

CHAPTER 5

Leader Traits and Attributes

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The concept of leader traits and attributes is indeed an old one, predating the scientific study of leadership and reaching back into antiquity, across several early civilizations (Bass, 1990; Zaccaro, in press). For example, in Chinese literature from the 6th century B.C., Lao-tzu described the qualities of effective leaders (Hieder, 1985). The wise leader, according to Lao-tzu, was to be selfless, hardworking, honest, able to time the appropriateness of actions, fair in handling conflict, and able to “empower” others (to use a more current vernacular). Early and medieval mythology (e.g., Homer’s *Iliad* and *Odyssey*; Alfred, Lord Tennyson’s *Idylls of the King*) focused on the attributes of heroes, whereas biblical writing emphasized wisdom and service to others as leadership qualities. Plato’s *Republic* (1960) emphasized that in the ideal nation-state, effective leaders used reasoning capacities and wisdom to lead others. He offered a lifelong “assessment plan” to help select such leaders (the first leader selection program?). His student Aristotle argued in *Politics* (1900) that leaders were to help others seek virtue; they would do so by themselves being virtuous. He offered a plan for educating future governors (the first leader development program?). Niccolò Machiavelli, in *The Prince*

(1513/1554), defined power and the ability of leaders to understand social situations and to manipulate them in the practice of leadership as key leader attributes. Contrary to Aristotle, Machiavelli suggested slyness as a leader attribute, prescribing that leaders use less than virtuous means of gaining power and social legitimacy if more virtuous means were inadequate. Bass (1990) noted in his review that notions about leader qualities could be found in early Egyptian, Babylonian, Asian, and Icelandic sagas. Wondering about and identifying the qualities of the effective leader, the great hero, or the wise monarch, then, preoccupied the earliest thinkers and storytellers.

The scientific modeling of this question perhaps began with Galton (1869), who examined the correlated status of leaders and geniuses across generations. He defined extraordinary intelligence as a key leader attribute and argued that such leader qualities were inherited, not developed. He also proposed eugenics, which relied on selective mating to produce individuals with the best combination of leadership qualities. Terman (1904) produced the first empirical study of leadership, examining the qualities that differentiated leaders from nonleaders in schoolchildren. He reported such attributes as verbal fluency, intelligence, low emotionality, daring, congeniality, goodness, and liveliness as characterizing youthful leaders. Similar studies burgeoned after Terman's (see Stogdill, 1948, for a review), forming the initial empirical backdrop for trait research.

These early writings from antiquity to the first part of the 20th century attest to the enduring and compelling notions that leaders have particular qualities distinguishing them from nonleaders, and that these qualities can be identified and assessed. However, beginning with Stogdill (1948), who stated in an oft-cited quotation, "A person does not become a leader by virtue of the possession of some combination of traits" (p. 64), researchers began to perceive leader trait models as having low utility for explaining leadership emergence and effectiveness. A survey of textbooks in industrial/organizational and social psychology that appeared after Stogdill's work points to the demise of trait-based leadership theories. Witness the following quotations:

If there is a general trait of leadership that plays a part in all situations it is relatively unimportant in determining an individual's success as a leader. To a considerable extent the manifestation of leadership is determined by the social situation. Under one set of circumstances an individual will be a good leader and under others he will be a poor one. (Ghiselli & Brown, 1955, p. 471)

[The trait method] does not provide the psychologist with much insight into the basic dynamics of the leadership process. (Blum & Naylor, 1956, p. 420)

Like much early research in the behavioral sciences, the initial approach to leadership was to compare individuals, in this case to explore how leaders differ from nonleaders. This tactic is generally acknowledged to have been premature. Few stable differences were found. (Sercov & Backman, 1974, p. 343)

[There is] little or no connection between personality traits and leader effectiveness. (Muchinsky, 1983, p. 403)

The conclusion . . . that leaders do not differ from followers in clear and easily recognized ways, remains valid. (Baron & Byrne, 1987, p. 405)

More recently, the trait, or individual difference, approach to leadership has regained some prominence. Some of the problems and shortcomings that plagued its earlier ascendant period, however, still exist to limit the potential reach of such models. This chapter will examine the recent research on leader attributes and will provide a set of propositions and conceptual prescriptions to guide future research. We begin by defining the notion of “trait” as it applies to the leadership domain, and we provide a somewhat brief history of the trait model, detailing milestones and the reasons for its initial demise and its recent resurgence. We then summarize recent empirical findings and conclude with some propositions and prescriptions.

The Meaning of “Trait”

The term *trait* has been the source of considerable ambiguity and confusion in the literature, referring sometimes and variously to personality, temperaments, dispositions, and abilities, as well as to any enduring qualities of the individual, including physical and demographic attributes. Furthermore, its utility for explaining behavioral variance has been severely challenged by Mischel (1968), although this view has been eclipsed by more recent arguments (Kenrick & Funder, 1988). Indeed, the rise, fall, and resurgence of leader trait perspectives roughly parallel the popularity (or lack thereof) of individual difference research in general psychology, as well as in industrial and organizational psychology (see Hough & Schneider, 1996). During this cycle, the notion of traits, as well as their relationships to behavior and performance, has evolved to reflect greater conceptual sophistication.

Allport (1961) defined a trait as a “neuropsychic structure having the capacity to render many stimuli functionally equivalent, and to initiate and guide equivalent (meaningfully consistent) forms of adaptive and expressive behavior.” (p. 347)

This perspective highlights the notion that traits refer to stable or consistent patterns of behavior that are relatively immune to situational contingencies—individuals with certain traits denoting particular behavioral predispositions would react in similar ways across a variety of situations having functionally diverse behavioral requirements. Indeed, it was this cross-situational consistency that was challenged by Mischel (1968). Kenrick and Funder (1988), while supporting the utility of trait concepts, noted that the influence of situations, as well as of person-by-situation interactions, “must be explicitly dealt with before we can predict from trait measures” (p. 31).

For the purposes of this chapter, we define *leader traits* as relatively stable and coherent integrations of personal characteristics that foster a consistent pattern of leadership performance across a variety of group and organizational situations. These characteristics reflect a range of stable individual differences, including personality, temperament, motives, cognitive abilities, skills, and expertise.

As we assert later in this chapter, effective and successful leaders do have qualities and attributes that are not generally possessed by nonleaders. This is not to argue that the situation has no bearing on leader behavior—we will strongly suggest otherwise. Likewise, some individuals can be successful as leaders in some situations but not in others. We would argue, however, that such success is a function of narrowly prescriptive leadership contexts that respond to a specific set of leader competencies, such as lower-level or direct line supervision (Jacobs & Jaques, 1987b; Zaccaro, 2001). As leadership situations become more complex and varied, we suspect that personal attributes play a more substantial role in predicting success.

The Rise, Fall, and Rise of Leader Trait Research

The roots of leader trait research were planted in the functionalism that characterized early American psychology, in the applied focus of some early American psychologists, and especially in the mental testing movement. Functionalism reflected an emphasis on the “typical operations of consciousness under actual conditions” (Angell, 1907, p. 61), in which the focus was on discerning the purposive nature of behavior. This focus was fertile ground for the emergence of applied psychology and yielded the first textbook in industrial/organizational psychology (Munsterberg, 1913). This book had several sections on personnel selection and identifying the qualities of best workers in various work domains, but it contained nothing on the processes and characteristics of effective leaders.

