

THE IMPACT OF ACCOMPANIMENT IN THE INSTRUMENTAL EDUCATION ON THE STUDENT'S MUSICAL DEVELOPMENT AND THEIR PERSPECTIVE ON THE COURSE ***Çalgı Eğitiminde Eşlikli Çalışmanın Öğrencinin Müziksel Gelişimine ve Derse Bakış Açısına Etkisi****Duygu SÖKEZOĞLU ATILGAN ******Gülşah TAZEGÜL *******ABSTRACT**

The aim of this research was to investigate the impact of piano-accompanied practice on the musical development of the students who are taking instrument education (violin) course in fine arts high schools, as well as their perspectives on the violin course. In line with this goal, studying with accompaniment and studying with a metronome were compared. The study group of the research consisted of 8 students selected for the experimental and control groups (experimental group [n=4] - control group [n=4]) among the violin students attending from 9th to 12th grade at Afyonkarahisar Fine Arts High School in the 2021-2022 academic year. In the research, the 'Post-test Control Group Model' was used. For the research, various evaluation criteria were examined and "Interim Observation Form", "Scoring Schelude" and "Questionary Form" were formed. During the 8-week experiment, the experimental group students worked with the accompaniment and the control group students worked with the metronome. Week 1 (deciphering phase) and Week 10 (post-test recordings) were not included in the 8-week training phase. In week 5, interim observation records were taken and in week 10, post-test records were taken. The recorded performances were evaluated by 5 experts. At the end of the study, it was concluded that piano-accompanied violin education had a positive impact on the musical development of the students and their perspective on violin course.

Keywords: Instrumental Education, Violin, Violin Education, Fine Arts High School, Accompaniment.

ÖZ

Bu araştırma; güzel sanatlar liselerinde çalgı eğitimi (keman) dersi alan öğrencilerin piyano eşlikle çalışmalarının müziksel gelişimlerine ve keman dersine bakış açılarına etkisini ortaya koymak amacıyla yapılmıştır. Bu amaç doğrultusunda eşlikli çalışma ile metronomla çalışma karşılaştırılmıştır. Araştırmanın çalışma grubunu; 2021-2022 eğitim-öğretim yılında Afyonkarahisar Güzel Sanatlar Lisesinde 9, 10, 11 ve 12. sınıfa giden keman öğrencileri arasından deney ve kontrol grupları (deney grubu [n=4] - kontrol grubu [n=4]) için seçilen 8 öğrenci oluşturmaktadır. Araştırmada, "Son Test Kontrol Gruplu Model" kullanılmıştır. Araştırma için çeşitli değerlendirme kriterleri incelenerek "Ara Gözlem Formu" ve "Deney/ Kontrol Grupları Puanlama Çizelgesi" oluşturulmuştur. Ayrıca deney ve kontrol grubu öğrencileri için "Çalışma Sonrası Keman Dersine Bakış Açılarına Yönelik Soru Formu" hazırlanmıştır. 8 hafta olarak belirlenen deney sürecinde deney grubu öğrencileri eserlerin kayıtlı eşlikleri, kontrol grubu öğrencileri belirlenen metronom hızları ile çalışmalarını gerçekleştirmişlerdir. 1. hafta (deşifre aşaması) ve 10. hafta (son test kayıtları) 8 haftalık eğitim aşamasına dâhil edilmemiştir. 5. haftada ara gözlem kayıtları, 10. haftada son test kayıtları alınmıştır. Kayıt altına alınan performanslar; "Ara Gözlem Formu" ve "Son Test Puanlama Çizelgesi" 5 uzman tarafından değerlendirilmiştir. Yapılan istatistiki analizler ve öğrencilerin verdikleri cevaplar doğrultusunda; piyano eşlikli keman eğitiminin öğrencilerin müziksel gelişimini ve keman dersine bakış açısını pozitif yönde etkilediği sonuçlarına ulaşılmıştır.

Anahtar Kelimeler: Çalgı Eğitimi, Keman, Keman Eğitimi, Güzel Sanatlar Lisesi, Eşlikli Çalma.

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Fine arts high schools are schools that provide music and art education in addition to culture courses after primary education. The music departments of these schools are secondary education institutions that prepare students for music teaching departments, conservatories, fine arts faculties and faculties that provide vocational music education. These schools offering 4-year education select their students from among those who succeed in the talent exam.

In music departments, students take courses such as music theory, choir, instrument training and piano for four years. The Individual Instrument Course has taken its place in the program under the new name "Instrument Education Course". The Instrument Education Course covers the training of various instruments such as stringed instruments, plucked string instruments and wind instruments. Students are directed to one of these instruments by the teachers based on their physical characteristics and in line with the student's wishes, and they receive training on this instrument for 4 years in the company of in-field teachers. One of these instruments is the violin, which belongs to the string family. Violin is one of the instruments that usually takes the first place in the instrument preference of students in fine arts high schools. In the curriculum of the 2021-2022 academic year in which the research was conducted, instrument education course hours were determined as 1 lesson hour in 9th and 10th grades and 2 lesson hours in 11th and 12th grades. In the curriculum of the 2022-2023 academic year, instrument education course hours were rearranged as 4 lesson hours in grades 9, 11 and 12 and 2 lesson hours in grade 10, which was in favor of the students who received instrument education. In addition, the course of the instrumental ensembles in 11th and 12th grades continues in the program.

There is no accompaniment lesson in the field courses of fine arts high schools. Piano accompaniment should immediately follow the deciphering phase and the familiarization phase of the piece. While playing the piece with accompaniment, the student has the chance to develop habits such as clean intonation, staying in tempo and playing together. In instrumental education classes, students usually have the opportunity to practice with accompaniment with the piano teacher allocating extra time during the instrument exam at the end of the year or at concert events, one or two weeks before they perform the works they will perform. Students may have problems with adapting to the accompaniment during the first playing with the accompaniment. This is also a situation that makes the student uneasy. Considering all these, in this study, the effect of playing with accompaniment in the instrument education (violin) course in fine arts high schools on the musical development of the student and his/her perspective on the violin course was investigated.

Fine Arts High Schools

The Basic Law of National Education stipulates that schools can be opened at the basic education and training level to educate individuals with special interests and talents in the field of fine arts. "Anatolian Fine Arts High Schools" were established to fulfill these objectives (Resmi Gazete, 1990: 4).

Anatolian fine arts high schools were opened in Istanbul in 1989 by the then Minister of National Education Avni Akyol, based on Article 33 of the National Education Basic Law No. 1739, which was amended in 1987 (Deniz, 2009: 10). Today, fine arts high schools have been opened in every province and continue their education in some big cities with three or more of them.

Anatolian fine arts high schools, which first started accepting students in the 1989-1990 academic year, aim to provide students with basic knowledge and skills related to fine arts and to serve as a source for raising qualified

people in the field of fine arts in addition to the general objectives of secondary education (Milli Eğitim Bakanlığı, 2015). In fine arts high schools, in addition to Visual Arts, there are fields of "Music, Turkish Folk Music and Turkish Art Music" and the number of students to be admitted to a branch is 30. In these schools, where students are admitted through an aptitude test, the number of students to be admitted to each field cannot exceed 2 sections each (Resmi Gazete, 2009). In the 2023-2024 academic year, the number of fine arts high schools reached 105 including private ones.

While one year of education was in the form of a preparatory class, within the scope of the "Restructuring of Secondary Education", with the decision of the Board of Education and Instruction dated June 07, 2005 and numbered 184, it was decided to abolish preparatory classes as of the 2005-2006 academic year and to reorganize the education periods according to four years (Yazıcı, 2016: 23). In addition, the term "Anatolian" was removed from the name of fine arts high schools. Fine arts high schools, which were opened under the General Directorate of Secondary Education, were transferred to the General Directorate of Vocational and Technical Education in line with the decision taken by the directorate in 2018 (Milli Eğitim Bakanlığı, 2018).

Music education in fine arts high schools is within the scope of vocational art education. These high schools have an important place in secondary education with the vocational education they provide in our country. The infrastructure of vocational music education in our country is mostly composed of fine arts high schools (Özder, 2009: 12).

