

The Effect of Application Middle Level Violin Textbooks on Violin Playing Skills in the Music Study Program, Faculty of Languages and Arts, Universitas Negeri Surabaya

Vivi Ervina Dewi^{1)*}

¹⁾ Music Study Program, Faculty of Languages and Arts, Universitas Negeri Surabaya, Indonesia

*Corresponding Author

Email : yividewi@unesa.ac.id

How to cite: Dewi, Vivi Ervina. (2023). The Effect of Application Middle Level Violin Textbooks on Violin Playing Skills in the Music Study Program, Faculty of Language and Arts, Universitas Negeri Surabaya. *Gondang: Jurnal Seni dan Budaya*, Vol 7 (No.1): 58-69

Article History : Received: Feb 28, 2023. Revised: May 14, 2023. Accepted: June 9, 2023

ABSTRACT

This research aims to find out significant differences in violin playing skills between students who were taught using an intermediate level violin textbook made by a team of lecturers and students who were not taught using an intermediate level violin textbook made by a team of lecturers in the Music Study Program, Universitas Negeri Surabaya. The research method used is a quantitative method with a quasi-experimental type. Research result is known that the violin playing skills between the experimental group and the control group differ significantly. This conclusion is proven by the mean score of the experimental group which is higher than the control group in the posttest activity. The mean posttest score in the experimental group was 88.45. Meanwhile, the mean posttest score in the control group was 82.65. Another thing is also shown by the results of the independent sample t-test in the experimental group and the control group during the posttest activity with a calculated t value of 6.104 and a t table value of 2.086. The calculated t value > t table value, so it can be said that the experimental group and the control group differ significantly. Therefore, there is an influence of the application of an intermediate level violin textbook made by a team of lecturers on violin playing skills in the Music Study Program, Universitas Negeri Surabaya. The increase in violin playing skills was more demonstrated in the experimental group than the control group. This argument is proven by the mean pretest score in the experimental group of 81.15, while the mean pretest score in the control group is 80.7. The mean posttest score for the experimental group was 88.45, while the mean posttest score for the control group was 82.65. The experimental group experienced an increase of 7.3. This is shown from the mean score of 81.15 at the pretest which increased to 88.45 at the posttest. Meanwhile, the control group also experienced an increase in the mean score of 1.95.

KEYWORDS

Textbooks
Violin
Skills

This is an open access article under the [CC-BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license



INTRODUCTION

Music is one part of the branch of art. Likewise, the implementation of music education is also one of the implementations of art education. This is reinforced by Plato's opinion (Djohan Salim, 2005: 175) which reveals that "In education, music occupies the highest position because there is no single scientific discipline that can penetrate the soul and accompany it with tiered abilities beyond rhythm and harmony". Based on this opinion, it can be reflected that the implementation of music education is a processing of sensitivity through playing music activities. The activity of playing music is in the form of feeling harmony, rhythm, melody, tempo, and so on. The implementation of music education in Indonesia can be seen from various levels of education.

One level of formal education in the realm of higher education that implements music education in its learning activities is Universitas Negeri Surabaya. This implementation can be seen from the study program at Universitas Negeri Surabaya which offers musical expertise. Music expertise in the study program can be found in the Faculty of Languages and Arts. The Faculty of Languages and Arts is one of the faculties at the Universitas Negeri Surabaya which gives birth to study programs in the fields of Languages and Arts.

The music study program is one of the new study programs at the Faculty of Languages and Arts, Universitas Negeri Surabaya. This study program was established in 2015 with 9 teaching staff or lecturers. This study program has graduated several student graduates from 2019 to the present. In addition, from year to year this study program also shows its existence through various awards and student achievements that have won championships at the local, national, and international levels. Another existence can also be seen from the interest in the increase in the number of students enrolling from year to year in this study program. Meanwhile, this study program is also the only (pure) music study program in East Java that has a classical music basis. The curriculum used is the Merdeka Belajar Curriculum. The curriculum offers a variety of very interesting practical and theoretical courses.

