



The importance of self- and shared leadership in team based knowledge work

A meso-level model of leadership dynamics

Michelle C. Bligh

*School of Behavioral and Organizational Sciences,
Claremont Graduate University, Claremont, California, USA*

Craig L. Pearce

*Peter F. Drucker and Masatoshi Ito Graduate School of Management,
Claremont Graduate University, Claremont, California, USA, and*

Jeffrey C. Kohles

*College of Business Administration, California State University San Marcos,
San Marcos, California, USA*

Abstract

Purpose – To address the increasing need for novel approaches to leadership that deal with the challenges organizations face as they flatten, diversify, and confront increasingly complex problems.

Design/methodology/approach – A meso-level theoretical model is developed that outlines the relationship between self- and shared leadership, focusing on the intermediary processes of trust, potency, and commitment that may lead to the development of shared leadership and ultimately more innovative knowledge creation.

Findings – Nine propositions are developed, addressing the relationships between self- and shared leadership, concluding with some of the theoretical and practical implications of the model and specific recommendations for future empirical work in this area.

Research limitations/implications – An important boundary condition of the model is that it assumes team and organizational incentives are in place to encourage team building and the facilitation of team over individual achievements.

Practical implications – Conceptualizing leadership in this way leads to numerous unanswered questions regarding how team dynamics influence, and are influenced by, various forms of leadership (including lateral, upward, and downward influence attempts). Greater dialogue between the team dynamics literature and the leadership literature may lead to new insights into how shared leadership is influenced by a variety of team characteristics, including team ability, size, member maturity, familiarity, likeability, cohesion, etc., all of which are potential areas for future research.

Originality/value – Important research questions that stem from consideration of these two theories in concert will prove critical in understanding the complex interrelationships among self-leadership, shared leadership, and the creation of new knowledge in today's complex and dynamic organizations.

Keywords Leadership, Team working, Shared leadership, Knowledge organizations, Trust

Paper type Research paper



Research on team innovation and performance has become increasingly important as organizations move to flatter, more diverse ways of organizing and are forced to develop creative solutions to complex problems. More specifically, the implementation

of cross-functional and self-managed work teams has created new challenges, particularly in organizations that have traditionally rewarded vertical leadership and individual innovation and performance. As Seers *et al.* (2003, p. 96) assert, “self-managed teams constitute one of the most prominent features of post-industrial era organizations”. As more and more organizations turn to team approaches in both profit and non-profit arenas, the study of team leadership and performance has become critical (Pearce *et al.*, 2004).

In particular, the increasing emphasis on team-based knowledge work, or work that involves significant investment of intellectual capital by a group of skilled professionals, is forcing us to expand our traditional models of leadership, as vested in one individual, to encompass more complex models of leadership, that include such concepts as self- and shared leadership (Houghton *et al.*, 2003). However, the implementation of team-based knowledge work is not always associated with increased effectiveness (e.g. Ashley, 1992; Verespej, 1990), and teams often fail to live up to their potential due to their inability to smoothly coordinate team members’ actions and the lack of effective leadership to guide this process (Burke *et al.*, 2003). As a result, it is important to develop models of team leadership that are more predictive of successful outcomes such as knowledge creation and productivity.

One promising development in the area of team leadership is the construct of shared leadership. Shared leadership is defined as “a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both” (Pearce and Conger, 2003, p. 1). A prominent distinction between shared leadership and more traditional forms of leadership is that the influence processes involved may frequently include peer or lateral influence in addition to upward and downward hierarchical influence processes. Particularly in cross-functional teams which lack hierarchical authority, or have a formally appointed leader who is highly dependent on the team members’ unique knowledge, skills, and backgrounds, shared leadership may be a powerful and potentially successful form of leadership. However, theoretical and empirical work is just beginning to explore the antecedents and consequences of shared leadership. In particular, we have little insight into how individual-level constructs that members bring to the team may influence the development constructs such as shared leadership at the group or team level. In this article, we suggest that self-leadership may be one potential individual level antecedent of shared leadership that is particularly worthy of exploration.

Self-leadership is defined as “a process through which people influence themselves to achieve the self-direction and self-motivation needed to perform” (Houghton *et al.*, 2003, p. 126). Both self-leadership and shared leadership have received increasing attention from researchers and practitioners. In recent years, however, with the exception of Houghton *et al.* (2003) and Pearce and Manz (2005), there has been relatively little attention devoted to how processes of self-leadership might be theoretically and empirically linked to shared leadership. Manz and Sims (1987, p. 119) suggest that in the context of self-managing work teams the leader’s role becomes a commitment “to the philosophy that the teams should successfully complete necessary leadership functions for themselves”. Similarly, Pearce (2004) suggests that shared leadership is the manifestation of fully developed empowerment in teams, in which team members engage in simultaneous, ongoing, and mutual influence processes. As

such, these authors explicitly address the need to shift the focus of leadership from a single leader engaged in primarily unidirectional influence processes to multiple leaders engaged in more fluid, reciprocal and more dynamic influence processes. We argue that through the development of self-leadership, team members can develop the intermediate behaviors and prerequisites necessary to engage in increased levels of shared leadership, resulting in more effective team knowledge creation.

Houghton *et al.* (2003) contend that self-leadership should play an important role in the facilitation of shared leadership, yet the processes through which effective self-leaders learn to take on shared leadership roles have only begun to be explored. As both concepts focus on the leadership capabilities of followers, exploring the theoretical relationships between these two theories may provide important synergistic outcomes, particularly in influencing successful knowledge creation. Seers *et al.* (2003, p. 80) point out that current research has been “largely silent on theoretical reasons for why influence should come to be wielded and reciprocated in any sustained or patterned way across multiple members of work groups”. Fletcher and Käufer (2003) similarly suggest that the microprocesses within social interactions have been largely ignored in the leadership literature.

Accordingly, we offer a number of theoretical reasons for reciprocated shared influence in teams in hopes of moving to address this gap in the literature. In essence, our model provides a cross-level or meso approach that integrates individual-level and group-level concepts. Cross-level or meso theories explicitly concern “the relationship between independent and dependent variables at different levels” (Rousseau, 1985, p. 20). The need for multilevel research has been frequently voiced in the organizational literature (House and Rousseau, 1992; Rousseau and House, 1994), and many scholars have suggested that greater attention to levels issues will strengthen organizational theory development and research (Klein and Dansereau, 1994). In addition, multilevel theory development is an important and necessary next step in order to “connect the dots” in the organizational literature, making explicit the links between constructs that have not been previously linked (Klein *et al.*, 1999, p. 248).

In practice, however, few models to guide such research exist, in part due to the multiple barriers that hinder multilevel theory building (see Klein *et al.*, 1999; Klein and Kozlowski, 2000). In this article, we emphasize the processual nature of the relationship between self- and shared leadership across levels of analysis, arguing that trust, potency, and commitment are crucial intermediary concepts that are both manifested by individual team members and subsequently interpreted by other organizational members, influencing their behaviors in turn. We argue that these intermediary constructs may undergo a shift in levels over time; thus, for example, self-leadership skills may encourage individuals who have initially independent work attitudes such as trust, commitment and potency to coalesce in these attitudes over time, forming a more homogeneous group that is united by these shared attitudes. In turn, the development of common attitudes and work beliefs is likely more conducive to the development of shared leadership. Applied in this way, our model is fundamentally a meso approach, as it emphasizes the interdependence of individuals in constructing organizational meanings and outcomes (Rousseau and House, 1994) and represents a level change from the individual level to a group “wholes view” (see Dansereau *et al.*, 1999, p. 347). Thus, we argue that our framework makes some headway toward

developing a meso-approach to the relationship between individual-level values and behaviors and their effects on team interactions.

In the next section, we briefly review the literature on self-leadership, focusing particular attention on some of the potential outcomes that may result when teams are comprised of individuals that utilize a variety of self-leadership strategies. Building on the conceptual model of Houghton *et al.* (2003), we subsequently develop a meso-level theoretical model that outlines the relationship between self- and shared leadership, focusing on some of the intermediary processes that may lead to the development of shared leadership (see Figure 1). We conclude with some of the theoretical and practical implications of this theoretical model, as well as some specific recommendations for future empirical work in this area.