Functionalism also facilitated a growing interest in mental testing (Cattell, 1890) to identify individual differences that contribute to performance variability. The early focus in mental testing was on the identification of differences in intelligence, following from the work of Goddard (1911) and Terman (1916). The first association of this testing movement with questions of leadership came in the development of mental ability tests for the U.S. Army in World War I. Robert Yerkes, who was one of several early psychologists in charge of this effort, wrote in a letter to the army surgeon general that one of the purposes of the mental ability exams was “to assist in selecting the most competent men for special training and responsible positions” (Hothersall, 1984, p. 323, citing Yerkes, 1921, p. 19). Thus, by the second decade of the 20th century, psychologists had begun to associate certain individual differences, in particular intelligence and mental ability, with high work performance in positions of authority.

The next three decades saw a burgeoning of research focusing on identifying those qualities that distinguish leaders from nonleaders. Bird (1940), Jenkins (1947), and Stogdill (1948) published early reviews of this research. The studies

summarized in these reviews reflected the use of six primary approaches methods (Stogdill, 1948, pp. 36–38): (a) observation of behavior in group situations that afforded leader emergence, (b) sociometric choices by peers, (c) nominations by qualified observers and raters, (d) selection of individuals into leadership positions, (e) analysis of biographical data and case histories of leaders and nonleaders, and (f) interviews with business executives and professionals to specify leader characteristics. The studies cited in these reviews were conducted across a range of age groups, from preschool to adulthood, and across many types of organizations.

Several observations emerge from an examination of the various early reviews of individual differences that were associated with leadership. First, early researchers investigated a wide range of individual difference. Bird (1940) listed 79 leader qualities! Bass (1990) placed Stogdill's 32 attributes into six categories: physical characteristics, social background, intelligence and ability, personality, task-related characteristics, and social characteristics. This diversity of attributes indicates that leadership researchers in this early period focused more on descriptive research, and less on conceptual models that defined leadership and hypothesized associations between leadership concepts and particular leader attributes. The result was an atheoretical miasma of attribute–leadership associations that could not be sustained consistently across different leadership situations.

Also problematic was the fact that the methods by which data were observed or collected were limited and confounded by possible errors and biases such as halo effects, variable misspecification, leniency, measure unreliability, and social desirability (Gibb, 1954). Finally, the leadership situations and methods of leader identification were so diverse as to overwhelm the likelihood of observing consistent attributes across studies (Gibb, 1954). Samples ranged from children in nursery school to business executives and well-known historical figures. The specification of leadership ranged from popularity ratings to the attainment of leadership positions. This variety of research settings, together with a lack of theory linking leadership and leadership situations to prescribed leader characteristics, decreased the likelihood of finding consistent differences between leaders and nonleaders.

This lack of consistency was reflected in several reviews published in the 1940s and 1950s. Gibb (1947) argued, "Leadership, then, is always relative to the situation . . . in the sense that the particular set of social circumstances existing at the moment determines which attributes of personality will confer leadership status" (p. 270). Jenkins (1947), in his review of military leadership, observed that "no single trait or group of characteristics has been isolated which sets off the leader from the members of the group" (pp. 74-75). Stogdill (1948) concluded that "persons who are leaders in one situation may not necessarily be leaders in other situations" (p. 65). Gibb (1954) noted that "numerous studies of the personalities of leaders have failed to find any consistent pattern of traits which characterize leaders" (p. 889). As a final example, Mann's (1959) empirical review of correlations among a variety of attributes and leader status indicated that few, if any, associations were of sufficient magnitude to warrant unambiguous conclusions.

As a group, these studies sounded the demise of leader trait models. However, close readings of these articles, in particular Stogdill (1948) and Mann (1959) (perhaps

the two most influential of the early reviews), shows an overly harsh interpretation of their conclusions about leader traits. The following excerpts suggest a significant role to be attributed to individual differences between leaders and nonleaders.

[Evidence from 15 or more studies indicates that] the average person who occupies a position of leadership exceeds the average member of his group in the following respects: (1) intelligence, (2) scholarship, (3) dependability in exercising responsibility, (4) activity and social participation, and (5) socioeconomic status. [Evidence from 10 or more studies indicates that] the average person who occupies a position of leadership exceeds the average member of his group in the following respects: (i) sociability, (ii) initiative, (iii) persistence, (iv) knowing how to get things done, (v) self-confidence, (vi) alertness to, and insight into, situations, (vii) cooperativeness, (viii) popularity, (ix) adaptability, and (x) verbal facility. (Stogdill, 1948, p. 63)

A number of relationships between an individual's personality and his leadership status in groups appear to be well established. The positive relationships of intelligence, adjustment, and extroversion to leadership are highly significant. In addition, dominance, masculinity, and interpersonal sensitivity are found to be positively related to leadership, while conservatism is found to be negatively related to leadership. (Mann, 1959, p. 252)

Thus, whereas the claims of these researchers, and others, about the importance of group situations in determining leadership had significant validity, the conclusions drawn from their findings by subsequent leadership researchers about the low utility of leader traits were perhaps unwarranted.

The demise of leader trait models in the 1940s and 1950s was facilitated by "rotation design" (see Kenny & Zaccaro, 1983, in which the term was coined) research paradigms that varied group situations to test the hypothesis that leader status was stable. Such designs varied (a) group membership such that each member was in a group with each other member only once, (b) group tasks such that each group completed several different tasks, or (c) both. Two studies that varied group composition (Bell & French, 1950; Borgatta, Bales, & Couch, 1954) found that leadership rankings of a member in one group were highly correlated with rankings of the same member in different groups. Such findings were problematic, however, because similar tasks were used across different groups—leader status could still be attributed to situational demands.

Two other studies (Carter & Nixon, 1949; Gibb, 1949) varied the task while keeping group composition constant. Each of these studies reported that leader status remained stable across group tasks that required different leadership contributions. These conclusions also were problematic, however, because leader status established on the first task could well have influenced team processes and member rankings on subsequently ordered tasks.

Work by Barnlund (1962) represents the single study at that time that varied both task and composition. Barnlund reported a statistically nonsignificant correlation

of .64 between leader emergence in one situation and similar status in group situations of differing tasks and members, and he concluded that his results lent “credibility to the idea that leadership grows out of the special problems of coordination facing a given group and the available talent of the participants” (p. 51).

The conclusions from the leader trait reviews and the rotation design studies provided impetus for the emergence of “leader situationism” models. These models perhaps started with A. J. Murphy (1941), who argued, “Leadership does not reside in the person. It is a function of the whole situation” (p. 674). The models continued with the work of Jenkins (1947), Sherif and Sherif (1948), Hemphill (1949), and Gibb (1947, 1954, 1958). The situationism perspective emphasized that certain group situations would call for specific leader qualities, and the individual who possessed those qualities would be effective as a leader in that situation; however, under a different group situation, another person could be more appropriate or effective in the leadership role.

