Music preferences as signs of who we are: Personality and social factors

Hasan Gürkan Tekman[*1]

*Psychology Department,Uludag University, Turkey
[1]tekman@uludag.edu.tr

ABSTRACT

Recent research shows that music preferences can be summarized by four dimensions and these dimensions are associated with certain personality characteristics, analyzed according to the five factor theory of personality. However, when directly asked to describe listeners of different musical genres, respondents make limited reference to personality characteristics. When classification of musical genres familiar to university students in Turkey by factor analysis and by judgments of similarity are compared, five main groups emerge. One group, which may be similar to the "folk" dimension that emerged in some studies with west European samples although it was missing in the North American data, subsumes styles indigenous to Turkey. Some styles such as techno, underground, blues, Turkish art music and another Turkish genre called Arabesk are classified differently depending on the method used. The comparison of personality profiles with perceived qualities of genres and their listeners do show some consistencies but some styles that appear similar may appeal to very different kinds of persons. Studying the relationship between music preferences and person variables would benefit from including a variety of measures, different cultures, and both target person and perceiver perspectives.

INTRODUCTION

Both theories about why people listen to music and opinions of respondents when they are asked directly why they listen to music indicate that there are social/situational as well as personal reasons for listening to music. Berlyne's (1971) hypothesis that musical preferences – and artistic preferences in general – are closely related to the level of arousal that results from exposure to such works of art is an example of the former approach. However, the work of Konecni and colleagues (Konecni, 1975; Konecni & Sargent-Pollock, 1976) puts even this idea in a situational context: Individuals do not necessarily prefer music that produces a specific level of arousal. Rather they use music with the purpose of modulating their arousal and the preferred kind of music changes according to the demands of the situation. Listeners of music also appear to be aware of this function of music, since modulating mood and arousal appears as a factor in research that directly asked respondents to indicate their reasons for listening to music (North, Hargreaves, & O'Neill, 2000; Tarrant, North, & Hargreaves, 2000; Tekman & Hortaçsu, 2002a).

Music serves other important functions in the social domain. In addition to helping coordinate group activity (Sloboda, 1985) music is also used in establishment and communication of social identities (North, Hargreaves, & O'Neill, 2000; Tarrant, North, & Hargreaves, 2000; Tekman & Hortaçsu, 2002b). Guesses about musical preferences of others and belonging to groups affect each other reciprocally. Individuals think ingroup members like the kind of music they like (Tarrant, North, &

Hargreaves, 2001) and they evaluate outgroups more positively if they believe they like the same kind of music (Bakagiannis & Tarrant, 2006). Similar to the case with arousal modulation, listeners of music are also aware of using musical preferences for purposes of self presentation in social contexts (North, Hargreaves, & O'Neill, 2000; Tarrant, North, & Hargreaves, 2000; Tekman & Hortaçsu, 2002a).

Although social uses of music lead us to expect musical preferences to depend on the situation, other more biologically oriented approaches to music preferences such as Berlyne's (1971) point out that musical preferences may be associated with more stable personal characteristics. Recent research by Rentfrow and Gosling (2003) brought a new focus to research in this area. Rentfrow and Gosling's research had two important contributions: They factor analyzed evaluative ratings of musical genres to reach a four-way classification of them, and they delineated relationships between other person variables including the Big Five personality factors (Costa & McCrae, 1992; McCrae & Costa, 1997) and these four dimensions of musical tastes. Subsequent research corroborated the main lines of Rentfrow and Goslings's results although there were further refinements (Delsing, ter Bogt, Engels, & Meeus, 2007; Mulder, ter Bogt, Raaijmakers, & Vollebergh, 2007; Zweigenhaft, 2008)and a fifth dimension mostly related to ethnic and folk music tends to emerge (Franek & Muzik, 2006; Tekman, Göklü, & Sağlam, 2008).

In the present paper I will attempt to integrate findings from several research projects (some of them published or presented previously) on two questions: First, is there a stable clustering of musical genres? Second, what information, other than personality traits does musical preference communicate about a person?

