

## Music Preference and Personality in Undergraduate and Postgraduate Students

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### ABSTRACT

This research was done to know the correlation between music preference and personality. The present research was conducted on individuals between the age group of 18 - 25 years. 50 individuals volunteered to participate in this research. While checking the outliers two outliers were found and therefore deleted. Therefore, the present results considered 48 participant's responses. MPS (music preference scale) and NEO FFI inventory was used in this research. MPS consists of 23 genres of music, which are then segregated into five music preference dimensions (Spiritual and Reflective, Intense and Electronic, Contemporary and Rhythmic, Devotional and Cultural, and Emotional and Melodious). This scale is developed by Indian researchers. IBM SPSS v. 24 was used for statistical analysis. This research found four significant negative correlations between music preferences dimensions and personality dimensions. A significant negative correlation between Agreeableness with IE (Intense and Electronic) and SR (Spiritual and Reflective) was seen. A significant negative correlation between Conscientiousness and SR was also seen. A significant negative correlation between CR (Contemporary and Rhythmic) and Agreeableness was also seen.

**Keywords:** *Music Preference dimensions, Personality dimensions, NEO-FFI, Music Preference Scale (MPS).*

*"Music is poetry with personality."  
-Ross Lynch*

**W**hy do people listen to what they listen to? Why do people prefer some kinds of music? This question is beginning to be explored not only in psychology of music but also in other disciplines. People listen to music in their daily life and it affects their overall emotional regulation and sometimes leads to cognitive development. It is also used as a tool for self-expression and social bonding. It is something that is deeply intertwined in people's lives and has a notable effect on how they feel, think, and behave. There are different emotions attached to the music people listen to. Certain feelings are hard to be freely expressed and music allows that freeness and assurance of being able to convey what you want to. To feel that freedom of experiencing and feeling what you want to,

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through music, is the base of music therapy. There are individual differences in what people like or prefer to hear. These differences have many reasons, like in what situation particular genre of music is preferred, might be because of cultural influence, might be because of age and gender differences, etc. Therefore, it is challenging to examine this topic. Psychology of music preference studies the psychological factors that underlie a person's music preference.

Personality refers to individual differences in characteristic patterns of thinking, feeling, and behaving (Kazdin, 2000). There have been a lot of researches regarding the preferences of music and personality using various scales. Many researchers have used the Big Five personality trait theory to know the link between music preference and personality. According to the new research in the year 1990, five factors by labels were identified by the theory, for U.S. English speaking population namely-openness to experience, conscientiousness, extraversion, agreeableness, neuroticism (Roccas et al., 2002). There are many researches on music preference and personality in other countries, but there are not many researches that were conducted in Indian settings. This research study will contribute and add to the findings of this research area that has been done in past in India.

### ***Preference of Music and Music Genres***

Preference is seen as choosing from alternatives. The term is also used to mean evaluative judgment in a sense of liking or disliking an object (e.g., Scherer, 2005). Music preference is one of the research areas studied in Music psychology. While looking at music preferences, the researchers look upon various genres of music. Music genre can be defined as the classification system of various music pieces into different music styles.

Some of the common music genres that were looked upon in this area of research in many pieces of research were Blues, Jazz, Pop, Hip Hop/Rap, Folk, Rock, Patriotic, Classical, Instrumental, New age, Country, Religious, etc. (Rentfrow et al., 2011; Upadhyay et al., 2016; Langmeyer et al., 2012; Račevska and Tadinac, 2019). The psychology of music preference indicates that there is a clear link between people's preference of listening to music and personality.

Findings in the research done by Upadhyay et al. (2017) showed that there is a significant positive correlation between Intense and Electronic dimension (Hip-hop, remix, pop, rock, English) and Openness to new experience; Devotional and Cultural dimension (Ghazal, folk, patriotic, bhajan, Sufi, classical, Islamic, instrumental) was found to be positively correlated with Openness to new experience; Spiritual and Reflective dimension (new age, trance, jazz, blues) was found to be positively correlated with Extraversion; and Emotional and Melodious dimension (Romantic love songs, Bollywood sad songs, soft songs, and melodious film songs) was found to be positively correlated to Openness to new experience. Gender differences were also found.

### **Personality**

The word 'Personality' is derived from the Latin word 'persona', which means mask. Personality is the characteristic behaviours, cognitions, and emotional patterns that evolve from biological and environmental factors (Corr & Matthews, 2009). It is the dynamic organization within the individual of those psychophysical systems that determine his characteristics behaviour and thought (Allport, 1961, p.28). Because of the limitations of Eysenck's personality theory and complications in Cattle's theory, the big five dimensions of personality (openness, conscientiousness, extraversion/ extroversion, agreeableness, neuroticism), are widely used in the area of personality.