Students who have started instrument education in fine arts high schools should plan the education they will receive during their education process on solid foundations and prepare their education programs according to the higher education institution. Correct planning in instrument education is important in getting efficient results. Accompanied playing is of great importance in this planning. Developing the ability to play together with accompaniment is one of the achievements that should be given throughout instrument education. The student is expected to fulfill gains such as intonation and playing in tempo while vocalizing together. It is thought that the student who has the opportunity to practice more with accompaniment during the semester or year will perform more comfortably before the exam and concert, and will also increase his/her musicality. It can be said that these studies will positively affect the student's perspective on instrument education courses and increase his/her commitment to his/her instrument.

Violin Education

The violin, which has a very wide sound range and sound color and a rich expressive power with these features, is perhaps the most well-known of all instruments. When we look at the history of this special instrument, although many sources state that it was emerged in Italy in the 15th/16th century, it can be said that the foundations of stringed instruments, and at the same time the violin, were laid at that time when people invented the bow and arrow (Şekerkan, 1996 cited in Yağışan & Aydın, 2013: 214).

Although the violin is considered to be an instrument of the Renaissance period (1450-1600) in terms of its emergence, it has experienced its own process of change and transformation in terms of structure, technique and violin literature - along with the periods in music history (Yağışan & Aydın, 2013: 215).

The violin has always been an instrument that has attracted the attention of composers, performers and listeners with its being a fretless instrument, having a wide sound range and effective sound. Its susceptibility to all kinds of music is also one of the reasons why it is preferred.

Within the scope of formal and non-formal education, it has been a frequently taught instrument in most environments where instrument education is practiced. The fact that it has the closest sound to the human voice, that its sound color is impressive, that it has a wide sound field and that it allows the player to make comments has made it a widespread and popular instrument in the world. The fact that it is a solo instrument is one of the reasons why it is preferred and privileged in music ensembles (Uslu, 2012: 2).

When violin courses begin, the teacher should first explain the development of the violin and bow to the present day and inform about the history of the violin. Each student should have their own instrument within their means. This is an important factor that will enable them to practice every day. In addition, violin education is a very long process that requires patient. It is essential for the student to devote enough time to his/her instrument and to create a regular study program. It is important that the student fulfills the homework and studies given by the teacher without interruption. Fenmen stated that students who are new to music can sometimes lose their courage in the face of the unfamiliarity and difficulties aroused by the first encounter with the instrument; the complex rules of music and the exercises that need to be done can make them weary (1997: 26). In this direction, basic playing techniques should be taught according to the level of the students. Students' bow control while playing the violin should be strengthened with etudes and finger exercises, and exercises related to these techniques should be included in the lessons. In this process, the teacher's encouragement and motivation can have a great impact on the success of the student.

Şendurur lists the current conditions that a student should have in an effective study process as follows: Mental State, Physical State, Spiritual State, Motivation, Study Spaces (2001: 163). Once these conditions are met, communication between the student and the teacher is an indispensable part of the violin course. In a good violin player, behaviors such as a musical ear with good hearing, a lot of patience and disciplined work are required and expected to be developed.

Since fine arts high schools are 4-year schools, the age at which students start violin is between 13-14. Although high school is considered too late to start playing a string instrument, students will have at least 4 years of undergraduate education to build on their high school education. With this in mind, violin courses should be given with more conscious and theoretical knowledge throughout the semesters, and students should not be forced to learn higher level skills before basic skills are acquired and reinforced properly. In addition to these, it is thought that accompanied studies should definitely be included in the program.

Accompanied Playing

The Turkish Language Association defines accompanied playing as "a set of sounds that form harmony with a certain melody and are divided into one or several parties" (Türk Dil Kurumu, 2024). Okan and Mohan Kömürcü defined the accompaniment course in music education institutions as the process of gaining or developing behaviors in the desired direction for the student to use the student's instrument or voice together with the piano accompaniment, and the instructor responsible for the course as the "accompanist" or "correpetitor" who uses the

accompaniment instrument (2020: 1417). Fenmen also said; "Do not miss the opportunity to "play together" as a duo, trio, etc. This will make your playing fluent and lively" (1997: 78).

Accompaniment is also important in terms of enriching music education and endearing it to students. "The school songs that music teachers use as materials are the most important tools in the process of developing students' vocal and musical senses. During the teaching of these songs, piano accompaniment is needed to support students' voices. Piano accompaniment enriches monophonic school songs harmonically and helps students get closer to polyphonic music" (Piji, 2006: 15).

Performing the piece with piano, guitar or an orchestra will increase the power and impact of the piece. In accompaniment courses, the piano is generally preferred because of its wide sound range and harmonic sensations. Thanks to this feature, the piano can convey the effect of playing a piece with an orchestra to the listener. The fact that the accompanist and soloist are in great harmony while playing together, and that they work together for a sufficient period of time, will ensure a better quality performance of the duo in the concerts to be held. Thus, the musicality-enhancing effect of playing with accompaniment will also be ensured.

Playing with accompaniment gives students the happiness of making music together, sharing and creating beautiful works together. It is considered important to practice with the accompaniment teacher at least once a week after the deciphering stage of the works that need to be played with accompaniment is completed in order to gain mastery of the work. This will improve the student's performance before the concert or exam. In addition, it is thought that playing with piano accompaniment will also contribute to students' performance with self-confidence and motivation.

Playing with piano accompaniment is also accepted as one of the processes of stepping into polyphony. "Playing pieces with accompaniment in violin education will provide benefits in every way. Especially the violinist who plays with a fixed-pitch instrument will pay a high level of attention to the sounds and intonation" (Angı, 2005: 53).

Many violin works and some etudes require piano accompaniment. In order to fully interpret, comprehend and internalize the piece, it is very important to provide the student with the opportunity to work with accompaniment. In fine arts high schools, students can only find this opportunity a week before exams or before concerts. The experience of playing with accompaniment shortly before a concert or an exam may cause students to have reservations about playing with accompaniment. While some fine arts high schools have this opportunity, the majority do not. The reason for this is that there are not enough piano teachers in many fine arts high schools and there is no "accompaniment" or "correpetition" course in the program. Coşkuner (2007) in his study titled "Teachers' Opinions on Piano-Accompanied Studies in the Individual Instrument Education Course in Anatolian Fine Arts High Schools (Strings) in Turkey" concluded that piano-accompanied works are included in fine arts high schools, but there is not enough help from piano teachers who will do the accompaniment. The reason for this is thought to be the scarcity of piano teachers in fine arts high schools and the intensity of the courses. Therefore, it can be said that students studying in these high schools may experience problems in their accompaniment studies. However, when an exam, recital or concert is planned, it can be said that both the accompanist and the students can complete their preparations with additional practice outside of school. Practices that go well until the moment of the exam or concert can often put students in trouble when it is time to play with the accompaniment. Çilden and Şendururur (2003: 1) expressed their opinion on this issue as follows; adding a

color with piano accompaniment will have important contributions in terms of creating an enjoyable working environment for the student, strengthening his/her enthusiasm for studying and developing a sense of self-confidence.

This research was conducted in order to find out the effect of working with piano accompaniment on the musical development of students taking instrument education (violin) courses and their perspectives on violin courses, and for this purpose, working with accompaniment and working with metronome were compared in the research. In this direction, the question "What is the effect of working with accompaniment in violin courses on the musical development of the student and his/her perspective on the violin course?" was determined as the problem statement of the research, and the sub-problems of the research were determined as follows.

1. Are there any differences between the 5th week interim observation results and post-test scores of the students in the experimental group in terms of accompaniment playing skills?
2. Are there any differences between the 5th week interim observation results and post-test scores of the students in the control group in terms of violin playing skills?
3. Are there any differences between the 5th week interim observation results of the experimental and control group students in terms of violin playing skills?
4. Are there significant differences between the post-test scores of the experimental and control group students in terms of violin playing skills?
5. How were the experimental and control group students' perspectives on violin course shaped after the study?

METHOD

Research Model

This research is an experimental study comparing accompanied practice and practice using a metronome in instrument education (violin) courses in fine arts high schools. Experimental research is a research model in which the data to be observed are produced and evaluated under the direct control of the researcher in order to test the cause-effect relationship. There is always a comparison in experimental research (Karasar, 2018: 120-121).