The practical courses offered in this study program are also very diverse. These practical courses include ethnic archipelago music courses, marching bands, choirs/ensembles/orchestras, and basic instruments. In the implementation of the main instrument courses, there are instrument specializations that are classified as string, wind, vocal, piano, guitar, and percussion instruments. The specialization of these instruments is also very diverse, such as stringed instruments consisting of violin, viola, cello, and contra bass.

The specialization of stringed instruments also has various levels of courses in the Merdeka Belajar curriculum structure of the music study program. The level of courses in the curriculum is an introduction to the basic practice of the instrument, the main instrument at the sensory level, the main instrument at the junior level, the main instrument at the middle level, and the main instrument at the main level. All of these practical courses are held face-to-face once a week with a load of between 3-4 credits and a duration of 150-200 minutes.

One level of practical courses, namely the intermediate level main instrument courses, is held in 4th semester. Based on preliminary studies that have been carried out through observation or observation of the middle level main instrument courses, especially in the violin class, it was found that there were still many obstacles and problems. These obstacles and problems are the lack of variation and innovation in learning models and learning resources applied by teaching lecturers who are still very minimal. This is shown from the attitude of students who are less enthusiastic and less active in participating in the learning process. Another thing is also shown from the scales, etude, and song repertoire that are given are not effective enough in improving violin playing skills with fast progress.

The other constraints and problems that were found during the preliminary research were the data on the scores of students taking the intermediate level basic instrument courses, especially on the violin instrument, there was a tendency for no significant increase in student skills. Constraints and problems that exist in the process of teaching and learning activities cause a major influence on the development and achievement of student learning. As is known, that learning achievement can be seen from three aspects, namely cognitive, affective, and psychomotor. This is reinforced by the opinion of Bloom (1956: 7), that learning outcomes and learning achievement are grouped into three domains, namely cognitive, affective, and psychomotor. Furthermore, James Cangelosi (1995: 7) that the construct of behavior is conventionally classified into 3 domains namely affective, cognitive,

and psychomotor.

In this research, the authors focused on learning achievement in the psychomotor domain. The psychomotor domain in question is the skill of playing the violin. Violin playing skills are closely related to playing the violin using certain patterns or techniques. This is reinforced by the opinion of Allard and Starkes (in Mornell, 2012: 155), that movement skill techniques, "movement patterns" are a skill. Furthermore, Heri Rahyubi (2014: 211) also revealed that motor skills are a person's ability to perform a movement task to the fullest according to his abilities.

Violin playing skill is one of the goals in learning music. This is reinforced by the opinion of Peters and Miller (in Durrant and Welch, 1995: 123), that one of the goals of learning music is the psychomotor aspect. Furthermore, Peters and Miller (in Durrant and Welch, 1995: 123) suggest that the psychomotor aspects in question include increased coordination and skills in selecting musical instruments, increased ability to play music, and increased awareness to respond, coordinate, and participate in a ensemble (group) play. A person's music playing skills are influenced by the presence of several factors of musical activity performed. This expression is reinforced by the opinion of Mornell (2012: 19), that to achieve musical skills at a high level, someone needs to spend hours practicing and honing their skills.

Based on the conditions of the preliminary research that have been described, it is necessary to have an effective textbook that supports the improvement of students' skills in playing the violin in accordance with current conditions. This is based on the idea of the Ministry of Education, Culture, Research, and Technology which requires tertiary institutions to implement an Merdeka Belajar curriculum and has an impact on students who are required to learn quickly and effectively.

Thus, this research tries to present a treatment through an alternative textbook, namely an intermediate level violin textbook made by a team of lecturers in the music study program, Universitas Negeri Surabaya. Based on these descriptions, this research is intended to prove and determine the effectiveness of the application of intermediate level violin textbooks on violin playing skills, especially for students of the music study program. The purpose of this research was to find out significant differences in violin playing skills between students who were taught using an intermediate level violin textbook made by a team of lecturers and students who were not taught using an intermediate level violin textbook made by a team of lecturers in the music study program, Universitas Negeri Surabaya.

