CHAPTER 12

Leadership Models, Methods, and Applications

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What a difference a decade made in the field of leadership research. Whereas the emphasis in the leadership literature during the 1980s was on contingency models and examining the initiation of structure and consideration in every imaginable context, the focus in the 1990s and beyond shifted to some of the more colorful aspects of leadership including charismatic, transformational, visionary, unethical, and inspiring (Hughes, Ginnett, & Curphy, 1999). Some other giant leaps involved examining shared leadership in teams, global leadership, strategic leadership, and followership.

Changes in emphasis with leadership research and theory have brought the field to a point where it is once again taking off in some new directions. Sensing this "time between times," we focus our attention on emerging streams of research while also reviewing relevant prior literature (see Bass, 1990; Chemers, 1997; House & Aditya, 1997; Yukl, 1998; Zaccaro & Klimoski, 2001, for additional reviews).

Halfway through most conferences on leadership, someone stands up and says, "Never has a construct been studied so much that we know so little about." Unfortunately, this comment is not only obsolete—it is also wrong! We have learned an enormous amount about what constitutes leadership, where it comes from, how it can be measured, what contributes to its being ethical or unethical, how people see it differently and why, how the context alters its interpretation, and what happens when it is substituted for or replaced.

Here we define leadership as a social influence process that can occur at the individual, dyadic, group, or strategic level, where it can be shared within a top management team. We embrace Katz and Kahn's (1978) definition of organizational leadership as being "the influential increment over and above mechanical compliance with the routine directives of the organization" (p. 528) and Bryman's (1996) synthesis of earlier definitions of leadership: "The common elements in these definitions imply that leadership involves a social influence process in which a person steers members of the group toward a goal" (p. 2).

AREAS REQUIRING FURTHER EXPLORATION

With all of the money spent on leadership development in organizations, one would think we now know a lot about this area. Unfortunately, that is not the case. We know very little about standard leadership training interventions and how they directly or indirectly impact leadership development (Avolio, 1999; McCauley, 2001). We also know very little about how planned and unplanned live events affect leader development (Avolio, 1999; Zaccarro, Mumford, Connelly, Marks, & Gilbert, 2000).

We also know very little about how to develop leaders to lead others when they are distant. For example, is the articulation of a vision and its diffusion affected by how distant the leader works from followers? How does one build a coherent unit when everyone, including the leader, works virtually, or through technology, versus face to face? How is the management of impressions different when a leader has contact with staff through technology?

Moving from individual- to group-level leadership, what constitutes collective or shared leadership, and how does it emerge in teams? As organizations delevel and become more network oriented, there is more opportunity for collective or shared leadership to emerge in groups. Today, more people are working on project teams that cut across traditional organizational boundaries in business-to-business (B2B) settings. How can shared leadership within and between organizational boundaries be measured and effectively developed? What constitutes the criteria for effective development at individual, group, and strategic levels? For individual development, should the criteria include changes in moral perspective? For teams, is it a coherent and shared mental model? At the strategic level, is it the efficient diffusion of a company's mission or vision across levels, or how well a new-enterprise information technology (IT) system is utilized? Or is it simply how people in an organization identify with its culture and mission (Day, 2001)?

Even relatively small companies are now globally positioned. How will leaders address the challenges of working with a culturally diverse workforce that brings to work differences in values, traditions, customs, and beliefs about what constitutes effective leadership? What implications does the diversification of work teams have for male and female leadership? How will these cultural differences affect how we define, measure, develop, and sustain leadership?

What constitutes strategic leadership, and how does it impact on individual, group, and organizational effectiveness? Should we view strategic leadership as an individual-level or as a group-level phenomenon, such as in top management teams? Should the concept of strategic leadership be studied only at the pinnacle of organizations? What happens to strategic leadership when it is examined in a flattened, networked organization, or in several organizations that work in alliance? How should we include the context in the study of strategic leadership (Zaccaro & Klimoski, 2001)?

What are the cognitive processes that inhibit leaders and followers from achieving their best results? Are there more effective strategies for developing mental models in leaders and followers that can accelerate levels of development and trust in each other? How resilient are these mental models, and to what extent are they developed and structured differently across cultures? How does the context affect what leaders and followers think, and what influence does it play in mediating and moderating the effects of leadership on motivation and performance?

A neglected construct in leadership research has been followership. What have we learned so far about what constitutes exemplary followership, and how does it differ from exemplary leadership? Does followership vary as a consequence of the context? For example, does exemplary followership differ in a strong versus in a weak context (see Mischel, 1973)? How does the leader's creation of networks among followers shape their development (Chan & Drasgow, 2001)? Do the capabilities and motivations of followers set certain limits on a leader's developmental potential?

Can the context shape the effects of leadership, or should we consider the context as part of leadership in organizations? With many leaders and followers linked together through technology, what exactly does the local context mean, if one has daily contact with followers at distance that spans continents, cultures, and time zones? How does the level of leadership in terms of context affect what we should and should not include in our leadership theories? Presently, most models of leadership have ignored the issue of level and how it shapes what constitutes leadership (Zaccaro & Klimoski, 2001). Examples to the contrary include work by Hambrick and Mason (1984), who discussed large-scale leadership of collectives, as well indirect and mediated leadership.

Today, it is not uncommon to find four distinctly different generations of employees in the workforce. How do their experiences and values shape how leaders need to lead in organizations? Generations X and Y are said to be more challenging and less accepting of authority. If this is true, how do we develop them into leadership roles, and what changes in leadership are required for current and future leaders to remain effective?

All of the challenges just cited make the measurement of leadership at all levels in organizations more complex and also more interesting. They pose giant challenges for the field, some of which are already being pursued, and which we review later.

In sum, we have attempted to highlight major themes and significant trends that have led us to the current state of leadership studies. Our vision for the field of leadership is that it will become less model specific and much more integrated across subdisciplines, or even transdisciplinary. Too often, leadership authors have drilled down so deeply on critiquing individual models of leadership that they have failed to consider how one model may be integrated with another. At a minimum, future theoretical work on leadership must include the following elements: a multilevel view ranging from the mental models of leaders and followers through to strategic and collective leadership of large organizational entities; an integration of the context into how we define and measure leadership at each of these levels; the incorporation of time; the basic idea that leadership and its impact represent an emergent process; what mediating factors are directly influenced by leadership; a more exacting choice of relevant dependent variables as opposed to convenient performance measures; how technology mediates leadership close up and at a distance; and how cultural differences affect how leaders and followers lead and follow.

Major Trends and Future Directions

Lowe and Gardner (2000) reviewed the last 10 years of research published in the journal *Leadership Quarterly* and highlighted where the field has been and where it is heading. Other papers included in that same issue pointed to new directions in the leadership field, including several themes that we pursue in this chapter: strategic leadership, e-leadership, collective leadership, and leadership development. To the extent that the *Leadership Quarterly* contains a representative sampling of what has and perhaps will be published, some of the past trends in leadership research identified by Lowe and Gardner offer a basis for launching our discussion.

Lowe and Gardner (2000) reported nearly an equivalent emphasis in articles published on theory and research over the last decade in the *Leadership Quarterly,* i.e., 46% vs. 55%, respectively. This pattern points to a field in transition, as new theoretical perspectives entered the field in the 1980s and 1990s, shaping directions in research. Lowe and Gardner also reported that most articles were still published by American authors, supporting House and Aditya's (1997) claim that 98% of leadership research still originates in North America. However, some giant steps are being made to promote and include research from other cultures.

Lowe and Gardner (2000) identified several trends that have shaped the field of leadership studies during the 1990s. These included work on transformational leadership (Avolio, 1999; Bass, 1998; Bass & Avolio, 1993, 1994) and neo-charismatic leadership theories based on House's (1977) theory of charismatic leadership, as well as Burns (1978) and Bass (1985; see also Bass & Steidlmeier, 1999; Bryman, 1993; Conger & Hunt, 1999; Conger & Kanungo, 1987, 1998; House & Shamir, 1993). Lowe and Gardner also pointed to renewed interest in cross-cultural leadership research, which received a tremendous boost from House and his associates' Global Leadership and Organizational Behavior Effectiveness study (GLOBE) project, as well as other cross-cultural research.

Another driving force behind the transformation of leadership research and theory during the 1990s involved the emphasis on levels of analysis in theory building, research design, and measurement (Dansereau, Alutto, & Yammarino, 1984; Dansereau, Yammarino, & Markham, 1995; Dansereau & Yammarino, 1998; Klein & House, 1995). A levels-of-analysis frame of reference provided a huge leap toward more sophisticated multilevel models of leadership that now include the context in which leadership is embedded. Today, work on levels of analysis has dramatically shaped the conceptualization of how leadership is defined, measured across research streams, and within context over time (Brass, 2001; House & Aditya, 1997; Zaccaro & Klimoski, 2001). The context now being examined includes a broad range of constructs such as the nature and level of change, the medium through which leaders and followers interact, the cultures in which each are embedded, the organization level, the type of work group or unit, and the network. Future research on leadership now needs to standardize approaches to examining individual, dyadic, group, and larger collective phenomena (Lowe & Gardner, 2000). We envision that all future research will allocate greater attention to defining the level at which leadership is investigated, as well as the levels at which various models are tested and hold across different contexts (Zaccaro & Banks, 2001).

House and Aditya (1997) noted an emerging trend over the previous decade regarding the focus on strategic leadership. However, there is still a thin base of research on what constitutes strategic leadership, as well as strategic change in organizations (Boal & Hoojberg, 2000; Lowe & Gardner, 2000). Moreover, much of the research in this area has been based on case analyses, cross-sectional designs, and small samples, and it lacks a strong and coherent theoretical base.

Ironically, we know very little about how leadership actually changes people, units, organizations, and larger collectives (Burns, personal communication, November 2000; Yukl, 1999). We need to examine how leadership affects fundamental change in individuals, groups, and organizations. How can we evaluate such change while also taking into consideration the context in which leadership is embedded? What criteria can we use for assessing change at the individual, group, organizational, and even community levels? For example, can we measure behavioral or attitudinal change at each of these respective levels? What does the performance domain look like when we cut across these levels and examine change over time? Surprisingly, we know very little about the leadership of CEOs across all types and sizes of organizations. Nonetheless, some authors have attributed between 20% and 40% of organizational effectiveness to executive leadership (Ireland & Hitt, 1999).

Prior research has not explored how shared or collective leadership associated with top management teams contributes to an organization's adaptability and effectiveness (Elron, 1997). However, several studies have produced a positive relationship between strategic leadership and firm performance, but in most cases prior research has not examined how the context moderates or mediates strategic leadership performance (Finklestein & Hambrick, 1996). Demonstrating the importance of the context, Waldman, Ramirez, House, and Puranam (2001) showed that executives who were rated by followers as more charismatic had little impact on firm performance under stable environmental conditions, but under unstable or uncertain conditions charismatic leadership significantly predicted financial performance.

A major decision for organizations about leadership deals with its succession (Lauterbach, Vu, & Weisberg, 1999). Organizations that rely on internal networks enjoy smooth transitions and the continuation of strategy. Yet, selecting a new leader who comes from the same stock as the previous one may result in staying the course when radical change is required (Hambrick & Mason, 1984). The area of leadership and succession, particularly at the tops of organizations, deserves more attention in the literature.

