

The Relationship Between Personality Traits and Preference for Musical Genres Among Students of Redeemer's University, Ede.

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Abstract

The study examined the relationship between personality and preference for musical genres among students of Redeemer's University, Nigeria. It was reasoned that if a correlation was found it may benefit psychologists working with young people, specifically providing a greater understanding of how their personality relates with their choice of music. The study was conducted using quantitative method, that is the use of questionnaires to collect data. The Big Five Inventory (BFI) was used to assess participants personality type and a modified version of the sample test of musical preference (STOMP) were administered to participants. The participants were selected using convenient sampling and consisted of 200 university students studying at Redeemer's University, Ede, Osun state Nigeria. Pearson Product Moment Correlation, Independent sample t test and Multiple Regression were used to analyzed the data. The result of this study indicated that there was a significant relationship between personality trait and preference for musical genres. There was no significant difference between male and female on preference for musical genres. Age was found not to be associated with preference for musical genres. Finally, factors influencing musical genres was found to predict preference for musical genres. Implications for educators and further research are discussed.

Keywords: Music, genre, personality, student.

Introduction

Music is considered to be very important among adolescence today. This is because the average adolescents spends about 14 percent of 24 hours listening to music, this is about the same amount of time spend watching television or reading books, and half the time spent in daily conversation (Rentfrow & Gosling, 2003; Zentner & Grandjean, 2008; Mehl & Pennebaker, 2003). For example, North, Hargreaves, and O'Neill (2000) reported British adolescents to listen to music for an average of 2.45 hours per day. In the United State of America, an average adolescence is exposed to popular music for 10500 hours (Zilman & Gan, 1997). The times spent listening to music approximate those spent in the classroom from kindergarten through high school. Studies with Irish (Fitzgerald, Joseph, Hayes, & O'Regan, 1995), Swedish (Bjurström & Wennhall, 1991) and Dutch (Ter Bogt, 2000) adolescents confirm that music is of central importance in the lives of most young people. It also helps them to relieve boredom, ease tension, manipulate listener's mood and fight loneliness (Wells & Hakanen, 1991), and to organize their social and internal worlds (DeNora, 2000).

The definition of music has been long debated among philosophers, musicians, sociologists and scientists. It is difficult to characterize or define something that has so many uses, forms and meanings. One may simply define music as a pleasant sound or product of a musician however, a professional definition would incorporate the mechanics of music, that is, melody, notes, chords, tempo, instruments, rhythm, harmony and bass (Dorrell, 2005). In his book, "a study in applied phenomenology" Thomas Clifton also defines music as an ordered arrangement of sound and silences whose meaning preventative rather than denotative. Music comes in various form which are separated into different categories or genres that differentiates one style of music from another. These genres can be divided based on the mechanism involved in creating the sound as well as how they performed. Example of different genres are Hip-hop, Rhythm & Poetry (Rap), Jazz, Blues, Dance, Drum and Bass, Rock, Reggae, Classical, Pop and so on.

Musical preference can be described as the liking of certain music at a given time (Abeles, 1980). In quite a number of books and papers, musical preference has been defined as the degree or level of liking a particular musical style/genre and also possessing the behavioural tendency to listen to that style/genre rather than other style/genres. Such preference could either be short-term or long-term attitude. However, psychology of music defines musical preference as a long term phenomenon (Schafer, 2008). It is evident that there is a wide range of factors that influence ones musical preference. According to Muller (2000), these factors can be divided into four groups which include: the music, the listener, the context and the use of music.

Research has shown that when people discuss their musical preference , they do so mainly on the level of genres. Hence musical genres provide optimal level for research (Rentfrow & Gosling, 2003). Musical preference is usually measured using Likert-type rating scales. Nevertheless, musical preference can either be measured on verbal or sounding preference (Muller, 2000). Verbal preference is said to be research setting in which respondents are asked to think of a particular genre and rate how much they like it, while sounding preference refers to a research setting in which respondents listen to concrete musical piece of work and then rate how much they enjoyed it. Whether these two forms of measurement yield different results have barely been

investigated, however one could argue that sounding preferences are closer to real music listening (Muller, 2000).

Personality on the other hand is the organized and developing system within the individual that represents the collective action of the individual's major psychological subsystems (Mayer, 2007). Personality has also been defined as those characteristics of a person that account for consistent patterns of feelings, thinking and behaving (Pervin, Cervone, & John, 2005). Personality is a set of traits and mechanisms within the individual that are organized and relatively enduring and that influence his or her interactions with, and adaptations to the intrapsychic, physical and social environment (Larsen & Buss, 2005). But there are factors that contribute to the development of every personality characteristics and they include: biological inheritance, physical environment, culture, group experience and unique experience.

