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Research Paper

# Music preferences and personality traits among college students 

Dr. Prashant ${ }^{1 *}$, Dr. Amra Ahsan ${ }^{2}$, Ms. Akshita Bochare ${ }^{3}$


#### Abstract

The study aims to investigate relationship between music preferences and personality among college going students. The sample of study comprises of 100 students in all, 50 males and 50 females. The tools used were Short Test of Music preferences- Revised (2003) with 23 items and Big Five Inventory (1984) with 44 items. The study was conducted on college going students. Pearson's Product Moment Correlation was used to see the relationship between music preferences and personality. it was concluded that, there is a significant positive relation between music preference and personality traits of males and females.


Keywords: Music preferences, Personality, Adolescents

'Music is life, that's why our hearts beat'. Music is a part of everyone's life. It resides in the way we talk, walk, write, or even breathe. But what is music? It is a rhythm. It is "organized sound", a term originally coined by a modernist composer, Edgard Varèse (Goldman 1961, 133) in reference to his own musical aesthetic. Also, "music is the actualization of the possibility of any sound whatever to present to some human being a meaning which he experiences with his body-that is to say, with his mind, his feelings, his senses, his will, and his metabolism" (Clifton 1983, 1).

Music is basically a form of art which expresses ideas and emotions in significant sound forms by using the elements of rhythm, melody and harmony through voices, instruments, or both. It is said that the origin of music can be traced back to 1500 BC in the subcontinents of Europe. Some say it was the Africans who discovered this art form. Thus, the origin of music remains unknown. However, it can be seen that every culture has their own story. In India, the Samaveda mentioned music. In Ancient Greece, music was an important part of the Greek theatre. In Iran, king Jamshid was believed to be the inventor of music.

Music can have many social and psychological impacts and meanings for people at different stages of their development (Hargreaves, 1986; McPherson, 2006; North \& Hargreaves, 2008). It can be a mother's lullaby, an artist's exploration and expression, a performer's dream and profession, a listener's passion and leisure, a social setting's ambience and a

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signifier of ritual. Thus, according to the impact that it caused, the music changed with time and currently, there exist almost 50 genres of music.

In present scenarios, it can be seen that music is loved by everyone, especially youngsters. They devote an ample amount of time and money in music, because, for them, it is a way out of their hectic schedules and busy routines. It provides them with a sense of peacefulness which is very important in this era of modernisation. It fills in as an approach to assuage pressure and weariness. And with the coming of modernization, it has become even more easy to enjoy music. A study with 100 sixth-graders revealed that $98 \%$ of these children listened to popular music, $72 \%$ of them on "most days" or every day (Christenson, 1992). Furthermore, it has been reported that children of 8 to 10 years of age listen to music an average of 1 hour per day (Roberts, Foehr, Rideout, 2005). Suppose you are on a public vehicle or maybe strolling in a park, you'll definitely see that people are engaged in listening to music in addition to whatever they are doing. As much as I have observed, adolescents usually use music as a 'way to escape the reality'. They use music to deal with loneliness, stress and emotional problems (North, Hargreaves and O'Neill, 2000). Females use music to deal with emotional stress or to eradicate the feeling of loneliness. Whereas, males on the other hand use music as an energizer, to stimulate their energies or just to create a positive self-image (Wells, Hakanen, 1991; North, Hargreaves, O'Neill, 2000; Roberts, Christensen, 2001).

The term 'Personality' refers to the total functions of an individual who interacts with his environment. Such a definition automatically includes all traits as the main themes of the personality. The purpose of the measurement is to describe a person in terms of traits. Trait is nothing but observed consistency of behaviour of a person i.e., traits are not directly observed but inferred from consistent behaviour of an individual. The most general cues to traits are what the person does, how he does it and how well he does it. It is an inner dynamic organization of psychophysical systems that form the individual's characteristic patterns of thoughts, feelings and behaviour (Allport, 1961).