METHOD

This research used a quantitative method with a quasi-experimental type. Experiment (Ertambang Nahartyo, 2013: 1) is a research design to investigate a phenomenon by manipulating circumstances or conditions through certain procedures and then observing the results of the engineering and interpreting them. Research design (Hasan Iqbal, 2002: 31) is the entire process required in planning and conducting research, so that existing questions can be answered. The experimental design used was the pretest-posttest control group design.

The population used is all students taking intermediate level basic instrument courses with a violin specialization, totaling 20 students. The sampling technique in this research was jenuh sampling, where all members of the population were sampled.

The variables in this research were textbooks for the intermediate level of violin made by a team of lecturers, textbooks for general violin for the middle level, and skills in playing the violin. These variables consist of three variables, namely two independent variables and

one dependent variable. The independent variable is a violin textbook for the middle level made by a team of lecturers (X1) and a general violin textbook for the middle level (X2). Meanwhile, the dependent variable is violin playing skill (Y).

Data collection techniques used in this research are test, observation, and documentation methods. Observations were made by direct observation of the experimental group and the control group. Documentation in this research was used to support data from observation activities, application of intermediate level violin textbooks made by a team of lecturers in the experimental group, and tests of violin playing skills. Meanwhile, tests of violin playing skills were carried out on the research population by looking at the scores or scores of violin playing skills in the control group and the experimental group before and after the textbook was applied in the lecture process. The data collection instrument in this research used a violin playing skill test.

The data analysis technique used is the independent sample t-test. Before using data analysis techniques with the independent sample t-test, several requirements are needed in this research. The requirements include that the data must be normally distributed and the variances of the control and experimental group data must be homogeneous. Therefore, the data analysis in this research is complemented by descriptive analysis. Presentation of data in descriptive analysis in the form of mean, median, mode, standard deviation, variance, minimum score, maximum score, range, and graphs. Meanwhile, the inferential analysis was in the form of a prerequisite test using the normality test with the Shapiro-Wilk method and the homogeneity test with Levene's test. After the descriptive analysis and inferential analysis were carried out, the next step was hypothesis testing. The hypothesis testing is in the form of an independent sample t-test.

RESULT AND DISCUSSION

A. Description of Research Results

Data description is a description of the data obtained as a support from the results of research and discussion. This research was conducted with an initial test at the first meeting, namely a test of skills in playing the violin in the control group and the experimental group. The initial test is used to determine the initial condition of violin playing skills. Furthermore, the research was conducted by providing treatment in the form of an intermediate level violin textbook made by a team of lecturers for the experimental group at the second meeting up to the fifteenth meeting. Meanwhile, the control group was not given treatment, but learning continued using common violin textbooks for the middle level. After the treatment was given to the experimental group, then the research was continued at the sixteenth meeting with a final test. The final test was in the form of a violin playing skills test in the experimental group and the control group. The final test is used to determine the final condition of violin playing skills.

The description of this data provides an overview of the initial and final conditions of violin playing skills in the experimental group and the control group. The description of the data obtained from violin playing skills is presented quantitatively including mean, median, mode, standard deviation, variance, minimum score, maximum score, range, and graph. The data in this study consisted of the results of the pretest and posttest scores of violin playing skills in the experimental group and the control group.

The pretest score was used to determine the conditions and initial abilities in the form of violin playing skills before being given a treatment in the experimental group. The pretest score was also used to determine the conditions and initial abilities in the form of violin playing skills in the control group which was not given a treatment. Meanwhile, the posttest

score was used to determine the final condition and ability, namely violin playing skills after being given a treatment in the experimental group. The posttest score was also used to determine the final condition and ability in the form of violin playing skills in the control group which was not given a treatment. The results of the descriptive statistical analysis and the results of the hypothesis testing are presented and described as follows:

a. Results of Descriptive Statistical Analysis

The data description of the violin playing skills test consists of the results of the pretest and posttest in the form of quantitative data. The violin playing skills test was given to the experimental group in 2 (two) meetings, namely before and after the treatment. This treatment was carried out in 14 (fourteen) meetings. In addition, the violin playing skills test was also given 2 (two) meetings in the control group which was not given a treatment at pretest and posttest.

