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### Big Five Personality Dimensions

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#### Big Five Personality Dimensions

#### **Abstract**

People differ from one another in many ways, and these individual differences matter for management theory and practice. The Big Five personality traits (also called the five-factor model of personality) describe five of the most crucial differences between people. An enormous body of research has conclusively established the importance of these five personality dimensions to major topics in management, such as job performance, motivation, leadership, teamwork, entrepreneurship, and strategy. This entry discusses the meaning of the Big Five traits, briefly reviews their history, and highlights their importance for a variety of management topics.

#### **Disciplines**

Business Administration, Management, and Operations | Business and Corporate Communications | Finance and Financial Management | Organizational Behavior and Theory | Performance Management | Strategic Management Policy

#### Comments

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# BIG FIVE PERSONALITY DIMENSIONS

People differ from one another in many ways, and these individual differences matter for management theory and practice. The Big Five personality traits (also called the five-factor model of personality) describe five of the most crucial differences between people. An enormous body of research has conclusively established the importance of these five personality dimensions to major topics in management, such as job performance, motivation, leadership, teamwork, entrepreneurship, and strategy. This entry discusses the meaning of the Big Five traits, briefly reviews their history, and highlights their importance for a variety of management topics.

#### **Fundamentals**

Personality traits are characteristic patterns of thoughts, feelings, and behaviors. They summarize how people tend to behave across diverse situations. Traits differ from momentary states (e.g., getting upset or being elated) in that they are more stable and enduring tendencies. They highlight both the ways people are similar to others and the ways in which they differ.

The Big Five personality traits are *extraversion*, *agreeableness*, *conscientiousness*, *emotional stability* (also labeled *neuroticism* when reverse scaled), and *openness to experience* (or *intellect*). Each of the Big Five traits is a continuum along which an individual's characteristic tendency is located (e.g., for extraversion, the continuum ranges from extreme

introversion to extreme extraversion). Furthermore, these broad traits encompass a wide range of narrower traits or "facets"; that is, each Big Five trait consists of other traits that fall within its domain. The exact nature of these facets has yet to be established for most of the Big Five, but the facet structure of conscientiousness is fairly well understood.

The trait of *extraversion* distinguishes between people who are described by terms such as talkative, energetic, and bold (on the high end of the continuum) and those who are instead described by terms such as *quiet*, *shy*, and *withdrawn*. People who score higher on extraversion are more likely to feel comfortable around other people and start conversations, and they don't mind being the center of attention. People who score lower on this trait tend to talk less, keep in the background, and do not like to draw attention to themselves.

The trait of *agreeableness* distinguishes between people who are described by terms such as cooperative, sympathetic, and kind (on the high end of the continuum) and those who are instead described by terms such as *cold*, *rude*, and *unsympathetic*. People who score higher on agreeableness tend to respect others, treat them as equals, and are concerned about them. People who score lower feel less concern for others, are not very interested in their problems, and are instead focused on their own gain, are demanding, and tend to contradict others.

The trait of conscientiousness distinguishes between people who are described by terms such as responsible, efficient, organized, and thorough (on the high end of the continuum) and those who are instead described as disorganized, careless, sloppy, and inefficient. People who score higher on conscientiousness tend to be prepared, pay attention to details, and make and follow schedules. People who score lower are more likely to leave things unfinished, waste time, and need a push to get started on their work. Numerous studies have researched the major components underlying conscientiousness (the facets) and these are now fairly well understood. The four main facets are *industriousness*, *reliability*, orderliness, and impulse control. Several studies have also found a fifth facet called conventionality. While each of these facets relates to both the broader conscientiousness trait, as well as the other facets, they sometimes predict outcomes differently.

The trait of *emotional stability* (or *neuroticism*) distinguishes between people who are described

by terms such as relaxed and unemotional (on the high end of the continuum for emotional stability or low end for neuroticism) and those who are instead described by terms such as nervous, moody, insecure, and irritable. People who score higher on emotional stability tend to feel comfortable with themselves, seldom feel blue, remain calm under pressure, and are less likely to get frustrated about things. People who score lower (i.e., who score higher on neuroticism) tend to worry about things, become stressed out more easily, and get upset and bothered by events.

