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Examination of the music lesson behavior of students studying at primary education level

Kabataş Mustafa

Department of Music Education, Faculty of Education, Kastamonu Üniversitesi, Turkey.

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This research was conducted to examine primary school students' attitudes towards music education lessons according to certain variables. 64 elementary schools from Kastamonu in Turkey participated in the study. The attitude scale developed by Güllü and Güçlü was adapted to the Music Education Courses Attitude scale and was used to determine students' attitudes towards music education lessons. In the statistical analysis of the data obtained as a result of the study, frequency, Single Sample Kolmogorov-Smirnov, Mann-Whitney U and Kruskal-Wallis H analysis were performed in SPSS 15.0 for Windows program. From the research result, it is concluded that most of the students (63.9%) have the habit of listening to music regularly and the number of students who participate in music activities and make music is quite high (43.8%). When the attitudes of students towards music education lessons were examined, it was seen that students' attitudes towards music education lessons were generally high. In addition, it was concluded that students' attitudes towards music education lessons did not show a statistically significant difference in terms of gender and age groups (P> 0.05). It was determined that the participation of students in music activities positively affected their attitudes towards music education lessons and this result was found to be statistically significant. This study is important in terms of guiding field experts, researchers and interests.

Key words: Music, education, music education, student behavior, primary education.

INTRODUCTION

In short, education, which is defined as the human training process, is generally defined as planned and deliberate activities carried out to achieve certain goals, based on the trainable feature of human beings (Ferhan and Sözlüğü, 1981). The foundation that makes education possible is the fact that people are born with traits prone to education. Educators explain human trainable traits as inheritance. Heredity is a term describing the orderly biological formation of an organism that enables other organisms to form within a similar structure (Özgüven, 2001). Heredity is divided into biological and social (Açak, 2006). The effect of the social environment in which the individual lives on the development of the organism through language, traditions and other cultural elements is called social inheritance. Education emerges after the interaction of innate hereditary characteristics with the environment and becomes a need for human beings. This interaction ensures that education is a
functional activity that necessitates the functional cooperation of heredity and environment (Keyifli, 2013).

One of the most important issues that education has to take into account in the process of fulfilling its developmental and nurturing functions on humans is its innate characteristics (Oğuzkan, 1981). This is called the natural aspect of education. The innate aspect of education is the abilities that form the basis of human development. Education, knowledge, attitudes and skills enable them to transform into behaviors as values. In other words, individuals can obtain some opportunities thanks to education (Küçük and Harun, 2004). It is assumed that individuals who cannot benefit from educational opportunities adequately cannot have this "quality" life. Education, which is accepted as a process that contributes to the achievement of a superior life, has diversity in the definition of the aspects of the human being to be educated. Here we are the definitions of education. Considering the difficulty of citing the whole of it, we will only give a few definitions. Education (education) is derived from the Latin word "educare", which means "to train", "to grow", to "develop". Today, education is defined as "all of the processes that occur in a person under the influence of the skills and attitudes developed by the person and the positive values and other behavioral patterns" or "the process of creating behavioral change in the individual through his own life" (Çelik and Pulu, 2011).

First of all, it is useful to take a general look at the phenomenon of "music", which has been defined by many people from different fields throughout the ages. The concepts of music and noise are a concept that varies from person to person. According to Károlyi (1999: 9) it can be assumed that there was silence at the beginning of the formation of the world or the universe. There was silence because there was no movement. So there was no vibration that could set the air in motion. No matter how the world was created, movement must have accompanied this creation. Perhaps this is why music has a magical effect for primitive societies, often showing life and death. Music, with its various forms, has not lost its abstract meaning throughout history. According to Fubini (1970), the whole idea of music that has been going on for centuries is inevitably it is intertwined with itself; on the other hand, with other disciplines that have made music the object of interest in some ways: mathematics, psychology, acoustic physics, philosophical and aesthetic speculation, music sociology, linguistics, etc. So it is easy to get lost in such a maze; nevertheless, if music has stimulated interest and attracted different thinkers, it is a multiform and multifaceted reality of music, meaning that it can be viewed from quite different angles as well. Compared to the verbal language, music is one of the most important characteristics of musical language and cannot be translated. Notes, sounds are not words; therefore, they can neither be translated into another language nor into another musical language. It is a unique language that everyone can understand. Music, which is used by every culture as a form of communication within its own texture, is also universal. Playing a key phonogenetic role in the evolution of language, music has important functions in interaction, group coordination and attachment behaviors, but it is also one of the fields based on fundamentals (Soysal et al., 2005: 107).

