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An Examination of Conservatory Students' Piano Lesson Self-Efficiency and Computer Literacy: The Case of Trabzon University State Conservatory

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ABSTRACT

In this study, the self-efficacy of conservatory students was determined in piano lessons. The piano lesson self-efficacy scale developed by Kurtuldu (2017) was used. The scale was applied to 55 students studying at the Musicology and Music Theory departments at Trabzon University State Conservatory in the academic year of 2020-2021. The result of this research revealed that significant differences were found only at the grade level between the piano lesson self-efficacy of the conservatory students. There was no significant difference in variables such as gender, the program attended at the conservatory, the type of high school graduated, the status of receiving piano education before undergraduate education, and the presence of a piano at the students' houses. As a result, several suggestions were put forward by evaluating the emerging differences in the context of computer literacy and distance education.

Key words: Self Efficacy, Piano Education, Computer Literacy, Distance Education

INTRODUCTION

The concept of self-efficacy was primarily introduced by Albert Bandura in 1977 within the scope of "Cognitive Behavior Change". A strong sense of individual efficacy has been found to be associated with better health, higher achievement, and more adequate social integration. This concept can be used in many different areas such as academic success, emotional disorders, mental and physical health, career choice and sociopolitical change (Schwazer & Fuchs, 1995).

It is stated that beliefs of self-efficacy are associated with four main sources. These can be listed as complete and accurate experiences, vicarious experiences provided by social models, verbal persuasion, and the individual's physical and emotional state. The most influential of these sources are the experiences of the individual. Self-efficacy beliefs affect the goals that people set for themselves, how much effort they make to achieve these goals, how long they can face the difficulties and their reactions to failure (Bıkmaz, 2004).

According to Bandura (1982), self-efficacy perception comprises of the beliefs about individual efficacy that affect a given job/task. Self-efficacy perceptions and outcome expectations may not always coincide. Individuals may have high self-efficacy perceptions, but negative outcome expectations. Although self-efficacy perceptions are low, there may be situations where outcome expectations are positive (Çoşgun & Ilgar, 2004).

Self-efficacy can be considered as the individual's self-awareness (Korkmaz, 2009, p. 229). Self-efficacy is what an individual should do to compare his/her own capacity with the performance and to take action according to the situation. According to Bandura, self-efficacy theory is based on the capacity of activating personal skills and the importance of self-belief about what an individual can do with the skills he/she owns (Coulibaly and Karsenti, 2013, p. 386). In other words, self-efficacy is the individual's belief in himself/herself about how successful he/she can be in using the skills he/she has. According to Bandura, a teacher's self-efficacy belief on his/her own teaching has an effect on the events that affect success in the classroom. Teacher self-efficacy has an important place in students' success. The self-efficacy belief of teachers is of utmost importance as it directs the teacher's learning and teaching processes, applies the principles and theories of education, contributes to the academic and social development of the students, and thus affects the success of the students (Eker, 2014). Studies have shown that the success of the individual does not depend only on the goals aimed at, but also depends on how much confidence and belief the individual has while realizing these goals (Marquotte and Bouffard, 2003 as cited in Galand and Vanlede, 2004; Kaçar and Beycioğlu, 2017, p. 1754).

Individuals with high self-efficacy perceptions opt for more challenging tasks and direct themselves to achieve these goals. Actions are first shaped throughout a plan, and people construct optimistic or pessimistic scenarios according to their self-efficacy proficiency levels. When the action starts, those with a high perception of self-efficacy make more effort and tend to continue to achieve their aims more than those with a low perception of self-efficacy. When

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faced with an obstacle, individuals with a high perception of self-efficacy recover quickly and continue to struggle to reach their goals. As a result, the perception of self-efficacy and competence is a reflection of the individual's capacity to cope with stress (Keskin & Orgun, 2006; Cited by Otacıoğlu 2017, p. 172).

As it can be understood from the definitions and explanations, self-efficacy, which is a factor that can affect people significantly, is important in terms of conveying ideas or feeling or making the other person feel it, as well as the individual's belief in his own ability. At this point, self-efficacy is expressed together with the feeling of competence. The sense of efficacy is also important in the field of teaching as it can affect both the expression, the quality of teaching, and learners. The teacher's feeling of self-efficacy is important in a wide range from his own teaching to the learner's perception (Kurtuldu 2017, p. 69).

