LEADERSHIP DEVELOPMENT: A REVIEW IN CONTEXT

David V. Day*
The Pennsylvania State University

Interest in leadership development is strong, especially among practitioners. Nonetheless, there is conceptual confusion regarding distinctions between leader and leadership development, as well as disconnection between the practice of leadership development and its scientific foundation. The present review examines the field of leadership development through three contextual lenses: (1) understanding the difference between leader development and leadership development (conceptual context); (2) reviewing how state-of-the-art development is being conducted in the context of ongoing organizational work (practice context); and (3) summarizing previous research that has implications for leadership development (research context). The overall purpose is to bridge the practice and science of leadership development by showing the importance of building both human and social capital in organizations. Specific practices that are reviewed include 360-degree feedback and executive coaching, mentoring and networking, and job assignments and action learning. Practices and research are framed in terms of a general need to link leader development, which is primarily based on enhancing human capital, with leadership development that emphasizes the creation of social capital in organizations.

In the traditional organization—the organization of the last one hundred years—the skeleton or internal structure, was a combination of rank and power. In the emerging organization, it has to be mutual understanding and responsibility.

-Peter F. Drucker, Managing in Times of Great Change

Interest in leadership development appears to be at its zenith. One indicator of this interest is seen in survey results highlighting the increased attention and resources given to leadership development (The Conference Board, 1999). Many organizations are viewing leadership as a source of competitive advantage and are investing in its development accordingly (McCall, 1998; Vicere & Fulmer, 1998).

Leadership Quarterly, 11(4), 581–613. Copyright © 2001 by Elsevier Science Inc. All rights of reproduction in any form reserved. ISSN: 1048-9843

^{*} Direct all correspondence to: David V. Day, Department of Psychology, The Pennsylvania State University, University Park, PA 16802; *e-mail*: dvd1@psu.edu.

Another indicator of the burgeoning interest in leadership development is the number of current publications on the topic. One of the most notable offerings is the *Center for Creative Leadership Handbook of Leadership Development* (McCauley, Moxley, & Van Velsor, 1998), which summarizes much of what Center researchers and trainers have learned about leadership development over the past 30 years. In addition, there are a number of recently published books and book chapters devoted to various aspects of leadership development (e.g., Conger & Benjamin, 1999; Dotlich & Noel, 1998; Giber, Carter, & Goldsmith, 1999; Hollenbeck & McCall, 1999; McCall, 1998; Vicere & Fulmer, 1998).

An immediate distinction must be made, however, between leadership development and management development. Literatures between the two areas are parallel and do overlap, but there are several key differences. Just as leadership and management are different (but interrelated) concepts (Yukl, 1998), their respective development has unique emphases. Management development primarily includes managerial education and training (Latham & Seijts, 1998; Mailick, Stumpf, Grant, Kfir, & Watson, 1998) with an emphasis on acquiring specific types of knowledge, skills, and abilities to enhance task performance in management roles (Baldwin & Padgett, 1994; Keys & Wolfe, 1988; Wexley & Baldwin, 1986). Another characteristic feature of management development is the application of proven solutions to known problems, which gives it mainly a training orientation.

Leadership development is defined as expanding the collective capacity of organizational members to engage effectively in leadership roles and processes (McCauley et al., 1998). Leadership roles refer to those that come with and without formal authority, whereas management development focuses on performance in formal managerial roles. Leadership processes are those that generally enable groups of people to work together in meaningful ways, whereas management processes are considered to be position- and organization-specific (Keys & Wolfe, 1988). Leadership development involves building the capacity for groups of people to learn their way out of problems that could not have been predicted (Dixon, 1993), or that arise from the disintegration of traditional organizational structures and the associated loss of sensemaking (Weick, 1993). In this sense capacity is thought to be similar to the notion of cognitive and behavioral complexity in that expanded capacity provides for better individual and collective adaptability across a wide range of situations (Hooijberg, Bullis, & Hunt, 1999). A leadership development approach is oriented toward building capacity in anticipation of unforeseen challenges (i.e., development).

The purpose of the present review is to examine leadership development in context. The use of the term *context* is meant to be multifaceted in nature, and implies that leadership development occurs in various circumstances. One specific context is that of developing leaders versus developing leadership (i.e., *conceptual* context). A second context is that of the work itself, and how state-of-the-art development is being conducted in the context of ongoing organizational work (i.e., *practice* context). A third context is related to research that has direct and indirect implications for leadership development (i.e., *research* context). The present review does not claim to be exhaustive; rather, it will focus on recent practices and research that have been implemented or published, typically within the past 5 to 10 years. Furthermore, given the relative dearth of scholarly research directly on the topic,

most of what is reviewed has implications for leadership development, as opposed to being conceptualized primarily within a leadership development framework. The research review and discussion is intended to spark interest among future leadership development researchers.

CONCEPTUAL CONTEXT: BRIDGING LEADER AND LEADERSHIP DEVELOPMENT

Leadership has been traditionally conceptualized as an individual-level skill. A good example of this is found in transformational leadership theory, which proposes that transformational leaders engage in behaviors related to the dimensions of Charisma, Intellectual Stimulation, and Individualized Consideration (Bass, 1985). The corresponding approach to research and theory testing assumes an individualistic conceptualization of leadership, in which sharp distinction is drawn between leaders and followers (e.g., followers evaluate their "leader" using a number of behavioral items). Within this tradition, development is thought to occur primarily through training individual, primarily intrapersonal, skills and abilities (Barling, Weber, & Kelloway, 1996; Neck & Manz, 1996; Skarlicki & Latham, 1997; Stewart, Carson, & Cardy, 1996). These kinds of training approaches, however, ignore almost 50 years of research showing leadership to be a complex interaction between the designated leader and the social and organizational environment (Fiedler, 1996).

In addition to building individual leaders by training a set of skills or abilities and assuming that leadership will result, a complementary perspective approaches leadership as a social process that engages everyone in the community (Barker, 1997; Drath & Palus, 1994; Wenger & Snyder, 2000). In this way, each person is considered a leader, and leadership is conceptualized as an effect rather than a cause (Drath, 1998). Leadership is therefore an emergent property of effective systems design (Salancik, Calder, Rowland, Leblebici, & Conway, 1975). Leadership development from this perspective consists of using social (i.e., relational) systems to help build commitments among members of a community of practice (Wenger, 1998). It is proposed that both individual and relational lenses are important concerns.

Lester Thurow (1999) has argued: "Businesses must be willing to destroy the old while it is still successful if they wish to build the new that will be successful. If they don't destroy themselves, others will destroy them" (p. 59). In building the leadership capacity necessary continually to reinvent themselves, organizations need to attend to both individual leader and collective leadership development. Furthermore, these approaches must be linked with each other and connected to a broader organizational strategy (Hall & Seibert, 1992; Latham & Seijts, 1998) for maximum return on investment. A summary of the proposed differences between leader development and leadership development is presented in Table 1.

Leader Development

One of the primary reasons that organizations invest in training and development for employees is to enhance and protect their *human capital* (Lepak & Snell, 1999).

	Development Target				
Comparison Dimension	Leader	Leadership			
Capital Type	Human	Social			
Leadership Model	Individual Personal power Knowledge Trustworthiness	Relational Commitments Mutual respect Trust			
Competence Base	Intrapersonal	Interpersonal			
Skills	Self-awareness Emotional awareness Self confidence Accurate self image Self-regulation Self-control Trustworthiness Personal responsibility Adaptability Self motivation Initiative Commitment Optimisim	Social awareness Empathy Service orientation Political awareness Social skills Building bonds Team orientation Change catalyst Conflict management			

Table 1. Summary of Differences between Leader Development and Leadership Development

In the case of leader development, the emphasis typically is on individual-based knowledge, skills, and abilities associated with formal leadership roles. These acquired capabilities enable people to think and act in new ways (Coleman, 1988). In this manner, leader development results as a function of purposeful investment in human capital. The primary emphasis of the overarching development strategy is to build the intrapersonal competence needed to form an accurate model of oneself (Gardner, 1993, p. 9), to engage in healthy attitude and identity development (Hall & Seibert, 1992), and to use that self-model to perform effectively in any number of organizational roles.

Specific examples of the type of intrapersonal competence associated with leader development initiatives include *self-awareness* (e.g., emotional awareness, self confidence), *self-regulation* (e.g., self-control, trustworthiness, adaptability), and *self-motivation* (e.g., commitment, initiative, optimism) (Manz & Sims, 1989; McCauley, 2000; Neck & Manz, 1996; Stewart et al., 1996). These capabilities contribute to enhanced individual knowledge, trust, and personal power, which have been proposed as the fundamental leadership imperatives (Zand, 1997), at least from a traditional, individualistic leadership perspective. It is important to understand this approach if only because the predominant emphasis in organizational leadership research has been on the human capital of individual leaders (Brass & Krackhardt, 1999).

Leadership Development

In addition to the organizational resources provided as a function of human capital, social resources are embedded in work relationships that take the form of

social capital (Brass & Krackhardt, 1999; Burt, 1992). Unlike human capital, in which the focus is on developing individual knowledge, skills, and abilities, the emphasis with social capital is on building networked relationships among individuals that enhance cooperation and resource exchange in creating organizational value (Bouty, 2000; Tsai & Ghoshal, 1998). Despite the importance of social networks in this approach—and the typical structural approach to social networks analyses—social capital is defined more by its function than by its structure (Coleman, 1988; Whitener, 2000). That is, social capital is based on relationships, which are created through interpersonal exchange (Bourdieu, 1986). In this manner social capital requires an interpersonal lens that is grounded in a relational model of leadership (Drath & Palus, 1994). At the heart of this relational model are commitments in the form of mutual obligations, which are supported by reciprocated trust and respect (Brower, Schoorman, & Tan, 2000).

Commitments, trust, and respect correspond roughly to three different aspects of social capital proposed by Nahapiet and Ghoshal (1998): structural, relational, and cognitive. The structural dimension pertains primarily to social interactions typically assessed by means of network ties (Tsai & Ghoshal, 1998). The social structure of interactions—and an actor's location in relation to his or her contacts—has been shown to provide resources to the actor as well as the organization (Burt, 1992). This structure is formed as a result of the commitments among all parties in a given social network. The relational dimension of social capital refers to functional assets that are rooted in networked relationships, such as trust and trustworthiness (Tsai & Ghoshal, 1998), which describe the kind of personal relationships developed through a history of interactions. This is a particularly interesting dimension. Whereas trust is an attribute of the relationship, trustworthiness rests in the intrapersonal qualities of the individual (Barney & Hansen, 1994). This highlights the importance of developing both intrapersonal and interpersonal competence, and of linking leader development with leadership development.