The relationship between music and personality was first suggested by Cattell (Cattell & Anderson, 1954). He argued that music satisfies in-depth and unconscious needs and went on to study musical preferences so as to gain a deep insight of personality. Cattell later joined Saunders and created the institute for personality and ability testing (IPAT), a music preference test comprising of 120 excerpts of classical and jazz music. They then discovered 11 stable music-preference factors, each of which mirrored an unconscious side of personality (Cattell & Saunders, 1954). These factors were later compared to normal and abnormal personality types with the aim of constructing a personality inventory for psychiatric diagnoses (Cattell & Saunders, 1954). The inventory was created as an alternate method of accessing personality which was different from projective tests such as the Rorschach Apperception Test and 16 Personality Factor Inventory (Kemp, 1996). Cattell's study also focused on only two musical genres (Classical and Jazz) omitting preference possibilities of other musical genres (Rentfrow & Gosling, 2003).

Contrary to Cattell's belief that individuals' musical preference provide information about unconscious aspects of personality, other studies have supported the notion that musical preference is as a result of explicit traits of personality (Rentfrow & Gosling, 2003). For example, research has shown significant correlation between sensation seeking behaviour and musical preference. Sensation seeking behaviour is one which seeks for a variety of new and complex experiences as well as the willingness to take risks to achieve such experiences. North and Hargreaves (2008), in their study showed that those who scored high on sensation seeking have strong and positive reactions to novelty and risks. Such links between music preference and sensation seeking show that people with such behaviour prefer loud, high tempo music such as heavy rock. In testing this relationship, the Musical Preference Scale (MPS) was created. It was a questionnaire consisting of 60 musical factors of 150 genres and examples of musicians were also provided for each genre (Zuckerman, 1986). When correlated with the Sensation Seeking Scale (SSS), results suggested that sensation seeking positively correlate with preference for rock music and negatively to soundtrack music (Little & Zuckerman, 1986). These results are supported by the theory of optimal stimulation which states that individuals with high stimulation level gravitate towards energizing environment to fulfil this need (Dollinger, 1993; Little & Zuckerman, 1986).

Research has shown musical preference to correlate with the factor model and NEO-PI traits. For example, openness as found to correlate with genres such as jazz, blues, classical and reggae. According to Dollinger (1993), individuals who score high on openness take interest in cultural experiences and enjoy many music genres especially genres that are less mainstream or convention. Extraversion was also found to be related to preference for jazz as well as new age music, however to a lesser degree. Extraversion strongly correlated with rock music and negatively to gospel music (Dollinger, 2003). It has also been discovered that introversion and extroversion to have different levels of engagement during music listening. For example, introverts have been seen to prefer intellectual music, unlike extrovert. They get involved with the music and make conscious effort to understand music at a deeper level (Payne, 1980). Extraverts on the other hand subscribe to more predictable and less demanding music. They prefer music which does not require cognitive and cognitive engagement (Kemp, 1996; North & Hargreaves, 1999). In addition, in his study, Dollinger found that neuroticism was found to positively correlate with likeness or preference for conventional pop music. This suggests that individual who scores high on neuroticism, decrease the negative effects induced by more arousing music.

In aforementioned studies, it was difficult to create unifying theory about the relationship between personality and musical preferences for two reasons (Rentfrow & McDonald, 2010). First, many studies only investigated classical music genres (Cattell & Saunders, 1954; Payne, 1967) and those that incorporated other genre had no rationale for genre selection which led to inconsistent combinations of musical genres. Secondly, previous researcher laid emphasis on personality from different perspectives and as a result of this they described the personality and music preference in terms of psychoanalytic concepts, while Dollinger (1993) considered music preference to be a reflection of personality traits. Therefore, the aim of this research is to examine the relationship between music preference and personality among University students. I am of the opinion that if a relationship is found it may benefit psychologists working with young people, specifically providing greater understanding to how music influences personality.

Methods

Participants

Participants were recruited from students of Redeemer's University, Ede, Osun State in Nigeria. A total of one hundred and seventy six students (85 Male, 87 Female) participated in this study. These students were selected from all levels, that is from 100 to 400 level. The age range of the students are between 18 -25 years. The mean age of the participants was 20.74.

Measures

Two standardized questionnaires on personality and musical preference were used to assess the relationship between adolescence personality and musical preference.