The trait of *openness to experience* (or *intellect*) distinguishes between people who are described by terms such as imaginative, philosophical, creative, and deep (on the high end of the continuum) and those who are instead described by terms such as *uninquisitive*, *unimaginative*, *unsophisticated*, and *shallow*. People who score higher on openness to experience tend to enjoy thinking about things, such as hearing about new ideas and getting excited by them, tend to have larger vocabularies, and value artistic expression. People who score lower tend not to be interested in abstract or theoretical ideas, avoid philosophical discussions, are less interested in the deeper meaning behind things, and care less about art.

Although the Big Five traits are discussed independently, and clearly have independent effects on various outcomes, it is well known that they are correlated with one another. For example, there is strong meta-analytic evidence that emotional stability is positively correlated with extraversion, agreeableness, and conscientiousness; extraversion is positively correlated with openness to experience; and conscientiousness is positive correlated with agreeableness.

#### Origins and Boundary Conditions

The question of what is responsible for personality differences has attracted a fair amount of attention. Studies of identical and fraternal twins have conclusively established that genetics are a key part of the answer, with genetic differences accounting for roughly 50% of the variance in each of the Big Five traits. For example, differences in extraversion are known to relate to genes related to the dopamine system. Other work has found that differences in extraversion and emotional stability are correlated with the thickness of specific prefrontal cortex regions of the brain.

Three topics that relate to the boundary conditions and domain of the Big Five are situational strength, cross-cultural validity, and temporal stability. The effects of personality traits are theorized to depend on the strength of the situational pressures acting on the individual in any given context. Scholars have distinguished between strong and weak situations. In strong situations, the expected behavior is generally understood, and deviations from this behavior may have significant negative consequences. In such situations, personality differences matter less. In weak situations, individuals have much greater discretion to decide among behavioral alternatives, because there is no clear expectation regarding appropriate behaviors, and personality differences matter more.

The five-factor model of personality has been found to be valid across an extensive variety of cultures. Although there have been a few studies that have found either fewer or more than five traits and there is at least some evidence that the meaning of the five traits may vary a bit across cultures, these findings are exceptions to what is typically found. Overall, there is clear and strong evidence for the international validity and generalizability of the Big Five.

Personality traits demonstrate relative stability (indeed, some stability is inherent in the definition of personality) but do change over the longer time span of several years. Furthermore, while specific individuals may change in either direction on any of the traits, there are clear trends in the changes among personality over time as people age. Individuals typically increase in conscientiousness, agreeableness, and emotional stability and decrease in extraversion and openness to experience (changes described as reflecting a "maturity principle").

#### Other Frameworks and Traits

Other frameworks have been proposed to describe the important ways that people differ from one another at a high level. One of the most popular of these historically is the Myers-Briggs Personality Type Indicator, which contained four dimensions that categorized people into one of 16 different personality "types." Research has shown that the four dimensions of this conceptualization are directly related to four of the traits of the Big Five, but that the important trait of emotional stability is missing. While this model has been used in research on

personality in the past and has been used extensively for consulting and training purposes (such as helping people appreciate diversity), it has been severely criticized by personality scholars and is no longer seen as an adequate representation of personality.

Perhaps the most viable challenger to the Big Five is the HEXACO model, which includes the Big Five but adds a sixth dimension called *honesty/humility*. This sixth dimension is reflected in adjectives such as honest, modest, and sincere versus greedy, boastful, and sly. Although evidence for this Big Six model of personality is growing, it is too early to tell whether it will become a serious rival to the Big Five model.

Regarding the domain of the Big Five, it is important to recognize that these do not exhaust the ways that people differ; rather, they summarize the major dimensions of difference. A wide variety of other, more targeted personality traits has been shown to relate to important management concerns. Several of the more prominent of these are self-monitoring (which is related to extraversion), core selfevaluations (part of which is emotional stability), and need for cognition (which is related to openness to experience, conscientiousness, and emotional stability). While these and other individual differences are typically related to Big Five traits, they are not completely subsumed by them and are distinct predictors of variables of interest to management scholars.