The third aspect of social capital is the cognitive dimension, which refers to resources embodied in shared representations and collective meanings among people. Expressions of the cognitive dimension to social capital can be found in organization culture or a shared vision based on a set of common values that produces and is a product of mutual respect. These facets of social capital (i.e., structural, relational, and cognitive) are interrelated and not independent concerns, and have been empirically linked to value creation in organizations through their separate effects on resource exchange and combination (Bouty, 2000; Tsai & Ghoshal, 1998).

The primary emphasis in leadership development is on building and using interpersonal competence. Gardner (1993) defines interpersonal intelligence in terms of the ability to understand people—a basic concern in building trust, respect, and ultimately, commitments. Key components of interpersonal competence include *social awareness* (e.g., empathy, service orientation, and developing others) and *social skills* (e.g., collaboration and cooperation, building bonds, and conflict management) (Goleman, 1995; McCauley, 2000). The emphasis is on the social nature of this competence, and the idea that effective development best occurs in an interpersonal (i.e., social) context.

The notion of leadership development offered in the present review focuses on the interaction between an individual and the social and organizational environment (Fiedler, 1996). As such, it is a more complex endeavor than one concerned solely with individual leader development. Although there is still a need to develop a sound foundation of intrapersonal and interpersonal skills, it is proposed that the most value resides in combining what is considered the traditional, individualistic approach to leader development with a more shared and relational approach.

Another way to conceptualize the distinction is that leader development can be interpreted as a form of individual-based *differentiation* in terms of helping individuals enhance a unique self-understanding and construct independent identities (Hall & Seibert, 1992; McCauley et al., 1998). 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. An overall approach to leadership development as a type of organizational development strategy requires a purposeful transformation toward higher levels of both leadership integration and differentiation. This is an example of a move toward what has been termed "organized complexity" (Gharajedaghi, 1999, pp. 92–93).

The profound changes shaping the competitive business environment are also affecting how organizations prepare people for present and future challenges. One emphasis has been on investing more intensely in leader and leadership development across all organization levels, and to develop leadership capacity in all employees and across all organizational systems. Scholarly researchers potentially have much to contribute to the understanding and improvement of leadership development in organizations. In particular, researchers can help enhance the purposefulness of leadership development by examining how various practices and processes, alone and in combination, contribute to better leadership. One of the biggest challenges facing organizations is reversing a tendency that allows leadership development to become a "haphazard process" (Conger, 1993, p. 46), which results from embedding development in the ongoing work of an organization without sufficient notice to intentionality, accountability, and evaluation.

To be of any help in this endeavor, academic researchers need to first transcend the outdated notion that leadership development occurs only through specially designed programs held in particular locations. Instead, it is a continuous process that can take place anywhere (Fulmer, 1997). Leadership development in practice today means helping people learn from their work rather than taking them away from their work to learn (Moxley & O'Connor Wilson, 1998). State-of-the-art leadership development is occurring in the context of ongoing work initiatives that are tied to strategic business imperatives (Dotlich & Noel, 1998).

Of course, classroom programs are still widely used by organizations as one type of development practice. A 1995 survey sponsored by the American Society of Training and Development indicated that 85% of companies that engage in leadership development activities use formal classroom programs (American Society for Training and Development, 1995); however, many organizations are realizing that such programs are not enough. Classroom programs suffer from transfer of training challenges and high start-up costs, among other limitations. The real movement is toward understanding and practicing leadership development more effectively in the context of the work itself.

PRACTICE AND RESEARCH CONTEXTS: BRIDGING THE APPLIED AND ACADEMIC COMMUNITIES

A variety of practices have been developed and implemented in organizations for reasons other than leadership development. Most typically, these practices were primarily intended to improve performance management (e.g., 360-degree feedback), facilitate corporate socialization (e.g., mentoring), or enhance productivity (e.g., job assignments, action learning). Often the practices are completely embedded in the work. In many cases, these practices also form the backbone of contemporary leadership development systems. The present review will examine the most popular and promising practices used to develop leaders and leadership in the context of ongoing work in an organization. Each section will contain a brief overview of the practice, how it is used for development, and a synthesis of recent theory and research with implications for understanding or improving the effectiveness of leadership development in work contexts. Literature from both the practitioner and academic domains will be examined. The specific practices to be reviewed (see Table 2) are 360-degree feedback and executive coaching, mentoring and networking, and job assignments and action learning. These practices are arranged roughly on a continuum of least to most embedded in ongoing organizational work.

360-degree Feedback

Overview

360-degree feedback, multi-source feedback, and multi-rater feedback are all terms used to describe this method of systematically collecting perceptions of an individual's performance from the entire circle of relevant viewpoints (Warech, Smither, Reilly, Millsap, & Reilly, 1998). Rating sources typically include peers, direct reports, supervisors, and, occasionally, such external stakeholders as customers and suppliers. A purported advantage of such intense, comprehensive scrutiny is that a more complete and accurate picture of an individual's performance can be obtained. In terms of the tripartite developmental strategy of linking assessment, challenge, and support (Van Velsor, McCauley, & Moxley, 1998), 360-degree feedback is strong on assessment but typically weak on challenge and support.

Practice

The introduction of 360-degree feedback processes has made a strong mark on organizations in recent years. For example, 360-degree feedback has been lauded as "perhaps the most notable management innovation of the 1990's" (Atwater & Waldman, 1998a). Furthermore, nearly all of the *Fortune* 500 companies currently use or intend to use some form of the practice (London & Smither, 1995). Some authors have argued that 360-degree feedback is a source of competitive advantage to organizations (London & Beatty, 1993), whereas others see its growing popularity as a function of imitation and political concerns (Waldman, Atwater, & Antonioni, 1998).

An important assumption of this approach is that performance varies across contexts, and that someone behaves differently with different constituencies. An advantage of the multi-source approach is that it directly acknowledges differences

Table 2. Summary of Selected Practices in Leadership Development

Practice	Description	Development Target	HC	SC	Strengths	Weaknesses
360-degree feedback	Multi-source ratings of performance, organized and presented to an individual	Self-knowledge Behavioral change	✓	х	Comprehensive picture; broad participation (A)	Overwhelming amount of data; no guidance on how to change; time and effort (C, S)
Coaching	Practical, goal-focused form of one-on-one learning	Self-knowledge Behavioral change Career development	✓	?	Personalized; intensive (C, S)	Perceived stigma (remedial); expensive
Mentoring	Advising/developmental relationship, usually with a more senior manager	Broader understanding. Advancement catalyst. Lessons learned/ avoid mistakes.	✓	?	Strong personal bond (S)	Peer jealousy; over dependence; (A, C)
Networks	Connecting to others in different functions and areas	Better problem- solving. Learning who to consult for project help. Socialization	?	✓	Builds organization (S)	Ad hoc; unstructured (A)
Job Assignments	Providing "stretch" assignments in terms of role, function, or geography	Skills development. Broader understanding of the business.	✓	?	Job relevant; accelerates learning (C)	Conflict between performance and devel.; no structure for learning (A, S)
Action Learning	Project-based learning directed at important business problems	Socialization Teamwork Implement strategy.	✓	1	Tied to business imperatives; action-oriented (C, S)	Time intensive; leadership lessons not always clear; over-emphasis on results (A)

Note: HC = human capital; SC = social capital; \checkmark = intended developmental target; x = not an intended developmental target; ? = possible developmental target; A = assessment; C = challenge; S = support.

across sources in the opportunity to observe various aspects of an individual's performance. Research findings corroborate these assumptions in showing that ratings across sources correlate only moderately (e.g., Atwater, Ostroff, Yammarino, & Fleenor, 1998; Atwater & Yammarino, 1997; Carless, Mann, & Wearing, 1998). Rather than being a problem, this finding suggests that performance may be different, and may be perceived differently, across various constituencies. Multisource or 360-degree ratings are needed to capture this variety of behavior and perspective. It should also be noted that additional research found little evidence of within-source rating agreement (Greguras & Robie, 1998), even among raters with similar observational opportunities (Van Scotter & Steel, 2000). Thus, using multiple raters within multiple rating sources makes good psychometric sense in terms of enhancing the overall reliability of feedback.

The growing popularity of 360-degree feedback may have something to do with a deeper appreciation for the business necessity of self-understanding. Lack of self-awareness can jeopardize projects by contributing to sub-optimal individual performance, or by creating increased stress and anxiety in others (Dotlich & Noel, 1998). Other possible reasons for the popularity of 360-degree feedback include its effectiveness as a developmental tool, its initial ease of implementation (although it is more complicated to manage effectively than many companies realize), and that many of the "most-admired" firms have adopted the practice (Waldman et al., 1998). A somewhat different explanation for the increased use of 360-degree evaluations lies with the changing nature of the U.S. industrial economy. In the past, the measure of a company's success was its property, not its people. Among leading-edge companies, that ratio is now reversed, and the majority of the wealth in many organizations is in its employees (i.e., intellectual capital). Thus, if a large portion of that talent becomes frustrated with their co-workers or bosses and quit the company, the economic results could be devastating for an organization. A substantial amount of value could potentially end up employed by a competitor, or—with the attractiveness of entrepreneurial start-ups—become the competition.

Multi-source feedback can be a useful developmental tool for building intrapersonal competence in the form of self-knowledge and increased self-awareness of one's impact on others, which is connected to building individual trustworthiness (Barney & Hansen, 1994). If the feedback process is handled professionally and with sensitivity, an individual's trusting intentions toward others can be enhanced (McKnight, Cummings, & Chervany, 1998). Because trust facilitates the cooperation needed for effective teamwork in organizations (Nahapiet & Ghoshal, 1998), there is an indirect link between 360-degree feedback and the development of social capital; its primary contribution, however, is on developing intrapersonal competence associated with enhanced human capital.

Proposition 1a: The use of 360-degree or multi-source feedback is associated with the development of human capital (i.e., intrapersonal competence) in organizations.

Research

Nothing guarantees that feedback inherently leads to positive individual change. Indeed, research indicates that over one-third of the feedback interventions reported

in the literature resulted in decreased performance (Kluger & DeNisi, 1996). One reason that behavioral change may not follow from feedback is that most people have well-developed defense mechanisms that protect them from feedback that is perceived as too threatening (Chappelow, 1998). Conversely, some might recognize feedback as accurate but do not want to change their behavior. For any leadership development effort to be effective—particularly one based on 360-degree feedback—a participant must first be willing to accept feedback as relevant and useful, and be open to change. They must also be realistic and resilient in that change is rarely a simple path forward; a large investment of time and energy is required before the needed change becomes part of an individual's behavioral repertoire.

