Self-Efficacy and Leadership Effectiveness: Applying Social Cognitive Theory to Leadership

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Executive Summary

One of the most frequently reported findings in the leadership literature is the relationship between a leader's self-confidence and successful leadership. Yet, absent from the literature is a theoretical explanation for this long recognized association. A new leadership approach is proposed based on Bandura's (1986) social cognitive theory that posits leadership self-efficacy as the key cognitive variable regulating leader functioning in a dynamic environment. The full model considers leader cognitions in addition to leader behaviors and the situation resulting in a broader view of the leadership process. Implications and propositions for leadership research are discussed.

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Whether they liked him or not, those who knew Winston Churchill always marveled at the steadfast faith he had in his own powers to deal with the most difficult circumstances (Manchester, 1988). Even those as daunting as what appeared to be the imminent destruction of his own country did not disturb him. His unshakeable self-confidence is revealed in a passage from his memoirs. In it Churchill recalls his thoughts as he was leaving Buckingham Palace after having agreed to the King's request that he become prime minister knowing full well that Hitler's mechanized armies had already begun the *Blitzkrieg* of France.

> I felt as if I were walking with Destiny, and that all my past life had been but a preparation for this hour and for this trial. [...] I could not be reproached either for making the war or with want of preparation for it. *I thought I knew a good deal about it all, and I was sure I should not fail* [italics added] (Churchill, 1948, p. 667).

Churchill's quote serves to illustrate what leadership researchers have observed about other effective leaders. They too seem to have had confidence in their abilities to meet the demands of the leadership situation they were in. Every major review of the leadership literature lists self-confidence as an essential characteristic for effective leadership (see Bass, 1990; House & Aditya, 1997; Northouse, 2001, Yukl & Van Fleet, 1992). In fact, one reviewer commented: "That self-confidence is a necessary trait for successful leadership is undisputed" (Locke, 1991a, p.26). Interestingly enough, despite this consensus, why leader self-confidence is important and how it affects leader behaviors and reactions to the leadership context has not been extensively investigated. In addition, as Bennis and Nanus (1985) remarked: "It is not all the clear how it is acquired" (p.68).

As will be discussed in the next section, the problem has been the self-confidence variable. Because it is a trait and not a part of any established theory of human performance, it can only be used to describe or predict behavior. However, as will be argued, because self-confidence is somewhat similar to Bandura's (1986) self-efficacy construct, this similarity can be used as a starting point for building a different leadership approach that can account for the frequently reported association between a leader's self-confidence and various criteria of leader effectiveness. This new perspective will be grounded in Bandura's (1997) social cognitive theory, since self-efficacy (one's task-specific self-confidence (Locke & Latham, 1994)) is the central integrating variable in this theory. A series of propositions to stimulate and guide leadership research and applied activities are offered.

Self-Confidence, Self-Efficacy and Social Cognitive Theory

Self-confidence, an important concept in personality psychology, refers to people's self-judgment of their capabilities and skill, or their perceived competence to deal successfully with the demands of a variety of situations (Shrauger & Schohn, 1995). It is an admired personal trait about which people often express interest. However, for model building purposes, self-confidence is not a construct embedded in a validated theoretical system specifying its determinants, processes, and effects. Because of this, it has presented a problem for researchers interested in developing models of different kinds of human performance, like leadership.

Researchers in other domains have typically dealt with this problem by using Bandura's (1986) self-efficacy construct to explain how self-confidence influences performance. For example, in the sports psychology field self-confidence is one of the most frequently cited psychological factors thought to affect athletic performance (Feltz, 1988), and self-efficacy theory is the most extensively used theory for investigating self-confidence in sports settings (Weinberg & Gould, 1995). This practice of substituting self-efficacy for self-confidence is understandable considering the seeming conceptual similarity of the two constructs. Other researchers have noted this as well (see Brockner, 1988; Hollenbeck, 1991). Bass (1990), for instance, declared that: "Self-efficacy is closely allied with self-confidence" (p. 153). Empirical findings and theory indicate that general, trait self-efficacy (or self-confidence) influences an individual's estimate of their situation-specific self-efficacy (Williams, 1997). Further, Chemer's (1993) integrative theory of leadership contends that leader self-confidence partially determines leader self-efficacy beliefs, which in turn impact leader behavior intentions. Thus, the trait of self-confidence impacts leadership performance through the mediating mechanism of leadership self-efficacy, a person's confidence in his or her ability to successfully lead.