From self-management to self-leadership

Manz and Sims (1980) define self-management as the degree to which an individual takes responsibility for the managerial aspects of his or her job above and beyond the mere execution of traditional role responsibilities, such as working toward pre-set goals and the self-administration of consequences such as rewards and punishments. Self-management can serve as a substitute for either traditional leader-initiated behaviors or the need for more structurally imposed controls on behavior (i.e. rules and procedures). Self-leadership expands on self-management behaviors, incorporating control and regulation components, as well as emphasizing the importance of intrinsic motivation resulting from the inherent rewards of completing a task. In short, self-management incorporates leadership substitutes addressing how to complete a given task, while self-leadership incorporates what should be done and why, in addition to addressing how the task should be completed (Manz, 1992). Self-leadership thus encompasses the processes through which individuals influence themselves to self-direct and self-motivate their own performance (Manz, 1986; Manz and Neck, 1999). As Markham and Markham (2002) note, these concepts may also be extended to the team level of analysis.

Self-leadership has garnered increasing attention from both researchers and practitioners interested in the application of behavioral and cognitive self-leadership strategies to performance outcomes (Blanchard, 1995; Cashman, 1995; Manz, 1992;

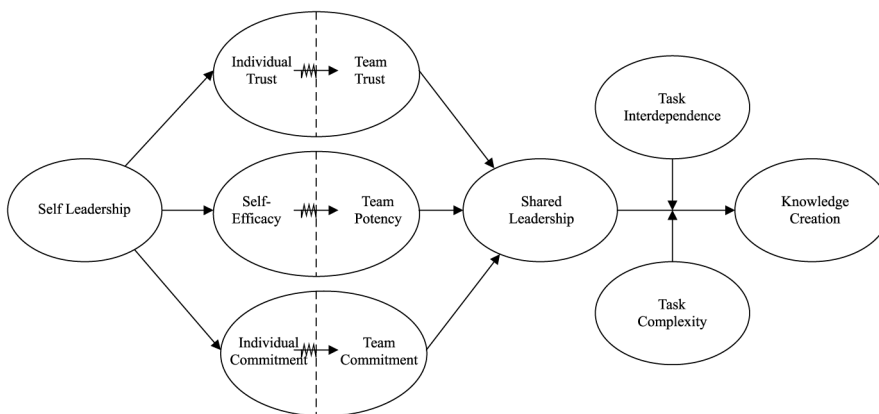


Figure 1.
The importance of self- and shared leadership in team-based knowledge work: a meso-level model of leadership dynamics

Manz and Neck, 1999; Manz and Sims, 1989, 1994, 2001; Sims and Manz, 1996; Waitley, 1995). Self-leadership strategies are rooted in theories of self-regulation, self-control, and self-management, and have been divided into three categories:

- (1) behavior-focused strategies;
- (2) natural reward strategies; and
- (3) constructive thought pattern strategies (see Houghton *et al.*, 2003, for an overview).

Behavior-focused strategies include self-observation, self-goal setting, self-reward, self-correcting feedback, and practice. Natural reward strategies, in contrast, occur when a team member engages in an activity for its own intrinsic value, and is motivated by the task itself (see Manz and Neck, 1999).

Finally, constructive thought pattern strategies, or thought self-leadership, involve positive and habitual ways of thinking that facilitate overall enhanced performance. These strategies may include mental imagery, positive self-talk, and self-analysis and correction of belief systems (Manz and Neck, 1999). According to Neck and Manz (1992), individuals tend to fall into one of two habitual thinking patterns: opportunity thinking or obstacle thinking. While opportunity thinking entails viewing situations in terms of challenges, opportunities, and constructive ways to handle difficult situations, obstacle thinking focuses on negative aspects of situations, insurmountable challenges, and reasons to give up, retreat from, or otherwise avoid situations. In the next section, we argue that when increased levels of self-leadership strategies are utilized within a team, team members are more likely to trust one another, believe that the team will be able to accomplish its goals, and ultimately be more committed to the team itself.

Self-leadership and trust, potency, and commitment

An important assumption of our model is that team members are strongly influenced by the interactions that they have with one another within the team environment, which can potentially impact team members' collective thoughts, behaviors, beliefs, and attitudes. According to Weick (1979), a singular human act invites a response by a party affected by the change (the interact), which then calls for a response by the first individual (the double interact). In cybernetics research, this process would be characterized as a simple feedback loop, in which an activity initiates a chain of activities that impact the original situation. Accordingly, we articulate how the expression of effective self-leadership on the part of team members can result in an important shift from individual-level independence concerning work attitudes to team-level homogeneity in members' levels of trust, potency and commitment.

Trust. Trust is defined as an individual's or group's belief that another individual or group will make efforts to uphold commitments, will be honest, and will not take advantage given the opportunity (Cummings and Bromiley, 1996). Trust has been cited as the variable with the strongest potential influence on interpersonal and group behavior (e.g. Golembiewski and McConkie, 1975). As a result, understanding the determinants of trust in teams can be an important key to fostering team effectiveness.

While the concept of trust has received a great deal of attention in the literature, trust is often treated as a blanket term for all aspects of interpersonal affiliation and risk-taking. However, it is important to distinguish between two relatively different types of trust that may develop between organizational actors: affective-based trust

and cognitive-based trust (McAllister, 1995). Affective-based trust is based on high levels of citizenship behaviors and frequent social interactions, and leads to the open exchange of information and increased tendency to reveal sensitive personal information, knowledge, and ideas. In contrast, cognitive-based trust develops when an organizational member perceives that another actor has demonstrated reliable role performance in the past and possesses satisfactory professional credentials (McAllister, 1995). Therefore, mutual cognitive-based trust may develop as team members succeed in performing complex roles, bringing excellent educational qualifications to the team, applying relevant special training, or revealing prior experiences that they can bring to bear on team tasks. According to Chowdhury (2005, p. 313), high levels of cognitive-based trust allow the evaluating team member to more readily “engage in collaborative work and seek knowledge from those he or she trusts”.

The two types of trust may have varying effects on team-level functioning. With affective-based trust, individuals develop strong links of personal values and emotional ties toward each other. This improves their understanding of each other as individual team members and creates a climate of emotional openness where individuals are less concerned about their own vulnerabilities or fears that other members may exploit them for individual outcomes. The resulting social intimacy also helps them develop shared values, perceptions and mental models. With cognitive-based trust, on the other hand, team members are more likely to experience improved professional relationships and enhanced collaborations concerning team tasks and activities (Chowdhury, 2005).

Mayer *et al.* (1995) posit that an individual's beliefs about a partner's trustworthiness are based on the outcomes of their past risk-taking with that partner. As others have argued, it is not individual human actions but individuals' responses to each other's actions, which comprise the foundation of social systems, organizations and teams (e.g. Masuch, 1985). We suggest that the extent to which fellow team members engage in self-leadership strategies is likely to positively affect team interactions, resulting in the development of higher team levels of cognitive-based trust over time. More specifically, team members' behavior-focused self-leadership strategies can act as tangible signals to other team members that they are making efforts to uphold commitments, are honest, and do not take advantage of other team members: the very foundations of trust (Cummings and Bromiley, 1996).

For example, through self-observation, a team member can potentially identify team behaviors that should be modified, intensified, or eliminated for the team's benefit. Or he or she might engage in self-goal setting, in which the team member decides that he or she will, for example, contribute at least one new idea per team meeting. Alternately, a team member may rehearse or practise team-related skills before he or she is actually required to perform them (for example rehearsing an important presentation of the team's work prior to delivering the formal presentation). Each of these self-leadership behavioral strategies potentially communicates important information to other team members about the relevance and qualifications of the team member and his or her performance, and will likely lead to increasing levels of trust in the individual who displays effective self-leadership. In turn, as additional team members display effective self-leadership and garner trust the phenomenon seems likely to ultimately morph into trust in the team as a whole. Thus, when perceived within a team setting, behavior-focused self-leadership strategies can minimize the inherent risk of

interacting with other team members. If a self-leading team members' behavior is maladaptive, he or she can engage in self-observation, self-correcting feedback, and practice in order to change the behavior; if the team faces new obstacles, the self-leaders will focus on ways to overcome them, rather than engaging in dysfunctional behaviors that may jeopardize the team's success or simply leave other team members "in the lurch".