Basically, there are two approaches to the study of personality: Western and Eastern. While the western approach focuses more on the individualistic approach to personality, eastern approach believes that personality is more of a collectivistic one. Some of the famous theorists of the western approach include William Sheldon, Carl Jung, Meyer Friedman and R.H. Rosenman, Morris, Hans Eysenck, etc. Eastern perspective divided the personality on the basis of Ayurveda and Mythology.

Some other personality theorists include names like Sigmund Freud, Alfred Adler, Erik Fromm, Karen Horney, Erik Erikson, B.F. Skinner, Albert Bandura, Abraham Maslow, Carl Rogers, Mayers and Briggs, etc. Since the olden times till now, personality traits and types have intrigued many researchers owing to the great amount of studies and researches done in this field. And these efforts lead to the various tests and methods used today, to assess personality. One can study personality via two basic methods: direct and indirect. While direct method focuses more on the observable traits, indirect one emphasizes more on the hidden facets of one's personality. Interviews, questionnaires, case studies, direct observations, psychometric testing, self-report inventories are some of the methods of direct assessment. For indirect assessment, projective techniques are used.

The NEO-Personality Inventory-Revised is one of the newest major personality inventories developed by Costa and McCrae (1992). The developers of the inventory have used both

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factor analysis and theory in item development and test construction. This inventory measures the Big Five personality factors: Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. 'Big' refers to the fact that each factor subsumes a large number of more specific traits. The Big Five are as broad and abstract in personality hierarchy as Eysenck's 'super factors'. Originally, Costa and McCrae $(1992,1995)$ had focused only on three factors like Neuroticism, Extraversion and Openness, thus the title NEO-Personality Inventory. Subsequently, they added the factors of Agreeableness and Conscientiousness to conform to the Big-Five factor model.

It had always been debateable whether one's personality is a result of one's genes or because of the environmental factors. Although recently, studies have concluded that both the genes as well as the environmental factors are responsible for building one's personality. Thus, we can say that biological factors like hormones and heredity, environmental factors, sociocultural factors like social experiences, parenting style, role of family and society, plays an important role in forming personality.

But the question that this study aims to answer is that, does music leave an impact on one's behaviour and personality too? Is there any relation between the personality type and the music preferences?

## LITERATURE REVIEW

Several studies have shown that music preferences could be correlated with certain behavioural patterns. For example, people with higher IQs tend to have a greater preference for the more complex musical genres (Rentfrow \& Gosling 2003), the use of alcohol and drugs were associated with teens who listen to EDMs. Heavy metal and certain type of rock music have been linked with suicidal behaviours, excessive depression and other sorts of risk behaviour (King, 1988; Weidinger and Demi, 1991). Hence, it can be said that, music does affect one's behaviour. As for it's relation with one's personality, there has been many researches to find out the relationship between music preferences of an individual and his/her personality. The distinguishing factors of music can subsequently determine certain behaviours and traits the person can potentially possess. Research has shown that with certain music, there are certain traits, a person is more disposed to. Therefore, there is a definite relationship between one's music preferences and personality (Knowles, 2013).

According to a study, most relationships with music preferences involved the personality dimensions, extraversion and openness to experience. Extroverts obtained high scores on the Popular Music factor, whereas, individuals scoring high on openness to experience, liked a wide range of music types. It was also found that females liked popular music styles more than males did (Rawlings and Ciancarelli, 1997). A recent study showed that the MBTI mental function of Intuitive-Feeling was found to be highly over-represented in the total music sample as compared to national norms, while several other personality preferences significantly dominated or were sparse in the music majors (Lesiuk, 2018). From a research, the results yielded no positive significant correlations between music preferences and either personality traits, coping skills or perception of academic ability. However, results did show that music training increases preference for complex music (Treacy, 2013). Some say that individuals open to experience prefer reflective and complex music (e.g., classical) and intense and rebellious music (e.g., rock), whereas they dislike upbeat and conventional types of music (e.g., pop music), whereas extraverts, are inclined towards upbeat and conventional and energetic and rhythmic kind of music (e.g., rap/hip-hop). The results reveal some gender differences (Langmeyer, Guglhör-Rudan, Tarnai, 2012).