While self-confidence and self-efficacy are not exactly identical concepts, they are closely associated. Therefore, it is proposed that for the purpose of building an initial exploratory model, Bandura's (1986) self-efficacy concept can be used to guide the model building process, as has been done by others. Doing so yields an immediate and important consequence for leadership scholars. This connects the academic study of leadership to the well-developed literature on social cognitive theory inspired by the seminal work of Bandura (1982) given that self-efficacy is the central integrative variable in his model. His social cognitive theory portrays human functioning as a dynamic system comprised of reciprocal relationships among three categories of determinants: (1) the individual's cognitions and other personal factors, (2) individual behavior, and (3) the performance environment. As Bandura (1997) explains it:

> A full understanding requires an integrated causal perspective in which social influences operate through self-processes that produce the actions. The self system is not merely a conduit for external influences, as structural reductionists (behaviorists) might claim [...] Moreover, human agency operates generatively and proactively rather than just reactively (p. 6).

Thinking about leadership as a particular kind of human functioning, Bandura's social cognitive model implies that to fully understand the leadership process three categories of leadership variables must be considered. They are leader cognitions, leader behaviors, and the leadership environment. And the most important leader cognition is the individual's self-efficacy for the leadership task. Figure 1 depicts the relationships among these three leadership determinants. Regarding the leadership process from the social cognitive perspective suggests the following proposition.

Proposition 1: Variations in leader cognitions, leader behaviors, and the leadership environment are necessary and sufficient to account for variations in leader effectiveness.

FIGURE 1

Applying Social Cognitive Theory to Leadership
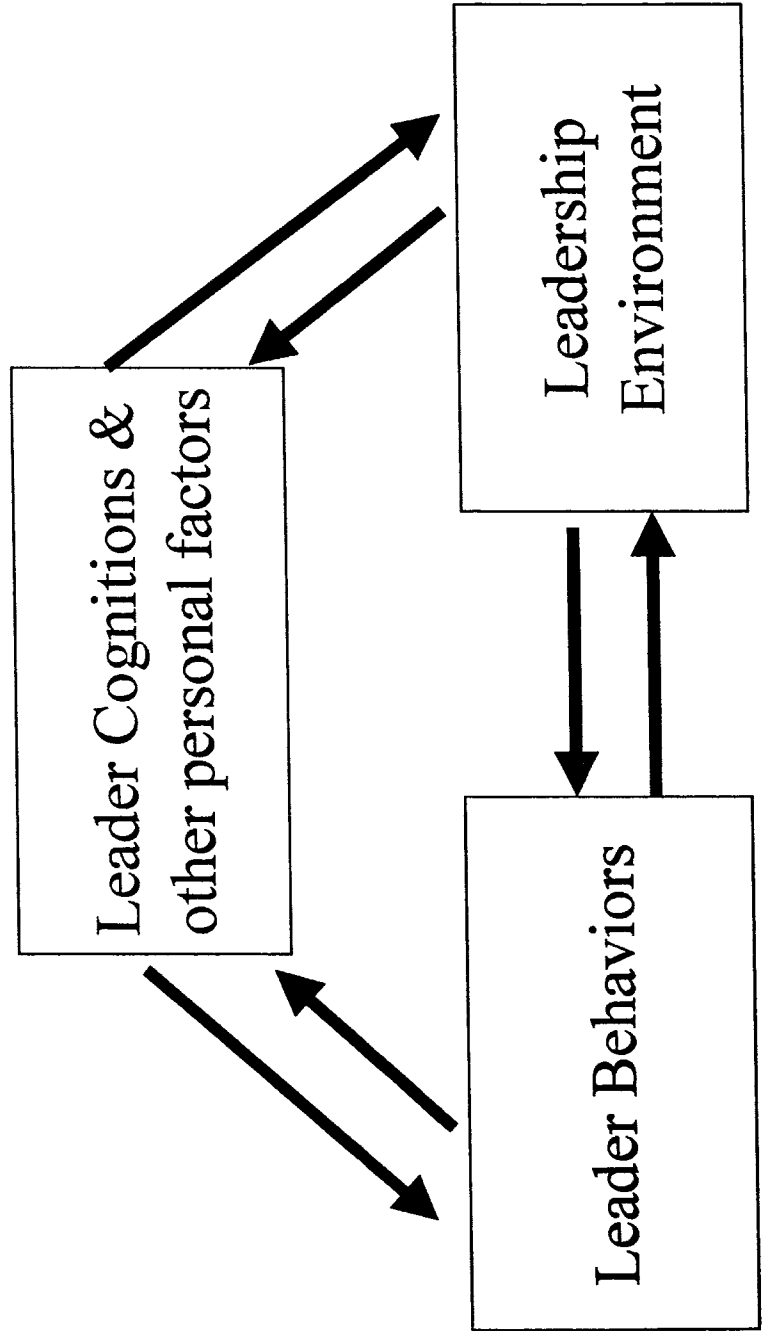
## Social Cognitive Theory and Self-regulated Behavior