As team members engage in behavioral self-leadership strategies they are likely to send positive signals to other members that they are trustworthy contributors to the team's functioning. According to Chowdhury (2005), although both affective- and cognitive-based team trust significantly influence team knowledge sharing, cognitive-based trust demonstrates a stronger influence on complex knowledge sharing than that of affective-based trust. Thus, in cross-functional teams in which knowledge sharing is critical, cognitive-based trust may be an important determinant of team effectiveness.

In addition, research on the initial trust paradox (McKnight *et al.*, 1998) finds that trust is surprisingly high in initial stages of a relationship. These findings suggest that when team members engage in self-leadership, they will be able to capitalize on initially high "default" levels of trust in order to build even higher levels of cooperation and mutual understanding within the team through demonstrating their professional capabilities and relevant past experiences. Based on both initial baseline levels of trust and positive interactive team processes that are likely to result when members engage in self-leadership, we suggest:

- P1.* Higher levels of self-leadership will be significantly and positively related to higher levels of team cognitive-based team trust.

Potency. In addition to facilitating higher levels of team trust, self-leadership may also directly result in higher levels of self-efficacy, which seems likely to ultimately translate, in the aggregate, into higher levels of team potency. Potency is the collective belief within a team that it can be effective (Guzzo *et al.*, 1993). Potency and collective efficacy are highly related, as both deal with the concept of confidence at the team level (Shamir, 1990). Pearce *et al.* (2002) present evidence that potency and effectiveness are reciprocally and longitudinally related; however, they point out that more research is needed to clarify the relationship between potency and team effectiveness across organizations.

We argue that one of the critical components in the development of a sense of team potency may be self-leadership, and individual self-efficacy is likely to be an important first step on the avenue through which self-leadership results in greater team potency. First and foremost, the array of behavioral, cognitive, and natural reward strategies that comprise self-leadership are likely to result in greater feelings of individual self-efficacy. Self-efficacy is defined as a personal belief concerning "one's capabilities to organize and execute courses of action required to produce given attainments" (Bandura, 1997, p. 3). Contrary to more global perceptions of the self (i.e. self-esteem and self-concept), self-efficacy is task specific: individuals may have high self-efficacy for some tasks and low self-efficacy for others. As a result, "self-efficacy is defined and measured in the context of relatively specific behaviors in specific situations or contexts" (Maddux, 1995, p. 8).

According to self-leadership theory, “a primary objective of all three categories of self-leadership strategies is the enhancement of self-efficacy perceptions, which should in turn lead to higher levels of performance” (Houghton *et al.*, 2003, p. 126; see also, Manz, 1986; Manz and Neck, 1999; Neck and Manz, 1992, 1996; Prussia *et al.*, 1998). In addition, there is a great deal of empirical evidence to suggest that self-leadership strategies are instrumental in increasing self-efficacy perceptions (Latham and Frayne, 1989; Neck and Manz, 1996, Prussia *et al.*, 1998). According to Houghton *et al.* (2003, p. 131), “substantial empirical evidence supports the effectiveness of self-leadership strategies in increasing self-efficacy perceptions”. Self-leaders utilizing constructive thought pattern strategies are more likely to focus on the positive attributes of the team’s task, focusing on the inherent opportunities that the team faces and how positive performance might benefit the team as a whole. Similarly, behavioral self-leadership such as self-goal setting and self-reward can help team members attain “small wins” that lead to an increased sense of self-efficacy. And finding ways to focus on the positive aspects of the team’s task can lead to increased motivation to achieve and an increased sense that he or she can be successful within the team environment.

According to Bandura (1997), self-efficacy is a major determinant of people’s choice of activities, how much effort they will expend in those activities, and how long they will sustain effort in dealing with stressful situations, obstacles, or setbacks. Hill *et al.* (1987) point out that those with high self-efficacy for a given task are more likely to choose to engage in the task, will expend a greater amount of effort in accomplishing the task, and will sustain that effort for a longer period of time. In addition, people with high self-efficacy for a task perceive less stress when attempting to accomplish the task (Murphy *et al.*, 1996), set higher personal goals (Bandura and Cervone, 1983), and are more apt to visualize success at the task (Wood and Bandura, 1989) than those with lower self-efficacy.

Given previous theoretical and empirical evidence that self-leadership skills are associated with higher levels of self-efficacy, we suggest that self-leadership skills may result in higher individual perceptions of team potency as well. In fact, potency has been defined as a construct between self-efficacy and collective motivation (Gil *et al.*, 2005). In addition, previous research suggests that shared perceptions of team potency develop over time, and substantial team interaction is required before team members develop homogeneous perceptions about the team (Jung and Sosik, 2003). As team members with high self-leadership skills interact with one another longitudinally, they communicate their individual beliefs that they are interested in the task, willing to expend large amounts of effort to accomplish that task, and will persevere in the face of setbacks and obstacles. In addition, team members with behavioral, cognitive, and natural reward strategies will likely address any dysfunctional thought processes or lack of confidence in the team’s ability to perform the task. Over time, these behavioral, cognitive, and natural reward strategies are likely to lead to increasingly homogeneous beliefs about the teams potency, resulting in a levels shift from individual perceptions of the self-efficacy and team potency to commonly shared understanding of the team’s potency as a whole:

- P2. Higher levels of self-leadership will be significantly and positively related to team potency.

Commitment. The past few decades have seen a remarkable proliferation of research interest in organizational commitment (Meyer *et al.*, 1993). The construct has been included in empirical work spanning a large number of disciplines and research areas, and several reviews of commitment theory and research have been conducted (e.g. Morrow, 1983; Mathieu and Zajac, 1990; Griffin and Bateman, 1986; Reichers, 1985; Mowday *et al.*, 1982; Meyer and Allen, 1991). These reviews emphasize the multitude of definitions and operationalizations of organizational commitment, and suggest that commitment is a complex concept that takes many forms and has many foci (e.g. Becker, 1992; Gordon and Ladd, 1990; Reichers, 1986; Steffy and Jones, 1988).

Cohen (2003) argues that work commitment is a multidimensional concept consisting of elements of commitment to specific objects such as one's organization, work group, occupation, union and job. As a result, team commitment can be conceptualized as separate and unique from organizational or occupational commitment. According to Cohen (2003), a multidimensional approach to commitment reflects the reality that people in the workplace are exposed to more than one commitment at a time. Therefore, their behavior may be affected, sometimes simultaneously, by several commitments. Further, "employees may be affected differently by different foci of commitment, resulting in the need to conceptually and empirically distinguish different commitment constructs" (Cohen, 2003, p. 15).

Mowday *et al.* (1979) argue that organizational commitment is characterized by at least three related factors:

- (1) a strong belief in, and acceptance of, the organization's goals and values;
- (2) a willingness to exert considerable effort on behalf of the organization; and
- (3) a strong desire to maintain membership in the organization.

As such, commitment is conceptualized as "stable over time", and as an active relationship with an organization rather than passive loyalty. Thus, commitment is seen as a deep attachment to an organization that is not affected by day-to-day events. Other researchers have offered slightly different definitions of organizational commitment. For example, O'Reilly and Chatman's (1986, p. 493) approach to commitment focuses exclusively on the psychological components of commitment, which they label compliance, identification, and internalization. Similarly, Meyer and Allen (1991) suggest that studies of commitment could be organized around three broad themes:

- (1) commitment as an affective attachment to the organization (affective commitment);
- (2) commitment as a perceived cost associated with leaving the organization (continuance commitment); and
- (3) commitment as an obligation to remain in the organization (normative commitment).