STRUCTURE OF MUSIC PREFERENCES

I investigated the basic clusters of genres that can summarize musical preferences together with colleagues in three different projects, using three different methods. One research project was very similar to the method used by Rentfrow and Gosling (2003) and others following them (Franek & Muzik, 2006; Dunn & de Ruyter, 2008): Respondents were asked to rate how much they liked a relatively large number of musical genres and the data were analyzed by a principle components analysis to find out the dimensions underlying the ratings (Tekman, Göklü, & Sağlam, 2008). The other two projects asked respondents to evaluate the similarity between genres of music directly. In one case a sorting task (Tekman & Hortaçsu, 2002a) and in another (Tekman & Akgül, unpublished) rating similarity on a five-point scale were used as methods of responding.

Method

Participants. One hundred and fifty students of Uludag University participated in the study in which participants rated how much they liked each genre (Tekman, Göklü, & Sağlam,

2008), 165 students of the Middle East Technical University participated in the rating task (Tekman & Hortaçsu, 2002a; 2002b), and 80 students of Uludag University participated in the study about rating the similarity between musical genres.

Materials. In all the research projects reported, 16 musical genres that were reported by at least 10% of a sample consisting of students of one Turkish university (Tekman & Hortaçsu, 2002a) were used.

Procedure. How much respondents liked each musical genre was assessed by a answers to three questions on five-point scales in the work of Tekman, Göklü, and Sağlam (2008). These three item scales had high reliability and the results with the average ratings from the three questions were consistent with the ratings in response to simply asking how much they liked a genre. Tekman and Hortaçsu (2002a) asked the respondents to put the 16 musical genres in as many groups as they liked such that the genres they thought similar would be in the same group. The number of times each pair of genres appeared in the same group across participants was used as a measure of similarity in a cluster analysis of musical genres. Participants were presented with all possible pairs of the 16 musical genres and were asked to rate the similarity of each pair on a five-point scale in the unpublished similarity rating study. The average similarity ratings of each pair were used as a measure of similarity in a cluster analysis. All data were collected through paper and pencil questionnaires that were distributed to participants in large groups.

Results and Discussion

Tekman, Göklü, and Sağlam (2008) basically replicated the four dimensions of Retfrow and Gosling (2003) with the addition of one more dimension. Preferences for rock, metal and heavy metal loaded on one factor which corresponded to Rentfor and Gosling's "intense and rebellious" group. Rap, techno and underground were combined in a group which we could call "energetic and rhythmic." The labels pop, Turkish pop and foreign pop loaded on one factor and this was called "upbeat and conventional." Classical, jazz, blues and Turkish art music, which was not one of the genres Rentfrow and Gosling used, combined in one factor. This corresponded to Rentfrow and Gosling's "reflective and complex" group. Three Turkish genres, Arabesk, Özgün, and Turkish folk music loaded on a fifth factor. We called this the *local popular* group.

Tekman and Hortaçsu's (2002a) cluster analysis gave very similar results, except Arabesk was separated from the group of other Turkish genres and Turkish art music clustered with them, instead. The cluster analysis based on direct similarity ratings yielded the intense and rebellious, reflexive and complex, and indigenous Turkish genre groups of Tekman and Hortaçsu intact. Arabesk stood apart from all the groups again. However, the upbeat and conventional group merged with two of the genres energetic and rhythmic group, leaving only rap outside.

Considering these results together, it appears that the musical styles that Rentfrow and Gosling (2003) called "intense and rebellious" and "reflective and complex" do make up distinctive groups of genres that Turkish respondents consistently produce, despite differences in samples and methods for probing similarity. One outstanding question that remains is whether Turkish art music should be grouped together with the reflective and complex styles or with the other

genres of Turkish music. Although evaluations of similarity tend to put this genre in a group with other Turkish genres, in the analysis of preference ratings it had its highest loading in the reflexive and complex factor. It should be noted that its loading on the local popular factor was also relatively high.

The "upbeat and conventional" versus "energetic and rhythmic" distinction did not always appear clearly in our data. Although these groups emerged in the factor analysis of preference ratings and in the sorting task, the distinction was much less clear when ratings of similarity were given. This difference does not appear to be a result of the respondents' lesser familiarity with these genres of music because the respondents for the musical preference questionnaire (Tekman, Göklü, & Sağlam, 2008) came from the same population.