The central idea behind the social cognitive perspective is that individuals can self-regulate their thoughts, motivation, and behaviors. Rather than simply reacting to the environment as the behaviorist perspective contends, the social cognitive approach views the person as being goal directed and proactively involved in shaping the task environment. Further, it holds that cognitive processes and other personal resources underlie the behavior strategies chosen and the skill with which they are executed. A model of this process emerged from the convergence of two streams of research, goal theory (Locke and Latham, 1990b) and self-efficacy theory (Bandura, 1986). What resulted was a framework that identified the cognitive variables involved in the self-regulation process. As can be seen in Figure 2, the two central cognitive components are personal goals and self-efficacy beliefs.

Numerous studies have confirmed that task performance is regulated by the goals individuals set for themselves (Locke & Latham, 1990b). Goals can be personal, reflecting individual needs, motives, and values, as well as assigned, reflecting environmental demands. Further, they can take the form of performance standards or valued outcomes. The second variable, self-efficacy, is the belief that one has the personal capabilities and resources to meet the demands of a specific task and situation. It has been directly linked to performance as well (Bandura, 1986). It also indirectly influences performance through its effects on goals. Thus, of the two, self-efficacy is the more influential.

Personal goals and self-efficacy beliefs affect performance through two mediating mechanisms: individual motivation (i.e., direction, effort, persistence) and task strategy development. Selecting and executing effective strategies depends on both effort and the individual's experience level, that is, their level of knowledge, skills and abilities (KSAs) (Wood, Mento, & Locke, 1987). These personal capabilities are derived from experience (Fiedler, 1994). Once formed task plans guide the behaviors that impact the task environment (Early, Connelly, & Ekegren, 1989; Wood & Bandura, 1989), and the performance context responds by generating feedback, which is then evaluated. The resulting experiences, depending upon the characteristics of the information and the evaluator, can produce changes in self-efficacy, goals, KSAs, and task strategies. And the cycle begins again.