It is possible to produce music with a single voice that is experimentally repeated, but almost all known music uses at least two frets. Likewise, a weighing of a single repeating stroke can be experimentally obtained. Yet all known music; it occurs when at least two different strokes follow each other, as in heartbeat, breathing, stepping, rowing, seed sprinkling, an ax up and down, and all work-related movements (Finkelstein, 2000). According to Uçan (1997: 10), it is an aesthetic whole that processes and expresses emotions, thoughts, designs and impressions with voices combined with a certain purpose and method, according to a certain understanding of beauty (Balyan et al., 2012). Before making a definition of music education, the general definition of education should be discussed. Various definitions of education have been made until today. According to Butlar (1957), education definitions vary according to philosophical views. According to idealism, education is "the ceaseless effort of man to reach God freely and consciously" (p.238). According to Realism, education is "the process of preparing new generations for adaptation to society by transferring their cultural heritage" (p. 344-347). According to pragmatism, education is "the process of raising a person again through building his life" (p.480-487). According to Marxism, education is "to educate man in a versatile way, to change nature by controlling it and to produce is the process of raising." According to Naturalism, education is "the job of increasing the natural maturation of a person and enabling him to show this feature" (Sönmez, 1994: 10).

Music education is an educational field that is surrounded by many teaching areas (such as music history, music theory, instrumental proficiency, singing and general musical skills). Music education is a field of study where music is learned and taught. Musical education is basically a musical behavior, a musical behavior change, which is the process of developing behavior. In this process, the individual's own musical life is taken as a basis; based on this basis, a planned, regular and methodical path is followed in line with certain purposes, and certain goals are achieved in this way (Uçan, 1997).

According to Sak (1997), music education should differentiate and diversify the musical perception ability of the student, and save the student from one-sided music-making and listening habits that are the product of certain conditioning (Alparslan, 2008). Based on these definitions and including the basic components of music, the definition of music education; it is thought that it would be
appropriate to do it as "It is the process of developing desired behaviors in the musical behavior of the individual through his own life, with the help of the basic components that make up the music".

Experts have long studied the impact of music on child development. The first work in this area is an experiment called the "Mozart Effect". Undoubtedly, this research, which was published in the journal "Nature" on October 14, 1993, became popular in a short time and immediately showed its effects in the society (Başer, 2009).

Research

It is based on the relationship between classical music and IQ. In the experiment, 36 high school students listened to the major sonata Mozart wrote for two pianos for a certain period of time every day, and as a result, an increase in the children's IQ was observed. The new age and dance music played to the same group, on the other hand, has the effect of Mozart. American scientists carried out the Mozart Effect experiment. The physicist Gordon L. Shaw of the Department of Learning and Memory Neurobiology at the University of California Irvine, and Frances H. Rauscher of the University of Wisconsin, preschool children's brains are just like a plastic and they argued that it is possible for their brains to be shaped and fed by some training at an early age. According to them, playing an instrument, especially the piano establishes a connection between the brain and body, affecting both the soul and the physique (Flores et al., 2008).

It has emerged as the most effective tool of this method. According to another study by Shaw and Rauscher, giving piano lessons to preschool children has been the most effective way to mature the mental structure necessary for children to show superior characteristics in science and mathematics. Shaw and Rauscher found this in 78 kindergarteners. They arrived with the experiment they did on their children. 78 children, who were selected by paying attention to the fact that the socio-economic-cultural structures of the families of the kindergarten children aged three to four, were equal to the kindergartens they went to; they were divided into four groups. First group had singing and piano lessons, second group had only singing lessons while the third group had computers lesson. While the third group had computer lessons, the fourth group did not take lessons at all. The children took 15 min piano lessons twice a week, and care was taken to ensure that each child took lessons for an equal amount of time. Other groups continued to work for eight months. After this training, when the intelligence test was applied to 78 children, the result was very important for researchers. It was no surprise. The increase in the intelligence of the children in the piano group was different from those in the other group. The intelligence test was administered to the children at the beginning of the experiment. At the end of the eight months, there was no significant improvement in the intelligence of the children in the other groups, while a 46 percent improvement was observed in the IQ of the group who took piano lessons. All children were subjected to five separate tests for this measurement. These tests consisted of combining puzzles, making the patterns shown, recognizing geometric shapes, finding the correct colors of objects and errors in pictures. Dr. Shaw and Dr. Rauscher argue that unlike the "effect of listening to Mozart for several hours", which they discovered in their early research, the effect of piano training will last for life (Uluğbay, 2013).