Fiedler (1964, 1971b) provided perhaps the most conceptually sophisticated framework of leader situationism with his contingency model. He articulated the features of group situations that produced favorable circumstances for certain stable patterns of leadership exhibited by an individual. Leaders were likely to be effective when their leadership patterns matched situational contingencies. Hersey and Blanchard (1969b), House (1971), Vroom and Yetton (1973), and Kerr and Jermier (1978) offered similar situation-matching models. Unlike Fiedler’s contingency theory, however, each of these models specified that leaders could vary their individual responses to changes in situational contingencies. Thus, presumably, the same individual could lead effectively across different situations. Nonetheless, these situational approaches dominated the zeitgeist in leadership in the 1960s and 1970s.

Although the trait approach to leadership was generally in decline in this period, psychologists in applied settings who were interested in leader and executive selection still utilized individual difference models. The research by Miner (1965, 1978) and that by Bray, Campbell, and Grant (1974; see also Bray, 1982; Howard & Bray, 1988, 1990) were two well-known examples. Miner examined the associations between several patterns of managerial motives and subsequent advancement. He found that need for power, need for achievement, and a positive orientation toward authority were significantly correlated with promotion to higher leadership positions in organizations. Bray et al. (1974) collected assessments of many attributes in organizational managers during a 3-day assessment center session, and followed that initial assessment with subsequent assessments 8 and 20 years later. They also conducted interviews with the bosses and supervisors of the original participants during the years between assessments. They found that attributes reflecting advancement motivation, interpersonal skills, intellectual ability, and administrative skills predicted attained managerial level 20 years after initial assessments. McClelland (1965), Boyatzis (1982), Moses (1985), Sparks (1990), and Bentz (1967, 1990) conducted similar trait-based studies of managerial performance and promotion.

The general resurgence of leader trait perspectives came in the 1980s and can be attributed to several research lines. The first was a statistical reexamination of both the early leader trait reviews and the rotation design studies. Lord, De Vader, and

Alliger (1986) used validity generalization techniques to correct the correlations reported by Mann (1959) for several sources of artifactual variance (i.e., sampling error, predictor unreliability, and differential range restriction across studies) and to calculate a population effect size. They also added leader attribute studies published after Mann's study to their analysis. Using only Mann's data, they reported corrected correlations of .52 for intelligence, .34 for masculinity, .21 for adjustment, .17 for dominance, .15 for extraversion, and .22 for conservatism. Adding the newer studies produced corrected correlations of .50 for intelligence, .24 for adjustment, .13 for dominance, and .26 for extraversion. They concluded that "personality traits are associated with leadership perceptions to a higher degree and more consistently than the popular literature indicates" (p. 407). A similar meta-analytic review by Keeney and Marchioro (1998) reported comparable findings.

Kenny and Zaccaro (1983) reexamined the findings of rotation design studies, particularly that of Barnlund (1962). They decomposed the correlations reported by Barnlund into the variance in leader ratings that could be attributed in part to the rater, to the interaction of rater and ratee, and to the characteristics of the person being rated (i.e., the potential leader). They estimated the association between ratee effects found across Barnlund's groups situations and found that between 49% and 82% of the variance in leadership ratings could be attributed to stable characteristics of the emergent leader. Zaccaro, Foti, and Kenny (1991) completed a similar rotation design, in which both task and group composition were varied, and reported a significant amount of trait-based variance in leader ratings (.59) and leader rankings (.43). In another similar study, Ferentinos (1996) reported an estimate of 56% for trait-based leadership variance. Taken together, these studies provide solid evidence that leaders who emerged in one group situation also were seen as leaders in different groups with different members, and across different situations, requiring different leadership responses.

Studies of charismatic leadership represent another line of research that energized leader trait perspectives in the 1980s. House (1977) put forth the first of such theories, followed shortly by Burns (1978), Bass (1985), Tichy and Devanna (1986), Conger and Kanungo (1987), and Sashkin (1988a). Whereas these models differed on many important concepts and parameters (see House and Shamir, 1993, for a summary of their differences), they all highlighted the special qualities of the leader that compelled strong followership. Several of these models postulated specific leader qualities that were linked to displayed charismatic influence. After reviewing these models and corresponding empirical research, Zaccaro (2001) specified the following as key leader attributes predicting charismatic influence: cognitive ability, self-confidence, socialized power motives, risk propensity, social skills, and nurturance.

In the late 1980s and the 1990s, the charismatic leadership models produced a deluge of empirical research across a variety of samples and using a variety of measures and methods (Conger, 1999). Whereas a substantial part of this research specified the contextual aspects of charismatic influence (e.g., Shamir & Howell, 1999), another consistent trend has been increasing study of the attributes of the charismatically influential leader (House, 1988; House & Howell, 1992; Zaccaro,

2001). The charismatic leadership research paradigm, together with the recent meta-analytic reviews, new rotation design studies, and longitudinal studies of managerial advancement, have contributed to a revitalization of the leader trait model. Indeed, Bass's (1990) comprehensive book summarizing the leadership literature devoted nine chapters (or 163 pages) to the personal attributes of leaders.

An Empirical Summary of Leader Trait Research, 1990–2003

Bass (1990) provided a comprehensive review of the leader trait literature up to the late 1980s, building in turn on reviews by Stogdill (1948, 1974). In this section, we review studies of leader attributes that were published between 1990 and 2003. We consider these recent studies within the context of leader attribute categories offered by Mumford, Zaccaro, Harding, Fleishman, and Reiter-Palmon (1993) and by Mumford, Zaccaro, Harding, Jacobs, and Fleishman (2000). They specified five categories of leader attributes: (a) cognitive abilities, (b) personality, (c) motivation, (d) social appraisal and interpersonal skills, and (e) leader expertise and tacit knowledge.

Cognitive Abilities

General cognitive ability has been one of the most frequently studied leader attributes. The conceptual and empirical reviews by Bird (1940), Stogdill (1948), Mann (1959), Lord, De Vader, et al. (1986), and Keeney and Marchioro (1998) all pointed to its ubiquity. This popularity has continued in the time period of the present review. Recent studies also have examined other cognitive abilities, such as creative reasoning abilities and complex problem-solving skills, as determinants of leadership.

Several common themes are apparent across these studies. First, general intelligence continues to exhibit a strong connection to various indices of leadership and leader effectiveness, and this association has been observed under a variety of research settings. For example, Morrow and Stern (1990) examined scores on a variety of mental ability tests among a sample of more than 2,200 participants in IBM's assessment center program and associated these scores with rated predictions of managerial success by observers. Mental ability test scores were significantly and positively associated with rated probability of managerial success. Spreitzer, McCall, and Mahony (1997) also reported a significant association between analytical ability and ratings of executive potential as well as current managerial performance. Zaccaro, White, et al. (1997) indicated significant associations between general intelligence and both attained organizational level and ratings of executive potential in a sample of 543 army civilian managers. Using an undergraduate student sample, Ferentinos (1996) found that general intelligence was significantly correlated with leader emergence scores in a

laboratory-based rotation design study. J. A. Smith and Foti (1998) also found significant correlations between intelligence and performance in laboratory teams, although they did not use a rotation design. LePine, Hollenbeck, Ilgen, and Hedlund (1997) found in laboratory decision-making teams that leader cognitive ability was significantly associated with team decision accuracy, although the effects were moderated by the degree of cognitive ability possessed by team staff members. Other studies have reported significant associations between leader intelligence and subordinate ratings (Atwater & Yammarino, 1993) and leader emergence (Atwater, Dionne, Avolio, Camobreco, & Lau, 1999; Kellett, Humphrey, & Sleeth, 2002; Roberts, 1995; Taggar, Hackett, & Saha, 1999). Taken together, these studies continue to support the consistent finding that leaders generally possess higher intelligence than do nonleaders.