The self-regulation model posits that high self-efficacy will lead individuals to set challenging goals, persist in the face of obstacles, work harder on tasks, direct cognitive and behavioral resources toward goal relevant actions, and actively search for effective task strategies. The model has been tested in both applied and experimental settings, and has been successfully used to predict and explain performance for both simple and complex tasks. (For a review see Bandura, 1997). Interestingly enough, although characteristics like persistence, effort, goal-directedness, and problem solving have been associated with successful leadership, no published studies were found that have connected the self-regulation framework with leadership. What is argued in the next section is that the self-regulation framework can be applied to the leadership process.
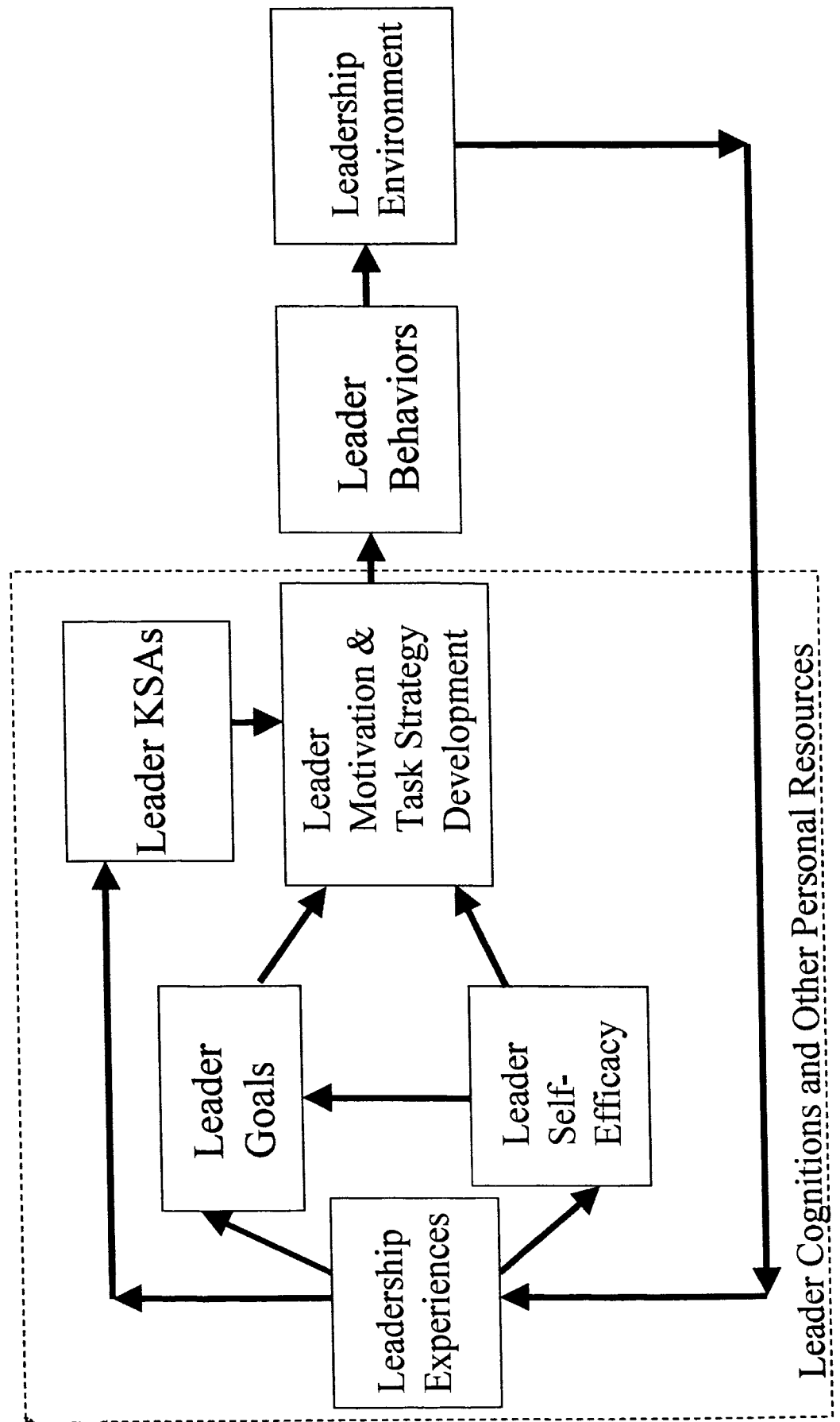
FIGURE 2