Attitude is “a tendency that is attributed to an individual and forms his thoughts, feelings and behaviors related to a psychological object in a regular manner.” An attitude affects the individual's thoughts, feelings and behaviors by harmonizing them with each other (Chung and Phillips, 2002). These three factors, which are generally in harmony with each other in attitudes, are called the elements of attitudes or the ABC model. Cognitive, emotional, and behavioral elements are fully contained in established, strong attitudes. In some weaker attitudes, especially the behavioral element may be very weak. The individual should adopt a positive attitude towards the goal he / she wants to achieve, the actions he / she will take to achieve this goal, the result to be obtained as a result of the actions, in short, the whole learning situation and in addition to his / her personality traits. Against the situation, the negative attitude adopted is a difficult obstacle to be prepared and motivated against learning in examining the situation, using their knowledge and skills for their actions because of the individual's rejection of the situation (Pehlivan, 2008).

Attitudes are learned. The processes of association, reinforcement and imitation determine this learning. Children spend a lot of time with their parents, and after a while they start believing what they believe by simply copying them. The same process seems to work for people other than parents, such as peer groups, teachers, or every important person in a child's life. Attitudes acquired at an early age are quite static and do not change easily unless there are significant experiences and events (Freedman et al., 1988). Accordingly, it can be said that the family is very effective in forming attitudes. However, according to Lipsett (1962), one of the most important social factors affecting all behaviors of the individual is the social class he / she belongs to. The society values judgments about professions, socio-economic status, family and family, etc. Without knowing it, it is not possible to predict an individual's professional behavior (Hünük, 2006).

Looking at the education of the students, there are studies on the effect of music education on students' success and attitudes. They investigated the effects of teaching the instrument subject in music teaching on students’ achievement. In their research with 5th grade
students, they found that using any musical instrument is more effective on students’ achievement. Similar findings were found in the study conducted by Kangalgil et al. (2006). In this study on the use of the importance of instrument training in the field of music education, it was seen that it was effective for the understanding and application levels of students who play instruments. Here, it was seen that the music materials were effective in increasing the success of the students, but the same effect was not seen on improving students’ attitudes. This has been attributed to the difficulty in developing an attitude in a short time. It supports this claim in the international literature that instrument training increases the success in music lessons (Bridgeman, 1992).

London (2005) investigated the effect of 5th grade students in increasing their knowledge of singing in music lessons. The research has shown that the information about music education and singing correctly was successfully transferred to the students. When we examine the above mentioned literature collectively, we can say that music education has an important place in increasing academic success, as it affects other lessons. In education, musical instruments can be used both as a tool and a method, and it is accepted that they facilitate the learning of individuals and help meaningful and permanent learning (Çelik and Pulur, 2011).

Considering the overall work done, music education is of great importance for children to have a more successful education life. As children are more social and more confident thanks to music education, it affects all school and exam performances. School administrators, teachers and families should provide opportunities for social and musical activities to children as much as possible. Music education should be continued not only at school but also at home, which covers the majority of the social environment of the child. Students should be educated about listening to quality music at home, and activities such as listening to music, singing and playing instruments should be done. It can be said that students will have a positive attitude towards school and music lessons thanks to the music education given at home and supported at school. In the study, with the students who make up our study group, it was aimed to determine their attitude towards school and music lesson. In this context, this study aims to examine primary school students’ attitudes towards music education lessons in terms of gender, age, regular music making and participation in activities. The study aims to find answers to the following questions;

1. Are the participants' attitudes towards the music education lesson statistically significant based on gender?  
2. Are the participants' attitudes towards the music education lesson statistically significant based on age groups?  
3. Are the participants' attitudes towards the music education lesson statistically significant based on music making?  
4. Do the participants' attitudes towards the music education lesson differ significantly based on their participation in music activities?

**METHODOLOGY**

The questionnaire model, which is a frequently used model of descriptive research model, was used in this study. As a data collection tool for research, the Likert type scale is frequently used in education (Karadağ, 2010). Music Education Lessons Attitude Scale, which is a 5-point Likert-type scale developed by Gülü and Güçlü (2009), is used to determine students’ attitudes towards music education lessons. The universe of the research consists of various students studying at the first level of primary education in Kastamonu Province. All of the selected students were determined as students from primary schools who continue primary education in Kastamonu Province. All of the selected students have similar family profiles, so it was assumed that they are socioeconomically similar.