These studies depart from earlier research, however, by their reliance on multivariate methodologies. A long-standing complaint in the leader trait literature has been the tendency to examine individual characteristics in isolation from other attributes, even when the researcher had assessed multiple attributes—such researchers often will report only the bivariate correlation of a particular attribute with an index of leadership. Most of the studies reviewed above, however, considered the influence of general intelligence in conjunction with at least one other variable, and they found (a) unique contributions of cognitive abilities to at least one index of leadership beyond the contributions of other attributes (e.g., Ferentinos, 1996; Roberts, 1995; Spreitzer et al., 1997; Taggar et al., 1999; Zaccaro, White, et al., 1997) or (b) joint contributions of general intelligence and other leader attributes to the prediction of leadership (e.g., LePine et al., 1997; Morrow & Stern, 1990; J. A. Smith & Foti, 1998). These studies, then, extend understanding about both the magnitude of intelligence as a leader attribute and its connection with other central leader traits.

Recent studies have proposed creative or divergent thinking as an important leader trait, particularly in organizational contexts requiring complex problem solving (Mumford & Connelly, 1991; Mumford, Marks, Connelly, Zaccaro, & Reiter-Palmon, 2000; Mumford, Scott, Gaddis, & Strange, 2002). In support of this proposition, Baehr (1992) found that in a sample of 1,358 managers in companies from four different industries, attained organizational level was associated with creative thinking—executives displayed higher creative potential scores than middle or lower-level managers. Using a case study approach, Bolin (1997) reported that exemplary entrepreneurial leaders shared creative thinking skills as a key attribute. Mouly and Sankaran (1999) indicated that leader creative capacity was associated with leader performance, whereas Tierney, Farmer, and Graen (1999) found that leader creative skills were related to the creativity displayed by group members. Connelly et al. (2000) found in a multivariate analysis of more than 700 army officers that, of 16 leader attributes, creative thinking and creative writing skills were among the strongest predictors of leader achievement. In a similar multivariate study, Zaccaro, White, et al. (1997) found a link between creative problem-solving skills and two indices of leadership—supervisory ratings of leader performance, and ratings of senior leader potential. The last two

studies are particularly noteworthy because they considered the influence on leadership of creative thinking capacities along with other cognitive and personality variables, and they each found support for unique contributions.

Recent studies also have considered the influence of cognitive complexity and metacognitive skills on indices of leadership processes and performance (Bader, Zaccaro, & Kemp, 2003; Banks, Bader, Fleming, Zaccaro, & Barber, 2001; Hendrick, 1990; Offermann, Schroyer, & Green, 1998; Wofford & Goodwin, 1994). These studies report evidence for linking these attributes to leadership criteria. Zaccaro (2001) also reviewed a number of studies linking cognitive complexity to executive leadership and performance in complex domains.

Personality

Perhaps the largest set of leader trait studies published in the last decade has focused on leader personality. These studies have examined primarily (a) leadership and the Big Five model and (b) leadership and dimensions of the Myers-Briggs Type Indicator (MBTI). A number of other studies have examined other attributes, such as locus of control, adaptability, optimism, and destructive personality characteristics.

Research in personality has coalesced around the premise that personality traits can be broadly organized into five major headings: neuroticism (or emotional stability), extroversion, openness to experience, agreeableness, and conscientiousness (Digman, 1990; McCrae & Costa, 1987, 1991). Barrick and Mount (1991) applied this categorization to job performance. During the period of the current review, a number of researchers also have applied this model, or linked at least one of the five factors, to leadership. Salgado (1997) found that emotional stability, conscientiousness, extroversion, and agreeableness, but not openness, were valid predictors of managerial job performance in the European community. Connelly et al. (2000) also did not find any effects of openness on career achievement in a sample of military officers. Zaccaro, White, et al. (1997), however, did find that openness was associated with attained organizational level among army civilian managers. Neither study included any of the other Big Five factors. Brooks (1998) reported significant findings for agreeableness, conscientiousness, and openness in predicting job performance of managers across three retail organizations, although the effects of openness disappeared after controlling for organization. Stevens and Ash (2001) found that conscientiousness and extroversion were positively correlated with preferences for managerial work and job performance. They also found that agreeableness and openness were associated with greater preferences for participative management styles. Crant and Bateman (2000) reported that of the Big Five factors, only extroversion was related to perceptions of charismatic leadership.

Judge, Bono, Ilies, and Gerhardt (2002) used meta-analysis to examine 78 studies that linked one or more of the Big Five factors to leadership. They reported that extroversion exhibited the strongest relationship to leadership, followed by conscientiousness, neuroticism, and openness. Agreeableness demonstrated the weakest

relationship to leadership. Judge et al. also differentiated between leader emergence and leader effectiveness, finding that all factors but agreeableness were associated with emergence; all five factors, though, were significantly associated with effectiveness. Ployhart, Holtz, and Bliese (2002) reported some stronger evidence for agreeableness, however, finding in a longitudinal study of leadership growth and development that agreeableness was associated with increased displays of adaptability.

Taken together, these studies find robust associations between most of, if not all, the Big Five personality factors and leadership. Indeed Judge et al. (2002) reported a multiple correlation of .48 with leadership.

Another substantial body of leadership research has examined the associations between dimensions of the MBTI and leadership indices. The MBTI measures four types of preferences regarding information, experiences, and making decisions (M. H. McCauley, 1990). The first measure, extroversion versus introversion, indicates a preference for social engagement versus a preference for introspection and ideas. The sensing versus intuition measure indicates a preference for sense data and facts (what can be experienced) versus a preference for possibilities and theoretical patterns. The measure of thinking versus feeling indicates a preference for using logic and rational analysis in making decisions versus a preference for making decisions using personal values and emotional reactions. Finally, the judging and perceiving measure reflects a preference for planning and organizing versus spontaneity and flexibility.