Recent research findings indicate that what managers do with their feedback does matter. Specifically, managers who met with direct reports to discuss their upward feedback demonstrated greater change in the form of performance improvement than managers who did not discuss their feedback (Walker & Smither, 1999). Other research found that perceived organization support enhances the usefulness of subordinate feedback over and above the overall favorability of the feedback (Facteau, Facteau, Schoel, Russell, & Poteet, 1998). Only favorability predicted the usefulness of peer ratings.

Another difficulty is that measuring change using 360-degree survey instruments has proven to be a challenge, given associated changes in expectations about a target as a result of program participation (i.e., beta change), and changes in thinking about the constructs being rated (i.e., gamma change). For these reasons, some researchers have adopted a retrospective methodology in which a measure of the perceived degree of a target's behavioral change is gathered at the second wave of data collection (Martineau, 1998; Peterson, 1993). This methodology is intriguing in that it attempts directly to assess the degree of perceived change rather than basing it on difference scores, which are associated with their own set of psychometric challenges. For this reason, the retrospective methodology is deserving of greater research attention.

A willingness to accept and use feedback might be insufficient for change, however, if the feedback is complex or inconsistent, or if the recipient lacks the requisite skills to interpret the data and translate it into behaving in a different manner. For these reasons, executive coaching has emerged as a popular leadership development tool.

Proposition 1b: The effectiveness of 360-degree feedback for the development of social capital development depends on the extent that it is linked to follow-up coaching.

Executive Coaching

Overview

Executive coaching involves practical, goal-focused forms of one-on-one learning and behavioral change (Hall, Otazo, & Hollenbeck, 1999; Peterson, 1996). The objectives of coaching are focused on improving individual performance and personal satisfaction, and, consequently, enhancing organizational effectiveness (Kilburg, 1996). The term connotes an ongoing process rather than a discrete event. Coaching may be used to improve individual performance, enhance a career, or

work through organizational issues such as culture change (Katz & Miller, 1996). It can be a relatively short-term activity aimed at improving specific leadership skills or solving specific problems, or a lengthy series of meetings over an extended time period (Tobias, 1996). Given that the cost of coaching provided by an external consultant ranges from \$1,500 for a single day to more than \$100,000 for a multi-year program (for a single executive), it is understandable why most firms prefer to keep this as short-term as possible. The approach, however, is comprehensive in terms of integrating assessment, challenge, and support in the name of development, especially when linked with 360-degree feedback.

Practice

One area of executive coaching that deserves greater attention concerns the underlying models of change adopted by coaches. One proposed coaching model consists of four general steps (Saporito, 1996):

- 1. Setting the foundation and defining the context;
- 2. Individual assessment, including the 360-degree process;
- 3. Development planning based on feedback to the individual and a three-way discussion with the supervisor; and
- 4. Implementation that focuses coaching around development experiences.

The Individual Coaching for Effectiveness model at Personnel Decisions, Inc. (Hellervik, Hazucha, & Schneider, 1992) consists of three major phases: diagnosis, coaching, and maintenance/support—similar to the assessment, challenge, and support perspective on how to enhance the potency of developmental experiences (Van Velsor et al., 1998).

Although it could be argued that nearly anyone would benefit from coaching, at least one study has estimated that three-quarters of participants were in some danger of derailing when they began a coaching process (Thompson, 1987). In addition, the typical motives for participating are remedial in nature, and usually associated with interpersonal insensitivity or a lack of influence ability (Hellervik et al., 1992). For these reasons, organizations that use coaches—as well as the coaches themselves—need to be aware of a possible stigma associated with being assigned a coach. Providing a coach to an entire executive group has the advantage of placing all recipients on equal footing. When everyone has a coach, it is not a secret—neither a stigma nor perceived source of favoritism. Coaching an entire team to get one particular executive help, however, without appearing to single out the individual is almost always transparent to the team, and can create more ill-will than if coaching is focused on the one individual who truly needs it. In summary, if coaching is not purposefully and strategically applied, it is a waste of time and money that dilutes the value of a development opportunity. Indeed, there is a risk of doing more harm than good.

Proposition 2a: Coaching effectiveness is enhanced to the degree that individuals are carefully selected for coaching, matched with a compatible coach, and are willing to change.

Research

There is little published empirical research other than case studies on the topic of executive coaching effectiveness (Kilburg, 1996), especially in terms of how well it enhances development in addition to improving performance. Executive coaching as a follow-up to a training program was shown to increase productivity by 88% in public sector managers (Olivero, Bane, & Kopelman, 1997), which was a significantly greater gain compared with training alone. No evaluation, however, was conducted that addressed the important, but different, issue of leadership development.

Additional research is needed that goes beyond an evaluation of immediate productivity improvements. For example, an examination of social accounts (i.e., managerial justifications and excuses used to explain an individual's actions) and the motivated reasoning of coaching participants could be useful in understanding the underlying reasons for change or resistance to change. Recent research that adopted social accounts and motivated reasoning lenses to understand reactions to organizational change has shown that nursing employees hear different messages from management depending on the quality of their relationship with the organization (Rousseau & Tijoriwala, 1999). It is expected that interpretations of a coaching initiative will be related to participants' change motivation and, ultimately, to the extent of behavior change. As in the Rousseau and Tijoriwala (1999), change motivation may also be related to trust in the organization and the level of mutual commitment established between the coaching participant and the employer.

Proposition 2b: The quality of an individual's relationship with an organization is positively associated with the effectiveness of coaching for development for that individual.

Another potentially fruitful line of research involves a social network analysis of a team or work group in which a coaching participant is involved. One hypothesis worth investigating is that coaching increases an individual's centrality within a social network, thus enhancing the structural component of that person's social capital (Nahapiet & Ghoshal, 1998). Network centrality results from strong ties with others that build loyalty, trust, mutual respect, and emotional commitments (Brass & Krackhardt, 1999). If coaching increases individual self-confidence and interpersonal effectiveness, it might also be expected to encourage the formation of new, non-redundant contacts with others both inside and outside the organization (Bouty, 2000). Thus, coaching provided to an individual or entire group, such as a top management team, could lead to the creation of a greater number of nonredundant (i.e., weak) ties (Granovetter, 1973). As noted by Brass and Krackhardt (1999), effective leadership requires establishing strong and weak ties, both of which are crucial but serve different purposes. Strong ties build loyalty, trust, and mutual respect—essentially, commitments among individuals—whereas weak ties provide access to novel, unique, and nonredundant information or resources (Burt, 1992). Creating value through enhanced social capital is especially critical in the network organization (Baker, 1992) in which temporary configurations are linked mainly by rapidly changing opportunities. Using executive coaching to provide the challenge and support in conjunction with the assessment provided by 360-degree feedback

may be an effective means of linking leader and leadership development by building both human and social capital.

Proposition 2c: Coaching increases a recipient's weak and strong network ties (i.e., social capital).

Research is needed that goes beyond trying to establish whether coaching is effective, to addressing questions such as how does it work, why does it work, and for what specific purpose (Campbell, 1989). The answers to some of these questions may be found in future studies that examine feedback and coaching from a social networks perspective (Brass & Krackhardt, 1999) and adopt a particular theoretical lens, such as self-regulation theory (Bandura, 1991; Carver & Scheier, 1981; Latham & Locke, 1991), to try to understand what makes for an effective feedback process.

Other possibilities for understanding the how, why, and what of effective coaching include the compelling literature on implementation intentions (Gollwitzer, 1993; Gollwitzer & Brandstatter, 1997). Consistent findings document that when people experience difficulty translating their goals into action, they can use situational cues to help make their responses relatively effortless and automatic by forming the cognitive structure "when situation x arises, I will do y" (Gollwitzer, 1999, p. 494). In other words, a person commits to responding to a certain situation in a specific, pre-designated manner. By coaching executives in how to link their development goals to implementation intentions, there may be ways of encouraging behavioral change while also removing the underlying impetus from conscious control. Implementation intentions could serve as a behavioral change catalyst in executive coaching efforts; because the cues for implementing the desired behaviors are removed from conscious control, however, some question remains as to the extent of learning that occurs through automatically enacted behavior. Clearly, there is a research need for a better understanding of the benefits and potential drawbacks of implementation intentions in organizational contexts.

Proposition 2d: The use of implementation intentions as part of coaching increases the amount and extent of behavioral change observed.

Mentoring

Overview

Formal developmental relationships are a venerable form of on-the-job experience used for leadership development. There are formal mentoring programs as well as informal processes. Formal, planned mentoring programs are assigned, maintained, and monitored by the organization (Kram & Bragar, 1992). Informal, unplanned mentoring is usually encouraged by an organization, but not initiated or administered by it. Regardless of the formality of the mentoring relationship, effective developmental relationships come about from a mix of opportunity and intent (Sherman, 1995). A challenge facing any organization is how to find the most appropriate combination of these ingredients. As typically implemented, mentoring

programs are heavily skewed toward support, with some attention to challenge, but relatively little consideration of assessment.

Practice

Most formal mentoring programs pair a junior manager with a more senior executive outside of his or her direct reporting line (McCauley & Douglas, 1998), although the pairing can sometimes occur with a peer or an external consultant (Douglas, 1997). In the latter cases, the line between mentoring and coaching becomes blurred. Indeed, coaching has been proposed as one particular mentoring role, along with sponsorship, protection, challenging assignments, and exposure to senior management thinking (Kram, 1985).

Mentoring is seen as an especially effective component of development in context. In a survey of over 350 companies involved in leadership development, those efforts reported as most successful included mentoring programs, as well as action learning and 360-degree feedback (Giber et al., 1999). The opportunity to observe and interact with members of senior management is an especially critical part of mentoring because it helps develop a more sophisticated and strategic perspective on the organization (i.e., a type of intrapersonal competence). Despite its apparent effectiveness at enhancing individual development, formal research has not been published on the topic of senior management exposure. Specifically, what is it about interacting with senior managers that sparks the development of more sophisticated perspectives? One possibility is that it enhances shared mental representations and interpretations of important organizational concerns. As such, mentoring might be partially effective due to its influence on the cognitive dimension of social capital.