After the data is obtained, the step taken is to analyze the data using descriptive statistics. Data descriptions from the pretest and posttest results of the violin playing skills test are shown in Table 1.

Table 1. Results of Descriptive Statistics

Deskripsi	Kelompok Eksperimen		Kelompok Kontrol	
	Pretest	Posttest	Pretest	Posttest
Rata-Rata	81,15	88,45	80,7	82,65
Median	81,25	88,25	80,75	82,75
Modus	83,5	85	80	80
Standar Deviasi	1,9727	2,4659	1,6364	1,7167
Varians	3,892	6,081	2,678	2,947
Jumlah Siswa	10	10	10	10
Nilai Tertinggi	83,5	93	83	85
Nilai Terendah	78	85	78	80
Range	5,5	8	5	5

Based on table 1, it is known that the highest score achieved by the experimental group during the pretest was 83.5 and the lowest score was 78. The highest score achieved by the experimental group during the posttest was 93 and the lowest score was 85. Meanwhile, the highest score achieved by the experimental group the control group at the time of the pretest was 83 and the lowest score was 78. The highest score achieved by the control group during the posttest was 85 and the lowest score was 80.

The mean or average of the experimental group obtained during the pretest was 81.15, while the average pretest of the control group was 80.7. The mean or average posttest score in the experimental group was 88.45, while the posttest average in the control group was 82.65. The score in the experimental group showed an increase of 7.3. This can be seen from the mean or average score of 81.15 at the pretest, rising to 88.45 at the posttest. Meanwhile, the score in the control group also experienced an increase of 1.95. This can be seen from the average score of 80.7 at the pretest, rising to 82.65 at the posttest.

The pretest results for the experimental group were also shown with a standard deviation value of 1.9727, median 81.25, mode 83.5, variance 3.892, and range 5.5. The posttest results of the experimental group were also shown with a standard deviation value of 2.4659, median 88.25, mode 85, variance 6.081, and range 8.

Meanwhile, the pretest results for the control group were also shown with a standard deviation value of 1.6364, median 80.75, mode 80, variance 2.678, and range 5. Posttest results for the control group were also shown with a standard deviation value of 1.7167, median 82.75, mode 80, variance 2.947, and range 5.

The graphs of the mean or average pretest and posttest results of the violin playing skills test in the control and experimental groups are shown in Figure 1.

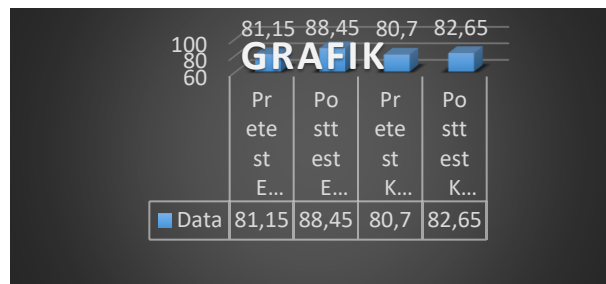


Figure 1. Graph of the Mean Pretest and Posttest Results of the Violin Playing Skills Test

Based on Figure 1, it is known that there is an increase in the scores of violin playing skills in the experimental group and the control group. This is indicated by the mean or average posttest score of violin playing skills which is higher than the mean or average pretest score of violin playing skills in the experimental and control groups. The increase in the average score of violin playing skills in the experimental group was indicated by a score of 7.3, while the increase in the average score of violin playing skills in the control group was indicated by a score of 1.95. Based on this description, it can be concluded that the increase in the average score of violin playing skills was shown by both groups, namely the experimental group and the control group. However, the increase in the average score of the violin playing skills test in the experimental group was higher than that in the control group.