Academic self-efficacy is one of the most important factors that determine the success of individuals in the educational environment. In this case, determining the self-efficacy proficiency levels of pre-service teachers can demonstrate how much effort they can put into performing teaching tasks and raising their students, and how long they can endure the difficulties they may encounter (Yalmancı & Aydın, 2014).

The area where the self-efficacy perception can be observed at the highest level is the field of music education. An individual who has to stand out in exams, lessons and various activities and to perform collectively or individually will need a sense of self-efficacy. Feeling self-sufficient is also important in terms of being more confident in the music education process and being able to control his performance. At this point, there are some interdisciplinary studies on self-efficacy and music in the literature.

Piano education is one of the courses which is commonly delivered in music education programs in higher education. Piano lessons are also present in faculties of education that train teachers in the field of music, conservatories that train performance artists, theorists, and music departments of faculties of fine arts. Piano lesson is a basic instrument lesson given to students who are interested in the instrument as a branch and students who are interested in other instruments as an elective course. The reason why the piano instrument is so widespread is that it is an important element in the maturation of the musical life of people who take art education as it is an instrument which is widely taught throughout the world in many different music education programs.

Today, societies need people who have lifelong learning skills, in other words, who can constantly renew their knowledge, keep up with change, follow developments and produce knowledge as well as being a conscious information consumer (Akkoyunlu & Kurbanoğlu, 2003). In this direction, education and computer technologies are advancing at a remarkable pace. Now, the teacher is in a guiding and guiding position to the students in their learning, rather than transferring information in the learning-teaching processes. Students also try to construct their own knowledge in learning environments, in a sense, they learn to learn. Teaching is moving in a student-centered direction. The use of computer-based technologies in the creation of student-centered teaching environments has brought the concept of computer literacy to the agenda for both students and teachers (Kolburan and Geçer 2010, p. 21).

Computer literacy is defined in various ways in the literature. Knowing the basic information about the computer and using it as a source of information can be defined as computer literacy (Caspo, 2002).Computer literacy can be defined as understanding the basic concepts of informatics and using basic computer programs in one's own profession (Lupo, 2001; Childers, 2003).Although computer literacy is briefly defined as the ability to use a computer, "the ability to control the computer and programs to achieve various purposes"; "the ability to use the computer to obtain information, communicate and solve problems." such definitions are also encountered in the literature (Dinçer, 2011, p. 132).

Based on the above explanations, a computer literate person can be defined as an individual who can use the programs on the computer, access the information he/she needs in the computer or internet environment, and solve the problems related to these environments effectively on his/her own.Many educational institutions in the world, especially universities, are working to create more effective and creative educational environments by using information and communication technologies (Akteke et al., 2008). Computer technologies are used for different purposes in the educational process. Computer-based word processors, spreadsheets, databases, as well as cd-rom, dvd-rom, hypertext, hypermedia and multimedia tools are some of these technologies.Besides; Graphic and desktop broadcasting software used in the presentation of course materials, audio conferencing and video conferencing applications that enable virtual classroom environments to be created within the scope of communication technologies allow faculty members, students and experts from different parts of the world to exchange views. (Kolburan and Geçer 2010, pp. 21-22) The aim of this study is to determine the piano lesson self-efficacy perceptions of conservatory students, and to make various suggestions on distance education and computer literacy.

OBJECTIVES

The aim of the research is to determine the self-efficacy levels of the students studying at the conservatory in the piano lessons and to make various suggestions in this direction. In this study, answers to the following questions were sought:

1. Do the piano lesson self-efficacy perceptions of conservatory students differ according to their gender?
2. Do the piano lesson self-efficacy perceptions of conservatory students differ according to their departments?
3. Do the piano lesson self-efficacy perceptions of conservatory students differ according to their grade levels?
   - 3.1. Do the piano lesson self-efficacy perceptions of the students studying in the music theory department differ according to the class they study?

3.2. Do the piano lesson self-efficacy perceptions of the students studying in the musicology department differ according to their grade levels?

4. Do the piano lesson self-efficacy perceptions of conservatory students differ according to the type of high school they graduated from?
5. Do conservatory students' perceptions of piano lesson self-efficacy differ according to their status of having a piano at home?
6. Do the piano lesson self-efficacy perceptions of conservatory students differ according to their piano learning experience before undergraduate education?