Proposition 3a: Effective mentoring processes result in sophisticated mental representations of strategic issues and organizational concerns on the part of recipients.

Research

An area of particular research interest has been comparing formal and informal mentoring practices. Results indicate that there are differential outcomes, with more positive benefits associated with informal mentoring (Chao, Walz, & Gardner, 1992; Ragins & Cotton, 1999). Research has also demonstrated the positive effects of intragroup relations in the context of mentoring (i.e., group mentoring) on career outcomes (Dansky, 1996). Another area of interest has been the area of gender differences in mentoring outcomes, with results suggesting that protégés of male mentors received greater financial reward than those of female mentors (Dreher & Cox, 1996). Recent findings suggest a more complex pattern related to the gender composition of the dyad (Ragins & Cotton, 1999), with male protégés of female mentors having the lowest overall promotion rate; the Ragins and Cotton study, however, was limited by a relatively small number of male protégé/female mentor dyads (n = 23). It was both an interesting and disheartening finding that female protégés of female mentors had the lowest compensation level of any of the possible dyadic combination.

There are theoretical and empirical reasons to believe that women and members

of underrepresented groups experience mentoring relationships differently than white men (Murrell, Crosby, & Ely, 1999; Ruderman & Hughes-James, 1998). Recent laboratory research has demonstrated that Black and White students experience differently critical feedback from a mentor (Cohen, Steele, & Ross, 1999). Black students who received critical feedback responded less favorably than White students; when the feedback was accompanied by an appeal for maintaining high standards and an assurance that the student could attain those standards, however, Black students responded as positively as Whites. The Cohen et al. (1999) study illustrates not only a need to appreciate how various races might make sense of critical feedback provided by a mentor but also that mentoring itself is a dynamic and complex mixture of coaching, modeling, and feedback. Earlier research on cross-race mentoring relationships demonstrated that a congruence in the type of strategy adopted in discussing racial differences was associated with the development of high-quality, supportive relationships (Thomas, 1993).

It is surprising that there are so few studies examining the qualities, characteristics, and behaviors of high-performing mentors in general. An apparent assumption exists that all mentors perform identically in terms of the quality of experience that is offered. A recent exception to this tendency, however, attempted to understand the common characteristics of an ideal mentor using interview data across five organizations (Allen & Poteet, 1999). Results of the qualitative analysis (i.e., content coding), suggested a number of different dimensions of ideal mentor characteristics, such as listening and communication skills, patience, knowledge of organization and industry, ability to read and understand others, and honesty and trustworthiness. These skills and characteristics could provide the foundation for a mentoring taxonomy for future researchers. To the extent that a mentor is seen as displaying these behaviors and characteristics, a more beneficial mentoring relationship is predicted.

This is potentially a useful research focus because of the empirical evidence demonstrating that subordinates do not perceive mentoring to be distinct from the quality of their leadership exchange, although supervisors do make such a distinction (Scandura & Schriesheim, 1994). From a subordinate's perspective, improving the quality of mentoring would also improve the quality of leadership experienced. More attention is needed regarding the apparent overlap between developing sound mentoring skills and leadership development. Greater intention can be placed on what constitutes effective mentoring within broader leadership development efforts. In particular, mentoring processes could focus on building mutual trust and respect as a means of forging commitments. A potentially interesting research question would be to examine the degree that these hypothesized enhancements in the social capital of a mentoring relationship generalize beyond the particular dyadic boundaries.

Proposition 3b: Attention to developing effective mentoring skills increases the amount and quality of informal mentoring, resulting in greater mutual trust, respect, and commitments (i.e., social capital).

There is one potential negative issue to be aware of regarding mentoring processes: over-dependence. An unintended side-effect of a close mentoring relation-

ship is the possibility that a protégé might become too closely aligned with a single senior executive. Others in the organization might come to resent this relationship, or question the protégé's ability to perform autonomously. Another risk is that if the senior executive falls from favor, so does the protégé. For these reasons, overdependence on a mentor or advocate was identified as one of the "ten fatal flaws" originally associated with leader derailment (McCall & Lombardo, 1983). Although it is still a potential concern, over-dependence may not be as career threatening as a difficulty to change or adapt, or having problems with interpersonal relationships (Van Velsor & Leslie, 1995). In sum, the potential developmental benefits associated with mentoring far outweigh the risks associated with over-dependence.

Networking

Overview

As a way of breaking down barriers between functional areas, some organizations include development activities aimed at fostering broader individual networks. An important goal of networking initiatives is to develop leaders beyond merely knowing *what* and knowing *how*, to knowing *who* in terms of problem-solving resources. Networking is also about expanding one's definition of what and how through exposure to others' thinking, which can challenge basic assumptions about what we think we know. It is also a means of encouraging organization members to form commitments with others outside of their immediate work group. In this way, networking is about investing in and developing social capital with a primary developmental emphasis on building support.

Practice

Specific networking initiatives that have been implemented with the goal of leadership development include efforts at Andersen Consulting and Motorola. Andersen's Worldwide Organization Executive Program is a five-day seminar to address the development needs of its global partners, including the chance to meet and exchange views with partners from all practice areas and all parts of the world. The goal is to allow partners to strengthen their personal networks as a means of creating entrepreneurial opportunities. At Motorola's Vice President Institute, the three overall goals of the program are to

- 1. Teach the vice presidents (VPs) about the company's unique heritage and culture;
- Help the VPs explore new ways to invent new technologies and businesses;
- 3. Foster networking (Eller, 1995).

Another type of networking involves the interaction of groups of managers and executives who have common training or job experiences. These groups meet regularly over lunches or through electronic dialogue to share their mutual challenges and opportunities, with the goals of applying their learning or making their learning relevant to present leadership challenges on an informal, ongoing basis. Enhancing

individual networks is believed to be an effective way to increase managers' innovation and problem-solving capacities.

Working in a globally dispersed yet technologically sophisticated organization presents numerous challenges (and creative opportunities) with regard to networking. Nortel uses its advanced video and data-networking technologies to air a Virtual Leadership Academy once a month. The show is simulcast in offices in 47 countries, with simultaneous translation from English into Spanish and Portuguese. Although the technology does not facilitate face-to-face networking between participants, managers can call with questions or concerns and get real-time responses. The program is geared to reinforce a core Nortel value that "technology is about elevating, not replacing, human interaction" (Global reach . . . virtual leadership, 1999).

Research

One reason why networking is thought to be beneficial to professional and personal development is because it fosters peer relationships in work settings. Peer relationships offer unique value for development because of the degree of mutual obligation and the duration of the relationship. Research has shown that some peer relationships can span an entire 20- or 30-year career (Kram & Isabella, 1985), as compared with a typical mentoring relationship that lasts between three and six years (Kram, 1985), or an executive coaching relationship that generally lasts around six months (Levinson, 1996). Organizations should consider peer relationships as a potentially valuable component of an overall leadership development system. As with general mentoring processes, the more effective efforts will not attempt to formalize relationships at the expense of informal ones; instead, formal programs should mimic the development of informal relationships (Ragins & Cotton, 1999) by intentionally making networking opportunities available, modeling successful developmental relationships in the organization, and highlighting the relative benefits of networking.

Proposition 4a: Networking opportunities build peer relationships across functional areas, leading to the creation of additional social capital.

Networking is a prime means of enhancing social capital in an organization. Managers who build the kinds of networks that allow them to transcend the organization's formal structure—especially when they form non-redundant ties with people in other networks—are most likely to benefit in terms of information and entrepreneurial opportunities (Burt, 1992). Managers embedded in a limited network with many redundant ties will not experience these same benefits. Of course, a manager needs the appropriate self-awareness, motivation, and self-regulation skills (i.e., intrapersonal competence), in addition to a well-defined set of developmental and strategic objectives, to benefit maximally from networking opportunities. For this reason, feedback, coaching, mentoring, and networking processes should be linked in a way that produces an integrated leadership development system that covers all aspects of assessment, challenge, and support. By including these linked processes within the context of a developmental job assignment or an action learning project,

the link between leader development and leadership development can be enhanced.

Proposition 4b: When used in conjunction with other developmental practices, networking links individual leader development with collective leadership development.

Job Assignments

Overview

It has long been recognized that experience is among the most important teachers, including the development of leadership. Development through job experiences pertains to how managers learn, undergo personal change, and acquire leadership capacity as a result of the roles, responsibilities, and tasks encountered in their jobs (McCauley & Brutus, 1998). Prior to its popularity in the United States, a number of practitioners and researchers in the United Kingdom were engaged in using and understanding how job experiences enhance development (e.g., Davies & Easterby-Smith, 1984; Mumford, 1980; Stewart, 1984). Job assignments have been identified as particularly helpful to managers in learning about building teams, how to be better strategic thinkers, and how to gain valuable persuasion and influence skills (McCall, Lombardo, & Morrison, 1988). The primary developmental experience, however, is that of providing challenge and, occasionally, support. More attention should be paid to assessment, especially in terms of matching individuals with the appropriate developmental assignment.

Proposition 5a: Leadership development is enhanced when assignments are matched with individuals' developmental needs.

Practice

An example of where job assignments play a prominent role in a leadership development initiative is the Coca-Cola Company, which transferred more than 300 professional and managerial staff to new countries in one year under its leadership development program. Gillette International makes 12- to 36-month assignments to take U.S. managers overseas to get broader experience and exposure to other countries and operational areas before returning to a U.S. assignment, usually of greater authority (Laabs, 1991). Regardless of how potent job assignments can be for development, the most challenging or fascinating assignment in the world may not teach much unless a person has the latitude to try out different leadership approaches as part of the developmental role. *Intentionality* must surround leadership development, otherwise the focus of a challenging new assignment will likely be on performance with little regard for development.

Organizations can take specific action to promote learning from experience, and specific things can impede it. Some types of jobs are more developmental than others, and different kinds of developmental assignments are associated with different kinds of learning (McCauley & Brutus, 1998). Jobs that are more developmental include "stretch" assignments that put a manager in a new situation with unfamiliar responsibilities, especially high-responsibility and high-latitude jobs. Those projects

requiring a manager to bring about change or build relationships (and commitments) also tend to be associated with the most meaningful learning.

Negative experiences or hardships tend to promote learning and trigger self-reflection (Moxley, 1998). The way in which influential members of an organization respond to failure can be instrumental in fostering a learning climate. Unfortunately, too few senior executives take a developmental view of failure. It is far more common to find top organizational levels populated with those who push maximum performance over a concern for development (Hollenbeck & McCall, 1999), despite that learning from hardships can help performance in the long run by enhancing individuals' resiliency in the face of challenge and change.

