The Association between Music Preferences and Psychiatric Problems in Adolescents

Ergenlerde Müzik Tercihi ile Psikiyatrik Sorunlar Arasındaki İlişki

Abstract

Despite the well-known importance of music in adolescent life, the relationship between music preferences and the psychological profiles of adolescents has not been completely clarified. The preference for some music types, especially heavy metal and rap (heavy music types), has been found to be associated with depressive symptoms, antisocial behavior and alcohol/drug usage. The lyrics of these music types and music videos also appear to contribute to these conditions. Although the bidirectional relationship between music preferences and psychiatric problems has not been well understood, the available research data suggest that the preferred music type represents already existing behavioural tendencies and emotional vulnerability towards psychiatric problems. (Marmara Medical Journal 2012;25:47-52)

Key Words: Music preference, Adolescents, Heavy metal, Rap

Introduction

Music undoubtedly has an important impact on adolescents’ life. It’s a way of living and reflecting feelings, values, needs and conflicts. For some of the adolescents, music is a part of socialization and even personality development. Music can also provide a background for romance and serve as the basis for establishing relationships in diverse settings. It is estimated that an ordinary adolescent spends over two hours listening to music everyday. The daily time spent in listening to music may be even more than that of watching television for adolescents. In recent years, with the huge increase in the popularity of internet use and the free availability of MP3 songs on the internet, music has become even more essential in the life of adolescents.

The relationship between music preferences and the psychological profiles of adolescents has not been completely clarified. Regarding music types, heavy metal and rap music has always derived more attention. Heavy metal was found to be
related to suicidality, self harm, depression, drug abuse, recklessness, antisocial behavior, school problems, arrests and family dysfunction\textsuperscript{3,4-7} while rap was shown to be linked with alcohol abuse, illegal-drug use, aggressive behavior and arrests\textsuperscript{8,9,10,11}. Dance, hip-hop, techno and reggae music were reported to be related mainly to alcohol and illegal drug use\textsuperscript{10,12}. A newer music style, emo music, was also suggested to be associated with psychiatric problems in youth. In 2007, Australian media linked the double suicide of two teenage girls with the lyrical themes of emo music\textsuperscript{13}.

This article aims to review the current literature on the relationship between music preferences and psychiatric problems in adolescents. The limited research on the topic in non-Western countries and in Turkey will also be discussed.

**Classification of Music Preferences in Adolescents**

Some researchers suggested using broad classification systems to categorize music types into main categories, classifying similar types under one broad category in order to find more general results. Schwarts and Fouts in their study used the terms heavy and light music types which refer to hard rock, classical rock, heavy metal, rap and pop, teen pop and dance music respectively\textsuperscript{3}. This classification has also been used by others\textsuperscript{2,14}. However, there are still definition problems in this system. For instance, grouping the fans of rock, hard rock and heavy metal music under the same category may not be an appropriate approach. In a former research paper, it is indicated that, in the U.S., adolescent heavy metal fans consist of a more extreme group, with more pronounced negative characteristics, compared with both mainstream rock and hard rock fans\textsuperscript{15}. Rap music, at least for the songs produced in the 2000s, also seems to be different from heavy metal music in some aspects. In their comprehensive review, Reddick and Beresin suggested that a rap audience is more unified around race, inner-city life and resistance against the oppressor, especially the police\textsuperscript{16}. Indeed, compared to that of heavy metal, a rap audience seems to be associated more with external violence, such as gang and gun violence, rather than suicide\textsuperscript{16}. Newer music styles have been on the market since the year 2000. Emo music, an abbreviation for emotional music, is defined as a musical outpouring of emotions, usually associated with relationship break-ups or other tragic events\textsuperscript{4}. Except for those with certain music preferences, there is a group of adolescents who state that they do not have strong preferences for any style of music. This type of music preference is referred to as eclectic\textsuperscript{3}. However, although these adolescents do not declare a preferred music type, they still may have answers for which types of music they enjoy listening. Therefore, it may be more accurate to explore both the favourite music type and the overall listening habits of adolescents for a more clear picture of their music preferences.