METHODOLOGY

The research is a quantitative study with a survey model. The self-efficacy levels of conservatory students for piano lesson were determined according to various variables with the scale scanning. The screening model is a type of research that aims to reveal a past or present situation as it is (Karasar, 2008, p. 86). The study can be characterized as a relational survey study based on comparison, which is one of the quantitative survey types. This model is a research model that aims to determine the existence or degree of change among many variables (Karasar, 2017, p. 114).

Limitations

The research is limited to musicology and music theory students studying at Trabzon University State Conservatory in 2020-2021 academic year. The conservatory has 56 registered students and the study was conducted with 55 students attending the school during the research process.

Sample

Trabzon University State Conservatory has two departments in 2020-2021. It consists of 55 students studying in the departments of Musicology and Music Theory in 2020-2021 academic year. There are 56 students in total at Trabzon University State Conservatory. The scale was applied to the students after the courses were completed at the end of the spring semester of 2021. The students (n=55) studying at the conservatory were reached and the scale was applied (Table 1).

Table 1. Demographic Information

Demographics	n	%
Gender		
Female	25	45.5
Male	30	54.5
Department		
Music Theory	29	52.7
Musicology	26	47.3
Grade		
1st Year	26	47.3
2nd Year	3	5.5
3rd Year	14	25.5
4th Year	12	21.7
The High Schools Students Attended		
Fine Arts High School	19	34.5
Other	36	65.5
Do you have a piano at home?		
Yes	15	27.3
No	40	72.7
Did you receive piano training before undergraduate education?		
Yes	24	43.6
No	31	56.4
Total	55	100

Data Collection

In this current research, the demographic information form created by the researcher and the self-efficacy scale for piano education developed by Kurtuldu (2017) were used. In the demographic information form, there are questions about the gender of the participants, the type of high school they graduated from, the availability of a piano at home, and their classes and departments. The self-efficacy scale for piano education consists of 32 items and the items are grouped under two factors. For the scale, KMO (Kaiser-Meyer-Olkin) sample fit test, Bartlett's test to determine the factorability level for the scale, principal component factor analysis measurements for the items that make up the scale, item-total correlations were determined and correlation measurements were made between the sub-factors and the total scores of the scale. Cronbach's Alpha coefficient, which is the reliability coefficient, was calculated to determine the reliability of the scale. In determining the internal consistency coefficients of the scale, Alpha test was performed for the factors. In addition to these, retest reliability and cross-validation studies were also conducted to test the validity and reliability of the scale. As a result of the measurement, factor loads were found to be high, the KMO value was measured as 0.92, and the total variance explanation rate was determined as 56.62%. The Alpha level of the scale was found to be 0.92, and the correlation level between the factors was also found to be positive and high.

Data Analysis

SPSS 24.0 was used for coding and statistical analysis of the data collected in this study. Descriptive statistics were expressed as frequency, percentage, mean, standard deviation, minimum, maximum, and median values. Normality of sample scores was confirmed using the Kolmogorov Smirnov test. Statistical analyses were performed using Mann-Whitney U-test and Kruskal Wallis tests for unpaired groups. The results were evaluated with 95.0% confidence interval and $p < 0.05$ significance. Bonferroni correction was made for multivariable tests (Table 2).

FINDINGS

Students' Gender and Piano Lesson Self-Efficacy Perception

In Table 3, the scores of the conservatory students' genders from the piano lesson self-efficacy scale are given.

As seen in Table 3, there is no significant difference in the Mann Whitney U test results between the total scores of the piano lesson self-efficacy perception scale and subscale scores according to gender (p>.05).

Students' Departments and Piano Lesson Self-efficacy Perception

In Table 4, the differentiation of the scale scores according to the program in which the students studied at the conservatory is given.

Table 2. Self-Efficacy Perception Scale for Piano Lessons and Its Sub-Dimensions' Scores

Sub-Dimensions	Mean±SS	Min-Max	Median (IQR)
Self-efficacy related to proficiency at skills	46.96±20.70	18-84	36 (33-69)
Self-efficacy related to the level of knowledge and cognition	37.00±16.66	14-67	28 (24-54)
Total Score	83.96 ± 37.20	32-151	64 (58-122)

As can be seen in Table 4, no significant difference was found as a result of the Mann-Whitney U test conducted between the total scores of the piano lesson self-efficacy perception scale and the subscale scores of the students according to the program they studied (p>.05).