b. Hypothesis Test Results

Inferential analysis was used to test the research hypothesis, namely violin playing skills. The description of the stages of inferential analysis is as follows:

1. Prerequisite Analysis Test

The analysis prerequisite test is used to determine whether the data from the experimental group and the control group are normally distributed and have a homogeneous data variance. The prerequisite analysis test is a prerequisite test that used before proceeding to the hypothesis testing stage, namely the t-test. The analysis prerequisite test before entering the hypothesis test is the normality test and homogeneity test. The two prerequisite tests are described as follows:

1) Normality test

The normality test is used to determine whether the data has a normal distribution or not. In other words, the normality test is used to find out whether the experimental group and the control group are normally distributed or not during the pretest and posttest activities. This is in accordance with the opinion of Arikunto (2010: 301), what is meant by a data normality test is a test of whether or not the distribution of the data to be analyzed is normal.

The normality test used in this study was the Shapiro-Wilk method. The decision criterion (Singgih Santoso, 2016: 393) is if the sig value > 0.05 , then the data is normally distributed (symmetric) and vice versa if the sig value is < 0.05 , then the data is normally distributed (symmetric). This normality test was obtained with the help of the SPSS software program.

The results of the normality test using the Shapiro-Wilk method in the experimental group and the control group during the pretest are shown in Figure 2.

Tests of Normality

		Keterampilan_Bermain_Violin Kelompok Penelitian	
		Eksperimen	Kontrol
Kolmogorov-Smirnov ^a	Statistic	.153	.134
	df	10	10
	Sig.	.200 [*]	.200 [*]
Shapiro-Wilk	Statistic	.932	.963
	df	10	10
	Sig.	.467	.819

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Figure 2. Pretest Normality Test Results

Based on Figure 2, it is known that the results of the test using the Shapiro-Wilk method in the experimental group during the pretest with a sig value of 0.467. Meanwhile, the results of the test with the Shapiro-Wilk method in the control group during the pretest with a sig value of 0.819. The results of the two groups, namely the experimental group and the control group at the time of the pretest showed that the value sig > 0.05, so that it can be said that the data came from both groups which were normally distributed (symmetrically) at the time of the pretest.

The normality test is also used at the time of the posttest. The results of the normality test using the Shapiro-Wilk method in the experimental group and the control group during the posttest are shown in Figure 3.

Tests of Normality

		Keterampilan_Bermain_Violin Kelompok Penelitian	
		Eksperimen	Kontrol
Kolmogorov-Smirnov ^a	Statistic	.122	.152
	df	10	10
	Sig.	.200 [*]	.200 [*]
Shapiro-Wilk	Statistic	.977	.936
	df	10	10
	Sig.	.947	.506

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Figure 3. Posttest Normality Test Results

Based on Figure 3, it is known that the results of the Shapiro-Wilk test in the experimental group during the posttest had a sig value of 0.947. Meanwhile, the results of the test using the Shapiro-Wilk method in the control group at the posttest with a sig value of 0.506. The results of the two groups, namely the experimental group and the control group at the time of the posttest showed that the value sig > 0.05, so that it can be said that the data came from both groups which were normally distributed (symmetrically) at the time of the posttest.

The results of the normality test in the control group and the experimental group during the pretest and posttest showed that the value sig > 0.05, so that it can be concluded that the data comes from both groups that have a normal distribution (symmetric). This is indicated by the sig values of 0.467 and 0.819 at the pretest and the sig values of 0.947 and 0.506 at the posttest.

2) Homogeneity Test

The homogeneity test is used to test the similarity of the variance of the experimental group data and the control group during the pretest and posttest. In other words, the

homogeneity test is used to find out whether the two groups have the same data variance or not during the pretest and posttest activities.

The homogeneity test in this study was tested using Levene's test by looking at the significance value. The decision criterion (Jonathan, 2015: 151) is that the data fulfills the assumption of homogeneity or the two variants are the same if the significance value is > 0.05 . This homogeneity test was carried out with the help of the SPSS software program.