Jack Welch, Chairman and CEO of General Electric (GE), might be expected to frame failure in a developmental light. Welch is legendary for his commitment to leadership development. It has been reported that Welch "knows intimately" the career paths of more than a thousand GE employees (Frost, 1997, p. 335). During an employee review session, it is common for Welch to display a willingness to put a manager in a certain position because it is the right professional growth experience for that person, regardless of immediate business needs. Choosing the right "stretch" job assignments for people is about using succession planning for intentional leadership development by linking individual learning with organizational strategy (Hall & Seibert, 1992). Despite the pro-development approach of someone like Welch, some jobs may be too important for developmental assignments (Ohlott, 1998). The difficult task is deciding what are those all-important jobs.

Research

One study on the role of succession planning for leadership development reported that 31% of promotions were considered developmental in nature (Ruderman & Ohlott, 1994). Some organizations are more intentional than others about using promotions as developmental tools. Citibank makes it a practice to place highpotential managers in job assignments for which they are no more than 60-70% prepared, thus making it likely that the kinds of challenges that contribute to ongoing development will be encountered (Clark & Lyness, 1991). Although a key element in using job assignments for development is challenge, the importance of assessment and support should not be overlooked (Ohlott, 1998). Attending to all three important aspects of assessment, challenge, and support (Van Velsor et al., 1998) in job assignments may help foster a learning goal climate. Taken as an extension of work on individual motivational patterns (Dweck, 1986), a learning goal climate is one in which the organization especially values understanding or mastering something new. It can be differentiated from a performance goal climate in which the emphasis is on gaining favorable (or avoiding negative) judgments of competence.

Proposition 5b: Emphasizing the assessment, challenge, and support aspects of developmental job assignments fosters a learning goal environment.

Despite the noted advantages of using job assignments for development, there has been relatively little theoretical guidance on how to conceptualize work experience within the context of leadership development. Fortunately, work has recently been done in this area. A taxonomy of work experience based on the dimensions of *measurement mode* (amount, time, and type) and *level of specificity* (task, job, organizational) was proposed, forming nine categories of work experience (Quiñones, Ford, & Teachout, 1995). This taxonomy was shown to be helpful in organizing the empirical research on the relationships between work experience and job performance; the issue of development, however, was not addressed. Subsequent conceptual work refined the experience concept further to differentiate between the qualitative and quantitative components that operate at different levels of specificity (Tesluk & Jacobs, 1998). These components are thought to interact and build over time. Again, they were conceptualized as having primary implications for work performance rather than development.

At least one empirical study tried to ascertain the developmental components of jobs, and to develop and test a measure for assessing the developmental potential of different jobs (McCauley, Ruderman, Ohlott, & Morrow, 1994). The Developmental Challenge Profile (DCP) assesses job characteristics organized into three general categories: job transitions (e.g., unfamiliar responsibilities, proving yourself), task-related characteristics (e.g., creating change, non-authority relationships), and obstacles (e.g., adverse business conditions, lack of top management support). Data collected from approximately 700 managers across various organizations and levels supported the basic premise that challenging jobs are associated with greater onthe-job learning. Subsequent research using the DCP suggested that men report greater task-related developmental challenges than women, and women report experiencing more developmental challenges stemming from obstacles faced on the job than men (Ohlott, Ruderman, & McCauley, 1994). These findings highlight the importance of knowing the developmental components of various jobs and carefully matching individuals with jobs that will best develop them (see Proposition 5a). Otherwise, subtle patterns of unintentional discrimination in job assignments could impede the development of women managers for top-level positions and contribute to the broader phenomenon of a glass ceiling (Martell, Lane, & Emrich, 1996).

Research on the topic of job rotations (i.e., lateral transfers of employees within an organization) has revealed that the most common answers to the question of what skills are gained through rotation are: broader perspective on the business (46% of executive respondents), adaptability and flexibility (31%), and leadership skills (19%) (Campion, Cheraskin, & Stevens, 1994). The first and second categories could be construed as cognitive and intrapersonal competence (e.g., self-regulation); the third category of leadership probably means very different things to respondents. There was no elaboration on the specific kinds of leadership skills that are supposedly gained.

Although job assignments might be considered the epitome of development in context, they often lack the kind of intentionality in terms of implementation and follow-up to be confident in understanding the amount and type of development that has occurred. There is agreement that some types of jobs are more developmental than others, and different kinds of developmental assignments are associated with different kinds of learning (McCauley & Brutus, 1998). More developmental types of job assignments put a manager in a new situation with unfamiliar responsibilities, especially those that go along with high-responsibility and high-latitude

jobs. Those assignments requiring a manager to bring about change or build relationships and commitments tend to be associated with significant learning and development, as do negative experiences or hardships. Nonetheless, additional theoretical and empirical work is needed to better map the various dimensions and types of experience onto individual and organizational development. In doing so, research can help inform practitioners on how to match assignments and developmental needs on a more scientific basis.

Proposition 5c: Linking specific job experiences with desired developmental goals enhances the intentionality and effectiveness of leadership development.

Action Learning

Overview

Many organizations realize that the type of traditional, lecture-based, classroom training found in most formal leadership development programs is at best only partially effective at preparing leaders for 21st-century problems (Dotlich & Noel, 1998). In particular, the lessons learned from traditional classroom development programs do not last much beyond the end of the program. Soon after the course ends, people slip back into their previous behavioral patterns, and little lasting change or developmental progress is achieved. As a result, the sponsors of traditional programs became justifiably frustrated. For these reasons, a number of organizations have embraced the action learning process, which can be described as a continuous process of learning and reflection, supported by colleagues, with a corresponding emphasis on getting things done.

Action learning is based on the assumption that people learn most effectively when working on real-time organizational problems (Revans, 1980). This sounds relatively straightforward, but someone who has worked in the area for almost 20 years put it this way: "Action learning may be a simple idea, but only at the philosophical level" (Pedler, 1997, p. 248). Because action learning is primarily a generative practice, each application is a unique performance of sorts in which participants collectively construct social meanings and shared realities in a community of practice (Drath, 1998; Drath & Palus, 1994). As typically implemented, action learning tends to provide a good deal of challenge and support; more emphasis is needed on formal assessment, especially in terms of choosing suitable individuals for a given project.

Proposition 6a: Using formal assessments to select action learning project members will enhance the quality of the developmental experience and result in greater leadership development.

Practice

Perhaps the best-known action learning initiative is GE's "Work-Out" program. The origin of the name is allegedly based on a comment made to Jack Welch to the effect that: "Now that you have rid yourself of so many people (more than

100,000 employees had been let go at that time) when are you going to get some of the work out?" Welch picked up on the multiple meanings of work-out in terms of working out problems as well as a fitness metaphor, and chose it as a prominent initiative in his culture transformation effort at GE (Vicere & Fulmer, 1998, p. 289).

An important cultural aspect of Work-Out is its link to a core management value at GE: empowered or boundaryless behavior. GE leaders must have the trust, respect, and self-confidence to involve others and to be open to ideas from anywhere. This effort personifies an attempt to make everyone responsible for leadership. Although Work-Out contains a number of critical roles, a key to implementation success is the champion. Somebody has to own the idea and help make it happen. There is nothing new about having groups of people come up with ideas and propose them to management (e.g., quality circles). The only innovative feature in GE's program was the idea of a champion, or somebody in the group who owns the idea and is accountable for implementation success. The champion is the person who frames the central issue of the Work-Out session, clarifies the specific topics to address, and selects the participants for the Work-Out team.

Selection of participants is particularly important. Because action learning projects are tied to a business imperative, individuals should carefully be matched to the core problem at hand. Not every developmental need can be addressed in every problem context. Many of the GE action learning projects focused on sending managers to foreign countries as a way of accomplishing two goals: figuring out how to expand globally and open new markets for GE products, and developing a manager's capability to lead in different cultures. In this manner the content of the leadership development effort was linked to important strategic business imperatives.

Citibank is another example of an organization that has successfully used action learning. In particular, the Citibank case provides a good overview of how action learning typically unfolds in an organization (Dotlich & Noel, 1998). The business imperative at Citibank dealt with the general inability of top managers to think with a broad, systems perspective. The issues and participants were selected using explicit criteria. Issues were recommended by business heads or the CEO and had to be seen as affecting total Citibank performance across the various businesses. Participants were chosen globally and had passed an internal talent inventory review process. Next there was a three-day, off-site team building and issue-orientation session. Data collection followed over the next two or three weeks, involving travel both inside and outside Citibank. A week was then spent on data analysis and developing recommendations. Presentations were made to the CEO and to business heads. Each team was given 90 minutes to present its case, consisting of a 30-minute formal presentation followed by a 60-minute focused discussion. Following the presentation was a one-day debriefing and reflection with a coach that was structured around the recommendations, team process, and individual development opportunities. Finally, a senior management follow-up was given within one or two weeks of the presentation whereby decisions were made regarding implementation.

The basic action learning process is similar across different organizations; the business imperatives that drive the process are different. For instance, at ARA-MARK the imperative was one of promoting cross-organizational awareness of capabilities and opportunities, whereas Shell Oil's imperative stemmed from a

pervasive misperception regarding the company's financial strength (Vicere & Fulmer, 1998). Ameritech was faced with an impending deregulation and the inability of managers to compete in a more challenging environment, whereas Johnson & Johnson needed to upgrade human resources globally and develop executive talent in its leadership pipeline, given its expectations of explosive growth (Dotlich & Noel, 1998). Even the U.S. Army uses its own version of action learning called the After Action Review as a means of quickly surfacing and sharing the lessons learned from battlefield simulations (Baird, Holland, & Deacon, 1999).

Although the business imperatives behind action learning programs may vary widely, common catalysts underlie the successes. Perhaps the most important commonality is creating a microworld (Senge, 1990), which enables learning through doing. This type of parallel, temporary system is designed to be realistic yet safe. People are encouraged to try new things and to trust themselves and others to stretch their thinking and behavior. For maximal effect, action should be accompanied by reflection about the action; otherwise, there is little structured guidance for learning from experience (Froiland, 1994).

Proposition 6b: Leadership development is enhanced to the extent that structured opportunities for individual and group reflection are included as part of action learning.