Another clear result was that our respondents thought of the Turkish genres as different from the genres of Western origin and these genres did not divide themselves among the four clusters of Rentfrow and Gosling (2003). Arabesk was not perceived as very similar to the other Turkish genres, but in the principal components analysis of preference ratings it did load on the same factor as Turkish folk music and Özgün.

RELATIONS BETWEEN MUSIC PREFERENCES AND PERSON VARIABLES

The second question addressed in this paper is which person variables are related to preference for the groups of musical genres that emerged as the result of research using a number of different methods. The five-way (Tekman, Göklü, & Sağlam, 2008) and the six-way (Tekman & Hortaçsu, 2002a; 2002b) classifications of genres were used as the basis for investigating these relations. I will try to compare the results from two different approaches to this question with each other: First is the view that musical preferences are related to stable personality characteristics (Dunn & de Ruyter, 2008; Franek & Muzik, 2006; Rentfrow & Gosling, 2003; Tekman, Göklü, & Sağlam, 2008; Zweigenhaft, 2008). The five-factor theory is taken as the basis of measuring personality characteristics in this approach. The second approach is the view that musical preferences are related to formation and presentation of social identities (Tarrant, North, & Hargreaves, 2001; Tekman & Hortaçsu, 2002b). The dimensions that emerged in the research of Tekman and Hortaçsu (2002a, 2002b) for describing musical genres, their listeners and reasons for listening to these genres were used in order to investigate those relations.

Method

Participants. The data were collected from the same participants who took part in the research Tekman, Göklü, and Sağlam (2008) and Tekman and Hortaçsu (2002a, 2002b).

Materials. Participants completed the NEO FFI-TR scale which is a version of the five-factor personality inventory standardized for Turkey for assessing personality characteristics. Those participants also indicated how much they liked each one of the 16 genres used in the study by giving five-point ratings in response to three questions (Tekman, Göklü, & Sağlam, 2008). The participants of Tekman and Hortaçsu (2002b) rated 19 items in terms of how appropriate they were for describing the characteristics fans of a musical genre. These items made up the dimensions loser (probably a

result of the inclusion of the Arabesk genre this factor contained items such as aggrieved, poor, defeated), sprightly, and sophisticated. These participants were given the name of a specific genre within each group of genres that was thought to be typical of that group for evaluation. In addition, they rated how well the 19 items described themselves and how much they liked each one of these six genres of music.

Procedure. The procedure was asking the respondents to complete the paper and pencil questionnaires in large groups.

Results and Discussion

The correlations between average liking ratings for the five groups of genres and the five personality factors reported by Tekman, Göklü, and Sağlam (2008) are given in the top panel of Table 1. The average ratings of the listeners of the six musical genres in terms of the three dimensions reported by Tekman & Hortaçsu (2002b) are given in Table 2.

Table 1. Correlation coefficients for rated preference for the five groups of musical genres and the scales used by Tekman, Göklü, and Sağlam (2008) and Tekman & Hortaçsu (2002b). Correlations that were significant at the .05 level are given in bold print. Key for genres: I&R = intense and rebellious, E&R = energetic and rhythmic, U&C = upbeat and conventional, LP = local popular, R&C = reflective and complex. Key for person variables: N = neuroticism, E = extraversion, O = openness, A = agreeableness, C = conscientiousness, L = loser, Spr = sprightly, Sop = sophisticated.

Person variable	Genre				
	I&R	E&R	U&C	LP	R&C
N	-.071	-.134	.107	**.182**	-.182
E	.154	**.248**	**.243**	-.010	.052
O	**.399**	-.084	**-.303**	.036	.058
A	-.134	**-.233**	.079	**.256**	**-.167**
C	-.098	-.153	-.035	**.171**	.013
Self rating					
L	.108	.119	.026	.095	.016
Spr	.113	-.022	.092	.033	.039
Sop	-.067	.052	**.258**	.136	**.181**

As can be seen, the loser dimension mainly distinguished the fans of Arabesk and classical music, in opposite directions, from the fans of other genres. If we compare the correlations of the personality characteristics with a preference for reflective and complex and local popular genres, which contain classical music and Arabesk, respectively, it is seen that neuroticism and agreeableness are correlated with preferences for these styles with opposite signs.