A vast amount of research (e.g., Kavanaugh \& Anderson, 2008; North \& Hargreaves, 1999; Tarrant et al., 2001) has linked "out" music preference with social identity, explaining that we prefer the genres that we believe are acknowledged either by our own 'higher' societal group or the societal group we believe is greater and hope to join. However, other researchers (e.g., Zillmann et al., 1995) have found no significant correlation between ones chosen preferred genre and the basic tenets of social identity theory. Further research has implied that the genres utility as a coping mechanism dictates preference - whether as an aid in releasing pent up emotions (Rustad, Small, Jobes, Safer \& Peterson, 2003), a diversion from stress (White, 1985), or a tool in manipulating one's mood (North, Tarrant \& Hargreaves, 2003). The value one places on the music in everyday life will rely upon the utilizations they make of it, the level of commitment with it and on the setting in which the music is heard (North, Hargreaves \& Hargreaves, 2004). In one research, the results revealed that participants who listened to sedative music showed significantly lower tension and state-anxiety levels than did those who listened to simulative music when music was undesirable. However, there was no significant difference of tension and state-anxiety levels between listening to sedative music and simulative music when music was preferred (Jiang, Zhou, Rickson et al.,2013)

Based on these researches, the following objectives and hypothesis were formulated.

## Objectives

1. To study the relationship between music preferences and personality traits.
2. To understand different traits of personality and music preferences.
3. To study the relation between various dimensions of personality traits and music preferences.

## Hypothesis

$\mathrm{H}_{1}$ : There will be a significant positive correlation between personality and music preferences.
$\mathrm{H}_{2}$ : There will be a significant positive correlation between Reflective \& Complex and Openness to experience
$\mathrm{H}_{3}$ : There will be a significant positive correlation between Intense \& Rebellious and Agreeableness
H4: There will be a significant positive correlation between Upbeat \& Conventional and Neuroticism
$\mathrm{H}_{5}$ : There will be a significant positive correlation between Energetic \& Rhythmic and Extraversion

## METHODOLOGY

## Sample

The research was conducted on 100 students, comprising of 50 Males and 50 Females. The age varies from 17-25 years, with most of the participants being undergraduate/ graduate students. Only those students were included in the studies that were cooperative in the psychological assessment and those who had an infinity towards music.

## Research design

The current study has a survey design whereby information was collected through administration of questionnaires. In terms of statistical analysis, this research has a simple correlation design, wherein, correlation between two primary constraints was examined.

## Tools used

## Music preferences

Rentfrow, P. J., \& Gosling, S. D. (2013). Short Test Of Music preferences (STOMP). Measurement Instrument Database for the Social Science.
The test used in this study is a 23 -item scale. The test has a 7-point rating scale:
1- Dislike strongly
2- Dislike moderately
3- Dislike a little
4- Neither like nor dislike
5- Like a little
6- Like moderately
7- Like strongly
The scale provides with a variety of genres for various preferences. The scores provided are $1,2,3,4,5,6$ and 7 . The lowest and the highest possible scores could be 23-161. The dimensions of the test are: Reflective \& Complex (2, 3, 4, 7, 11, 12, 13, 15); Intense \& Rebellious (1, 10, 17, 21); Upbeat \& Conventional (5, 9, 14, 16, 20, 23); Energetic \& Rhythmic ( $6,8,18,19,22$ ). The reliability of the test was calculated by test-retest method. It was: . $81, .74, .70$ and .71 for Reflective \& Complex, Intense \& Rebellious, Upbeat \& Conventional and Energetic \& Rhythmic respectively.

## Personality

McCrae, R. R., \& Costa. P. T. Jr. (1999). A five-factor theory of personality. In L. A. Pervin, \& O. P. John (Eds.), Handbook of personality: Theory and research. New York: Guilford Press.