Bishop *et al.* (2000) argue that team commitment can be defined in a similar fashion to organizational commitment. Specifically, like organizations, teams develop goals and values that members may accept; team members may choose to exert varying degrees of effort on the team's behalf; and individual members may have varying levels of desire to maintain their team membership. Furthermore, employees may experience a

high level of commitment to one of these foci (i.e. the organization or team) and not the other, both, or neither (Becker *et al.*, 1996; Bishop and Scott, 2000). Previous research suggests many positive team outcomes are related to the level of an individual's commitment to both the organization and to his or her work team (Becker, 1992; Bishop and Scott, 2000; Bishop *et al.*, 2000), suggesting that understanding the antecedents of team commitment is an important area of research.

Self-leadership may lead to higher levels of team commitment through a number of avenues. First and foremost, members who engage in thought self-leadership are more likely to believe strongly in the team's goals and values, and communicate those beliefs to other team members. Thought self-leadership has been argued to include three primary strategies: self-analysis and improvement of belief systems, mental imagery of successful performance outcomes, and positive self-talk (Houghton *et al.*, 2003; Manz and Neck, 1999). To the extent that team members engage in this kind of influence over their team-focused cognitions, their beliefs are likely to become more firmly embedded in the team's goals and values. Similarly, self-leadership theory suggests that individuals who engage in thought self-leadership tend to become opportunity thinkers, and tend to exert greater effort and persistence in dealing with challenges and difficulties. The result is a willingness to exert considerable effort on behalf of the team, one of the three basic tenets of commitment (Mowday *et al.*, 1979). Such team members are more likely to focus on positive aspects of the team's task, mentally shift attention to the aspects of the task that they find most enjoyable, and as a result be more committed to its goals and the efforts necessary to achieve those goals. Finally, team members who engage in self-leadership strategies are likely to evidence a strong desire to maintain membership in the team. Through the creation of positive self-talk, natural rewards, and imagery of successful performance outcomes, individuals with self-leadership strategies are more likely to persevere in the face of setbacks, be motivated to achieve the team's goals, and have a strong attachment to the team as a result. Thus, to the extent these self-leadership strategies are behaviorally and verbally communicated to other team members over time, we would expect a levels shift from commitment of an individual to the team to more widespread commitment by multiple individuals to the team and ultimately to unified and shared team commitment:

- P3.* Higher levels of self-leadership will be significantly and positively related to higher levels of team commitment.

Shared leadership as the nexus of the knowledge creation process

Shared leadership involves dynamic, interactive influence processes among and between individuals in teams (Pearce and Conger, 2003, p. 1). Shared leadership thus offers a concept of leadership practice as a team-level phenomenon where behaviors are enacted by multiple individuals rather than solely by those at the top or by those in formal leadership roles. In addition, shared leadership focuses on leadership as a social process, or "a dynamic, multidirectional, collective activity, that like all human action and cognitive sense-making, is embedded in the context in which it occurs" (Fletcher and Käufer, 2003, p. 23). According to Fletcher and Käufer, this definition of shared leadership encourages a more explicit focus on the egalitarian, collaborative, mutually enacted, and less hierarchical nature of leader-follower interactions.

While self-leadership focuses on the development of independence, self-sufficiency, and the ability to create and set one's own goals and monitor progress toward those

goals, shared leadership focuses on the ability to connect with others in achieving team or group objectives. In addition, while self-leadership focuses on how employees can operate with as little influence from supervisors as possible, shared leadership focuses on how interpersonal influence operates between members of a team. Rather than conceptualizing leadership as the unidirectional application of influence from formal leaders to followers, shared leadership represents a conceptualization of leadership characterized by the serial emergence of temporary leaders, depending on the task(s) facing the team and the knowledge, skills and abilities of the team members. In shared leadership, influence is therefore fluid and often reciprocal, and team members take on the leadership tasks for which they are best suited or are most motivated to accomplish.

Conditions facilitating shared leadership: the role of trust, potency, and commitment

The theoretical reasons for why influence should be shared and reciprocated in a sustained manner among team members have only recently begun to receive attention (Seers *et al.*, 2003). Previous researchers have suggested a number of conditions and proposed antecedents that may facilitate shared leadership in teams, including group, task, and environmental characteristics that attempt to address issues of when shared leadership is *likely* and when it is required (Seers *et al.*, 2003). Specifically, Pearce and Sims (2000) argue that specific team characteristics, (i.e. team member ability, the size of the team, member maturity, and familiarity), task characteristics (i.e. urgency, complexity, need for creativity and interdependence), and environmental characteristics (i.e. organizational support systems and rewards) are more conducive to the rise of shared leadership. In addition, Pearce (2004) has developed practical advice for facilitating the development of shared leadership, including specific training on how to engage in responsible and constructive leadership, how to give and receive influence, as well as basic teamwork skills such as goal setting, status reporting, and citizenship behaviors.

We argue that the development of the self-leadership capabilities of team members sets into motion the meso-level processes that result in higher collective-levels of trust, potency, and commitment, which in turn facilitate the sustained sharing of mutual influence within the team that comprises shared leadership. In other words, we expect self-leadership to initially influence individual team members' trust, self-efficacy and commitment, which over time evolve into similar, collectively held beliefs regarding team trust, team potency, and team commitment. These assertions are further bolstered by previous research that suggests the increase in duties, responsibility, autonomy and authority associated with self-leadership is linked to other positive team outcomes such as intrinsic motivation (Deci *et al.*, 1989), job satisfaction (Lawler, 1982) and increased effort (Manz, 1992).

Rousseau and House (1994) remind us that it is through the avenues of "bottom up" effects that organizational members play a role in shaping their teams and their organizations, and that individual predilections can become work group, departmental, team, or organizational norms. For example, organizational members who share a belief that teamwork is desirable can form the basis of a team-oriented culture through processes of social construction, ongoing interaction patterns, and shared values. Rousseau and House (1994, p. 24) also point out that "the more unstructured, ambiguous, or novel the situation, the more influence lower level processes will have".

Following this reasoning, we argue that particularly in team-based knowledge work, in which teams are faced with novel situations, unfamiliar territory, and increasingly complex problems, it is all the more likely that we will observe such meso-level effects. In other words, over time, individual levels of trust, potency, and commitment are likely to transcend their individual-level roots and, through bottom-up meso-level processes, transform and become manifest at the team level of analysis.

While increased levels of team trust, potency and commitment may ultimately result from higher levels of self-leadership exhibited by team members, when considering outcomes such as knowledge creation, the development of shared leadership may represent a critical next step. Self-leadership allows team members the autonomy and authority to set goals, develop strategies, and self-manage, but may continue to entail relatively fixed roles for team members. With the development of shared leadership, team members become comfortable enough to truly give and receive mutual influence when confronted with varying tasks, allowing them to move fluidly among different types of leader behavior, including directive, transactional, transformational and empowering behavior.

Trust. Because influence involves power, the ability to share influence necessitates some level of basic trust in other team members' motives and abilities. An individual who does not feel that other team members uphold commitments, are honest, or that she might be taken advantage of if she allows peer influence, is unlikely to accept others' influence; to do so would involve an unacceptable level of risk. Although previous research has suggested a number of interpersonal variables that may facilitate shared leadership, the role of trust has yet to be adequately explored. For example, the work of Feldman (1973) suggests that group members may facilitate shared leadership to the extent that they perceive each other as likeable. Pearce and Sims (2000) suggest that team members who have reached a certain level of familiarity are more likely to engage in shared leadership. Still other researchers have focused on group cohesion, or the forces that attract members to a group (Cartwright, 1968).

Building on these previous assertions, we argue that higher levels of cognitive-based trust, influenced in part by team members' self-leadership strategies, will be more predictive of shared leadership than familiarity, likeability, or length of interaction among team members. Trust develops through frequent and meaningful ongoing interactions, where team members become comfortable and open in sharing their individual experiences and contributions, where ideas and assumptions can be challenged without fear or risk of repercussion, and where diversity of opinion is valued over cohesion (Holton, 2001). According to Quinn *et al.* (1996), encouraging shared interests, commonly held values, and collectively satisfying solutions are essential to leveraging the potential of knowledge workers. Shared leadership involves the ability to engage in constructive lateral influence, to give and receive feedback, and be at times both an effective leader and an effective follower. These behaviors will likely be facilitated to the extent that the team has reached a level of mutual cognitive-based trust that allows team members to engage in these behaviors within an environment of mutual respect and understanding for one another's professional capabilities (Holton, 2001). Establishing trust has been argued to be a fundamental aspect of the successful formation and growth of any new team (Senge *et al.*, 1994), and we suggest cognitive-based trust is a critical condition for the kind of mutual influence that characterizes shared leadership:

- P4. Higher levels of cognitive-based team trust will be significantly and positively related to higher levels of shared leadership.