A number of questions highlight the need for future research on the context in which leadership is observed and interpreted, including the following: Are the same leadership styles differentially effective as we move up the organizational hierarchy? How does the legacy left by a former leader affect his or her successor's ability to maintain and enhance organizational performance? How do strategic leadership styles vary in terms of their impacts across different sectors of the economy? Are some strategic leadership styles generic and equally effective across all sectors? As the world of work becomes more complex, can leadership at the top be more effectively shared; if so, what are optimal strategies for developing and deploying shared leadership? How will strategic leadership change after inserting advanced IT in organizations in which every employee is connected to the CEO?

Leadership and Creating Meaning

Smircich and Morgan (1982) provided an alternative definition of leadership, which has not been thoroughly explored and may have even greater relevance as leaders lead at a distance from followers in today's global economy. They stated that "leadership is realized in the process whereby one or more individuals succeeds in attempting to frame and define the reality of others" (p. 258). Are there differences in how leaders create impressions and use impression-management strategies to influence followers to support their positions? How do different types of leaders use impression-management strategies to create the meaning that they want their followers to derive from a particular situation, and will the creation of meaning work differently across cultures? For example, W. L. Gardner and Avolio (1998) argued that charismatic versus noncharismatic leaders use different impression-management styles to gain commitment and trust from followers. How do these differences extend across cultures?

Smircich and Morgan (1982) related the management of meaning to a number of important areas including the emergence of leadership: "They emerge as leaders because of their role in framing experience in a way that provides a viable basis for actions" (p. 258). Simply put, leaders define the situation in which followers find themselves, shaping their range of perceived and actual choices. Charismatic leaders frequently emerge in times of crisis because they offer a viable alternative interpretation to resolve the crisis while managing an impression of confidence and an ability to inspire followers to pursue a solution (Conger & Kanungo, 1998).

The management of meaning has direct relevance to studying strategic leadership. Such leaders usually do not have direct contact with all followers and therefore must manage the meaning of events at a distance—and in today's organizations through advanced IT. Strategic leaders have a mandate to define the current and future reality of their organizations (Ireland & Hitt, 1999). However, we know that many strategic leaders lose their mandate when their framing of reality does not make sense to followers, lacks credibility, or ultimately does not contribute to success. Indeed, according to Howard (2001), somewhere between 30% and 50% of CEOs are prematurely ousted from their jobs.

To make sense of each follower's future requires the leader to develop a relationship through which followers come to identify with the leader's vision (Shamir, House, & Arthur, 1993). According to Shamir and his associates, to energize followers, leaders must successfully link the follower's self-concept to the collective thinking or concept of the group. This creates a sense of alignment around the vision to move forward. Visions represent one of the highest forms of managing meaning (Awamleh & Gardner, 1999; Graen & Uhl-Bien, 1995) and could be examined in terms of their diffusion through organizations as being an outcome of successful leadership. Specifically, all other things being equal, the extent to which a vision is wired into each employee's thinking and behavior could be used as a criterion measure of leadership effectiveness in an organization.

In sum, Smircich and Morgan (1982) stated that "leadership as a phenomenon depends upon the existence of people who are prepared to surrender their ability to define their reality for others" (p. 270). The way leaders transform reality for followers is a fertile area for future research (Yukl, 1999), including differences in followers' willingness to surrender their interpretations of reality or to share in the responsibility of creating the interpretation of the future.

Leadership Substitutes

Whereas leaders are said to influence how followers derive meaning from events, another line of research argues that we attribute too much meaning to leaders as the central causes of events. Followers erroneously attribute events or performance outcomes to the influence of a leader when in fact it is due to the context (Kerr & Jermier, 1978). This may be particularly evident with charismatic leaders, who emerge during times of crisis (Beyer, 1999). Meindl, Ehrlich, and Dukerich (1985) argued that people use leadership as a way of explaining or interpreting what goes on in organizations when they do not fully understand the cause of events. In these cases, using a levels-of-analysis framework in the design of models and methods can facilitate a better understanding of what causes what over time.

Although the literature on leadership substitutes provides an interesting perspective on how the context can moderate the impact of leadership on follower perceptions and performance, the weight of evidence shows that substitutes for leadership do not substitute as predicted by Kerr and Jermier (1978). Podsakoff, Niehoff, MacKenzie, and Williams (1993) were unable to find sufficient evidence to support J. P. Howell, Dorfman, and Kerr's (1986) claim that leadership substitutes moderate the relationship between leader behaviors and various intermediate process and outcome measures. Podsakoff, MacKenzie, and Fetter (1993) examined effects of substitutes for leadership with a sample of professional employees. The authors concluded that a substantial portion of the variance in perceptions and performance was shared by *both* leadership behaviors and substitutes. All substitutes for leadership independently influenced at least one of the criterion measures, accounting for 30% to 40% of the variance in employee attitudes, 18% to 23% in employee role perceptions, and 7% in performance. Podsakoff, MacKenzie, and Bommer (1995) concluded that "although the notion that subordinate, task, and organizational characteristics moderate the effects of a leader's behavior seems intuitively appealing, the weight of empirical evidence does not support it" (p. 381). However, these same substitutes added to leadership can augment the prediction of employee role perceptions, job attitudes, and performance. Podsakoff et al. reported that the total variance explained in employee attitudes and in role performance by leadership and its substitutes (e.g., task feedback, professional orientation, rewards outside of the leader's control, etc.) were 35% and 33%.

We now turn to addressing some of the issues just mentioned by focusing on the individual, later returning to the strategic context in which individual leadership is observed and developed.

Implicit Leadership Theory

Calder (1977), as well as Mitchell (1979), argued that leadership was not directly observable. Observer ratings were based in part on attributions, thus introducing some degree of error or bias into all leadership ratings (Lord, Binning, Rush, & Thomas, 1978; Rush, Phillips, & Lord, 1981). Summarizing a long line of research on implicit notions of leadership, Lord and Maher (1991) defined leadership as a process perceived by others and then labeled leadership. Calder's (1977) work provided the basis for a cognitive revolution in leadership research that continues to emerge and have a significant influence on the field of leadership research and theory today. Much of this research is based on the work of Lord and his associates. Early experimental research by Rush, Thomas, and Lord (1977) demonstrated that college students exposed to the same experimental leadership conditions interpreted leadership behaviors differently. Phillips and Lord (1981) attributed those differences to a cognitive categorization process that uses contextual and behavioral cues to classify leadership behaviors. Each observer comes to the situation with a preexisting mental structure, which results in observed behaviors being encoded based on the rater's categorization process. Differences in category systems or implicit theories (e.g., between men and women leaders) can result in an encoding and recall of behavior that is different for men and women.

Lord, Foti, and DeVader (1984) suggest that perceptions of leadership are based on hierarchically organized categories, which are each represented by a prototype. Prototypes are formed based on experiences with individuals or events. A prototypical category might be the use of a political or military leader. Traits that people associate with prototypical categories become important facets of how perceivers construct their categories and prototypes (Mischel, 1973). Observed leadership behavior is then categorized more or less automatically based on prototypical matching between an observer's implicit theory of leadership and actual behavior.

Work on implicit leadership theory (ILT) clearly has implications for leadership research as it moves across different cultures. ILT also has implications for theory development as we examine how followers internalize leadership messages and identify with a leader's vision within and between cultures. Work on ILT has implications for leadership development as well. ILT also affects whether an individual sees himself or herself as a leader worthy of development.

In sum, the work by Lord and his associates has demonstrated the importance of viewing leadership as being in the eye of the beholder. This stream of research has implications for examining biases in leadership measurement, for developing new theories that capture how leaders manage the meaning of events for followers, and the development of leadership itself. Other issues deserving closer scrutiny include the following: To what extent are changes in generational views of leadership being shaped by the media exposure on the topic? How can leaders build trust when they are so overexposed in the media? Does the generation now entering the workforce come with different expectations about what constitutes trusted leadership?

INTEGRATING SEVERAL STREAMS OF LEADERSHIP RESEARCH

The emergence of leadership research in the early 1900s was based on the idea that certain traits predisposed an individual to emerge as a leader (Bass, 1990). Up until published reviews by Mann (1959) and Stogdill (1948), trait theories of leadership dominated the literature. However, conclusions drawn from early reviews set a new direction for leadership research focusing on leadership style or behaviors, which lasted the next 40 years. Indeed, the shift away from personality research and leadership was unfortunate, given that Kenny and Zaccaro (1983) later reported that 48% to 82% of the variance in leadership emergence was accounted for by the leader's attributes. Ironically, Stogdill (1974) reported that personality attributes such as surgency, emotional stability, conscientiousness, and agreeableness were all positively related to leadership effectiveness (Hogan, Curphy, & Hogan, 1994). Yet it was Stogdill's review that led to a near abandonment of research on traits.

Lord, DeVader, and Alliger (1986) argued that many previous authors misinterpreted Mann and Stogdill's reviews, and raised several concerns. First, both Mann and Stogdill examined the relationship between leadership emergence and personality, limiting the scope of research reviewed. Second, although there were a number of consistent significant relationships between leadership traits and emergence, Mann commented on the lack of relationships. Lord et al. conducted a meta-analysis of the literature reviewed by Mann, reporting that many of the relationships between personality and leadership emergence had been underestimated. They concluded that traits (e.g., intelligence, masculinity-femininity, and dominance) were associated with leadership perceptions to a much greater extent than had been reported.

Howard (2001) discussed the importance of examining not only which traits predicted leadership success and effectiveness but also those traits that predicted failures. Hogan, Raskin, and Fazzini (1990) focused on what caused leadership failures after finding that 60% to 70% of employees reported that their worst or most stressful aspect of their job was their supervisor. Earlier work by McCall and Lombardo (1983) and by Hellervik, Hazucha, and Schneider (1992) reported that managers who failed exhibited a number of personality flaws including being overly controlling, irritable, and exploitative. These results parallel findings reported by Kaplan, Drath, and Kofodimos (1991). Many bright, hardworking managers fail because they are arrogant, abrasive, selfish, and lacking what Goleman (1998) called *emotional intelligence*.

Judge, Bono, Ilies, and Werner (2000) completed a meta-analysis of 94 studies examining the relationship among the Big Five personality traits, leadership emergence, effectiveness, and transformational leadership. Judge et al. reported a multiple R of .47 with the Big Five traits predicting leadership effectiveness. Extraversion was most consistently and positively correlated with leadership emergence and effectiveness. Extraversion, conscientiousness, and openness to experience were consistently correlated with leadership effectiveness. Judge and Bono (2000) examined the relationship between transformational leadership and the Big Five personality factors. Results based on over 200 organizations indicated that agreeableness was the strongest predictor of transformational leadership, followed by extraversion. Openness to experience was also positively related to transformational leadership; however, this relationship disappeared when effects of other personality traits were statistically controlled. Overall, the multiple-R value between the Big Five personality traits and transformational leadership was .40.

