design of studies on the skill development of subjects in experimental groups between before and during the experiments. This research featured regular group lessons for the experimental and control groups by the researcher at different times. As instrument training is a performance-based domain, it was considered that the researcher would need to have regular group lessons to inspect student performances because it would be problematic for teaching students to approve their own performance. In this sense, it is believed that this research created a significant difference in terms of guitar performance in favor of the teaching group.

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A STUDY OF PROSPECTIVE CLASSROOM TEACHERS' MUSIC ACHIEVEMENT GOAL ORIENTATIONS

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Introduction

There are many definitions of achievement goal orientation in the literature. Elliot, (1999), defined *achievement goal* as “cognitive representation[s] of a competence based possibility that an individual seeks to attain” (p. 628). Achievement goal orientations are defined as a set of beliefs that cause students to differ in their responses to achievements or failures in the standards they use to assess their performances for the purposes they have in order to complete an academic assignment (Ames, 1992; Elliott & McGregor, 2001; Meece, Blumenfeld & Hoyle, 1988; Midgley et al., 2000).

Achievement goals emphasize how individuals think about their own performance and duties (Ames, 1992; Maehr, 1989; Nicholls, 1989). The theory of achievement orientations (Pintrich and Schunck, 1996) explores how individuals interpret and respond to events and self-sufficiency, examining criteria and standards that individuals use to evaluate their beliefs and performances toward success (Dweck and Leggett, 1988). When the literature, examined, it is suggested that researchers (Dweck and Leggett, 1988) have two types of achievement orientation: a) a learning orientation directed at developing competence and b) a performance orientation directed at proving competence or avoiding inability.

When student profiles of classroom teacher departments are examined, it is seen that most students do not receive regular music education pre-university. When the theory of achievement goal orientation is considered, it is considered that the attitudes towards the learning activities of classroom teacher candidates who take music education will affect their attitudes, participation levels and academic achievements in the classes. Researches (Lin & Lin, 2016) reveals that achievement goal motivation theory might be a powerful framework for understanding student engagement, persistence on tasks, and academic reliance (p.2). When the literature is examined, it is seen that the success tendencies are considered as a general feature of the learning-teaching process in the great majority of the researches related to the achievement orientations. In other words, for the majority of the studies, success tendencies were tried to be determined in general without aiming at any area (Anderman, Austin & Johnson, 2002). Elliot and Harackiewicz (1996) point out that learning aims enhance inner motivation. From this point of view, it is thought that the determination of achievement goal orientations which is an important element of motivation of classroom teacher candidates and the elimination of deficiencies are important for the necessary studies to increase the motivation of teacher candidates towards music learning. Thus the purpose of this study was to investigate the music achievement goal orientations of prospective classroom teachers.

Method

This study was a descriptive study that explored the music achievement goal orientations of prospective classroom teachers. The study made use of a

general screening model. In this context, the following questions were tried to be answered in the study:

1. What are music achievement goal orientation levels of prospective teachers studying in classroom teaching program?
2. Do the music achievement goal orientation levels of prospective classroom teachers show a significant difference
 - according to gender?
 - according to music course achievement scores?
 - according to music course achievement scores?
 - according to type of high school graduated from?
 - according to pre-university music education status?
 - according to academic achievement scores?

Participants

Participants of the research is consists of 82 prospective classroom teachers taking music and music teaching course at the primary school teaching department of the education faculty at a university located in mediterranean region of Turkey during spring semester of 2016-2017 academic year. This study has employed "criterion sampling method", one of the purposive sampling methods. According to Patton, (1990) "the logic and power of purposeful sampling lies in selecting in formation-rich cases for study in depth (p.169). In selection of the pre-service teachers, basic criterion has been established as being 2th graders of primary school teaching program who have taken music and music teaching course and completed their music trainings. All of the preservice teachers who are 2th graders took part in the study. Demographic information about the participants is provided in Table 1.