Barber (1990) compared the types (as measured by the MBTI) of senior military officers with those of the general population and found that military executives were more likely to reflect sensing, thinking, and judging preferences. M. H. McCauley (1990) examined several comprehensive MBTI databases containing scores from more than 92,000 subjects, ranging from college students, to managers in many different industries from all organizational levels and from many different countries, to leaders in government and public institutions. In summarizing the findings regarding which types and preferences most likely predicted advancement to top executive ranks, M. H. McCauley (1990) noted:

Though any type can reach the top, executives most likely to do so are somewhat more likely to prefer extraversion and intuition, and are highly likely to prefer thinking and judgment. Leaders who inspire by communicating a vision of a better future may come from intuitives, especially the intuitives with feeling. (p. 411)

Jacobs and Jaques (1990) noted that because executives often face tasks of developing conceptual frameworks of their complex operating environments, they ought to possess a temperament reflecting a desire to engage in reflective thinking and to build mental models. Labeling this temperament "proclivity," they argued that it reflected the degree to which individuals felt rewarded by the cognitive activity of organizing complex experiences. They also argued that this temperament might be operationalized as the intuition-thinking (NT) profile from the MBTI. To assess

this hypothesis, Zaccaro (2001) used the tables from M. H. McCauley (1990) to compare successful executives with a sample of middle- and lower-level managers and unsuccessful executives. He found that a greater proportion of NTs (40%) were represented in the successful executive sample than in the sample of lower-level managers or less-effective executives (21%).

Several other recent studies have found links between dimensions of the MBTI and leadership. B. Schneider, Ehrhart, and Ehrhart (2002) reported preferences for extroversion and judging to be associated with teacher and peer ratings of leadership in a sample of high school students. Connelly et al. (2000) found that preferences for intuition predicted army officer career achievement. Ludgate (2001) reported higher preferences for extroversion, intuition, perceiving, and sensing in a sample of managers from a cross-section of U.S. corporations.

These studies, together with those of M. H. McCauley (1990) and Zaccaro (2001), suggest that leaders differ somewhat from nonleaders in their preferences for extroversion, intuition, thinking, and judging, although some contradictory findings have been reported for sensing and perceiving. We hasten to add McCauley's cautionary note that "there is evidence that all 16 MBTI types assume leadership positions" (p. 414). Knowlton and McGee (1994) argued that top-level leadership requires the development and display of preferred and secondary information acquisition and decision-making styles.

Other recent leader personality research has examined such attributes as optimism (Bader, Zaccaro, et al., 2003; Pritzker, 2002), proactivity (Crant & Batemen, 2000; Deluga, 1998, 2001), adaptability (Ployhart et al., 2002), locus of control (J. M. Howell & Avolio, 1993), and nurturance (S. M. Ross & Offermann, 1991). These studies typically investigated targeted leader attributes within a multivariate framework and found support for unique contributions of particular leader traits. House, Hanges, et al. (1999) investigated a number of leader attributes in a large multinational, multimethod, and multiphase study, titled Project GLOBE (see also Abdalla & Al-Homoud, 2001). This effort has found that (a) the influences of some leader attributes on key leadership criteria extend across cultures and that (b) the influences of other attributes present culture-specific effects.

Finally, some researchers have focused on destructive personal attributes that contribute to harmful or negative leadership influences (Costanza, 1996; Hogan, Raskin, & Fazzini, 1990; Mumford, Gessner, Connelly, O'Connor, & Clifton, 1993; Sarris, 1995; Van Velsor & Leslie, 1995). Although this line of research is in its early stages and has yielded somewhat inconsistent findings, it has begun to provide a counterperspective to the overwhelming body of research that has pointed to the personality attributes that facilitate leadership.

Motivation

Leadership researchers have examined primarily the following motive-states as influences on leadership: need for power or need for dominance, need for

achievement, need for affiliation, and need for responsibility. The latter is similar to another motive-state that has emerged recently in the leadership literature—motivation to lead (Chan & Drasgow, 2001).

House, Spangler, and Woycke (1991) completed an archival-based analysis of U.S. presidents and investigated the association between needs for power, achievement, and affiliation, respectively, and five indices of presidential performance. They found that need for power was related positively to four of the five indices (but negatively related to economic performance), whereas needs for achievement and affiliation were negatively related to three performance criteria. Using other indices of presidential greatness, Deluga (1998) also reported significant positive effects for power needs but no effects for achievement and affiliation. Thomas, Dickson, and Bliese (2001) examined the degree to which the effects of power and affiliation needs on leadership ratings for ROTC cadets were mediated by extroversion. This study is valuable because it provides a process model linking personality and motives to leadership. They found that whereas both motive-states were associated with extroversion, the latter fully mediated the effects of affiliation on leadership; that is, need for power had both direct and mediated effects on leadership effects.

J. A. Smith and Foti (1998) found that need for dominance motives were positively associated, in conjunction with intelligence and general self-efficacy, to leader emergence scores. Connelly et al. (2001) indicated that dominance and achievement needs were not associated with leader career achievement and rated solution quality to leadership problems. Zaccaro, White, et al. (1997), however, reported that achievement and dominance motives did predict attained organizational level, career achievement indices, and ratings of senior leadership potential among army civilian managers. These effects held even after controlling for cognitive, personality, and problem-solving skills in a multivariate analysis.

Taken together, these studies provide fairly strong and consistent evidence that need for power is significantly associated with multiple indices of leader effectiveness. The results for achievement are more mixed, whereas no recent study supports a significant association between affiliation needs and leadership.

A focus on individual differences in a person's "motivation to lead" is a recent addition to the empirical literature investigating leader motives (Chan & Drasgow, 2001). Chan and Drasgow argued that this individual difference construct "affects a leader's or leader-to-be's decision to assume leadership training, roles, and responsibilities and that affects his or her intensity of effort at leading and persistence as a leader" (p. 482). They also argued that this motive construct will mediate the influences of general cognitive ability, Big Five personality factors, sociocultural values, leadership efficacy, and past leadership experience values on other leadership criteria. They found some support for their assertions across three samples (Singaporean military recruits, Singaporean college students, and U.S. college students). Motivation to lead was positively associated with leadership potential ratings from a military assessment center and from surveys distributed at the end of basic military training (for the military subjects only). These effects held even after controlling for all other predictors in a multivariate analysis. Leader experience, leader efficacy, and

several of the personality and value attributes predicted variance in motivation to lead, suggesting support for at least a partially mediated model.

The results of Chan and Drasgow (2001) are promising and deserve further inquiry. Several prior studies have linked leadership with motive-states related to motivation to lead. Miner (1978; Berman & Miner, 1985) found that managerial motivation was associated with advancement and promotion. Connelly et al. (2000) found that need for responsibility, a related construct, was associated with career achievement among military officers. Indeed, the extensive reviews by Stogdill (1974) and Bass (1990) cite responsibility motives as key leader attributes. Chan and Drasgow (2001) took this research a step further by decomposing the construct of motivation to lead, embedding it into a conceptual model, and examining its influences in a multivariate context.

Social Appraisal Skills

Zaccaro and his colleagues (Zaccaro, 1999, 2001, 2002; Zaccaro, Foti, et al., 1991; Zaccaro, Gilbert, Thor, & Mumford, 1991) have argued that social appraisal skills, or social intelligence, reside at the heart of effective leadership. Social intelligence refers to “the ability to understand the feelings, thoughts, and behaviors of persons, including oneself, in interpersonal situations and to act appropriately upon that understanding” (Marlowe, 1986, p. 52). Zaccaro (2002) defined social intelligence as reflecting the following social capacities—social awareness, social acumen, response selection, and response enactment. These capacities refer to a leader’s understanding of the feelings, thoughts, and behaviors of others in a social domain and his or her selection of the responses that best fit the contingencies and dynamics of that domain.

