

The Influence of Personality on Music Preference Across Geographic Locations

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Abstract

How does personality affect music preference? The Big Five Theory of Personality is used to answer this question as it is the most widely used scientific method of assessing personality. The Big 5 comprises five broad trait dimensions: extraversion, openness, agreeableness, conscientiousness, and neuroticism. Most studies on music preference involve separating music into different genres and assessing preference. The main correlates of the Big 5 and music preference are discussed. Also, some research has shown that geography matters in the link between personality and music preference, while others do not.

Keywords: personality, music preference, geographic locations, influence

The diversity of music preferences raises intriguing questions about individual attraction to genres, such as why some gravitate toward classical music while others prefer eclectic rock. Music plays a vital role in contemporary society, with studies indicating that individuals spend between 15% and 44% of their daily lives engaged with it (Juslin et al., 2008; North et al., 2004; Rentfrow, 2012; Sloboda et al., 2001). Platforms like Spotify, boasting 280 million users globally, leverage personalized recommendation systems, highlighting the need to explore the underlying factors influencing music preferences. Previous research has established a significant link between personality traits and music tastes (Langmeyer, 2012; Upadhyay, 2017). However, these studies were conducted in varied contexts, yielding inconsistent findings regarding the influences of environment and biology on music preference (Doi et al., 2018;

Soley & Hannon, 2010; Zatorre & Salimpoor, 2013). This paper aims to delve into how personality shapes music preferences across different locations.

The Big Five Theory of Personality is the most widely used scientific method of assessing personality (Gurven, 2012). It is measured through personal inventories. It comprises five broad trait dimensions: extraversion, openness, agreeableness, conscientiousness, and neuroticism. Extraversion refers to an individual's propensity to be sociable and affectionate. In contrast, individuals who score low on extraversion tend to be more reserved. Openness is characterized by an individual's tendency toward intellectual curiosity, meaning those who score high on openness are more independent. Individuals who prefer routine tend to score lower on openness. Agreeableness refers to an individual's propensity toward

altruism and to enjoy helping others. Uncooperative individuals are considered to have a lower level of agreeableness. High scores on conscientiousness refer to an individual's propensity toward self-control, and those who score high on conscientiousness tend to be more disciplined. Disorganized individuals tend to score lower on conscientiousness. Neuroticism describes a person's tendency to experience negative emotions such as anxiety, fear, and sadness. Individuals with high levels of neuroticism often exhibit less emotional stability (McCrae & Costa, 1986).

Additionally, previous studies on how personality affects music preference have been measured through self-reported preferences for music genres such as STOMP and the use of inventories to classify the Big Five, which was developed by Rentfrow and his colleagues (Rentfrow, 2003). The abbreviation STOMP stands for Short Test Of Music Preference, a 14-item scale assessing preference in music genres. STOMPR is a revised scale version assessing preference for 23 genres (Rentfrow, 2003).

Greensburg research on Universal and Variations in Musical preference consisted of two studies, which specified correlations between personality traits and musical preferences. (Greensburg, 2022) Participants from different countries were asked to complete personality tests that measured their preferences, personality traits, and demographic information. All participants completed the genre-based and revised 23-item STOMPR. Participants also completed the Ten-Item Personality Inventory, briefly assessing the Big Five personality domains. This research has a few limitations. All participants were English speakers, which limits the generalizability of the results.

Greensburg research indicated that personality impacts music preference significantly. Extroverted people tend to prefer contemporary music such as pop, rock, and hip-hop. Contemporary music is often played in social settings such as parties, which extroverts tend to enjoy. Based on the mere exposure effect, individuals tend to prefer things more if they are familiar with them (Zajonc, 2001). In addition, individuals who score high on conscientiousness tend to prefer unpretentious music, such as country music and folk. The reason could be that individuals who score high

on conscientiousness are more self-disciplined. That modest music least disturbs immersion, given their lower arousal levels but higher depth levels. A positive correlation exists between agreeableness and a preference for mellow and serene musical styles; this could be because people with high agreeableness tend to prefer more peaceful interactions, which in turn helps calm their emotions. Neuroticism people tend to prefer intense music styles because they can release their inner anxiety by allowing the individual to express their emotions. Listening to intense music style can also serve as a distractor, bringing individuals away from anxiety. People with high openness tend to prefer complex and new music experiences.