The results of the homogeneity test using the Levene's test by looking at the significance value in the experimental group and the control group during the pretest are shown in Figure 4.

Independent Samples Test			
		Equal variances assumed	Equal variances not assumed
		Keterampilan_Bermain_Violin	Keterampilan_Bermain_Violin
Levene's Test for Equality of Variances	F	.735	
	Sig.	.403	

Figure 4. Pretest Homogeneity Test Results

Based on Figure 4, it is known that the results of the homogeneity test in the experimental group and the control group during the pretest with a calculated F value of 0.735 and a significance value of 0.403. The significance value shows > 0.05 , so it can be said that the variance of the data from the experimental group and the control group at the time of the pretest is homogeneous.

Homogeneity test is also applied at the posttest. The results of the homogeneity test using the Levene's test by looking at the significance value in the experimental group and the control group during the posttest are shown in Figure 5.

Independent Samples Test			
		Equal variances assumed	Equal variances not assumed
		Keterampilan_Bermain_Violin	Keterampilan_Bermain_Violin
Levene's Test for Equality of Variances	F	1.296	
	Sig.	.270	

Figure 5. Posttest Homogeneity Test Results

Based on Figure 5, it is known that the results of the homogeneity test in the experimental group and the control group during the posttest with a calculated F value of 1.296 and a significance value of 0.270. The significance value shows > 0.05 , so it can be said that the variance of the data from the experimental group and the control group at the time of the posttest is homogeneous.

The results of the homogeneity test using the Levene's test by looking at the significance value > 0.05 indicate that the control group and the experimental group at the time of the pretest and posttest have a homogeneous data variance. This is indicated by a significance value of 0.403 at the pretest and a significance value of 0.270 at the posttest.

2. Independent sample t-test

Tests for normality and homogeneity obtained from the results of the pretest and posttest activities show that the data distribution is normal and variance of experimental group data and homogeneous control group. Next, hypothesis testing is carried out. The test used to analyze research data and test hypotheses is the t-test or different test. This difference test was used to find out significant differences in violin playing skills between students who were taught using an intermediate level violin textbook made by a team of lecturers and students who were not taught using an intermediate level violin textbook made by a team of

lecturers. The calculation of this t-test uses the independent sample t-test and is calculated using the help of the SPSS software program. The decision criterion (Jonathan, 2015: 152) is if the t count > t table value, it can be concluded that there is a significant difference between groups in the dependent variable.

The t-test is divided into 2 stages of analysis which are described as follows:

1) T-test on pretest

The first stage of analysis is the t-test or different test on pretest activities. This different test was conducted to find out whether there was a difference in the mean of the experimental group and the control group in terms of violin playing skills during the pretest. The results of the t-test (different test) from the average of the experimental group and the control group during the pretest activities are shown in Figure 6.

		Equal variances assumed	Equal variances not assumed	
		Keterampilan_Bermain_Violin	Keterampilan_Bermain_Violin	
Levene's Test for Equality of Variances	F	.735		
	Sig.	.403		
t-test for Equality of Means	t	.555	.555	
	df	18	17.406	
	Sig. (2-tailed)	.586	.586	
	Mean Difference	.4500	.4500	
	Std. Error Difference	.8105	.8105	
	95% Confidence Interval of the Difference	Lower	-1.2528	-1.2570
		Upper	2.1528	2.1570

Figure 6. T-test results on pretest

Based on Figure 6, it is known that the results of the t-test (different test) in the experimental group and the control group during the pretest activities with a t value of 0.555 and a t table value of 2.086. The value of t count < value of t table, so it can be said that there is no difference in the results of the pretest skills in playing the violin between the experimental group and the control group. In other words, the results of the pretest of violin playing skills in the experimental group and the control group were the same. Based on the results of the t-test (different test) on pretest, it can be concluded that there is not significant differences in violin playing skills between students in the control and experimental groups in the Music Study Program, Universitas Negeri Surabaya.