**Music Preferences and Personality Traits in Youth**

Studies from the 80s to date investigated the relationship between music preferences and personality traits in youth. An early study showed that the preference for heavy metal music correlated with assertiveness, aggressiveness, indifference to the feelings of others, moodiness, pessimism, and increased likelihood to act on impulses\textsuperscript{17}. Other studies also showed that adolescents preferring heavy metal music have an increased tendency to homicide\textsuperscript{18}, experience more psychological turmoil\textsuperscript{8}, and exhibit more anger and emotional problems\textsuperscript{19} than those without such a preference. Personality traits of youth preferring pop music were also studied. Swartz and Fouts\textsuperscript{3} found pop music preference to be linked to being overly responsible, and struggling with issues of sexuality, peer acceptance, and negotiation of the balance between dependence and independence. The results of these studies, however, must be considered in the context of the evolution of popular music and other dynamics of adolescents' lives. Adolescents' perceptions, attributions and reflections on music may also be influenced by social, cultural and environmental factors.

**Demographic findings**

Studies have revealed some gender and age differences in music preferences and involvement with music\textsuperscript{20-23}. Female adolescents usually feel themselves more close to light music than do males, since such music reflects their social tendencies (e.g., emotional expressiveness, relationships)\textsuperscript{24,25}. In contrast, male adolescents seem more likely than females to prefer heavy music, as these music types, in turn, reflect their social tendencies (e.g., themes of independence and dominance)\textsuperscript{26}. Male adolescents' preference for rock and metal music may partly reflect the fact that male adolescents identify more with the rock musicians, 94% of who are young males\textsuperscript{27}. Indeed, aggressiveness, moral relativity, hypermasculinity and the anti-authority in both the lyrics and loud tones of heavy music types also match with the typical idealizations and externalizing behavior of male adolescents. A recent study supported these findings for light music types but not for heavy music preferences. In this study, females preferred light music more than males but there was no significant difference between males and females in their preferences for heavy music\textsuperscript{3}. The risk for psychopathology may also differ between genders. According to the study performed by Martin et al, the majority of female adolescents found rock/heavy metal unacceptable. However, the minority of female adolescents who preferred rock/heavy metal were found to be a group with a high risk of suicidal acts and thoughts, depression, delinquency and family problems\textsuperscript{9}.

**Music and Emotional Symptoms: Bidirectional Relationship and Additional Factors**

The effects of music on the life and mental health of adolescents may be related with time, context, culture and many unidentified and confounding factors. One important clue for this may be the change itself in music and music subculture over the past 20 years\textsuperscript{4}. For instance, the music and lyrics of heavy metal music in the 80s and 90s have changed extensively from the 90s to the late 2000s with subdivisions into different categories and even a different outlook and life style. Approximately one decade ago, two famous heavy metal bands; Judas Priest and
Ozzie Osbourne were unsuccessfully sued by the parents of suicide victim adolescents because their music was being played while the adolescents died. In the case of rap music, a change in the lyrics/themes of songs may be argued from the 80s to the present time. There has been a remarkable increase in lyrics about drugs and alcohol use in this genre throughout the past thirty years.

Another important issue is the bidirectional relationship between music preferences and psychiatric problems. Preference for certain types of music may be interpreted as red flags for psychiatric problems. However, it may also be true that preferring these music types reflects the underlying vulnerability which may be the real cause of psychiatric problems. It has previously been shown that adolescents’ music preferences reflect their developmental needs, individualism level, family and friend relations, dependence-independence, perceptions of self and various other domains of self and environment. All of these subdomains are well known correlates of vulnerability to psychiatric problems including emotional symptoms.

The available research on the association of depression risk and suicidality and music preferences revealed mixed results. Martin et al. found heavy metal preference associated with suicidal thoughts and depression in 10 year old students. Another study involving university students found that those who listened to rock music or watched rock music videos with suicidal content wrote scenarios with suicide-related themes more often than those who were exposed to music with non-suicide-related themes. In contrast to the findings of these studies, Lacourse et al. found no relation between heavy metal preference and suicide risk. Ballard and Coates reported no significant association between music preference and suicidal tendencies. Becknell et al. recently indicated that youngsters with a heavy metal preference use this music to treat their depressive feelings, rather than becoming depressed as a result of listening to it. There is evidence that one of the most important indicators of vulnerability to emotional symptoms is not how you feel before listening but how you feel after listening to music. It’s been shown that for the majority of adolescents, independent of the music type, listening to music had a positive effect on mood. As for heavy metal preference, there is evidence that most of the heavy metal fans are typically in a negative, especially angry, mood before listening to and experiencing the positive effects of heavy metal music. Martin et al., in their preliminary study linking heavy metal music to psychopathology, identified a relatively small subgroup of rock/heavy metal fans who reported feeling worse after listening. In their study, the most disturbed group of adolescents presented with suicidal thoughts, self-harm, and depression. It may also be true for not only heavy metal but also other types of music preferences that; feeling negative emotions like sadness, anxiety and/or feeling worse after listening may be the main indicator of psychopathology. We speculate that, it may be reasonable to extend this hypothesis to “using music as an adaptation to life or not”.