Additionally, gender differences were notable, with females showing a stronger preference for mellow music and males for intense music (Greensburg, 2022). Age also influenced musical preferences, with older individuals favoring mellow and sophisticated music, while different ethnic groups showed varying preferences for various music styles.

Geographic location has been shown to affect music preference; males in the Western hemisphere preferred intense musical styles, whereas males in the Eastern hemisphere disliked intense music. One reason people in close geographic distance share similar music preferences is group polarization, meaning when a group of people with similar views will reinforce each other's opinion (Moscovici & Zavalloni, 1969). Asian participants were more likely to prefer mellow, unpretentious, and sophisticated music. In contrast, preferences for intense music were lower among Black and Asian participants, while contemporary music was more popular among Black and Latino participants (Greensburg, 2022). The climate could also predict music preferences; for example, warmer climates in countries like Brazil had a stronger correlation between extraversion and contemporary preferences. Therefore, besides personality, other factors can affect music preference.

Research has also indicated that musical preference is related to physiological arousal, valence, and depth. Arousal refers to the intensity and energy levels of the music, valence refers to the type of emotional response the music evokes, and depth refers to intellectual and emotional complexity (Greenberg, 2022). For instance, people with high neuroticism tend

to prefer music that is high in arousal and low in valence. People with high extraversion tend to prefer music that is lower in arousal. People with high openness tend to prefer music high in valence and depth. People with high agreeableness prefer music that is lower in arousal and valence but higher in depth. People with high conscientiousness tend to prefer music with lower arousal and high depth.

Additionally, Rentfrow's research used a different approach to analyze how music preferences and personality correlate: exploratory factor analysis (Rentfrow, 2003). Four factors were retained in this analysis: reflective and complex, intense and rebellious, upbeat and conventional, and energetic and rhythmic. This research included six studies with over 3,500 individuals and identified four factors of music preference. Most of the sample are whites, with smaller proportions of African American, Hispanic, and Asian participants. Their analysis concluded that reflexive and complex correlate to openness. Intense and rebellious correlate to extraversion. Upbeat and conventional correlates to extraversion, agreeableness, and conscientiousness. Energetic and rhythmic correlates to extraversion. Researchers found that openness and extraversion are the best predictors of music preference.

Moreover, a study by Vella and Mills also examined how personality affects music preference (Vella & Mills, 2016). This study included 122 undergraduate psychology majors at a mid-sized public university. The majority of the sample is Caucasian, with smaller proportions of African American, Hispanic, and Native American participants. Participants in this study complete the Big Five Personality Inventory, the 15-item uses of music inventory, the 14-item STOMP inventory, the life orientation test, a 10-item inventory of the degree of expectation for positive outcomes in life, and the perceived stress scale, which is a 10-item inventory designed to understand how respondents live were overloaded in the past month. Openness to experience positively predicted preferences for reflective-complex and intense-rebellious music, and openness to experience was inversely linked to upbeat-conventional music preference. When people who score high on openness listen to reflective-complex music, they will appreciate the composition's complexity. When they listen

to preferred intense-rebellious music, they will regulate their emotional experience. Neuroticism is inversely correlated with intense-rebellious music and is positively correlated with upbeat-conventional music. Neuroticism was found to be used for emotion regulation, whereas openness correlates to cognitive uses of music. People who score high on extraversion prefer energetic-rhythmic and upbeat-conventional music. People who score high on agreeableness tend to prefer upbeat-conventional music.

The study also found that cognitive uses of music partially mediate the relationship between openness to experience and reflective-complex music preference, as indicated by significant regression analyses and a confirmed mediated effect. Additionally, emotional uses of music were hypothesized to partially mediate the association between openness to experience and intense-rebellious music preference, though the significance of this mediation was marginal. Exploratory hypotheses suggested that extraverts might use background music for their preferred genres, and that emotional uses could mediate the link between optimism and music preferences; however, neither hypothesis was supported, as extraversion and optimism showed no significant relationships with the respective music uses. Overall, the findings highlight the role of music use as a mediator in the interplay between personality traits and music preferences.

These three studies were conducted in various settings, yet no significant differences were observed among the locations. While the Big Five personality traits do influence music preferences, other mediators may also play a role alongside personality. Future research should delve into how biological mechanisms and the frequency of music use as mediators impact music preferences. Ultimately, there is a need to develop a more comprehensive theory of music preferences that incorporates multiple influencing factors.

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