2) T-test on posttest

The next stage of analysis is the t-test (different test) during the posttest activity. The t-test (difference test) was conducted to find out whether there was a difference in the mean of the experimental group and the control group in terms of violin playing skills during the posttest activity. The results of the t-test (different test) from the average of the experimental group and the control group during the posttest activities are shown in Figure 7.

		Equal variances assumed	Equal variances not assumed	
		Keterampilan_Bermain_Violin	Keterampilan_Bermain_Violin	
Levene's Test for Equality of Variances	F	1.296		
	Sig.	.270		
t-test for Equality of Means	t	6.104	6.104	
	df	18	16.065	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	5.8000	5.8000	
	Std. Error Difference	.9501	.9501	
	95% Confidence Interval of the Difference	Lower	3.8038	3.7864
		Upper	7.7962	7.8136

Figure 7. T-test results on posttest

Based on Figure 7, it is known that the results of the t-test (different test) in the experimental group and the control group during posttest activities with a t value of 6.104 and a t table value of 2.086. The value of t count > t table value, so it can be said that there are differences in the posttest results of violin playing skills between the experimental group

and the control group. In other words, the posttest results of violin playing skills in the experimental group and the control group were different. Based on the results of the t-test (different test) on posttest, it can be concluded that there is significant differences in violin playing skills between students who were taught using an intermediate level violin textbook made by a team of lecturers and students who were not taught using an intermediate level violin textbook made by a team of lecturers in the Music Study Program, Universitas Negeri Surabaya.

B. Discussion

As described in the introduction, the purpose of this study was to find out significant differences in violin playing skills between students who were taught using an intermediate level violin textbook made by a team of lecturers and students who were not taught using an intermediate level violin textbook made by lecturer team.

Based on the results of the data analysis that has been done, it is known that the violin playing skills between the experimental group and the control group differ significantly. This conclusion is proven by the mean or average score of the experimental group which is higher than the control group during the posttest activity. The mean or average posttest score in the experimental group was 88.45. Meanwhile, the mean or average posttest score in the control group was 82.65. Another thing is also shown by the results of the t-test (different test) in the experimental group and the control group during posttest activities with a calculated t value of 6.104 and a t table value of 2.086. The calculated t value > t table value, so it can be said that the experimental group and the control group differ significantly.

The results of the t-test (different test) at the time of the posttest activity showed that there was significant differences in violin playing skills between students who were taught using an intermediate level violin textbook made by a team of lecturers and students who were not taught using an intermediate level violin textbook made by a team of lecturers in the Music Study Program, Universitas Negeri Surabaya. Therefore, the skill to play the violin is an aspect of the psychomotor domain that has an influence on the implementation of the mid-level violin textbooks made by a team of lecturers. As stated by David (1982: 162), that the psychomotor domain is very important in several fields of education including music and art, which require motor skills, where motor skills are a necessary part of the learning process.

Meanwhile, the increase in violin playing skills is also evidenced by the results of the research that has been carried out. The increase in violin playing skills was more demonstrated in the experimental group than the control group. This argument is proven by the mean or average pretest value in the experimental group of 81.15, while the mean or average pretest value in the control group is 80.7. The mean or average posttest score in the experimental group was 88.45, while the posttest mean or average value in the control group was 82.65. In the experimental group there was an increase of 7.3. This is shown from the mean or average score of 81.15 at the pretest, which increased to 88.45 at the posttest. Meanwhile, in the control group also experienced an increase in the mean or average value of 1.95. This can be shown by the average score of 80.7 at the pretest, rising to 82.65 at the posttest.

CONCLUSIONS

Based on the results of descriptive statistical analysis, it is known that the results of the experimental group's pretest were indicated by a minimum value of 78, maximum value of 83.5, standard deviation of 1.9727, median of 81.25, mode of 83.5, variance of 3.892, and range of 5.5. The results of the experimental group's posttest were also shown with a

minimum value of 85, maximum value of 93, standard deviation of 2.4659, median of 88.25, mode of 85, variance of 6.081, and range of 8.

