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Associations between Personality Traits and Music Preference

Isabella Boccia*

Purpose: The purpose of this study was to examine potential associations between an individual's personality traits in reference to the Big Five, and their music preference and enjoyment. **Method:** This study consisted of 175 participants who each completed an online survey intended to measure both their personality traits and music they enjoyed. Participants would read various statements referencing each of the Big Five personality traits: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. They would then respond to how much they agreed or disagreed with the statements presented. Additionally, participants would listen to short 15-s audio clips of various songs with the music genres of: rock, rap, country, pop, electronic, new age and classical represented. After listening to these audio clips, participants would rate the degree to which they enjoyed the song. **Results:** The results revealed that individuals who scored high in Openness, Extraversion, or Agreeableness enjoyed more genres of music than those scoring low in these areas. Additionally, those scoring low in Neuroticism enjoyed more genres of music. People who scored high and low for Conscientiousness showed no difference in enjoyment. **Discussion:** Future research in this field could strengthen the idea that personality traits are associated with an individual's music preference. Additional factors such as an individual's age, race, cultural background, or other aspects of personality may also be beneficial to take into account due to the data not supporting all hypotheses.

Keywords: Big Five, personality traits, music genres, music preference, music enjoyment

When it comes to music preference, it can be noted that an individual's personality traits may be linked to the types of music they prefer and enjoy. Additionally, there are many different tools and methods that can be used to measure an individual's personality. The present research solely focused on addressing personality with regard to the Big Five personality traits. The Big Five personality traits, created by McCrae and Costa (as cited in Waude, 2017), serve as a resource for explaining different aspects of human behavior in terms of how individuals express personality characteristics. The five traits specifically addressed can be represented in the acronym OCEAN: Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism

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(Waude, 2017). Since all individuals are unique, there are some limitations to only presenting five aspects of an individual's personality; however, it does provide a foundation for addressing these specific areas of personality. These personality traits can contribute to and serve as a guide for many different aspects of behavior and functioning.

A study conducted by Ali (2019) observed the impact of personality traits on human behavior and found that the way participants perceived their life in terms of satisfaction as well as how innovative they were was positively impacted by Extraversion, Agreeableness, Conscientiousness, and Openness. Because human behavior and personality traits are complex and consist of many different factors, even something as small as music preference can potentially be associated with it. Similar results of music in relation to personality were found in another study conducted by Pellerone et al. (2018). By studying personality traits, music genre preference, attitudes, and beliefs about lifestyles and other activities associated with an individual's spare time, it was found that individuals taking part in the study believed that the types of music they favored showed information not only about themselves, but also about the personalities of those around them (Pellerone et al., 2018).

Building off of this concept, Pearson and Dollinger (2004) further examined relationships between personality and music preference by utilizing the Myers Briggs Type Indicator (MBTI), (Myers et al., 1998), and the Music Preference Scale (MPS), (Litle & Zuckerman, 1986). The MBTI is a self-reporting tool used to measure personality type and covers the topics of Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perception (Myers et al. as cited in Pearson & Dollinger, 2004). Extraversion is the way in which individuals' cognitive functions are more externalized whereas introversion is more internalized (Furnham et al., 2003). In terms of Sensing-Intuition, sensing individuals think in terms of practicality and

essentially view the arts as luxuries that offer temporary enjoyment (Pearson & Dollinger, 2004). Intuitive individuals on the other hand, seem to have a different approach with a broader scope where the arts should be both enjoyed and appreciated due to its complex nature and the ability to bring about both pleasure and curiosity (Pearson & Dollinger, 2004). Thinking and feeling can be addressed in a head versus heart argument; thinking deals with individuals who assess situations based on logic while feeling individuals focus on emotions and their value (Furnham et al., 2003). Lastly, Judging-Perception is both associated with the way individuals process and then evaluate information; perception is just the gathering of information whereas judging is taking that information and then evaluating it (Furnham et al., 2003).

The MPS on the other hand, measures music experience and preference ratings (Pearson & Dollinger, 2004). Individuals completed both the MBTI and the MPS, and individuals in the Extraversion-Introversion segment who scored high in Extraversion preferred pop or rock music while also having an overall music enjoyment, and those who scored high on Thinking-Feeling segment preferred country music (Pearson & Dollinger, 2004). An additional study carried out by Rawlings and Ciancarelli (1997) also used the MPS as well as a revised version of the Neuroticism, Openness and Extraversion Personality Inventory. Similarly, Extraversion and Openness were associated with the greatest number of music genre preferences, and participants who were more open enjoyed a variety of music (Rawlings & Ciancarelli, 1997). In contrast to this, extraverted people generally scored high on the MPS in preferring popular music (Rawlings & Ciancarelli, 1997).