All of the selected students were determined as students who received music education without discrimination between girls and boys. Simple neutral sampling model was used to determine the project sample. Working in Turkey was also studied by students studying in schools in Kastamonu Province Center. A questionnaire was conducted to gather information on the attitudes of these students towards their schools and music lessons. The questionnaire we applied consists of two different parts. In the first part of the questionnaire, questions about students’ demographic features are formed. In the second part of the questionnaire, "Music Education Lessons Attitude Scale" was used to determine students’ attitudes towards music education and music lessons. There are 35 questions in total in our survey study that we applied to students. While preparing these questions, 11 positive and 24 negative questions were prepared by considering the positive and negative variables. The scale we use is one dimensional. The variance value of the scale expressed by a factor was 35.59% and the eigenvalue was 13.57. Reliability tests of the questionnaire used were conducted. In the test; It was determined that the Cronbach’s Alpha value was 0.96 and the reliability coefficient was 0.82. The scale is a 5-point Likert type and the rating form is expressed with plus signs as ++++, +++, ++, +, 0, –, –, –, –, –, –. There are 35 questions in total in our scale study, applied to students. 11 positive and 24 negative scales were prepared by considering the positive and negative variables while preparing these questions.

When the high scores obtained as a result of the scale are analyzed, it can be said that the attitudes of the students participating in our study towards the music lesson are positive, and when the low scores are examined, the attitude of the students towards the music lesson is negative. In our study, the questionnaires used for data collection were applied to students personally by interviewing them. As a result of the examination, incomplete or incorrectly filled questionnaire forms were not included in the study. The data obtained as a result of the questionnaire forms were recorded in the computer and processed using the SPSS 15.0 analysis program. Frequency analysis was used to determine the percentage distribution of the demographic data of our study group students. The Single Sample Kolmogorov-Smirnov test was applied to determine whether the scores of the attitude scale, applied to the students, showed normal distribution and it was observed that the data did not show a normal distribution. Therefore, non-parametric tests from basic statistics were used. In this context, the Mann-Whitney U test was applied to examine the effect of gender, age group, music making status and participation in music activities on the students’ attitude towards...
Table 1. Percentage distribution of participants by gender, age, regular music making in an out-of-school environment and their participation in music activities such as concerts and music concert.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of persons</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>33</td>
<td>50.9</td>
</tr>
<tr>
<td>Female</td>
<td>31</td>
<td>49.1</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Age groups</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-11 years</td>
<td>31</td>
<td>47.5</td>
</tr>
<tr>
<td>12-14 years</td>
<td>33</td>
<td>52.5</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Regular music activity status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do music activity regularly</td>
<td>40</td>
<td>63.9</td>
</tr>
<tr>
<td>I do not do music activity regularly</td>
<td>22</td>
<td>36.1</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Participating in music events</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I participate Music Events</td>
<td>27</td>
<td>43.8</td>
</tr>
<tr>
<td>I do not participate Music Events</td>
<td>37</td>
<td>56.2</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2. The Students’ Average Points Regarding Music Education Lessons.

<table>
<thead>
<tr>
<th>Number of persons</th>
<th>The lowest</th>
<th>The highest</th>
<th>Average</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td>5</td>
<td>59</td>
<td>47.37</td>
<td>18.282</td>
</tr>
</tbody>
</table>

**FINDINGS**

Music-human relationship has existed in every period of human history and in every phase of human life. This relationship has been established in different types and qualities in human life from birth to infancy, from infancy to childhood, from childhood to youth, from youth to adulthood and old age, sometimes directly and sometimes indirectly. From the first lullaby heard by the mother to the nursery rhyme in the street play, to counting from music in entertainment to lamentation in grief, music has been human emotion, thought and language. Music is an integral part of children’s daily life. Music is an activity area that diversifies and enriches the daily lives of children at home, at school, on the street, in the park, therefore everywhere and at any time of the day. Music activities provide children with important experiences in reflecting their emotions and thoughts, using their bodies in harmony and balanced ways, improving their learning capacity, increasing their language proficiency and socializing. Percentage distribution of students according to gender, age group, and regular music activities is given in Table 1. 50.9% of the participants are men and 49.1% are women. It was observed that 47.5% of the students were in the 9-11 age group and 52.5% were in the 12-14 age group. It was observed that 63.9% of the students did regular music activities, while 36.1% did not do music activities. In addition, it was determined that 43.8% of the students participated in music activities, 56.2% did not attend music class. Table 2 shows the average scores of the students for their music education lessons. It was determined that the average score of the students for their music education lessons was 47.37 ± 18.282. Considering the lowest possible score of 5 and the highest possible score of 59 it was determined that the behavior scores of the students towards music education lessons were high.