The Big Five personality traits have also been linked as antecedents to leadership emergence in autonomous teams (Taggar, Hackett, & Saha, 1999). Earlier research on antecedents of leadership found that the leader's interests, energy, verbal fluency, confidence, and independence were each predictors of leadership success (reported in Bass, 1990).

In sum, one of the main conclusions from this literature is that personality does indeed matter and, like attributes of the context, must be taken into consideration when predicting leadership emergence and effectiveness. The accumulated research in this area indicates that there are certain attributes one might want to take into consideration when making selection decisions. Some of these attributes may also prove to be quite effective in predicting whether a more or less successful candidate will succeed at current leadership in an organization (McCauley, 2001).

Male and Female Leaders

Over the last decade, many attributes associated with effective management have been associated with women (Helgesen, 1990; Rosener, 1995). Changes in organizational structure and a greater emphasis on inclusion have led to calls for managers to be more collaborative, cooperative, participative, empathetic, nurturing, and developmentally oriented. These qualities have been traditionally associated with "female advantages" (Rosener, 1995), as well as with transformational leadership (Maher, 1997). The conventional wisdom suggests that men and women differ in terms of leadership styles and behaviors. The literature on sex role types indicates that men tend to be seen as more task oriented, whereas women are viewed as more relationship oriented. Men have been shown to be less comfortable working for a female leader, while also viewing her success as being due more to luck than to capability (Forsyth & Forsyth, 1984). As noted later, however, these effects may disappear when organizational context factors are controlled (Eagly & Johannesen-Schmidt, 2000). Hollander and Neider (1978) reported that female respondents tended to cite more incidents of bad leadership being associated with male leaders, while citing an equivalent number of good incidents for male and female leaders. Eagly, Karau, and Makhijani (1995) concluded from their meta-analysis of the literature that women who exhibited a more masculine style were perceived as less effective than were women who used a feminine style. Women using a feminine style were also seen as less effective than men, who exhibited a masculine style.

Men and women can lead equally effectively (Eagly et al., 1995; Powell, 1993), but may differ in terms of how they lead (Adler, 1996; Eagly & Johnson, 1990; Parker & Ogilvie, 1996). However, Kanter (1977) argued that individual differences in terms of personality were probably more important than gender in determining how male and female leaders performed in managerial roles.

Many books written for the general public contend that women's leadership styles are different than men's (Helgesen, 1990; Loden, 1985; Rosener, 1995). Rosener labeled the style of women as being interactive and that of men as being command and control oriented. Nonetheless, much of the research on this topic has not reported reliable male-female differences (Bartol & Martin, 1986; Eagly & Johannesen-Schmidt, 2000; Eagly, Karu, Miner, & Johnson, 1994). Eagly et al. (1994) reported that men generally scored higher than women on motivation to manage others in a more hierarchical manner. Eagly and Johannesen-Schmidt (2000) conducted a meta-analysis of literature comparing male to female leadership styles. Most differences were relatively small, but there was a tendency for women to be more interpersonally oriented, less autocratic, and more participative.

Comparisons of male and female leaders on transformational leadership behavior have also produced small but significant differences. Bass, Avolio, and Atwater (1996) reported that women were rated more transformational than were their male counterparts. Ross and Offermann (1997) reported that military cadets' ratings of their commanding officers' transformational leadership were positively correlated with being seen as more nurturing and feminine and were negatively correlated with attributes such as aggressiveness and masculinity. Hackman, Furniss, Hills, and Peterson (1992) reported a positive relationship between ratings of transformational leadership and communal qualities assessed by Bem's (1974) sex role inventory. Eagly and Johannesen-Schmidt (2000) examined the normative database ($N = 9{,}000$ raters) for the Multifactor Leadership Questionnaire (MLQ) Form 5X (see Avolio, Bass, & Jung, 1999), reporting that female leaders were rated higher on two aspects of transformational leadership: attributed charisma and individualized consideration. Male leaders were rated higher on all aspects of negative, or less effective, leadership.

Eagly and Johannesen-Schmidt (2000) suggested that some gender-stereotypic role differences may disappear as the specific characteristics of those organizational roles are controlled. For example, Moskowitz, Suh, and Desaulniers (1994) reported that agentic behavior traditionally associated with men was more controlled by the status of the interacting partners (e.g., any boss with a follower), whereas communal behaviors were more controlled by gender regardless of organizational roles.

In sum, literature comparing male and female leaders has generally reported relatively few differences in terms of leadership style. Future research needs to take a closer look at how the organizational and cultural contexts affect these results, especially at more senior levels. A more precise comparison of men and women leaders needs to take into account other variables that may be correlated with gender differences including level, tenure, and experience (Yukl, 1998).

Leadership Knowledge, Skills, and Ability

A thin base of literature links leadership ability to behavior and performance (Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000). Mumford et al. argued that leadership involves a complex form of social problem solving in which a leader's performance is associated with his or her ability to sense the need for change, identify goals, construct viable solution paths, and do so by understanding the complexity of the internal and external environment. Complex problem-solving skills, social judgment skills (Goleman, 1998), and knowledge (Simonton, 1994) have all been linked to effectiveness.

Leaders frequently need to generate solutions to multiple, rapidly unfolding problems by coming up with the best alternative solutions in the shortest period of time (Day, 2001;

Mintzberg, 1973). Leaders need skills and abilities to develop and implement solutions with followers, peers, or supervisors operating in complex, dynamic contexts. To do so, leaders need the social skills that come with some of the traits identified earlier (House & Baetz, 1979; Yukl & Van Fleet, 1992; Zaccaro, 1996). Moreover, effective leaders must also have the skills to persuade followers—often in very difficult, complex social situations—to accept and support their proposed solutions (Conger & Kanungo, 1998).

Leaders need a certain knowledge set in order to come up with solutions required to address challenges and opportunities (Mumford et al., 2000). For example, Simonton (1984, 1990) reported that charismatic leaders had a rather unique set of career experiences that provided them with the experiential knowledge to solve problems confronting their followers. Ironically, although the acquisition of knowledge and skills is clearly important to leadership effectiveness, the area has been downplayed in the leadership literature; however, some exceptions exist (Jacobs & Jaques, 1987). Leaders who accumulate knowledge characterized by a broader and longer time perspective are expected to be more successful as they ascend to higher level positions in organizations (Jaques, 1977). Similarly, tacit experience and knowledge were shown to have significant, positive relationships with leadership effectiveness and performance (Sternberg & Wagner, 1993).

There are several important issues to consider in this emerging area of interest. First, how does the accumulation of life experiences shape the knowledge and implicit or schematic structures of leaders through the development of intelligence, tacit knowledge, wisdom, or perspective-taking capacity? How do such experiences impact the leader's development and performance? How can we use these measures in the selection of leaders? For example, it seems highly feasible to use the Sternberg's work on tacit knowledge as one means of determining who is more or less able to lead.

Summarizing Attributes of Successful and Unsuccessful Leaders

Research comparing successful and unsuccessful leaders has been synthesized in two excellent reviews of this literature. Hogan et al.'s (1994) review presents the Big Five model of personality as a convenient way to summarize individual differences associated with leader effectiveness. Their review reveals a consistent association between leader success and surgency (e.g., dominance, extraversion, sociability), conscientiousness (e.g., integrity, responsibility), agreeableness (e.g., diplomacy, cooperativeness), and emotional stability (e.g., self-confidence, positive mood, emotional control). Additional leader attributes associated with success were provided by Kirkpatrick and Locke's (1991) review. These included drive, honesty and integrity, self-confidence, cognitive ability, and knowledge. Leaders may also be unsuccessful because of personality defects or character flaws (e.g., Kaplan et al., 1991; Kets de Vries, 1988). Leaders who lack intelligence, good social skills, decisiveness, self-confidence, self-esteem, self-confidence, hubris, honesty, and ambition often fail. This stream of research parallels evidence reported in the popular press indicating that CEOs of Fortune 500 companies failed because of personal problems such as self-deception, decision gridlock, and passive leadership (Sellers, 1999). Again, such attributes could be used to prescreen when selecting future leaders in organizations.

The selection of managers based on leadership attributes has been a longstanding concern in the literature. Identifying the set of characteristics of effective leaders as well as developing the selection tools to assess them has hampered progress, although recent work has moved the field forward considerably. Extensive research on managerial abilities and specifically the definition and characterization of leadership in terms of complex social problem-solving skills, as well as attributes repeatedly linked to effectiveness, now provide a firmer basis for developing new selection tools (Marshall-Mies et al., 2000).

The Development of Moral and Immoral Leadership

Ethics and character of leaders have gained increased research attention over the last decade (e.g., Bass & Steidlmeier, 1999; Hollander, 1995; Kanungo & Mendonca, 1996). This emerging literature highlights prosocial motives, morality, and trustworthiness as being important determinants of effective leader-follower relations. For example, the charismatic leadership literature has distinguished constructive versus destructive leaders (Avolio, 1999; Bass & Steidlmeier, 1999; Conger & Kanungo, 1998; House & Howell, 1992), who differ on prosocial versus self-centered motives paralleling higher and lower stages of moral development (Kuhnert & Lewis, 1987). Prosocial leaders are empathetic, self-sacrificing, trustworthy, individually considerate, and focused on building collective missions, whereas self-centered leaders are self-aggrandizing, dominating, exploitative, and manipulative and promote compliance through fear (Bass & Steidlmeier, 1999; O'Connor, Mumford, Clifton, Gessner, & Connelly, 1995).

Overall, the literature on leadership attributes and individual differences has produced a wealth of information regarding the identification and development of effective leadership. Nonetheless, most of this literature still applies to middle- to lower-level leaders. Future research needs to examine the personal attributes and life experiences of more senior.

Leadership Styles and Behaviors

Unlike the limited amount of work on knowledge, skills, and problem-solving capability, there has been an extensive research on differences in leadership styles and behaviors (Hughes et al., 1999; Yukl, 1998). Much of this emerged following the disappointing conclusions reported by Mann and Stogdill's reviews of leadership traits. This led to a stream of research on the people versus production styles of leaders, as well as on initiation of structure and consideration generated in research conducted at the University of Michigan and Ohio State University (Bass, 1990). At Ohio State University researchers measured nine behavioral constructs, which initially included initiation, membership, representation, integration, organization, domination, communication, recognition, and production orientation. Leaders were rated on how frequently they displayed behaviors associated with each construct (Hemphill & Coons, 1957; Stogdill, 1963). Factor analyses resulted in a clustering of constructs into four categories labeled consideration, initiation of structure, production emphasis, and sensitivity (Bass, 1990). These early results led to the development of two-factor theories of leadership, which dominated the literature well into the 1980s—for example in Fiedler's (1967) contingency model, Blake and Mouton's (1964) managerial grid, Hershey and Blanchard's (1969) situational leadership theory, and more recent work by Graen and his colleagues on leader-member exchange (LMX) theory (Fiedler, 1967; Graen, Novak, & Sommerkamp, 1982). Preceding this period, work by Hemphill (1949) focused on examining what the situation demanded of leaders. The outgrowth of focusing on the situation led to other contingency models such as Vroom and Yetton's (1973) normative decision-making model, and House and Mitchell's (1974) path-goal theory.