In the study, "post-test control group model" was used. In this model, there are two groups formed by random assignment. One of these groups is the experimental group and the other is the control group. Neither group is given a pre-test, only a post-test is administered to both groups at the same time. The averages of the scores of both groups from the post-test are compared (Sönmez & Alacapınar, 2018: 59). This study is a study in which a true experimental design is applied. "If individuals are randomly assigned to experimental and control groups, this is a true experimental design. Randomization is when all individuals have an equal chance of being in one of the experimental or control groups" (Mertens, 2015 cited in Hocaoğlu & Akkaş Baysal, 2019: 90). To randomly select participants, papers with their names can be drawn from a hat or box, dice or coin tossed, or a program that generates a random list of names can be used (Hocaoğlu & Akkaş Baysal, 2019: 90). In this study, students were determined by drawing papers with their names on them (by draw), which is one of the above-mentioned ways of

unbiased assignment. Since the students were admitted to the school where the study was conducted through an aptitude test, it is thought that they have similar qualifications among themselves.

In this study, the studies within the scope of the subject were investigated through a literature review, and the effects of working with threshold on musical development were examined. Literature review helps to find information about the topic you are interested in, to provide a theoretical basis for the research and to see the results of similar studies. It also contributes to finding out whether the research problem has been answered before by examining previous studies on the selected topic (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, & Demirel, 2023: 47). In the literature review of the research, the control groups were not touched in the studies conducted by Büyükköse (2023), Çikot (2019), Sonsel (2018), Kaleli (2017), Ergen (2010), Topoğlu (2010-2006) and Bağcı (2009). In order to make this research different and to avoid repetition of the literature, another method (working together with a metronome) was applied to the control group students to improve their playing skills. At the end of the experimental, the same post-test was administered to both groups, and the experimental and control group students were observed playing together with the accompaniment.

Study Group

The study group of the research consisted of 8 students selected for the experimental and control groups (experimental group [n=4] - control group [n=4]) among 9th, 10th, 11th and 12th grade violin students studying at Afyonkarahisar Fine Arts High School in the 2021-2022 academic year. Experimental group students were assigned as 3 girls and 1 boy; control group students were assigned as 4 girls. Experimental and control groups were determined by random assignment (by draw). Experimental and control group students were divided into one experimental and one control group at each grade level. The grade levels of the students were equal to each other. All students started their violin education at Afyonkarahisar Fine Arts High School. None of the students had had the opportunity to work professionally with accompaniment before.

Data Collection

In the study, various evaluation criteria were examined by reviewing the literature and "interim observation form" for the experimental part, "post-test experimental/control groups scoring schedule" for the post-test and "post-study questionnaire form on perspectives towards violin courses" for the students participating in the study were created. Expert opinions were consulted while creating the forms and schedule, and the forms and schedule were reshaped by taking into account the opinions and suggestions of the experts. Content validity of the forms and schedule was ensured by taking expert opinions. While creating the interim observation forms, judgmental measurement was utilized. Judgmental measurements are mostly aimed at psychological and sociological characteristics such as achievement, general ability, personality. Various tests, inventories, questionnaires, forms, etc. are developed for this purpose. Opinions are usually expressed in written or oral statements by the person concerned. Opinions are measured by individual questions and evaluated separately. Classification or ordinal scales can be used for answer choices. For example, "very good-good-medium-bad-very bad" and "no opinion" (Karasar, 2018: 181-182).

After the study, a "question form" was prepared to evaluate the students' perspectives on the violin course and applied to the students after the study. It was paid attention to use clear and understandable expressions in the questions, not to cause different interpretations and not to be directive.

For the study, a literature review was conducted, existing violin teaching methods and various resources were examined, and an 8-week accompaniment study program was prepared and submitted to expert opinions. The pieces with piano accompaniment to be played by the students were selected from the Suzuki Violin Method for 9th, 10th and 11th grade students, and N. Baklanova's Concerto in D minor for 12th grade students. The piano accompaniment of each of the determined pieces was played by an instructor from the Piano Department of Afyon Kocatepe University State Conservatory Music Department at four different tempos (by hitting one quarter on the metronome; 50-60-70-85 for 9th graders; 55-65-75-85 for 10th graders; 65-75-85-90 for 11th graders; 40-50-60-70 for 12th graders) and recorded by the researcher with a voice recorder. The transcription phase of the pieces (Week 1) and the post-test recording process (Week 10) were not included in the 8-week training phase of the study. While the experimental group students practiced with accompaniment recording, the control group students practiced their pieces using a metronome. Both groups were taken to a higher metronome speed every 2 weeks, and the experimental group was given an accompaniment recording recorded at the same metronome speed. The researcher conducted one course (40 minutes) per week with both experimental and control groups. In the 5th week of the study, video recordings were taken for the interim observation and in the 10th week, video recordings were taken for the post-test. The recordings were watched and scored by 5 experts. The data obtained were analyzed statistically and evaluated in the findings and interpretations section.

In the study, each student used his/her own individual instrument (experimental and control groups), the metronome application that can be installed on the phone (control group), and the accompaniment recordings sent to the students' phones by the researcher (experimental group).

Data Analysis

The data obtained from the interim observation form and the post-test scoring schedule prepared for the experimental and control groups were statistically analyzed. The data obtained were analyzed and interpreted in accordance with quantitative research methods. The data between the experimental and control groups were analyzed according to physical, musical and skill differences.

The findings obtained in the study were analyzed with SPSS 25.0 program. Cronbach's Alpha reliability analysis was performed to examine the reliability of the measurement tools. According to the research purpose, "independent sample t-test" was used to examine the difference between the experimental and control groups and "correlation analysis" was used to examine the relationship between the groups.

Table 1. Reliability Levels of the Measurement Tools Used in this Study

Measurement Tools	Cronbach's Alpha
Interim Observation Form	0,887
Post-test Scoring Schedule	0,766

When Table 1 is examined, it is determined that the reliability levels of the measurement tools are quite high (Cronbach's Alpha>0.70).

Descriptive analysis was used to analyze the data obtained from the question form directed to the students to evaluate the perspectives of the experimental and control group students towards the violin course. In descriptive analysis, data are summarized and interpreted under predetermined headings. The purpose of this analysis is to put the raw data into a form that readers can understand. For this purpose, the data obtained are first put in a logical order, then these descriptions (classifications) are interpreted and conclusions are reached. In this type of analysis, direct quotations are used to reflect the views of the interviewees in a striking way. Making some quotations from data sources is also useful for the reliability of the study (Altunışık, Coşkun, Bayraktaroğlu & Yıldırım 2004: 234). Meaningful and interrelated categorizations were made in the interview questions related to sub-problem 5 of this study and explained systematically in the findings section. While presenting the findings, direct quotations from the statements of the interviewed students were also included.

Ethical Declaration

In the research, all the rules in the Scientific Research and Publication Ethics Directive of Higher Education Institutions were followed and none of the 'Actions Contrary to Scientific Research and Publication Ethics' in the second part of the directive were carried out. The research was approved by Afyon Kocatepe University Social and Human Sciences Scientific Research and Publication Ethics Committee with the decision dated 15.10.2021 and numbered 2021/353. In addition, the necessary permissions were obtained from the Ministry of National Education for the implementation of the data collection tools and for working with the experimental and control groups. In addition, the parents of the students participating in the experimental and control groups were also asked for a parental consent form so that their children could participate in the study.

FINDINGS AND COMMENTS

The research was handled within the framework of the main problem "What is the effect of working with accompaniment in violin courses on the musical development of the student and his/her perspective on the violin course?". The findings related to the sub-problems created based on this problem were processed and interpreted.

Table 2. Normal Distribution Analysis Result for the Distribution of Data

Measurements	Central Tendency		Kurtosis-Skewness	
	Mean	Median	Kurtosis	Skewness
Interim Observation Performance Level	25,88	25,00	-0,355	0,549
Post-test Skill Levels	75,63	78,00	0,621	-0,708

As a result of the normal distribution analysis, it was determined that the data obtained from the central tendency measurements examined were from a normal distribution since the mean-median was close to each other and the kurtosis and skewness were between ± 2 (George & Mallery, 2010).

