



# **Music Theory Literacy of Individuals Receiving Amateur Piano Education**

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ARTICLE INFO	ABSTRACT	
Article history Received: July 14, 2024 Accepted: October 15, 2024 Published: October 31, 2024 Volume: 12 Issue: 4	In this study, the level of musical literacy acquisition of individuals who receive self-engage piano education was examined. It is thought that there is an ambiguity between the piano playing ability of individuals who receive self-engage piano education and the development of their music literacy. The aim of the study is to reveal the music theory literacy levels of these individuals and their differences according to various variables. The research was conducted with a descriptive survey model. The study focused on individuals who receive amateur piano education, and the	
Conflicts of interest: None Funding: None	<ul> <li>data were collected through literature review, demographic information form and "Music Theory Literacy Scale". A total of 124 individuals who did not receive professional music education (amateur) participated in the study. A 17-question test was developed to determine music theory literacy. As a result of the study, it was seen that the music theory literacy levels of individuals who received amateur piano education were at an intermediate level. While the participants were highly successful in the questions involving knowledge of note values, they failed in the question involving knowledge of basic tone in music.</li> </ul>	

Key words: Music Education, Music Theory Literacy, Piano Education

## INTRODUCTION

Music literacy in music education is a field like playing and singing, and this field is included in the national programs of other countries. For example, in the USA, some of the national music education standards to be achieved in formal education determined by MENC (The National Association for Music Education) include areas of music literacy such as reading and notating music (Aslan & Deniz, 2011).

In 1983, Gardner (2004) mentioned the relationship between language and music skills in his theory of multiple intelligences. In music, language skills include reading notes, transposing, understanding keys and harmony, analyzing music, understanding the cultural and historical context in which music and composers are involved, expressing meaning with musical sounds, sound quality, remembering music (etc.) (Hallam, 1998, p. 34).

A musically literate individual understands the nature of music and musical developments; comprehends basic musical concepts, principles, laws and theories and uses them appropriately; uses musical processes in solving problems and making decisions; understands the relationship between music and technology, music and the environment and their interaction with society; and has interests that lead to a richer and more fulfilling life (Köseoğlu et al., 2003).

The activities based on the outcome sentence "Uses basic music writing and elements" in the 2006 music program of the Ministry of National Education are aimed at developing music literacy. These activities include creating a rhythm pattern, writing this pattern, and completing an unfinished musical sentence. Students who complete these activities correctly will acquire music literacy and thus improve their perspective on music, which has an extremely important place in our lives (Aslan & Deniz, 2011).

There are various studies examining art literacy levels in the literature (Yücetoker, 2015; Kurtaslan Yıldırım, 2017; Özer, 2018; Mentiş Köksoy, 2018; Uyar & Temiz, 2019; Afacan & Kaya, 2019; Taşkesen & Ekici, 2020; Aydınlı Gürler & Kaynak Akçaoğlu, 2021).

In Yücetoker's (2015) study conducted with music education and art education students, it was examined whether there was a significant difference in the level of art literacy according to the department, grade, interest to read art books, and interest to do library research. In Kurtaslan Yıldırım's (2017) study conducted with students studying in the painting and music departments of Fine Arts High Schools, it was examined whether there was a significant difference in the level of art literacy according to gender, department, grade, interest to participate in artistic activities, and interest to do art class assignments. In the study conducted by Özer (2018) with music, painting and ceramics department students, it was examined whether there was a significant difference in the level of art literacy according to the department, grade, interest to read art books, and interest to do library research.

In Mentiş Köksoy's (2018) study conducted with music and art teacher candidates, it was examined whether there

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was a significant difference in the level of art literacy according to branch, gender, grade, interest to read art books, interest to do research in the library, and frequency of reading books. Afacan and Kaya's (2019) research was conducted with music department students. In the study, it was examined whether there is a significant difference in the level of art literacy according to gender, class, university, interest to read art books, and interest to do research in the library. The study group of Aydınlı Gürler and Kaynak Akçaoğlu's (2021) study consisted of music department students. In the study, the relationship between art literacy levels and their interest in reading books, interest in reading art books, interest in doing research in the library, TYT achievement scores and art literacy levels were examined.