#### **Evolution**

The history of the Big Five begins with attempts in the first half of the 20th century to reduce the many thousands of descriptive terms that differentiate people to a smaller set using the statistical method of factor analysis. For example, Gordon Allport and H. S. Odbert identified 17,953 such terms in the English language from a large dictionary. It was recognized that many of these terms were related or synonymous, but it was unclear how many dimensions were needed to represent the major differences. While early analyses produced a somewhat large number of factors, subsequent reanalyses of these data discovered five factors. By the late 1960s, five different investigations had found strong evidence that five factors described personality at a broad level.

Research on personality then entered a lull because of a highly influential critique of trait psychology, which shifted the focus of researchers toward behavioral approaches and situational forces. In the subsequent two decades, convincing refutations of the critiques on trait psychology were published. By the latter part of the 1980s, an almost overwhelming body of evidence in support of the Big Five personality traits emerged, and its utility for advancing the understanding of the effects of personality on management topics was widely recognized.

Around that time, new scales designed specifically to measure the Big Five were developed. Two that have been extensively used are the copyrighted measures called the NEO-PI (which includes 240 items [i.e., questions] that measure six facets of each of the Big Five traits) and the shortened version of that measure called the NEO-FFI (which includes 60 items). Other published measures were subsequently developed, including widely used measures such as the Big Five Inventory by Oliver John and colleagues (44 items) and Gerard Saucier's Mini-Markers (40 items). More recently, an extensive set of public domain measures have been developed and validated and are available from the International Personality Item Pool; these are increasingly being used by academic researchers.

#### **Importance**

The importance of the Big Five traits for personality research is that it identifies the primary differences for researchers to investigate and enables researchers to cumulate findings on traits whose overlap was previously unrecognized. This has enabled scholars to achieve a deeper understanding of the effects of personality traits on management topics.

#### **Iob Performance**

The most established findings concern the impact of the Big Five personality traits on overall job performance. While it has long been known that individual differences in general mental ability (i.e., intelligence or IQ) predict job performance across essentially all occupations and types of work, it has only been since the advent of the Big Five that researchers had the comprehensive framework of personality necessary to investigate the role of personality. The most consistent finding is that conscientiousness is the Big Five personality trait that best predicts additional variance in job performance across all types of work (with moderately sized effects even after controlling for intelligence). Several meta-analyses

have also found that emotional stability affects job performance, although the effect sizes are typically smaller than those for conscientiousness.

In addition to these, extraversion has been found to affect job performance for jobs that involve interpersonal skills (such as sales and managerial positions), and some studies have found that agreeableness and openness to experience predict performance in customer service jobs (although most have found these last two traits to have no relationship to overall job performance). The positive impact of conscientiousness and emotional stability on performance appears to be partially due to greater motivation, as both of these traits have been found to consistently relate to multiple aspects of performance motivation (e.g., goal setting).

When one breaks overall job performance into task performance and contextual performance (or organizational citizenship behaviors [OCBs])—that is, those things not explicitly required to fulfill job requirements but that significantly improve overall organizational functioning), then the impact of the Big Five personality traits changes somewhat. In particular, agreeableness has been shown to relate to "interpersonal facilitation" and is a powerful predictor of extra-role behavior. A recent meta-analysis has found that each of the Big Five traits predicts OCBs and, furthermore, that emotional stability, openness to experience, and extraversion predict OCBs above and beyond the effects of conscientiousness and agreeableness.

While the above research has addressed main effects of the Big Five traits on job performance, there is also a small amount of work that has tested interaction effects between different pairs of the Big Five traits on performance. For example, research has shown that agreeableness and extraversion can moderate the effects of conscientiousness in jobs requiring cooperative and interpersonal interactions with others, such that the effects of higher conscientiousness are stronger for people who score higher on agreeableness or extraversion. These and similar results are intriguing but need to be replicated by future studies.