Table 3. Descriptive Findings for Levels

Matter/Measurement	Mean	s.s
Interim Observation Performance Level	25,88	5,07
Post-test Skill Levels	75,63	13,04

As a result of the scores obtained from the measurement tools created in Likert format, a score interval of 0.75 ($3/4=0.75$) was used to calculate the musical skill intermediate performance level of the participants. In this case, the range corresponding to each measurement level is calculated by adding a score interval of 0.75 to the initial

Musical Skill (13)	r																	1	0,843	0,960	
	p																			0,001*	0,001*
Performance Skill (14)	r																			1	0,952
	p																				0,001*
Skill Levels (15)	r																				1
	p																				

*p<0.01; Pearson correlation

Figure 2. Analysis Results of the Relationship between Variables in the Control Group

When the results of the correlation analysis in Figure 2 were analyzed, it was determined that there was a positive and highly significant relationship between the interim observation performance levels of the control group students and their post-test skill levels ($r=0.706$; $p<0.05$). This result means that when the students' skill levels are improved, their musical skill interim performance level will also improve at a high level. In addition, the highest relationship was found between playing in accordance with the character of the piece and performance skill dimensions ($r=0.742$; $p<0.01$).

When we look at the performance of the control group students between the interim observation and the post-test, we can say that the regular use of metronome by the control group students contributed to their violin playing skills and their performance improved positively. We can also add that the study methods in instrument education are interrelated and that each method to be applied is supportive and complementary to the other.

Findings and Comments Related to the Third Sub-Problem

The findings related to the third sub-problem, which was determined as "Are there any differences between the 5th week interim observation results of the experimental and control group students in terms of violin playing skills?" were obtained with the "Interim Observation Form" prepared to evaluate the experimental and control groups. The interim observation results were analyzed in terms of the criteria determined in the form and the results are given in the tables below (Table 4-14).

Table 4. Comparison of Harmony of Right and Left Hand Level of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
Harmony of right and left hand	Experimental	20	2,80	0,83	1,301	0,201
	Control	20	2,50	0,61		

t:Independent sample t-test

After the independent sample t-test conducted to compare the harmony of right and left hand level of the students in the experimental and control groups, no significant difference was found between the harmony of right and left hand level of the groups ($p>0.05$). Since all of the students participating in the study started and continued their violin education with the same teacher, we can say that it is an expected result that there is no difference in this criterion.

Table 5. Comparison of Posture Level of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	p
Posture	Experimental	20	2,80	0,70	0,831	0,411
	Control	20	2,60	0,82		

t:Independent sample t-test

After the independent sample t-test conducted to compare the posture level of the students in the experimental and control groups, no significant difference was found between the posture level of the groups ($p>0.05$). It can

be said that there is no physical difference between the experimental and control group students in the right-left hand harmony and posture criteria, both groups are equal, and the students' violin holding skills are the same.

Table 6. Comparison of Playing the Correct Note Level of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
Playing the correct note	Experimental	20	3,05	0,83	-0,402	0,690
	Control	20	3,15	0,75		

t:Independent sample t-test

After the independent sample t-test conducted to compare the playing the correct note level of the students in the experimental and control groups, no significant difference was found between the playing the correct note level of the groups ($p>0.05$).

Table 7. Comparison of Level of Playing the Rhythm of the Piece Correctly of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
Playing the rhythm of the piece correctly	Experimental	20	3,25	0,72	1,228	0,227
	Control	20	3,00	0,56		

t:Independent sample t-test

After the independent sample t-test conducted to compare of level of playing the rhythm of the piece correctly of the students in the experimental and control groups in terms of, no significant difference was found between the groups in terms of playing the correct scale of the piece ($p>0.05$).

Table 8. Comparison of Level of Paying Attention Nuances of the Piece of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
Paying attention to the nuances of the piece	Experimental	20	1,80	0,62	0,271	0,788
	Control	20	1,75	0,55		

t:Independent sample t-test

After the independent sample t-test conducted to compare of level of paying attention to the nuances of the piece the students in the experimental and control groups, no significant difference was found between the paying attention to the nuances of the piece level of the groups ($p>0.05$). In the interim observation evaluations of the experimental and control group students, it was observed that they did not pay much attention to the existing nuances while performing the pieces. At this stage, it is thought that students' vocalization by paying attention to nuance terms will come to the fore in the following weeks. It can be thought that students prioritized criteria such as playing the correct notes and complying with the rhythm in the first weeks.

Table 9. Comparison of Level of Paying Attention to Intonation of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
Paying attention to intonation	Experimental	20	1,95	0,83	0,728	0,471
	Control	20	1,75	0,91		

t:Independent sample t-test

After the independent sample t-test conducted to compare of level of paying attention to intonation of the students in the experimental and control groups, no significant difference was found between the paying attention to intonation level of the groups ($p>0.05$).

Table 10. Comparison of Level of Adapting to Accompaniment/Metronome of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
	Experimental	20	3,30	0,57	2,400	0,021*

Adapting to accompaniment/metronome	Control	n	\bar{x}	s.s.	t	P
		20	2,75	0,85		

*p<0.05; t:Independent sample t-test

After the independent sample t-test conducted to compare of level of adapting to accompaniment/metronome the students in the experimental and control groups, a significant difference was found between the groups' level of adaptation to ($p=0.021 < 0.05$). It was concluded that the level of adapting to accompaniment of the experimental group was higher than the level of adapting to metronome of the control group.

In this result, we can see the difference between the experimental group's efforts to follow the accompaniment and the control group's efforts to follow the metronome. We can say that the students had difficulty in following the metronome, that they adapted more easily to playing with accompaniment, and that in fact, while playing with accompaniment, they also ensured playing by staying in tempo.

Table 11. Comparison of Level of Playing with Correct Articulation of Experimental and Control Group Student

Measurements	Group	n	\bar{x}	s.s.	t	P
Playing with correct articulation	Experimental	20	2,80	0,70	2,773	0,009*
	Control	20	2,25	0,55		

*p<0.05; t:Independent sample t-test

After the independent sample t-test conducted to compare of level of playing with correct articulation of the students in the experimental and control groups, a significant difference was found between the groups' level of playing with correct articulation ($p=0.009 < 0.05$). It was concluded that the level of playing with correct articulation of the experimental group was higher than the control group. We can say that the reason why the experimental group played with correct articulation is that they heard the same articulation in the piano accompaniment and the student took care to play by imitating it in the same way. According to this result, we can say that practicing with accompaniment also improves the ability to playing with correct articulation.

Table 12. Comparison of Level of Playing in Accordance with the Character of the Piece of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	T	P
Playing in accordance with the character of the piece	Experimental	20	2,70	0,66	1,342	0,188
	Control	20	2,40	0,75		

t:Independent sample t-test

After the independent sample t-test conducted to compare of level of playing in accordance with the character of the piece of the students in the experimental and control groups, no significant difference was found between the level of playing in accordance with the character of the piece of the groups ($p>0.05$).

Table 13. Comparison of Artistic Mastery Level of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
Artistic mastery	Experimental	20	2,85	0,67	3,003	0,005*
	Control	20	2,30	0,47		

*p<0.05; t:Independent sample t-test

After the independent sample t-test conducted to compare the artistic mastery level of the students in the experimental and control groups, a significant difference was found between the groups' level of artistic mastery ($p=0.009 < 0.05$). It was concluded that the experimental group had a higher level of artistic mastery than the control group. It is thought that the reason why the experimental group has a higher level of piece mastery is that the piano accompaniment leads the student to recognize the piece more quickly and to realize what to do in the

piece in advance. According to this result, we can say that working with accompaniment has an important effect on achieving piece mastery.

Table 14. Comparison of Musical Skill Interim Performance Level of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	T	P
Musical skill interim performance level	Experimental	20	27,30	5,15	1,831	0,075
	Control	20	24,45	4,68		

t:Independent sample t-test

As a result of the independent sample t-test conducted to compare the musical skill interim performance level of the students in the experimental and control groups, no significant difference was found between the musical skill interim performance level of the groups ($p>0.05$).