Students' Grade Levels and Piano Lesson Self-efficacy Perception

Table 5 demonstrates the findings regarding the differentiation of the scale scores of the conservatory students according to their grade levels.

As can be seen in Table 5, as a result of the Kruskal Wallis test conducted between the grade they study and the piano lesson self-efficacy scale scores of the conservatory students, there is a significant difference between the 1st and 4th Grades, 2nd and 4th Grades, and 3rd and 4th Grades in favor of the 4th Grades(p<.05).

Grade Levels and Piano Lesson Self-efficacy Perception of Students Studying in the Music Theory Department of the Conservatory

In Table 6, the differentiation of the scale scores of the students studying in the music theory department of the conservatory according to the year they study is given.

As seen in Table 6, as a result of the Kruskal Wallis test, which was conducted to determine the relationship between the scores of the students studying in the music theory department according to their grade levels, it was revealed that there

Table 3. U-Test Results According to Gender

Sub-Dimensions	Female			Male			Statistical Analysis
	Mean ± SS	Min-Max	Median (IQR)	Mean ± SS	Min-Max	Median (IQR)	
*Sub-dimension 1	47.2 ± 20.36	18-79	36 (34.0-71.0)	46.8 ± 21.33	18-84	36 (33.3-61.0)	U = 362.500 P = 0.832
**Sub-dimension 2	36.7 ± 16.28	14-64	28 (24.0-54.0)	37.3 ± 17.24	14-67	28 (24.0-52.8)	U = 367.500 P = 0.899
Total Score	83.8 ± 36.45	32-140	64 (58.0-127)	84.1 ± 38.43	32-151	64 (58.0-113.0)	U = 362.000 P = 0.835

IQR = 25th-75th percentile. *Sub-dimension 1: Self-efficacy related to skills proficiency. **Sub-dimension 2: Self-efficacy related to the level of knowledge and cognition

Table 4. U-Test Results According to Department Variable

Sub-Dimensions	Music Theory			Musicology			Statistical Analysis
	Mean±SS	Min-Max	Median (IQR)	Mean±SS	Min-Max	Median (IQR)	
*Sub-dimension 1	43.38±19.20	18-78	36 (32-60.50)	50.96±21.94	18-84	43.50 (33.75-73)	U=435.500 P=0.322
**Sub-dimension 2	34.28±15.75	14-64	28 (24-50)	40.04±17.42	14-67	31 (24-56.25)	U=443.500 P=0.259
Total Score	77.66 ± 34.80	32-141	64 (57.50-109.50)	91.00 ± 39.18	32-151	74.50 (58-132)	U = 435.500 P = 0.321

IQR=25th-75th percentile. **Sub-dimension 1: Self-efficacy related to skills proficiency. **Sub-dimension 2: Self-efficacy related to the level of knowledge and cognition

Table 5. Kruskal Wallis Test Result According to Grade Level

Grade/Year	*Sub-dimension 1	**Sub-dimension 2	Total Score
1st Year			
Mean±SS	42.58±18.14	33.35±14.63	75.92±32.52
Min-Max	23-78	21-63	44-141
Median (IQR)	34 (31-58.50)	25 (24-49)	58 (57-106.75)
2nd Year			
Mean±SS	30.00±10.39	23.33±8.08	53.33±18.47
Min-Max	18-36	14-28	32-64
Median (IQR)	36 (18-36)	28 (14-28)	64 (32-64)
3rd Year			
Mean±SS	36.79±15.66	28.86±13.00	65.64±28.63
Min-Max	18-76	14-64	32-140
Median (IQR)	36 (31.50-36)	28 (24.50-28)	64 (56-64)
4th Year			
Mean±SS	72.58±8.72	57.83±4.91	130.42±12.97
Min-Max	55-84	52-67	107-151
Median (IQR)	73 (66-79.25)	56.50 (53.75-59.75)	132 (119.75-137.25)
Statistical Analysis	KW = 19.778 p<.001	KW = 20.349 p<.001	KW = 19.993 p<.001