Model of Self-Regulated Behavior
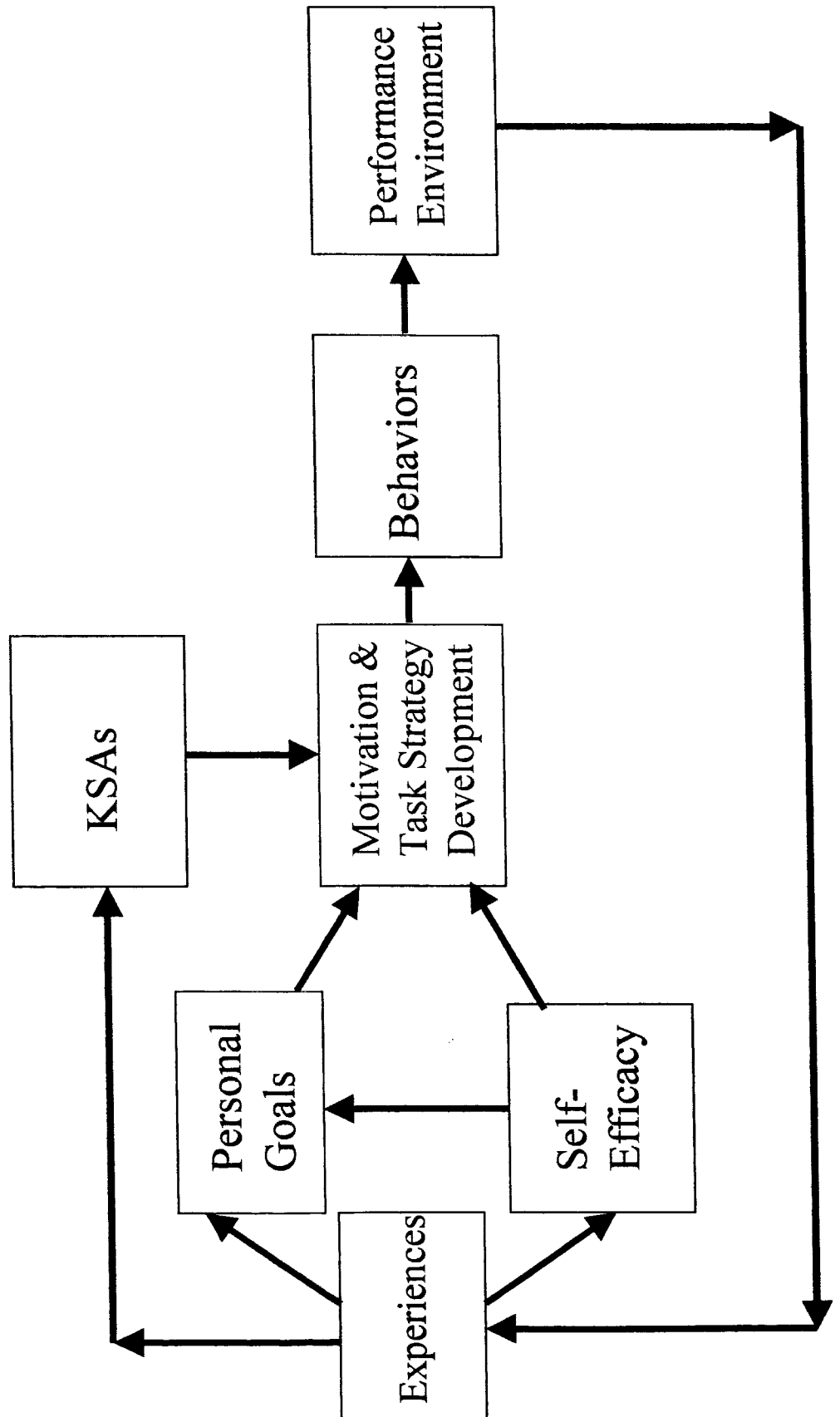
Extending the Self-Regulation Framework to the Leadership Process

Leadership is a complex cognitive and behavioral task that takes place in a dynamic social context. Successful leadership involves using social influence processes to organize, direct and motivate the actions of others. It requires persistent task-directed effort, effective task strategies, and the artful application of various conceptual, technical, and interpersonal skills (House & Aditya, 1997; Yukl & Van Fleet, 1992). Its purpose is to facilitate group goal attainment by establishing and maintaining a favorable group performance environment (Hackman & Walton, 1986). Because group goal achievement is the result of the coordinated effort of group members, an individual's effectiveness in a leadership role is a socially mediated outcome. Leader effort alone does not guarantee attainment of a collective goal.