(Non)Contingent Rewards and Punishment

Other research on leadership styles included how leaders used rewards and punishment to influence follower motivation and performance. Podsakoff and Todor (1985) examined the relationship between the use of contingent reward and punishment behaviors on follower motivation. They reported that group cohesion, drive, and productivity were all related positively to leader-contingent reward behavior. Contingent punishment was also positively related to group drive and productivity, whereas noncontingent reward and punishment produced equivocal results. Their findings supported earlier arguments by Hunt and Osborn (1980), as well as House and Mitchell's (1975) path-goal theory of leadership, indicating that noncontingent versus contingent rewards were less likely to produce positive motivational effects.

Podsakoff, Todor, and Skov (1982) demonstrated that the impact of using contingent or noncontingent rewards depends on the nature of the context. For example, both low and high performers were equally dissatisfied with the use of noncontingent punishment; however, there were no effects on performance. The use of contingent rewards has been associated with higher follower satisfaction, advancement opportunities, and performance over a large number of samples, levels, and cultures (Bass, 1998; Lowe, Kroeck, & Sivasubramaniam, 1996).

Fiedler's Contingency Theory

Additional work on leadership styles and behaviors based on Fiedler's (1967) contingency model of leadership has generated considerable controversy over the last 30 years (Schriesheim, Tepper, & Tetrault, 1994). Part of the controversy stems from Fielder's measurement of relational- versus task-focused leadership, using what he called the least preferred coworker (LPC) scale. According to Fiedler's theory, leaders are categorized according to their scores on the LPC scale as being more task oriented than people oriented. Fiedler then classified the context in terms of those situations being more or less favorable using the following three dimensions: leader-member relations, task structure, and position power. Fiedler argued that task-oriented leaders were more effective in highly favorable and unfavorable situations, whereas relationship-oriented leaders were more effective in the middle range.

A third aspect of the controversy concerns Fiedler's insistence that leader effectiveness is based on changing the situation versus the leader. Fiedler argued in favor of changing the context to match the leader's preferred style. Unfortunately, research on the leader-match process has produced both support (see Peters, Hartke, & Pohlmann, 1985; Strube & Garcia, 1981) and discrepancies for his model (e.g., Jago & Ragan, 1986).

Schriesheim et al. (1994) examined 147 empirical studies that used Fiedler's contingency model and concluded that both high- and low-LPC leaders demonstrated effective performance depending on the context. Schriesheim et al. (1994) concluded that not all of the predictions in Fiedler's model held up; however, altering the situation may indeed be one way of enhancing the impact of leadership on performance. Fielder's early emphasis on the context balanced off the emphasis on behavior and attributes in the literature.

Leader Style, Relationships, and Leader-Member Exchange Theory

The roots of LMX theory can be traced to the work of Dansereau, Graen, and Haga (1975), which was originally referred to as vertical dyad linkage (VDL) theory. Graen et al. (1982) extended this work into what is now called LMX theory by focusing on exchanges and relationships that were not necessarily vertical.

Reviews by Gerstner and Day (1997) showed that the LMX scale was correlated with a broad range of variables, including follower satisfaction, performance, and turnover. However, controversy also surrounds this construct's measurement. Schriesheim, Castro, and Cogliser (1999) pointed to problems with how the LMX construct was defined, measured, and analyzed. They also criticized LMX research for not examining the level of analysis to assess relationships. However, there were important findings produced by LMX research, which has led to new streams of research focusing on individualized leadership, trust-building in teams, and cross-cultural research (Graen & Uhl-Bien, 1995; Schriesheim et al., 1999).

A main concern about LMX theory is how it has changed over time in terms of what constitutes LMX. Schriesheim et al. (1999) indicated that Graen and his colleagues have continued to define LMX as the quality of exchange between a leader and followers; however, what constitutes the quality of that exchange has varied. For example, Schriesheim et al. examined 13 studies published by Graen and his colleagues over a period of 10 years, concluding that there were 18 subdimensions describing the quality of LMX (trust, competence, motivation, assistance and support, understanding, latitude, authority, information, influence in decision making, communications, confidence, consideration, talent, delegation, innovativeness, expertise, control of organizational resources, and mutual control). Schriesheim et al. reviewed 37 dissertations and research papers reporting that there were 11 different theoretical definitions associated with LMX and 35 different sub content elements, and concluded that "a decade after the inception of LMX theory, there was still so much disagreement as to the basic definition of the construct as well as no clear or consistent direction provided about where or how to proceed in developing the theory" (p. 76). Alternatively, we might also describe LMX as changing with the times. From 1972 to 2001 organizations became flatter, more networked, technologically connected, and arranged in strategic alliances configured in B2B models. Leaders and followers now interact more at a distance through technology, and followers instead of leaders are often the experts in work processes. How these global changes are affecting the exchanges between leaders and followers remains an interesting domain for future research.

Taken together, the research on leadership styles and behaviors has identified a number of styles that consistently show up differentiating more or less effective leadership. Recently, this literature was significantly extended on the order of a giant leap as leadership research began to examine more the behaviors and styles of charismatic and transformational leaders.

Transformational, Charismatic, and Visionary Theories

Much effort in leadership research before the late 1980s did not focus on what constituted charismatic or inspirational leadership. A giant step toward understanding these profound forms of leadership was taken in the 1980s based on work by House (1977) and Burns (1978). House and Shamir (1993) highlighted the need to integrate charismatic, transformational, and visionary theories of leadership because all overlap with each other and appear to evolve in the same direction. A distinguishing characteristic of these theories builds on the relationship between leaders and followers discussed earlier in LMX theory. Charismatic leaders transform the needs, values, and aspirations of followers from individual to collective interests. They ask followers to consider the greater good of their group, organization, community, or society above and beyond their own self-interests (Bass, 1985; Bennis & Nanus, 1985; Conger & Kanungo, 1987; Tichy & Devanna, 1986). Earlier theories covered in this review focused attention on the tangible exchanges that occur between leaders and followers, as opposed to examining how trusting a leader motivates followers to extraordinary efforts and performance. The focus shifted to symbolic leadership, building identification with the leader's cause or vision, challenging followers to think differently, inspiring followers to extraordinary efforts, and building enough confidence in followers for them to lead (House & Shamir, 1993). Charismatic theories highlighted the importance of behaviors that were originally discussed by House (1977) and Burns (1978), and later by Bass (1985), Bennis and Nanus (1985), Tichy and Devanna (1986), and Conger and Kanungo (1987). Leaders who are transformational or charismatic have produced higher levels of effort, satisfaction, and performance (Avolio, 1999; Bass, 1998).

Podsakoff, MacKenzie, Moorman, and Fetter (1990) explored some of the internal mechanisms affected by transformational leadership. They examined how transactional and transformational leadership impacted the trust that followers had in their leaders, as well as how trust influenced organizational citizenship behaviors. Their results provided evidence to support Bass's (1985) contention that transformational leadership activates higher order needs through the development of trust, leading followers to exhibit extra-role behaviors in addition to in-role behaviors that honor transactional agreements.

Bass and Avolio (1997) addressed some of the issues concerning the need for integrating various models of charismatic-transformational leadership, developing a model referred to as a *full range theory of leadership.* Bass and Avolio chose the label "full range" to expand the thinking in the field of what constitutes the broadest possible range of leadership beliefs, values, perspectives, and styles. As Yukl (1999) noted, "Although no single theory should be expected to include all aspects of leadership behavior, use of the label 'full range leadership theory' by Bass (1996) invites critical evaluation of completeness" (p. 290). Yukl's criticism challenges the field of leadership exactly as Bass and Avolio had intended in choosing the term 'full range.'

In a critique of the charismatic-transformational leadership literature, Yukl (1999) highlighted the importance of examining how transformational versus transactional leadership influences followers through instrumental, compliance, personal identification, and internalization citing Kelman's (1958, 1974) theoretical work as a basis. Yukl pointed out that "the theory would be stronger if the essential influence processes were identified more clearly and used to explain how each type of behavior affects each type of mediating variable and outcome" (p. 287). House and Shamir (1993) provided some useful suggestions for pursuing several lines of research recommended by Yukl. For example, if a follower associates his or her self-concept with a leader's vision or values, one would expect higher levels of identification. Leaders who appeal to the ideological values of their followers would have followers whose images of themselves were linked to the leader's mission and vision. By implicating the follower's working self-concept, House and Shamir argued, a charismatic leader is making certain identities maintained by followers more salient, resulting in greater motivational potential.

Yukl (1999) described work on transformational leadership as following in the footsteps of earlier heroic theories of leadership (Calder, 1977). The effective leader is described as influencing followers to sacrifice and exert exceptional effort. Yukl argued that leadership should also be viewed as reciprocal or shared. More recent discussions of transformational leadership address some of Yukl's concerns (see Avolio, 1999; Sivasubramaniam et al., 2002). However, many leadership researchers still have difficulty viewing leadership as a collective phenomenon.

A final area of concern raised by Yukl (1999) relates to whether it is possible to have a simultaneous occurrence of transformational and charismatic leadership: "In fact, the developing and empowering behaviors associated with transformational leadership seem to make it less likely that followers will attribute extraordinary qualities to the leader" (p. 299). He argued that more empowered and developed followers are less likely to be dependent on their leader, apparently making the assumption that dependence is a necessary condition for charismatic leadership, which would contradict the theory and results in this area (Bass, 1998). Dependence is not a precondition for transformational leadership; nor do we suspect it is for leaders who are socialized charismatic leaders. Nevertheless, examining the power-dependence dynamics between charismatic-transformational leaders and their follower is an important area for leadership research to explore (see Xin & Tsui, 1996).

In sum, work on charismatic and transformational leadership has opened new and exciting areas for leadership researchers to pursue. Most of the work in this area is relatively new, and there is still much to be learned about these complex leadership phenomena.

Measurement Issues Pertaining to Leadership

Leadership has been measured primarily by survey methods (Beyer, 1999; Bryman, Stephens, & Campo, 1996), focusing more on the individual than on interactions between the individual and the situation (Beyer, 1999). Leadership theories, such as Fiedler's contingency model (Fiedler, 1967), include concepts that were developed using factor analysis or other quantitative methods. These techniques provide stable factors that are easy to replicate across multiple studies.

The development of the MLQ (Avolio et al., 1999; Bass & Avolio, 1990) is used here as an example for both the utility and the challenges and limitations of using quantitative methodology. Bass (1985) developed the MLQ and included scales of transformational and transactional leadership. Extensive research on the MLQ over the last 15 years provided both support and criticism (e.g., Bycio, Hackett, & Allen, 1995) concerning its factor structure. These criticisms have led to modifications both in the number of scales used and in item wording. Avolio et al. conducted a comprehensive validation study of the MLQ on 14 diverse samples using confirmatory factor analysis and reported strong support for the original model offered by Bass (1985), as compared to eight other models.

Use of the MLQ demonstrates the utility of quantitative approaches to the measurement of leadership. Nevertheless, critics of quantitative research (e.g., Bryman et al., 1996) argue that these methods are not sufficient when used alone. Surveys typically fail to take into consideration how the context influences leadership, which is a major shortcoming of leadership research.