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D.W. Fiske, Norman, Smith, Goldberg, and McCrea, and Costa examined Cattle's list of 16 personality traits and reduced them to five traits mentioned above (Cherry, 2019). The Big Five Model/ Five-Factor Model is also known by its acronym OCEAN or CANOE. This research has used NEO FFI scale of personality with takes these five dimensions into consideration.

### 1) Openness-

The people who are high on this dimension are imaginative, creative, original, prefer variety, are curious, and liberal. The people who are low on this dimension are down- to-earth, uncreative, conventional, prefer routine, are uncurious, and conservative.

### 2) Conscientiousness-

The people who are high on this dimension are conscientious, hardworking, well- organized, punctual, ambitious, and persevering. The people who are low on this dimension are negligent, lazy, disorganized, late, aimless, and quitting

### 3) Extraversion-

The people who are high on this dimension are affectionate, joiner, talkative, active, fun-loving, and passionate. The people who are low on this dimension are reserved, loner, quiet, passive, sober, and unfeeling.

### 4) Agreeableness-

The people who are high on this dimension are soft-hearted, trusting, generous, acquiescent, lenient, and good-natured. The people who are low on this dimension are ruthless, suspicious, stingy, antagonistic, critical, and irritable

### 5) Neuroticism-

The people who are high on this dimension are worrying, temperamental, self-pitying, self-conscious, emotional, and vulnerable. The people who are low on this dimension are calm, even-tempered, self-satisfied, comfortable, unemotional, and hardy.

Different tests/ scales/ questionnaires can be administered to identify/ know/ assess a person's personality. Some of them are Minnesota Multiphasic Personality Inventory (MMPI), Sixteen Personality Factor Questionnaire (16 PF), the Comrey Personality Scales, NEO Personality Inventories, etc.

### ***Statement of the Problem***

To study the relationship between personality and music preference.

### ***Objective of the Problem***

The objective of this problem is to study the relations between the domains of music preference (Spiritual and Reflective, Intense and Electronic, Contemporary and Rhythmic, Devotional and Cultural, and Emotional and Melodious) and personality (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) with each other.

### ***Hypothesis***

The hypotheses of this research study were:

- Hypothesis 1: Intense and Electronic music dimension is significantly positively correlated with Openness to experience and significantly negatively correlated with Agreeableness.
- Hypothesis 2: Devotional and Cultural music dimension is significantly positively correlated with Openness to new experience.
- Hypothesis 3: Spiritual and Reflective dimension is significantly positively correlated to Extraversion and Agreeableness.

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- Hypothesis 4: Emotional and Melodious dimension is significantly positively correlated with Openness to New Experience.

### **Sample**

50 participants volunteered to participate in this research. The research was done on the participants between 18-25 years (undergraduate and graduate students of college). The data was collected using google forms. Among them, 44 were females and 6 were males. The participants that volunteered to take part in this study were currently living in Pune city. Variety of streams taken in college were seen from the response given by the participants in the survey administered to them (Applied Arts, Arts - Psychology, BCNA, Bachelor of Pharmacy, Computer Engineering, Economics, Finance, Humanities, Management/Commerce, Mechanical Engineering, and Science). Non-probability convenience sampling was used in this research.

### **Variable**

IV - Music Preference. DV- Personality

CV- Age

### **Tools Used in The Present Study Music Preference Scale (MPS)**

MPS scale is taken from the research done by Upadhyay et al. (2017). This scale is used to know the music preferences of the respondents. 23 genres of music namely: Bollywood (sad) songs, melodious film songs, romantic (love) songs, soft songs, folk, rock, ghazal, bhajan, Punjabi, patriotic, Sufi, classical, hip hop, English, remix, rap, pop, blues, Islamic songs, new age, jazz, trance, and instrumental; are included in this scale, which then has to be rated on preference on a seven-point Likert scale (with 1- not at all, and 7- very much as the endpoints) by the respondents. One open-ended question asked respondents to add (if any) music genre to this list. Also, one more open-ended item is included after each genre in this list asking the respondents to respond to, 'when (time, place, mood, etc.) do you prefer to listen to this genre?'. The 23 music genres are segregated into 5 dimensions- Intense and Electronic, Devotional and Cultural, Emotional and Melodious, Spiritual and Reflective, and Contemporary and Rhythmic. This scale has excellent validity and reliability (Cronbach's alpha = .85) except for the contemporary and rhythmic dimension of music preference. Scoring is done by cumulating the scores of genres in each dimension.