It is obvious that the individuals who receive amateur piano education should gain music literacy while completing their piano education process. However, the fact that individuals play the piano as a result of piano education does not give an idea about the extent to which they have acquired the dimensions of music literacy. Individuals who receive recreational piano education can play the piano, but since they do not receive education based on a specific program or since the education in question varies from teacher to teacher, it is unclear to what extent the process is realized within the framework of goals and objectives as in formal education.

For this reason, the level of music literacy of individuals receiving piano education is a question in mind. First of all, the lack of a study in the field makes this study important in terms of pioneering the determination of the music literacy status of individuals receiving piano education. In this study, it was aimed to determine the level of music theory literacy of individuals who receive self-engage piano education and to examine their music literacy levels according to various variables.

For this purpose, the following question was sought to be answered:

(1) What is the level of music theory literacy of individuals receiving amateur piano education?

# METHOD

In this section, information about the research model, methodology, population, sample and data analysis are given.

## **Research Model**

This study is a descriptive research conducted in the survey model. The survey model is suitable for studies that aim to describe a past or present situation as it exists (Karasar, 2006, p. 77). More specifically, the following models were followed in conducting this study:

### General survey models

This model is defined as follows: "in a universe consisting of a large number of elements, in order to make a general judgment about the universe, all of the universe or a group of samples or samples to be taken from it are survey arrangements" (Karasar, 1994, p. 79).

#### **Relational survey models**

Karasar (1998) defines these models as follows: "Relational survey models are research models that aim to determine the existence and/or degree of change between two or more variables together" (p. 81).

### Working Group

The study group consisted of 124 individuals without professional music education between the ages of 4-72 years who received amateur piano education. The case was handled with the accessible sampling method.

The accessible sampling method is a method that allows the researcher to examine a sample that is easily accessible in terms of time and resources. In this method, although the selected sample is not representative of the population, it provides a practical and economical solution for the research (Büyüköztürk et al., 2015).

#### **Data Collection and Analysis**

Firstly, literature information was accessed through books, articles and the internet.

In the study, the "Music Theory Literacy Scale", which was developed by the researcher in order to determine the music literacy level of the individuals receiving amateur piano education, consisting of basic information and basic information about musical concepts, and a demographic information form were used as data collection tools.

### Analyzing the Data

Various methods and tools can be used to determine the music theory literacy of piano students. These methods can be adapted according to the child's age, musical level and learning style.

However, in this study, in order to reveal the music literacy of individuals, the results obtained from the "Music literacy test", which was prepared by the researcher to recognize musical concepts and consists of basic information, were used.

"About the music literacy test:

The music literacy test was prepared in line with the following objectives and achievements:

- 1. Recognizes note and rest values.
- 2. Recognizes 2/4, 3/4 and 4/4 meter formats based on the number of measures and measures.
- 3. Recognizes basic nuance, speed terms and music terms
- 4. Recognizes Major-Minor tones.

For these goals and objectives, 17 questions were prepared (Appendix).

## **RESULTS AND DISCUSSION**

#### **Demographic Results**

This section provides demographic information about the individuals who participated in the study.

According to Table 1, when the age distribution of the participants is analyzed, it is seen that most of the participants (37.9%) are between the ages of 4-10, followed

by 11-15 years (22.6%), 21 years and over (21%) and 16-20 years (18.5%), respectively.

When the distribution of the duration of the participants' piano education is analyzed (Table 2), it is seen that the participants generally received piano education for 1-3 years (39.5%) and 0-12 months (38.7%), and approximately one fifth of the participants (21.8%) received education for 4 years or more.