3. to summarize the findings related to the sub-problem; according to the results of the independent sample t-test analysis between the sub-dimensions of the musical skill interim performance level of the students participating in the study and the groups; a significant difference was found between the levels of adaptation to accompaniment, playing with correct articulation and piece mastery of the experimental and control group students. This result in favor of the experimental group students is one of the important skills that students will gain in violin playing.

No significant difference was found between the levels of musical skill interim performance level, harmony of right and left hand, posture, playing the correct note, playing the rhythm of the piece correctly, paying attention to the nuances of the piece, paying attention to intonation and playing in accordance with the character of the piece ($p>0.05$).

Findings and Comments Related to the Fourth Sub-Problem

The findings related to the fourth sub-problem, which was determined as "Are there significant differences between the post-test scores of the experimental and control group students in terms of violin playing skills?" were obtained with the "Post-test Scoring Schedule" prepared to evaluate the experimental and control groups. The results of the post-test scores were analyzed in terms of the skill criteria determined in the schedule and the results are given in the tables below (Tables 15-18).

Table 15. Comparison of Post-test Physical Skill Level of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
Physical skill	Experimental	20	15,80	2,48	1,175	0,247
	Control	20	14,90	2,36		

t:Independent sample t-test

After the independent sample t-test conducted to compare the physical skill level (posture, violin grip, right hand bow grip, left hand use skill) of the students in the experimental and control groups, no significant difference was found between the physical skill level of the groups ($p>0.05$). As a result, physical skill level did not differ according to the groups. The fact that there is no difference between the physical skill levels shows that all students have acquired skills such as violin and bow holding and that they do not have problems in this regard. In the interim observation evaluation of the research, the same findings were reached in these skill levels.

Table 16. Comparison of Post-test Musical Skill Level of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
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Musical skill	Experimental	20	27,70	2,58	3,386	0,002*
	Control	20	23,40	5,06		

*p<0.05; t:Independent sample t-test

After the independent sample t-test conducted to compare the musical skill level of the students in the experimental and control groups, a significant difference was found between the musical skill level of the experimental and control groups ($p=0.002 < 0.05$). When the averages were analyzed, it was seen that the musical skill level of the experimental group was higher than the control group.

The target behaviors that the experimental and control group students' musical skills were evaluated in the post-test, which were expected to be gained as a result of working with accompaniment, were playing with correct notes, intonation, paying attention to scales, following the metronome, playing with correct nuances and articulation. As a result of the accompaniment study, these target behaviors were in favor of the experimental group students with higher scores. This result shows that regular accompaniment practice will be beneficial in developing students' musical skills.

Table 17. Comparison of Post-test Performance Skill Level of Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	P
Performance skill	Experimental	20	37,85	5,24	2,849	0,007*
	Control	20	31,60	8,29		

*p<0.05; t:Independent sample t-test

After the independent sample t-test conducted to compare the performance skill level of the students in the experimental and control groups, a significant difference was found between the performance skill level of the experimental and control groups ($p=0.002 < 0.05$). When the averages were analyzed, it was seen that the performance skill level of the experimental group was higher than the control group.

The experimental group students benefited from working with the accompaniment in the criteria of performance skills; capturing the tone appropriate to the character of the piece, playing in harmony with the accompaniment and dominating the piece. These criteria show that the student also fulfills the gains such as making music together and assimilating the piece. As a result of these gains, it is thought that the students' fear of going on stage will decrease and they will show better performances with accompaniment.

Table 18. Comparison of the Overall Scores of Post-test Skill Levels the Experimental and Control Group Students

Measurements	Group	n	\bar{x}	s.s.	t	p
Skill levels	Experimental	20	81,35	8,28	3,059	0,005*
	Control	20	69,90	14,55		

*p<0.05; t:Independent sample t-test

After the independent sample t-test conducted to compare the general skill levels of the students in the experimental and control groups, a significant difference was found between the general skill levels of the experimental and control groups ($p=0.002 < 0.05$). When the averages were analyzed, it was seen that the general skill levels of the experimental group was higher than the control group.

When the post-test score difference between the experimental and control groups is examined, the result shows that the performance of violin playing skills of the experimental group students working with accompaniment was positively affected.

Findings and Comments Related to the Fifth Sub-Problem

The findings related to the fifth sub-problem, which was determined as "Has there been a change in the experimental and control group students' perspectives on the violin lesson after the study?", were obtained through the answers given by the experimental and control group students to the questions in the "Post-Study Questionary Form on Perspectives towards Violin Courses". Experimental Group Student 1 is abbreviated as "EGS1" and Control Group Student 1 is abbreviated as "CGS1".

Metronome Use Habits of Experimental and Control Group Students

EGS1: "I don't use it much when I practice myself, but we play with a metronome in our violin lessons."

EGS2: "I don't use it much when I am practicing alone, but we usually play with a metronome in the lessons."

EGS3: "I don't have the habit of using a metronome much. I only use a metronome if it is necessary in the piece I am going to play."

EGS4: "I don't have the habit of practicing with a metronome."

CGS1: "I don't have the habit of using a metronome."

CGS2: "I don't have the habit of using metronome very much, I often forget."

CGS3: "Not very much, I use it occasionally."

CGS4: "A little bit, I don't use it a lot, but I try to use it."

When the metronome usage habits of the experimental and control group students are examined, it is understood that the students do not have the habit of using a metronome, and that the 1st and 2nd students from the experimental group were practiced with a metronome by their teachers during violin lessons. In addition, the 4th student from the control group stated that she did not use it much but tried to use it. The remaining students stated that they did not have the habit of using a metronome or that they occasionally used a metronome. Generally, students are told by their teachers that using a metronome is a necessity. However, in the first years, students may prefer to put working with the metronome on the back burner. This is because it takes time, patience and a disciplined study process to adapt to the metronome and play together.

Experimental Group Students' Frequency of Listening to the Accompaniment Part of the Pieces They Played

EGS1: "I listened to it a few times."

EGS2: "I listened once during the day."

EGS3: "I listened 4 times during the day while working."

EGS4: "I listened 3 times a week before studying."

Here, only the experimental group students were asked the question. Looking at the answers received, the 1st student stated that he/she listened to the piece several times a day, the 2nd student stated that he/she listened only once a day, the 3rd student stated that he/she listened four times while practicing the piece, and the 4th student stated that he/she listened three times a week. In this way, while listening to the accompaniment recording of the piece, the students will learn to memorize if there are empty measures at the beginning of the piece, and if there are no empty measures, they will learn to visualize the opening attacks of the piece with a breath at the same time with the piano. In the study, listening to the accompaniment recording of the piece during the day is also important for the dynamics of the piece to be recognized and assimilated by the student.

Experimental Group Students' Frequency of Playing the Piece with Accompaniment

EGS1: "I practiced three or four times a week."

EGS2: " I practiced 3 times a week with accompaniment."

EGS3: "I practiced 3 days a week. On the days I practiced, I practiced 4 times during the day."

EGS4: "I practiced 3 times a week, 1-1.5 hours during the day."

When the answers given by the students in the experimental group are analyzed, it is seen that the students practiced with accompaniment at least three times a week. Therefore, it can be said that the students in the experimental group include accompaniment in their weekly programs. Students who receive instrumental training are asked to allocate time for their instruments during the day. This is an important factor for students to progress and gain mastery over their instruments. It is a general opinion among instrument teachers that every meaningful minute spent with the instrument strengthens the student's bond with the instrument. We can also say that practicing the violin three or four times a week is a very small amount of time for students receiving professional music education.

Control Group Students' Frequency of Playing the Piece with the Metronome

CGS1: "I played it twice during the day."

CGS2: "I don't use metronome very much."

CGS3: " I practice the pieces I play with a metronome once. Other than that, I practice as much as I can during the day."

CGS4: "I played the pieces twice during the day, I tried to play them as much as I could during the week."

Here, only the control group students were asked a question. When we look at the answers received; the 1st and 4th students stated that they played the piece they practiced with the metronome twice a day, the 3rd student stated that she practiced with the metronome once a day, and the 2nd student stated that she did not use the metronome very much. From these answers, it can be concluded that the time period that the students allocate for practicing violin with metronome is small. At the beginning of the study, the control group students were given increasing metronome speeds every 2 weeks while practicing the piece and were told to practice with a metronome at these speeds. When the answers given by the students were evaluated, it can be said that the use of metronome has not yet become an established behavior in students.