BIG FIVE PERSONALITY: Students' personality was assessed using a 44-item questionnaire designed by John et.al (1999) to measure personality from a five dimensional perspectives. The essence of the perspective is that personality characteristics can be resolved into five broad dimensions which are distinct from another. The five dimension subscales are:

- (a) Extraversion: High energy and activity level, dominance, sociability, expressive and positive emotions.
- (b) Agreeableness: Prosocial orientation, altruism, trust and modesty.
- (c) Conscientiousness: Impulse control, task orientation, goal directedness
- (d) Neuroticism: Emotional stability, anxiety, sadness and irritability
- (e) Openness: It exemplifies the depth, breadth and complexity of an individual's mental and experiential life.

The first part of the questionnaire requested the demographic students such as age, gender and school, while the second parts of the questionnaire investigated the five dimension of students' personality. Participants were asked to indicate their responses on a five-point Likert-type scale (1= strongly disagree, 5= strongly agree). The reliability alpha Cronbach was 0.80. The Big Five Inventory were scored directly by adding together the values shaded in each item to obtain student score in each of the subscale.

THE SHORT TEST OF MUSICAL PREFERENCE: The musical preference inventory is the Short Test of Musical Preference (STOMP). The scale was developed by Rentfrow and Gosling (2003) for the purpose of measuring preference for particular well-organized musical genres. The participants are expected to indicate their basic preference for the musical genre. The STOMP accesses music from four dimensions, these dimensions include:

- (a) Reflective and Complex: Genre that seem to facilitate introspection and are structurally complex. e.g. blues, jazz, classical.
- (b) Intense and Rebellion: Genres that are full of energy and emphasize on themes of rebellion. e.g Rock, Alternate.
- (c) Upbeat and Conventional: Genres that emphasize positive emotions and structurally simple. e.g. country, pop, religious
- (d) Energetic and Rhythmic: Genres that are lively and often emphasize the rhythm. e.g. Rap, hip-hop etc.

Participants responses were indicated on a five - point likert - type scale (1= strongly agree, 5 = strongly disagree). The scale has a Cronbach alpha of 0.86

Design

This research adopted a survey research design, which was used to quantify the relationship between personality type and preference for musical genres. The independent variable was personality type while the dependent variable was musical preference. Data was collected through the use of questionnaire.

Procedure

Permission was sought from the school authority and the data collection was done by walking up to the students at their leisure time and explaining what the questionnaire was about in order to get a good standard result, the questionnaires was administered to the participants individually asking them to take their time in filling it in order not to make them fill irrelevant or wrong answers. Th students gave written consent to participate in the study. Time was taken out to educate the students about the questionnaire before administering them. The distribution and collection of the questionnaires were done within Redeemer's University campus. It took about 30 minutes to fill both the Big Five Personality and The Short Test of Musical Preference.

Method of Data Analysis

The techniques used in analyzing these data were inferential and descriptive statistics. For the descriptive statistics, Standard Deviation, Mean and Frequency Tables were used to summarize the participant's scores for personality type and musical preference. For inferential statistics, Statistical Package for Social Sciences (SPSS) was used to analyze the data collected. Multiple Regression, Independent T-Test and Pearson Product Moment Correlations techniques were put to use where applicable in order to test the hypothesis of the study. The difference between the mean scores was analyzed using the independent t-test and the relationship between the variables in this study was found using the Pearson Product Moment Correlation.

Results

The results from this study measure the relationship of personality type and preference for musical genres among undergraduate students of Redeemer's University. The data were analyzed through the use of Pearson Product Moment Correlation and Independent Sample Test.

Pearson Product Moment was employed to determine the relationship between personality type and preference for musical genres and also between age and preference for musical preference. Independent t-test was employed to determine gender difference in respect to preference for musical genres.

Analysis of the data depicts and did not depict significant relationships and differences for gender, personality type, age and preference for musical genres. Details of the results are presented as follows.

Descriptive statistics of demographic variables

The information below shows the descriptive statistics of the mean, standard deviation and percentage of students who participated in the study. The number of students involved in this research were 176. Among the students the average mean and standard deviation for their age are 20.74 and 2.21 respectively; Extraversion is 25.37 and 5.37; Agreeableness is 34.78 and 5.49; Conscientiousness is 32.43 and 6.55; for Neuroticism is 21.85 and 6.67; Openness is 35.62 and 5.14; Reflective and Complex is 18.46 and 4.23; Intense and Rebellion is 15.57 and 5.00; Upbeat and Conventional is 19.47 and 3.78; and Energetic and Rhythmic are 17.71 and 4.67.

Table 1: Descriptive Statistics of Age, Personality and Musical Genres.