**Table 1.** Age distribution of the individuals participating in the study

Age categories	f	%
4-10 years	45	37.9
11-15 years	28	22.6
16-20 years	23	18.5
21 years >	26	21.0
Total	122*	100

**Table 2.** Distribution of participants' duration of piano training

<b>Duration of Piano Education</b>	f	%
0-12 month	48	38.7
1-3 year	49	39.5
4 year and +	27	21.8
Total	124	100.0

 Table 3. Correct answer levels of the questions in the achievement test (n=124)

Questions	f	%
Question_1	103	83.1
Question_2	99	79.8
Question_3	106	85.5
Question_4	101	81.5
Question_5	85	68.5
Question_6	88	71.0
Question_7	92	74.2
Question_8	70	56.5
Question_9	91	73.4
Question_10	88	71.0
Question_11	66	53,2
Question_12	63	50.8
Question_13	86	69.4
Question_14	100	80.6
Question_15	85	68.5
Question_16	87	70.2
Question_17	103	83.1

 Table 4. Average net score of the participants in the achievement test

	Ν	Minimum	Maximum	Μ	SD
Questions	124	0	17	12.20	4.78

Table 3 shows the level of correct answers of the participants to the questions in the achievement test. According to this table, the question that the participants answered most correctly was question 3 (f = 106, 85.5%). In addition, the question with the lowest correct answer rate was question 12 (f = 63, 50.8%).

Table 4 shows the mean scores and standard deviation values of the participants in the achievement test. According to this, the participants' average score in 17 questions was 12.20. The success level of the participants in the test is 71.76%.

## DISCUSSION

While this study shows that students have reached a certain level of mastery of theoretical knowledge with a success rate of 71.76%, it reveals that there are still deficiencies in deeper concepts.

In their study, Aslan and Deniz (2011) measured the music literacy levels of ninth grade students with the Marmara Music Literacy Test and examined it in terms of MEB score and grade evaluation criteria (distributions). As a result of the study, it was revealed that the students scored below average (passing). He also stated that the music literacy levels of students studying in public schools could not be improved compared to private school students.

As a result of the test applied to individuals receiving amateur piano education, 71.76% success rate shows that as the education received becomes more specialized (one-to-one or out-of-school), it is thought that the success rate in music theory literacy can increase.

The  $12^{th}$  question, in which the participants were more unsuccessful than the other questions, was the question about the concept of basic tone in music. In general, this failure also revealed that the subject including the concept of fundamental tone in music should be studied more.

### **CONCLUSION AND RECOMMENDATIONS**

The age range of the 124 individuals who participated in the study was between 4-21 years old, with the largest group consisting of participants between 4-10 years old (36.3%). The duration of piano training generally varied between 1-3 years (39.5%) and 0-12 months (38.7%). In the achievement test, the correct answer rates of the participants were highest in question 3 (85.5%) and lowest in question 12 (50.8%). The average success level in the test was 71.76%. As a result of the study, it was seen that the music theory literacy level of the individuals who receive amateur piano education is at an intermediate level.

The success level of the participants who participated in the music theory literacy test consisting of knowledge of basic concepts was 71.76%. In order to improve music theory literacy, the learning process needs to be supported by continuous evaluation and feedback. Participants can be given regular quizzes, quizzes or assignments to check their level of knowledge and identify areas where they are lacking. Feedback is critical for individuals to improve their areas of weakness. In addition, based on the results of the test, it can be determined which topics are more difficult to understand by the participants and further work can be done on these topics.

Music theory lessons should be integrated with piano practice and the theoretical knowledge learned should be applied on the piano. It is important for piano teachers to have sufficient knowledge of music theory and to continuously improve themselves in this area. Music theory is not only about learning the rules of music, but should also allow individuals to create their own music and interact freely with music. Interactive and creative music theory materials appropriate to the age and interests of individuals should be used. Families should be informed about the importance of music theory and encouraged to take an active role in the musical development of individuals. In line with these suggestions, the music theory literacy of individuals receiving amateur piano training can be supported more effectively and thus better equipped musicians can be trained.

The issue of music theory literacy is not only a lesson for children studying piano, but also a tool that forms the basis of their musical development. Understanding music theory and basic concepts such as notes, rhythms, chords, etc. provides a better understanding of music.

Music theory literacy allows individuals to create their own music. Skills such as creating new melodies by combining chords, creating different musical atmospheres by experimenting with rhythms are based on music theory.

