The analysis of the relationship between university students’ attitude to listening to music and their level of optimism

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The purpose of this study is to analyse the relationship between university students’ attitude to listening to music and their level of optimism. The study group for the research consists of 508 students who studied at Aksaray University in the 2012-13 academic year. Simple random sampling is used. In this study, the “Attitude Scale for Listening to Music” and the “Optimism Scale”, which were developed by the researcher, are used for measurement. According to the findings of the research study, there is a significant correlation at the level of .430 between students’ attitudes to listening to music and their level of optimism. The level of optimism has a positive impact on the attitude to listening to music at the level of .184.

Key words: Attitude, Listening to music, Optimism

INTRODUCTION

Music has been defined in many ways up till date. According to an approach connecting the fundamental similarities among these definitions, music is an aesthetic whole which narrates emotions, thoughts, designs and impressions through processing them, by adopting a certain aim and method, with sounds which are combined according to a certain concept of beauty (Uçan, 2005, p. 10).

One of the meanings of music, in ancient Greece, was that it is a human activity which impresses emotions and prompts good or bad aspirations (Şenel, 2013, p. 8, from Cross and Tolbert).

Music is an inalienable phenomenon which occurs at every phase of human life. The human-music relationship, which begins to be established indirectly during the pre-birth existence of an individual, evolves into a “direct relationship” following birth, and continues to be a part of human life by gradually diversifying, enriching, growing stronger and developing. It is a known fact that a baby, even in its mother’s womb, is impressed by the heartbeats of the mother and that rediscovering this familiar sound and rhythm after birth has a relaxing effect on the baby.

As a matter of fact, experiments show that new-borns lying in a room listening to pre-recorded heartbeats fall asleep faster compared to those in a silent room. This is considered as an indicator that a baby begins to gain a certain amount of sensitivity towards music, and particular musical elements, even before birth (Uçan, 2005, p. 12).
The fact that music has a psychological effect on human beings is constantly emphasized; besides this, various scientific studies show that such an effect does not only occur in people, but in other species as well. This feature of music has sometimes resulted in the use of music in the treatment of psychiatric illness in people by medical professionals, or its use in learning efficiency from other species (especially animals) at other times (Sezer, 2011, p. 1474).

Data indicate that in ancient Greece, music was used in the treatment of epilepsy, depression, homesickness, melancholy, mania, insanity, somnambulism, lethargy, catatonia, hysteria, paralysis, aphasia, tarantism, chorea, gout, inflammatory diseases, rheumatism, aches, plague, measles, rabies, and so on. An ancient Greek proverb declares: "Use songs efficiently, you may thus possibly relieve pain" (Birkan, 2014, pp. 37-38).

In “The Sole Method for a Better Understanding of the Pulse”, Marguet (1769) argues that in the treatment of melancholy, one must use a piece of music that is simple, comes in assorted tones and is appealing to the soul. According to Marguet, music awakens the slumbering soul by stimulating hearing and other sensory nerves. In the treatment of chronic melancholy, music must be soft and at a gentle pitch, while in acute cases it should be merry, vivacious and intense (Birkan, 2014, p. 39; Marguet, 1769).

According to Ibn-i Sina (Avicenna), the changes in one’s voice reveals one’s mood; what makes musical compositions appealing to us is not our sense of hearing, but our cognitive skills which gain various inspirations from that melody (Somakçı, 2003, p. 132).

Listening to music is one of the musical behaviours of an individual, an interaction with music in his or her environment (Uçan, 2005, p. 13).

Listening to music is not only an auditory event but is also an event of a visual, tactile nature and is accompanied by emotional experiences. All of these functions occur in different cerebral areas. Audio stimulation even at a low level arouses the fundamental emotional circuits. For example, the inferior colliculus, rich in opioid receptors, is one of the stopovers of the auditory pathway in the peduncle. The mother’s voice will be registered here first and the periaqueductal grey matter next to the inferior colliculus is where affective awareness occurs (Birkan, 2014, p. 44).