Implicit Leadership Theory and Leadership Measurement

Critics of survey methodology (e.g., Podsakoff & Organ, 1986) argue that questionnaires require raters to report a specific behavior, yet raters have to recall, weigh, and infer information to respond. In order to simplify this cognitive process, respondents fall back on their implicit models of leadership, which can bias their observations and responses to surveys (Lord & Maher, 1991). Eden and Leviatan (1975) argued that a respondent's reliance on attributions could lead to biases such as specific response patterns throughout a questionnaire that can distort evaluations.

In the last decade a growing number of studies have used qualitative research methods. Bryman et al. (1996) used qualitative methods to show that charisma was exhibited less frequently than instrumental (transactional) behaviors among British police officers. Beyer and Browning (1999) conducted intensive interviews and collected archival and ethnographic data to demonstrate the impact of a charismatic leader on the emergence of the U.S. semiconductor industry. Berson, Avolio, Shamir, and Popper (2001) analyzed the content of videotaped visions reporting a relationship between transformational leadership scores and the optimistic content of visions coded by raters.

Qualitative evidence can offer a more holistic perspective of leadership, helping to explain why differences in ratings exist, rather than simply showing differences. Qualitative strategies such as grounded theory (Glaser & Strauss, 1967) allow for theory development and the inclusion of multiple levels of analysis, including the context in which leadership is observed (Hunt & Ropo, 1995). Nevertheless, qualitative inquiry also has its disadvantages, such as replicating previous measurements (Reissman, 1993) and comparing data collected from different places.

The Utility of Triangulation for Assessing Leadership

Jick (1979) suggested triangulation using quantitative and qualitative measures of the same phenomenon as a method for boosting validity. Triangulation fosters the use of innovative methods, facilitates the examination of new aspects of theories, and allows synthesis and critical comparison between different theories. Whereas quantitative methods allow for better generalizations based on systematic observation, qualitative measures are superior in the vividness and density of information that they provide on phenomena (Weiss, 1968). For example, Berson and Avolio (2000a) examined the utility of triangulation for measuring the relationship between visionary leadership and organizational performance. They reported that how frequently the vision was expressed was less important to organizational performance than was the vision's content.

Triangulating unobtrusive evidence with quantitative and qualitative data provides further support for using triangulation (Webb, Campbell, Schwartz, & Sechrest, 1966). Unobtrusive data can help confirm patterns in quantitative data that are more prone to measurement bias. For example, Berson and Avolio (2000b) used internal correspondence to confirm that a business unit whose managers were rated low in trust was facing shutdown. Interview data revealed that employees did not trust their managers, describing them as weak and helpless, even though followers were unaware of the impending shutdown. The triangulation of survey, interview, and unobtrusive data helped explain why these managers were rated so low on trust.

Leadership research has moved from relying solely on quantitative methods to adding in qualitative methods (e.g., Bryman et al., 1996; Hunt & Ropo, 1995). However, as Bryman et al. concluded, the use of qualitative methods is rare and is frequently done as an addendum to quantitative measurement. Triangulation may be an effective method for testing some of the more complex and controversial aspects of neo-charismatic theories of leadership.

Defining Leadership Effectiveness

As Yukl (1998) suggested, measuring leadership effectiveness has varied from one study to another, often reflecting a researcher's philosophy and implicit assumptions toward leadership. As such, the choice of what constitutes leadership effectiveness has been somewhat arbitrary, potentially affecting the predictive validity of models (Lowe et al., 1996). Looking at prior research on leadership and effectiveness, we classified three different sets of measures: (a) perceived (subjective or process-oriented) versus actual (objective or outcome-oriented) measures; (b) short-term versus long-term measures; and (c) leadership effectiveness measures derived from above (i.e., performance evaluation by superiors) versus below (i.e., performance evaluation of and by followers). Observational measures used in prior research include perceived leader effectiveness, satisfaction, commitment, and loyalty, whereas actual performance was by profit, sales increases, and percentage of goals met.

The time frame also can have several important implications when measuring leadership effectiveness because some leaders may be seen as ineffective in the short term, although they are highly effective leaders over time. For example, we can speculate that while transactional leaders are more likely to be rated as effective in the short run, a transformational leader may be perceived by followers to be more effective over a longer period of time (Nahavandi, 2000). A careful selection of criterion measures is required to uncover this potentially important distinction between the two different leadership styles. Finally, a number of previous studies have demonstrated that a leader and his or her effectiveness tend to be defined and evaluated differently depending on the source of information such as subordinates, peers, and superiors (Atwater & Yammarino, 1997; Facteau, Facteau, Schoel, Russell, & Poteet, 1998; Yammarino & Atwater, 1997).

In our literature review we found that prior studies have used perceived and actual measures of leadership effectiveness evenly. Although it is beyond the scope of this chapter to present a detailed breakdown for each category, a large number of leadership studies measured actual performance. Finally, most leadership studies used more immediate or short-term outcomes such as followers' efforts, commitments, and supervisory ratings, rather than longer term measures such as sales increase, stock prices, and a firm's financial performance because longer term measures are more likely to be contaminated by extraneous factors such as economic conditions and other variables that are beyond leader's personal control (Yukl, 1998). Similarly, a large percentage of prior leadership studies used performance measures obtained from below. Given the popularity of 360-degree feedback for performance evaluation (Atwater, Ostroff, Yammarino, & Fleenor, 1998), future research needs to incorporate all rating sources of leadership effectiveness.

Reciprocal and Shared Leadership

House and Aditya (1997) commented that "there is some speculation, and some preliminary evidence, to suggest that concentration of leadership in a single chain of command may be less optimal than shared leadership responsibility among two or more individuals in certain task environments. . . . [L]eadership involves collaborative relationships that lead to collective action grounded in shared values of people who work together to effect positive change" (p. 457). They referred to collective leadership in their review of the leadership literature, borrowing the term *peer leadership* from work published by Bowers and Seashore (1966), stating, "It is also possible that some of the specific leader behaviors required to enact generic functions can be distributed throughout the entire work group or work unit being managed. Thus, several individuals would enact the same specific leaders' behaviors contemporaneously" (p. 458). As House and Aditya noted, "The research by Bowers and Seashore (1966) clearly demonstrates that the exercise of leaders' behaviors can be shared by members of work units, as well as conducted by formal work unit managers" (p. 459).

Several authors have described leadership as being a collective social influence process (Bales, 1954; Bowers & Seashore, 1966; House & Aditya, 1997) or as coleadership (Pearce & Sims, 2000). For example, while summarizing the Harvard Laboratory Studies on leadership, Bales (1954) suggested that the term *coleadership* might be beneficial for groups to allocate the task and relational leadership roles to different individuals. Research on self-managing teams (Manz & Sims, 1987, 1993) has helped to move the leadership field toward recognizing the importance of leadership *by* the team versus leadership *of* the team by a single individual (Sivasubramaniam et al., 2002). However, most prior research on leadership in teams at all organizational levels has assessed the leadership of a single individual leading a team (Cohen, Chang, & Ledford, 1997). Although several authors have introduced the concept of distributed or collective leadership *within* teams (Katzenbach, 1997; Kozlowski, Gully, Salas, & Cannon-Bowers, 1996; Manz & Sims, 1993; Pearce & Sims, 2000), there have been few attempts to examine leadership as a group-level construct. Dunphy and Bryant (1996) concluded that future research must include leadership *by* the team and *of* the team when modeling effectiveness.

Yukl (1998) stated, "The extent to which leadership can be shared . . . [,] the success of shared leadership[,] and the implications for the design of organizations are important and interesting questions that deserve more research. As yet, we have only begun to examine these research questions" (p. 504). For instance, Pearce and Sims (2000) examined the contribution of vertical and shared leadership to the rated effectiveness in change management teams, concluding that shared leadership independently contributed to predicting team effectiveness above and beyond vertical leadership.

Burns (1997) extended his work on individual transformational leadership to include a focus on *collective leadership.* He argued for "the existence of webs of potential collective leadership" (p. 1). He then suggested that "the initiator [i.e., leader] may continue as a single dominating 'leader' à la Castro, but more typically she will merge with others in a series of participant interactions that will constitute collective leadership. . . . I see crucial leadership acts in the collective process" (pp. 2–3). Similar to Burns's extensions to transformational leadership, Bass (1998) noted that "transformational leadership could be shared among the team members. . . . Instead of motivation being supplied by identification of members with an idealized, charismatic leader, similar motivation would be supplied by identification with the team. . . . Inspiration would come from a sharing of mutually articulated goals” (p. 157).

Sivasubramaniam et al. (2000) reported that perceptions of collective transformational leadership in student teams predicted team potency and group performance over a three-month period of time. Pearce (1997) reported that shared leadership was related to group potency, citizenship, and group effectiveness. Mankin, Cohen, and Bikson (1996) argued that the role of leadership will change in technology-mediated groups and that leadership may emerge more as a shared construct initiated within a team. Preliminary evidence to support their position comes from Weisband, Schneider, and Connolly (1995). Group members interacting through computer-mediated systems instead of face to face participated more equally.

In sum, by advancing leadership as a shared process, we can position researchers to explore from a cognitive, behavioral, and contextual perspective an alternative and more complex form of leadership relevant to today’s web-based, virtual organizations.

EMERGING AREAS IN LEADERSHIP THEORY AND RESEARCH

Leadership Development: Born/Made

We now explore an area of leadership where more has been written than perhaps in any other area. Unfortunately, volume does not correlate with quality. Numerous popular books profess to have the solution to developing high potential leadership. However, as House and Aditya (1997) concluded, “That management training and development efforts will result in improved management appears to be taken as an article of faith by many organizations, professional management associations and consultants. Yet, despite the immense amount of investment in management training on the part of corporations and government, there is little evidence that such training results in more effective management behavior” (p. 459). Because only 10% of all leadership development programs are evaluated beyond participants’ satisfaction with the program, it is premature to say that leadership development can or cannot be developed. For example, Burke and Day (1986) completed a meta-analysis of 70 different management training studies and concluded that there were positive and negative effects for knowledge development. House and Aditya (1997) cited preliminary evidence supporting the positive effects of training that were associated with use of Graen’s LMX.

Leadership Development in Context

When evaluating leadership development, it is important to consider how the context promotes or inhibits the transfer of training effects. For example, supervisory training not supported by the management culture of the organization has resulted in higher role conflict and stress and lower job performance (Fleishman, Harris, & Burtt, 1955; House, 1960; Sykes, 1962).

Most leadership training fails to recognize that leadership constitutes a complex interaction between leaders, followers, and the context (Day, 2000; Fiedler, 1996). Day made a useful distinction between leader development and leadership development. Leader development has the primary goal of enhancing an individual’s capacity and potential (H. Gardner, 1983, 1985). Day provided specific examples focusing on areas such as self-awareness, self-regulation, and self-motivation, citing the work of McCauley (2000, 2001). Leadership development focuses on the interaction of the leader within a social-organizational context, an area repeatedly neglected in past leadership development research (Fiedler, 1996; Zaccaro & Klimoski, 2001). Day concluded that “leadership development can be thought of as an integration strategy by helping people understand how to relate to others, coordinate their efforts, build commitments, and develop extended social networks by applying self-understanding to social and organizational imperatives” (p. 10).