The contemporary leadership literature has viewed the leader as a causal agent who acts on the leadership situation rather than simply responding to it (Yukl & Van Fleet, 1992). It has described the successful leader as being persistent, self-confident, energetic, alert to the environment, adaptable to the situation, assertive and goal-directed (Bass, 1990; Yukl, 1994; Zacarro, Foti, & Kenny, 1991). In addition, various taxonomies of effective leader behaviors have included activities such as monitoring operational processes and the task environment, goal setting, planning, problem solving, and diagnosing individual and group needs (Mumford, Zacarro, Harding, Fleishman, & Rieter-Palmon, 1993; Van Fleet & Yukl, 1986). In short, leaders are efficacious individuals who, "gather information, plan action, take action, and monitor group progress towards goals" (Kane, 1995, p. 4).

Viewed from the social cognitive perspective, what leadership researchers have been describing for years is a person engaged in self-regulation in a complex and ever changing task setting, the leadership situation. Through his or her behaviors, the individual in the leadership role actively attempts to influence the processes of the task-performing group and the larger social context in which the group must function (i.e., a company, a school, a community) in order to facilitate group success. Cognitive processes and other personal resources underlie the actions selected and the proficiency with which they are executed (Mumford et al., 1993; Wood & Bandura, 1989).

FIGURE 3
Social Cognitive Model of Leadership

Adapting the self-regulation model to the leadership process produces a conceptual framework that includes a person's sense of confidence that they can perform the leadership role within an established theoretical system (see Figure 3). This then accounts for the often reported association between a leader's sense of self-assurance and leadership success. *Leadership self-efficacy,* which is proposed as the central cognitive variable in the model, is defined as one's self-perceived capability to perform the cognitive and behavioral functions necessary to regulate group process in relation to goal achievement. Put another way, it is a person's confidence in his or her ability to successfully lead a group. As depicted in Figure 3, leadership self-efficacy is critical to the leadership process because it affects the goals a leader selects, leader motivation, development of functional leadership strategies, and the skillful execution of those strategies. Based upon the model, the following propositions are offered.

Proposition 2: Leadership self-efficacy is a necessary though not sufficient factor contributing to leadership effectiveness.

Proposition 3: Leader cognitions and other personal resources underlie the leader behaviors chosen and the skill with which they are executed.

Proposition 4: Leader cognitions include, but are not limited to (a) leadership self-efficacy beliefs, (b) beliefs about others and the performance context, (c) goals, (d) knowledge structures, and (e) diagnostic and evaluation processes.

Leadership Self-Efficacy: Implications for Research and Practice

In his extensive review of the self-efficacy literature, Bandura (1997) found no studies that directly examined the impact of leader self-efficacy beliefs on leader effectiveness. Kane (1995), after examining the leadership literature, also found that: "Very little is known about the process by which perception of self-competence influences a leader's interaction with groups and group effectiveness" (p. 5). Additionally, a computerized key word search of the major business and psychology databases identified only one very recent journal article on leadership self-efficacy (see Chemers, Watson, & May, 2000). These investigators concluded that:

> The study of the effects of positive judgments, such as **self-efficacy** and optimism, on leadership, team and organizational performance is just beginning. Preliminary evidence indictes, however, that this approach holds promise for clarifying the complex processes that underlie effective leadership (p.276).

Applying social cognitive theory and the self-efficacy construct to the leadership process has theoretical and practical implications. First, social cognitive theory is a conceptual framework of human functioning that is well supported by a large body of empirical research. According to Locke (1991b): "Evidence for the validity of social cognitive theory is very strong" (p.293). Thus, it is a paradigm whose concepts and principles can be relied upon by leadership researchers and practitioners. The fact that it could be used as the theoretical foundation for a leadership model that can explain why self-confidence typically correlates with different measures of leader effectiveness demonstrates its theoretical utility. The

social cognitive model of leadership (Figure 3) proposes that managerial leaders who are confident of their leadership capabilities will select higher goals and deploy their skills and efforts more effectively than those beset by self-doubt.