### **NEO-FFI**

NEO FFI is developed by and Costa and McCrae (1992). It looks at five dimensions: openness, conscientiousness, extraversion, agreeableness, and neuroticism. NEO FFI is the 60 items version of the Form S of the NEO PI-R that provides brief comprehension of personality. It is a shortened version, and when time is limited, it is used to gain global information on personality. The NEO FFI consists of 5 scales, each containing 12 items, that measure every domain. This shortened version is, however, less reliable and valid than the original inventory, i.e., the NEO PI- R.

Convergent and criterion validity was established in this test. Internal consistency of NEO FFI was calculated using coefficient alpha. With the respect to all the five domains coefficient, alpha ranged from = .75 to .83. The scoring of NEO-FFI is a cumulative type of scoring. Each domain is scored separately. The addition of all item scores of each domain is the final score on the domain. In each domain reverse scoring

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is used for some items i.e., for strongly disagree (SD)- 4, disagree (D)-3, neutral (N)- 2, agree (A)- 1, strongly agree (SA)- 0.

### *Procedure*

Confidentiality instructions were written in the survey before taking demographic details. This survey administered to the participants was via an online form. As mentioned above, this process took place by using a non-probability convenience/ accidental sampling method. The responses of participants were then put into an excel sheet for further statistical analysis.

IBM SPSS v.24 was used in this research. Pearson Product-Moment Correlation was used for statistical analysis to check the correlation of dimensions of music preferences with the dimensions of personality. Mean, standard deviation (SD), skewness, and kurtosis were measured to see if the population was normally distributed.

## **RESULT AND DISCUSSION**

### *Descriptive Statistics*

The normal distribution graphs suggest that all the domains under both scales are normally distributed. The openness dimension is slightly positively skewed. EM (Emotional and Melodious) and SR (Spiritual and Reflective) are negatively skewed.

*Table 1*

Dimensions	Mean	Standard Deviation (SD)	Number of samples
Openness	29.56	4.467	48
Conscientiousness	33.44	5.978	48
Extraversion	27.83	4.102	48
Agreeableness	28.77	3.959	48
Neuroticism	22.04	5.387	48
IE (Intense and Electronic)	21.63	6.945	48
DC (Devotional and Cultural)	34.21	9.095	48
EM (Emotional and Melodious)	20.73	5.338	48
SR (Spiritual and Reflective)	14.79	5.543	48
CR (Contemporary and Rhythmic)	06.35	2.638	48

The findings in this present study showed different results than the results found in other researches that were reviewed. The findings suggest that Conscientiousness domain and Spiritual and Reflective domain are significantly negatively correlated to each other with  $r = -0.303$  which is significant at 0.05 level. The research also showed significant negative correlations between agreeableness and some music preferences. The findings suggest that Agreeableness domain and Intense and Electronic (IR) domain, Spiritual and Reflective (SR) domain are significantly negatively to each other with  $r = -.300$  for IR and  $r = -.295$  for SR which are significant at a 0.05 level for both of them. One significant finding that opposed the research of Upadhyay et al. (2017) that was found in this research, was that Agreeableness and Contemporary and Rhythmic (CR) domains are significantly negatively correlated to each other with  $r = -.375$  which is significant at a level of 0.01 level. No significant correlations were seen in DC (Devotional and Cultural) and EM (Emotional and Melodious) music preference. No significant correlation was seen any other domains other than conscientiousness and agreeableness were seen.

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**Table 2: Music Preference Dimensions and Personality Dimensions Correlations**

		O	C	E	A	N	IE	=DC	EM	SR	CR
O	Pearson Correlation	1	.257	-.017	.169	-.086	.005	.267	-.040	-.215	-.126
C	Pearson Correlation	.257	1	.039	.314*	-.367*	.007	-.024	.075	-.303*	.040
E	Pearson Correlation	-.017	.039	1	.161	-.207	-.010	.171	.077	.100	.108
A	Pearson Correlation	.169	.314*	.161	1	-.405**	-.300*	-.057	.103	-.295*	-.375**
N	Pearson Correlation	-.086	-.367*	-.207	-.405**	1	.194	-.037	-.148	.233	.207
IE	Pearson Correlation	.005	.007	-.010	-.300*	.194	1	-.148	-.192	.507**	.619**
DC	Pearson Correlation	.267	-.024	.171	-.057	-.037	-.148	1	.416**	.299*	.032
EM	Pearson Correlation	-.040	.075	.077	.103	-.148	-.192	.416**	1	.057	-.149
SR	Pearson Correlation	-.215	-.303*	.100	-.295*	.233	.507**	.299*	.057	1	.408**
CR	Pearson Correlation	-.126	.040	.108	-.375**	.207	.619**	.032	-.149	.408**	1

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Statistical Analysis

Some of the formulated hypotheses were proven wrong. One hypothesis that IE (Intense and Electronic) music preference dimension is significantly negatively correlated with Agreeableness, was found to be supported. The hypothesis is also supported on the basis of research done by Upadhyay et al. (2017). There may be many reasons behind these negative correlations.

