Honors 2000 Research Proposal Draft

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Abstract

Think of all the stories you enjoy consuming the most, whether they’re movies, TV shows, graphic novels, or written literature. Chances are, the types of stories you prefer follow a pattern. What if one could predict somebody’s narrative preferences without even knowing what types of stories they have consumed in the past? The answer may be found in the Five Factor Model, a personality model that describes five major traits: Conscientiousness, Openness to Experience, Neuroticism, Agreeableness, and Extraversion. My research question is as follows: How can the Five Factor Model help us make predictions of individuals’ narrative preferences?

Keywords: five-factor model, big five model, five personality traits, narrative, structure
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Think of all the stories you enjoy consuming the most, whether they’re movies, TV shows, graphic novels, or written literature. Chances are, your favorite stories follow a pattern. Observing this fact, many media services, such as Netflix, implement algorithms to predict the types of stories that you will enjoy based on the stories you viewed in the past. However, what if one could predict somebody’s narrative preferences without knowing their past viewership? The answer may be found in personality psychology, a branch of psychology that creates personality theories that categorize significant traits of one’s personality. By far, the most empirically rigorous of these personality theories is the Five Factor Model, which describes five major traits: Conscientiousness, Openness to Experience, Neuroticism, Agreeableness, and Extraversion.

My research question is as follows: How can the Five Factor Model help us predict individuals’ preferences for different narratives?

**Background Research**

This research question assumes a few background premises that should be addressed. The first premise is that the Five Factor Model is a reliable model of personality.

**Premise 1: The Five Factor Model is a reliable model of personality.**

There are alternatives to the Five Factor Model. If you’ve ever heard of personality models before, for example, chances are that you’ve heard of the Myers-Briggs Test Indicator, or MBTI for short. However, according to Randy Stein and Alexander Swan’s 2019 article “Evaluating the Validity of Myers-Briggs Type Indicator Theory,” the MBTI fails empirically despite being a popular theory. It firstly builds upon non-empirical Jungian theories, it secondly
gives self-contradictory test results, and it thirdly avoids making predictions about individuals’
behavior based on their type (Stein & Swan, 2019, p. 3).

In contrast to the MBTI, the Five Factor Model passes empirical scrutiny, as Robert
McRae writes in his 2011 article “Personality Theories for the 21st Century.” Researchers
created the Five Factor Model through the lexical method, which determined the most significant
personality traits by empirically studying lexicons across different cultures (McCrae, 2011, p.
210). The Five Factors also are consistent across a person’s adulthood, and can be used to make
predictions about an individual’s behavior. Christopher A. Cooper, David M. McCord, and
Whittney Campbell-Bridges’s in their 2017 study “Personality and the Teaching of Public
Administration” found that the Five Factor Model could predict statistically significant levels of
an individual’s job satisfaction. Conversely, the MBTI failed to predict job satisfaction
statistically significantly (Cooper, McCord, & Campbell-Bridges, 2017, p. 685).

In essence, The Five Factor Model is a reliable model of personality, especially in
comparison to other personality models. My second premise is that personality traits can be used
to predict preferences for different aspects of art.

**Premise 2: Personality traits can predict preferences for different aspects of art.**

Past research has shown that the Five Factor Model can predict preferences for
interactive aspects of art. Anthony Bean and Gary Groth-Marnat’s 2016 study “Video gamers
and personality: A five-factor model to understand game playing style” and Catherine Potard et
al.’s 2019 study “Video game players’ personality traits” both analyzed the correlation between
the Five Factors and different video game playstyles. They found that a player’s gameplay
preference “appears to be at least partially dependent on their personality” (Bean & Groth-
Marnat, 2014, p. 35). Thus, one’s personality traits can predict preferences for interactive aspects of a video game. However, neither studies connected personality traits to surface-level preferences such as in-game cosmetics.

Building off Bean and Potard’s studies, past research shows that Five Factor Model does not predict surface-level aesthetic preferences, such as for musical style or painting style. Thomas Schäfer and Claudia Mehlhorn’s 2017 article “Can Personality Traits Predict Musical Style Preferences?” and Tomas Chamorro-Premuzic et al.’s 2010 article “Personality Predictors of Artistic Preferences as a Function of the Emotional Valence and Perceived Complexity of Paintings” analyzed the connection between the Five Factors and preferences for styles of music and painting. Schäfer and Mehlhorn found that personality traits “barely account for inter-individual differences in music preferences” (Schäfer & Mehlhorn, 2017, p. 265). Similarly, Chamorro-Premuzic et al. found that the Five Factor model “explained only 5% of the variance in artistic preferences [for paintings]” (Chamorro-Premuzic, Burke, Hsu, & Swami, 2010, p. 202). Thus, the Five Factor Model failed to predict preferences for different aesthetic styles in painting and music.