Second, the social cognitive model of leadership has relevance to leadership training since it proposes that for someone to be successful in a leadership role, he or she must have a healthy sense of personal effectiveness as a leader. This implies that enhancing leadership self-efficacy should be an important objective for those responsible for improving the quality of leadership in organizations. A search of the training evaluation literature revealed that leadership training designers have not yet focused on the leadership self-efficacy construct. No study was found that measured whether a leadership development program affected trainees' efficacy beliefs. Given the enormous sums of money, employee time, and company resources expended annually on leadership and management education by business and the military, using leadership self-efficacy as a training evaluation criterion seems appropriate.

Third, not only does Bandura's (1997) work explain the relationship between self-confidence and leadership success, his self-efficacy theory explains what is involved in improving self-efficacy beliefs. This means that leadership training designers can use social cognitive theory to guide the design of interventions more likely to improve the leadership capabilities of their trainees. According to Bandura, efficacy perceptions are derived from four kinds of experiences. From most to least influential they are enactive mastery (or repeated personal performance accomplishments), observational learning, social persuasion, and physiological or emotional states. The efficacy enhancement literature (see Eden & Aviram, 1993; Gist, 1989; Gist & Mitchell, 1992; Stevens, Bavetta, & Gist, 1993) does indicate that training programs structured to include mastery experiences, role plays, and positive persuasory messages do enhance trainees' task-specific efficacy perceptions.

In conclusion, the utility of Bandura's (1986) social cognitive framework for explaining human functioning in a variety of performance domains has been recognized for years by researchers in other fields of study. However, this has not been the case in the leadership studies domain. The purpose of this paper was to introduce social cognitive theory to leadership researchers and practitioners and also demonstrate how it could be employed to account for one of the most frequently reported findings in the extant literature, the relationship between leader self-confidence and leadership success. The proposed model, which posits leader self-efficacy belief as the key cognitive variable, represents a new perspective on the leadership process, one that focuses on leader cognitions in addition to leader behaviors and the leadership context. This model has implications for research and practice in organizational leadership.

References

Bandura, A. 1982. Self-efficacy mechanism in human agency. American Psychologist, 37: 122-147.

Bandura, A. 1986. Social foundations of thought and action. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. 1997. Self-efficacy: The exercise of control. New York: H.W. Freeman.

Bass, B.M. 1990. Stogdill's handbook of leadership. New York: Free Press.

Brockner, J. 1988. Self-esteem at work. Lexington, MA: Lexington Books.

Chemers, M.M., Watson, C.B., & May, S.T. 2000. Dispositional affect and leadership effectiveness: A comparison of self-esteem, optimism, and efficacy. Personality and Social Psychology Bulletin, 26: 267-277.

Churchill, W. 1948. The gathering storm. Boston: Houghton-Mifflin.

Cioffi, D. 1991. Beyond attentional strategies: A cognitive-perceptual model of somatic interpretation. Psychological Bulletin, 109: 25-41.

Crundall, I., & Foddy, M. 1981. Vicarious exposure to a task as a basis of evaluative competence. Social Psychology Quarterly, 44: 331-338.

Early, P.C. Connolly, T., & Ekegren, G. 1989. Goals, strategy development and task performance: some limits on the efficacy of goal-setting. Journal of Applied Psychology, 74: 24-33.

Eden, D., & Aviram, A. 1993. Self-efficacy training to speed reemployment: Helping people to help themselves. Journal of Applied Psychology, 78: 352-360.

Eden, D., & Zuk, Y. 1995. Seasickness as a self-fulfilling prophesy: Raising self-efficacy to boost performance at sea. Journal of Applied Psychology, 80: 628-635.

Feltz, D.L. 1988. Self-confidence and sports performance. Exercise and Sport Science Reviews, 16: 423-457.

Fiedler, F. 1994. Leadership experience and leadership performance. U.S. Army Research Institute for the Behavioral and Social Sciences.

Forgas, J.P., Bower, G.H., & Moylan, S.J. 1990. Praise or blame? Affective influences on attributions for achievement. Journal of Personality and Social Psychology, 59: 809-819.

