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The Relationship Between Characteristic Moods and Most Commonly Listened To Types of Music

Valerie N. Stratton, Ph.D. and
Annette H. Zalanowski, M.A.
Penn State Altoona

Three samples of participants were surveyed to determine their characteristic moods and the types of music they typically listened to. The samples included college students, college faculty and staff, and a random sample of noncollege related adults. Participants were asked to report how many hours per week, on average, they listened to various styles of music. They also responded to a standardized mood questionnaire in terms of how they typically feel. Correlations were calculated between mood and hours of listening to the various styles of music. Among the college students, listening to rock was positively correlated with anxiety, depression, and sensation seeking, and negatively correlated with positive affect. Among the faculty-staff, classical music-listening was positively correlated with depression, anxiety, and hostility, while total music listening was positively correlated with depression and negatively correlated with positive affect. Among the noncollege adults, only a small correlation between classical music and positive affect was found. Results suggest that music-listening is more related to mood among younger and more educated individuals. The most likely interpretation of the relationship is that negative moods lead to music listening rather than music-listening causing negative moods.

A large body of research and clinical work, as well as personal experiences, support the connection between music and mood. Although the bulk of research in this area has focused on the use of music to improve mood, music is also commonly employed to elicit unpleasant emotions, such as using music in movies to establish fear. In recent years much concern has been expressed about the possibility that certain kinds of music may induce even more nega-

tive and antisocial emotions which may lead to destructive behaviors. This concern has been most clearly and frequently presented with respect to rock music and the behavior of adolescents. We are all familiar with the legal cases which have claimed that aggressive and antisocial rock music is responsible for various misdeeds including murder and suicide (e.g., Litman and Farberow, 1994). But is there any research supporting such a causal link?

Several studies have supported a relationship between rock music and traits such as rebelliousness and hostility, as well as specific antisocial behaviors. Hansen and Hansen (1990) tested the hypothesis that exposure to antisocial rock videos would cause subjects to have more positive attitudes toward people performing antisocial behavior. The results of their study supported this hypothesis and they suggested that cognitive priming theory may explain the effect. The viewing of antisocial videos may trigger additional stored information in that category thus making the category of antisocial behavior more accessible and likely to be used in the near future. Using an A-B-A reversal design, Harris, Bradley and Titus (1992) compared the effects of hard rock and rap music with easy listening and country music on the behavior of clients of a mental health hospital. They found that several inappropriate behaviors, including being disruptive, assaultive, and self-abusive, were more frequent during the 21 days of exposure to the rock and rap music. Arnett (1991) looked at the natural behavior patterns of adolescents in relation to their liking of heavy metal music. He found that males who liked heavy metal music, compared to those who did not like this music, had higher rates of reckless behavior in the areas of driving, sex, and drug use. Females who liked heavy metal music were more likely to be involved in shoplifting, vandalism, sex, and drugs. Both males and females who liked heavy metal were higher in sensation seeking, which Arnett suggests is the connecting link between the reckless behavior and the liking of heavy metal. Thus, while finding a relationship between heavy metal and antisocial behavior, he does not support the idea that listening to this kind of music directly causes antisocial behavior.

Other studies also do not find causal connections between rock music and negative reactions. Ballard and Coates (1995) examined the impact of lyrical content (homicidal, suicidal, and nonviolent) and music type (heavy metal and rap) on the moods of male undergraduates. Results showed no effects of lyrics or music type on

suicidal ideation, anxiety, or self-esteem. Wanamaker and Reznikoff (1989) had college students write stories about TAT cards while listening to rock music. They compared songs with aggressive music and lyrics, nonaggressive music and lyrics, and aggressive music and nonaggressive lyrics. They found no differences between the groups with respect to the amount of hostility expressed in the TAT stories or scores on a direct measure of hostility. They reported that most of the subjects did not understand the lyrics, especially of the aggressive music.

With little support for overall direct effects of rock music on antisocial behaviors, others have looked further for individual characteristics that might determine a preference for certain kinds of music and mediate any effects of the music. On the assumption that antisocial rock music reflects the defiance of adolescents, Bleich, Zillman and Weaver (1991) predicted that high school students high in rebelliousness would enjoy defiant rock videos more than students low in rebelliousness. They found, however, that both types of students enjoyed these videos equally, but that high rebelliousness students had less enjoyment of nondefiant videos compared to the other students. Similarly, while all students owned equal numbers of defiant albums and listened to this type of music with equal frequency, the students high in rebelliousness owned fewer nondefiant albums and listened to nondefiant music less frequently. Using statistical data on suicide rates and subscription rates to a heavy metal magazine, Stack, Gundlach and Reeves (1994) found a positive correlation between the two variables, concluding that the greater the strength of the metal subculture, the higher the youth suicide rate. They suggested that this music nurtures suicidal tendencies already present in the subculture.