Potency. In addition to trust, team potency also seems likely to result in higher levels of shared leadership. Houghton *et al.* (2003, p. 131) argue that through the use of self-leadership strategies, “team members can effectively increase their self-efficacy beliefs for undertaking various leadership roles and responsibilities within the team”. Thus, increasing perceptions of the team’s potency are likely to imbue team members with the confidence that they have the necessary skills to engage in shared leadership. This is consistent with Pearce and Sims’ (2000) assertion that shared leadership is more likely when group members are highly skilled in their assigned tasks; however, we assert that team members must also have the collective confidence that these skills are present and likely to be effective in order to facilitate shared leadership in any sustained way.

Gil *et al.* (2005) argue that where the demand for change brings uncertainty and risk, it is likely that the more self-confident teams will more readily accept this uncertainty with a positive impact on group processes (i.e. climate, and especially the climate of innovation). In addition, if team members are low in a collective sense of team potency for sharing leadership responsibilities, they are likely to be unwilling and perhaps even unable to undertake leadership activities within the team. In other words, shared leadership is more likely to be facilitated to the extent that team members have *both* the skills and the desire to engage in mutual influence (Perry *et al.*, 1999).

According to Houghton *et al.* (2003, p. 126), “the reluctance or inability of team members to embrace the shared leadership concept can be a major hindrance to its effective implementation”. Burke *et al.* (2003) similarly argue that within the context of shared leadership, collective efficacy or potency is highly relevant because it reflects an attitude of confidence concerning the abilities of fellow teammates. They go on to point out that “when more than one individual will occupy the leadership role, as with shared leadership, it is necessary that fellow team members have confidence in the ability of each member assuming the leadership role at any given time” (Burke *et al.*, 2003, p. 115). Without this base level of confidence in one another’s abilities, team members are unlikely to accept the influence attempts of their peers. Thus, the development of team potency, in part fostered by the self-leadership skills and strategies of individual team members, is likely to be an important predictor of the levels of subsequent shared leadership within the team.

- P5. Higher levels of team potency will be significantly and positively related to higher levels of shared leadership.

Commitment. Finally, we suggest that commitment to the team is likely to be an important facilitator of shared leadership as well. To the extent that team members truly buy into the values, beliefs, and goals of the team, they may also be more open to alternate, non-traditional, and perhaps even at times slightly uncomfortable forms of achieving those goals. As Seibert *et al.* (2003) point out, neither group members nor formal leaders can always be assumed to share organizational goals and objectives, and the same tenet applies at the team level. Thus, high levels of commitment to the team’s values and goals may be even more critical for teams engaging in shared leadership. In other words, in order to create an environment in which team members are comfortable giving and receiving influence, all members must be strongly

committed to the team for the team's sake. If high levels of commitment are not present, team members are likely to be highly reluctant and even uncomfortable without a more formal source of power that "keeps members on track" in the absence of a psychological attachment to the team itself. Seibert *et al.* (2003, p. 177) similarly argue that in the context of shared leadership, the "relationship between the behavioral influence strategies used in the group and aspects of group effectiveness may be mediated by member's task commitment". Building on this previous work, we propose:

- P6. Higher levels of team commitment will be significantly and positively related to higher levels of shared leadership.

Shared leadership and knowledge creation

We have argued that the strategies inherent in self-leadership are likely to foster higher levels of trust, potency, and commitment in team members. In turn, we have suggested that these intermediary meso-processes are instrumental in facilitating a team context in which members are comfortable with shared influence processes. However, we do not assume that shared leadership is ideal for every team environment. In contrast, our model suggests that there may be characteristics unique to knowledge work that impact the degree to which shared leadership proves to be more effective than traditional vertical leadership. Specifically, we argue that the development of shared leadership may be particularly critical when dealing with complex tasks in which the active engagement of multiple team members may be critical in solving a problem, or when innovation and knowledge creation is critical to team success.

Knowledge work, or work that requires the intellectual capital of skilled professionals, is increasingly becoming dependent on teams in which the knowledge of several individuals must be integrated to create true innovation (Cox *et al.*, 2003). It is more and more difficult for any individual leader to have all of the knowledge, skills, and abilities necessary to lead all aspects of knowledge work, and as a result, knowledge creation is highly dependent on the ability to coordinate and integrate the ideas and abilities of individuals with different backgrounds, experiences, and approaches.

Shared leadership has been shown to be an important predictor of team effectiveness (e.g. Pearce and Ensley, 2003; Pearce and Sims, 2002; Pearce *et al.*, 2004). However, according to Pearce and Manz (2005), shared leadership is most essential for organizations that require continuous innovation in order to offer the best products and services to their customers, as well as to remain competitive in quickly changing environments. Traditional, more hierarchical forms of leadership, which center on the individual in the formal leadership role as being the primary source of knowledge, skills, and answers to emerging problems, do not encourage optimal knowledge creation. When team members are encouraged to lead themselves and share influence with their peers in defining problems, making decisions, solving problems and identifying opportunities and challenges both now and in the future, creativity and innovation is more likely to result.

- P7. Higher levels of shared leadership will be significantly and positively related to higher levels of knowledge creation.

However, there are several factors that may affect the relationship between levels of shared leadership and knowledge creation. Specifically, we argue that the more

interdependent the tasks of team members are, the greater the relationship may be between shared leadership and knowledge creation. Task interdependence is defined as the degree to which goal accomplishment requires completing related or dependent subtasks (Cox *et al.*, 2003; Steiner, 1972). Previous research has demonstrated that teams outperform individuals on tasks involving greater integration and interconnectedness (Latané *et al.*, 1979), and multiple and fluid leadership influence tactics are likely to be critical in interdependent tasks involving the display of leadership by multiple team members in order to take full advantage of team members' competencies (see Pearce, 2004).

Liden *et al.* (1997) found that the relation between empowerment at the group level and influence in decision-making and group performance were moderated by task interdependence; for low task-interdependent groups, performance at the team level suffered as the team was empowered. These findings prompted Seibert *et al.* (2003) to suggest that the degree of task interdependence should be examined for its moderating role between shared leadership and team effectiveness. Based on this previous work, we suggest that task interdependence may also play an important moderating role in the relationship between shared leadership and knowledge creation. Specifically, the higher the interdependence involved, the more important shared leadership becomes, such that interdependent teams of workers who share the leadership process tend to outperform individual workers when tasks are interconnected and integrated:

- P8. Increased task interdependence will strengthen the relationship between shared leadership and knowledge creation.

In addition, there is ample evidence to suggest that the greater the complexity of the task, the greater the importance of shared leadership. As tasks increase in complexity, there is less likelihood that the competencies, knowledge, skills, and abilities to lead the team in completing the task successfully will reside in a single individual. Therefore, as the task increases in complexity, the leadership challenges increase as well, necessitating leadership skills in a growing variety of realms (i.e. technical, cognitive, social, boundary spanning, etc.) (Cox *et al.*, 2003; Kerr and Jermier, 1978). Thus, we posit that increased task complexity will moderate the relationship between shared leadership and knowledge creation, such that shared leadership will prove increasingly critical as teams confront more complex tasks.