IQR=25th-75th percentile. *Sub-dimension 1: Self-efficacy related to skills proficiency. **Sub-dimension 2: Self-efficacy related to the level of knowledge and cognition. →There is a difference between 1st and 4th year students (p<.001). →There is a difference between 2nd and 4th year students (p<.05). → There is a difference between 3rd and 4th year students (p<.01)

Table 6. Kruskal-Wallis Test Results of Music Theory Department Students (n=29) According to Grade Level Variable

Grade/Year***	n (%)	Score	*Sub-dimension 1	**Sub-dimension 2	Total Score
1st Year	16 (55.2)	Mean±SS	48.69±20.28	38.63±35.50	87.31±36.447
		Min-Max	23-78	21-63	44-141
		Median (IQR)	45 (31.50-70.75)	35.50 (24-54)	81 (57.25-125)
2nd Year	3 (10.3)	Mean±SS	30.00±10.39	23.33±8.08	53.33±18.47
		Min-Max	18-36	14-28	32-64
		Median (IQR)	36 (18-36)	28 (14-28)	64 (32-64)
3rd Year	10 (34.5)	Mean±SS	38.90±17.60	30.60±14.69	69.50±32.26
		Min-Max	18-76	14-64	32-140
		Median (IQR)	36 (31.50-42.25)	28 (24.50-32.50)	64 (56-74.75)
Statistical Analysis			KW = 0.841 p = 0.657	KW = 0.890 p = 0.641	KW = 0.889 p = 0.641

IQR=25th-75th percentile. *Sub-dimension 1: Self-efficacy related to skills proficiency. **Sub-dimension 2: Self-efficacy related to the level of knowledge and cognition. *** There are no 4th-year students in Music Theory Department.

was no significant difference according to their grade levels (p>.05).

Grade Levels and Piano Lesson Self-efficacy Perception of Students Studying in the Conservatory Musicology Department

In Table 7, the differentiation of the scale scores of the students studying in the conservatory musicology department according to the years they study is given.

As can be seen in Table 7, it has been revealed that the scores of the students studying in the musicology department from the piano lesson self-efficacy scale show a significant difference according to the Kruskal Wallis test. It is seen that the difference shows a significant difference between 1st and 4th grades and between 3rd and 4th grades in favor of 4th grades (p<.05).

Conservatory Students' Piano Lesson Self-efficacy Perception Scale Scores According to the Type of High School they Graduated from

Table 8 shows the differentiation of the scale scores according to the high schools in which the students studied at the conservatory attended.

Table 7. Kruskal Wallis Test Results of Musicology Students (n=26) According to Their Grade Levels

	n (%)	Score	*Sub-dimension 1	**Sub-dimension 2	Total Score
1st Year	10 (38.4)	Mean±SS	32.80±7.71	34.90±3.63	57.70±11.16
		Min-Max	23-51	21-34	44-85
		Median (IQR)	33.50 (29-34)	24 (23.25-26)	58 (53.75-58)
3rd Year	4 (15.4)	Mean±SS	31.50±9.00	24.50±7.00	56.00±16.00
		Min-Max	18-36	14-28	32-64
		Median (IQR)	36 (22.50-36)	28 (17.50-28)	64 (40-64)
4th Year	12 (46.2)	Mean±SS	72.58±8.72	57.83±4.91	130.42±12.97
		Min-Max	55-84	52-67	107-151
		Median (IQR)	73 (66-79.25)	56.50 (53.75-59.75)	132 (119.75-137.25)
Statistical Analysis			KW = 19.077 p<.001	KW = 19.104 p<.001	KW = 19.143 p<.001

IQR=25th-75th percentile. *Sub-dimension 1: Self-efficacy related to skills proficiency. **Sub-dimension 2: Self-efficacy related to the level of knowledge and cognition. *** There are no 2nd-year students in Musicology Department. →There is a difference between 1st and 4th year students (p<.001). →There is a difference between 3rd and 4th year students (p<0.05).