While the majority of research in this area has focused on rock music, some researchers have considered a possible association between country music and negative emotions and behavior. Stack and Gundlach (1992) reported a strong correlation between airtime devoted to country music in 49 metropolitan areas and suicide rates among whites in those areas. They concluded that country music nurtures suicidal moods through the subject matter of the lyrics. This study and its conclusions have been challenged. Maguire and Snipes (1994) and Snipes and Maguire (1995) tried and failed to replicate the relationship found by Stack and Gundlach. Another criticism, made by Mauk, Taylor, White, and Allen

(1994), is that a sociological approach using aggregate data may not tell us anything about the individual. There is no way of knowing whether the individuals who committed suicide were the same individuals who listened to greater amounts of country music. No research appears to have directly examined any possible negative impact on individuals listening to country music. Although several researchers have discussed the negative lyric content found in country music (e.g., Armstrong, 1993; Rogers, 1988), there is no evidence for a direct causal connection between country music and negative reactions.

Indeed, the idea that individual music-listening habits have not been connected to individual feelings and acts represents a major lack in music-mood research. Experimental studies which indicate that music can have an emotional impact on individuals have typically been conducted in experimental settings or have focused on reactions to individual selections of music. With the exception of just a few studies (e.g., Arnett, 1991; Bleich et al., 1991), researchers have not tried to examine the extent of exposure people have to particular categories of music on a daily basis or to relate extended music-listening to long-standing mood. Brief exposures to music in a controlled setting can only tell us about the immediate impact of one or two songs. While trying to overcome this shortcoming, studies which use population statistics or which focus on subjects who most likely listen to large amounts of a certain type of music, this approach does not give us direct evidence of a link between music-listening patterns and moods in individuals. The present study was conducted to begin to explore how everyday music-listening preferences and exposure are related to overall persistent moods.

Method

Participants

Three samples of participants were surveyed. The first sample included 122 college students, 64 females and 58 males. These were freshman and sophomore university students enrolled in either an elementary music appreciation or psychology course. The average age was 19.3 and none were music majors. The second group was taken from university faculty and staff. Questionnaires were sent to all full-time personnel of one campus and 45% were returned for a sample size of 99, with 57 females and 42 males. Ages ranged from

18 to 71, with an average age of 44.3. The third sample was of noncollege-related adults. Students enrolled in an introductory psychology course (not one used for the first sample) were asked to take the questionnaires to family members or other adults aged 18 or older who were not college students. This was done over a holiday when students returned home for several days; thus, the sample included people from a variety of locations. This produced a sample of 217 participants, with 119 females and 98 males. Ages ranged from 18 to 80 with an average of 40.9. Ninety-five percent of this sample reported completion of high school as the highest grade level achieved; only seven of the participants had completed college.

Materials

Two questionnaires were used. The music-listening questionnaire listed 12 styles of music and asked participants to estimate the number of hours per week they listened to each of the types. The 12 styles, which were adopted from a record club application form and thus represented the most commonly recognized categories, were: hard rock, soft rock, heavy metal, modern rock, oldies, country-western, dance/pop, R&B/soul, jazz, easy listening, rap, and classical. A space for "other" was also included. The mood questionnaire was the Multiple Affect Adjective Check List—Revised (MAACL-R) trait form (Zuckerman and Lubin, 1985) which assesses five moods: anxiety, depression, hostility, positive affect, and sensation seeking.

Procedure

Subjects were asked to respond to the MAACL-R in terms of how they usually or typically felt, not how they felt at the moment. The student sample filled out the questionnaires in a classroom setting. The faculty-staff were sent the questionnaires with a cover letter and instructions by campus mail and returned them the same way. The noncollege sample was administered the questionnaires by students who had been given instructions by the researchers. The only personal information asked for were sex and age, and, for the noncollege sample, occupation and highest grade level achieved.

Results

In compiling the data, the responses to the four types of rock music were combined for a total rock music category. This was

TABLE 1

Percentages of Subjects Reporting Music Categories and Average Number of Hours of Listening

	Rock	Country	Classical	Oldies	Easy Lis	Total
College Students						
%Reporting	94	42	50	61	28	100
Average hours	12.5	6.4	3.1	2.8	2.3	30.9
Faculty/Staff						
% Reporting	61	30	51	67	53	98
Average hours	9.0	2.7	4.0	6.4	7.5	21.7
Noncollege Sample						
% Reporting	64	52	20	63	45	98
Average hours	12.3	8.5	2.6	6.8	4.4	22.6

done to reduce the number of categories for calculation of correlations. A preliminary analysis showed high correlations between the listening times reported for these categories, and some subjects had expressed confusion about the distinctions between some of these categories; thus the combining of the rock categories seemed justified.