Starting with the context, individuals can be developed based on their job assignments and responsibilities. Challenging new assignments can be strategically used to develop the potentials of leaders (McCauley & Brutus, 1998). What leaders learn from both positive and negative experiences on the job represents a fruitful area for future research. Indeed, many companies such as Coca Cola, General Electric, and Citibank strategically utilize work assignments as a way of building individual and collective leadership potential. Research done by McCauley, Ruderman, Ohlott, and Morrow (1994) showed that challenging work assignments are correlated with on-the-job learning, but such learning has not been empirically linked to leader or leadership development. Thus, does leadership develop differentially over time as one moves through various stages of life (Erikson, 1968; Kuhnert & Lewis, 1987)?

Self-Concept and Leadership Development

The manner in which a leader views himself or herself, behaves, and influences followers may stem from an awareness of the leader’s self-concept or identity (Hanges, Lord, & Dickson, 2000), self-goals, possible selves (Lord, Brown, & Freiberg, 1999; Sosik, 2000), self-awareness, self-regulation

(W. L. Gardner & Avolio, 1998; Sosik & Dworakivsky, 1998), familial issues (Simonton, 1994), maturation (Erikson, 1968), dependence versus independence (Conger, 1999), defense mechanisms, and repression of a shadow self (Kets de Vries, 1988). To develop fully, leaders must develop self-awareness and acceptance to understand how to interact with followers (Goleman, 1998; Kets de Vries, 1988).

360-Degree Survey Feedback and Leadership Development

One of the central features of most leader development programs is the use of 360-degree feedback systems (Waldman & Atwater, 1998). However, relatively little is known about their impact on creating leader self-awareness and development (Atwater, Waldman, Atwater, & Cartier, 2000). Atwater and her associates offered some positive evidence for the impact of upward feedback on leader development, as did Hegarty (1974). However, why feedback had a positive impact had not been determined in prior research. As Atwater and her associates argued, improvements could stem from an awareness of self-other rating differences, from highlighting dimensions of leadership that focus one's efforts, from motivational pride to close the gap between self-other ratings, or from some combination of factors. On the negative side, Kluger and DeNisi (1996) reported that in over one third of the cases of providing feedback, performance was actually reduced after feedback.

Atwater et al. (2000) reported that in an organization where cynicism was higher, the level of positive change following feedback was lower: "This finding suggests that cynicism may have contributed to the ratings of leadership that supervisors received after the initial feedback, rather than cynicism being related to concurrent ratings of leadership at Time 1" (p. 287).

Impact of Leadership Training

Although only a small number of studies have examined how training can impact neo-charismatic or transformational leadership development, several results are worth noting. Avolio and Bass (1998) reported the results of a field study of community leaders that went through a 1-year training intervention, using the full-range leadership model. There were significant and positive changes in followers' evaluations of transformational leadership for those participants who created leadership development plans that were independently coded as having clear, specific, and measurable goals.

Crookall (1992) conducted a training study with prison shop supervisors to compare transformational to situational leadership training. Group 1 received a transformational training program, whereas Group 2 received situational training and Group 3 received no training. Both trained groups pre- to posttraining intervention improved on the order of 10% to 50% depending on the criterion measures. Transformational leadership training had a more positive impact on personal growth and performance while improving inmates' respect for supervisors, skills development, and good citizenship behaviors. Barling, Weber, and Kelloway (1996) examined the impact of transformational leadership training with bank managers in a field experiment conducted in a large financial institution. Using a coaching model, they reported that certain aspects of transformational leadership improved as well as managerial performance. Dvir, Eden, Avolio, and Shamir (2002) completed a true field experiment with Israeli platoon commanders randomly assigned to two versions of transformational leadership training. Both programs involved 3 days of training. The newer or experimental transformational leadership program also included a 3-hr booster session approximately 1 month after the close of the first session. The booster session was used to coach individual commanders on leadership development and self-reflection. Results showed significant differences in what was learned about transformational leadership, changes in transformational behavior, and performance effects, which were all in the predicted direction. Transformational leadership ratings increased over time for the group going through the experimental transformational leadership program. Six months following the close of training, groups going through the experimental transformational leadership training had significantly higher performance.

A growing body of evidence suggests that transformational leadership can be developed using in vitro methods. We have also learned that some leadership styles may be learned in vivo. For example, Klonsky (1983) reported that parental warmth, discipline, and achievement demands predicted the type of leadership behaviors observed among high school students. Cox and Cooper (1989) reported that many successful British CEOs experienced an early loss of a parent or were separated from them at an early age. Avolio and Gibbons (1988) used life history interviews of executives and concluded that those who were evaluated as more transformational had parents who set high standards and encouraged them to do their best, came from family circumstances that were challenging, and learned from parents to deal more effectively with disappointment and conflict. Zacharatos, Barling, and Kelloway (2000) examined relationships between parental leadership style and the leadership of children based on self, peer, and supervisor ratings. Results showed that perceptions of one's father's transformational leadership had a significant relationship with self and other transformational leadership ratings.

There is a shift occurring in the field of leadership development where research and practice are focusing more on how people learn within their work context to be more effective leaders (McCauley, 2001; Moxley & O'Connor-Wilson, 1998). Work on coaching and mentoring is a popular emerging area. Coaching has typically been described like mentoring as a longer-term process that focuses on both the context and the individual (Day, 2000; Kilburg, 1996). Like other areas of leader and leadership development, however, there is still very little research to support the effectiveness of coaching (Day, 2000; Kilburg, 1996). There is also a thin literature base demonstrating the effectiveness of mentoring programs (Day, 2000). Research comparing formal to informal mentoring programs concluded that there are more positive benefits for informal mentoring relationships (Ragins & Cotton, 1999). Additional research indicates that gender and racial differences need to be explored in terms of the effectiveness of mentoring and coaching.

Thus, the collective evidence suggests that leaders and leadership can and are developed over time, both in natural settings as well as in workshops. After nearly 60 years of research on leadership development, the field is finally getting around to answering a question that represents one of the core reasons for studying leadership: Can we develop it over time?

Examining Leadership Across Cultures

Culture is a part of the social context in which leadership is embedded, and it is expected to moderate and mediate leader and follower interactions. Culture is a mindset that emerges through social interaction and is transmitted and diffused through the interaction among individuals (Hofstede, 1980, 1983; Triandis, 1994). Over the years, studies have examined a broad range of questions concerning the linkage between leadership and culture: Are certain leader behaviors and styles culturally universal? Do theories of leadership developed in the United States generalize to other cultural settings? House, Hanges, Agar, and Quintanilla (1995) argued that answers to these questions could provide organizations with a strategic advantage for developing a diverse range of future leaders (for additional reviews see House, Wright, & Aditya, 1997; Peterson & Hunt, 1997).

Single-Culture and Single-Country Research to Multiculture and Multicountry Research

Single-culture and *single-country* research aims to replicate specific leadership theories or models in other cultural settings. For example, Shamir, Zakay, Breinin, and Popper (1998) examined charismatic leadership behavior and its effects on followers' attitudes and leadership effectiveness in the Israeli military. *Multiculture* and *multicountry* research examines arguments concerning whether a particular leadership theory, model, or style generalizes across cultures. The GLOBE project initiated by House and his international research team (Den Hartog, House, Hanges, Ruiz-Quintanilla, & Dorfman, 1999) represents this second category of cross-cultural leadership research. Preliminary evidence cited earlier showed that attributes associated with charismatic leadership were universal (Bass, 1997).

A third category of cross-cultural leadership research has examined the effects of cultural diversity within group or team settings, testing how differences in ethnicity of leaders and followers affected the perceptions and outcomes of leadership within those groups and teams. This research examines how certain styles of leadership affect followers' motivation, effectiveness, and performance when followers are ethnically or culturally different from their leader or when in culturally heterogeneous groups (Hooijberg & DiTomaso, 1996). Such research has compared how different leadership styles displayed within different ethnic groups within a single culture affected follower perceptions, motivation, and performance (Jung & Avolio, 1999).

Cultural Values and Leadership

Over the last two decades, cross-cultural research has focused primarily on four cultural dimensions (see Hofstede, 1980, 1993). These dimensions included power distance, uncertainty avoidance, individualism/collectivism, and masculinity/femininity. These four cultural dimensions have been used to identify potential boundary conditions for leadership theories that have been applied across cultures (Dorfman, 1996). For example, a leadership theory that argues for a democratic leader as an ideal style of leadership may not generalize to cultures where an unequal distribution of power is accepted as the norm (Dorfman & Howell, 1988; Jung, Bass, & Sosik, 1995).

Key Results of Research on Cross-Cultural Leadership

Early cross-cultural leadership studies focused on task- and relationship-oriented leadership styles. This research included a wide range of samples from the Philippines and China (Bennett, 1977), Japan (Misumi, 1985; Misumi & Peterson, 1985), India (Sinha, 1984), New Zealand (Anderson, 1983), Mexico (Ayman & Chemers, 1991), and Israel (Fleishman & Simmons, 1970), among many other cultures and nations, and has reached two general conclusions: (a) The most effective leadership styles are a combination of high relationship- and high task-oriented leadership, and (b) although general patterns of leadership are similar across cultures, specific behaviors and attitudes expressed by leaders appear to differ across cultures (Bass, 1997).

Prior cross-cultural research has also tested social identity and LMX theory. Pelled and Xin (1997) investigated the effect of leader-member demographic similarity on followers' organizational attachment to Mexican organizations, with leaders coming from a high power distance culture. They reported that Mexican employees, who had a small age gap with their superior, were less likely to be absent and were more attached to their organization. These same followers exhibited lower commitment to their work while expressing higher levels of comfort working for a younger supervisor. Farh, Tsui, Xin, and Cheng (1998) examined the effects of relational demography and personal network ties called *Guanxi* in China on leader-follower relationships and reported that demographic similarities among leaders and followers had a positive impact on follower trust in the leader.

Recent cross-cultural leadership research has focused on testing neo-charismatic models of leadership. For instance, Shamir et al. (1998) reported mixed support for the relationship between charismatic leadership and Israeli followers' attitudes toward their respective leader. Only one of three charismatic behaviors (emphasizing units' collective identity) was positively related to followers' identification with and trust in the leader, whereas the other two behaviors (i.e., supportive behavior and ideological emphasis) were either unrelated or negatively related.

Contrary to the Shamir et al. (1998) results, the majority of cross-cultural research on charismatic-transformational leadership has supported the hierarchy of leadership effectiveness styles comprising Bass and Avolio's (1994) model of leadership. Koh, Terborg, and Steers (1991) reported that transformational leadership of Singaporean school principals had significant add-on effects to transactional leadership in predicting organizational commitment, citizenship behavior, and teacher satisfaction. Similar augmentation effects have been reported in a wide variety of samples, including Canadian (Boyd, 1988; J. M. Howell & Avolio, 1993), Mexican (Dorfman & Howell, 1988; Echavarria & Davis, 1994), Italian (Bass & Avolio, 1994), and Danish (Den Hartog, Van Muijen, & Koopman, 1994). Overall, the positive effects that transformational leadership has on follower's motivation and performance have been well documented in other cultural settings, including Austria (Geyer & Steyrer, 1998), Israel (Popper, Mayseless, & Castelnovo, 2000), and Korea (Cho, 1999; Jung, Butler, & Baik, 2000).