Music theory plays an important role in overcoming technical difficulties encountered while playing the piano. For example, knowledge of music theory is necessary to analyze a difficult passage in a piece. It is also known to help strengthen musical memory. Recognizing notes and rhythms allows to memorize a piece faster and more accurately.

Knowledge of music theory is a basic requirement for individuals who want to learn an instrument other than the piano. Music theory makes it easier to understand the working principles of different instruments. Music theory literacy is a basic requirement for individuals who want to become a professional musician.

This study was conducted with 124 amateur piano players who could be reached. It can be expanded with a larger number of participants.

This study is important in terms of measuring music theory literacy and analyzing the level of success in this field. First of all, determining the knowledge levels of the participants about the basic concepts of music theory provides data to direct music education studies. This helps to determine which subjects should be emphasized more in the education process and where students have difficulties. Thus, it is thought that it will allow the section allocated to music theory in piano education processes to be structured more effectively.

Secondly, by providing a methodology for measuring music theory literacy, this study provides a reference for further research in this field. The results of the study can contribute to the development of strategies to increase the level of achievement in piano and music education. Such an assessment tool can be an important guide for educators in evaluating both achievement and the effectiveness of music theory teaching.

In order to improve music theory literacy in piano education, research can be conducted both to improve teaching methods and to develop practices that will make individuals' learning process more supportive. The integration of technology-based educational tools into music theory teaching in piano education can be emphasized. Technologies such as mobile applications, online platforms and artificial intelligence-based learning tools can present theoretical knowledge in a more fun and interactive way. These tools can increase music theory literacy by providing students with the opportunity to practice and reinforce what they have learned.

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# APPENDIX

d- g Clef

1. What is the name of the tool we use to write notes consisting of five lines and four intervals?

c- percussion

# **Music Theory Literacy Test**

b- f Clef

2. Which of the following is a 1-beat (quartet) note?

a- porte

a- 8

b-7

**c-6** 

d-5

	C	Î		
a- 🚺	b- <b>O</b>	c-	d-	
3-How many bea	ats is the note in th	ne image? <b>O</b>		
a- 1	b-3	c- 2	d-4	
4. Which of th	e following is a 2-	beat note?		
a-	b-	c- <b>O</b>	d-	
5. Which of th	e following is the	sign that thickens	the note it comes next to by half a tone?	
a-	b-	c-#	d-b	
6. Which sign	means 'go back to	the beginning' an	d finish where it says 'fine'?	
a- poco	b- D.C. al fine	c-crescendo	d-forte	
7. What is it ca	alled to read the no	otes in accordance	with their sounds and durations?	
a- solfeggio	b- bona	c-ezgi repetition	d-staccato	
8. What is the	reading of notes o	nly in accordance	with their duration called?	
a- solfeggio	b-legato	c-bona	d-rhythm	
9. Which sign	indicates that the o	duration of the not	e and hush marks next to it should be extended by half?	
a-,	b	c- !	d- flat (b)	
10. What is the	name and duratior	n of the note shown	n in the figure?	
a-F note 1 beat	b-D note 4 beats	c-F note 4 beats	d-C note 4 beats	
11. What does r	np (mezzo piano)	mean?		
a- strong	b-medium light	c-medium strong	d-very light	
12. What does a	llegro mean?			
a-very slowly	b-slowly	c-fastly	d-very fastly	
13. What is the	tone of the sequen	ce given below?		
2			0	
	00	0 0 0		
a- G Maj	b-C Maj	c-D Maj	d- A Maj	
14. How many measures does the melody below consist of?				
63			*	
<b>§.</b> .				

15. Which of the following is a  $\frac{1}{2}$  beat (eighth) rest?

a 🌱 b-**Y** °-**}** d-16. Which of the following is <sup>1</sup>/<sub>4</sub> beat (hexadecimal) rest? a-7 d-**Y** ۰**\_** b- **O** 17. Which of the following is silent for 1 beat (quatrain)? d- 😽 a- 🕇 b-**C** c-**}**