Table 1 shows the most commonly listened to types of music for each sample with the percentage of participants in each sample that reported any time listening to that type. Also shown are the average number of hours of listening reported for each type of music, and the average number of hours of listening to any kind of music. The student sample reported the most listening, with rock, not surprisingly, being the most common category. Rock music listeners also spent more time listening than any other category. Oldies was the most commonly reported category among the faculty/staff sample, but rock and easy listening had higher listening times reported. The noncollege sample reported rock and oldies most frequently, while rock and country received the most listening time. Figure 1 illustrates each sample's musical exposure by showing the relative percentages of total music listening for each category.

Raw scores on the MAACL-R were converted to standardized scores using tables provided with the test (Zuckerman and Lubin, 1985). While the scores for the faculty/staff sample indicated a slightly more positive overall mood compared to the other samples, there were no significant differences between the samples for any

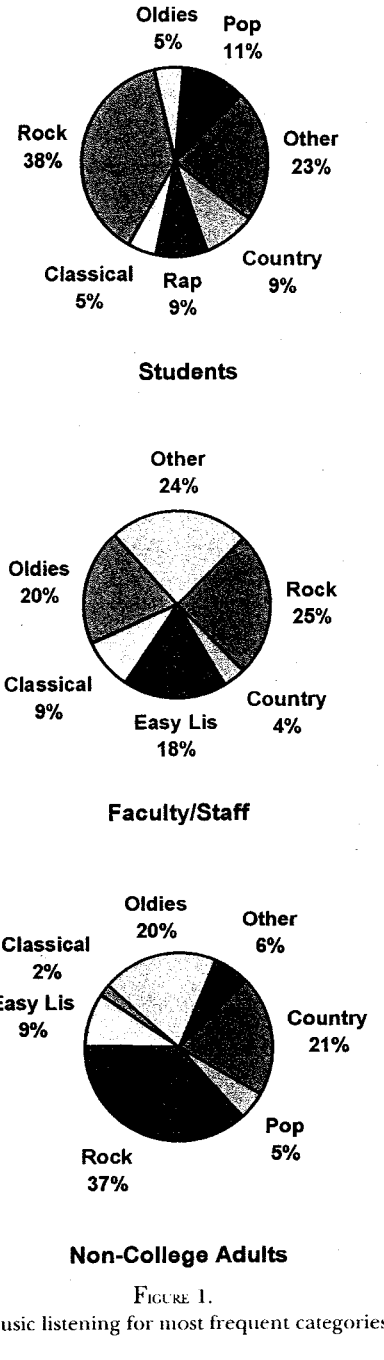

FIGURE 1.
Percentages of total music listening for most frequent categories in three samples.

TABLE 2
Pearson Correlations between Mood Scores and Listening Times Reported for Different Styles of Music and for Total Music

Music	Anxiety	Depression	Hostility	Sen Seeking	Pos Affect
			College Students (n = 122)		
Rock	+.269**	+.328**	+.128	+.380**	−.218*
Country	−.033	−.044	−.005	−.030	+.126
Pop	+.169	−.032	+.019	+.148	+.036
Total	+.198	+.090	+.123	+.109	−.084
			Faculty/Staff (n = 99)		
Rock	+.054	+.038	+.193	−.210*	−.252*
Country	−.046	+.009	−.089	+.245*	+.099
Classical	+.210*	+.259**	+.341**	−.045	−.105
Oldies	−.029	+.019	−.008	−.073	−.025
Easy Listening	+.124	+.145	−.052	−.109	−.095
Total	+.140	+.293**	+.171	−.210*	−.212*
			Non-college Sample (n = 217)		
Rock	−.014	−.049	−.075	+.085	−.024
Country	+.019	−.046	+.003	+.062	+.019
Classical	−.054	−.029	−.060	−.061	+.149*
Oldies	+.021	+.068	−.001	+.009	+.083
Easy Listening	+.046	−.004	+.056	+.022	+.017
Total	−.009	−.056	−.054	+.113	+.029

* $p < .05$.
** $p < .01$.

scale. Thus, the three samples may be considered comparable with respect to overall mood.