Findings regarding the comparison of the behavioral levels of students towards music education lessons in terms of gender, age, making music and participating in music activities are given in Table 3. When the attitudes...
Table 3. Findings regarding the comparison of the behavioral levels of students towards music education lessons in terms of gender, age, making music and participating in music activities.

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Significance Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>33</td>
<td>148.44</td>
<td>-0.381</td>
<td>0.703</td>
</tr>
<tr>
<td>Female</td>
<td>31</td>
<td>146.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age (year)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-11</td>
<td>31</td>
<td>148.16</td>
<td>17.469</td>
<td>0.505</td>
</tr>
<tr>
<td>12-14</td>
<td>33</td>
<td>146.79</td>
<td>18.893</td>
<td></td>
</tr>
<tr>
<td><strong>Music activity regularly</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do</td>
<td>40</td>
<td>151.32</td>
<td>16.352</td>
<td>0.001</td>
</tr>
<tr>
<td>I do not</td>
<td>22</td>
<td>140.82</td>
<td>19.364</td>
<td></td>
</tr>
<tr>
<td><strong>State of participating into music events</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do</td>
<td>27</td>
<td>149.69</td>
<td>16.357</td>
<td>0.023</td>
</tr>
<tr>
<td>I do not</td>
<td>37</td>
<td>145.81</td>
<td>19.481</td>
<td></td>
</tr>
</tbody>
</table>

of the students towards the music education lesson are examined, there was no statistically significant difference between the attitude levels of the students according to their gender (p > 0.05). Female or male students showed similar attitudes towards the music lesson. When the behavior levels of the students in music lesson are examined, it can be said that the behavior levels of students in the 9-11 age group are higher than those in the 12-14 age group. This shows us that at an earlier age, students are more enthusiastic about music and music lessons. When the age groups were examined within themselves, no statistically significant difference was found between the behavior levels of the students (p > 0.05). It has been observed that the students who regularly deal with music both at school and in their social environment have higher attitudes towards music lessons than students who do not deal with music. What is meant by music education attitude levels; it is the interest and desire of the students to participate in the activities performed during the music lesson. The difference between the regular music making levels of the students is statistically significant (p < 0.05).

In addition, it was found that the behavioral levels of those who participated in music activities towards music education courses were higher than those who did not participate in music activities. A statistically significant difference was found between the behavior levels of the participants according to their participation in music activities (p < 0.05).

DISCUSSION

Music has a very important place in art education, which is a dimension of pre-school education. The aims of music education in pre-school education are to help the cognitive, affective, psychomotor and social development of children, to enable them to express their emotions, thoughts and impressions with music, which is an aesthetic language of expression, to reveal the creativity that exists and to prepare them for basic education by providing the development of the mother tongue (Flavell, 2000).

According to Ucan, musical education includes the ability of the individual to have a healthy interaction with the musical environment they live in and face every day; directly or indirectly, consciously and indirectly, on the creation, production, interpretation, use or consumption of music. It aims to be able to participate in a knowledgeable way and to be equipped with the necessary behaviors to contribute to the development of musical life. The musical education that should begin in the preschool period directly affects the children's knowledge and skills related to music. A questionnaire about music lessons was applied to 100 students studying in the fourth grade of Ankara University and Gazi University Preschool Teaching Undergraduate Program and it was found that the students' musical knowledge was not at the desired level. As can be seen at the end of the study, there is insufficient knowledge level of teacher candidates (Gül and D İber, 2019).

Other scientific studies have confirmed the Rauscher and Shaw duo; Biologists say that some of the extraordinary cells in the newborn child's brain lie outside the network of cells connected by nerves (Rauscher, 1995). Listening to conversations in babies, playing with brightly colored toys and situations such as listening to music strengthen these nerves and provide the development of intelligence in the child. Shaw and Rauscher's research is already based on this basis. Two
scientists prove that the piano or other instruments strengthen this neural link and increase the child's intelligence by 46% (Güner, 2015).