In organizations involved with advanced technology, often requiring teams of knowledge workers that integrate their intellectual capital to accomplish the required work, shared leadership may be particularly critical. In such contexts, the idea that a single leader can know everything that is necessary to lead all aspects of the work process is often unrealistic, and individual employees frequently need to step forward as their expertise and the demands of the task require. Both Cox *et al.* (2003) and Kruglianskas and Thamhain (2000) have argued that a departure from the conventional leadership hierarchy is necessary as tasks increase in complexity, technology, and require specialized skills. Similarly, Seers *et al.* (2003, p. 93) suggest that "a complex task, or multiple tasks, may require multiple exchange relationships among members". In addition, we have argued that the willingness and confidence to take on part of the leadership role requires high levels of team trust, potency, and commitment from the knowledge workers involved. It is one thing to possess the knowledge and expertise to help guide a particular aspect of the work process, but

quite another to have the motivation, initiative and skills needed to provide leadership. Thus, the more complex the work involved, the more likely it is that shared leadership will be needed for optimal knowledge creation:

- P9. Increased task complexity will strengthen the relationship between shared leadership and knowledge creation.

Implications and directions for future research

According to Houghton *et al.* (2003, p. 135), “the sharing of leadership roles among team members can be a key factor in maximizing the effectiveness of team based structures”. However, the realities of facilitating shared leadership in employees who have been trained and seasoned in traditional hierarchical structures with individual accountability and incentives may be difficult to realize. For this reason, research into the antecedents of shared leadership may be critical in realizing effective team-based structures, particularly as environments continue to favor more flexible, responsive organizations. As Hooker and Csikszentmihalyi (2003, p. 218) state:

The implications for the future seem clear. As more work becomes knowledge work, work within organizations will likely become more flexible and varied. This in turn will require teamwork of a new kind, one that is conducive to the expression of creativity and innovation. Decentralized forms of leadership will become more necessary and so will shared forms of leadership.

As a result, exploring individual, group, and organizational factors that are conducive to shared leadership is critical for future research. We have offered a theoretical model that examines how an individual factor, self-leadership, may help foster intermediary processes conducive to shared leadership; additional theoretical work is necessary to explore factors at the team, organizational, industry and national levels that may be more or less supportive of the development of shared leadership.

Another promising area for researchers lies at the intersection of leadership and team dynamics. Although beyond the scope of this paper, our model is consistent with a shift toward conceptualizing leadership less as the behaviors and characteristics of individuals and more as a social process that is embedded in a context of team dynamics and social interaction (e.g. Bligh and Meindl, 2004; Bligh *et al.*, 2004; Pearce and Conger, 2003; Shamir and Howell, 1999). From this perspective, leadership is viewed as a process that occurs both within and through social relationships and networks of influence (see also Fletcher and Käufer, 2003). Conceptualizing leadership in this way leads to numerous unanswered questions regarding how team dynamics influence, and are influenced by various forms of leadership (including lateral, upward, and downward influence attempts). For example, greater dialogue between the team dynamics literature and the leadership literature may lead to new insights into how shared leadership is influenced by a variety of team characteristics, including team ability, size, member maturity, familiarity, likeability, cohesion, conflict, differentiation, and stage of team development, all of which are potential areas for future research.

An important consideration of our model is that it explicitly involves meso-level research that necessitates both individual-level and team-level data collection. Following Markham and Markham’s (1995, p. 357) advice, “the conduct of research from a levels-of-analysis perspective requires a conformance between the level of

referent in any survey question, the level of measurement from which the data are collected, the level (or levels) at which the statistical analyses are conducted, and the level of analysis for theory building”. Thus, future research must explore the extent to which the variables of interest are level-specific (i.e. do not transcend a single level of analysis), isomorphic, or cross-level effects. As Rousseau and House (1994) point out, one cannot just assume isomorphism – the idea that processes or relationships that hold true at one level of analysis will necessarily hold true at another level of analysis. As a result, empirical research is necessary to examine:

- how individual employees mature into self-leaders;
- whether or not a meso-level empirical relationship exists between self-leadership on the part of team members and team-level trust, potency, and commitment; and
- whether there is indeed a subsequent effect of these team-level variables on shared leadership.

We have proposed that the development of an individual level construct, self-leadership, will, through meso-level effects, result in higher levels of team trust, potency, and commitment, which in turn will facilitate a team environment in which potentially novel and even risky forms of shared leadership may emerge. We do not, however, suggest that self-leadership will always have positive qualities for team building. Given that self-leadership is so individualistic in orientation, the development of extremely high self-leadership skills could potentially inhibit an employee’s ability to effectively interact with others. Stated differently, there is nothing inherently team focused about self-leadership, and to the extent that an individual engages in behavior-focused strategies, natural reward strategies, and constructive thought strategies solely for personal gain or individual reasons, team-building processes would likely be negatively affected. Thus, an important limitation of our model is that it assumes team and organizational incentives are in place to encourage team building and the facilitation of team over individual achievements. In addition, the use of peer-based performance assessments and team-level rewards may be necessary conditions for the relationship between self-leadership and shared leadership.

Over 45 years ago, Peter Drucker noted the rise of the knowledge worker, suggesting that knowledge is the new currency of work and “putting knowledge to work” is one of the primary challenges facing modern organizations (Drucker, 1959, 1995). Throughout this paper, we have argued that knowledge management is critical to team innovation and effectiveness, and have suggested that shared leadership may be critical to the development of knowledge creation in teams. Although both self-leadership and shared leadership explicitly address the need for novel approaches to leadership that address the new challenges that organizations face as they flatten, diversify, and confront increasingly complex problems that necessitate bringing together knowledge workers with diverse backgrounds and experiences, there has been little theoretical or empirical attention devoted to the relationship between these two theories. Our conceptual model attempts to address this void, suggesting some initial meso-level theoretical relationships and areas for future empirical research.

Although research into team productivity and effectiveness has made great strides, many basic questions still remain unanswered. Specifically, do teams with greater levels of self-leadership on the part of the individual members develop increased trust in the members of the team, potency that the team can accomplish its tasks, and

commitment to the team? Second, are these positive outcomes (i.e. higher levels of team trust, potency and commitment) associated with increased shared leadership? And further, does an associated increase in shared leadership, particularly in teams facing high levels of interdependence and task complexity, result in greater knowledge creation? These and other important research questions that stem from consideration of these two theories in concert may prove critical in understanding the complex interrelationships among self-leadership, shared leadership, and the creation of new knowledge in today's complex and dynamic organizations.

References

- Ashley, S. (1992), "US quality improves but Japan still leads (study by Ernst & Young and American Quality Foundation)", *Mechanical Engineering*, Vol. 24, pp. 114-26.
- Bandura, A. (1997), *Self-Efficacy: The Exercise of Control*, W.H. Freeman, New York, NY.
- Bandura, A. and Cervone, D. (1983), "Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems", *Journal of Personality and Social Psychology*, Vol. 45, pp. 1017-28.
- Becker, T.E. (1992), "Foci and bases of commitment: are they distinctions worth making?", *Academy of Management Journal*, Vol. 35 No. 1, pp. 232-44.
- Becker, T.E., Billings, R.S., Eveleth, D.M. and Gilbert, N.L. (1996), "Foci and bases of employee commitment: implications for job performance", *Academy of Management Journal*, Vol. 39 No. 2, pp. 464-82.
- Bishop, J.W. and Scott, K.D. (2000), "Organizational and team commitment in a team environment", *Journal of Applied Psychology*, Vol. 85, pp. 439-50.
- Bishop, J.W., Scott, K.D. and Burroughs, S.M. (2000), "Support, commitment, and employee outcomes in a team environment", *Journal of Management*, Vol. 26 No. 6, pp. 1113-32.
- Blanchard, K. (1995), "Points of power can help self-leadership", *Manage*, Vol. 46 No. 3, p. 12.
- Bligh, M.C. and Meindl, J.R. (2004), "The cultural ecology of leadership: an analysis of popular leadership books", in Messick, D.M. and Kramer, R.M. (Eds), *The Psychology of Leadership: New Perspectives and Research*, LEA Press, Athens, pp. 11-52.
- Bligh, M.C., Kohles, J.C. and Meindl, J.R. (2004), "Charisma under crisis: presidential leadership, rhetoric, and media responses before and after the September 11th terrorist attacks", *The Leadership Quarterly*, Vol. 15 No. 2, pp. 211-39.
- Burke, C.S., Fiore, S.M. and Salas, E. (2003), "The role of shared cognition in enabling shared leadership and team adaptability", in Pearce, C.L. and Conger, J.A. (Eds), *Shared Leadership: Reframing the Hows and Whys of Leadership*, Sage Publications, Thousand Oaks, CA, pp. 103-22.
- Cashman, K. (1995), "Mastery from the inside out", *Executive Excellence*, Vol. 12 No. 12, p. 17.
- Cartwright, D. (1968), "The nature of group cohesiveness", in Cartwright, D. and Zander, A. (Eds), *Group Dynamics*, 3rd ed., Harper & Row, New York, NY.
- Chowdhury, S. (2005), "The role of affect- and cognition-based trust in complex knowledge sharing", *Journal of Managerial Issues*, Vol. 17 No. 3, pp. 310-27.
- Cohen, A. (2003), *Multiple Commitments in the Workplace: An Integrative Approach*, Lawrence Erlbaum Associates, Mahwah, NJ.
- Cox, J.F., Pearce, C.L. and Perry, M.L. (2003), "Toward a model of shared leadership and distributed influence in the innovation process: how shared leadership can enhance new product development, team dynamics and effectiveness", in Pearce, C.L. and Conger, J.A.