Correlations were computed between hours of listening to each type of music and the scores on each mood subscale. Table 2 shows the correlations between mood scores and listening times reported for the most commonly listened to types of music for the three samples. Among the college students, only rock music and total listening times were related to any mood; positive correlations were found between hours of listening to rock and reported depression, anxiety, and sensation seeking. Total amount of music listening was positively related to anxiety. Among the faculty/staff, amount of time spent listening to classical music was positively related to depression, anxiety, and hostility, while country music listening was positively correlated with sensation seeking, and rock listening was negatively correlated with positive affect. Total music listening was positively correlated with depression and negatively correlated

with sensation seeking and positive affect. In the noncollege sample there was very little relationship between any music listening and mood. A small positive correlation was found between classical music listening and positive affect.

Strong relationships were found in the noncollege sample between age and listening to rock music—the older the person, the less rock listening was reported, $r = -.269$, $p < .01$. This relationship carried over to total music listening, $r = -.177$, $p < .01$. Younger people listen to more rock music, and rock music listeners listen for more time than do other categories of listeners.

Discussion

These results provide some support for a connection between moods and individual levels of listening to music. However, there are interesting differences among the samples. In the college sample, negative emotions were related to higher levels of listening to rock, while in the faculty/staff sample, negative moods were surprisingly associated with listening to classical music and music overall. The only mood measure associated with country music listening in any of the samples was sensation seeking in the faculty/staff sample. Very little relationship between music-listening and any moods was found in the noncollege sample. If the student sample had been the only group surveyed, the findings for that group might have been interpreted in light of other studies which point to a possible role of rock music as nurturing negative tendencies found in the rock subculture, or as having a more general pernicious effect on anyone listening to it. However, the results from the other two samples require other possible interpretations to be considered. The noncollege adults reported nearly as much rock listening as the college students, yet no relationships between amount of rock listening and negative moods were found in this group. It is possible that rock listening could have different effects on different populations. The cognitive priming theory supported by Hansen and Hansen (1990) requires that negative and antisocial information be available in order to be accessed by the rock music. These categories may be more common or more easily accessed in college students. It is difficult, however, to extend this explanation to the relationship between classical music and anxiety, depression, and hostility in the faculty/staff sample. It seems unlikely that anything in classical music would be priming access to hostile or anx-

ious thoughts. And no one has ever uncovered a classical music subculture with negative feelings and antisocial tendencies. In addition, classical music was positively related to positive affect in the noncollege adults. Thus, we need to consider other interpretations.

The correlation between total music listening and depression in the faculty/staff group may hold a key. Rather than conclude that high levels of music listening in some way lead to or nurture negative affect, it is more likely that music is listened to more frequently by individuals with higher levels of negative affect. People may have different reasons for choosing to listen to music when experiencing negative emotions—to change their mood to a more positive one, to seek understanding and empathy from music which matches the mood, or to actually enhance and enjoy their misery more (something which subjects have told us they do. Schubert (1996) has proposed a theory to explain why people may enjoy negative emotions connected to music.). Regardless of the reason, people would be most likely to choose to listen to music which is emotionally meaningful and moving. Among college students, this type of music is obviously rock for the majority. Among the faculty/staff sample, classical music was not the most commonly listened to music, but it likely is the type of music which has the greatest emotional impact on regular listeners. Rock no longer has the social significance for this older group that it does for the students. Oldies and easy listening are not commonly thought of as having deep emotional expression.

A remaining question is why music listening was not associated with affect in the noncollege sample. Again it is possible that music plays different roles for different demographic groups. While having roughly the same average age as the faculty/staff group, the noncollege sample was significantly different with respect to education and employment. This group reported listening to about the same total amount of music as the faculty/staff, but the music appears to play a much less important role in their emotional lives. Perhaps the idea of intentionally using music to manipulate feelings is more common with higher levels of education or with exposure to a greater variety of types of music. The noncollege sample reported the least variety of music categories. Seventy-eight percent of the music-listening they reported fell into the categories of rock, country and oldies; in the faculty/staff group, only 49% of the music-listening fell into those categories.

There are some obvious shortcomings and limitations of this study. We have depended on subjective reports of the participants since it is difficult, if not impossible, to objectively and accurately assess how much music of various categories a person is exposed to on a daily basis. While the actual numbers of hours reported may not be totally accurate, however, they do provide an indication of how much music a person thinks they are exposed to which may be just as relevant as actual exposure. A finer analysis of music types might also be useful. With more carefully defined categories to eliminate confusion, differences may be found between the various subdivisions of rock. Despite these problems, this study helps fill in some gaps in our understanding of the role of music in the daily life of the average adult citizen.

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The deadline for submission is July 15, 1997. Please send submissions to: Dr. Clifford K. Madsen, Chairman, NAMT Research Committee, Center for Music Research, Florida State University, Tallahassee, FL 32306-2098.