Table 1. Demographic information of participants

		n	%
Gender	Female	57	69,5
	Male	25	30,5
	Total	82	100,0
Type of high school graduated from	Regular High School	48	58,5
	Vocational High School	2	2,4
	Anatolian High School	28	34,1
	Other	4	4,9
	Total	82	100,0
Pre-university music education status	Primary School	28	34,1
	Secondary School	20	24,4
	High School	28	34,1
	Primary , Secondary & High School	3	3,7
	Primary & Secondary School	3	3,7
Music Course Achievement Score	10-50	15	18,3
	51-70	52	63,4
	70-80	10	12,2
	81-100	5	6,1
	Total	82	100,0

Instruments

The "personal information form", and Turkish version of the 2x2 "Achievement Goals Questionnaire" (Elliot & Murayama, 2008) were used in the research as data collection tools. This instrument was developed by Elliot and Murayama (2008) and includes 12 items and 4 subscales: performance-approach goals (1,2,3 items), mastery-avoidance goals (4,5,6 items), mastery-approach goals (7,8,9 items) and performance-avoidance goals (10,11,12 items).

The Cronbach Alpha coefficients of internal consistency were found as .84 for mastery-approach, .87 for mastery- avoidance, .92 for performance-approach, and .94 for performance-avoidance. Factor loadings of 2x2 Achievement Goal Orientations Scale ranged from .73 to .93 and each response is made on a five-point Likert scale anchored by, strongly agree (5) and , strongly disagree (1). In order to determine which goal orientations a student adopts, the total score of the each subscale should be divided by total item number in that subscale (Arslan & Akin, 2015, p.14). The Turkish version of the 2x2 Achievement Goals Questionnaire adapted by Arslan & Akin (2015).

Procedure

The items on “Achievement Goals Questionnaire” do not refer to a particular academic or performance context, however, participants were directed to respond in accordance to their beliefs about music courses. Before the scale is filled out, it is explained how the teacher candidates should be filled in. After the application, the collected questionnaires were examined and missing questionnaires or never filled were excluded from the scope of the research and the remaining 82 scales were included in the research.

Data analysis

Having checked whether the data satisfied the general conditions of parametric tests by Kolmogorov-Smirnov normality test, t-test was performed on independent groups to see whether there was a significant difference between genders and One-Way Analysis of Variance (ANOVA) was conducted to identify the differences with respect to the type of high school graduated from, pre-university music education status, music course achievement scores, and academic grade point average. In order to identify the groups for which ANOVA test revealed significant differences, Scheffe's test was employed. The significance level was taken as $p < 0.05$.

Results

In this section, the findings have been presented by statistical analyses of the data collected.

Table 2. The results of the prospective classroom teachers' music achievement goals.

Items	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree	\bar{X}	Sd
(N=82) In Music Course...	f-%	f- %	f-%	f- %	f- %		
It is important for me to do better than other students.	20/24.4	45/54.9	16/19.5	1/1.2	-	4.02	.702
It is important for me to do well compared to others in this class.	25/30.5	42/51.2	12/14.6	3/3.7	-	4.08	.773
My goal in this class is to get a better grade than most of the other students.	14/17.1	28/34.1	22/26.8	15/18.3	3/3.7	3.42	1.08
I worry that I may not learn all that I possibly could in this class.	14/17.1	55/67.1	9/11.0	3/3.7	1/2.5	3.95	.735
Sometimes I'm afraid that I may not understand the content of this class as thoroughly as I'd like.	23/28.0	36/43.9	16/19.5	5/6.1	2/2.4	3.89	.968
I am often concerned that I may not learn all that there is to learn in this class.	16/19.5	44/53.7	17/20.7	5/6.1	-	3.86	.797
I want to learn as much as possible from this class.	17/20.7	31/37.8	13/15.9	15/18.3	6/7.3	3.46	1.21
It is important for me to understand the content of this course as thoroughly as possible.	11/13.4	28/34.1	17/20.7	20/24.4	6/7.3	3.21	1.17
I desire to completely master the material presented in this class.	18/22.0	27/32.9	13/15.9	19/23.2	5/6.1	3.41	1.23
I just want to avoid doing poorly in this class.	25/30.5	39/47.6	12/14.6	4/4.9	2/2.4	3.98	.936
My goal in this class is to avoid performing poorly.	25/30.5	46/56.1	9/11.0	2/2.4	-	4.14	.704
My fear of performing poorly in this class is often what motivates me.	22/26.8	45/54.9	10/12.2	4/4.9	1/1.2	4.01	.838