Research conducted by Chamorro-Premuzic et al. (2010) examined the relationship between the Big Five personality traits as well as individuals' use and motivations for music listening. Individuals listened to different genres of music and answered questions intended to

measure personality traits (Chamorro-Premuzic et al., 2010). To understand this relationship, Structural Equation Modeling, which uses equations to measure how variables are structured as well as their interactions, was used to evaluate which personality traits predict uses of music; these predictions would then be used to predict overall music preferences (Chamorro-Premuzic et al., 2010; Tarka, 2017). The personality traits of emotional stability, extraversion, openness, and trait emotional intelligence were specifically addressed (Chamorro-Premuzic et al., 2010). With the addition of differences in age and gender, all traits examined in the study were found to show relationships with music preferences and music use (Chamorro-Premuzic et al., 2010). With reference to extraversion and openness, Chamorro et al. (2010) found positive relationships; extraversion was positively correlated with music being used by individuals in the background while engaging in other tasks, while openness was positively correlated with using music in a way that was associated with stimulating the mind in some way. In specific reference to emotional stability and trait emotional intelligence, negative correlations were found in terms of individuals using music as a means to manage both their emotions and mood (Chamorro-Premuzic et al., 2010).

In terms of longitudinal design, Delsing et al. (2008) followed Dutch adolescents over a three-year time period to observe how stable their music preferences were and if there would be any change in their preference over time. Participants were asked to complete the Musical Preference Questionnaire and rate words referencing the Big Five based on how much they applied to them (Delsing et al., 2008). This questionnaire consisted of 11 categories of contemporary music that would be familiar to them, and a 5-point Likert scale was used to measure their preference of the genres presented (Delsing et al., 2008). Responses to the questionnaire and the rated words regarding personality were recorded and measured during the

three-year period (Delsing et al., 2008). In terms of stability over time, they found little changes in preference during adolescent years, and even more stability once those individuals aged (Delsing et al., 2008). They also found Openness and rock to be positively correlated as opposed to finding negative relationships between rock and the personality traits of Conscientiousness and Extraversion (Delsing et al., 2008). Agreeableness in addition to both Conscientiousness and Openness were positively correlated with Elite music whereas Emotional stability showed a negative relationship (Delsing et al., 2008). Additionally, both Extraversion and Agreeableness shared a positive relationship with urban, pop and dance music (Delsing et al., 2008).

When observing dimensions of personality, Nave et al. (2018), conducted a study similar in some ways to the present study discussed here. The International Personality Item Pool which measures the five-factor model, otherwise known as the Big Five, was used to address personality, and the dimensions of music model that consisted of: mellow, unpretentious, sophisticated, intense and contemporary, was used to categorize specific genres (Nave et al., 2018). They found that when participants were exposed to 15-s audio clips, there were individual differences in personality based on the music alone, that had nothing to do with the artist or the genre (Nave et al., 2018). Additionally, they found that both Openness and Extraversion showed an association with specific musical preference (Nave et al., 2018). Openness was associated with sophisticated music, or music that is inspires the listener, and is both complex and lively in terms of its elements, while extraversion was associated with unpretentious music that is described as relaxed, contains acoustic notes and is more straightforward (Nave et al., 2018). Past and current research continues to build on this topic and observe additional factors of personality that can be associated with an individual's music preference and enjoyment.

The purpose of the present study was to observe the potential relationship between an individual's personality traits, specifically referencing the Big Five, and the types of music they prefer and enjoy. I hypothesized that an individual's personality traits would be related to their preference and enjoyment of different genres and that certain personality traits would be associated with a preference and enjoyment of more genres than others. More specifically, I predicted that individuals who scored high in Openness, Extraversion or Agreeableness would enjoy and prefer more genres of music. I also predicted that those scoring low in Neuroticism would enjoy and prefer more genres of music. Lastly in-regards-to personality traits, I hypothesized that in terms of high and low scores for Conscientiousness, there would be no difference in enjoyment of genres.

In-regards-to specific music genre enjoyment, I hypothesized that individuals who scored high in Extraversion, Openness and Agreeableness would prefer music genres that were considered to be more upbeat. Upbeat music was operationally defined as music considered to produce feelings of excitement or happiness in the listener with many beats and rhythms, which included rock, rap, country, pop, and electronic genres. Whereas, individuals scoring low in these traits were predicted to prefer more mellow music. Mellow music was defined as music producing more relaxed feelings in the listener, while containing less beats and rhythms. New age and classical genres were included in this category. Individuals scoring high in Conscientiousness and Neuroticism were predicted to prefer more mellow music as opposed to upbeat music, and those scoring low in these traits were predicted to prefer both upbeat and mellow music.

Both qualitative and quantitative data were collected using an online survey. Individuals responded to various survey questions presented on a 4-point Likert scale that addressed each of

the Big Five traits and listened to short 15-s audio clips of various songs from the music genres of rock, rap, country, pop, electronic, new age and classical. Additionally, individuals answered five short free response questions, corresponding with each of the Big Five traits, and were encouraged to respond to the situation presented in the free response.

