

Big Five Personality Traits

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Over the past 50 years, a consensus has emerged on the structure of personality around the five-factor model of personality (FFM) commonly known as the “Big Five.” There is general agreement among personality researchers that these five factors appear to capture important individual differences in the human personality. Based on the results of numerous factor analyses of traits from personality and adjective inventories, researchers have been able to categorize a substantial number of these traits into five primary personality factors: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness.

With the emergence of the Big Five model, there has been a resurgence of interest in the research of personality traits especially in the workplace context. The five-factor model appears to represent a robust taxonomy of personality and its structure has been replicated in numerous studies using a variety of measures of personality. The Big Five traits have been found to predict various criteria that are of interest to industrial and organizational psychologists including job performance and leadership.

The development of the Big Five model began in the 1940s with the creation of a novel personality measure by Raymond Cattell. Cattell’s model was based on an approach that used natural language to describe personality traits rather than psychological labels, which would eventually lead to his development of the *16 Personality Questionnaire* (16PF). In 1961, Ernest Tupes and Raymond Christal factor analyzed the personality data collected by Cattell, which resulted in five significant and stable personality factors. Since then, numerous personality researchers have validated, refined and extended the findings of Tupes and Christal. The validity of the five-factor model has been replicated across many different cultures and languages. A

substantial amount of research has found significant relationships between the Big Five traits and important outcomes. For example, relationships have been found with disparate criteria such as well-being, life expectancy, and academic achievement.

The Big Five Traits

Because the Big Five traits emerged from factor-analytic research, they are often referred to as factors. The five factors are characterized by the following personality attributes:

- *Neuroticism*: Emotionally unstable, sad, moody, anxious, irritable
- *Extraversion*: Social, outgoing, active, high-energy, excitement-seeking, enthusiastic, assertive, interactive, friendly
- *Openness to Experience*: Playful, curious, imaginative, creative, open-minded, novelty-seeking, visionary, unconventional
- *Agreeableness*: Cooperative, helpful, accommodating, trusting, compassionate, altruistic, steady, cooperative, tolerant, easy to get along with
- *Conscientiousness*: Purposeful, determined, organized, controlled, committed, achievement-oriented, reliable, self-disciplined.

Because the term “Neuroticism” may be considered by some to be pejorative in nature, it is frequently labeled as its opposite pole, *Emotional Stability*. Emotional Stability is characterized by the following attributes: calm, even-tempered, positive, resilient, deliberate, easy-going, regulated.

Measures of the Big Five Subtraits

One of the best-known personality measures of the Big Five traits is the *NEO Personality Inventory* (NEO-PI), which was developed by Paul Costa and Robert McCrae in 1983 with a revision in 1992 (the NEO PI-R). The NEO-PI is based on the five-factor model of personality

with the addition of six subtraits for each primary trait. The subtraits are groups of specific personality facets obtained through factor analysis (i.e., second-order factors) that underlie each of the primary five factors. For example, Extraversion has subtraits labeled as Warmth, Assertiveness and Excitement-Seeking. An individual with high scores on Extraversion is likely to have high scores on most of its subtraits, but not necessarily on all of them. For example, the individual may have high scores on the social subtraits of Extraversion (e.g. Warmth, Gregariousness), but not on the Excitement-Seeking subtrait.

For applied purposes, the information provided by the more specific subtraits (i.e., facets) of the NEO-PI is important. For example, both intellectual curiosity and aesthetic sensitivity are facets of Openness to Experience; however, intellectual curiosity is a better predictor of vocational interests, whereas aesthetic sensitivity is a better predictor of artistic interests. In personality measurement, the trade-off between broad personality factors and narrower, more specific subtraits is known as the *bandwidth* issue. The debate continues today – are broadly-defined personality traits better predictors of criteria such as job performance than the more narrowly-defined personality facets?

Research on the Big Five Traits

A large number of research studies have been conducted on the correlates of the specific Big Five traits and their relationship to the other factors in the model. For each Big Five trait, a summary of this research follows:

Neuroticism

Neuroticism (i.e., low Emotional Stability) has been found to be negatively related to self-esteem, self-efficacy, internal locus of control, benevolence and conformity. Positive correlations have been reported with the lack of motivation, poor goal setting, and hedonism.

Studies have shown that Neuroticism is related to drug and alcohol abuse, failure adjust to problems, and other mental health concerns. Neuroticism is unrelated to Agreeableness or Conscientiousness and has shown low negative correlations with Extraversion and Openness.

Extraversion

Extraversion has been found to be positively related to general well-being, positive attitudes, ability to meet challenges, satisfying social relationships, income, and self-confidence. Extraversion has demonstrated low negative correlations with Neuroticism, and low positive correlations with Openness to Experience.

Openness to Experience

Research has found that Openness to Experience is related to creativity, originality, curiosity, imagination, and unconventionality. Openness to Experience has demonstrated low correlations with Extraversion, and is unrelated to Neuroticism, Agreeableness and Conscientiousness.

Agreeableness

Agreeableness has been found to be related cooperation, helpfulness, and adjustment. Agreeableness demonstrates positive correlations with Extraversion and Conscientiousness and is negatively related to Neuroticism.