Music Preferences and Alcohol/Drug Usage

There is evidence that certain music preferences are linked to alcohol and drug usage. A handful of studies showed that preferring loud and energetic types of music, such as heavy metal, rap, and dance music (heavy music), co-occurs with increased levels of alcohol, cannabis, and tobacco consumption, compared to preferring light music genres including pop. The association of heavy music preference and alcohol, cannabis and tobacco usage have been shown widely in Western countries including US, Australia and European countries.

Several explanations were proposed for this association. It is suggested that both the behavior of admired music artists in the community and the lyrics of the songs may have a modeling effect through mentioning, using or even celebrating smoking and alcohol usage as desirable behavior. Another explanation points out the presence of some behavioral traits both in heavy music preference and substance usage. Rebelliousness and sensation seeking, commonly known behavioral correlates of risk-taking behaviors and substance usage, were also linked with the preference of heavy music styles.

Music Preferences and Deviant, Reckless and Anti-social Behaviors

The relationship between music preferences and antisocial behaviors has been addressed in the available literature. Listening to violent songs, regardless of the music type, is linked with being more hostile and aggressive. In a US study on adolescents, preference for heavy metal or rock music was found to be associated with higher rates of reckless behaviour (e.g. drink-driving, unprotected sex, shoplifting and vandalism) than those with a preference for other types of music. Another study among university students also showed that the preference for rap and heavy metal music was associated with significant hostile attitudes. In correlation with the previous studies, a recent study found strong links between rap music and deviant behaviours including violence, theft and membership of street gangs.

Music Videos

Research on the relationship between music preferences with adolescent mental health has detected another dimension of current popular music: the music videos. By the 2000s, music videos address the youth not only in the Western countries but also in the whole world. A recent study revealed that a sample of 12 to 15-year-olds watched music videos on an average of 4.3 days per week. Music videos may be classified into two types, performance and concept videos. While the performance videos consist of an artist or a group filmed during a performance of the song, concept videos show the viewer a theme and/or a story which is usually related to the song’s lyrics. This story may sometimes add content to the lyrics and provide a particular interpretation that is reinforced every time the viewer hears the song. The content of music videos has been studied in a number of studies. A comprehensive study in the US found that rap videos...
had the highest portrayal of violence (20.4%), followed by rock videos (19.8%)\(^4,48\). Another study showed that rap music videos had a higher content of alcohol or tobacco use when compared with the other types of music videos\(^{49}\). The content of music videos appears to be related with adolescent behavior. Former studies showed that adolescents exposed to violent videos reported an increased probability of being engaged in violence and a greater acceptance of the use of violence\(^{47,50,51}\).

### Case-Control Clinical Studies

Only a limited number of studies are available investigating the relationship between music preferences and psychopathology. The results of these studies are complicated. Weidinger and Demi\(^52\) investigated the relationship between music preferences and the preadmission dysfunctional psychosocial behavior (PDPB) of 60 adolescents who were hospitalized in a psychiatric unit. Findings revealed that hospitalized adolescents who primarily listened to music with negative lyrics/themes had a history of more PDPB than those who primarily listened to music without negative lyrics/themes. Heavy metal music listeners were found to have a history of more PDPB than the ones who primarily listened to other types of music\(^52\). Rosenbaum and Prinsky\(^53\) reported that a high incidence of adolescents with preference for heavy metal music were hospitalized for psychiatric problems. Doak\(^54\) also found that adolescents diagnosed with mood disorder tended to like rap, classic rock, hard rock, heavy metal and alternative music. Another study, in which 35 adolescents (aged 12-18 yrs) from a psychiatric facility were included, short-term fluctuations in mood were measured before and after music listening, and music preference was assessed with a rating sheet completed during testing. When grouped according to music preferences, heavy metal music listeners were found to have a significant increase in positive attitude after listening to the music they prefer. In this study, primary psychiatric diagnoses of adolescents had showed that music had only a little effect on mood\(^35\). Future studies are needed to draw a comprehensive conclusion on the relationship between music preferences and psychopathology in clinical trials of adolescents.