Results of multiculture and multicountry research are equally interesting. For example, Dorfman and Howell (1988) reported different effects associated with charismatic leadership when comparing Mexican versus American employees. Charismatic leadership had a strong positive relationship with both Mexican and American employee satisfaction levels; however, the relationships were much stronger for American versus Mexican employees. Dorfman et al. (1997) reported that among six leadership behaviors examined across five countries, leader supportiveness, contingent reward, and charisma had universally positive relationships with followers' level of satisfaction, whereas participative, directive, and contingent punishment had positive relationships in only two cultures.

Fu and Yukl (2000) compared the perceived effectiveness of influence tactics in the United States and China, reporting that American and Chinese managers favored different influence tactics. American managers rated rational persuasion and exchange as more effective styles compared with their Chinese counterparts. Chinese managers rated coalition building, upward appeals, and gifts as more effective than did American managers. Rao, Hashimoto, and Rao (1997) examined influence tactics employed in Japan and reported that Japanese managers used many of the same influence tactics as did their American counterparts but differed on behaviors.

Valikangas and Okumura (1997) examined differences in follower motivation, comparing leaders in the United States and Japan. They concluded that leadership in the United States was based on followers' *utility expectations* (i.e., a "right" agency will result in the "right" outcomes). Leadership in Japan was based on *identity expectations* (i.e., a "right" group or corporate identity will result in "right" behaviors among followers).

How do people in different cultures perceive their ideal leaders? Using an attribute-rating task in which people rated a list of attributes according to how well each attribute fit their prototype of leaders, Gerstner and Day (1994) examined leadership prototypes across eight countries. Gerstner and Day reported that *to be determined* was a prototypical attribute of leaders in Western countries, whereas *intelligence* was considered highly prototypical in Asia. Den Hartog et al. (1999) reported that a number of attributes associated with charismatic-transformational leadership were considered "ideal" attributes of leadership across 62 different countries. The following leadership attributes were endorsed across cultures: encouraging, positive, motivational, confidence builder, dynamic, and foresight. On the other hand, being a loner, noncooperative, ruthless, nonexplicit, irritable, and dictatorial were seen as negative facets of leadership (Conger & Hunt, 1999).

Brodbeck et al. (2000) reported differences in leadership prototypes across 22 European countries. Their sample included middle-level managers ($N = 6{,}052$), who rated 112 traits and behaviors in terms of how well they represented outstanding business leadership. Some leadership concepts were culturally endorsed and grouped according to the values representing a cluster of nations. Interpersonal directness and proximity were more strongly associated with outstanding leadership in Nordic countries versus Near East and Central European countries. Autonomy was associated with outstanding leadership in Germanic countries. Wofford, Lovett, Whittington, and Coalter (1999) argued that differences in leadership prototypes may be a function of the type of organization from which raters are pooled. For example, with raters coming from the United States and Mexico, Wofford et al. (1999) reported that differences in leadership prototypes in their investigation were due to the type of institutions from which participants were sampled, as well as to their national cultures. Xin (1997) reported that different impression-management tactics were used by Asian American and Caucasian American managers. Specifically, Asian American managers used more job-focused (e.g., pointing out past accomplishments to my supervisor) and more supervisor-focused (e.g., offering to do things for my supervisor that are not formally required) impression-management tactics and less self-disclosure (e.g., expressing my feeling to my supervisor). Jung and Avolio (1999) reported that Asian Americans generated more ideas when they worked with a transformational leader in a brainstorming task, whereas Caucasian Americans performed better when working with a transactional leader. Asian Americans also performed better when they worked alone than when they worked as a group generating ideas requiring radical changes.

A common theme running through many cross-cultural studies of leadership concerns how cultural values moderate or mediate relationships between a leader and his or her followers. Support for both cultural-universal and culture-specific aspects of leadership have been provided in prior research. However, several important issues must be addressed to advance the field. First, Hunt and Peterson (1997) pointed out the need to define and measure leadership constructs in a similar way across different studies. Leadership has been measured based on various methods, including the use of influence tactics (e.g., Fu & Yukl, 2000), prototype attributes (e.g., Brodbeck et al., 2000), charismatic and transformational leadership behaviors (Shamir et al., 1998), and motivational differences (Valikangas & Okumura, 1997). Second, there has been insufficient attention to defining the level of analysis at which cultural differences should be examined (Hunt & Peterson, 1997). For example, different types of leadership effectiveness and outcome measures have been compared across different levels of analysis in organizations, making it difficult to discern the impact of cultural differences reported in this literature. Third, there has been a high degree of variance in the quality of methods used by different researchers. For example, some researchers hired professionals to translate and back-translate their survey instruments to ensure functional and conceptual equivalence, whereas others did not use professional translation. Fourth, by and large, culture has generally been included in studies as either a moderator or mediator variable (Hunt & Peterson, 1997). Most prior research has not treated culture as a fundamental variable that drives the relationship between leaders and followers (House, Wright, & Aditya, 1997). Finally, the majority of cross-cultural research has relied on quantitative, survey-based research designs, and more qualitative, unobtrusive research methods are now needed to examine how culture shapes leadership.

Strategic Leadership Research

Beginning with Barnard (1938), research on strategic leadership has concentrated on identifying best practices that contribute to firm success. Recent research has focused on internal firm characteristics (Hoskisson, Hitt, Wan, & Yiu, 1999), either in the form of agency contracts (Jensen & Meckling, 1976) or by focusing on a firm's unique resources. Both approaches take into consideration the role of leaders as representing strategic assets for the firm.

Strategic leadership researchers have argued that organizations become a reflection of their top managers (Hambrick & Mason, 1984; Klimoski & Koles, 2001). Hambrick (1989) emphasized the importance of strategic leadership but also recognized that its impact may be more indirect. Moreover, top managers face ambiguous environments and often experience information overload (March & Simon, 1959). Under these conditions, successful leadership is determined by the frame of reference used by decision makers, which includes their personal background, experiences, education, and other biographical characteristics. Strategic leadership helps to coordinate and maintain organizational systems, while readying it for adaptive change.

Beginning with Kotter (1982) and Hambrick and Mason (1984), strategic leadership research has focused on personal and background characteristics of executives related to firm success. According to Hambrick and Mason, personal characteristics together with environmental constraints and organizational factors constitute the leader's "discretion" (Cannella & Monroe, 1997). The amount of discretion employed by top managers moderates the relationship between their strategic choices and organizational outcomes. Cannella and Monroe criticized the overreliance on using biographical data as predictors of strategic performance. They argued that strategic leadership theory relies too much on descriptive variables to explain choices that executives make while providing little guidance on how to include the *process* of leadership in its research designs. Here is where some of the work on the neo-charismatic theories of leadership (e.g., Bass, 1985; House, 1995) may contribute to strategic leadership theory by focusing on how the leader's think, behave, and are affected by the context.

Integrating Transformational and Strategic Leadership

The neo-charismatic theories of leadership focus on interpersonal processes between leaders and followers (House & Aditya, 1997). These theories focus on the process of leadership within organizations, although they could also be applied to leadership across organizations. Transformational or charismatic leaders have followers who emulate them and perform beyond expectations (Avolio, 1999; Bass, 1985). Their followers may be more open to shifts in their worldview and to accepting new values and changes in thinking and strategy (Boal & Bryson, 1988). Transformational leaders often convey their ideas using a strategic vision for the organization that includes strategic goals presented in a future-oriented optimistic framework (Berson et al., 2001). As noted by Zaccaro and Banks (2001), "a fundamental requirement of organizational leadership is setting the direction for collective effort on behalf of organizational progress" (p. 181).

The turbulence that characterizes today's environment dictates constant transformation and even radical change for organizations. The process of radical change begins with a strategic vision that leaders have for their organization. A vision is an outline of a strategic and lofty action plan or a guideline to the "new way of doing things" following the transformation (Nutt & Backoff, 1997). A comprehensive vision can help to align the views of multiple stakeholders, which is critical to change and success (Nutt & Backoff, 1997).

Although it seems that strategic leaders would benefit from a charismatic or transformational style, strategic leadership theorists have taken a different position on this issue. They argue that charisma may narrow the executive's information processing orientation, thereby restricting the range of strategic choices (Finkelstein & Hambrick, 1996). Specifically, Finkelstein and Hambrick suggested that charismatic leaders are more likely to receive filtered and distilled information from their followers and may be less aware of information that contradicts their visions. This occurs when followers are threatened by the charismatic leader's ability to "see the future" and are hesitant to offer ideas that conflict with their leader's vision. Alternatively, Cannella and Monroe (1997) argued that charismatic-transformational leadership could actually help strategic leaders implement their organization's strategy. Indeed, Brass and Krackhadt (1999) suggested that the high social intelligence characterizing transformational or charismatic leaders allows them to estimate the social capital, or the potential influence that is available to a leader based solely on the characteristics and the structure of a social setting. Transformational or charismatic leaders can both analyze the environment and enforce norms that help them accomplish instrumental objectives, such as strategy implementation without restricting the flow of information.

Berson and Avolio (2000b) examined the contribution of transformational leadership to the dissemination of strategic goals. Their findings indicated that senior executives rated more transformational were also more effective disseminators of strategic goals than were nontransformational executives. Transformational leaders exhibited a prospector strategy, which emphasized innovation and risk taking (Miles & Snow, 1978). Absence of transformational leadership at the top created confusion and a lack of alignment with regard to the dissemination of strategic goals across subsequent organizational levels.

Several researchers have offered models of organizational life cycles (e.g., Mintzberg, 1980; Quinn & Cameron, 1983) that included formation, development, maturity, and decline. In the strategic management literature (e.g., Zanetti & Cunningham, 2000) authors have highlighted certain strategic implications for each stage of an organization's life cycle with implications for leadership research. The new genre of leadership, specifically transformational leadership (Avolio, 1999; Bass, 1985), offers a range of leadership behaviors that could be examined in relationship to organizational life cycles. Strategic leadership theory can also benefit from studies that examine the cognitive and emotional characteristics of effective strategists. Boal and Hooijberg (2001) offered several avenues for future research emphasizing social capital, cognitive complexity, and managerial wisdom as a basis for examining how strategic leaders think and link their thinking to action.

In sum, the strategic management and leadership literatures are beginning to converge in ways that lay the groundwork for an interesting line of research projects. How CEOs and top management teams in organizations affect employee motivation and performance is now being researched in ways that will advance both areas.

E-Leadership and Its Distribution in Organizations

Leadership within the context of advanced information technology (AIT) has become a strategic asset for organizations (Avolio, Kahai, & Dodge, 2000). Such leadership may be termed *e-leadership*. It can involve one-to-one, one-to-many, and within- and between-group and collective interactions via AIT. Sociotechnical systems theory (e.g., Trist, 1993) suggests that organizational effectiveness is a function of how well the leadership and AIT systems are aligned with each other and the external environment. This theoretical framework suggests several important implications for e-leadership research within and between organizations.