Essentially, the Five Factor Model predicts preferences for interactive elements of art but not for aesthetic elements. This leaves open the possibility that the Five Factor Model could be used to predict preferences for structural elements of a story: complexity, themes, and tone. Therefore, the final question becomes whether or not the Five Factor Model could be used to predict preferences for structurally different narratives.

**Question:** Can the Five Factor Model be used to predict preferences for structural aspects of narrative?
Dan P. McAdams, Nana Akua Anyidoho, Chelsea Brown, Yi Ting Huang, Bonnie Kaplan, and Mary Anne Machado’s 2004 study “Traits and Stories: Links between Dispositional and Narrative Features of Personality” studied whether the Five Factor Model could predict the structure of one’s life narrative. The study had respondents write “two or three paragraph accounts” for important scenes from their life story (McAdams et al., 2004, p. 767).

The researchers went on to measure each participant’s stories using three structural metrics: tone, complexity, and themes. Narrative tone ranges from “extreme positivity ([think comedy]) to extreme negativity ([think tragedy])” (McAdams et al., 2004, p. 763). Themes refer to the types of character intentions and motivations; themes of agency encompass “intentional movements toward self-mastery, self-control, achievement, and power,” and themes of communion include “love, intimacy, care, and the sense of being a part of a community” (McAdams et al., 2004, p. 764). Finally, complexity is a measure of plot structure. Simple stories contain “few characters, straightforward plots, and clear resolutions,” while complex stories contain “a multitude of characters and interwoven plots, and they may suggest multiple meanings and have ambiguous resolutions” (McAdams et al., 2004, p. 765).

McAdams et al. found that Agreeableness and Extraversion positively correlated to narrative themes of communion, Neuroticism positively correlated to negative life-narrative tone, and Openness strongly associated with high structural complexity of life narratives (McAdams et al., 2004, p. 761). The study’s main limitation is that it measures structure in the personal life stories of individuals. One could, nevertheless, appropriate the authors’ methods for a study on structural preferences for fictional narratives.
For example, Katrina Fong, Justin B. Mullin, and Raymond A. Mar’s 2013 study “What You Read Matters” studied the relations between participants’ five traits and their preferences for fictional genre. The study found that Openness to Experiences positively predicted preferences for “Fiction, Nonfiction, and Domestic Fiction” (Fong, Mullin, & Mar, 2013, p. 372). However, the researchers failed to strictly study structural preferences, as aesthetic style and public image influence one’s preference for an author. Therefore, an ideal study on structural narrative preferences would remove authorial identifications.

**Methods**

For my study, I will adopt the methodology of McAdams et al. in “Traits and Stories: Links between Dispositional and Narrative Features of Personality.”

I will find 125 undergraduate students at Loyola Marymount University in the Spring of 2020 to participate in the study. To measure traits, I will use the M5-50, a 50-item self-report rating scale for the Five Factor Model. Alan Socha, Christopher A. Cooper, and David M. McCord’s 2010 paper “Confirmatory Factor Analysis of the M5-50” showed that the M5-50 yields a reasonable model fit for questionnaire takers.

To measure a participant’s preferences for specific tone, complexity, and themes, participants will read eight different stories. After they read each story, they will rank the story relative to the others based on which they enjoyed the most. I will write each story no more than a few paragraphs long, with the same prose, setting, and characters. Each story will fall to one end of each three dichotomies: Positive (P) vs. Negative (N), Simple (S) vs. Complex (C), and Communion (M) vs. Agency (A). These dichotomies follow the distinctions established by McAdams (McAdams et al., 765). A PSM story, for example, would be a Positive and Complex
story with dominant themes of Communion. In total, there will be eight stories: PSM, PSA, PCM, PCA, NSM, NSA, NCM, and NCA.

**Expected Results**

My hypothesis is that Neuroticism will correlate to high ratings of Negative stories, Agreeableness and Extraversion will correlate to high ratings of Communion stories, and Openness will correlate to high ratings of Complex stories. Conscientiousness will not correlate with preferences for stories that specifically fulfill P, N, S, C, M, or A. These hypothesized results draw from the results of McAdam et al.’s 2004 study.

**Conclusion**

The question of why we prefer the stories we prefer is not just an interesting question, but one that is potentially pertinent to media distribution services such as Netflix. The Five Factor Model has been shown to predict art preferences for interactive entertainment, as well as structural aspects of life-stories. So, why couldn’t we use it to predict the structural preferences of individuals towards different stories?
References


Timeline/Budget

For this research project, I request $625, to cover $5 Starbucks gift cards for incentives. The expected time to conduct this research is a month.