As shown in the table 2, frequency distribution revealed that the highest agreement was on the sub-dimension of performance-avoidance goals: 86.6 % of the participants agreed with the item that "it is important for me to do better than other students". On the other hand, the item with the lowest mean ($= 3.21$) was "it is important for me to understand the content of this course as thoroughly as possible" which belongs to perceived mastery-approach goals. 47.5 % of the students agreed on the item.

Table 3. Descriptive statistics to prospective teachers' perceptions of "performance-approach goals" sub-dimension

Items	n	\bar{X}	sd	Comment
1 It is important for me to do better than other students.	82	4.02	.702	Agree
2 It is important for me to do well compared to others in this class.	82	4.08	.773	Agree
3 My goal in this class is to get a better grade than most of the other students.	82	3.42	1.08	Agree
Overall average	82	3.84	.63	Agree

When table 3 is examined, it is seen that the teacher candidates give opinions on the level of "agree" ($\bar{X} = 3.84$) on the items of the "performance-approach goals" sub-dimension.

Table 4. Descriptive statistics to prospective teachers' perceptions of "mastery-avoidance goals" sub-dimension

Items	n	\bar{X}	sd	Comment
4 I worry that I may not learn all that I possibly could in this class.	82	3.95	.735	Agree
5 Sometimes I'm afraid that I may not understand the content of this class as thoroughly as I'd like.	82	3.89	.968	Agree
6 I am often concerned that I may not learn all that there is to learn in this class.	82	3.86	.797	Agree
Overall average	82	3.90	.61	Agree

When table 4 is examined, it is seen that the teacher candidates give opinions on the level of "agree" ($\bar{X} = 3.90$) on the items of the "mastery-avoidance goals" sub-dimension.

Table 5. Descriptive statistics to prospective teachers' perceptions of "mastery-approach goals " sub-dimension

	Items	n	\bar{X}	sd	Comment
7	I want to learn as much as possible from this class.	82	3.46	1.21	Agree
8	It is important for me to understand the content of this course as thoroughly as possible.	82	3.21	1.17	Uncertain
9	I desire to completely master the material presented in this class.	82	3.41	1.23	Agree
	Overall average	82	3.36	.71	Uncertain

When table 5 is examined, it is seen that the candidates have the most positive opinions for "I want to learn as much as possible from this class." ($\bar{X} = 3.46$) and "I desire to completely master the material presented in this class." ($\bar{X} = 3.41$). On the other hand, the items that teacher candidates have expressed in the "uncertain" directions was only one statement (it is important for me to understand the content of this course as thoroughly as possible). Prospective music teachers' average score to the overall "mastery-approach goals " sub-dimension is ($\bar{X} = 3.36$).

Table 6. Descriptive statistics to prospective teachers' perceptions of "performance-avoidance goals " sub-dimension

		n	\bar{X}	sd	Comment
10	I just want to avoid doing poorly in this class.	82	3.98	.936	Agree
11	My goal in this class is to avoid performing poorly.	82	4.14	.704	Agree
12	My fear of performing poorly in this class is often what motivates me.	82	4.01	.838	Agree
	Overall average	82	4.04	.67	Agree

As shown in the tables 3,4,5 and 6 descriptive statistics indicated that "performance-avoidance goals" were most strongly endorsed by prospective teachers ($\bar{X} = 4.04$).