Research

Little research has been published on action learning, especially anything other than qualitative program descriptions. As mentioned, this may be a function of the generative nature of the concept. It has been described as an "idea rather than a method, capable of taking many forms" (Pedler, 1997, p. 262). Several research streams have the potential to advance our practice and understanding of action learning. In particular, research in the areas of trust and empowerment are especially relevant to action learning.

A recent study of psychological safety in work teams (Edmondson, 1999) has important implications for action learning projects. Team psychological safety is defined by Edmondson (1999) as "a shared belief that the team is safe for interpersonal risk taking" (p. 354). There is a direct link between psychological safety and leadership development stemming from the assumption that organizations need to create a climate of psychological safety for individuals to feel secure and supported to change (Schein & Bennis, 1965). The concept is similar to that of respectful interaction, which has been proposed as a vital component of resilient organizations (Weick, 1993). When team psychological safety is high, team members are more likely to overcome threats of embarrassment and admit errors, ask for help, and discuss problems. This type of climate enhances both the challenge and support elements of experience (Van Velsor et al., 1998), and encourages the type of flexibility that is hypothesized to be an antecedent of team learning. It also facilitates a learning goal orientation among team members (Dweck, 1986). Results of qualitative and quantitative analyses based on 51 work teams in a manufacturing company indicated that team psychological safety enhanced learning behavior, which in turn predicted team performance. In a related study, higher levels of trust and empowerment among members of 43 process improvement work teams in a Big Three

automotive firm was shown to be related to team involvement, which in turn was related to higher levels of team performance (Spreitzer, Noble, Mishra, & Coole, 1999). Given that action learning projects typically focus on the developmental target of improved teamwork (Day, 1999), and that group dynamics often are a key variable in helping executives learn from their project experiences (Marsick, 1990), much could be gained by facilitating a climate of trust and psychological safety (i.e., encouraging interpersonal risk taking) in action learning project teams.

It has recently been proposed that unconditional trust represents the most highly evolved trust state and is based on mutual respect and shared values (Jones & George, 1998). Unconditional trust is thought to be directly and indirectly related (through such interpersonal processes as communal relationships and free exchange of information) to interpersonal cooperation and teamwork. Trust is conceptualized as an important relational asset of social capital (Tsai & Ghoshal, 1998); furthermore, the notion of mutual respect based on shared values is the foundation of the cognitive dimension of social capital (Nahapiet & Ghoshal, 1998). Thus, designing action learning projects with the intention of developing trust among participants would likely enhance the relational and cognitive dimensions of social capital. Depending on the composition of the groups, there is also the likelihood of action learning projects enhancing the structural dimension of social capital. Based on this hypothesized relationship between action learning and social capital, and between social capital and leadership development, how action learning projects can be used for effective leadership development in organizations can be appreciated.

Proposition 6c: High trust and psychological safety among action learning project team members is positively related to the social capital of the team.

Another recent study with implications for leadership development adopted a Personal Projects Analysis methodology to examine the relationship between selfappraised goal characteristics and the project factors of happiness and meaning (McGregor & Little, 1998). It was proposed that goal efficacy ("doing well") would be associated with happiness, whereas goal integrity ("being yourself") would be associated with meaning, defined as a special type of well-being. Results generally supported these propositions, and the notion that happiness and meaning were found to be independent factors in personal projects. Most fascinating of all were the results from archival data in a sample of 110 senior managers suggesting an "integrity shift" whereby success either became habituated to or a source of disenchantment. Simply put, doing well was no longer enough. That left integrity as the main source of well-being and meaning. From the results of McGregor and Little's study, an optimistic conclusion can be drawn that the developmental impact of action learning projects can be improved by emphasizing not only doing well, but also being oneself within the project context. In this manner, action learning can be use as a process of creating personal meaning in organizations.

Proposition 6d: Action learning goals that are aligned with individual goals result in meaningful developmental experiences.

SUMMARY AND CONCLUSIONS

The proposed distinction between leader development and leadership development is more than mere semantics. At the core of the difference is an orientation toward developing human capital (leader development) as compared with social capital (leadership development). Orientation toward human capital emphasizes the development of individual capabilities such as those related to self-awareness, self-regulation, and self-motivation that serve as the foundation of intrapersonal competence (McCauley, 2000). Orientation toward social capital emphasizes the development of reciprocal obligations and commitments built on a foundation of mutual trust and respect (Drath, 1998; Whitener, 2000); it rests on a foundation of interpersonal competence, but ultimately, it requires enactment. Leadership is developed through the enactment of leadership.

The proposed distinction is an essential because the respective development approaches are grounded in very different leadership models. Leader development is based on a traditional, individualistic conceptualization of leadership. The underlying assumption is that more effective leadership occurs through the development of individual leaders. It also assumes that leadership is something that can be added to organizations to improve social and operational effectiveness. On the other hand, leadership development has its origins in a more contemporary, relational model of leadership. This model assumes that leadership is a function of the social resources that are embedded in relationships. In this manner, leadership is considered an emergent property of social systems (Salancik et al., 1975), rather than something that is added to existing systems. Leadership emerges with the process of creating shared meaning, both in terms of sensemaking and in terms of value-added. From this approach everyone is considered to be a leader. Rather than asking the question "How can I be an effective leader" the more pertinent question from the relational approach is "How can I participate productively in the leadership process" (Drath & Palus, 1994). The latter is a more complex way of thinking about leadership. Because thinking is for doing (Fiske, 1992), greater complexity in terms of thinking about leadership may be a prerequisite for greater behavioral complexity that is needed for enhanced adaptability (Hooijberg, Hunt, & Dodge, 1997; Jacobs & Jaques, 1987).

The distinction between leader development and leadership development should not be taken as edict for organizations to choose one approach over the other. Either approach is incomplete by itself. Developing individual leaders without concern for reciprocal relations among people or their interactions within a broader social context ignores the research demonstrating that leadership is a complex interaction between individuals and their social and organizational environments. Attempting to build shared meaning systems and mutual commitments among communities of practice without a proper investment in individual preparation runs the risk of placing people in challenging developmental situations that are too far over their heads.

The preferred approach is to link leader development with leadership development such that the development of leadership transcends but does not replace the development of individual leaders. It has been said that a bridge must be well anchored on either side for effective development to occur (Kegan, 1994). In moving

toward a vision of the organization that is based on the social capital imperatives of mutual understanding and responsibility (Drucker, 1995) there must also be an appropriate investment in developing human capital across all organizational levels. As with any change effort, success depends on the extent that people who are responsible for the success of the effort share the same assumptions about it and have been prepared appropriately (Schein, 1997).

The practices of 360-degree feedback and executive coaching, mentoring and networking, and job assignment and action learning have all been lauded as beneficial for leadership development in one application or another. Unfortunately, little hard evaluation evidence supports those claims. It is probably safe to conclude that any of these practices could be effective for leadership development, and that any could be ineffective. Effective leadership development is less about which specific practices are endorsed than about consistent and intentional implementation. A key to effective implementation is having the organizational discipline to introduce leadership development throughout the organization, rather than bounded by specific (usually top) levels. Another key to effectiveness is linking initiatives across organizational levels and in terms of an overall developmental purpose within the context of a strategic business challenge.

As proposed earlier, one conceptualization of leadership is that it emerges as people rely on their mutual commitments, trust, and respect to create new meaning that replaces what has been traditionally provided by formal structure, planning, and control. It is this kind of leadership and not simply a collection of individual leaders that many contemporary organizations are striving to develop. Leadership development needs to evolve to a level of contribution whereby it is considered an investment in the social capital of the organization, to complement its human and intellectual capital (Nahapiet & Ghoshal, 1998).

Where are the leadership researchers in the midst of these exciting advances in the practice of leadership development? It has been noted that over the past 15 years there has been a "remarkable flowering" in research and theory on charismatic and transformational leadership (Conger & Hunt, 1999, p. 121). It might also be noted that too many flowers of the same type makes for a relatively dull garden. The charismatic and transformational leadership approaches have merit and should not be ignored; these approaches, however, do not come close to representing the entire depth or complexity of thinking on leadership needed to design, evaluate, and improve leadership development efforts for the present and the future. A potential lens that is offered in the present review connects the interrelated concerns of developing human and social capital in organizations. The differences between approaches is proposed as an overarching framework for conceptualizing leadership development practice, research, and theory in hopes of encouraging future researchers to contribute, in particular, to a better understanding of this important topic.

Acknowledgments: Work on this article was supported by the Center for Creative Leadership and the Army Research Institute. Thanks to Patricia O'Connor, Kevin Liu, Cindy McCauley, Alicia Grandey, and participants in the "Frontiers in Leadership" symposium at the University of Mississippi for their helpful comments.

REFERENCES

- Allen, T. D., & Poteet, M. L. (1999). Developing effective mentoring relationships: Strategies from the mentor's viewpoint. *Career Development Quarterly*, 48(1), 59–73.
- American Society for Training and Development. (1995). *National HRD executive survey*. Alexandria, VA: Author.
- Atwater, L., & Waldman, D. (1998a). 360 degree feedback and leadership development. *Leadership Quarterly*, 9, 423–426.
- Atwater, L., & Yammarino, F. J. (1997). Self-other rating agreement: A review and model. Research in Personnel and Human Resources Management, 15, 121–174.
- Atwater, L. E., Ostroff, C., Yammarino, F. J., & Fleenor, J. W. (1998). Self-other agreement: Does it really matter? *Personnel Psychology*, *51*, 577–598.
- Baird, L., Holland, P., & Deacon, S. (1999). Learning from action: Imbedding more learning into the performance fast enough to make a difference. *Organizational Dynamics*, 27(4), 19–32.
- Baker, W. E. (1992). The network organization in theory and practice. In N. Nohria & R. Eccles (Eds.), *Networks and organizations: Structure, form, and action* (pp. 397–429). Boston: Harvard Business School.
- Baldwin, T. T., & Padgett, M. Y. (1994). Management development: A review and commentary. In C. L. Cooper, I. T. Robertson, & Associates (Eds.), *Key reviews in managerial psychology: Concepts and research for practice* (pp. 270–320). Chichester, UK: Wiley.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248–287.
- Barker, R. A. (1997). How can we train leaders if we do not know what leadership is? *Human Relations*, 50, 343–362.
- Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes. *Journal of Applied Psychology, 81*, 827–832.
- Barney, J. B., & Hansen, M. H. (1994). Trustworthiness as a source of competitive advantage. Strategic Management Journal, 15, 175–190.
- Bass, B. M. (1985). Leadership and performance beyond expectations. New York: Free Press. Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), Handbook of theory and research for the sociology of education (pp. 241–258). New York: Greenwood.
- Bouty, I. (2000). Interpersonal and interaction influences on informal resource exchanges between R&D researchers across organizational boundaries. *Academy of Management Journal*, 43, 50–65.
- Brass, D. J., & Krackhardt, D. (1999). The social capital of twenty-first century leaders. In J. G. Hunt, G. E. Dodge, & L. Wong (Eds.), *Out-of-the-box leadership: Transforming the twenty-first-century army and other top-performing organizations* (pp. 179–194). Stamford, CT: JAI.
- Brower, H. H., Schoorman, F. D., & Tan, H. H. (2000). A model of relational leadership: The integration of trust and leader-member exchange. *Leadership Quarterly*, 11, 227–250.
- Burt, R. S. (1992). Structural holes: The social structure of competition. Cambridge, MA: Harvard University Press.
- Campbell, J. P. (1989). The agenda for theory and research. In I. L. Goldstein, & Associates (Ed.), *Training and development in organizations* (pp. 469–486). San Francisco: Jossey-Bass.
- Campion, M. A., Cheraskin, L., & Stevens, M. J. (1994). Career-related antecedents and outcomes of job rotation. *Academy of Management Journal*, 37, 1518–1542.
- Carless, S. A., Mann, L., & Wearing, A. J. (1998). Leadership, managerial performance and 360-degree feedback. *Applied Psychology: An International Review, 47*, 481–496.

