

Correlations between the Big Five Personality Traits and Leadership

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### Correlations between the Big Five Personality Traits and Leadership

The current study examines the relationship between leadership characteristics and three personality traits assessed by the Big Five Inventory-54 (BFI), developed by John, Donahue, & Kentle (1991). Specifically, this research attempts to analyze correlations between conscientiousness, agreeableness, extraversion, and leadership attitudes. Operationally, leadership characteristics will refer to the inclination to lead, belief that one's opinions are correct, belief that others value one's opinions, and participation in extracurriculars, since these groups tend to foster leadership values. Utilizing these factors provides multiple perspectives on what types of individuals might be leaders, and what these individuals associate with leadership.

The hypothesis fueling this research is the theory that individuals who are highly extraverted, conscientious, and low on agreeableness might rate themselves as possessing leadership characteristics. Those who are outgoing, responsible, and unwilling to compromise may be more likely to assert the role of a leader than those who are shy, disorganized, and submissive. Generally, a leader tends to be assertive and dominant, whereas a follower is obedient and reserved.

Since the self-report data collected can only assess individuals' opinions of themselves, the purpose of this study is not to determine whether others would consider the participants as possessing leadership characteristics. Rather, this research assesses participants' regard of themselves as leaders, as well as personality types that may be inclined to lead.

## Method

### Participants

Researchers selected 45 undergraduates from a small liberal arts college in the northeast to participate in the study. All participants understood that their scores would be anonymous and they would not be able to see their own scores after completing the questionnaire.

### Materials

Participants answered 54 questions on the BFI (John, Donahue, & Kentle, 1991). This self-report questionnaire measures the levels of one's core personality traits, which include extraversion, agreeableness, openness, neuroticism, and conscientiousness. A question from the BFI asks whether the participants see themselves as someone who "tends to find fault with others." Participants then responded to each question on a 1-5 scale (1 = *disagree strongly*, 5 = *agree strongly*). For the purpose of this research, the correlational analyses will focus on three of the traits assessed by the BFI, including conscientiousness, agreeableness, and extraversion.

Each of these traits includes various subcategories of characteristics. Conscientiousness describes a collection of traits including organization, responsibility, dependability, and cautiousness. One who is not conscientious might be disorganized, easy-going, and careless. A question assessing conscientiousness asks participants if they think of themselves as someone who "does a thorough job." In addition to this trait, agreeableness assesses the degree to which individuals are compassionate, cooperative, friendly, and trusting. One who is not agreeable might be rather antagonistic, cold, unkind, uncooperative, and selfish. Someone who believes that he or she "tends to find fault with others," might have a low agreeableness score. Finally, extraversion measures whether one is energetic, dominant, talkative, sociable, and enthusiastic. Introverts are more submissive, quiet, and reserved. A question assessing extraversion asks the

extent to which the individual is someone who “generates a lot of enthusiasm.” An extravert might agree with this statement.

In addition to completing the BFI questions assessing these traits, the participants answered 40 questions developed by the researchers. These questions assessed ways in which the participants’ Big Five personality traits might influence their tendencies to agree with certain attitudes or characteristics about themselves. For example, a question developed by a researcher asks whether the participant is someone who “looks for courses that will expose me to new experiences.” One might hypothesize that individuals with high introversion scores will tend to disagree with that statement. In an identical manner as the BFI, participants rated their answers to these questions on a 1-5 scale (1 = *disagree strongly*, 5 = *agree strongly*).

### **Procedure**

All participants received informed consent forms before beginning the questionnaire. Researchers gave standardized instructions to the participants and allowed them to begin the BFI and the additional 40 questions. After completing the questionnaire, researchers administered a debriefing form to the participants and ended the test session.

### **Results**

The correlational analyses attempt to assess the relationships between extraversion, agreeableness, conscientiousness, and subjective measures of leadership characteristics. Although several of the researcher-developed questions explicitly address leadership attitudes, a few of the statements merely hint at these characteristics. Thus, the research requires further analyses to determine whether such questions accurately measure leadership attributes.