According to Meyer’s melodic expectation theory, which Kaemmer referred to in relation to the meaning music creates for people via its tones, such meaning concerns the reaction to the nature of musical resonance. According to this theory, music, when it contravenes the routine musical templates that a person is accustomed to, causes uncertainty in the listener, thus resulting in a certain reaction. What makes a piece of music appealing is that it can bring this sort of uncertainty under control (Şenel, 2013, p. 9; Kaemmer, 1993).

Musical therapy has various uses in major depression. In a study where patients listened to soft and sedative music for 30 min for a period of two weeks, a significant improvement was observed in their global depressive scores. As many studies show, music has a cumulative effect over time. In another study, depression patients were observed to express their condition better when they listened to melancholic music compared to listening to cheerful, fierce or gruesome music, or no music at all. The authors claim that this sort of treatment lifts the patients’ verbal barriers to the expression of their feelings, thus enabling therapists to offer counselling more comfortably (Birkan, 2014, p. 47).

In a study of the relationship between music and states of emotion and aggression by Krahe and Bieneck (2012), both the participants’ states of emotion and their reactions to negative feedback were measured under three different conditions, namely listening to appealing music, unappealing music and no music at all. Participants who were listening to appealing music were observed to show less aggression towards feedback with more positive states of emotion, compared to participants in the other two conditions. Moreover, the findings showed that appealing music increased the amount of positive emotions, which then reduced the feeling and demonstration of aggression. Meanwhile, under the condition of unappealing music, a lesser number of positive emotions were reported, which resulted in a higher tendency towards aggressive behaviour through an increased feeling of aggression.

According to the results of another study conducted to evaluate the effect of music on increasing both the positive emotions and the work performance of computer software developers, who are pressured for constant productivity and creativity in their job, the positive emotional state of the software developers increased during the week they listened to music and decreased in the week they did not (Lesliuk, 2005).

Optimism was defined by Scheier and Carver (1985) as one’s expectation of positive results in the future and faith in good outcomes.

According to Goleman (2012), optimism and hope are learnable concepts; likewise despair and hopelessness. At the core of both concepts is self-sufficiency, meaning the faith that one has in one’s ability to cope and handle difficulties in one’s life.

Optimism, one of the favourite concepts of positive psychology, has become a popular area of study among contemporary psychologists in the past 25 years. Psychologists have evaluated optimism under the concepts of situation-based, case-specific and hope-related optimism, and often associated optimism with desirable results, without considering how optimism was measured. Studies on this subject on wide samples show that optimism has a positive effect on people’s health and welfare. These studies manifest longitudinal and cross-sectional relations between optimism and personal wellbeing, self-esteem, low-level depression, low-level
negative emotions and life satisfaction (Öztürk, 2013; Peterson and Park, 2004).

Lyubomirsky (2011) stated that individuals with an optimistic point of view had a high level of happiness and life satisfaction.

Research shows that, if the individual is expecting optimistic results, they make a constant effort to resolve the issues and expect good outcomes even under difficult circumstances (Güler, 1994; Aydin and Tezer, 1991).

The literature review found no study on the relationship between attitude to listening to music and the perception of optimism. Therefore, this study is aimed at making a contribution to address this deficiency in this field. The purpose of this study is to analyse the relationship between university students' attitudes to listening to music and the perception of optimism. The corresponding results will be given below.

For this purpose, the following research questions will be addressed:

1. What is the attitude of university students towards listening to music?
2. What is the level of optimism by university students?
3. Is there a meaningful correlation between the attitude of university students towards listening to music and their level of optimism?

**METHODOLOGY**

**Research design**

Descriptive design, which is a quantitative research method, is adopted in this research in order to determine the relationship between the attitude of university students towards listening to music and their level of optimism.

**Participants**

The study group of the research consists of 508 students aged 19-25 who studied at Aksaray University in the 2012-13 academic year. Simple random sampling is used.