Method

Participants

Prior to data collection, this study met ethical standards evaluated by the Lindenwood Institutional Review Board and the Psychology Program Scientific Review Committee. Participants were recruited through various social media platforms including Facebook, Instagram, and Snapchat. Additionally, they were recruited through both the Lindenwood Participant Pool (LPP), which allows students of various majors to take part in research studies, and through the International Honor Society in Psychology (Psi Chi)'s research website. All participants were required to be at least 18 years of age and must have been able to read English. If participants did not meet this criterion, their data were excluded from the study. Participants with access to these various social media platforms or websites would be able to find a recruitment script containing the electronic link to the study. Because this was an online survey, participants had the ability to take it whenever they had the time. In-regards-to compensation, participants that were not involved with the LPP received no compensation, while those involved with the LPP received one or two points for their participation in the study. Prior to March 16, all individuals that were involved with the LPP received one point for their participation, however after this date, all in-person studies were eliminated due to the outbreak of COVID-19. To serve as compensation for this removal of in-person studies, all participants affiliated with the LPP received two bonus points as opposed to the previous one point.

The intended sample size for this study was around 150-200 participants, consisting of individuals from different nationalities and age groups. In total, 175 individuals participated in this study. This sample size was mainly comprised of women, with men making up only 18.9% of the sample. In regards to age, the sample size was relatively young ($M = 29.86$, $SD = 15.8$). Additionally, individuals that were born in the United States made up 57.7% of the sample, while the remaining 42.3% of individuals were born in various countries. Individuals currently residing in the United States made up 64% of the sample, with the remaining 36% residing in other countries.

Materials

Due to the sample not being restrictive, an online survey appeared to be the strongest option in terms of gathering data from many different individuals (see Appendix A). A participant recruitment script (see Appendix B) was posted on various social media platforms as well as on Sona Systems for the LPP and on the Psi Chi website. Participants taking this survey needed to have an electronic device to gain access to the survey whether that be a tablet, computer, or mobile phone. Additionally, participants may have needed headphones, if in a public place, to listen to the audio portion of the survey.

Prior to answering questions, an informed consent statement was attached at the beginning of the survey, followed by a few general demographic questions, and a debriefing statement at the conclusion of the study. If participants did not consent to engage in the study, they were redirected out of the survey and did not have to answer any further questions. The content of this survey included both questions regarding personality type, specifically in reference to the Big Five personality traits, as well as questions concerning enjoyment of certain music genres.

For questions regarding personality type, participants were presented with seven questions: one question being a free response for the participant to read a short passage about a specific situation and respond, and the remaining six were various statements created to gauge the participant's personality type. The responses to these statements were presented on a 4-point Likert scale ranging from strongly agree to strongly disagree. For the section of the survey pertaining to music preference and enjoyment, the participant was presented with fourteen 15-s audio clips consisting of various music genres. These samples were chosen randomly and were made up of two songs for each music genre: rock, rap, country, pop, electronic, new age and classical (see Table 1). Responses were also measured using a similar 4-point Likert scale. After these questions, one final question addressed the participant's favorite genre of music from those chosen and mentioned above in order to find out which genre(s) the participant's preferred; this question was not scored or used in data analysis.

Measures

All survey questions were measured in similar ways to ensure that data collection remained consistent and easy to follow. For survey questions dealing with Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism, a 4-point Likert scale was used to gauge a participant's response to the statement. There were six statements presented for each of the Big Five traits as well as one free response question to allow for the participant to express personal opinion rather than having to choose from already assigned answers.

When measuring participants' responses for the six questions regarding personality traits, each question was scored on a 4-point scale. Each category of the Big Five traits had seven questions, with a maximum of 28 points. Each of the personality traits was scored independently of the others, and the sum of all responses was used in analysis, so individuals scoring between

7-17 points were considered to be “low” in that personality trait and those scoring between 18-28 were considered to be “high” in that specific trait.

Free response questions were scored by me on a similar 4-point scale developed for content analysis (see Appendix C). This coding system was separated into five categories representing Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. Individuals would be presented with a short narrative in which they would have to respond by stating what they would do in that situation. Individual’s responses were measured on a 4-point scale that addressed the degree to which they responded to the situation. Additionally, the detail given in their response would impact their score. Responses for the coding system were created to mimic what a 1- 4-point free response answer would look like. A score of 1 would indicate that they did not embody that specific personality trait whereas a score of 4 would indicate they truly embodied the trait. These free response questions were included in the 28-point total.