Similarly, the sprightly dimension is rated as high for the intense and rebellious, energetic and rhythmic, and upbeat and conventional genres but low for Arabesk. However, except for the case of extraversion, in which we see generally positive correlation coefficients for those three genre groups as opposed to near zero correlation for local popular genres, it is difficult to

see a correspondence between the characteristics of the stereotypes and the personality characteristics of the actual fans.

The sophisticated dimension distinguishes classical music and Arabesk from the other genres again. Only this time this characteristic is rated as very appropriate for listeners of classical music but not at all for listeners of Arabesk. In addition, listeners of Turkish folk music were also rated relatively high on this dimension. These ratings seem to give information that is quite different from the correlations with personality characteristics, because the characteristics of listeners of local popular genres and those of reflective and complex genres are very different. Furthermore, Turkish folk music and Arabesk whose listeners are perceived very differently on this dimension were grouped together in the factor analysis.

Table 2. Average ratings on a five-point scale (1 = not appropriate at all, 5 = very appropriate) of listeners of six musical genres on three dimensions (Tekman & Hortaçsu, 2002b). Key for genres: Ar = Arabesk, I&R = intense and rebellious (rock), E&R = energetic and rhythmic (rap), U&C = upbeat and conventional (pop), LP = local popular (Turkish folk music), R&C = reflective and complex (classical). Key for person variables: L = loser, Spr = sprightly, Sop = sophisticated.

Person variable	Genre					
	Ar	I&R	E&R	U&C	LP	R&C
L	4.55	2.77	2.39	2.43	2.84	0.96
Spr	0.84	3.99	4.17	4.04	2.69	2.42
Sop	0.89	2.97	2.36	2.82	3.71	4.36

Respondents in Tekman and Hortaçsu's (2002b) research were also asked to rate how well each item in the scale described themselves. The correlations of self ratings with how much the respondents reported liking each genre are given in the lower panel of Table 1. These correlations indicate that either the associations between musical preferences and these three dimensions were in the minds of the observers and did not correspond to the actual characteristics of the fans of these genres, or the respondents were unwilling to reveal their true characteristics when asked directly. The latter is not very probable considering the responses were given anonymously. Thus, although Rentfrow and Gosling (2006) found that information about musical preferences could be used to generated accurate estimations of personality characteristics of others, the ratings of our respondents did not match the self ratings of listeners of different genres.

CONCLUSION

Musical genres specific to Turkey did not group together with genres of Western origin, but formed their own clusters regardless of the method used. Significantly, Turkish pop music and Turkish art music provided exceptions to this finding. Although folk music typically clusters together with popular styles in North American and Western European samples (Delsing, et al., 2006; Mulder, et al., 2006; Retfrow & Gosling,

2003) this may happen because of historical reasons and may not be true of Eastern European or non-European popular styles, as also suggested by Franek and Muzik (2006).

Of the three dimensions that emerged in the work of Tekman and Hortaçsu (2002b) for describing listeners of different musical genres, which contained four groups very similar to those of Rentfrow and Gosling (2003) in addition to the Turkish genres, only the dimension "sprightly," which included adjectives such as fun-loving and wild can be said to describe a personality trait. The loser and sophisticated dimensions were more related to social status than to personality. Furthermore, it was not always possible to see a correspondence between the personality correlates and the perceived characteristics of listeners of a genre of music. Most importantly, unlike personality characteristics (Rentfrow & Gosling, 2006) the social characteristics of listeners do not seem to be perceived accurately by observers. It is possible that what inferences will be made about the listeners of a musical genre is closely related to motivational factors for maintaining a positive identity for ourselves and distinguishing our social identities from rejected groups (Tekman & Hortaçsu, 2003).