Several intraorganizational issues are relevant to e-leadership. First, e-leadership and technology can be viewed as system components that interact and evolve over time, providing structures that guide action in organizations using AIT. Avolio et al. (2000) identified adaptive structuration theory (AST; DeSanctis & Poole, 1994) as a useful theoretical framework for examining the interaction between technology and leadership. AST proposes that AIT affects human interaction by providing structures (e.g., rules, resources) stemming from the AIT, task, environment, emergent structures, and the group. People also influence the interpretation and use of AIT (i.e., adoption, resistance, or rejection). Leaders are also part of the sociotechnical system who "make meaning" by promoting technology adoption while considering the impact of existing organizational norms and culture on the use of this technology.

Leadership can promote successful adaptations to technological change, or it can restrict new AIT development, implementation, and adoption. Oz and Sosik (in press) surveyed 159 chief information officers and reported that passive leadership in AIT project teams was the main factor contributing to project failure. Vandenbosch and Ginzberg (1997) suggested that the adoption and derived benefits of groupware technology by organizations have fallen short of expectations because of the absence of leadership that fosters a cooperative culture. Leadership can restrict new AIT use to such an extent that it has little, if any, impact on organizational effectiveness. For example, autocratic leadership may repel attempts at collaboration enabled by groupware systems (Kahai, Sosik, & Avolio, 1997). Similarly, using LMX theory, a leader who has created an in-group versus an out-group among followers may inhibit collaboration using groupware due to a lack of trust (Avolio et al., 2001). Successful implementation and integration of AIT may require a significant transformation in the leadership system in advance of, during, and after the insertion of the new technology.

The IT revolution has influenced how new organizational systems need to be structured by leaders to adapt in the e-business context. Organic structures, shaped by massive enterprise-wide information systems, collaborative work flows, and geographically distant or temporally removed teams, are required to achieve flexibility and openness in the current work environment (Oz, 2000).

Leaders today often make decisions that have relatively little historical base in the midst of rapidly changing technological environments (Sheehy & Gallagher, 1996). As such, more disciplined analytical models of decision making, which dominated the strategic management literature (e.g., Stevenson, Pearce, & Porter, 1985), may have been modified to include models placing greater value on experimentation and continuous learning (Hedlund & Rolander, 1990).

Comprehensive enterprise-wide information systems have promoted collaborative sharing of information across organizational stovepipes, causing shifts in power dynamics and networking (Postmes, Spears, & Lea, 2000; Sheehy & Gallagher, 1996). Widespread availability of information on company intranets and the Internet provide followers with increased online networking opportunities via chat rooms, e-mail, and message boards, offering them alternative channels of information to those provided within traditional management hierarchies. These trends offer leaders an unprecedented opportunity to empower their followers to build more intelligent communities. However, AIT can also present leaders and followers with the challenges of information overload, followers' receiving messages that are discrepant with their leaders, and social isolation.

Applications of E-Leadership Between Organizations

The proliferation of B2B and business-to-customer (B2C) transactions highlights the role of e-leadership as a between-systems concept (Avolio et al., 2000). For example, Ford, General Motors, Chrysler, Nissan, and Renault are partnering to develop a vast electronic supply chain network that will link their business transactions (Baer & Davis, 2001). This B2B initiative will require effective information and collaborative leadership that can harness technology to support virtual teams working across time zones and diverse cultures. Current leadership models need to incorporate macrolevel variables that span organizations, such as culture congruence and technology compatibility, which play a critical role in defining interorganizational leadership.

Another interorganizational issue relevant to e-leadership is the deployment of B2C technologies that link organizations to their customers via supply chains and enterprise information systems. Internet-mandated changes in business have prompted organizations such as Charles Schwab and Company to develop customer-centric strategies that implement personalized and customized technologies meeting each customer's needs. The deployment and adaptation of such customer-centric systems pose significant challenges to both researchers and practitioners because our current models of leadership do not take into full consideration customers as constituents in the leadership system.

The Internet and other forms of AIT have enabled new models for interacting within and between organizations (e-business) and with customers and suppliers (e-commerce; O'Mahoney & Barley, 1999). The new business models highlight fundamental differences to leading in a digitized world that must now be researched. Studies of leadership in computer-mediated environments provide a foundation for examining how leaders influence social interactions within and between organizations. Early work on group support systems (GSSs) focused on how facilitation (e.g., George, Dennis, & Nunamaker, 1992) and emergent (e.g., Harmon, Schneer, & Hoffman, 1995) or appointed leadership (e.g., Lim, Raman, & Wai, 1994) influenced group processes (e.g., consensus, communication content) and outcomes (e.g., decision quality, satisfaction). Evidence indicated that the type of facilitation and leadership had an impact in GSS contexts and highlighted the potential for GSS structures or processes (e.g., anonymity) to substitute for or moderate leadership effects on group processes and outcomes (George, Easton, Nunamaker, & Northcraft, 1990; Ho & Raman, 1991).

Over the last decade, a series of research studies have systematically manipulated and measured effects of various leadership styles, including directive, participative, transactional, and transformational approaches, on various process and outcome variables collected in GSS contexts. Participative (directive) leadership for groups solving a less (more) structured task led to more solution proposals (Kahai et al., 1997). Transformational leadership has been linked with higher levels of group potency (Sosik, Avolio, & Kahai, 1997), more questioning and supportive comments (Sosik, 1997), and more creative outcomes in terms of elaboration and originality (Sosik, Kahai, & Avolio, 1998) versus transactional leadership. Anonymity moderated the impact of leadership style on GSS performance depending on whether the group used the GSS to brainstorm or to complete a task report (Sosik et al., 1997). Anonymity also interacted with leadership to influence motivation levels of GSS users (Sosik, Kahai, & Avolio, 1999).

Several findings of GSS research are relevant for building new models of e-leadership. First, research on relational development in groupware contexts (Walther, 1995) suggests that groups may shift from task to relational communication over time. Second, group history creates an embedded social structure that may influence the subsequent adoption and effective use of GSS technology (Weisband et al., 1995). Third, there may be differences in national and organizational cultures affecting the use of AIT. For example, collectivistic cultures may find collaborative technologies more useful than individualistic ones. Finally, whereas anonymity may enhance group identification of GSS users (Lea & Spears, 1992), it may make it difficult for users to judge the credibility of an idea in high power distance cultures (Dennis, Hilmer, & Taylor, 1998).

Relevant Models and Methods for E-Leadership

Several leadership models are relevant to examining e-leadership. Given that GSS process structure may neutralize leader efforts (Ho & Raman, 1991) and GSS anonymity may enhance effects of transformational leadership on group potency (Sosik et al., 1997), substitutes for leadership theory (Kerr & Jermier, 1978) may be a useful framework for examining how the context affects measurement of e-leadership. LMX theory (Graen & Uhl-Bien, 1995) may provide some insight on how dyadic relationships emerge in virtual contexts or how in-groups and out-groups differ in terms of trust, commitment, and motivation when interacting virtually. Theories of shared leadership (e.g., Avolio, 1999) may be helpful to understanding how team member perceptions influence trust and subsequent team interaction (e.g., efficacy, cohesion) and outcomes (e.g., creativity, satisfaction). Neo-charismatic theories (Conger & Kanungo, 1998; W. L. Gardner & Avolio, 1998) and social distance (Shamir, 1995) focusing on self-perceptions and self-presentation are relevant to examining how AIT influences leaders working at a distance virtually with followers.

What's Next With E-Leadership?

At the individual level of analysis, work is needed examining how leader-follower virtual interactions influence follower perceptions of leadership, the effectiveness of impression-management strategies (W. L. Gardner & Avolio, 1998), and perceptions of social distance (Shamir, 1995). At the group level, we need to examine shared leadership (Sivasubramaniam et al., 2000); interactions among leadership, AIT structural features, and task type (Sosik et al., 1997); the use of AIT within and between multicultural teams; how e-leadership transforms team processes and outcomes over time (Walther, 1995); and which forms of AIT best support e-leadership (Avolio et al., 2000). At the organizational level, work is required on culture and structural influences of AIT, on their interaction with leadership, and on the subsequent transformation of technology and leadership into an integrated system that works.

In sum, organizations are dramatically changing with the integration of AIT. B2B and B2C models of e-commerce have enabled Web-based dot-com organizations, such as Amazon.com, to change the fundamentals of business. Such organizations possess structures, cultures, and human resources that are vastly different from traditional bricks-and-mortar organizations. A critical research question is, How does the integration of technology into organizations affect our models, measures, and development of leadership?

CONCLUSION: NEW LEADERS IN NEW ORGANIZATIONAL CONTEXTS

Projected workplace trends toward increased diversity, multiple generations, teaming, innovation, environmental turbulence, global competition, and AIT suggest that certain attributes may be required for leaders to adapt to and fit in with these trends. Increased diversity will require leaders to possess a cultural intelligence characterized by tolerance, empathy, and cooperativeness to appreciate differences among followers. Leaders will need integrative complexity to synthesize multiple perspectives into coherent solutions (Simonton, 1994). Leading followers from the baby boom, generation X, and Internet generation cohorts will require leaders to appreciate cross-generational differences. Adapting to information-based team environments will require leaders to understand a collectivistic orientation (Jung et al., 1995), systems thinking (Mumford et al., 2000), and capacities for filtering large amounts of information coming from computer networks (Avolio et al., 2000). Dealing with environmental turbulence and global competition will require leaders to be adaptable (Mann, 1959), resilient to stress (Goleman, 1998), fully knowledgeable of competitors and their products (Kirpatrick & Locke, 1991), and capable of solving complex problems quickly (Zaccaro et al., 2000).

How are leaders being selected and prepared for these changes? Based on the available evidence, the answer is probably not well. Leadership failure rates range from 50% to 60%, costing organizations billions of dollars each year (Hogan et al., 1994). To reduce failure rates will require a better integration of the various lines of leadership research. For example, there is a need for research to examine the intersection of trait-based (e.g., Kirkpatrick & Locke, 1991), skill-based (Mumford et al., 2000), behavior-based (e.g., Avolio, 1999; Bass, 1998), and situational (e.g., Fiedler, 1967) leadership theories to develop profiles of successful and unsuccessful leaders. Such profiles could help researchers focus on converging toward, rather than diverging from, understanding leadership processes and outcomes within the new and emerging organizational realities. With this level of integration and awareness of the context, we can begin to examine leadership as a total system, which includes the leader, followers, emerging context, and time in our assessments of leadership potential and effectiveness.

In sum, now where hierarchies are less clear, more leaders will likely emerge without position power (Huxam & Vangen, 2000). How leaders acquire, utilize, distribute, and replenish their influence and power is even more interesting today, given the seismic shift in organizations, the workforce, and the environmental context. How followers will play a role in the leadership dynamic may represent one of the most significant and important frontiers for research in the future. It is also likely that there will be far fewer followers and more leaders needing to figure out how to share leadership. Shared leadership also represents a new frontier for leadership researchers, especially shared leadership across time, distance, organizations, and cultures in the form of virtual teams.

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