#### Other Management Topics

The Big Five are related not only to job performance but also to job satisfaction, turnover, and counterproductive work behaviors. Meta-analytic results have found that emotional stability, extraversion, and conscientiousness are each associated with higher levels of job satisfaction. Furthermore, meta-analytic evidence has found that each of the Big Five is related to reduced turnover. Finally, both conscientiousness and agreeableness have been shown to be negatively related to deviant behaviors such as theft, substance abuse, and disciplinary problems.

A variety of research has examined the role that the Big Five traits play in leadership. Research suggests that people who score higher on extraversion have a greater motivation to become leaders. Furthermore, meta-analytic results have found that extraversion, emotional stability, conscientiousness, and openness to experience each predict leader emergence and effectiveness, and that extraversion has a sizable relationship with transformational leadership behaviors.

A considerable number of studies have examined the role of the Big Five on teamwork and team effectiveness. Unlike research that considers individual-level personality and individual-level outcomes, these studies examine the role of personality at the team level, typically operationalized as the average, minimum, or variance of the team members' individual scores. Meta-analytic results across several studies suggest that team agreeableness and team conscientiousness are the most important traits and that both of these affect team process and performance.

The Big Five personality traits have also been found to play a significant role in entrepreneurship. One meta-analysis reported that entrepreneurs differ from nonentrepreneur managers in being higher on conscientiousness, emotional stability, and openness to experience and lower on agreeableness. Meta-analytic evidence also shows that four of the Big Five (all but agreeableness) are positively related to entrepreneurial intentions and entrepreneurial performance.

Although few studies have examined the roles of the Big Five traits on business strategy and top management team dynamics, there is suggestive evidence that they may play an important role. For example, one suggestive study found that each of the Big Five traits was associated with one or more aspects of top management team dynamics. Another study of CEO personality in small-to-medium Indian firms found that each of the Big Five traits was associated with strategic flexibility (the ability to adapt to environmental changes), which in turn was associated with firm performance.

Given the extensive amount of research showing that the Big Five personality traits affect a broad range of management topics, it seems likely that future research will continue to discover the ways that personality is important to management and organizational behavior.

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See also Emotional and Social Intelligence; Human Capital Theory; Individual Values; Locus of Control; Psychological Type and Problem-Solving Styles; Type A Personality Theory

#### **Further Readings**

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# BOUNDED RATIONALITY AND SATISFICING (BEHAVIORAL DECISION-MAKING MODEL)

The last few decades have witnessed greatly enhanced interest in behavioral decision theory. Unlike traditional decision theory, which is normative or prescriptive and seeks to find an optimal solution, behavioral decision theory (while it yields important practical implications) is inherently descriptive, seeking to understand how people actually make decisions. Long considered to be a fringe discipline, and perhaps simply a pesky nuisance to those advocating "economic decision making," behavioral decision theory has emerged as an important and promising domain of research and practice. Two behavioral decision theorists-Herbert Simon and Daniel Kahneman—neither of them economists—won the Nobel Prize in Economics for their work. Further, Cass Sunstein, a leading writer on behavioral decision theory and an advocate of using "paternalistic intervention" to influence decision making, was appointed by President Obama to serve as administrator of the White House Office of Information and Regulatory Affairs. In that role, his views have drawn both applause and condemnation. Popular books such as Thaler and Sunstein's *Nudge*, Ariely's Predictably Irrational: The Hidden Forces That Shape Our Decisions and Kahneman's Thinking, Fast and Slow have introduced these issues to a broader audience. Behavioral decision theory has been used to offer novel insights into disparate issues such as terrorism futures, road rage, whether to punt, bullet selection, divorce, and organ donation, as well as many management topics. This entry considers (a) rationality and its limits; (b) consequences of such bounds on rationality; (c) the roles of automatic information processing; (d) the relative merits of clinical, actuarial, and clinical synthesis approaches to decision making; (e) controversies relating to paternalistic intervention; and (f) the prospects of statistical groups and prediction markets.

#### **Fundamentals**

#### Rationality and Its Limits

In his 1947 book, *Administrative Behavior*, Herbert Simon wrote that decision making is the