Several studies have supported the importance of such skills-for-leadership criteria. Zaccaro, Foti, et al. (1991) associated scores on a measure of self-monitoring skills with leader emergence rankings and ratings taken within the context of a rotation design. Self-monitoring reflects skill in monitoring social cues and controlling one’s own expressive behavior. Zaccaro, Foti, et al. found that self-monitoring was associated with leader rankings and with perceived behavioral responsiveness to situational contingencies. A recent meta-analysis of 23 samples by Day, Schleicher, Unckless, and Hiller (2002) found that self-monitoring displayed a robust relationship with leadership.

Other studies have explored the association between measures of social intelligence and behavioral flexibility, respectively, and leadership. Ferentinos (1996) found in a rotation design that social intelligence predicted leader emergence, even when controlling for general intelligence. Zaccaro, Zazanis, Diana, and Gilbert (1994) found a significant linkage between social intelligence and leadership rankings in military training groups. Gilbert and Zaccaro (1995) reported that social intelligence scores were associated with career achievement and attained organizational level of military officers. Ritchie (1994) reported that behavioral flexibility scores predicted advancement 7 years after assessment. Kobe, Reiter-Palmon,

and Rickers (2001) found that social intelligence was associated with leadership experience, even when controlling for emotional intelligence (see below). Hooijberg (1996) reported that indices of behavioral flexibility were linked to leader effectiveness ratings in a sample of business managers. Taken together, these studies demonstrate strong evidence, across different samples and methods, supporting the importance of social intelligence skills for leadership.

A related leader attribute, emotional intelligence, has received considerable recent scrutiny in the leadership literature. Such intelligence refers to “the ability to perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional knowledge, and to regulate emotions reflectively to promote emotional and intellectual growth” (Caruso, Mayer, & Salovey, 2002, p. 56). Because emotions are essential self-information, their accurate appraisal is crucial for effective self-regulation in the context of leadership. Note that emotional intelligence has at its core the awareness of self and others—their needs, motives, desires, emotions, and requirements.

Salovey, Mayer, and Caruso (Caruso, Mayer, et al., 2002; Caruso & Wolfe, in press; Mayer & Salovey, 1997; Salovey & Mayer, 1990) have defined four distinct emotional intelligence skills. These are (Caruso, Mayer, et al., p. 59) the following:

- *Emotion identification*: This refers to skills in identifying and appraising one’s own feelings, as well as the emotional expression of others. It also reflects skills in expressing emotions and distinguishing real from phony emotional expression.
- *Emotion use*: This refers to skill in using emotions to direct attention to important events and environmental cues. It also reflects skills in using emotions in decision making and problem solving.
- *Emotion understanding*: This refers to skill in understanding emotions within a larger network of causes and meaning, to understand how different emotions in oneself and others are connected.
- *Emotion management*: This refers to an ability to stay aware of emotions and particularly “the ability to solve emotion-laden problems without necessarily suppressing negative emotions.”

Recent studies have begun to link emotional intelligence to leadership (Caruso, Mayer, et al., 2002; Caruso & Wolfe, in press; Goleman, Boyatzis, & McKee, 2002; Sosik & Megerian, 1999). Wong and Law (2002) examined the effects of emotion management skills on job performance, job satisfaction, organizational commitment, and turnover intentions. They also examined the “emotional labor” of the job as a moderator of these predicted influences. Emotional labor refers to the extent to which the job frequently or infrequently requires incumbents to display particular emotions and to manage and regulate their emotional expressions, particularly in response to the emotion expressions of others. Wong and Law hypothesized that emotion management skills would be more strongly related to performance in highly emotionally laborious jobs than in those involving less emotional labor.

They found that emotional intelligence was related to job performance and job satisfaction. Furthermore, the emotional labor of the job indeed moderated the effects of emotional management skills, such that these skills were more strongly related to job performance, organizational commitment, and turnover intentions when jobs demanded high emotional regulation.

These findings reflect the influence of a leader's emotional intelligence on his or her own job outcomes. Wong and Law (2002) also investigated the effects of leader emotion management skills on subordinate work outcomes. They found that leader skills predicted follower job satisfaction and extra-role behaviors, even after controlling for subordinate emotion management skills, job perceptions, educational level, and tenure with the company. This is one of very few empirical studies in the leadership literature to link leader emotion management skills to subordinate outcomes.

Interest in emotional intelligence and leadership is relatively new, although it is the subject of several popular books written primarily for business managers (e.g., Cherniss & Goleman, 2001; Goleman, 1995; Goleman et al., 2002). Taken together, the aforementioned empirical studies provide support for this linkage; however, additional research is necessary to identify the unique contributions of emotional intelligence beyond other conceptually similar constructs. For example, Kobe et al. (2001) found that emotional intelligence did not predict leadership criteria after controlling for social intelligence; however, social intelligence retained its ability to explain variance in leadership after controlling for emotional intelligence. These constructs are closely related conceptually, and their independent contributions to leadership will need to be pursued further.

Leader Problem-Solving Skills, Expertise, and Tacit Knowledge

Mumford, Zaccaro, et al. (2000) argued that leadership represented a form of social problem solving and that, accordingly, social problem-solving skills were important proximal leader attributes predicting leader performance. In support, Connelly et al. (2000) found that skills in problem construction and solution generation predicted leader career achievement, even after controlling for the influences of general intelligence, creative thinking capacities, personality, and motives. Zaccaro, White, et al. (1997) found that such skills were associated with attained organizational level in army civilian managers, also after controlling for cognitive, personality, and motivation attributes.

The application of problem solving and appraisal skills to experience drives the acquisition of tacit knowledge. Tacit knowledge can be defined as "what one needs to know to succeed in a given environment, and is knowledge that is typically not explicitly taught and often not even verbalized" (Sternberg, 2002, p. 11). Sternberg (2002; see also Sternberg et al., 2000) argued that tacit knowledge and its corresponding attribute of practical intelligence are strongly related to leader adaptability. Research reported by Sternberg and colleagues indicates that measures

of tacit knowledge were significantly associated with indices of leader effectiveness given to military officers at different organizational ranks.

Knowledge emerges when individuals acquire new experiences and have the cognitive appraisal skills that allow them to draw the lessons from these experiences. Banks, Zaccaro, and Bader (2003; see also Bader, Fleming, Zaccaro, & Barber, 2002; Banks et al., 2001) provided evidence for this assertion by demonstrating that developmental work experiences were associated with higher tacit knowledge when army officers possessed higher levels of metacognitive skills; such experiences were not so efficacious for officers having low metacognitive skills. Spreitzer et al. (1997) also pointed to the ability to learn from experience as an important leader quality.

Summary

This summary of leader attributes indicates a burgeoning number of studies published over the last 10–14 years that support the importance of leader attributes for a variety of leadership outcomes. Table 5.1 summarizes the leader attributes, by categories, that have received substantial empirical support in the period since the publication of Bass's (1990) *Handbook of Leadership*.