**Data collection and analysis**

In this piece of study, the "Attitude Scale for Listening to Music" and the "Optimism Scale", which were developed by the researcher, are used for measurement.

**Research instruments**

The "Attitude Scale for Listening to Music" developed by the researcher as an assessment tool in 21 questions was pre-implemented on 200 participants, and those with a correlation value below 30 were excluded. As a result of factor analysis, the scale was found to be two-dimensional in the psychological (eight items) and cognitive (seven items) dimensions, and the scale clarified 51% of the total variation. Factor load values were found to range from .558 to .799 for dimension 1 and .408 to .751 for dimension 2. The scale comprised 15 questions of a Likert-style attitudinal scale with five choices. The replies were sorted from positive to negative in the following order: "strongly agree (5)", "considerably agree (4)", "partially agree (3)", "slightly agree (2)", "do not agree at all (1)". Reverse scoring was used in negatively-keyed items. The Cronbach’s alpha reliability coefficient was measured to determine the reliability of the scale; the results were .857 for dimension 1 and .829 for dimension 2.

The "Optimism Scale" developed by the researcher through 17 questions was pre-implemented on 200 participants, and those with a correlation value below 30 were excluded from further analysis. As a result of factor analysis, the scale was found to be single-dimensional and the scale clarified 44% of the total variation. Factor load values were between .350 and .878. The scale comprised 15 questions of a Likert-style attitudinal scale with five choices. The replies were sorted from positive to negative in the following order: "strongly agree (5)", "considerably agree (4)", "partially agree (3)", "slightly agree (2)", "do not agree at all (1)". Reverse scoring was used in negatively-keyed items. The Cronbach’s alpha reliability coefficient was measured to determine the reliability of the scale, and the result was .911.

**Data analysis**

For the statistical analysis of the data obtained from the implementation of the scales, SPSS 12.0 (Statistical Packet for the Social Sciences) software was used. A significance level of 0.005 was chosen for statistical significance. In order to detect the relationship between the students’ attitude towards listening to music and their level of optimism, the Pearson product-moment correlation coefficient was used.

**FINDINGS AND REVIEWS**

**Findings on the attitudinal scores of the university students towards listening to music**

As Table 1 shows, the average attitudinal score of university students towards listening to music was found to be 3.30. Therefore, we may assert that the university students’ attitude towards listening to music is at a medium level.

**Findings on university students’ level of optimism**

As Table 2 shows, the average score of university students’ perception of optimism was found to be 3.71. Therefore, we may assert that university students' level of optimism is at medium rate.

**Findings on the relationship between university students’ attitude to listening to music and level of optimism**

Upon assessment of the correlation between the university students’ attitude towards listening to music and their level of optimism, significant correlation was found between the dimension 1 of attitude towards listening to music and the optimism total at a level of .459, and also
Table 1. Attitudinal scores of the university students towards listening to music.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD1</td>
<td>3.55</td>
<td>6.49104</td>
<td>507</td>
</tr>
<tr>
<td>MD2</td>
<td>2.85</td>
<td>5.52301</td>
<td>508</td>
</tr>
<tr>
<td>MD</td>
<td>3.30</td>
<td>10.72055</td>
<td>507</td>
</tr>
</tbody>
</table>

(MD1: attitude towards listening to music, dimension 1; MD2: attitude towards listening to music, dimension 2).

Table 2. Scores of university students' level of optimism.

<table>
<thead>
<tr>
<th></th>
<th>Ave.</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism</td>
<td>3.71</td>
<td>11.44565</td>
<td>508</td>
</tr>
</tbody>
</table>

Table 3. Relationship between attitude to listening to music and level of optimism.

