Music and personality: A Closer Look At The Relationship Between The Five Factor Model, Self-Esteem, And Music Preference

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ABSTRACT
We tested the reliability and generalizability of Rentfrow and Gosling’s (2003) measure of music preference (the Short Test of Music Preference (STOMP)) and its relationship to various individual difference measures with mixed results. The regional differences between the two samples may partially explain the failure to replicate some of these results. The implications and future directions for this line of research, are discussed.

INTRODUCTION
• Past research has shown a link between personality traits and music preference:
  • Cattell and Anderson (1953) produced the IPAT music preference test, which linked personality to musical preferences.
  • McCrow, Keiser, Mulhearn, and Williamson (1997) found a connection between extraversion and a musical preference for songs with exaggerated bass.
  • Recent studies have shown a link between music and social identity, such as, self-views and self-esteem (North, Hargreaves, & O’Neill, 2000).
• Most recently, Rentfrow and Gosling (2003) have created a way of categorizing musical preference with specific personality traits:
  • They adapted a new measure of music preference called The Short Test of Music Preference (STOMP).
  • Research examined the relationship between individual’s preference for particular musical genres and various individual difference measures, including:
    1. The Big Five Inventory (Openness, Conscientiousness, Extraversion, Agreeableness, and Emotional Stability).
    2. Self-Esteem.
    3. Cognitive abilities (e.g. Verbal IQ).
• They created several categories of music preference: 1. Reflective/complex including classical, blues, folk, and jazz.
  2. Intense/rebellious including alternative, rock, and heavy metal music.
  3. Upbeat/conventional including country, religious, and soundtrack/theme songs.
  4. Energetic/rhythmic includes dance/electronics, rap/hip-hop, and soul/funk.
• This research indicates how personality can lead to particular musical preferences. Other findings include the possibility that exposure to certain types of music may lead to changes in the development of certain personality traits.

HYPOTHESIS
The goal of this research is to replicate the study conducted by Rentfrow & Gosling (2003). If the generalizability of their research is relevant across samples, it is hypothesized that the results of this study will parallel their results in which specific personality traits were correlated with particular genres of music.

METHODS
Participants: 125 research participants from Psychology 101 classes volunteered to participate and were given class credit.

Procedures: Participants responded to multiple questions relating to various measures of personality. These questions assessed characteristics of the participant’s personality in relation to the Big Five Inventory (Gosling, Rentfrow, & Swan, 2003). This included several Likert-type statements on a 5-point scale (1- Not at all; 5- Extremely).

Another measures indicated each participant’s level of self-esteem in which we used the Rosenberg Self-Esteem Scale (Rosenberg, 1965). This test consists of ten Likert-type statements on a 5-point scale (1- Not at all; 5- Extremely).

Participants then completed The Short Test of Music Preference (Rentfrow & Gosling, 2003). The STOMP test contains questions which indicate 14 genres of music: alternative, blue, classical, country, electronic/dance, folk, heavy metal, rap/hip-hop, jazz, pop, religious, rock, soul/funk, and soundtrack/theme songs. Preferences were rated on a 7-point Likert scale (1-Not at all; 7- A great deal).

RESULTS
• We failed to replicate several of Rentfrow and Gosling’s (2003) findings:
  1. We found no correlation between extraversion and the music preference categories of Upbeat/Conventional and Energetic/Rhythmic.
  2. We did not find a correlation between Agreeableness and Upbeat/Conventional.
  3. We failed to replicate the negative correlation between openness and Upbeat/Conventional.

• We did replicate a few aspects of the previous study:
  1. There was a positive correlation between conscientiousness and Upbeat/Conventional (r = .217, p = .045).
  2. We replicated the correlation between openness and Reflective/Complex (r = .361, p = .000).
  3. We found a correlation between openness and Intense/rebellious (r = .266, p = .012).

• Also, we found a correlation between self-esteem and reflective/complex (r = .201, p = .025). This result contradicted Rentfrow and Gosling (2003) in which they found positive correlations between self-esteem and upbeat/conventional as well as energetic/rhythmic.

• Also, similar to Rentfrow & Gosling, we failed to find any significant correlations between music preference and emotional stability.

CORRELATION TABLE

<table>
<thead>
<tr>
<th>Reflection/Complex</th>
<th>Intense/Rebellious</th>
<th>Upbeat/Conventional</th>
<th>Energetic/Rhythmic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>r = .013</td>
<td>r = -.083</td>
<td>r = .087</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>r = .077</td>
<td>r = .183</td>
<td>r = .225</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>r = .067</td>
<td>r = .337</td>
<td>r = .533</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>r = .067</td>
<td>r = .050</td>
<td>r = .060</td>
</tr>
<tr>
<td>Openness</td>
<td>r = .013</td>
<td>r = -.208</td>
<td>r = -.128</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>r = .000</td>
<td>r = .012</td>
<td>r = .156</td>
</tr>
</tbody>
</table>

• We, on the other hand, found the following three factors: 1) rap/hip-hop, soul/funk, and pop; 2) country and religious; and 3) electronic/dance and soundtracks/theme songs.

• When we forced the factor analysis to pull these into only 4 factors, the story becomes even more interesting. The first factor is still the same as Rentfrow and Gosling, but the remaining 3 factors vary considerably:
  2. Country, religious, and soundtracks/theme songs.

• Based on this last 4-factor model we created the following composite variables: intense/rebellious (rock, heavy metal, alternative, electronic/dance), hip-hop/rap (rap/hip-hop, soul/funk, pop, and conventional (country, religious, soundtracks/theme songs).

• Intense/rebellious was positively correlated with openness.

• Intense/rebellious was positively correlated with extraversion.

• Conventional was correlated with conscientiousness.

DISCUSSION
• The purpose of this research was to see if previous findings about music preference and personality could be generalized and applied to different regions.
• Some of the results correlated with Rentfrow and Gosling (2003) while others did not. This may indicate that the relationship between particular genres of music and personality type may be dependent on region and the current music standards.
• The differences between our research and Rentfrow and Gosling’s demonstrates that the relationship between music preference (STOMP) and personality may not be generalizable across samples. Styles of music are at a constant state of flux dependent upon the current standards. While a few factors may be relevant between generations and regions, future researchers should be certain to account for the current trends and how they may differ from the past styles.

REFERENCES