Table 5.1 Key Leader Attributes, 1990–2003

-
- | | |
|----|---|
| 1. | Cognitive capacities
General intelligence
Creative thinking capacities |
| 2. | Personality
Extroversion
Conscientiousness
Emotional stability
Openness
Agreeableness
MBTI preferences for extroversion, intuition, thinking, and judging |
| 3. | Motives and needs
Need for power
Need for achievement
Motivation to lead |
| 4. | Social capacities
Self-monitoring
Social intelligence
Emotional intelligence |
| 5. | Problem-solving skills
Problem construction
Solution generation
Metacognition |
| 6. | Tacit knowledge |
-

Despite the support for leader attributes suggested by past reviews, recent conceptual models, and the empirical review described in this chapter, considerable questions remain in textbooks and reviews concerning the utility of such perspectives. We agree that leader trait research does present a number of concerns that have mitigated the extent of its contributions. These concerns have been described elsewhere (Bass, 1990; Gibb, 1954; Stogdill, 1974). In the next section, we offer some summary propositions that we hope will guide future research on leader traits and attributes.

Leader Traits and Attributes: Some Propositions

The research reviewed in this chapter and studies reviewed in Bass (1990), Hogan, Curphy, and Hogan (1994), and S. A. Kirkpatrick and Locke (1991) point to the strong conclusion that leaders do differ from nonleaders on a number of attributes, and that these differences contribute significantly to leader effectiveness. The rotation design research by Kenny and Zaccaro (1983), Zaccaro, Foti, et al., (1991), and Ferentinos (1996) indicates that approximately 55%-60% of the variance in leader emergence ratings across different groups and different tasks was attributable to characteristics of the ratee (i.e., the emergent leader). House, Spangler, et al. (1991) reported that charisma, leader personality, and leader age, together with the presence of a crisis, predicted from 24% to 66% of the variance across several presidential effectiveness indicators. One situational variable (crisis) was included in these variance estimates, and the contributions of leader personality and charisma explained the bulk of leadership variance. Judge et al. (2002) reported from their meta-analysis a multiple correlation of .48 between the Big Five personality factors and leadership. The promotion and advancement studies of Howard and Bray (1988) indicate that leader attributes predict managerial advancement years after their assessment. Studies by Hitt and Tyler (1991), Koene, Vogelaar, and Soeters (2002), and Russell (2001) linked the personal characteristics of top executives to such outcomes as corporation acquisition decisions, company costs, and estimated company profitability, respectively; Hitt and Tyler (1991) demonstrated the influence of leader traits, even after controlling for industry and environmental characteristics. This body of work, extending from laboratory settings to corporative environments, indicates that personal attributes of the leader matter greatly in leadership.

Thus, we propose the following: *Leader traits contribute significantly to the prediction of leader effectiveness, leader emergence, and leader advancement.*

The research on leader attributes has suffered greatly from univariate examinations of particular leader traits (Bass, 1990; Keeney & Marchioro, 1998; Kenny & Zaccaro, 1983). Such research strategies appear to be based on the premise that a single attribute can be largely responsible for significant variance in leadership. Even studies that examine a few leader characteristics still take an inadequate approach to the question of explained variance in leadership. Such an approach will lead invariably to the finding that a particular trait, or a small set of traits, will have a small, albeit statistically significant, association with leadership, and that

this relationship will not exhibit a high degree of consistency—exactly the kind of criticism that has been leveled at leader trait research since Stogdill (1948) and Mann (1959). Leadership represents a complex and a multifaceted performance domain and, like any complex behavior pattern, will be predicted by a constellation of attributes.

We argue that leadership is multiply determined by sets of attributes that contain cognitive capacities, personality dispositions, motives, values, and an array of skills and competencies related to particular leadership situations. Table 5.1 presents characteristics suggested by our empirical review of the recent literature. Some characteristics will carry more weight than will others in certain contexts (Zaccaro & Klimoski, 2001). For example, several researchers have argued that certain leadership qualities become more potent as leaders ascend an organizational hierarchy (J. G. Hunt, 1991; Jacobs & Jaques, 1987b; Katz & Kahn, 1978; Zaccaro, 2001). We acknowledge that situationally driven performance requirements will highlight the value of certain skills and competencies; however, we would also argue that certain fundamental abilities and dispositions contribute to leader success across multiple domains. These attributes are not few in number, and the amount of variance they might explain in leadership may shift from situation to situation, but, taken together, they will have a large influence on leadership. Indeed, a number of recent studies have taken a multivariate approach to leader traits and have explained significant amounts of variance (e.g., Connelly et al., 2000; Hammerschmidt & Jennings, 1992; Howard & Bray, 1988; Judge et al., 2002; Zaccaro, White, et al., 1997).

Thus, we propose the following: *Leadership is best predicted by an amalgamation of attributes reflecting cognitive capacities, personality orientation, motives and values, social appraisal skills, problem-solving competencies, and general and domain-specific expertise.*

Leader traits convey the premise of behavioral invariance—that persons possessing certain attributes will behave the same way across different situations. An individual's ability to respond effectively to a variety of different behavioral demands, however, represents a fundamental requirement for leader effectiveness in most organizations. Kenny and Zaccaro (1983) argued, "Persons who are consistently cast in the leadership role possess the ability to perceive and predict variations in group situations and pattern their approaches accordingly" (p. 683). The rotation design studies by Zaccaro, Foti, et al. (1991) and Ferentinos (1996) demonstrated that leadership status was stable across separate situations, but such status was significantly associated with attributes specifically reflecting skill in being able to respond effectively to different situations. These studies also provided evidence that leaders changed their responses in accordance with task demands. Over the last 12 years, there has been substantial interest in social intelligence (Zaccaro, 1999, 2002; Zaccaro, Gilbert, et al., 1991), emotional intelligence (Caruso et al., 2002; Goleman, 1995; Goleman et al., 2002; Mayer & Salovey, 1997; Salovey & Mayer, 1990), and behavioral complexity (Hooijberg, 1996; Hooijberg, Hunt, & Dodge, 1997; Hooijberg & Schneider, 2001). All these attributes specifically promote leader adaptability and flexibility.

Thus, we propose the following: *The constellation of critical leader attributes includes traits that promote a leader's ability to respond effectively and appropriately across situations affording qualitatively different performance requirements.*

Recently, individual difference theorists have begun to distinguish between traits that are more distal to behavior performance and those that are more proximal to outcomes (Ackerman & Humphreys, 1990; Hough & Schneider, 1996; Kanfer, 1990, 1992). Chen, Gully, Whiteman, and Kilcullen (2000) define these as "trait-like" individual differences and "state-like" individual differences, respectively. Trait-like individual differences are not situationally bound and thus are relatively stable across time and contexts. State-like individual differences are more specific to certain situations, and they reflect skills, competences, expertise, belief systems, and attitudes that exert influence largely in response to situational parameters. A basic premise of this perspective argues that trait-like individual differences are more distal in their influence on performance, manifesting such influences through their effects on state-like individual differences (Ford, Smith, Weissbein, Gully, & Salas, 1998).

