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## **Big Five Taxonomy of Personality**

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Personality traits are characteristic behaviors, thoughts, and feelings of an individual that tend to occur across diverse situations and are relatively stable over time. Given this broad definition, literally thousands of personality traits can be identified. For the better part of 100 years, personality researchers have attempted to create a standard taxonomy, or organizing structure, of personality traits. Although some disagreement remains, the Big Five taxonomy is currently the dominant perspective on the organization of personality traits. The Big Five traits are identified in the following text, and trait descriptive terms are provided for each:

1. **Neuroticism:** Anxious, temperamental, nervous, moody versus confident, relaxed, unexcitable
2. **Extraversion:** Sociable, energetic, active, assertive versus shy, reserved, withdrawn, unadventurous
3. **Openness:** Intellectual, innovative, artistic, complex versus unimaginative, simple, unsophisticated
4. **Agreeableness:** Trusting, trustful, helpful, generous versus cold, harsh, rude, unsympathetic
5. **Conscientiousness:** Organized, neat, thorough, systematic, efficient versus careless, undependable, haphazard, sloppy

The term *Big Five* was coined by Lewis R. Goldberg in 1981 and was meant to signify that these traits are broad in nature. Generally, the Big Five trait taxonomy is conceptualized as hierarchical, such that the Big Five traits are the broadest level. Within each of the Big Five traits, narrower trait dimensions can be defined, representing the second level of the hierarchy. As one progresses to lower points in the hierarchy, increasingly narrow trait dimensions can be identified. The lowest level of the taxonomy consists of specific behaviors.

### Origins of the Big Five

Although human curiosity and examination of personality traits dates back to the ancient Greeks, the history of the Big Five begins with the work of Gordon W. Allport and Henry S. Odbert based on the lexical hypothesis. The lexical hypothesis suggests that important aspects of human behavior will be encoded into language; and the more important an aspect is, the more likely it will be encoded as a single word. Based on this hypothesis, Allport and Odbert turned to the dictionary to identify the basic elements of personality. They identified almost 18,000 personality related words, and organized these terms into four categories:

1. personal traits,
2. temporary moods,
3. evaluative terms (such as excellent or irritating), and
4. miscellaneous.

Although Allport and Odbert stopped with the identification of these personality descriptive terms, Raymond B. Cattell sought to bring order to them. Cattell began his work with the set of nearly 4,500 words Allport and Odbert placed in the personal trait category. As this set of terms was far too large to investigate empirically, Cattell conceptually combined the terms into 171 clusters. Still too numerous to work with given that his computations needed to be done by hand, he eventually worked his way down

to a set of 35 clusters. He was then able to collect data on these clusters and conduct a factor analysis. Finally, he arrived at a set of 12 factors, but many believe that he overfactored the data.

Based on Cattell's work, two factor-analytic studies provided a foundation for what would eventually become the Big Five. Using 22 of Cattell's 35 clusters, Donald W. Fiske in 1949 and Ernest C. Tupes and Raymond E. Christal (1961/1992) found five similar factors when scores from the 22 clusters were factor analyzed. The Tupes and Christal findings were particularly interesting in that they found the five factors within each of eight samples that differed in many ways: education (high school graduates, college students, graduate students), type of rating (self-ratings, peer ratings), and among the peer ratings, length of acquaintanceship (from 3 days to 1 year or more). The five factors identified by Fiske and by Tupes and Christal were defined in a manner that is similar to the way in which the Big Five are defined today.

Recognizing some of the limitations in Cattell's conceptual sorting of the trait terms, Warren T. Norman went back to the beginning and developed a new list of trait descriptive terms from the dictionary. Norman, like Allport and Odbert before him, sorted his set of terms into broad categories and focused his work on those terms that fell into the category he labeled biophysical traits. After doing considerable work to reduce the set of terms in this category to roughly 1,550 terms, he set out to organize them. First, the terms were sorted into the endpoints of the five factors identified by Tupes and Christal, giving him 10 groups of words. He then sorted each of the 10 groups of words, which resulted in 75 groups of words. A factor analysis of scores on these groups produced the expected five factors.

To this point, much of the research on the five factors had been directly related to the initial work of Cattell. Recognizing this fact, Goldberg (1990) conducted studies on trait terms that were common in the English language, finding the same five-factor structure. Given that these words were selected on the basis of common usage and not on the variables identified by Cattell, these studies demonstrated that the five factors were general and not specific to Cattell's variables. The Big Five was born.

To date, considerable research has been conducted to establish the Big Five. Numerous questionnaire measures of the Big Five traits have been developed, suggesting that the factors are not unique to the study of trait descriptive terms. The five factors have been found in a wide variety of cultures from across the globe in both adjective and questionnaire measures; and evidence suggests that they are, at least in part, heritable.

### **Lingering Taxonomic Issues**

Although the Big Five is the dominant perspective on the organization of personality traits, there remain differences of opinion regarding some aspects of the taxonomy. Hans Eysenck (1992) and Auke Tellegen, for example, have argued that the highest level of the taxonomy should be represented by three rather than five traits. Eysenck has vigorously defended his position that the highest level of the taxonomy should be represented by the traits of extraversion, neuroticism, and psychoticism, a perspective that some have referred to as the *Even Bigger Three*. Although extraversion and neuroticism are defined by Eysenck in a manner that is consistent with the Big Five, he argues that psychoticism is made up of lower levels of conscientiousness and agreeableness. Tellegen has taken a position similar to Eysenck's, arguing that the

three traits of positive emotionality (extraversion and part of conscientiousness), negative emotionality (neuroticism and low agreeableness), and constraint (part of conscientiousness and low openness) should dominate the highest levels of the trait taxonomy.