<table>
<thead>
<tr>
<th></th>
<th>MD1 Total</th>
<th>MD2 Total</th>
<th>MD Total</th>
<th>Optimism Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD1 Total</td>
<td>Pearson Correlation</td>
<td>.589**</td>
<td>.909**</td>
<td>.459**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>507</td>
<td>507</td>
<td>507</td>
<td></td>
</tr>
<tr>
<td>MD2 Total</td>
<td>Pearson Correlation</td>
<td>.589**</td>
<td>1</td>
<td>.294**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>507</td>
<td>508</td>
<td>508</td>
<td></td>
</tr>
<tr>
<td>MD Total</td>
<td>Pearson Correlation</td>
<td>.909**</td>
<td>.872**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>507</td>
<td>507</td>
<td>507</td>
<td></td>
</tr>
<tr>
<td>Optimism Total</td>
<td>Pearson Correlation</td>
<td>.459**</td>
<td>.294**</td>
<td>.430**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>507</td>
<td>508</td>
<td>508</td>
<td></td>
</tr>
</tbody>
</table>

(MD1: attitude towards listening to music, dimension 1; MD2: attitude towards listening to music, dimension 2).

at a level of .294 between dimension 2 and the level of optimism. A medium positive significant correlation at the level of .430 was observed between the general attitude towards listening to music and the level of optimism. Therefore, we may assert that the level of optimism has a positive impact on the university students' attitude towards listening to music at the level of .184; and, likewise, their attitude towards listening to music has a positive impact on their level of optimism (Table 3).

Conclusion

This research was conducted on 508 students aged 19-25 who studied at Aksaray University in the 2012-13 academic year in order to determine the university students' attitude towards listening to music and their level of optimism. The university students' attitude towards listening to music and their level of optimism were found to be at medium rate.

A significant correlation between the university students' attitude towards listening to music and their level of optimism at the rate of .430 was observed. Consequently, it was concluded that the level of optimism has a positive impact on the university students' attitude towards listening to music at the rate of .184; and, likewise, their attitude positively impacts on their level of optimism.

Although the literature review found no study directly on the relationship between the attitude to listening to music and the level of optimism, a significant amount of research has been conducted on music and its relation to
psychology and emotions. For instance, Lemont and Eerola (2011) reviewed the relationship between music and emotions. Getz et al. (2014) conducted research on the effects of stress, optimism and music training on listening to music and preferences. The results showed that a high level of stress predicted the tendency for listening to music, while optimistic individuals were emotionally more inclined to listen to music. This suggested that stress and optimism affect listening to music, even if in a negative manner. The research indicated that people with a music training background had a tendency to listen to music for cognitive reasons rather than emotional reasons, although their levels of optimism were lower and their stress levels higher. Miranda and Claes (2009) conducted a study on 418 French-Canadian teenagers in order to find experimental evidence for how the music preferences of teenagers are correlated with their level of depression, and whether the level of depression in adolescent correlated with their relationship with adults. They indicated that people with a music training background had a tendency to listen to music for cognitive reasons rather than emotional reasons, although their levels of optimism were lower and their stress levels higher. Miranda and Claes (2009) conducted a study on 418 French-Canadian teenagers in order to find experimental evidence for how the music preferences of teenagers are correlated with their relationship with adults. They observed whether the level of depression in adolescent girls and their coping through listening to music is correlated with their level of depression, and whether or not they prefer metal music. They also addressed whether there is a correlation between the level of depression and coping with emotional adaptation by means of listening to music in teenage boys. They concluded that there is a correlation between high levels of depression among teenagers who listen to metal music and the fact that they choose to associate only with peers who are more depressed than them. Consequently, although it is evident that there is a relationship between music and people’s state of emotions and psychological mood, the perceptions of people from different environments, age, economic or social status may vary. Therefore, it is worth noting that the findings of this study are limited to the students who studied at Aksaray University in the 2012-13 academic year, and that a study conducted on a different sample could result in considerably different outcomes.

REFERENCES


Marguet (1769) ‘Nabzi İyi Anlambil İçin Tek Yöntem’ adlı eserinde melankoliyi tedavi etmek için basit, çeşitli inleyen, ruhu okuyan bir müziğe başvurulması.