Gist, M.E. 1989. The influence of training method on self-efficacy and idea generation among managers. Personnel Psychology, 42: 787-805.

Gist, M.E., & Mitchell, T.R. 1992. Self-efficacy: A theoretical analysis of its determinants and malleability. Academy of Management Review, 17: 183-211.

Hackman, J.R., & Walton, R.E. 1986. Leading groups in organizations. In P.S. Goodman & Associates (Eds.), Designing effective work groups: 72-119. San Francisco, CA: Jossey-Bass.

Hollenbeck, G.P. 1991. What did you learn in school? Studies of a university executive program. Human Resource Planning, 14: 247-260.

House, R.J., & Aditya, R.N. 1997. The social scientific study of leadership: Quo vadis? Journal of Management, 23: 409-473.

Kane, T.D. 1995. Integrative functional leadership and social cognitive theory: The leader's regulation of groups. Unpublished doctoral dissertation, George Mason University: Fairfax.

Locke, E.A. 1991a. The essence of leadership: The four keys to leading successfully. New York: Lexington Books.

Locke, E.A. 1991b. The motivation sequence, the motivation hub, and the motivation core. Organizational Behavior and Human Decision Processes, 50: 288-299.

Locke, E.A., & Latham, G.P. 1990. A theory of goal setting and task performance. Englewood Cliffs, N.J.: Prentice-Hall.

Locke, E.A. & Latham, G.P. 1994. Goal setting theory. In H.F. O'Neil, Jr. & M. Drillings (Eds.), Motivation: Theory and research: 1-13. Hillsdale, NJ: Lawrence.

Manchester, W. 1988. The Last Lion, Winston Spencer Churchill. Boston, MA: Little, Brown & Co.

Mumford, M.D., Zaccaro, S.J., Harding, E.A., Fleischman, E.A., & Rieter-Palmon, R. 1993. Cognitive and temperamental predictors of executive ability: Principles for developing leadership capacity (Tech. Rep. 977). U.S. Army Research Institute, Bethesda, MD: Management Research Institute.

Northouse, P.G. 2001. Leadership. 2nd ed., Thousand Oaks, CA: Sage Publications.

Salovey, P., & Birnbaum, D. 1989. Influence of mood on health-relevant cognitions. Journal of Personality and Social Psychology, 57: 539-551.

Savard, C.J., & Rogers, R.W. 1992. A self-efficacy and subjective expected utility theory analysis of the selection and use of influence strategies. Journal of Social Behavior and Personality, 7: 273-292.

Shrauger, J.S., & Schohn, M. 1995. Self-confidence in college students: Conceptualization, measurement, and behavioral implications. Assessment, 2: 255-278.

Spreitzer, G.M., McCall, Jr., M.W., & Mahoney, J.D. 1997. Early identification of international executive potential. Journal of Applied Psychology, 82: 6-29.

Stevens, C.K., Bavetta, A.G., & Gist, M.E. 1993. Gender differences in the acquisition of salary negotiation skills: The role of goals, self-efficacy, and perceived control. Journal of Applied Psychology, 78: 723-735.

Van Fleet, D.D., & Yukl, G. 1986. Military leadership: An organizational perspective. Greenwich, CT: JAI Press.

Weinberg, R.S., & Gould, D. 1995. Foundations of sport and exercise psychology. Champaign, IL: Human Kinetics.

Wood, R., & Bandura, A. 1989. Social cognitive theory of organization management. Academy of Management Review, 14: 361-384.

Wood, R.E., Mento, A.J., & Locke, E.A. 1987. Task complexity as a moderator of goal effects: A meta-analysis. Journal of Applied Psychology, 72: 416-425.

Yukl, G. 1994. Leadership in Organizations. 3rd ed., Englewood Cliffs, NJ: Prentice Hall.

Zaccaro, S.J., Foti, R.J., & Kenny, D.A. 1991. Self-monitoring and trait-based variance in leadership: An investigation of leader flexibility across multiple group situations. Journal of Applied Psychology, 76: 308-315.

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