Variable	N	Minimum	Maximum	Mean	SD
Age	173	13.00	27.00	20.74	2.21
Extraversion	176	15.00	40.00	25.37	5.37
Agreeableness	176	21.00	45.00	34.78	5.49
Conscientiousness	175	9.00	44.00	32.43	6.55
Neuroticism	175	9.00	40.00	21.85	6.67
Openness	175	22.00	47.00	35.62	5.14
Reflective and Complex	176	6.00	28.00	18.46	4.23
Intense and Rebellious	176	4.00	28.00	15.57	5.00
Upbeat and Conventional	176	6.00	28.00	19.47	3.78
Energetic and Rhythmic	176	4.00	28.00	17.71	4.67

In table 2, the gender distribution of the respondents are shown and it is indicated that 86(48.9%) respondents are males while 90(51.1%) of the respondents are females. This shows that more undergraduate female participated in the study than male.

Table 2: Gender distribution of the respondents

S/N	Gender	Frequency	Percentage (%)
1	Male	86	48.9
2	Female	90	51.1
	Total	176	100.0

Table 3 indicates factors that can influence musical genre and it was found that musical genre are influenced the most by the wordings/lyrics of a song 79 (45.7%). This means that it is the wordings/lyrics of a song that make most of the students develop interest in certain musical genre. However, other factors that influence musical genre are Rhythm 38(22.0%); Artiste 23(13.3%); Group influence 17 (9.8%) and Culture 16 (9.2%).

Table 3: Factors influencing musical genre

S/N	Musical Genre	Frequency	Percentage (%)
1	Wordings/Lyrics	79	45.7
2	Artiste	23	13.3
3	Group Influence	17	9.8
4	Rhythm	38	22.0
5	Culture	16	9.2
	Total	173	100

Relationship between personality type and musical preference

It was hypothesized that there is a significant relationship between personality type and musical genre. Table 4 reports a significant relationship between Extraversion (EX) and Intense and Rebellion (IR) ($r=.18, p < 0.05$). Agreeableness (Agr.) has a significant relationship with Reflective and Complex (RC) ($r=.18, p < .05$) and Upbeat and Conventional (UC) ($r=.25, p < 0.05$). Conscientiousness (Con.) has a significant relationship with Reflective and Complex (RC) ($r=.28, p < .05$) and Upbeat and Conventional (UC) ($r=.22, p < .05$). Openness (Open) has a significant relationship with Reflective and Complex (RC) ($r=.27, p < .05$) and Intense and Rebellion (IR) ($r=.21, p < .05$). these subscales results suggest that the hypothesis is supported.

Table 4: Relationship between personality type and musical preference

	Ex.	Agr.	Con.	Neu.	Open.	R & C	I & R	UC	E & R
Ex.	1						.18*		
Agr.		1				.18*		.25*	
Con.			1			.28*		.22*	
Neu.				1					
Open.					1	.27*	.21*		
R & C		.18*	.28*		.27*	1			
I & R	.18*				.21*		1		
UC		.25*	.22*					1	
E & R									1

Gender difference on musical preference

The independent sample t-test was also used in Table 5 to confirm the hypothesis that significant difference exists between male and female as regard preference of musical genres. This was tested in order to examine the influence of gender on this variable. The result indicates that there is no significant difference between male and female on preference for musical genres ($t=0.42$, $df=170$, $p > 0.05$). However, the male respondents have a higher preference for musical genres than female respondents among Redeemer's University students.

Table 5: Gender difference on preference for musical genre

Gender	N	Mean	S.D	Df	t	p
Male	85	71.52	12.51	170	0.42	> 0.05
Female	87	70.78	10.61			

Age and Preference for Musical Genre

It was hypothesized that there is a significant relationship between age and preference for musical genre. Table 6 reports no significant relationship between age and preference for musical genre. That is, no significant relationship was found between age and all the subscales of preference for musical genre (Intense and Rebellion, Reflective and Complex, Upbeat and Conventional, Energetic and Rhythmic). The results suggest that the hypothesis is rejected.

Table 6: Relationship between Age and preference for musical genre

	Age	R & C	I & R	U & C	E & R
Age	1	.04	-.01	-.05	-.02
R & C	.04	1			
I & R	-.01		1		
U & C	-.05			1	
E & R	-.02				1

Table 7: Factor influencing musical genre as predictor of preference for musical genre

Predictor	B	R	R ²	P
Factors influencing musical genre	-1.53	.19	.03	< .05

Table 7 above indicates that factors influencing musical genres will significantly predict preference for musical genre ($R=.19$; $R^2=.03$; $P < 0.05$). This means that factors influencing musical genres will determine the preference for musical genre of students in Redeemer's University. That is, factors influencing musical genres account for 3% of the variance in the level of musical genres of the participants. The hypothesis is therefore rejected.