For the music enjoyment questions, each genre question was also paired with a 4-point response. After listening to the short audio clip, participants would rate on a 1-4 scale how much they enjoyed the audio. Upbeat and mellow categories of music were not separately grouped into categories; rather, specific songs were all categorized into one scoring system. A score of 1 would indicate that the participant did not enjoy the audio at all, whereas a score of 4 would indicate that they highly enjoyed it. For music genres, all scores were factored in together to produce a maximum score of 56. Individuals scoring between a 14-35 were considered to score “low” and prefer fewer genres than individuals scoring high from a 36-56, who preferred more genres. Furthermore, when referencing an individual’s enjoyment for certain genres, an additional scale was used for each of the seven genres. Since each genre had two songs totaling

eight points, individuals scoring between 2-4 were considered to not prefer or enjoy that genre whereas those scoring between 5-8 did prefer that genre.

Analysis

Originally, a series of independent *t*-tests were to be conducted to evaluate the relationship between overall and specific music enjoyment with personality trait scores, however, due to the nature of the data and the uneven amount of high and low scores for participants, correlational analyses were performed instead. Two Pearson's *r* correlational analyses were used to evaluate the relationship between personality traits and music enjoyment and preference. Measures of Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism were correlated with the scores on overall as well as specific music enjoyment. Data from one individual were excluded from the study due to not responding to all questions regarding music preference. Data for overall music enjoyment (in Table 2) and for specific music enjoyment (in Table 3) can also be found.

Big Five Personality Traits and Overall Music Enjoyment

The first analysis performed dealt with each of the scores for the Big Five personality traits in relation to overall music enjoyment. I hypothesized that for the personality traits of Openness, Extraversion or Agreeableness, individuals would enjoy and prefer more genres of music and that those scoring low in Neuroticism would also enjoy and prefer more genres of music. Additionally, in terms of high and low scores for Conscientiousness, I hypothesized that there would be no difference in enjoyment of genres. For the personality trait of Openness, there was a significant positive correlation with overall music enjoyment, $r(173) = .169, p = .013$, which is consistent with the predicted hypothesis. For the personality trait of Conscientiousness, there was no significant relationship with overall music enjoyment, $r(173) = .061, p = .212$;

results from this were consistent with the projected hypothesis. For the personality trait of Extraversion, there was also a significant positive correlation with overall music enjoyment as predicted, $r(173) = .275, p < .001$. For Agreeableness, there was also a significant positive correlation with overall music enjoyment, also consistent with the projected hypothesis, $r(173) = .233, p = .001$. Lastly, for the personality trait of Neuroticism, there was a significant negative correlation with overall music enjoyment, as predicted by the projected hypothesis, $r(173) = -.186, p = .007$.

Big Five Personality Traits and Specific Music Enjoyment

Regarding the association between personality traits and specific genre enjoyment, another correlational analysis was done. For the personality trait of Openness, I predicted that individuals who scored high would prefer more upbeat genres than mellow genres: rock, rap, country, pop and electronic. I found that there was only one significant positive correlation shared between Openness and rap music $r(173) = .237, p = .001$, which was predicted. Contrary to my hypothesis, there were no significant relationships between Openness and rock, $r(173) = .006, p = .466$, country $r(173) = -.094, p = .109$, pop, $r(173) = -.008, p = .456$, or electronic, $r(173) = .091, p = .116$. Additionally, more open individuals were predicted to not enjoy classical music due to its mellow nature. However, the data showed this hypothesis to be incorrect; rather, there was a significant positive relationship between Openness and classical music, $r(173) = .209, p = .003$.

For the personality trait of Extraversion, my prediction was the same as that for Openness. I found that out of these five genres, only three of them (country, pop and electronic) yielded results consistent with my hypothesis. There was a significant positive relationship between Extraversion and country, $r(173) = .267, p < .001$, pop, $r(173) = .201, p = .004$, and

electronic music genres, $r(173) = .184, p = .007$. However, there was no statistically significant relationship between Extraversion and both rock, $r(173) = .097, p = .100$, and rap, $r(173) = .107, p = .079$.

In terms of the personality trait of Agreeableness, I hypothesized the same as that for both Openness and Extraversion. Similar to the results from the trait of Extraversion, only three out of the five upbeat genres showed patterns that were consistent with my hypothesis. There was a significant relationship between Agreeableness and rap, $r(173) = .256, p < .001$, country, $r(173) = .181, p = .008$, and pop genres, $r(173) = .295, p < .001$. Additionally, there was no significant relationship between Agreeableness and rock, $r(173) = .037, p = .312$. However, for the electronic genre, $r(173) = .123, p = .052$, the relationship was approaching statistical significance. While there were negative correlations between Agreeableness and the mellow genres, the relationship between both new age music, $r(173) = -.036, p = .316$, and classical genres, $r(173) = -.070, p = .180$, were not statistically significant.