There have been few attempts to articulate a multistage model of leader characteristics and performance. Mumford, Zaccaro, et al. (1993) offered a model that was later revised by Mumford, Zaccaro, et al. (2000). This model defined general cognitive abilities, crystallized cognitive abilities, motivation, and personality as distal attributes. It defined problem-solving skills, social appraisal and interaction skills, and knowledge as proximal skills predicted by distal attributes. The proximal attributes also predicted the quality of leader problem-solving activities, which in turn predicted leader performance. Connelly et al. (2000) provided support for this model by demonstrating that problem-solving skills and leader knowledge partially mediated the effects of cognitive capacities, personality, and motives on leader achievement indices.

Figure 5.1 presents a model of leader attributes that is similar to the ones offered by Mumford and colleagues (Mumford, Zaccaro, et al., 1993; Mumford, Zaccaro, 2000). It, too, articulates cognitive, personality, and motives as distal predictors of leader social appraisal skills, problem-solving skills, expertise, and tacit knowledge. The model specifies the latter sets of skills as predicting leader problem-solving processes, which in turn predict leader performance. The model proposes that situational influences, identified as the leader's "operating environment," determine (a) the quality and appropriateness of displayed skill and knowledge and (b) the appropriateness of particular leadership processes. Such influences also moderate the effects of proximal skills and knowledge on processes as well as the effects of processes on leader emergence, effectiveness, and advancement.

Thus, reflecting this model, we propose the following: *Cognitive abilities, personality, and motives will influence leadership processes and outcomes through their effects on social appraisal skills, problem-solving competencies, expertise, and tacit knowledge.*

Situational or contextual influences will be manifested mostly in the nature and quality of appropriate skills, in knowledge, and by defining the leadership processes and behaviors required for success.

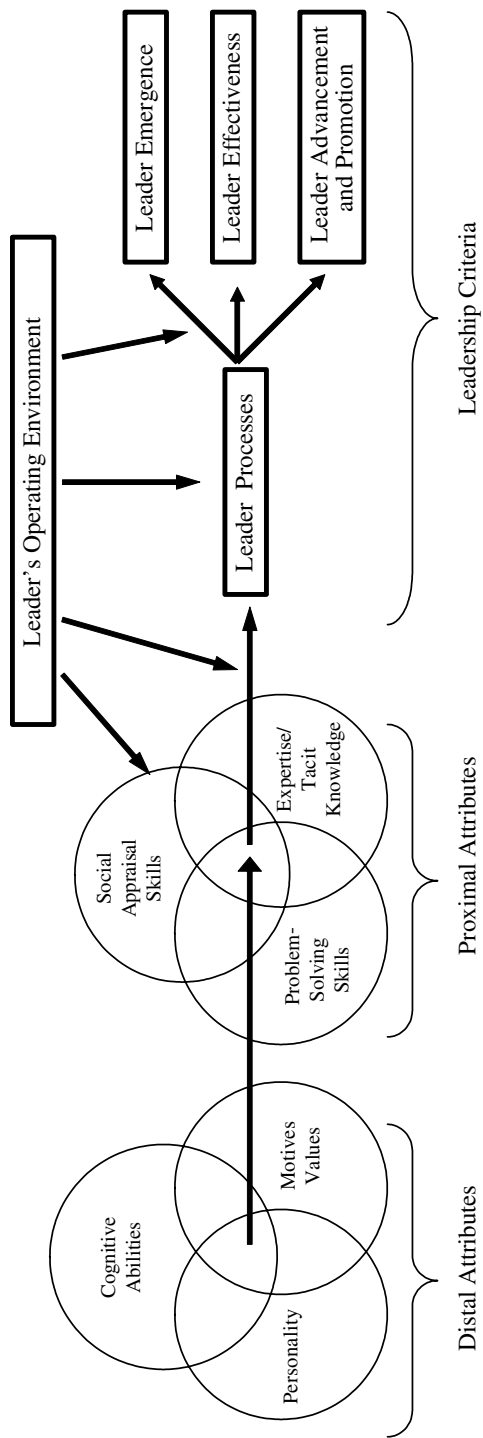


Figure 5.1 A Model of Leader Attributes and Leader Performance

The model in Figure 5.1 indicates the three sets of distal predictors and the three sets of proximal predictors as overlapping circles. This represents the premise that each set of predictors operates jointly with other predictors to influence particular outcomes; that is, each set is defined as being necessary but not sufficient for the prediction of targeted criteria. Thus, skills and expertise derive from the joint influence of cognitive capacities, personality orientations, and motives. For example, organizational executives often are required to use conceptual capacities to interpret the meaning of complex events occurring in their operating environment. The successful growth and use of such capacities likely depends on their having a personality orientation that reflects openness to experience and tolerance of ambiguity. Furthermore, certain motive-states, such as motivation to lead or high need for power, are necessary to motivate the effort required to engage in complex thinking. Thus, the influence of each set of attributes on leadership is conditioned on the other two attribute sets (see Zaccaro, 1999, 2001).

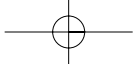
Leadership processes, in turn, reflect the combined influence of social appraisal, problem-solving skills, and expertise. Successful problem solving requires an accurate appraisal of social system requirements and dynamics (Zaccaro, Gilbert, et al., 1991). In turn, social appraisal depends heavily on social expertise that can be applied to interpret social events (Cantor & Kihlstrom, 1987; Zaccaro, Gilbert, et al., 1991). Likewise, problem construction (a key problem-solving skill) requires appropriate knowledge stores that can be used to interpret events in a problem space (Mumford, Zaccaro, et al., 2000). The development of successful solutions contributes to subsequent growth in leader expertise. Thus, at the level of proximal leader attributes, each set of attributes depends on, and contributes to, each other set in its effect on leadership. Understanding leader traits and attributes will require a deeper conceptualization of how such traits, both distal and proximal, operate jointly to influence different leadership outcomes.

Thus, we propose the following: *A leader's cognitive capacities, personality, motives, and values are necessary but not sufficient in isolation to influence growth and utilization of proximal skills and expertise; the influence of these distal traits derives from their joint application.*

A leader's social appraisal skills, problem-solving competencies, expertise, and tacit knowledge are necessary but not sufficient in isolation to influence the display and quality of particular leadership processes; the influence of these proximal traits derives from their joint application.

Conclusion

The question of how leaders differ from nonleaders is one of the oldest in psychology, yet it remains a source of disagreement and controversy in the leadership domain. A consensus remains elusive regarding the magnitude of leader trait effects on leadership, and, if a large magnitude is conceded, what specific and critical attributes contribute to such effects. In this chapter, we have sought to contribute

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to the building of a consensus about leader traits by summarizing the applicable literature, both empirical and conceptual, and offering a series of propositions to guide further thinking and research. Knowing the history of these questions, we suspect that such a consensus will remain elusive until researchers undertake the challenge of conducting more conceptually and methodologically sophisticated research. We note, though, that the current resurrection of leader trait research rested on studies that exhibited more conceptual breadth, methodological soundness, and statistical sophistication than its predecessors. We anticipate that such progress will continue.