- Carver, C. S., & Scheier, M. F. (1981). Attention and self-regulation: A control theory approach to human behavior. New York: Springer-Verlag.
- Chao, G. T., Walz, P. M., & Gardner, P. D. (1992). Formal and informal mentorships: A comparison on mentoring functions and contrast with nonmentored counterparts. *Personnel Psychology*, 45, 619–636.
- Chappelow, C. T. (1998). 360-degree feedback. In C. D. McCauley, R. S. Moxley, & E. Van Velsor (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 29–65). San Francisco: Jossey-Bass.
- Clark, L. A., & Lyness, K. S. (1991). Succession planning as strategic activity at Citicorp. In L. W. Foster (Ed.), Advances in applied business strategy (vol. 2; pp. 25–57). Greenwich, CT: JAI.
- Cohen, G. L., Steele, C. M., & Ross, L. D. (1999). The mentor's dilemma: Providing critical feedback across the racial divide. *Personality and Social Psychology Bulletin*, 25, 1302– 1318.
- Coleman, J. S. (1988). Social capital in the creation of human capital. American Journal of Sociology, 94, S95–S120.
- Conger, J. A. (1993). The brave new world of leadership training. *Organizational Dynamics*, 21(3), 46–58.
- Conger, J. A., & Benjamin, B. (1999). Building leaders: How successful companies develop the next generation. San Francisco: Jossey-Bass.
- Conger, J. A., & Hunt, J. G. (1999). Charismatic and transformational leadership: Taking stock of the present and future (Part I). *Leadership Quarterly*, 10, 121–127.
- Dansky, K. H. (1996). The effect of group mentoring on career outcomes. *Group & Organization Management*, 21, 5–21.
- Davies, J., & Easterby-Smith, M. (1984). Learning and developing from managerial work experiences. *Journal of Management Studies*, 21, 169–183.
- Day, D. V. (1999). Leadership development: A review of industry best practices (Tech. Rep. No. 1141). Fort Leavenworth, KS: Army Research Institute.
- Dixon, N. M. (1993). Developing managers for the learning organization. *Human Resource Management Review*, 3, 243–254.
- Dotlich, D. L., & Noel, J. L. (1998). Action learning: How the world's top companies are recreating their leaders and themselves (1st ed.). San Francisco: Jossey-Bass.
- Douglas, C. A. (1997). Formal mentoring programs in organizations: An annotated bibliography. Greensboro, NC: Center for Creative Leadership.
- Drath, W. H. (1998). Approaching the future of leadership development. In C. D. McCauley, R. S. Moxley, & E. Van Velsor (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 403–432). San Francisco: Jossey-Bass.
- Drath, W. H., & Palus, C. J. (1994). *Making common sense: Leadership as meaning-making in a community of practice.* Greensboro, NC: Center for Creative Leadership.
- Dreher, G., & Cox, T. H., Jr. (1996). Race, gender, and opportunity: A study of compensation attainment and the establishment of mentoring relationships. *Journal of Applied Psychology*, 81, 297–308.
- Drucker, P. F. (1995). *Managing in a time of great change*. New York: Truman Talley Books/ Dutton.
- Dweck, C. S. (1986). Motivational processes affecting learning. American Psychologist, 41, 1040–1048.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44, 350–383.
- Eller, D. (1995). Motorola trains VPs to become growth leaders. *HRMagazine*, (June), 82–87. Facteau, C. L., Facteau, J. D., Schoel, L. C., Russell, J. E., & Poteet, M. L. (1998). Reactions

- of leaders to 360-degree feedback from subordinates and peers. *Leadership Quarterly*, 9, 427–448.
- Fiedler, F. E. (1996). Research on leadership selection and training: One view of the future. *Administrative Science Quarterly*, 41, 241–250.
- Fiske, S. T. (1992). Thinking is for doing: Portraits of social cognition from daguerreotype to laserphoto. *Journal of Personality and Social Psychology*, 63, 877–889.
- Froiland, P. (1994). Action learning: Taming real problems in real time. *Training*, 31(1), 27–34.
- Frost, P. J. (1997). Bridging academia and business: A conversation with Steve Kerr. Organization Science, 8(3), 332–347.
- Fulmer, R. M. (1997). The evolving paradigm of leadership development. *Organizational Dynamics*, 25(4), 59–72.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books. Gharajedaghi, J. (1999). *Systems thinking: Managing chaos and complexity*. Boston: Butterworth Heinemann.
- Giber, D., Carter, L., & Goldsmith, M. (Eds.). (1999). Linkage, Inc.'s best practices in leadership development handbook. Lexington, MA: Linkage Press.
- Global reach . . . virtual leadership. (1999). Fast Company, 80.
- Goleman, D. (1995). Emotional intelligence. New York: Bantam Books.
- Gollwitzer, P. M. (1993). Goal achievement: The role of intentions. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (vol. 4; pp. 141–185). Chichester, UK: Wiley.
- Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. *American Psychologist*, *54*, 493–503.
- Gollwitzer, P. M., & Brandstatter, V. (1997). Implementation intentions and effective goal pursuit. *Journal of Personality and Social Psychology*, 73, 186–199.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360–1380.
- Greguras, G. J., & Robie, C. (1998). A new look at within-source interrater reliability of 360-degree feedback ratings. *Journal of Applied Psychology*, 83, 960–968.
- Hall, D. T., Otazo, K. L., & Hollenbeck, G. P. (1999). Behind closed doors: What really happens in executive coaching. *Organizational Dynamics*, 29(Winter), 39–53.
- Hall, D. T., & Seibert, K. W. (1992). Strategic management development: Linking organizational strategy, succession planning, and managerial learning. In D. H. Montross & C. J. Shinkman (Eds.), Career development: Theory and practice (pp. 255–275). Springfield, IL: Charles C. Thomas.
- Hellervik, L. W., Hazucha, J. F., & Schneider, R. L. (1992). Behavior change: Models, methods, and a review of evidence. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (vol. 3; 2nd ed.; pp. 823–896). Palo Alto, CA: Consulting Psychologists.
- Hollenbeck, G. P., & McCall, M. W., Jr. (1999). Leadership development: Contemporary practices. In A. I. Kraut & A. K. Korman (Eds.), Evolving practices in human resource management (pp. 172–200). San Francisco: Jossey-Bass.
- Hooijberg, R., Bullis, R. C., & Hunt, J. G. (1999). Behavioral complexity and the development of military leadership for the twenty-first century. In J. G. Hunt, G. E. Dodge, & L. Wong (Eds.), *Out-of-the-box leadership: Transforming the twenty-first army and other top-performing organizations* (pp. 111–130). Stamford, CT: JAI.
- Hooijberg, R., Hunt, J. G., & Dodge, G. E. (1997). Leadership complexity and development of the Leaderplex model. *Journal of Management*, 23, 375–408.

- Jacobs, T. O., & Jaques, E. (1987). Leadership in complex systems. In J. Zeidner (Ed.), Human productivity enhancment (vol. 2; pp. 7–65). New York: Praeger.
- Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review*, 23, 531–546.
- Katz, J. H., & Miller, F., A. (1996). Coaching leaders through culture change. Consulting Psychology Journal: Practice and Research, 48, 104–114.
- Kegan, R. (1994). In over our heads: The mental demands of modern life. Cambridge, MA: Harvard University.
- Keys, J. B., & Wolfe, J. (1988). Management education and development: Current issues and emerging trends. *Journal of Management*, 16, 307–336.
- Kilburg, R. R. (1996). Toward a conceptual understanding and definition of executive coaching. *Consulting Psychology Journal: Practice and Research*, 48, 134–144.
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback on performance: A historical review, a meta-analysis, and a preliminary feedback intervention. *Psychological Bulletin*, 119, 254–284.
- Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life.* Glenview, IL: Scott Foresman.
- Kram, K. E., & Bragar, M. C. (1992). Development through mentoring: A strategic approach. In D. H. Montross & C. J. Shinkman (Eds.), *Career development: Theory and practice* (pp. 221–254). Springfield, IL: Charles C. Thomas.
- Kram, K. E., & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal*, 28, 110–132.
- Laabs, J. J. (1991). The global talent search. Personnel Journal, (August), 38-44.
- Latham, G. P., & Locke, E. A. (1991). Self-regulation through goal setting. *Organizational Behavior and Human Decision Processes*, 50, 212–247.
- Latham, G. P., & Seijts, G. H. (1998). Management development. In P. J. D. Drenth, H. Thierry, & Associates (Eds.), *Handbook of work and organizational psychology* (vol. 3; 2nd ed.; pp. 257–272). Hove, UK: Psychology Press/Erlbaum.
- Lepak, D. P., & Snell, S. A. (1999). The human resource architecture: Toward a theory of human capital allocation and development. *Academy of Management Review*, 24, 31–48.
- Levinson, H. (1996). Executive coaching. *Consulting Psychology Journal: Practice and Research*, 48, 115–123.
- London, M., & Beatty, R. W. (1993). 360-degree feedback as a competitive advantage. *Human Resource Management*, 32, 353–372.
- London, M., & Smither, J. W. (1995). Can multi-source feedback change perceptions of goal accomplishment, self-evaluations, and performance-related outcomes? Theory-based applications and directions for research. *Personnel Psychology*, 48, 803–839.
- Mailick, S., Stumpf, S. A., Grant, S., Kfir, A., & Watson, M. A. (1998). *Learning theory in the practice of management development: Evolution and applications.* Westport, CT: Quorum.
- Manz, C. C., & Sims, H. P. (1989). SuperLeadership: Leading others to lead themselves. New York: Prentice-Hall.
- Marsick, V. (1990). Experience-based learning: Executive learning outside the classroom. *Journal of Management Development*, 9(4), 50–60.
- Martell, R. F., Lane, D. M., & Emrich, C. E. (1996). Male-female differences: A computer simulation. *American Psychologist*, *51*, 157–158.
- Martineau, J. W. (1998). Using 360-degree surveys to assess change. In W. W. Tornow, M. London, & Associates (Eds.), *Maximizing the value of 360-degree feedback* (pp. 217–248). San Francisco: Jossey-Bass.