In terms of Conscientiousness, I predicted that individuals scoring high in this area would prefer more mellow music (new age and classical), as opposed to upbeat. The only significant relationship was with country music, $r(173) = .143, p = .029$, which is inconsistent with the projected hypothesis. Both new age, $r(173) = .047, p = .267$ and classical genres, $r(173) = .036, p = .320$, however, did not correlate with Conscientiousness. Lastly, for the personality trait of Neuroticism, similar to Conscientiousness, I predicted that individuals scoring high in Neuroticism would prefer more mellow genres as well. However, my results indicated the opposite to be true. There were significant negative relationships with Neuroticism and new age music, $r(173) = -.180, p = .008$ and with classical music, $r(173) = -.201, p = .004$.

Lastly, the final question that requested participants to select their favorite genres out of the list was not included in the data analysis, however, out of all possible genres, the top three most preferred were pop, rock, and rap. A total of 130 participants preferred pop music, 91 participants preferred rock, and 82 participants preferred rap music.

Discussion

Multiple significant relationships were found between personality traits and overall music enjoyment. As hypothesized, there were significant positive correlations between the enjoyment of more genres by individuals scoring high in Openness, Extraversion or Agreeableness, as well as for individuals scoring low in Neuroticism. I also found that individuals who scored high or low in Conscientiousness showed no difference in music enjoyment which was hypothesized. However, interesting data resulted from analyses conducted to establish relationships between personality traits and specific music enjoyment. Many hypotheses were challenged, including the relationship between upbeat music and the personality traits of Openness, Extraversion and Agreeableness. It was not the case that individuals scoring high in these areas would prefer the more upbeat genres and additionally not the case that those scoring high in Conscientiousness and Neuroticism would prefer the more mellow genres.

There may be explanations as to why these results may have differed from the projected hypotheses. Possible explanations for this may be due to other factors outside of the Big Five personality traits. Other aspects of an individual's personality may likely be associated with their music preference and enjoyment, and therefore produce different results. Additionally, an individual's birthplace, current place of residence, and the individuals they surround themselves with may strongly correlate to their music preference; this was not analyzed in the current study. Limitations in this research arise from the fact that these demographic areas were not specifically

addressed and correlated with music enjoyment. If specific demographic factors were taken into account and analyzed, this could potentially be associated with different outcomes that further support or deny my hypotheses. Additionally, due to the age range of participants in the study with most of them in middle adulthood, results were very limited in that way. Age and music preference can potentially show significant correlations due to the fact that music does continue to develop and change over time. If the relationship between age and music preference were evaluated, this may lead to significant results in preference of music over the lifespan. Another potential explanation for the data being different from the projected hypotheses may have been due to the songs chosen for the music enjoyment section. In choosing songs to represent the various genres, there were no guidelines followed in terms of what songs were chosen. Due to this, I chose songs that I felt fit into the specific genre category; some of these songs may have been very familiar to the participant, and rather than not preferring the genre as a whole, they may have just not preferred the song due to repeated exposure.

Another noteworthy result that differed strongly from the projected hypotheses was that of neuroticism and music preference, specifically in reference to new age and classical genres. While I predicted that individuals scoring high in neuroticism would prefer more mellow music, this proved to be the exact opposite. Reasons for these results may include the fact that the more neurotic traits an individual presents, the more they may prefer to listen to many different genres of music to match their personality, rather than combat it with more mellow, relaxing music. Another potential explanation could be due to the fact that their music choice can in turn influence their anxious personality by constantly being reinforced.

In the future it may be beneficial to take these factors into account and evaluate any differences that may arise from observing them. However, in terms of the relationship between

personality traits and music preference alone, additional research in this area can further the idea that personality can show a potential relationship between an individual's music preference and enjoyment.

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Table 1*Music Genres and Specific Songs Used in My Study*

| Upbeat/ Mellow | Genre | Artist/Composer | Song | Year |
|-------------------|------------|--------------------------------|--|------|
| Upbeat | Rock | Guns N' Roses | 14 Years | 1991 |
| | | Lynyrd Skynyrd | Double Trouble | 1976 |
| Upbeat | Pop | Chris Brown | YEAH 3X | 2010 |
| | | Harry Styles | Lights Up | 2019 |
| Upbeat | Country | Diamond Rio | Meet in the Middle | 1991 |
| | | Keith Urban | Blue Ain't Your Color | 2016 |
| Upbeat | Rap | Lil Baby | Woah | 2019 |
| | | Travis Scott | HIGHEST IN THE ROOM | 2019 |
| Upbeat | Electronic | Hook N Sling | Turning Me On | 2018 |
| | | PNAU | Go Bang | 2017 |
| Mellow | New Age | Steven Halpern & Georgia Kelly | Sand Dance | 1995 |
| | | Reiki Healing Music Ensemble | To the Moon and Back | 2010 |
| Mellow | Classical | Alessio Bax | Lyric Pieces, Book 5, Op. 54 Nocturne | 2016 |
| | | Evgeny Kissin | Liebesträum No. 3 | 1992 |