A significant negative correlation is seen between SR and Conscientiousness. This finding is different from the results of the researches reviewed. Conscientious people are more organized and self-disciplined. In the research done by Reiter-Polman et al. (2009), there is a negative correlation between the orderliness/dependability subfactors (order, dutifulness, and deliberation) of conscientiousness and creativity; while there is a positive correlation between industriousness/ achievement with creativity. In the SR music preference music genres like Jazz, New Age, Trance, and Blues are included. The essence of the jazz music genre is improvisation. Jazz does not follow any particular order as such. New age, trance music, and blue music also have that element of freedom to do what they want which is opposed to what conscientious individuals prefer.

A significant negative correlation is seen between IE and Agreeableness. IE consists of genres like pop, rock, remix, English, and hip-hop. Agreeable people are conventional and social. But the genres of music like hip-hop, rock are more about expressing views that might be antisocial or anti-conventional.

A significant negative correlation is seen between agreeableness and SR music preference dimension. This finding is different from the results of the researches reviewed. As mentioned above agreeable people are more social, more outgoing, and conventional individuals. The SR domain is more about connecting with ourselves, while agreeableness is about connecting and conforming with others. This might be one plausible explanation of the negative link between the domain. The other explanation for this correlation might be

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that in Indian settings the genres of music in SR dimension of music preference (Blues, Jazz, New Age, and Trance) are newly introduced. They all are complex styles of music which are not yet conventional in Indian settings.

A significant negative correlation is seen between CR music preference dimension and agreeableness. This research is opposed to what Upadhyay et al. (2017) found in their research. CR music preference dimension consists of only 2 music genres (Punjabi and rap). These styles are more aggressive in nature. Rap style is about self-expression and the lyrics in those songs might be against the society, making the style unconventional in nature.

### *Limitations*

- The majority of the samples taken for this study was female population. Therefore, in this research there is a major limitation of gender differences.
- The major survey sample is of the age of 20, for convenience purpose. As mentioned above use of the non-probability accidental sampling due to limitation of time is done in this research posing a limitation to extensive research.
- Size of the sample, here n=50, of which 2 were outliers and thus were deleted; this also poses a limitation to the study.
- The confounding variables that are gender, age, etc., were not explored and controlled in this study.
- The mood while listening, familiarity, cultural differences might have affected the findings of this research. The survey was supposed to be filled in one sitting, which also might have affected the findings.
- The Contemporary and Rhythmic music dimension only has two music genres, which also poses limitation on the finding regarding this dimension.

## REFERENCES

- Allport, G. W. (1937). *Personality: A psychological interpretation*. New York: H. Holt and Company.
- Auckland University of Technology. (2009). *An investigation into the relationship between music preference, personality and psychological wellbeing*. Nicola Sigg. <https://openrepository.aut.ac.nz/bitstream/handle/10292/955/SiggN.pdf?sequence=4&isAllowed=y>
- Cherry, K. (2019, October 14). *What Are the Big 5 Personality Traits?* *Verywell Mind*. Retrieved 12 June 2020, from <https://www.verywellmind.com/the-big-five-personality-dimensions-2795422>
- Corr, Philip J.; Matthews, Gerald (2009). *The Cambridge handbook of personality psychology* (1. publ. ed.). Cambridge: Cambridge University Press. ISBN 978-0-521-86218-9.
- Herrera, L., Soares-Quadros, J. F., & Lorenzo, O. (2018). Music Preferences and Personality in Brazilians. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.01488>
- 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>
- Lim, A. G. Y. (2020, June 15). *Big Five Personality Traits | Simply Psychology*. Simply Psychology. <https://www.simplypsychology.org/big-five-personality.html>
- What Are the 4 Perspectives on Personality?* (2021, August 16). Verywell Mind. <https://www.verywellmind.com/personality-perspectives-2795950>