An examination of these data reveals that musical preferences may give information about social characteristics that is not redundant with personality traits. Furthermore, rather than giving accurate information about listeners, musical preferences may cue stereotypes that may not always be true or may be used to actively manage impressions that listeners create on others (North, Hargreaves, & O'Neill, 2000). This issue should be studied in research projects that assess personality characteristics and social and situational determinants of musical preferences in conjunction with each other.

ACKNOWLEDGMENT

REFERENCES

Bakagiannis, S. & Tarrant, M. (2006). Can music bring people together: Effects of shared musical preference on intergroup bias in adolescence. *Scandinavian Journal of Psychology, 47*, 129-136.

Berlyne, D. E. (1971). *Aesthetics and psychobiology*. New York: Appleton-Century-Crofts.

Costa, P. T. & McCrea, R. R. (1992). Four ways 5 factors are basic. *Personality and Individual Differences, 13*, 653-665.

Delsing, M. J. M. H., ter Bogt, T. F. M., Engels, R. C. M. E., & Meeus, W. H. J. (2007). Adolescents' music preferences and personality characteristics. *European Journal of Personality, 22*, 109-130.

Dunn, G. & de Ruyter, B. (August, 2008). Relating personality to reported music listening behavior. Paper presented at the 10th International Conference on Music Perception and Cognition, Sapporo, Japan.

Franek, M. & Muzik, P. (August, 2006). Personality correlates and the structure of music preferences. Paper presented at the 9th International Conference on Music Perception and Cognition, Bologna, Italy.

Konecni, V. J. (1975). The mediation of aggressive behavior: Arousal level vs. anger and cognitive labelling. *Journal of Personality and Social Psychology, 32*, 706-712.

Konecni, V. J. & Sargent-Pollock, D. (1976). Choice between melodies differing in melodic complexity under divided attention conditions. *Journal of Experimental Psychology: Human Perception and Performance, 2*, 347-356.

McCrae, R. R. & Costa, P. T. (1997). Personality trait structure as a human universal. *American Psychologist, 52*, 509-516.

Mulder, J., ter Bogt, T., Raaijmakers, Q, & Vollebergh, W. (2007). Music taste groups and problem behavior. *Journal of Youth and Adolescence, 36*, 313-324.

North, A. C., Hargreaves, D. J., & O'Neill, S. A. (2000). The importance music to adolescents. *British Journal of Educational Psychology, 70*, 255-271.

Rentfrow, P. J. & Gosling, S. D. (2003). The do re mi's of everyday life: the structure and personality correlates of music preferences. *Journal of Personality and Social Psychology, 84*, 1236-1256.

Rentfrow, P. J. & Gosling, S. D. (2006). Message in a ballad: The role of music preferences in interpersonal perception. *Psychological Science, 17*, 236-242.

Tarrant, M., North, A. C., & Hargreaves, D. J. (2000). English and American adolescents' reasons for listening to music. *Psychology of Music and Music Education, 28*, 166-173.

Tarrant, M., North, A. C., & Hargreaves, D. J. (2001). Social categorization, self-esteem, and the estimated musical preferences of male adolescents. *Journal of Social Psychology, 141*, 65-581.

Tekman, H. G., Göklü, G. & Sağlam, V. (August, 2008). Relations between music preferences, personality characteristics and values in a Turkish sample. Paper presented at the 10th International Conference on Music Perception and Cognition, Sapporo, Japan.

Tekman, H. G. & Hortaçsu, N. (2002a). Music and social identity: Stylistic identification as a response to musical style. *International Journal of Psychology,37*, 277-285.

Tekman, H. G. & Hortaçsu, N. (2002b). Aspects of stylistic knowledge: What are different styles like and why do we listen to them? *Psychology of Music, 30*, 28-47.

Tekman, H. G. & Hortaçsu, N. (September, 2003). Perceiveing and reasoning about musical styles and their listeners: The role of social identity. Paper presented at the 5th European Society for Cognitive Sciences of Music Conference, Hannover, Germany.

Zweigenhaft, R. L. (2008). A do re mi encore: A closer look at the personality correlates of music preferences. Journal of Individual Differences, 29, 45-55.