- (Eds), *Shared Leadership: Reframing the Hows and Whys of Leadership*, Sage Publications, Thousand Oaks, CA, pp. 48-76.
- Cummings, L.L. and Bromiley, P. (1996), "The Organizational Trust Inventory (OTI): development and validation", in Kramer, R.M. and Tyler, T.R. (Eds), *Trust in Organizations: Frontiers of Theory and Research*, Sage Publications, Thousand Oaks, CA, pp. 302-30.
- Dansereau, F., Yammarino, F.J. and Kohles, J.C. (1999), "Multiple levels of analysis from a longitudinal perspective: some implications for theory building", *Academy of Management Review*, Vol. 24 No. 2, pp. 346-58.
- Deci, E.L., Connell, J.P. and Ryan, R.M. (1989), "Self-determination in a work organization", *Journal of Applied Psychology*, Vol. 74, pp. 580-90.
- Drucker, P.F. (1959), *The Landmarks of Tomorrow*, Harper, New York, NY.
- Drucker, P.F. (1995), *Management in a Time of Great Change*, Penguin Putnam, New York, NY.
- Feldman, R.A. (1973), "Power distribution, integration, and conformity in small groups", *American Journal of Sociology*, Vol. 79, pp. 639-65.
- Fletcher, J.K. and Käufer, K. (2003), "Shared leadership: paradox and possibility", in Pearce, C.L. and Conger, J.A. (Eds), *Shared Leadership: Reframing the Hows and Whys of Leadership*, Sage Publications, Thousand Oaks, CA, pp. 21-47.
- Gil, F., Rico, R., Alcover, C.M. and Barrasa, A. (2005), "Change-oriented leadership, satisfaction and performance in work groups: effects of team climate and group potency", *Journal of Managerial Psychology*, Vol. 20 No. 3, pp. 312-28.
- Golembiewski, R.T. and McConkie, M. (1975), "The centrality of interpersonal trust in group processes", in Cooper, C.L. (Ed.), *Theories of Group Processes*, Wiley, New York, NY, pp. 131-85.
- Gordon, M.E. and Ladd, R.T. (1990), "Dual allegiance: renewal, reconsideration, and recantation", *Personnel Psychology*, Vol. 43, pp. 37-69.
- Griffin, R.W. and Bateman, T.S. (1986), "Job satisfaction and organizational commitment", in Cooper, C.L. and Robertson, I. (Eds), *International Review of Industrial and Organizational Psychology*, Wiley, New York, NY, pp. 157-88.
- Guzzo, R.A., Yost, P.R., Campbell, R.J. and Shea, G.P. (1993), "Potency in groups: articulating a construct", *British Journal of Social Psychology*, Vol. 32, pp. 87-106.
- Hill, T., Smith, N.D. and Mann, M.F. (1987), "Role of efficacy expectations in predicting the decision to use advanced technologies", *Journal of Applied Psychology*, Vol. 72, pp. 307-14.
- Holton, J.A. (2001), "Building trust and collaboration in a virtual team", *Team Performance Management*, Vol. 7 No. 3, pp. 36-48.
- Hooker, C. and Csikszentmihalyi, M. (2003), "Flow, creativity, and shared leadership: rethinking the motivation and structuring of knowledge work", in Pearce, C.L. and Conger, J.A. (Eds), *Shared Leadership: Reframing the Hows and Whys of Leadership*, Sage Publications, Thousand Oaks, CA, pp. 217-34.
- Houghton, J., Neck, C.P. and Manz, C.C. (2003), "Self-leadership and SuperLeadership: the heart and the art of creating shared leadership in teams", in Pearce, C.L. and Conger, J.A. (Eds), *Shared Leadership: Reframing the Hows and Whys of Leadership*, Sage Publications, Thousand Oaks, CA, pp. 123-40.
- House, R.J. and Rousseau, D. (1992), "If it ain't meso, it ain't OB", paper presented at the 3rd Annual Meso Conference, Northwestern University, Evanston, IL.

-
- Jung, D.I. and Sosik, J.J. (2003), "Group potency and collective efficacy: examining their predictive validity, level and analysis, and effects of performance feedback on future group performance", *Group & Organization Management*, Vol. 28 No. 3, pp. 366-91.
- Kerr, S. and Jermier, J.M. (1978), "Substitutes for leadership: their meaning and measurement", *Organizational Behavior and Human Performance*, Vol. 22, pp. 1-14.
- Klein, K.J. and Kozlowski, S.W.J. (2000), "From micro to meso: critical steps in conceptualizing and conducting multilevel research", *Organizational Research Methods*, Vol. 3 No. 3, pp. 211-36.
- Klein, K.J. and Dansereau, F. (1994), "Levels issues in theory development, data collection, and analysis", *Academy of Management Review*, Vol. 19 No. 2, pp. 195-229.
- Klein, K.J., Tosi, H. and Cannella, A.A. Jr (1999), "Multilevel theory building: benefits, barriers, and new developments", *Academy of Management Review*, Vol. 24 No. 2, pp. 248-54.
- Kruglianskas, I. and Thamhain, H.J. (2000), "Managing technology-based projects in multinational environments", *IEEE Transactions on Engineering Management*, Vol. 47, pp. 55-64.
- Latané, B., Williams, K. and Harkins, S. (1979), "Many hands make light the work: the causes and consequences of social loafing", *Journal of Personality and Social Psychology*, Vol. 37, pp. 823-32.
- Latham, G.P. and Frayne, C.A. (1989), "Self-management training for increasing job attendance: a follow-up and replication", *Journal of Applied Psychology*, Vol. 74, pp. 411-6.
- Lawler, E.E. (1982), "Increasing worker involvement to enhance organizational effectiveness", in P.S. Goodman and Associates (Ed.), *Change in Organizations*, Jossey-Bass, San Francisco, CA, pp. 280-315.
- Liden, R.C., Wayne, S.J. and Bradway, L.M. (1997), "Task interdependence as a moderator of the relation between group control and performance", *Human Relations*, Vol. 50, pp. 169-81.
- McAllister, D.J. (1995), "Affect and cognition based trust as foundations for interpersonal cooperation in organizations", *Academy of Management Journal*, Vol. 38 No. 1, pp. 24-59.
- McKnight, D.H., Cummings, L.L. and Chervany, N.L. (1998), "Initial trust formation in new organizational relationships", *Academy of Management Review*, Vol. 23, pp. 473-90.
- Maddux, J.E. (1995), "Self-efficacy theory: an introduction", in Maddux, J.E. (Ed.), *Self-Efficacy, Adaptation, and Adjustment: Theory, Research, and Application*, Plenum Press, New York, NY, pp. 3-33.
- Manz, C.C. (1986), "Self-leadership: toward an expanded theory of self-influence processes in organizations", *Academy of Management Review*, Vol. 11, pp. 585-600.
- Manz, C.C. (1992), "Self-leadership ... the heart of empowerment", *The Journal for Quality and Participation*, Vol. 15 No. 4, pp. 80-9.
- Manz, C.C. and Neck, C.P. (1999), *Mastering Self-Leadership: Empowering Yourself for Personal Excellence*, 2nd ed., Prentice-Hall, Upper Saddle River, NJ.
- Manz, C.C. and Sims, H.P. Jr (1980), "Self-management as a substitute for leadership: a social learning theory perspective", *Academy of Management Review*, Vol. 5 No. 3, pp. 361-7.
- Manz, C.C. and Sims, H.P. Jr (1987), "Leading workers to lead themselves: the external leadership of self-managing work teams", *Administrative Science Quarterly*, Vol. 32, pp. 106-28.
- Manz, C.C. and Sims, H.P. Jr (1989), *Superleadership: Leading Others to Lead Themselves*, Prentice-Hall, Englewood Cliffs, NJ.
- Manz, C.C. and Sims, H.P. Jr (1994), *Business Without Bosses: How Self-Managing Work Teams are Building High Performance Companies*, Wiley, New York, NY.