Table 8. U-test Results According the Types of High Schools Students Graduated From

Type of High School	Fine Arts High School			Other			Statistical Analysis
	Mean±S SS	Min-Max	Median (IQR)	Mean±SS	Min-Max	Median (IQR)	
*Sub-dimension 1	49.53±19.98	23-78	36 (34-73)	45.61±21.23	18-84	36 (31.50-61)	U=294.000 P=0.393
**Sub-dimension 2	39.11±16.13	21-64	28 (2654)	35.89±17.05	14-67	28 (24-53.50)	U=285.500 P=0.314
Total Score	88.63 ± 35.96	44-141	64 (58-129)	81.50 ± 38.10	32-151	64 (57.25-112.75)	U = 291.500 P = 0.369

IQR=25th-75th percentile. *Sub-dimension 1: Self-efficacy related to skills proficiency. **Sub-dimension 2: Self-efficacy related to the level of knowledge and cognition

As seen in Table 8, in the Mann-Whitney U Test conducted,it was found that there was no significant difference between the conservatory students' scores from the piano lesson self-efficacy scale according to the type of high school they graduated from (p>.05).

Conservatory Students' Piano Lesson Self-efficacy Perception Scale Scores According to the Availability of a Piano at Home

Table 9 shows the differentiation of the scale scores according to the availability of a piano at students' houses.

As can be seen in Table 9, it has been revealed that the scores of the conservatory students from the piano lesson self-efficacy scale do not show a significant difference according to whether they have a piano at home (p>.05).

Students' Piano Education Before their Undergraduate Years and their Piano Lesson Self-efficacy Perception

As can be seen in Table 10, it has been revealed that the scores obtained from the piano lesson self-efficacy scale do not differ according to the status of conservatory students taking piano lessons before their undergraduate education (p>.05).

DISCCUSSION

The results of the research revealed that the scores obtained from the piano lesson self-efficacy scale of the conservatory students differ only according to their grade levels. In addition, when we examine the programs in the conservatory in itself, it has emerged that only the musicology department differs within itself according to the grade levels of the students. The difference in both directions is only in favor of the 4th Grades. The reason for this may be because the fourth-grade students took the piano lessons delivered in the conservatory face-to-face without being affected by the Covid-19 pandemic process all over the world. The first- and second-year students did not take face-to-face piano lessons, while the third-year students took face-to-face piano lessons for one and a half semesters and received online training for one semester. The digital literacy levels of these students may be low regarding art education, especially piano education. Factors such as the use of the distance education tools, technical difficulties and lack of online materials, teachers' ability to master the online platform and the course itself may have caused the 1st, 2nd and 3rd year students to have a lower sense of self-efficacy when compared to the 4th grade students. These results show parallelism with the results obtained in Sevinç (2010)'s study. In his study, Sevinç examined whether the music teaching self-efficacy beliefs of the

Table 9. U-Test Results According to Availability of a Piano at Home

Availiability of a Piano at home	Available			Not Available			Statistical Analysis
	Mean±SS	Min-Max	Median (IQR)	Mean±SS	Min-Max	Median (IQR)	
*Sub Dimension 1	44.87±21.41	18-78	36 (31-69)	47.75±20.66	18-84	36 (34-69.50)	U=335.500 p>.05
**Sub Dimension 2	35.60±17.05	14-63	28 (24-54)	37.53±16.70	14-67	28 (24-56)	U=335.500 p>.05
Total Score	80.47 ± 38.20	32-141	64 (57-122)	85.28 ± 37.22	32-151	64 (58-125)	U = 335.500 p>.05

IQR=25th-75th percentile. *Sub-dimension 1: Self-efficacy related to skills proficiency. **Sub-dimension 2: Self-efficacy related to the level of knowledge and cognition

Table 10. U Test Results According to Students' Previous Piano Education Experience before Undergraduate Level

Did you receive any paino training before undergraduate education?	Yes			No			Statistical Analysis
	Mean ± SS	Min-Max	Median (IQR)	Mean ± SS	Min-Max	Median (IQR)	
*Sub-dimension 1	42.13 ± 18.51	18-78	35,50 (31-61)	50.71 ± 21.81	18-84	51 (34-73)	U = 468.000 p = 0.101
**Sub Dimension 2	33.13 ± 14.92	14-63	27 (24-52.75)	40.00 ± 17.53	14-67	34 (24-57)	U = 458.500 p = 0.140
Total Scora	75.25 ± 33.25	32-141	61,50 (57-115.25)	90.71 ± 39.18	32-151	85 (58-132)	U = 467.000 p = 0.105

IQR = 25th-75th percentile. *Sub-dimension 1: Self-efficacy related to skills proficiency. **Sub-dimension 2: Self-efficacy related to the level of knowledge and cognition

music teacher candidates differ according to the level of their education, and as a result, he concluded that the self-efficacy levels of the 4th grade students were at the highest level.