Conscientiousness

Conscientious demonstrates positive correlations with, job performance, career success and learning outcomes. Conscientiousness has been found to be negatively related to Neuroticism and Agreeableness, and it appears to be unrelated to the other factors.

Research on the Big Five Traits in the Workplace

The introduction of Big Five measures such as the NEO-PI into the workplace has spawned a great deal of research on the relationship between personality and job-related criteria. The Big Five traits have been found to predict both general job competencies and specific work behaviors. Research has found evidence of relationships between the Big Five traits and various criteria including job performance, work attitudes, motivation, job satisfaction, integrity, counterproductive work behaviors, teamwork, attendance, turnover, leadership potential, career choice, and training outcomes. For example, Extraversion has been found to be a valid predictor of performance in jobs that require social interactions such as sales positions. Additionally, Conscientiousness has shown the most promise as a predictor of job performance in most occupations.

To demonstrate their predictive power as composite personality scores, the Big Five traits have been mapped onto numerous job-related criteria. Various combinations of the Big Five traits have been shown to predict distinct criteria such as teamwork, organizational citizenship, goal setting, training performance, and turnover intention. For example, an aggregated measure comprised of Emotional Stability, Extraversion and Conscientiousness has been found to be positively related to leadership potential.

The Big Five Traits and Leadership

The emergence of the Big Five model was an important advance in the development of an organizing framework for the personality traits hypothesized to be important for successful leadership. Individually, four of the Big Five traits (i.e., Extraversion, Conscientiousness, Emotional Stability, and Openness) have been found to be positively related to leadership. The Big Five traits in combination have been found to be predictors of leadership emergence and

leadership effectiveness. However, because the correlations between the Big Five traits and criterion measures of leadership are typically found to be modest in size, questions remain about the true relationship between personality and leadership. Several hypotheses have attempted to explain why the relationship between the personality factors and leadership is a moderate one. One explanation involves measurement issues with the personality assessments. Because most Big Five personality inventories are self-report measures, their results may be adversely affected by motivational distortion (i.e., faking) on the part of the test-takers. Research evidence suggests that observer ratings of personality are better predictors of leadership effectiveness than are self-ratings. Therefore, the use of multi-rater personality measures may find more robust relationships between the Big Five traits and leadership.

General Factor of Personality

For measures of intelligence, the existence of a *g* factor has long been proposed to represent general mental ability. For the Big Five traits, a *p* factor has been proposed as a general factor of personality (GFP), which is analogous to the *g* factor in intelligence. Meta-analytic studies have confirmed that correlations between specific personality traits led to the emergence of a general factor of personality that appears to be universal across cultures. Research has demonstrated that GFP is predictive of general social proficiency and has been found to be related to leadership effectiveness. These findings suggest that individuals with high GFPs are more effective leaders.

More research is required to determine the extent that a general factor of personality based on the Big Five traits is related to intelligence. Such research could conceivably lead to the unification of the intelligence and personality factors into a single, related measure that would emphasize the relative strengths of each factor.

Theoretical Limitations of the Big Five Model

Although extensive empirical evidence has been provided for the Big Five model, there has been some criticism regarding the atheoretical approach taken in its development. The Big Five traits were derived using purely empirical methods (i.e., factor analysis) with little consideration of any underlying theory of personality. Historically, this method has generally been known as “dustbowl empiricism.” In addition to being atheoretical, the Big Five model has been criticized for ignoring lifespan personality development, which posits that one’s personality develops over time. In response to these criticisms, Paul Costa and Robert McCrae have proposed a Five-Factor Theory, which describes the five factors as “basic tendencies” and hypothesizes that they are innate, heritable, and universal personality traits. However, research in African and Asian cultures suggests that the Big Five factors do not fully represent the important traits in the structure of personality. In particular, the collectivist factor, which posits that some cultures are collectivist in nature as opposed to individualistic, is not included in the Five-Factor Theory. A possible explanation for this oversight is that the United States has an individualist culture and American researchers may have been unaware of this factor when developing the Big Five model. Recent research suggests that the development of a more fully realized hierarchy of personality factors would require a more detailed understanding of the cultural qualities of personality at the theoretical level.

Summary

Despite its limitations, the Big Five model represents the best attempt to date at creating a universal structure of the human personality. With the introduction of the Big Five traits into the workplace, personality assessment has become one of the more common methods for employee

selection and promotion. In the measurement of job performance, the Big Five model has made important contributions with its ability to provide incremental validity beyond the contributions of cognitive ability (i.e., intelligence) measures. Although personality and intelligence are usually considered to be separate constructs, they independently can be predictive of job-related criteria. For example, when measures of the Big Five traits are included in selection and promotion procedures, they can improve the predictive ability of the processes. Big Five inventories can provide measures of attributes that are important for successful job performance but not captured by cognitive ability tests (e.g., energy, cooperation and organization), which adds incremental predictive validity to the process. Additionally, Big Five measures do not typically demonstrate adverse impact on protected classes as compared to cognitive ability measures.

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Further Readings

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