Table 2*Big Five Personality Traits and Overall Music Enjoyment*

| | TOTAL MUSIC SCORE | |
|----------------|---------------------|---------|
| OPENNESS | Pearson Correlation | .169* |
| | Sig. (1-tailed) | .013 |
| | N | 175 |
| CONSCIENTIOUS. | Pearson Correlation | .061 |
| | Sig. (1-tailed) | .212 |
| | N | 175 |
| EXTRAVERSION | Pearson Correlation | .275** |
| | Sig. (1-tailed) | .000 |
| | N | 175 |
| AGREEABLENESS | Pearson Correlation | .233** |
| | Sig. (1-tailed) | .001 |
| | N | 175 |
| NEUROTICISM | Pearson Correlation | -.186** |
| | Sig. (1-tailed) | .007 |
| | N | 175 |

* Correlation is significant at the .05 level (1-tailed).

** Correlation is significant at the .01 level (1-tailed).

Table 3*Big Five Personality Traits and Specific Music Enjoyment*

| | | ROCK | RAP | COUNTRY | POP | ELECTRON. | NEW AGE | CLASSIC. |
|-------------------|------------------------|-------|--------|---------|--------|-----------|------------|----------|
| Openness | Pearson Correlation | .006 | .237** | -.094 | -.008 | .091 | .075 | .209** |
| | Sig. (1- tailed) | .466 | .001 | .109 | .456 | .116 | .163 | .003 |
| | N | 175 | 175 | 175 | 175 | 175 | 175 | 175 |
| Conscientiousness | Pearson Correlation | -.092 | .022 | .143* | .066 | -.032 | .047 | .036 |
| | Sig. (1- tailed) | .114 | .385 | .029 | .195 | .337 | .267 | .320 |
| | N | 175 | 175 | 175 | 175 | 175 | 175 | 175 |
| Extraversion | Pearson Correlation | .097 | .107 | .267** | .201** | .184** | .007 | .029 |
| | Sig. (1- tailed) | .100 | .079 | .000 | .004 | .007 | .465 | .352 |
| | N | 175 | 175 | 175 | 175 | 175 | 175 | 175 |
| Agreeableness | Pearson Correlation | .037 | .256** | .181** | .295** | .123 | -.036 | -.070 |
| | Sig. (1- tailed) | .312 | .000 | .008 | .000 | .052 | .316 | .180 |
| | N | 175 | 175 | 175 | 175 | 175 | 175 | 175 |
| Neuroticism | Pearson Correlation | -.050 | .001 | -.068 | .011 | -.085 | -.180** | -.201** |
| | Sig. (1- tailed) | .256 | .497 | .184 | .444 | .131 | .008 | .004 |
| | N | 175 | 175 | 175 | 175 | 175 | 175 | 175 |

* Correlation is significant at the .05 level (1-tailed).

** Correlation is significant at the .01 level (1-tailed).

Appendix A

Online Survey

STOP! Collaborate and Listen-Associations between Personality Traits and Music Preference

Survey Flow

Standard: Informed Consent (1 Question)

Standard: Demographic Questions (4 Questions)

Standard: Personality Questions (40 Questions)

Standard: Now you will be asked to listen to short video clips of various song genres. (15 Questions)

Standard: Debriefing Statement (1 Question)

Page Break

Start of Block: Informed Consent

Q1 You are being asked to participate in a survey conducted by Isabella Boccia at Lindenwood University. I am doing this study to observe potential associations between personality traits and music preference. Questions regarding personality traits as well as music enjoyment will be asked. Additionally, you will be asked to listen to short 15-second audio clips of various music genres. It will take about 15 minutes to complete this survey.

Your participation is voluntary. You may choose not to participate or withdraw at any time by simply not completing the survey or closing the browser window.

There are no risks from participating in this project. I will not collect any information that may identify you. There are no direct benefits for you participating in this study.

If you are a part of the Lindenwood Participant Pool (LPP) you will receive TWO extra credit point in the course for which you signed up for the LPP. You will receive extra credit simply for completing this information sheet. You are free to withdraw your participation at any time without penalty.

Participants who are not part of the LPP will receive no compensation beyond the possible benefits listed above. However, your participation is an opportunity to contribute to psychological science.

WHO CAN I CONTACT WITH QUESTIONS? If you have concerns or complaints about this project, please use the following contact information:

Isabella Boccia ipb674@lindenwood.edu

Michiko Nohara-LeClairmnohara-leclair@lindenwood.edu

If you have questions about your rights as a participant or concerns about the project and wish to talk to someone outside the research team, you can contact:

Michael Leary (Director - Institutional Review Board) at 636-949-4730 or mleary@lindenwood.edu.

By clicking the link below, I confirm that I have read this form and decided that I will participate in the project described above. I understand the purpose of the study, what I will be required to do, and the risks involved. I understand that I can discontinue participation at any time by closing the survey browser. My consent also indicates that I am at least 18 years of age.