## Music Preference and Personality in Undergraduate and Postgraduate Students

- What Are the Big 5 Personality Traits?* (2021, February 20). Verywell Mind. <https://www.verywellmind.com/the-big-five-personality-dimensions-2795422>
- Wikipedia contributors. (2021d, November 12). *Psychology of music preference*. Wikipedia. [https://en.wikipedia.org/wiki/Psychology\\_of\\_music\\_preference](https://en.wikipedia.org/wiki/Psychology_of_music_preference)
- Wikipedia contributors. (2021e, November 15). *Preference*. Wikipedia. <https://en.wikipedia.org/wiki/Preference>
- Wikipedia contributors. (2021f, November 16). *Personality test*. Wikipedia. [https://en.wikipedia.org/wiki/Personality\\_test](https://en.wikipedia.org/wiki/Personality_test)
- Wikipedia contributors. (2021g, November 23). *Music genre*. Wikipedia. [https://en.wikipedia.org/wiki/Music\\_genre](https://en.wikipedia.org/wiki/Music_genre)
- Wikipedia contributors. (2021h, November 26). *Personality psychology*. Wikipedia. [https://en.wikipedia.org/wiki/Personality\\_psychology](https://en.wikipedia.org/wiki/Personality_psychology)
- Wikipedia contributors. (2021i, November 27). *Revised NEO Personality Inventory*. Wikipedia. [https://en.wikipedia.org/wiki/Revised\\_NEO\\_Personality\\_Inventor](https://en.wikipedia.org/wiki/Revised_NEO_Personality_Inventor)
- Loma Linda University. (2009, December). *The Relationship between Personality and Music Preference*. Robert K. Hull.
- McCrae, R. R., & Costa, P. T. (2004). A contemplated revision of the NEO Five-Factor Inventory. *Personality and Individual Differences*, 36(3), 587–596. [https://doi.org/10.1016/s0191-8869\(03\)00118-1](https://doi.org/10.1016/s0191-8869(03)00118-1)
- McLeod, S. (2021). *Theories of Personality | Simply Psychology*. Simply Psychology. <https://www.simplypsychology.org/personality-theories.html>
- Račevska, E., & Tadinac, M. (2019). Intelligence, music preferences, and uses of music from the perspective of evolutionary psychology. *Evolutionary Behavioral Sciences*, 13(2), 101–110. <https://doi.org/10.1037/ebbs0000124>
- Reiter-Palmon, Roni; Illies, Jody J.; and Kobe-Cross, Lisa M., "Conscientiousness Is Not Always a Good Predictor of Performance: The Case of Creativity" (2009). *Psychology Faculty Publications*. 20.
- Rentfrow, P. J., Goldberg, L. R., & Levitin, D. J. (2011). The structure of musical preferences: A five-factor model. *Journal of Personality and Social Psychology*, 100(6), 1139–1157. <https://doi.org/10.1037/a0022406>
- 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(6), 1236–1256. <https://doi.org/10.1037/0022-3514.84.6.1236>
- Upadhyay, Dr. Durgesh & Shukla, Ridhima & Chakraborty, Aheli. (2017). Factor structure of music preference scale and its relation to personality. *Journal of the Indian Academy of Applied Psychology*. 43. 104-113.
- What Are the 4 Perspectives on Personality?* (2021, August 16). Verywell Mind. <https://www.verywellmind.com/personality-perspectives-2795950>
- What Are the Big 5 Personality Traits?* (2021, February 20). Verywell Mind. <https://www.verywellmind.com/the-big-five-personality-dimensions-2795422>
- Wikipedia contributors. (2021d, November 12). *Psychology of music preference*. Wikipedia. [https://en.wikipedia.org/wiki/Psychology\\_of\\_music\\_preference](https://en.wikipedia.org/wiki/Psychology_of_music_preference)
- Wikipedia contributors. (2021e, November 15). *Preference*. Wikipedia. <https://en.wikipedia.org/wiki/Preference>
- Wikipedia contributors. (2021f, November 16). *Personality test*. Wikipedia. [https://en.wikipedia.org/wiki/Personality\\_test](https://en.wikipedia.org/wiki/Personality_test)
- Wikipedia contributors. (2021g, November 23). *Music genre*. Wikipedia. [https://en.wikipedia.org/wiki/Music\\_genre](https://en.wikipedia.org/wiki/Music_genre)
- Wikipedia contributors. (2021h, November 26). *Personality psychology*. Wikipedia. [https://en.wikipedia.org/wiki/Personality\\_psychology](https://en.wikipedia.org/wiki/Personality_psychology)



## Music Preference and Personality in Undergraduate and Postgraduate Students

Wikipedia contributors. (2021i, November 27). *Revised NEO Personality Inventory*.  
Wikipedia. [https://en.wikipedia.org/wiki/Revised\\_NEO\\_Personality\\_Inventor](https://en.wikipedia.org/wiki/Revised_NEO_Personality_Inventor)

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### ***Conflict of Interest***

The author(s) declared no conflict of interest.

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