There is no significant difference found according to the other defining characteristics of the group, such as gender, type of high school they graduated from, whether or not they took piano lessons before undergraduate education, and whether they had a piano at home. From this point of view, the study of Otacıoğlu (2008) comparing the self-efficacy and self-esteem levels of conservatory and education faculty students could not find a significant difference regarding the gender variable. Again, Kurtuldu (2017) concluded that the self-efficacy levels of the students who took piano lessons in the music teaching departments of the faculty of education did not differ according to gender. In their research, Çoşgun and Ilgar (2004) concluded that there was no change in the self-efficacy perceptions of students according to their gender, according to their participation in guidance and psychological counseling activities. In the study of Keskin and Orgun (2006), they could not find a significant relationship between the gender of the students and the scores they got from the self-efficacy perception scale. In their study, Karakuş and Ocak (2019) examined pre-service teachers' skills related to digital literacy and self-efficacy in terms of gender, department they are studying at, educational status of parents, type of school they graduated from, and computer access opportunities. The scale they used consists of four sub-dimensions. These are production, resource availability, application availability, and support dimensions, respectively. In the study, the sub-dimensions of the gender variable scale, the sub-dimensions of using the application differed in terms of gender, and no gender difference was revealed in the other dimensions.

In his study, Gün (2014) concluded that the perceptions of the performance levels of music teacher candidates do not differ according to the type of high school they attended before their undergraduate education. In their study, Babacan and Babacan (2017) concluded that the piano lesson self-efficacy perceptions of music teacher candidates do not differ according to the type of high school they graduated from. The results of this current research show parallelism with these two studies.

CONCLUSION

The Covid-19 Outbreak process, which has affected the world as of 2020, has brought about several changes in the field of education. These processes of change have shown themselves in the field of art education. Art education, which has been based on traditional methods for many years, had to adapt quickly to the distance education process. In this process, academicians, students and administrators, who are the stakeholders of the system, are trying to adapt to this period with great self-sacrifice. On the other hand, the new process brings change and new ideas in its wake for the future. In the field of art education, educators, academicians and students, who are fed by tradition, have to carry out education with a completely digital system in the process of transferring knowledge. For this reason, especially in the art education processes in our country, digitalization, which has progressed at a slow pace in the last twenty years, and the inclusion of technology

in education have come to the fore suddenly and rapidly. According to Yazıcı (2001), the necessary subjects to become a computer literate are given under two headings: "reader" and "writer".To be a reader; Basic computer concepts and definitions, most used computer terms, a brief history of computers, general classifications of computers, working principle of computers, capacities, hardware and peripherals, computer networks and basic information; In order to be a writer, it is necessary to have both knowledge and skills to use the internet, programming concepts, classification of software, the purpose and use of some application software, and programming. (Akgül et al.2015, p. 209)It is extremely clear that a teacher can fulfill his/her duty more effectively, solve computer problems in a shorter time, and thus be more beneficial both for himself and for the institution he/she works for, if he/she is computer literate (İnceoğlu 2004).

It is very important that computer literacy becomes widespread in all disciplines in the field of music education (instrument, theory, musicology, music teacher education), and that the stakeholders of the system develop in this direction. For this reason, studies should be carried out to spread computer literacy in the field of music in Turkey. Particularly, steps should be taken to identify the experiences that emerged during the pandemic and the problems faced by students in music and instrument education in general and to eliminate their deficiencies. In the context of computer literacy, the differences in the self-efficacy level that emerged in this study according to the grade level of the students can be determined and larger-scale studies can be carried out by determining the situations of other stakeholders in the system.

More detailed studies should be carried out to determine the self-efficacy deficiencies for the piano lesson. In particular, research should be conducted to identify and develop the deficiencies and weaknesses caused by the pandemic process. In spite of the fact that this study was implemented in a small group, it is recommended that the study and the scale be applied to larger communities and students who take piano lessons in different art education institutions. In the distance education process, it is important to make research to reveal the challenges or positive experiences in the piano education and other areas of art education in general in order for the distance education to work more healthily.

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