You can withdraw from this study at any time by simply closing the browser window. Please feel free to print a copy of this information sheet.

Due to the nature of this survey involving audio clips, headphones may be needed to complete particular questions on the survey. If you prefer not to use headphones, finding a private setting would be adequate.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

- I consent, begin the study (1)
- I do not consent, I do not wish to participate (2)

End of Block: Informed Consent

Start of Block: Demographic Questions

Q2 How do you identify?

- Male (1)
- Female (2)
- Other (3) _____

Q3 How old are you?

Q4 What country do you now reside in?

Q5 What country were you born in?

End of Block: Demographic Questions

Start of Block: Personality Questions

Q6 Pretend you are a college student. One day in class, your professor tells you about an opportunity to study abroad (take classes in another country). The study abroad program includes 4 months of learning about the culture, food and history of that country. She tells you that the school is paying for the entire trip for each person and that money is not an issue for you to worry about. However, you would essentially be moving away for 4 months and would have to experience a completely new culture. Would you go on the trip, and why/why not?

- Yes (42)
- No (43)

Q7 Why/why not?

Page Break

Q8 I consider myself to be creative/have an imagination.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q9 I like to be challenged.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q10 I am open to trying new things. (New things may include but are not limited to: new foods, traveling to new places, etc.).

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q11 I consider myself to be skeptical about things.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q12 Change does not bother me.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q13 I consider myself to be adventurous.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Page Break

Q14 Pretend you are a college student. You are given an assignment in your class and that assignment is a 5-page paper on a topic of your choice. Your paper is due in two weeks. Would you start the paper immediately or would you wait, and why/why not?

- Yes (23)
- No (24)

Q15 Why/why not?

Q16 I like to plan ahead.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q17 I need structure/schedule in my life.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q18 I pay attention to details.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q19 When I make certain decisions, I think about how they may impact someone else.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q20 Deadlines do not affect me. I take my time to complete tasks.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q21 I am organized.

- Strongly agree (1)

- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Page Break

Q22 You look out your window one day and notice a new family moving into the house next door. Would you introduce yourself, and why/why not?

- Yes (18)
- No (19)

Q23 Why/why not?

Page Break

Q24 I am a conversation-starter.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q25 I like to meet new people.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q26 Making new friends is easy for me.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q27 I enjoy being around others.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q28 I like being the center of attention.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q29 I enjoy being by myself.

- Strongly agree (1)
- Agree (2)

- Disagree (3)
- Strongly disagree (4)

Page Break

Q30 You are at the grocery store one day and the person in front of you leaves a bag in the store. The grocery store clerk asks you to take the bag and run it out to the person. Would you go after them, and why/why not?

- Yes (25)
- No (28)

Q31 Why/why not?

Page Break

Q32 I enjoy making other people happy.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q33 Other people's lives interest me.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q34 I care about how others feel.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q35 If I see someone is feeling down, I would try to cheer them up.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q36 If I see someone who needs help, I would go out of my way to help them.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q37 I can cooperate with people.

- Strongly agree (1)
- Agree (2)

- Disagree (3)
- Strongly disagree (4)

Page Break

Q38 You are about to go to bed and have the next 2 days off from work when you get a phone call from your manager. They tell you that they got food poisoning and ask you if you will take their shift for them in the morning. However, you have to take on the role as the manager. Would you cover for them, and why/why not?

- Yes (25)
- No (26)

Q39 Why/why not?

Page Break

Q40 I tend to experience high levels of stress. (High levels of stress= stress that interferes with your daily life).

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q41 My mood is stable. I rarely experience mood swings. (Mood swings= dramatic changes in your mood that happen out of nowhere).

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q42 I tend to get upset easily.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q43 I consider myself to be relaxed.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q44 I tend to get anxious/often worry about things.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

Q45 I often feel sad or depressed.

- Strongly agree (1)
- Agree (2)
- Disagree (3)
- Strongly disagree (4)

End of Block: Personality Questions

Start of Block: Now you will be asked to listen to short video clips of various song genres.

Q46

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q47

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q48

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q49

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q50

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)

- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q51

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q52

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q53

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q54

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q55

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q56

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q57

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q58

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q59

How much do you enjoy this music genre?

- Like a great deal (1)
- Like somewhat (2)
- Dislike somewhat (3)
- Dislike a great deal (4)

Page Break

Q60 What genres do you prefer out of these options? (Select all that apply)

1. Rap (1)
2. Country (2)
3. New Age (Calming music that often has nature noises) (3)
4. Pop (4)
5. Rock (5)
6. Electronic (6)
7. Classical (7)

End of Block: Now you will be asked to listen to short video clips of various song genres.

Start of Block: Debriefing Statement

Q61 Thank you for taking the time to participate in this survey! This study aimed to observe potential associations between an individual's personality type and their music preference.