### Popular Music Types in Turkey

Despite the extensive literature in Western countries, research on the relationship between music preferences and psychiatric profiles of youth is limited in non-Western countries. Beside the international Western oriented music types, every country has its own specific music types according to the society’s socio-demographic properties, beliefs, problems, needs and conflicts. Turkey, with its unique geographical location between Europe and Asia, consists of different cultures and music types. Both the above-mentioned Western-oriented music types and indigenous Turkish music styles in Turkish are popular in Turkey, depending on the the socio-economic status, cultural origin and age of the people. Indigenous Turkish music styles, however, appear to be more popular in the general population. For instance, arabesque is a musical style which combines aspects of folk music and traditional Turkish music with the musical styles of Egyptian and Indian music. Its popularity reached peak in the 1980s and it still has listeners, especially in the lower socioeconomic levels which suffer from adaptation problems caused by rapid urbanization and by migration from rural areas to large cities\(^55,56\). Stokes indicated that arabesque, with its lyrics about the rejected social identity in these poorly educated individuals without hope or the power to control their lives\(^55\). Another popular style, Turkish Folk music, has more positive themes and seems to be linked to the expression of identity and nationality\(^56\). Beside these indigenous music styles, above-mentioned Western-oriented styles like rock, heavy metal, rap, pop and dance/techno are also popular in Turkey, especially in the young generation belonging to the middle and upper socio-economic class. With the globalization of the world and the music industry, these music styles originally born in Western countries are accepted internationally and undoubtedly have a great influence on the youth of the whole world including Turkey. Levine indicated that the popularity of heavy metal tends to increase among youth in Muslim societies including Turkey\(^57\). Turkish rap in the 2000s also deserves attention. Among Turkish adolescents, Turkish rap is far more popular than American rap music. Turkish rap, which is still underground in nature, was first produced by Turkish immigrants in Germany. Currently, Turkish rap musicians from Turkey have come to dominate Turkey’s popular rap field. The lyrical themes of Turkish rap may be defined as similar to the ones of American rap in terms of aggression towards authority and a rejection of the rules of the law\(^58\).

Regarding the relationship between Western-oriented music preferences and psychiatric problems, there is limited data on Turkish adolescents. In a study about the social activity patterns in Turkish high school students who use drugs, Ogel et al.\(^59\) showed that most of the adolescents with at least one experience with drugs had a preference for pop music. However, the majority of the whole sample also had pop music preference while rock music was second. On the other hand, the adolescents who use more than one substance and use marihuanna, frequently preferred rap, hip hop, techno and dance music types. Going to concerts was found to be an indicator for substance usage among adolescents\(^59\). One recent study focused on young adult heavy metal patrons in Istanbul and showed associations between being a heavy metal patron and having social anxiety disorder, attention deficit hyperactivity disorder (ADHD) and depression\(^60\).

### The Lyrics of Songs in Non-Western Countries

The sound of the music styles, i.e., the exaggerated volume, bass, and rhythm commonly heard in heavy metal and rap songs, appear to be universal. However, it is unclear to what extent youth from non-English speaking and non-Western countries understand the lyrics of music types like heavy metal and rap. The violence, drugs and sex content in the lyrics of these genres may not be understood by the adolescents in non-Western countries to the same degree in Western countries where English is natively spoken. On the other hand, some authors hold the notion that lyrics of the individual songs, compared to music, has less influence on the adolescents’ behavior, mood and cognition. Prinsky and Rosenbaum\(^61\) suggested that adolescents do not
interpret correctly or comprehend the messages of the songs’ lyrics, and they feel that the lyrics are the least important reason for liking a song. Ballard and Dodson26 proposed that, when compared to the actual lyrics, the expectations and of adolescents created by a particular music seem to have an effect on their mood.

Conclusion

The researches in the past 30 years indicate that the music preferences of adolescents may be associated with their psychological profile. In addition, music preference appears to be an indicator of an underlying emotional disturbance or vulnerability to psychopathology. The American Academy of Pediatrics recommends both to parents and to the professionals working with adolescents, that they should explore adolescents’ music preferences and the music videos that they watch. The professionals should also become familiar with the role of the music in the life of the adolescents, and identify the music preferences of their patients as clues to their emotional conflict or problems. The complex relation between music preferences and psychopathology in adolescents will be clarified in future studies.

References