Meanwhile, the pretest results for the control group were also shown with a minimum value of 78, maximum value of 83, standard deviation of 1.6364, median of 80.75, mode of 80, variance of 2.678, and range of 5. The posttest results of the control group were also shown with a minimum value of 80, maximum value is 85, standard deviation is 1.7167, median is 82.75, mode is 80, variance is 2.947, and range is 5.

Before entering the independent sample t-test, there is an analysis requirement test that must be carried out. The prerequisite tests are the normality test and homogeneity test. The results of the normality test using the Shapiro-Wilk in the control group and the experimental group during the pretest and posttest showed that the value $\text{sig} > 0.05$, so that it can be concluded that the data comes from both groups that have a normal distribution (symmetric). This is indicated by the sig values of 0.467 and 0.819 at the pretest and the sig values of 0.947 and 0.506 at the posttest. Meanwhile, the results of the homogeneity test using the Levene's test by looking at the significance value > 0.05 indicated that the control group and the experimental group at the time of the pretest and posttest had a homogeneous data variance. This is indicated by a significance value of 0.403 at the pretest and a significance value of 0.270 at the posttest.

The research results obtained using the independent sample t-test and the results of descriptive statistics, It is known that the violin playing skills between the experimental group and the control group differ significantly. This conclusion is proven by the mean score of the experimental group which is higher than the control group in the posttest activity. The mean posttest score in the experimental group was 88.45. Meanwhile, the mean posttest score in the control group was 82.65. Another thing is also shown by the results of the independent sample t-test in the experimental group and the control group during the posttest activity with a calculated t value of 6.104 and a t table value of 2.086. The calculated t value $>$ t table value, so it can be said that the experimental group and the control group differ significantly. Therefore, there is an influence of the application of an intermediate level violin textbook made by a team of lecturers on violin playing skills in the Music Study Program, Universitas Negeri Surabaya.

The increase in violin playing skills was more demonstrated in the experimental group than the control group. This argument is proven by the mean pretest score in the experimental group of 81.15, while the mean pretest score in the control group is 80.7. The mean posttest score for the experimental group was 88.45, while the mean posttest score for the control group was 82.65. The experimental group experienced an increase of 7.3. This is shown from the mean score of 81.15 at the pretest which increased to 88.45 at the posttest. Meanwhile, the control group also experienced an increase in the mean score of 1.95. This is shown by the mean score of 80.7 at the pretest, rising to 82.65 at the posttest.

REFERENCES

- Arikunto, Suharsimi. (2010). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Bloom, B.S. (1956). *Taxonomy of educational objectives*. London: Longmans, Green and Co Ltd.
- Cangelosi, J.S. (1995). *Merancang tes untuk menilai prestasi siswa*. Bandung: ITB Bandung.
- David, P.G. (1982). *Music teaching and learning*. New York: Longman Inc.
- Djohan Salim. (2005). *Psikologi musik*. Yogyakarta: Best Publisher.
- Durrant, C., & Welch, G. (1995). *Making sense of music education: foundation for music education*. New

York: Cassell.

Ertambang Nahartyo. (2013). Desain dan implementasi riset eksperimen. Yogyakarta: UPP STIM YKPN.

Heri Rahyubi. (2014). Teori-teori belajar dan aplikasi pembelajaran motorik. Bandung: Nusa Media.

Iqbal, H.M. (2002). Pokok-pokok materi metodologi penelitian dan aplikasinya. Jakarta: Ghalia Indonesia.

Mornell, A. (2012). Art in motion: motor skills, motivation, and musical practice. Frankfurt: Peter Lang GmbH.

Singgih Santoso. (2015). Statistik Parametrik. Konsep dan Aplikasi dengan SPSS. Jakarta: PT Elex Media Komputindo.

Sarwono, Jonathan. (2015). Rumus-Rumus Populer dalam SPSS 22. Yogyakarta: CV ANDI OFFSET.