- McCall, M. W. (1998). *High flyers: Developing the next generation of leaders*. Boston: Harvard Business School.
- McCall, M. W., & Lombardo, M. M. (1983). Off the track: Why and how successful executives get derailed (Tech. Rep. No. 21). Greensboro, NC: Center for Creative Leadership.
- McCall, M. W., Lombardo, M. M., & Morrison, A. M. (1988). *The lessons of experience:* How successful executives develop on the job. Lexington, MA: Lexington Books.
- McCauley, C. D. (2000). A systemic approach to leadership development. Paper presented at the 15th Annual Conference of the Society for Industrial and Organizational Psychology, New Orleans, LA, April.
- McCauley, C. D., & Brutus, S. (1998). *Management development through job experiences:*An annotated bibliography. Greensboro, NC: Center for Creative Leadership.
- McCauley, C. D., & Douglas, C. A. (1998). Developmental relationships. In C. D. McCauley, R. S. Moxley, & E. Van Velsor (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 160–193). San Francisco: Jossey-Bass.
- McCauley, C. D., Moxley, R. S., & Van Velsor, E. (Eds.). (1998). *The Center for Creative Leadership handbook of leadership development.* San Francisco: Jossey-Bass.
- McCauley, C. D., Ruderman, M. N., Ohlott, P. J., & Morrow, J. E. (1994). Assessing the developmental components of managerial jobs. *Journal of Applied Psychology*, 79, 544–560.
- McGregor, I., & Little, B. R. (1998). Personal projects, happiness, and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology*, 74, 494–512.
- McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review*, *23*, 473–490.
- Moxley, R. S. (1998). Hardships. In C. D. McCauley, R. S. Moxlet, & E. Van Velsor (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 194–213). San Francisco: Jossey-Bass.
- Moxley, R. S., & O'Connor Wilson, P. (1998). A systems approach to leadership development. In C. D. McCauley, R. S. Moxley, & E. Van Velsor (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 217–241). San Francisco: Jossey-Bass.
- Mumford, A. (1980). Making experience pay. Berkshire, UK: McGraw-Hill.
- Murrell, A. J., Crosby, F. J., & Ely, R. J. (Eds.). (1999). *Mentoring dilemmas: Developmental relationships within multicultural organizations*. Mahwah, NJ: Erlbaum.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23, 242–266.
- Neck, C., & Manz, C. C. (1996). Thought self-leadership: The impact of mental strategies training on employee cognition, behavior, and affect. *Journal of Organizational Behavior*, 17, 445–467.
- Ohlott, P. J. (1998). Job assignments. In C. D. McCauley, R. S. Moxley, & E. Van Velsor (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 127–159). San Francisco: Jossey-Bass.
- Ohlott, P. J., Ruderman, M. N., & McCauley, C. D. (1994). Gender differences in managers' developmental job experiences. *Academy of Management Journal*, *37*, 46–67.
- Olivero, G., Bane, D. K., & Kopelman, R. E. (1997). Executive coaching as a transfer of training tool: Effects on productivity in a public agency. *Public Personnel Management*, 26, 461–469.
- Pedler, M. (1997). Interpreting action learning. In J. Burgoyne & M. Reynolds (Eds.), *Management learning: Integrating perspective in theory and practice* (pp. 248–264). London: Sage.
- Peterson, D. B. (1993). Measuring change: A psychometric approach to evaluating individual

- training outcomes. Paper presented at the Eighth Annual Conference of the Society for Industrial and Organizational Psychology, San Francisco, CA, May.
- Peterson, D. B. (1996). Executive coaching at work: The art of one-on-one change. *Consulting Psychology Journal: Practice and Research*, 48, 78–86.
- Quiñones, M. A., Ford, J. K., & Teachout, M. S. (1995). The relationship between work experience and job performance: A conceptual and meta-analytic review. *Personnel Psychology*, 48, 887–910.
- Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and women in formal and informal mentoring relationships. *Journal of Applied Psychology*, 84, 529–550.
- Revans, R. W. (1980). Action learning. London: Blond & Briggs.
- Rousseau, D. M., & Tijoriwala, S. A. (1999). What's a good reason to change? Motivated reasoning and social accounts in promoting organizational change. *Journal of Applied Psychology*, 84, 514–528.
- Ruderman, M. N., & Hughes-James, M. W. (1998). Leadership development across race and gender. In C. D. McCauley, R. S. Moxley, & E. Van Velsor (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 291–335). San Francisco: Jossey-Bass.
- Ruderman, M. N., & Ohlott, P. J. (1994). *The realities of management promotion*. Greensboro, NC: Center for Creative Leadership.
- Salancik, G. R., Calder, B. J., Rowland, K. M., Leblebici, H., & Conway, M. (1975). Leadership as an outcome of social structure and process: A multidimensional analysis. In J. G. Hunt & L. L. Larson (Eds.), *Leadership frontiers* (pp. 81–101). Kent, OH: Kent State University.
- Saporito, T. J. (1996). Business-linked executive development: Coaching senior executives. *Consulting Psychology Journal: Practice and Research*, 48, 96–103.
- Scandura, T. A., & Schriesheim, C. A. (1994). Leader-member exchange and supervisor career mentoring as complementary constructs in leadership research. *Academy of Management Journal*, 37, 1588–1602.
- Schein, E. H. (1997). Organizational culture and leadership (2nd ed.). San Francisco: Jossey-Bass.
- Schein, E. H., & Bennis, W. (1965). *Personal and organizational change via group methods*. New York: Wiley.
- Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday.
- Sherman, S. (1995). How tomorrow's leaders are learning their stuff. *Fortune*, *132*,(November 27), 90–102.
- Skarlicki, D. P., & Latham, G. P. (1997). Leadership training in organizational justice to increase citizenship behavior within a labor union: A replication. *Personnel Psychology*, 50, 617–633.
- Spreitzer, G. M., Noble, D. S., Mishra, A. K., & Coole, W. N. (1999). Predicting process improvement team performance in an automotive firm: Explicating the roles of trust and empowerment. In R. Wageman (Ed.), *Research on managing groups and teams: Groups in context* (vol. 2; pp. 71–92). Stamford, CT: JAI.
- Stewart, G. L., Carson, K. P., & Cardy, R. L. (1996). The joint effects of conscientiousness and self-leadership training on employee self-directed behavior in a service setting. *Personnel Psychology*, 49, 143–164.
- Stewart, R. (1984). Developing managers by radical job moves. *Journal of Management Development*, 3(2), 48–85.

- Tesluk, P. E., & Jacobs, R. R. (1998). Toward an integrated model of work experience. *Personnel Psychology*, 51, 321–355.
- The Conference Board. (1999). Developing leaders. HR Executive Review, 7(1), 1–19.
- Thomas, D. A. (1993). Racial dynamics in cross-race developmental relationships. *Administrative Science Quarterly*, *38*, 169–194.
- Thompson, D. A. (1987). A formative evaluation of an individualized coaching program for business managers and professionals (Doctoral dissertation, University of Minnesota, 1987). *Dissertation Abstracts International*, 47(12-A, Pt. 1), 4339.
- Tobias, L. L. (1996). Coaching executives. *Consulting Psychology Journal: Practice and Research*, 48, 87–95.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41, 464–476.
- Van Scotter, J. R., & Steel, R. P. (2000). *Is a rater's opportunity to observe over-rated? A test of the effects of observational opportunity on rater agreement.* Paper presented at the 15th Annual Conference of the Society for Industrial and Organizational Psychology, New Orleanns, LA, April.
- Van Velsor, E., & Leslie, J. B. (1995). Why executives derail: Perspectives across time and cultures. *Academy of Management Executive*, 9(4), 62–72.
- Van Velsor, E., McCauley, C. D., & Moxley, R. S. (1998). Our view of leadership development. In C. D. McCauley, R. S. Moxley, & E. Van Velsor (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 1–25). San Francisco: Jossey-Bass.
- Vicere, A. A., & Fulmer, R. M. (1998). *Leadership by design*. Boston, MA: Harvard Business School.
- Waldman, D. A., Atwater, L. E., & Antonioni, D. (1998). Has 360 degree feedback gone amok? *Academy of Management Executive*, 12(2), 86–94.
- Walker, A. G., & Smither, J. W. (1999). A five-year study of upward feedback: What managers do with their results matters. *Personnel Psychology*, 52, 393–423.
- Warech, M. A., Smither, J. W., Reilly, R. R., Millsap, R. E., & Reilly, S. P. (1998). Self-monitoring and 360-degree ratings. *Leadership Quarterly*, 9, 449–473.
- Weick, K. E. (1993). The collapse of sensemaking in organizations: The Mann Gulch disaster. *Administrative Science Quarterly*, 38, 628–652.
- Wenger, E. (1998). Communities of practice: Learning, meaning, and identity. Cambridge, UK: Cambridge University.
- Wenger, E. C., & Snyder, W. M. (2000). Communities of practice: The organizational frontier. *Harvard Business Review*, (January-February), 139–145.
- Wexley, K. N., & Baldwin, T. T. (1986). Management development. *Journal of Management*, 12, 277–294.
- Whitener, E. M. (2000). *The processes of building social capital in organizations: The integrating role of trust.* Paper presented at the Academy of Management Annual Meeting, Toronto, Ontario, Canada, August.
- Yukl, G. A. (1998). *Leadership in organizations* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Zand, D. E. (1997). *The leadership triad: Knowledge, trust, and power.* New York: Oxford University.