Table 7. T test result of prospective classroom teachers according to genders

Gender	n	\bar{X}	ss	sd	t	p
Female	57	3,91	,38	80	3,79	,000*
Male	25	3,50	,57			

*p<0.05

As table 7 demonstrates, the analysis results show that there is a significant difference according to genders ($p < .05$). Accordingly, it can be said that female students achievement goal levels ($= 3.91$) was higher than male students ($= 3.50$).

Table 8. Result of one-way analysis of prospective classroom teachers according to music course achievement scores

Variance source	Sum Square	df	Mean Square	f	p	(Scheffe)
Between groups	3,111	3	1,037	5.098	.003*	
Within groups	15,865	78	.203			1-3 3-4
Total	18,976	81				

* $p < 0.05$ 1- (10-50) 3- (71-80) 4- (81 +)

As table 8 shows, statistically there is a statistically significant difference between students' achievement goal levels and the variable of music course achievement scores [$F (3-78) = 5.098$; $p < 0.05$]. According to the results of the Scheffe's test, which was performed to identify the source of the difference, students with a final grade of 71-80 in the music course had higher achievement goal levels.

Table 9. Result of one-way analysis of prospective classroom teachers according to variables of type of high school graduated, pre-university music education status and academic achievement scores

Variables	Variance source	Sum of Square	df	Mean Square	F	p
Type of high school graduated from	Between groups	1.272	3	.424	1.868	.142
	Within groups	17.704	78	.227		
	Total	18.976	81			
Pre-University Music Education Status	Between groups	2.061	4	.515	2.034	.062
	Within groups	16.915	77	.220		
	Total	18.976	81			
Academic Achievement Score	Between groups	.266	2	.133	.562	.572
	Within groups	18.709	79	.237		
	Total	18.976	81			

As table 9 demonstrates, there is no statistically significant difference between students' achievement goal levels and the variables of type of high school graduated from [$F (3-78) = 1.868$; $p > .05$], pre-university music

education status [$F(4-77) = 2.034$; $p > .05$] and academic achievement scores [$F(2-79) = .562$; $p > .05$].

Conclusion and Discussion

This study attempted to identify the music achievement goal orientations of prospective classroom teachers. Based on the study results, it was determined that teacher candidates give opinions on the level of "agree on the subscales of "performance-approach goals" ($\bar{X} = 3.84$), "mastery-avoidance goals" ($\bar{X} = 3.90$) and "performance-avoidance goals" ($\bar{X} = 4.04$). On the other hand, the items that teacher candidates have expressed in the "uncertain" directions was only one statement (It is important for me to understand the content of this course as thoroughly as possible). Prospective music teachers' average score to the overall "mastery-approach goals" sub-dimension is ($\bar{X} = 3.36$).

"Mastery goal orientation, means that the child is focused on improving their skills, mastering material, and learning new things. Questions such as "How can I do this task?" and "What will I learn?" reflect mastery goals. The second goal orientation, called performance or ego orientation, means that the child focuses on maximizing favorable evaluations of their competence and minimizing negative evaluations of competence. Questions such as "Am I doing this task better than my friend?" and "Does completing this task make me look smart?" reflect performance goals" (Wigfield & Cambria, 2010, p.7).

It is indicated that the *mastery* goal oriented teachers have higher self-efficacy for teaching than the *work avoidance* goal oriented teachers (Nitsche, Dickhäuser, Fasching and Dresel, 2011). Dresel et al. (2013) found that teachers with high mastery goals make more frequent use of cognitively and motivationally stimulating strategies of teaching (cited by Daumiller, Grassinger, Dickhäuser and Dresel, 2016, p.4).

In the light of literature (Senko et al., 2011) overall achievement is positively related to mastery goals and mostly negatively related to performance avoidance goals (cited by Daumiller, Grassinger, Dickhäuser and Dresel (2016, p.3).