Personality test as used in the present study consists of 44 statements. Each statement is followed by 5 -point scale which says:
1 = Disagree strongly
$2=$ Disagree a little
$3=$ Neither agree nor disagree
4 = Agree a little
$5=$ Agree strongly
This five-point Likert type scale provides full choice to the raters to fill up the questionnaire conveniently. The scores given to the five-point scale are 1, 2, 3, 4 and 5 . The lowest and the highest possible score could be 44-240. The dimensions of the test are: Extraversion (1, 6R, 11, 16, 21R, 26, 31R, 36); Agreeableness (2R, 7, 12R, 17, 22, 27R, 32, 37R, 42); Conscientiousness (3, 8R, 13, 18R, 23R, 28, 33, 38, 43R); Neuroticism (4, 9R, 14, 19, 24R, $29,34 \mathrm{R}, 39$ ) and Openness ( $5,10,15,20,25,30,35 \mathrm{R}, 40,41 \mathrm{R}, 44$ ). Those items marked with ' R ' are reverse scored. It was found that the Cronbach's alpha for each type are $\mathrm{E}=.66$, $\mathrm{N}=.59, \mathrm{O}=.74, \mathrm{~A}=.70$, and $\mathrm{C}=.64$. Previous studies such as those undertaken by John \& Soto (2008) and Benet-Martinez \& John (1998) have shown that this scale has high levels of validity and reliability i.e. $\mathrm{E}=.90, \mathrm{~N}=.89, \mathrm{O}=.93, \mathrm{~A}=.90$ and $\mathrm{C}=.87$.

## Procedure

In order to collect data from the student, the researcher got the questionnaire filled by the students with the aid of Google forms. When the questionnaires were filled, the scoring was done by the researcher as per the scoring given for the scales. Then the obtained data was put to following statistical analysis techniques.

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## Data analysis

All the data collected was entered in SPSS and analysed using the same software. For correlation, Pearson Product Moment Correlation formula was used.

## Reliability of the research

The reliability of the STOMP-R and the Big-Five questionnaire were found to be .865 and .824 respectively. This shows that these two scales can be administered on the Indian population.

## RESULT

Table i showing descriptive statistics of dimensions of music preferences and personality traits ( $n=100$ )

|  | Mean | Std. Deviation |
| :--- | :--- | :--- |
| Reflective and Complex | 37.6600 | 7.06281 |
| Intensive and Rebellious | 17.9100 | 4.49937 |
| Upbeat and Conventional | 30.4600 | 5.50192 |
| Energetic and Rhythmic | 24.0000 | 5.85860 |
| Extraversion | 28.8300 | 4.63421 |
| Agreeableness | 32.7700 | 3.72774 |
| Conscientiousness | 32.5900 | 4.54627 |
| Neuroticism | 26.8800 | 3.95500 |
| Openness to experience | 41.3600 | 5.45046 |

Table ii showing inter-correlation between the dimensions of music preferences and personality traits

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | $.434^{* *}$ | $.674^{* *}$ | $.584^{* *}$ | $.279^{* *}$ | $.291^{* *}$ | $.262^{* *}$ | $.286^{* *}$ |

**-correlation is significant at the 0.01 level (2-tailed).
*-correlation is significant at 0.05 level ( 2 -tailed).

## Description

The table depicts that there is a positive significant correlation among all the dimensions of music preferences among which Reflective \& Complex and Upbeat \& Conventional showed a positively significant correlation $(r=0.674)$ at 0.01 level of significance. The table also shows that there is a positive significant correlation between Energetic \& Rhythmic and Extraversion at 0.01 level. Similarly, there is a positive significant correlation between Upbeat \& Conventional and Neuroticism; Intensive \& Rebellious and Agreeableness; Reflective \& Complex and Openness to experience at 0.01 level respectively.