Experimental Group Students' Comfort in Working with Accompaniment

EGS1: "I practiced more comfortably with the accompaniment. The sounds sounded better with the accompaniment."

EGS2: "I practice more comfortably with the accompaniment. I get the rhythm better."

EGS3: "I work more comfortably with the accompaniment, because it is easier both in terms of finding the right sound and in terms of rhythm."

EGS4: "I work more comfortably with accompaniment. I feel better."

When the answers given by the experimental group students are examined, all of the experimental group students stated that they were more comfortable with the accompaniment. The 1st student stated that he/she could hear the sounds better, the 2nd student stated that he/she understood the rhythm better, the 3rd stated that it was easier in terms of finding the right sound and rhythm, and the 4th student stated that working with the accompaniment made him/her feel good. In line with the answers given to this question, we can say that practicing

with accompaniment is more enjoyable than practicing alone and that the student is more productive in such studies. In addition, it is among the expectations that the student will like his/her instrument more and the time he/she will spend with his/her instrument will increase over time.

Control Group Students' Comfort in Working with Metronome

CGS1: "I am more comfortable playing alone, because when I play with a metronome, I feel fear inside, fear of missing the metronome."

CGS2: "I play more comfortably alone, because it is difficult for me to obey the metronome as I play on my own."

CGS3: "I play more comfortably alone, but the metronome helps me maintain the integrity of the piece."

CGS4: "I am more comfortable playing alone. When I play with the metronome, I may miss the metronome."

Control group students stated that they were more comfortable working alone instead of with a metronome. The 1st student stated that there was a fear of missing the metronome while working with a metronome, the 2nd student stated that she could not adapt to the metronome, the 3rd student stated that she preferred to work alone, and the 4th student stated that there was a possibility of missing the metronome. From the answers given to this question, we can say that working with a metronome frightens students, students feel under stress when working with a metronome and they cannot be comfortable. Students have previously stated that they use the metronome when teaching with their teachers, but not when working on their own. It is thought that the students did not realize the advantages of working with the metronome because of the small amount of time they spent working with it. Working with a metronome is a method that requires concentration and attention. It is expected that when this method becomes a habit for students, they will realize that it will be more efficient over time.

The Contribution of Working with Accompaniment to Experimental Group Students to Catch the Tempo of the Piece

EGS1: "When I miss, I can easily continue with the accompaniment."

EGS2: "I do not miss the tempo while working with accompaniment."

EGS3: "It helps a lot."

EGS4: "I play the violin more comfortably with the accompaniment."

Here, positive responses were received from all of the experimental group students. The 1st student stated that even if she/he missed the tempo, she/he caught it thanks to the accompaniment, the 2nd student stated that she/he played with the accompaniment without missing the tempo, the 3rd student stated that the accompaniment was very helpful, and the 4th student stated that she/he played the violin more comfortably with the accompaniment. These answers show that working with the accompaniment enabled the students to play the piece more easily at the determined metronome speeds and that the experimental group students were able to adapt to the piece without fear of missing the tempo of the piece.

The Contribution of Working with a Metronome to Control Group Students to Catch the Tempo of the Piece

CGS1: "It has a contribution. When I got used to the metronome, I did not feel in fear."

CGS2: "When I play without metronome, I play without keeping the tempo, but when I play with metronome, the piece becomes more meaningful."

CGS3: "It definitely contributes."

CGS4: "It helps us to adjust the tempo of the piece, it gives us a kind of command."

Here, positive responses were received from all control group students. The 1st student stated that she did not feel fear after getting used to the metronome, the 2nd student stated that she could not adapt to the tempo when she played without a metronome, but the piece gained meaning when she played with a metronome, and the 4th student stated that the metronome helped her to adjust the tempo of the piece. In line with the answers given by the control group students to this question, we can say that the students realized the contribution of working with a metronome to the piece they played.

Improvement in Intonation of Experimental Group Students in Playing with Accompaniment

EGS1: "My intonation has improved."

EGS2: "It has improved. I listen to the accompaniment and play accordingly."

EGS3: "It improves intonation."

EGS4: "I think it has improved."

Regarding the improvement of intonation in playing with accompaniment, all of the students in the experimental group responded positively. Except for the 2nd student, no student made an additional explanation. This student stated that she/he listened to the accompaniment and played according to the accompaniment. From the answers given by the experimental group students, we can say that the students realized that they improved their intonation problems by practicing with accompaniment.

Improvement in Intonation of Control Group Students in Playing with Metronome

CGS1: "No, it hasn't improved. I'm playing wrong in order to keep up with the tempo."

CGS2: "It has improved because I obey the rhythm."

CGS3: "The only reason I definitely use a metronome is intonation."

CGS4: "It got better. It allows us to play both accurately and beautifully."

Regarding the improvement of intonation when playing with a metronome, only student 1 of the control group students gave a negative answer and stated that she pressed the sounds wrong in an effort to catch the tempo. On the other hand, student 2 stated that her intonation improved when she followed the metronome, student 3 stated that the only reason she used the metronome was to improve his intonation, and student 4 stated that she played the notes more beautifully. We can say that the control group students who worked with this method experienced that working with a metronome was useful in correcting intonation.

Motivation and Self-Confidence of Experimental Group Students after Working with Accompaniment

EGS1: "I definitely think my motivation has increased."

EGS2: "I think my motivation and self-confidence increased because I can play more comfortably since the possibility of missing the rhythm decreases."

EGS3: "I think it increases, because I play more accurately."

EGS4: "I am really happy when I hear that I am playing."

When the answers of the experimental group students regarding motivation and self-confidence after playing with accompaniment were analyzed, the 1st student stated that her/his motivation increased, the 2nd student stated

that she/he played more comfortably because the possibility of missing the rhythm decreased, the 3rd student stated that she/he played more accurately, and the 4th student stated that she/he was happy when she/he heard herself/himself playing. The experimental group students realized that playing with accompaniment had a positive effect on motivation and self-confidence. Since the experimental group students increased their motivation and self-confidence with the accompaniment they listened to on the recording, we can say that these feelings will increase even more when they play one-on-one with the teacher in the accompaniment lesson. We can also say that with the accompaniment teacher's immediate interventions, students can more easily fulfill the musical dynamics they need to do.

Motivation and Self-Confidence of Control Group Students after Working with Metronome

CGS1: "My motivation and self-confidence did not increase."

CGS2: "I think it increased because beautiful melodies and clean sounds come out while practicing and playing."

CGS3: "My motivation and self-confidence did not increase. I feel more confident because I feel more when I play on my own without a metronome."

CGS4: "When I miss the metronome while playing with the metronome, I think I can't do it a little bit."

Only student 2 of the control group students responded positively about their motivation and self-confidence after working with the metronome. While the 2nd student stated that she produced beautiful melodies and clean sounds while practicing, the other students stated that there was no increase in their motivation and self-confidence. In line with these responses, we can say that there was no change in the motivation and self-confidence of the control group students (except for one student).

Contributions of Working with Accompaniment to Experimental Group Students

EGS1: "My intonation improved. I gained self-confidence. I also got used to accompaniment while playing pieces."

EGS2: "Playing violin with accompaniment first makes me feel confident. Then it helps me not to miss the rhythm. It helps me clean my intonation. Musically, a more beautiful sensation emerges and this makes me happier."

EGS3: "The feeling created by the piece increases even more, it helped me to play the piece with the right intonation and rhythm."

EGS4: "I gained self-confidence. I started to like the violin more."

When the contributions of working with the accompaniment on the experimental group students were analyzed, it was seen that all of the students gave positive responses. The 1st and 2nd students stated that their intonation improved, they got used to playing with the accompaniment and their self-confidence increased. In addition, the 2nd student stated that she/he progressed musically and this made her/him happy. The 3rd student stated that her/his feeling on the piece she/he played increased and that it enabled her/him to play the piece with the correct intonation and rhythm. The 4th student stated that she/he gained self-confidence and started to like playing the violin more. In line with the answers given, we can say that working with accompaniment contributed to the musical development of the students.

Contributions of Working with Metronome to Control Group Students

CGS1: "I got used to keeping rhythm."