According to Rauscher, the piano and cello lessons that the researcher Rauscher took in his childhood were extremely effective in his own development: "Music requires mental imagery and transforming these images into music using notes. I think music has a lot in common with science and mathematics in this respect" (Swartz, The "Mozart Effect"). In 1997, a research was conducted on 30 university students by Cockerton et al. The research aimed to measure the effect of music on cognitive performance, and two cognitive tests were administered to the students. The first was in an atmosphere of silence, the second was accompanied by background music. Students in the test where background music is Their number of correct answers given was higher. There was no difference in heart rate; this showed that the increase in the number of correct answers was independent of the degree of alertness (Güllü and Güçlü, 2009).

The Journal of Applied Developmental Psychology (1999) included a study describing the benefits of early music education for children. According to this study, Plato, Aristotle, Boethius, Leonardo da Vinci, Galileo Galilei, Isaac Newton, René Descartes, Benjamin Franklin, Thomas Edison, Albert Einstein, Robert stated that people such as Oppenheimer and Stephen Hawking who made invaluable contributions to world history have something in common and that they did not achieve success by chance (Karadağ, 2010). This common feature is that they are all musicians or have dealt with music early in their lives. The result of the study is as follows; Intelligence alone is not determined by genes, the quality of time spent with families and the fullness of music play a greater role in intelligence than genes. In children's groups with or without musical education, the time the family devotes to the child was a very important factor in the child's intelligence development and success (Hergüner et al., 2004).

In another study of sixty-six children, first Stanford-Binet intelligence was given to all children. Test and music test was applied. Then, the students in the experimental group received 75 min of music training per week for 30 weeks. Finally, a significant increase was observed in the success of the thinking and generative-scientific thinking tests of the children who received music education. In the intelligence tests related to words, no significant difference was found in both groups. While the percentage of success in standard intelligence tests for children who received music education increased from 50% to 87%, this success rate remained at the level of 78% for children who did not receive musical education (Bilhartz, 1999).

Canadian researcher, musician E. Glenn Schellenberg, in an experiment conducted by creating two different groups on children at school in Canada in 2006 regarding the relationship between music and intelligence, revealed that the ratio of IQ test scores of children who did not take music lessons was quite high. He observed the positive effects of music especially on math, intelligence and perception of the world. In his experiment, Schellenberg found that music lessons provide skills that improve abstract intelligence, such as working memory, processing speed, and perceptual organization (Eraslan et al., 2015).

In short, the effect of music on IQ development depends on the correct application of music education at the right time. Music education, especially given in the preschool period (3-6 age group), is a very effective way to gain some concepts and values to children. Music is seen to be beneficial in many areas (social, cultural, emotional, etc.) in child development and it appears that it provides a noticeable improvement especially in the intelligence of the child. Other effects of music that support intelligence development on development can be listed as follows: its effects on social development, emotional development, cultural accumulation, perspective and psychomotor development (Sönmez, 1994).

We can summarize the studies supporting the benefits of music on children as follows: Perceptual-Temporal IQ: Researchers have proven that children who are taught piano are much more successful in perceptual-temporal IQ scores. It has been observed that those who receive music education especially in the fields of mathematical logic are more successful than those who do not take computer lessons or any lessons (Demirel and Kaya, 2007).

(i) Higher marks: In 1988, it was found that those who took the National Education Longitudinal Study music classes in Washington DC received more A, A-, B, B +, B- than those who did not take music classes, and those who received music education were more likely to graduate with honors (National Center for Education Statistics, 1990).

(ii) Higher reading scores: According to a study conducted in Scotland, it was found that when the first grade students who took a group of music lessons and the students who took a group of discussion tactics were compared, there was a noticeable increase in the reading scores of those who took music lessons compared to the other group. On the other hand, no increase was observed in the scores of the other group (Sheila Douglas and Peter Willatts, Journal of Research in Reading, 1994). Behaving positively: 73% of the participants in the 2000 survey found that young people who play an instrument are unexpectedly having disciplinary problems, that is, they are more likely to be disciplined (American Music Conference, 2000).

(iii) Less crime rate: It has been observed that students who study in secondary education and take part in an orchestra or band use illegal substances (cocaine, heroin, etc.) or consume less alcohol than other students (Texas Commission on Drug and Alcohol Abuse Report,
increases his control over his voice (Doğan, 2011).

(v) Better problem solving: It has been determined that students who can play complex rhythms react faster and more accurately in academic and physical situations, so they can solve problems that may arise more easily (Wilson et al., 2000).

(vi) Less anxiety: It was judged that music students had less anxiety rates in anxiety tests and performed less anxiety-related behaviors in their real life (Çelik and Pulur, 2011).