According to Daumiller, Grassinger, Dickhäuser and Dresel (2016, p.3), achievement goals are also related differently to other aspects of motivation, such as self-efficacy. "Mastery goals have consistently and positively been associated with self-efficacy (Ames, 1992; Pintrich, 2000a), performance avoidance goals have been negatively associated with self-efficacy" (Daumiller, Grassinger, Dickhäuser and Dresel (2016, p.3).

According to Koca (2013), "self-efficacy is important for the prospective teachers to be more efficient and effective in music activities they will perform with their students. Hoy and Spero (2005:345) state that 'teachers with higher efficacy judgments tend to be more open to new ideas, more willing to experiment with new methods to better meet the needs of their

students, and more committed to teaching'. Parallel to this view, Hsiao et al. (2011) have also stated that teachers who have a high sense of self-efficacy are usually effective approaches and also implement new educational practices in the classroom" (p.900).

Previous studies (Garvis, 2013; Hash, 2009; Koca, 2013) revealed that prospective classroom teachers have low sense of self-efficacy in terms of music training. Kane (2005) have also stated that 'teachers with low levels of perceived efficacy related to music teaching have been shown to be less confident to teach music'. "International researches (Abril & Gault, 2005; Bresler, 1993; Hash, 2010; Holden & Button, 2006; Krehbiel, 1990; Russell-Bowie, 2009) carried out on musical education have revealed that the music training provided in primary education was considered less important compared to other courses and was not covered adequately" (Koca, 2016, p.144).

"A performance-approach orientation is focused on demonstrating competence and gaining favorable judgments, whereas a performance-avoidance orientation is focused on avoiding the demonstration of lack of competence and unfavorable judgments" (Gonida, Voulala & Kiosseoglou, 2009, p.54). Koca reveals (2016, p.144) that "confidence in the ability to teach music has been found to be a significant factor in the field of pre-service generalist teacher music education (Jeanneret, 1995; 1997; Hennessy, 2000; Holden & Button, 2006; Russell, 1996, cited in Collins, 2014, p.4)".

According to Daumiller, Grassinger, Dickhäuser and Dresel (2016, p.3), researches shows that achievement goals vary depending on individual factors such as age, gender, and competence level (Harackiewicz et al., 1998; Midgley et al., 2001; Nitsche et al., 2013). In the direction of these thoughts t-test was performed on independent groups to see whether there was a significant difference between genders and One-Way Analysis of Variance (ANOVA) was conducted to identify the differences with respect to the type of high school graduated from, pre-university music education status, music course achievement scores, and academic grade point average.

The findings of the study revealed that there is a significant difference according to genders ($p < .05$). Accordingly, it can be said that female students achievement goal levels ($\bar{X} = 3.91$) was higher than male students ($\bar{X} = 3.50$). Similar results was also demonstrated in the studies of Kenney-Benson et al., 2006 and Nitsche et al., 2013. These opinions supported the findings obtained from the research.

The study also indicated that there is a statistically significant difference between students' achievement goal levels and the variable of music course achievement scores [$F(3-78) = 5.098$; $p < 0.05$]. According to the results of the Scheffe's test, which was performed to identify the source of the difference, students with a final grade of 71-80 in the music course had higher achievement goal levels ($\bar{X} = 4.40$).

Another finding of the study is that there is no statistically significant difference between students' achievement goal levels and the variables of type of high school graduated from [$F(3-78) = 1.868$; $p > .05$], pre-university music education status [$F(4-77) = 2.034$; $p > .05$] and academic achievement scores [$F(2-79) = .562$; $p > .05$].

“According to the researchers, if a teacher knows the success goal orientations of the student, he can make some predictions about the student's potential success (Wentzel, 1989). As an educator it is useful to know which of the student's learning, performance-approach, or performance-avoidance goal orientations are adopted” (Arslan & Akin, 2015, p.9).

In line with the results of the research, it is recommended to conduct the necessary studies in order to determine the success goal orientations of the students by carrying out similar studies in different universities, to eliminate the deficiencies and to increase the motivation of the students towards learning.

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