Discussion

This study examine the relationship between personality and preference for musical genres among students. In effect three hypotheses were tested. The first hypothesis showed a statistical significant relationship between extraversion personality type and a preference for intense and rebellion music. This result shows a consistency with other results carried out by other authors (Nicola, 2009; McCown, 1997; Rentfrow & Gosling, 2003). This finding is logical as the genres within the intense and rebellion dimension correspond well with extroverts high energy level, desire to socialize and enjoy themselves. Additionally, energetic genres are commonly played at parties, night clubs and social gatherings and locations frequented by extroverts. Thus, individuals who enjoy Energetic and Rhythmic music tend to be talkative, full of energy, are forgiving, see themselves as physically attractive, and tend to eschew conservative ideals (Rentfrow & Gosling, 2003). This study also found significant relationship between this personality trait and a preference for Upbeat and Conventional music. This is contrary to the findings of Nicola (2009), however, a hand full of research findings support this (Baker & Bor, 2008; Delsing et al; 2008; North et al., 2005; Rentfrow & Gosling, 2003; Zweigenhaft, 2008). Pearson and Dollinger (2004) found that those with a broad music preference are more likely to be extraverted which coincides with the

results found within this current study.

A considerable amount of past research has indicated the presence of a relationship between openness personality trait and a preference for reflective music (Delsing et al; 2008; Dollinger, 1993; Rawlings & Ciancarelli, 1997; Rentfrow & Gosling, 2003; Zweigenhaft, 2008) corresponding to the findings found within the current study. This finding is logical because the genres under the complex and reflective dimension are characterized by depth and structural complexity which is also similar with the nature of individuals with openness personality trait. A significant relationship was also established between openness and rebellion, this finding shows consistency with previous research (Delsing et al., 2008; Dollinger, 1993; Rawling & Ciancarelli, 1997; Rentfrow & Gosling, 2003; Zweigenhaft, 2008) which is also logical because individuals who prefer intense and rebellious music tend to be curious about different things, enjoy taking risks, are physically active, and consider themselves intelligent.

Consistent with previous research (Delsing et al., 2008; Rentfrow & Gosling, 2003; Zweigenhaft, 2008), these findings suggested significant relationships between the agreeableness personality trait and the reflective and complex as well as upbeat and conventional music preference factors. In addition, this study also indicate a positive correlation between conscientious personality trait and reflective and complex preference factor and a negative relationship with the intense music preference factor which was also discovered by Delsing et al. (2008).

The second hypothesis tested if there is a significant difference between male and female in respect to preference to musical genre. The finding shows that there is no significant difference between male and female on preference for musical genre. However, this is contrary to a previous study which found a significant difference between male and female in respect to preference for musical genre (White, 2001). The reason there is no difference in male and female in respect to preference for musical genre as found in this study might be due to the fact that musicians in Nigeria do not create music for a specific gender as target audience unlike in the Western world where artistes such as Justin Bieber have females as their target audience.

The third hypothesis which indicates that there is a significant relationship between age and preference for musical genre was found not to have significant relationship. That is, age of the participants does not determine their preference for musical genre.

The final hypothesis states that factor influencing music genres will significantly predict preference for musical genres. The result shows factors influencing musical genres will significantly predict preference for musical genres. That is, factors such as wordings/lyrics, artiste, group influence, rhythm and culture will predict Redeemer's University students preference for musical genres such as Intense and Rebellion, Reflective and Complex, Upbeat and Conventional, Energetic and Rhythmic. This is contrary to the finding that adolescents often do not pay attention to music lyrics and cited lyrical content as the least important reason for liking a song (Prinsky & Rosenbaum, 1987; Gantz, Gartenberg, Pearson, & Schiller, 1978). However, Christenson (1992) and LeBlanc (1982) interactive theory of musical preference supported this finding that the combination of rhythmic, lyrics, vocal, music and melody affects music preference (White, 1985).

A limitation to this current study and why it cannot be taken as conclusive is due to the non-coverage of large sample of adolescents. In order to validate the study there is to replicate this study in other part of the country and to cover a larger sample. Future research conducted on this subject should involve a less homogenous sample. Additional enquiry into why people enjoy each genre would be valuable. For example, if an individual has a preference for highlife because it reminds them of someone special, then the drive behind his or her preference may be related to certain memories, which may in turn be related to different mood.

In conclusion, personality has a significant relationship with preference for musical genre. No significant difference was found between male and female on preference for musical genre. This could be as a result of difference in population samples. Also, there was no significant relationship between age and preference for musical genre. Furthermore, factors influencing musical genre can predict adolescents' preference for musical genres.

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