(vii) Broad perspective: key features of musical education life for children provide a wide vision in interpretation. For example, a child playing a musical instrument can concentrate his energy in a positive direction. The singing child, on the other hand, learns to use his voice as well as manages to learn the lyrics he does not know and recognizes his voice contributes to his cognitive and psychomotor development (Uluğbay, 2013).

(viii) Positive spiritual development: Music education can be used as a tool to instill good and right in children, because children who provide spiritual satisfaction through music are more likely to acquire a healthier personality structure in terms of their spiritual development (Hoşgörür and Taştan, 2007).

(ix) Creativity: Music supports the child’s imagination and creativity. Experiments investigating the effects of music on imagination and creativity have shown that, children listening to music in the tests applied on various music genres from the classical to the modern period make more colorful and more characteristic drawings than those who do not listen (Demirel and Kaya, 2007).

(x) Cultural background: Music education opens the doors of other languages, cultures and worlds to the child. In terms of being a universal language, music can also be considered as a cultural transmission because different music reflects cultural characteristics. This increases the cultural knowledge of children who receive music education (Pehlivan, 2008).

Social Development: Music education in the preschool period will socialize the child in terms of allowing the child to participate in various musical activities. Participating in social activities will make it easier for children to be responsible individuals within the group by increasing their experience (Binbaşoğlu, 1982).

(xi) Psychomotor development: The large and small muscle development of children who play musical instruments is supported. Instruments help develop concepts such as coordination, power and reaction speed, which are important in children’s psychomotor development. The child’s reaction to music with body movements, trying to create dance figures suitable for music, accompanying the music with his voice and recognizing his voice contributes to his cognitive and psychomotor development (Uluğbay, 2013).

In this context, the gender variable of research findings regarding behavioral levels towards music education lessons in the literature is given by Keskin et al. (2017). Devtет schools were selected while choosing the preschools where we did our study. It is assumed that the socioeconomic structure of the students studying in these schools is equal. Our observation arising from the gender difference is that girls mature earlier at that age and thus their perceptions are clearer. Girls attend music lessons more actively than boys. Boys are relatively more difficult to adapt (İmamoğlu, 2011).

When the literature about our study is scanned, as stated above, there are various studies. Studies that show us that when music education is placed in every part of students’ lives, students show more success both in music lessons and in school. It was found that the different findings arising from the gender characteristics of the general behavioral levels of music education lessons are based on the psychological characteristics of different genders and the different attitudes of male and female students towards music education teachers (Hergüner, 1992). In our study, it was found that female students were more interested in music lessons. It was found that the attitude levels of the students participating in this study did not differ significantly according to age groups. When we evaluate the research findings in the literature regarding our study, it is seen that some research findings are compatible with our study, but the findings of some studies do not support our research findings. The abundance of research related to our study draws attention. In the study conducted by Doğan (2011), it was found that the behavior levels of students towards music education did not differ significantly according to age groups. In addition, in a study conducted on secondary school students in parallel with our research, it was found that attitudes towards music education did not differ significantly according to age groups (Gürbüz and Özkan 2012). In the study of Gürbüz and Özkan (2012), it is stated that a new study will be conducted on the behaviors of primary school students of different age groups towards music education lessons. Kangalgil et al. (2006) examined the attitudes of primary, high school and university students towards music education lessons in terms of different variables and found that the behavioral levels of students towards music education lessons increased as they age. It can be said that the earlier students start their music education, the higher their success rates will be proportional to this (Koca et al., 2005).

In the studies conducted, the behavioral levels of the students towards the music lesson show a significant difference according to the students’ level of dealing with music in their social lives and at home. Students’ behavioral attitudes towards music lessons include attending lessons on time and actively, singing songs correctly, participating in dance activities, having an idea about music culture and basic music knowledge.
It has been determined by the researches that music education given to children encourages them to be individuals with high self-esteem, who have completed their spiritual development in a healthy way, have a well-established personality, disciplined, social, with a perspective that can distinguish between good and bad, and exhibit better behaviors. In addition, studies show that children who receive music education have higher lecture grades, test scores and academic skills than those who do not. This contributes to their growth as creative, successful and productive individuals. Also; music is a culture. When considered as an intermediary, it also supports the cultural accumulation of children. Children who play musical instruments, their psychomotor development and coordination skills improve. In short, the determinant and direct effects of music education on the developmental stages of children revealed by Piaget have been reported by scientists for years. Basic features such as music education increasing concentration, gaining the ability to correctly perceive and distinguishing different symbols and mixed musical phrases, etc show parallel and emerge as an indispensable element of child development.