If you have any further questions or concerns, please do not hesitate to contact the Principal Investigator of this study. Once again, thank you for taking part in this scientific research!

Contact Information:

Isabella Boccia

ipb674@lindenwood.edu

End of Block: Debriefing Statement

Appendix B

Participant Recruitment Script



HEY! I WANT TO KNOW ABOUT YOU!

- Individuals 18 years and older that can read English are needed for a study regarding personality type and music preference
- Headphones may be needed to listen to music OR finding a private area
- This study will take about 15 minutes of your time & will not cost you anything!

To Participate: Follow the link to my survey below!

-

Any Additional Questions/Concerns:
Contact: Isabella Boccia @
ipb674@lindenwood.edu

Appendix C

Coding Guide for Free Response Questions

Openness: Pretend you are a college student. One day in class, your professor tells you about an opportunity to study abroad (take classes in another country). The study abroad program includes 4 months of learning about the culture, food and history of that country. She tells you that the school is paying for the entire trip for each person and that money is not an issue for you to worry about. However, you would essentially be moving away for 4 months and would have to experience a completely new culture. Would you go on the trip, and why/why not?

Examples of Valid Responses

A score of **1**: I would not go on the trip because I would be too nervous/I don't like new things/ I would be uncomfortable...etc.

A score of **2**: I might think about it for a minute, but I would not end up going on the trip because I would rather be in a familiar place...etc.

A score of **3**: I would probably go on the trip because I like to sometimes go out of my comfort zone.

A score of **4**: I would definitely go on the trip because it sounds like a great opportunity and I love experiencing new people/places/things/food...etc.

Conscientiousness Pretend you are a college student. You are given an assignment in your class and that assignment is a 5-page paper on a topic of your choice. Your paper is due in two weeks. Would you start the paper immediately or would you wait, and why/why not?

Examples of Valid Responses

A score of **1**: I would wait until the last minute to write the paper and not even look at it until close to when its due because I procrastinate...I would not write the paper at all...etc.

A score of **2**: I would probably look at the paper and read the directions but wait to start it until later...I might turn the paper in late/not necessarily pay attention to the deadline...etc.

A score of **3**: I would probably read the directions and turn in the paper before it's due, but I would not necessarily make an outline or start the paper right away

A score of **4**: I would read the directions after getting the assignment and then start planning out what I want to write about by either making an outline or just starting to write it. (If they mention details about making outlines, preparing, paying attention to details, enjoys deadlines, etc.)

Extraversion You look out your window one day and notice a new family moving into the house next door. Would you introduce yourself, and why/why not?

Examples of Valid Responses

A score of **1**: I would not introduce myself because I am shy and it is hard for me to start conversations...I don't like to start conversations...I would rather stay inside

A score of **2**: I might consider introducing myself but I probably would not end up doing it because I would rather not...etc.

A score of **3**: I would introduce myself but because it's the right thing to do...I might be nervous to do it but I would...I like to make new friends...etc.

A score of **4**: I would definitely introduce myself to the new neighbors...(Mentioning love meeting new people, starting conversations, find it easy to make new friends, feel energized by others...etc).

Agreeableness You are at the grocery store one day and the person in front of you leaves a bag in the store. The grocery store clerk asks you to take the bag and run it out to the person. Would you go after them, and why/why not?

Examples of Valid Responses

A score of **1**: I would not go after the person because it's their fault they left the bag in the store...I don't really care about their problems...etc.

A score of **2**: I might consider it but would probably not go after the person because I don't necessarily think it's my job to run the bag to the person...etc.

A score of **3**: I would probably go out after the person because they left the bag by accident and I feel bad for them...etc.

A score of **4**: I would definitely go run after the person to give them their bag...They could have something really important in there and I wouldn't want them to leave without it...(Mentions things that imply they: have interest in others/care about others, enjoys helping people or assisting them, expresses empathy, etc.)

Neuroticism You are about to go to bed and have the next 2 days off from work when you get a phone call from your manager. They tell you that they got food poisoning and ask you if you will take their shift for them in the morning. However, you have to take on the role as the manager. Would you cover for them, and why/why not?

Examples of Valid Responses

A score of **1**: I would go in for my manager because they are sick, and I completely understand why they can't go to work...This situation wouldn't really stress me out...etc.

A score of **2**: I would probably go in for my manager...I might be a little frustrated, but nothing crazy because I understand...etc.

A score of **3**: I would be really frustrated/anxious about the situation and I would probably tell them to ask someone if they could cover for them...etc.

A score of **4**: I would be extremely frustrated that my manager is texting me right before bed asking me to cover for them...No I have to worry about getting gas in the morning and having to reschedule my entire day...Tell them to ask someone else to cover...(Mentions anything about severe frustration, annoyance, anxiety..etc.).