## DISCUSSION

This study was an attempt with the aim of finding the relation between music preferences and personality. A sample of 100 college going students was taken up for the purpose. There were 50 males and 50 females in the study. In order to collect data from the student, the researcher got the questionnaire filled by the students with the aid of Google forms. When the questionnaires were filled, the scoring was done by the researcher as per the scoring given for the scales. All the data collected was entered in SPSS and analysed using the same software. For the calculation, Pearson correlation formula was used. From the results it was seen that a significant positive correlation was found between Energetic and Rhythmic and Extraversion ( $\mathrm{r}=0.419$ ) (hence, $\mathrm{H}_{5}$ is accepted); Upbeat and Conventional and Neuroticism ( $\mathrm{r}=0.373$ ) (hence, $\mathrm{H}_{4}$ is accepted); Intense and Rebellious and Agreeableness ( $\mathrm{r}=0.288$ ) (hence, $\mathrm{H}_{3}$ is accepted); Reflective and Complex and Openness to Experience $(\mathrm{r}=0.330)$ (hence, $\mathrm{H}_{2}$ is accepted). They are significant at 0.01 level. Therefore, $\mathrm{H}_{1}$ is accepted.

This shows that the individuals who prefer energetic and rhythmic type of music are more of outgoing kind i.e. they derive their energy from interacting with others. They are the life of a party and enjoy all the attention they get. Extremely talkative, they get their high from EDMs. This assumption is also supported by the above quoted researches which stated that extraverts are inclined towards energetic and rhythmic kind of music (e.g., rap/hip-hop). They are also susceptible to addiction to alcohol and drug abuse. Similarly, those who like upbeat and conventional music are likely to be moody, emotionally unstable and feel anxious. People who are more inclined towards intensive and rebellious music genre have a very compassionate, cooperative and friendly personality. Lastly, those who have an affinity for reflective and complex music have a broad range of interests, are very creative and try new things (McCrae, R., Terracciano, A., et al., 2005).

## CONCLUSION

This study was an attempt with the aim of finding the relation between music preferences and personality. A sample of 100 college going students was taken up for the purpose. There were 50 males and 50 females in the study. From the above-mentioned data, it can be concluded that, there is a significant positive correlation between music preference and personality traits of males and females both.

## REFERENCES

Allport, G.W. (1961) Pattern and growth in personality. New York: Holt, Rinehart \& Winston.
Christenson, P. (1992). Preadolescent perceptions and interpretations of music videos. Pop Music Soc.,16(3), 63-74
Clifton, Thomas. 1983. Music as Heard: A Study in Applied Phenomenology. New Haven and London: Yale University Press. ISBN 0-300-02091-0

Goldman \& Richard, (1961). "Varèse: Ionisation; Density
21.5; Intégrales; Octandre; Hyperprism; Poème Electronique. Instrumentalists, cond.

Robert Craft. Columbia MS 6146 (stereo)" (in Reviews of Records). Musical Quarterly 47(1), 133-134.
Hargreaves, D. (1986). The Developmental Psychology of Music. Cambridge: Cambridge University Press. doi:10.1017/CBO9780511521225
Jiang, J., Zhou, L., Rickson, D., \& Jiang, C. (2013). The effects of sedative and stimulative music on stress reduction depend on music preference. Arts in Psychotherapy, 40(2), 201-205. https://doi.org/10.1016/j.aip.2013.02.002
Kavanaugh, P.R., \& Anderson, T.L. (2008). Solidarity and drug use in the electronic music scene. The Sociological Quarterly, 49(1), 181-208.
King, P. (1988). Heavy metal music and drug abuse in adolescents. Postgrad. Med.,83(5), 295-304.
Knowles, C. L. (2013). The Correlation of Music Preference and Personality. A with Honors Projects, 92. http://spark.parkland.edu/ah/92
Knowles, C. L. (2013). The Correlation of Music Preference and Personality. A with Honors Project, 1-14.
Lang, KL, Livesley, WJ, \& Vemon, PA. (1996). Heritability of the big five personality dimensions and their facets: A twin study. Journal of Personality, 64(3), 577-591.
Langmeyer, A., Guglhör-Rudan, A. \& Tarnai, C. (2012). What Do Music Preferences Reveal About Personality?A Cross-Cultural Replication Using Self-Ratings and Ratings of Music Samples. Journal of Individual Differences, 33(2), 119-130.
Langmeyer, A., Guglhör-Rudan, A., \& Tarnai, C. (2012). What Do Music Preferences Reveal About Personality? Journal of Individual Differences, 33(2), 119-130. https://doi.org/10.1027/1614-0001/a000082
Lesiuk, T. (2018). Personality and music major. Psychology of Music. Sage Publications Ltd. https://doi.org/10.1177/0305735618761802
McCrae, R., Terracciano, A., et al. (2005). Universal features of personality traits from the observer's perspective: Data from 50 different cultures. Journal of Personality and Social Psychology,88, 547-561.
McPherson, G.E. (2006). The child as musician: A handbook of musical development, Oxford: Oxford University Press.
North, A. C., Hargreaves, D.J., \& Hargreaves, J.J. (2004). Uses of music in everyday life. Music Perception, 22(1), 47 - 77.
North, A.C., \& Hargreaves, D.J. (1999). Music and adolescent identity. Music Education Research, 1(1), 75-92.
North, A.C., Tarrant, M., \& Hargreaves, D.J. (2003). The effects of music on helping behavior: A field study. Environment and Behavior, 36(2), 266 - 275.
North, A.C. \& Hargreaves, D.J. (2008). The social and applied psychology of music, Oxford: Oxford University Press.
North, A.C., Hargreaves, D.J. \& O'Neill, S.A. (2000). The importance of music to adolescents. British Journal of Educational Psychology, 70, 255-272.
North AC, Hargreaves DJ \& O'Neill SA. The importance of music to adolescents. Br J Educ Psychol.,70(2), 255-272.
Rawlings, D., \& Ciancarelli, V. (1997). Music preference and the five-factor model of the NEO personality inventory. Psychology of Music, 25(2), 120-132. https://doi.org/10.1177/0305735697252003
Roberts D.F., Christensen P.G. (2001). Popular music in childhood and adolescence. In: Singer DG, Singer JL, eds. Handbook of Children and the Media. Thousand Oaks, CA: Sage Publications, 395-410