Undoubtedly, the correct and regularity of music education is directly dependent on these effects. In other words, the same results should not be expected from the wrong type of music education. How music education should be is beyond the scope of this article. However, music education especially at an early age (2-7 age and 7-12 years) and playing musical instruments are understood from researches. In summary, there is a direct link between music and development and experiments show that, it is obvious that the correct and effective use of music has significant contributions in many areas, especially in the development of intelligence, in the child development process.

It has been seen in the study, that the fact that students constantly create music in their lives, listen to music, play instruments, go to concerts, participate in musical activities make these behaviors a skill, and their attitudes and behavior levels towards both the music lesson and other lessons are quite high. Students feel more social, their expression and language skills increase, and their reading comprehension and prediction skills increase. There is a significant difference between students who create music in their lives and students who do not, both in music lesson and school performance levels. In a similar study by Alparslan (2008), students who voluntarily participate in music activities have higher behavior levels towards music education lessons than non-volunteer students. The main reason for this result is that volunteer students meet more frequently with music teachers in extracurricular activities and trainings and have a disciplined approach to learning from educational sessions. In a study conducted by Karadağ (2010) on primary and high school students, it was found that students who make music have higher attitudes towards music education lessons than those who do not. Similar research results show that students with formal music activities have higher attitudes towards music education lessons (Balyan et al., 2012; Doğan, 2011; Hünük, 2006). As a result of its comprehensive evaluation, it shows that our findings are supported by the results of the literature and in parallel with these results (Keskin, 2014).

As a result, although all of the primary school students are not socio-economically good and do not have good opportunities as in private schools, it can be said that the majority of the students participating in our study dealt with music in their social lives, so their behavior towards music lessons was positive. Although female students are more dominant in the behavioral levels of my students towards music lessons, there was no significant difference between students in terms of age and gender. In addition, it was observed that students who were supported by the school administration, teachers and families, and students who actively participated in music activities were observed to have a positive attitude towards music lessons.

Suggestions

Since the earliest times, music has been both an educational tool and a well-established field of education, as it has certain functions in people's lives (Uçan, 1997). The reason for this is that music is naturally included in our lives from a very early age in various ways; for example, children especially at an early age. It has been observed with the experiments that the correct and effective music education to be given in the pre-school period plays a serious role in their development. Especially Rauscher and Shaw's studies in 1999 called Mozart Effect argue that it has a direct impact on music and child development (especially intelligence development). Various studies have been supporting and explaining each other over the years; they pointed out the visible benefits of music in child development. The effects on the development of intelligence are striking as the most prominent and striking, and all other effects can be revealed as a result of supporting the development of intelligence.

It has been determined by the researches that the musical education given to children encourages them to be individuals with high self-confidence, complete mental development, well-established personalities, disciplined, social, perspective that can distinguish between good and bad, and exhibit better behaviors. In addition, studies show that children who receive music education have higher lecture grades, test scores and academic skills than those who do not. This contributes to their growth as creative, successful and productive individuals.

According to the findings obtained as a result of the literature review, it is recommended that students start
music activities at an early age and transform these activities into lifestyle activities in order to be physically and mentally healthy. Because, in the study we conducted with preschool students, it was observed that students who are actively engaged in music have higher performance in both music lessons and school. It has been observed that music relaxes the students so that their concentration increases even more while focusing on other lessons. It is thought that students dealing with music spend less time with technologies such as computers and television. In this way, students who deal with music show more social behavior. In this context, families should give priority to music activities among social activities for their children. Students should be guided to musical instruments for their abilities, and encouraged to engage in musical activities by music education teachers and school principles. In this way, students will learn a lot both in terms of getting to know a musical instrument and at the point of self-confidence.

Successful music students should be rewarded and promoted to other students at special events for motivational reasons (Keskin et al., 2017). This should be done according to different age groups and types of schools in state and private schools in different regions of Turkey. Findings should be compared and combined. According to our findings and research results, primary school students should be supported financially and morally by their families and school administrations in order to increase their behavioral attitudes towards music education lessons. State administrations and local governments should allocate more expenditure for preschool education in their administrative budget. In this way, more social activities can be done in pre-school education and children can become more social individuals. Looking at the children observed in music lessons, it can be said that the more they are supported by their families by their social and musical activities, the more they have increased in school and music lesson success. If we talk about moral support, school administrators, teachers and the family should be in cooperation with each other. It should be directed to research, symposiums and panels in order to make the family more conscious.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

REFERENCES


Karadağ E (2010). Research Models Used in Educational Sciences