Some debate also remains about the names and definitions of some of the Big Five traits themselves. For example, the agreeableness dimension has also been referred to as love, likability, and nurturance, each of which conveys a somewhat different interpretation. Oliver John has argued, in fact, that the term *agreeableness* is somewhat misleading, suggesting a submissive nature that would actually be located at the lower end of the extraversion trait. Although the term *conscientiousness* seems to be well accepted at this point in time, this trait has also been referred to by various authors as dependability, work, will to achieve, responsibility, and constraint. Perhaps the most controversy, however, has surrounded the nature of the openness dimension. In addition to openness, this dimension has been referred to as culture, intellect, and intellectance. The controversy stems from the apparent incorporation of aspects of intelligence into the factor. For example, in Goldberg's work, the term *intelligent* was consistently an indicator of this dimension. Some researchers have been highly critical of the association of this dimension with intelligence, fearing that the dimension will be considered synonymous with intelligence as measured by IQ tests when, in fact, the dimension is much broader, encompassing artistic and creative aspects, a willingness to try new things, and a sense of open-mindedness.

It seems that much of the controversy surrounding the naming of the five dimensions is a result of their broad nature. Some clarity might be brought to the issue if there were to be consensus regarding the next lowest level of the trait hierarchy. Scant work, however, has been done to identify and define the traits at the level below the five dimensions. There is some consensus among industrial/organizational (I/O) researchers interested in personality that the trait of conscientiousness can be broken down into two dimensions of achievement striving and dependability. Also, Robert and Joyce Hogan have argued that extraversion can be split into sociability and ambition. It seems clear that research focusing explicitly on this level of the hierarchy is warranted.

One problem with establishing the lower levels of the trait hierarchy is that the hierarchy is likely to be reticulated. That is, many lower-level traits are liable to relate to more than one trait at the higher levels. Using studies of adjectives as a source of examples, some researchers have associated warmth with extraversion whereas others have associated it with agreeableness. Likewise, the characteristic of impulsiveness has been associated with neuroticism, extraversion, and conscientiousness by various researchers. These cross-associations of traits at one level with traits at higher levels will make the process of achieving consensus at levels of traits below the Big Five difficult, but it would seem to be a worthwhile endeavor.

It is important to recognize that the Big Five taxonomy is simply descriptive and is not a theory. As such, it does not explain why people behave in the ways they do; it is only a system for classifying behavioral tendencies. Although many have criticized the Big Five because it is not theoretical, others have argued that the taxonomy is necessary before theory can be developed. To this end, Paul Costa and Robert McCrea have proposed a five-factor theory of personality. Although the theory is broad in scope, at its core it suggests that the Big Five are a result of biological processes and influence people's characteristic adaptations—the ways they think, feel, and behave in their

unique environments.

## **The Big Five and Industrial/Organizational Psychology**

The emergence of the Big Five through the 1980s was a tremendous benefit to both I/O-related research and the application of personality testing in organizational contexts. Although multitrait personality inventories began to emerge in the 1930s, the use of personality testing in applied settings was largely haphazard and not theoretically grounded before the emergence of the Big Five. Reviews of the criterion-related validities of personality scales conducted in the 1950s suggested little support for using personality tests for predicting job performance. As noted by Robert Guion and Richard Gottier in 1965, the field seemed to be dominated by a *broadside* approach where every available personality test score was correlated with all available performance measures. Although many of the observed correlations were small, Guion and Gottier asserted that many of these would be expected, based on theory, to be small.

The emergence of the Big Five allowed researchers and practitioners to select traits (and scales representing those traits) based on a conceptual mapping of the traits to the performance dimension. As a result, numerous meta-analyses on the relationships between personality test scores and measures of work performance have resulted in positive findings regarding the criterion-related validities of personality tests. These meta-analyses have generally shown that conscientiousness is related to almost all job-related criteria (i.e., performance, training, attendance, etc.) across almost all jobs. Other Big Five dimensions have also proven important predictors but not as universally as conscientiousness. For example, extraversion has been shown to be related to performance in managerial and sales jobs, and openness has been related to training performance.

Having established the usefulness of personality testing, many researchers are exploring factors that may strengthen or weaken the personality–performance relationship. In 1993, for example, Murray Barrick and Michael Mount examined the extent to which the degree of autonomy given to employees would moderate the relationship between conscientiousness and job performance. They found that in autonomous situations (i.e., where workers had more control over their activities), the relationship between conscientiousness and job performance was stronger than in situations where workers were given less autonomy.

One contentious issue has been whether practitioners should use broad or narrow traits to predict performance; that is, whether to focus on the Big Five or on more narrow traits at some point lower in the hierarchy. Although authors on both sides of this issue have made potent arguments for their perspectives, it would appear that the solution is to attempt to match the breadth of the predictor with that of the criterion.

When predicting broad criteria, it appears optimal to use broad traits such as the Big Five. In contrast, when more narrow criteria are of interest, narrower trait constructs are preferred.

## **Conclusions**

The Big Five trait taxonomy is the dominant organizing structure for personality traits. Although the traits emerged from the lexical approach to personality, the structure is found with questionnaire measures and identified in cultures around the world. The

impact of the Big Five on the role of personality in I/O research and application has been immense, allowing for theoretically guided predictor-criterion mapping. At present, there is a great deal of interest in personality within the field of I/O psychology, an interest in no small part a result of the Big Five taxonomy of personality traits.

- traits
- personality tests
- extraversion
- agreeableness
- neuroticism
- personality
- criterion-related validity

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See also

- [Factor Analysis](#)
- [Individual Differences](#)
- [Personality](#)
- [Personality Assessment](#)

### Further Reading

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