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Roberts D.F., Foehr U.G. \& Rideout V. (2005) Generation M: Media in the Lives of 8-18-Year-Olds. Menlo Park, CA: Henry J. Kaiser Family Foundation. Available at: www.kff.org/entmedia/7251.cfm. Accessed December 10, 2007
Rustad, R., Small, J.E., Jobes, D.A., Safer, M.A., \& Peterson, R.J. (2003). The impact of rock videos and music with suicidal content on thought and attitudes about suicide. Suicide and life-Threatening Behavior, 33, 120-131.
Tarrent, M., North, A.C., \& Hargreaves, D.J. (2001). Social Categorization, Self Esteem, and the Estimated Musical Preference of Male Adolescents. The Journal of Social Psychology, 141 (5), 565-581.
Treacy, A. (2013). Music preferences, and their effect on personality, coping styles and perceived scholastic competence in students. Retrieved from http://hdl.handle.net/10788/1575
Varèse, E., \& Wen-chung, C. (1966). The Liberation of Sound. Perspectives of New Music, 5(1), 11-19. doi:10.2307/832385
Weidinger, C.K. \& Demi, A.S. (1991). Music listening preferences and preadmission dysfunctional psychosocial behaviours of adolescents hospitalized on an inpatient psychiatric unit. J. Child Adolesc. Psychiatr. Ment. Health Nurs,4, 3-8.
Wells, A. \& Hakanen, E.A. (1991). The emotional use of popular music by adolescents. Journal Q.68(3), 445-454.
White, A. (1985). Meaning and effects of listening to popular music: Implications for counselling. Journal of Counselling and Development, 64, $65-69$.
Zillmann, D., Aust, C.F., Hoffman, K.D., Love, C.C., Ordman, V.L., Pope, J.T., Seigler, P.D., \& Gibson, R.J. (1995). Radical rap: Does it further ethnic division? Basic and Applied Social Psychology, 16(1), 1 - 25.

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## Conflict of Interest

The author declared no conflict of interest.
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[^0]:    ${ }^{1}$ Associate Professor, Amity University Rajasthan, India
    ${ }^{2}$ Assistant Professor, AIBAS, Amity University Rajasthan, India
    ${ }^{3}$ B.A. (H) Applied Psychology, Amity University Rajasthan, India
    *Responding Author