CGS2: "My piece becomes more meaningful and I enjoy playing it more."

CGS3: "It helps me to create integrity in the pieces I play and to play more smoothly."

CGS4: "I can play at the speed of the piece, I can follow the metronome at the rests."

When the contributions of working with the metronome on the control group students were examined, it was seen that all of the students gave positive responses. The 1st student stated that she got used to practicing with a metronome, the 2nd student stated that the piece was more meaningful and that she played it with pleasure, the 3rd student stated that the piece gained integrity and played more smoothly, and the 4th student stated that she could play the piece at her own pace and that she could follow the rests easily with the help of the metronome. In line with the answers given to this question, we can say that the control group students became aware of the musical behaviors they gained from working with the metronome.

CONCLUSION, DISCUSSION and RECOMMENDATIONS

In the study, the effect of working with accompaniment in violin education on the musical development of the student and his/her perspective on violin lessons was evaluated by experts after an 8-week (10 weeks with pre-study and post-tests) experimental process. In the study, the experimental and control groups were prepared for the works with two different methods (experimental group/ accompaniment and control group/ metronome), both groups performed with piano accompaniment in the 10th week and these performances were evaluated by experts. These evaluations were analyzed;

It was concluded that there was a positive and moderately significant relationship between the interim and post-test scores of the experimental group students, and the highest relationship was found in the dimensions of posture and physical skills. When the analyses were analyzed, it was determined that there was a significant relationship between the criteria of intonation and adaptation to the accompaniment, playing in accordance with the character of the piece and dominance of the piece. As a result of the fact that the experimental group students improved these gains at a moderate level in an eight-week period, we can say that if the same study is planned over a longer period of time, it will increase the performance of the students and will be beneficial for the students.

It was concluded that there was a highly significant relationship between the interim and post-test scores of the control group students. When the relationship between the criteria of paying attention to intonation and obeying the metronome was examined, it was concluded that there was a moderate improvement. In addition, it is understood that the control group students also showed positive results in the criteria of playing in accordance with the character of the piece and dominance of the piece. In line with this result, we can say that practicing using a metronome will also contribute to students' violin playing skills. In addition, the idea that practicing with a metronome in instrument education will be a preliminary preparation for practicing with accompaniment is an acceptable idea.

When the interim observation performances of the experimental and control group students at the 5th week were compared and the results were evaluated, no significant difference was found between the criteria of right and left hand harmony, posture, playing the correct notes, playing the rhythm of the piece correctly, paying attention to the nuances of the piece and playing in accordance with its character. In addition, a significant difference was found in favor of the experimental group between the levels of adaptation to the accompaniment,

correct articulation and mastery of the piece. This shows that the experimental group students improved positively as a result of working with accompaniment.

When the post-test scores of the experimental and control group students were compared and the results were evaluated, it was concluded that the physical skill levels (violin grip, right hand and left hand skills, posture) did not differ according to the groups. This result shows that the students are physically fit and accustomed to the instrument, and that working with accompaniment does not affect such criteria. In addition, a significant difference was found between the post-test musical skill levels of the experimental and control groups (playing correct notes, intonation, paying attention to rhythms, following the metronome, correct nuance, articulation) in favor of the experimental group. According to this result, we can say that working with accompaniment improves students' musical skills. In the study conducted by Sonsel (2018) with viola students of fine arts high schools, it was concluded that the experimental group students who practiced with piano accompaniment made more progress than the control group students who did not practice with piano accompaniment. We can say that the results of Sonsel's study coincide with the findings of this study.

In the post-test analysis between the experimental and control groups, the performance levels of the students (capturing the tone appropriate to the character of the piece, playing in harmony with the accompaniment, piece mastery) were examined. At this level, a significant difference was found between the experimental and control groups in favor of the experimental group. In addition, when the post-test overall total values were analyzed, it was determined that the scores of the experimental group students were higher than the control group students. According to these results, we can say that the experimental group students who practiced with accompaniment performed better and practicing with accompaniment positively affected the students' violin playing skills. Kaleli (2017) concluded in his/her study that piano-accompanied studies make significant contributions to finding solutions to students' rhythmic, harmonic and melodic problems, and Özcan (2017) concluded in his/her study that polyphonic arranging techniques (piano-accompanied education) are more effective in achieving musical gains than unaccompanied education. The results of Kaleli (2017) and Özcan (2017) support the results of this study.

The answers obtained from the questionnaire applied to the students can be summarized as follows: It can be said that the experimental and control group students do not have the habit of using a metronome, and they mostly use metronomes when they make lessons with their teachers. In addition, it is understood from their answers that the time period they allocate for violin practice is small. It is seen in the answers given by the students that the experimental group students work more comfortably when working with the accompaniment and miss the rhythm of the piece less thanks to the accompaniment, whereas the control group students prefer to work on their own instead of using the metronome and are afraid of missing the metronome. Thanks to this study, it was concluded that the experimental group students corrected the intonation problem. In addition, 3 students from the control group stated that their intonation improved when they got used to working with a metronome. In his/her study titled "Comparison of Three Methods Used to Improve Intonation in Strings Education", Taş (2020) used piano accompaniment, vocalization and verbal notification methods and evaluated the intonation scale developed by the researcher by taking frequency analysis. At the end of the study, he/she found that piano accompaniment was positive for the experimental group students. Taş's result supports the intonation problem, which is one of the dimensions of the fifth sub-problem of this research. From the answers given by the experimental group students to the question of what working with accompaniment added to them, it was concluded that their intonation

improved the most, they played without missing the rhythm, they liked the violin more, and playing with accompaniment increased their motivation and self-confidence. Ergen (2010) in his/her research titled "The Effect of Violin Education Based on Accompanied Playing at Elementary Level on Intonation, Self-Confidence and Attitude" and Topoğlu (2010) in his research titled "The Effect of Accompanied Finger Opening Exercises in the Cello Study Process on Cello Students' Intonation, Effects of Accompaniment on Self-Regulation and Opinions about the Lesson", they obtained results in favor of the experimental group students in terms of the positive effects of accompaniment on the behaviors of the experimental group students such as motivation, intonation, self-confidence, self-observation, self-judgment and self-reaction. The results of Ergen's (2010) and Topoğlu's (2010) studies support the results of this study in terms of intonation, motivation and self-confidence in favor of the experimental group students.

In this study, the experimental group students practiced the pieces with pre-recorded piano accompaniments. Çikot (2019), in his/her study titled "The Effects of Cubase Music Software Program Supported Piano Accompaniment Styles on Violin Teaching", concluded that students who worked with piano accompaniments created by using technology-containing hardware and music software prepared by him/her were more successful than students who worked according to traditional teaching methods. The fact that the experimental group students in this study practiced the works with pre-recorded piano accompaniments is similar to the result of Çikot's (2019) study.

In line with these results, it is recommended that;

- Accompaniment or correpetition courses to the 9th, 10th, 11th and 12th grade programs of fine arts high school music departments be added,
- A sufficient number of piano accompaniment teachers for fine arts high school music departments be recruited,
- The accompaniments of the pieces in the books prepared for the instrument training (violin) classes in the music department of fine arts high schools be recorded professionally and these recordings be published on the EBA platform affiliated to the Ministry.

REFERENCES/KAYNAKÇA

- Altunışık, R., Coşkun, R., Bayraktaroğlu, S. ve Yıldırım, E. (2004). *Sosyal bilimlerde araştırma yöntemleri SPSS uygulamalı*. (3. baskı). Sakarya: Sakarya Kitabevi.
- Angı, Ç. E. (2005). *Keman öğretiminde karşılaşılan entonasyon problemleri ve çözüm önerileri*. (Yayınlanmamış yüksek lisans tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Güzel Sanatlar Eğitimi Ana Bilim Dalı, Ankara.
- Bağcı, H. (2009). *Eşlik desteğinin armoni ve solfej eğitimindeki başarı düzeyine etkisi*. (Yayınlanmamış doktora tezi). Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul.
- Büyükköse, A. (2023). *Viyolonsel öğretiminde piyano eşlikli halk türkülerine dayalı örnek bir materyal tasarımı ve uygulamadaki görünümü*. (Yayınlanmamış doktora tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.

- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. ve Demirel, F. (2023). *Eğitimde bilimsel araştırma yöntemleri*. (34. baskı). Ankara: Pegem Akademi.
- Coşkuner, S. (2007). *Türkiye'de anadolu güzel sanatlar liseleri (yaylı çalgılar) bireysel çalgı eğitimi dersinde piyano eşlikli çalışmalara ilişkin öğretmen görüşleri*. (Yayınlanmamış yüksek lisans tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Güzel Sanatlar Eğitimi Ana Bilim Dalı, Ankara.
- Çikot, K. (2019). *Cubase müzik yazılım programı destekli piyano eşlik stillerinin keman öğretimi üzerindeki etkileri*. (Yayınlanmamış yüksek lisans tezi). Atatürk Üniversitesi Eğitim Bilimleri Enstitüsü Güzel Sanatlar Eğitimi Ana Bilim Dalı, Erzurum.
- Çilden, Ş. ve Şendurur, Y. (2003). *Keman için piyano eşlikli albüm-1*. Ankara: Evrensel Yayınevi.
- Deniz, Ü. (2009). *Anadolu güzel sanatlar liseleri müzik bölümü öğrencilerinin müziksel işitme okuma ve yazma dersinin öğretim programında yer alan kazanımlara ulaşma durumlarının değerlendirilmesi*. (Yayınlanmamış yüksek lisans tezi). İnönü Üniversitesi Sosyal Bilimler Enstitüsü Müzik Ana Bilim Dalı, Malatya.
- Durmaz, Y. (2020). *Vakıf üniversitelerinde okuyan öğrencilerin kişilik özelliklerinin içgüdüsel satın alma davranışları üzerindeki etkisinin yapısal eşitlik modeli ile belirlenmesi*. (Yayınlanmamış yüksek lisans tezi). Üsküdar Üniversitesi Sosyal Bilimler Enstitüsü Nöropazarlama Ana Bilim Dalı, İstanbul.
- Ergen, D. (2010). *İlköğretim düzeyinde eşlikli çalmaya dayalı keman eğitiminin entonasyon, özgüven ve tutum üzerindeki etkisi*. (Yayınlanmamış doktora tezi). Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü, İzmir.
- Fenmen, M. (1997). *Müzikçinin el kitabı*. Ankara: Müzik Ansiklopedisi Yayınları.
- George, D. ve Mallery, M. (2010). *SPSS for windows step by step: A simple guide and reference*. Boston: Pearson Publishing.
- Hocaoğlu, N. ve Akkaş Baysal, E. (2019). Nicel araştırma modelleri-desenleri. G. Ocak (Ed.), *Eğitimde bilimsel araştırma yöntemleri* (66-119 ss.). Ankara: Pegem Akademi.
- Kaleli, N. (2017). *Müzik eğitimi anabilim dalı bireysel çalgı keman öğrencilerinin piyano eşlikli çalışma durumlarının öğrenci ve öğretmen görüşlerine göre değerlendirilmesi*. (Yayınlanmamış yüksek lisans tezi). Necmettin Erbakan Üniversitesi Eğitim Bilimleri Enstitüsü Güzel Sanatlar Eğitimi Ana Bilim Dalı, Konya.
- Karasar, N. (2018). *Bilimsel araştırma yöntemi kavramlar ilkeler teknikler*. (33. baskı). Ankara: Nobel Akademik Yayıncılık.
- Milli Eğitim Bakanlığı, (2015). Milli Eğitim Bakanlığı orta öğretim kurumları yönetmeliği. Erişim adresi http://ogm.meb.gov.tr/meb_iys_dosyalar/2015_05/07092423_ogmokusultanim.pdf
- Milli Eğitim Bakanlığı, (2018). Ortaöğretim Genel Müdürlüğü güzel sanatlar liseleri yönetmeliği. Erişim adresi http://ogm.meb.gov.tr/meb_iys_dosyalar/2018_09/19185304_Güzel_Sanatlar_Liseleri.pdf
- Okan, H. ve Mohan Kömürcü, H. (2020). Konservatuvar öğrencilerinin eşlik dersine ilişkin metaforik yaklaşımlarının farklı değişkenlere açısından incelenmesi. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 17(1), 1415-1443. <https://doi.org/10.33711/yyuefd.838445>

- Özcan, A. T. (2017). Keman eğitiminde çoksesli aranje tekniklerinin kullanımı. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 13(1), 290-302. <https://doi.org/10.17860/mersinefd.305980>
- Özder, Z. (2010). *Anadolu güzel sanatlar liseleri viyolonsel eğitiminde motivasyonun yeri ve önemine ilişkin öğretmen ve öğrenci görüşleri*. (Yayınlanmamış yüksek lisans tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Güzel Sanatlar Eğitimi Ana Bilim Dalı, Ankara.
- Piji, D. (2006). *Dizgeli öğretime göre geliştirilen eşlik dersi programının akademik başarıya, tutuma, yeterlilik algısına ve kalıcılığa etkisi*. (Yayınlanmamış doktora tezi). Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul.
- Resmi Gazete, (1990). Milli Eğitim Bakanlığına bağlı anadolu güzel sanatlar liseleri yönetmeliği. Erişim adresi <https://www.resmigazete.gov.tr/arsiv/20642.pdf>.
- Resmi Gazete, (2009). Talim Terbiye Kurulu Başkanlığı, 27260 sayılı yönetmelik. Erişim adresi <https://www.resmigazete.gov.tr/eskiler/2009/06/20090616-7.htm>
- Sonsel, Ö. B. (2018). *Piyano eşlikli başlangıç viyola öğretiminin ritim duygusu gelişimi ve entonasyon hâkimiyeti açısından incelenmesi ve değerlendirilmesi*. (Yayınlanmamış doktora tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Sönmez, V. ve Alacapınar, F. G. (2018). *Örneklendirilmiş bilimsel araştırma yöntemleri*. (6. baskı). Ankara: Anı Yayıncılık.
- Şendurur, Y. (2001). Keman eğitimi dersine etkili hazırlanma süreci. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*, 21(2), 161-168. Erişim adresi <https://dergipark.org.tr/en/pub/gefad/issue/6768/91081>
- Taş, F. (2020). Yaylı çalgılar eğitiminde entonastonu geliştirmeye yönelik kullanılan üç yöntemin karşılaştırılması. *İdil Sanat ve Dil Dergisi*, 9(76), 1802-1820. Erişim adresi <https://www.ceeol.com/search/article-detail?id=965293>
- Topoğlu, O. (2006). *Yaylı çalgı çalışma sürecinde eşlikli çalışmanın önemi ve viyolonsel için eşlikli parmak açma çalışmaları*. (Yayınlanmamış yüksek lisans tezi). Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü Güzel Sanatlar Eğitimi Ana Bilim Dalı, İzmir.
- Topoğlu, O. (2010). *Viyolonsel çalışma sürecinde eşlikli parmak açma çalışmalarının viyolonsel öğrencilerinin entonasyon, özdüzenleme ve derse ilişkin görüşleri üzerindeki etkileri*. (Yayınlanmamış doktora tezi). Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü, İzmir.
- Türk Dil Kurumu. Erişim Tarihi: 22 Şubat, 2024, <https://sozluk.gov.tr/>
- Uslu, M. (2012). Nitelikli keman eğitimine yönelik yaklaşımlar. *Eğitim ve Öğretim Araştırmaları Dergisi*, 1(4), 1-11. Erişim adresi https://arastirmax.com/en/system/files/dergiler/116393/makaleler/1/4/arastirmx_116393_1_pp_1-11.pdf
- Yazıcı, D. (2016). *Güzel sanatlar lisesi öğrencilerinin alan dışı ders başarılarının incelenmesi (Nevit Kodallı güzel sanatlar lisesi örneği)*. (Yayınlanmamış yüksek lisans tezi). Necmettin Erbakan Üniversitesi Eğitim Bilimleri Enstitüsü Güzel Sanatlar Eğitimi Ana Bilim Dalı, Konya.

Yağıřan, N. ve Aydın, N. (2013). Kemanın tarihsel gelişim süreci ve eğitimci yorumcular. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 30, 213-221. Erişim adresi <https://dergipark.org.tr/en/pub/susbed/issue/61808/924744>