To begin, a composite variable of “Leadership” contained questions concerning extracurriculars, leadership values, and opinions. These included whether one “is involved in

extracurriculars,” “tends to lead rather than follow,” “is someone who others think of as a leader,” and “has opinions and ideas that others value.” These questions attempt to assess general attributes that leaders might possess. Leadership correlated with extraversion in a significant positive linear relationship,  $r(43) = .405, p = .006$ .

Utilizing single variable analyses related to the composite variable helped to explore the relationship between leadership behaviors and the Big Five personality traits. Specifically, one’s belief that he or she “has opinions and ideas that others value” correlated with extraversion in a significant positive linear relationship,  $r(43) = .336, p = .024$ . This question assesses the typical characteristic of leaders to have opinions that the majority tends to support.

Agreeableness also demonstrated correlations with leadership characteristics. A single variable assessing whether one “tends to lead and not follow” correlated with the trait of agreeableness in a significant negative linear relationship,  $r(43) = -.499, p < .001$ . Furthermore, one’s tendency to believe he or she “has an opinion that is usually the best/right” correlated with agreeableness in a significant negative linear relationship,  $r(43) = -.456, p = .002$ . This question does not directly assess leadership, but rather a conventional attribute of leaders to insist that their opinions are correct.

Finally, a single variable of whether one is “involved in extracurriculars” correlated with a different trait, conscientiousness. This correlation resulted in a significant positive linear relationship,  $r(43) = .369, p = .013$ . In relation to the central theme of leadership, even if one is not the “leader” of an extracurricular, he or she might adopt some form of leadership by becoming a spokesperson of the group when not attending meetings and speaking to non-members.

### Discussion

Regarding the first analysis, the data suggest that as individuals score higher on extraversion, they are more likely to report endorsing leadership characteristics. Extraverts may tend to embrace the position of a leader since this status requires enthusiasm and dominance, two characteristics of extraversion. Additionally, those who tend to rate their opinions as valued by others score high on extraversion. The results of this analysis may be due to extraverts' willingness to voice their beliefs and subsequently receive affirmation that others respect their opinions. Extraverts tend to be more dominant whereas introverts are more submissive. Introverts may not be willing to voice or fight for their opinions and therefore do not receive confirmation that others value their beliefs.

In addition to extraversion, the data suggest that highly agreeable individuals may be less likely to lead. In comparison, one who is antagonistic may prefer to lead. Judging from this tendency, the participants seem to characterize a leader as someone who is antagonistic, strong-willed, and driven, rather than someone who is agreeable, compromising, and a listener. In addition to the preference to lead, the lower the agreeableness score, the more likely the participants rate their opinions as the best. In comparing this result with the previous analysis, it appears that antagonism may be useful in predicting whether individuals believe they are always correct and are leaders. However, correlational research cannot infer causation. Therefore, future research might consider assessing the causal direction between antagonism and leadership.

In developing this research, it seemed necessary to include an analysis of extracurricular participation, since these groups typically foster leadership roles. As an aside, a question concerning whether one has been a leader of an extracurricular might help to clarify future research. Regarding extracurriculars at Skidmore, these groups tend to demand responsibility

and dependability from their participants. Therefore, being a member appears to require a high level of conscientiousness. However, conscientious people are also disciplined and cautious. It seems likely that these individuals would focus on a few activities and not branch out farther than their comfort levels.

This discrepancy calls for additional correlational research between leadership and conscientiousness. This Big Five trait encompasses a broad factor of personality and requires sub-analyses of its various components. Such analyses would help to examine whether cautiousness and dependability both correlate with leadership, or whether these sub-traits are too dissimilar to be included with conscientiousness when analyzing its correlations with leadership characteristics.

**References**

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The “big five” inventory—versions 4a and 54* (Tech. Report). Berkeley, CA: Institute of Personality Assessment and Research.