-
- Manz, C.C. and Sims, H.P. Jr (2001), *New Superleadership: Leading Others to Lead Themselves*, Berrett-Koehler, San Francisco, CA.
- Markham, S.E. and Markham, I.S. (2002), "Self-management and self-leadership reexamined: a levels-of-analysis perspective", *The Leadership Quarterly*, Vol. 6 No. 3, pp. 343-59.
- Masuch, M. (1985), "Vicious circles in organizations", *Administrative Science Quarterly*, Vol. 30, pp. 14-33.
- Mathieu, J.E. and Zajac, D.M. (1990), "A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment", *Psychological Bulletin*, Vol. 108 No. 2, pp. 171-94.
- Mayer, R.C., Davis, J.H. and Schoorman, F.D. (1995), "An integrative model of organizational trust", *Academy of Management Review*, Vol. 20, pp. 709-34.
- Meyer, J.P. and Allen, N.J. (1991), "A three-component conceptualization of organizational commitment", *Human Resource Management Review*, Vol. 1, pp. 61-98.
- Meyer, J.P., Allen, N.J. and Smith, C.A. (1993), "Commitment to organizations and occupations: extension and test of a three-component conceptualization", *Journal of Applied Psychology*, Vol. 78, pp. 538-51.
- Morrow, P.C. (1983), "Concept redundancy in organizational research: the case of work commitment", *Academy of Management Review*, Vol. 8 No. 3, pp. 486-500.
- Mowday, R.T., Porter, L.W. and Steers, R.M. (1982), *Employee-Organization Linkages: The Psychology of Commitment, Absenteeism, and Turnover*, Academic Press, San Diego, CA.
- Mowday, R.T., Steers, R.M. and Porter, L.W. (1979), "The measurement of organizational commitment", *Journal of Vocational Behavior*, Vol. 14, pp. 224-47.
- Murphy, S.E., Chemers, M.M., Macaulay, J.L. and Kohles, J.C. (1996), "The contribution of leadership self-efficacy to performance under stress: an extension of cognitive resource theory", paper presented at the American Psychological Society Meeting, San Francisco, CA.
- Neck, C.P. and Manz, C.C. (1992), "Thought self-leadership: the impact of self-talk and mental imagery on performance", *Journal of Organizational Behavior*, Vol. 12, pp. 681-99.
- Neck, C.P. and Manz, C.C. (1996), "Thought self-leadership: the impact of mental strategies training on employee behavior, cognition, and emotion", *Journal of Organizational Behavior*, Vol. 17, pp. 445-67.
- O'Reilly, C. and Chatman, J. (1986), "Organizational commitment and psychological attachment: the effects of compliance, identification, and internalization on prosocial behavior", *Journal of Applied Psychology*, Vol. 71 No. 3, pp. 492-9.
- Pearce, C.L. (2004), "The future of leadership: combining vertical and shared leadership to transform knowledge work", *Academy of Management Executive*, Vol. 18 No. 1, pp. 47-57.
- Pearce, C.L. and Conger, J.A. (2003), "All those years ago: the historical underpinnings of shared leadership", in Pearce, C.L. and Conger, J.A. (Eds), *Shared Leadership: Reframing the Hows and Whys of Leadership*, Sage Publications, Thousand Oaks, CA, pp. 1-18.
- Pearce, C.L. and Ensley, M.D. (2003), "A reciprocal and longitudinal investigation of the innovation process: the central role of shared vision in product and process innovation teams (PPITs)", *Journal of Organizational Behavior*, Vol. 24, pp. 1-20.
- Pearce, C.L. and Manz, C.C. (2005), "The new silver bullets of leadership: the importance of self and shared leadership in knowledge work", *Organizational Dynamics*, Vol. 34 No. 2, pp. 130-40.

-
- Pearce, C.L. and Sims, H.P. Jr (2000), "Shared leadership: toward a multi-level theory of leadership", *Advances in Interdisciplinary Studies of Work Teams*, JAI Press, Greenwich, CT, pp. 115-39.
- Pearce, C.L. and Sims, H.P. Jr (2002), "Vertical versus shared leadership as predictors of the effectiveness of change management teams: an examination of aversive, directive, transactional, transformational, and empowering leader behaviors", *Group Dynamics: Theory, Research, and Practice*, Vol. 6, pp. 172-97.
- Pearce, C.L., Gallagher, C.A. and Ensley, M.D. (2002), "Confidence at the group level of analysis: a longitudinal investigation of the relationship between potency and team effectiveness", *Journal of Occupational and Organizational Psychology*, Vol. 75, pp. 115-9.
- Pearce, C.L., Yoo, Y. and Alavi, M. (2004), "Leadership, social work, and virtual teams: the relative influence of vertical versus shared leadership in the nonprofit sector", in Riggio, R. and Orr, S.S. (Eds), *Improving Leadership in Nonprofit Organizations*, Jossey-Bass, San Francisco, CA, pp. 180-203.
- Perry, M.L., Pearce, C.L. and Sims, H.P. Jr (1999), "Empowered selling teams: how shared leadership can contribute to selling team outcomes", *Journal of Personal Selling & Sales Management*, Vol. 14, pp. 13-51.
- Prussia, G.E., Anderson, J.S. and Manz, C.C. (1998), "Self-leadership and performance outcomes: the mediating influence of self-efficacy", *Journal of Organizational Behavior*, Vol. 19, pp. 523-38.
- Quinn, J., Anderson, P. and Finkelstein, S. (1996), "Managing professional intellect: making the most of the best", *Harvard Business Review*, Vol. 13, March/April, pp. 71-80.
- Reichers, A.E. (1985), "A review and reconceptualization of organizational commitment", *Academy of Management Review*, Vol. 10, pp. 465-76.
- Reichers, A.E. (1986), "Conflict and organizational commitments", *Journal of Applied Psychology*, Vol. 71, pp. 508-14.
- Rousseau, D.M. (1985), "Issues of level in organizational research: multilevel and cross-level perspectives", in Cummings, L.L. and Staw, B.M. (Eds), *Research in Organizational Behavior*, Vol. 7, JAI Press, Greenwich, CT, pp. 1-37.
- Rousseau, D.M. and House, R.J. (1994), "Meso organizational behavior: avoiding three fundamental biases", *Journal of Organizational Behavior*, pp. 13-31.
- Seibert, S.E., Sparrowe, R.T. and Liden, R.C. (2003), "A group exchange structure approach to leadership in groups", in Pearce, C.L. and Conger, J.A. (Eds), *Shared Leadership: Reframing the Hows and Whys of Leadership*, Sage Publications, Thousand Oaks, CA, pp. 173-92.
- Seers, A., Keller, T. and Wilkerson, J.M. (2003), "Can team members share leadership? Foundations in research and theory", in Pearce, C.L. and Conger, J.A. (Eds), *Shared Leadership: Reframing the Hows and Whys of Leadership*, Sage Publications, Thousand Oaks, CA, pp. 77-102.
- Senge, P., Kleiner, A., Roberts, C., Ross, R.B. and Smith, B.J. (1994), *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*, Doubleday, New York, NY.
- Shamir, B. (1990), "Calculations, values, and identities: the sources of collectivistic work motivation", *Human Relations*, Vol. 43, pp. 313-32.
- Shamir, B. and Howell, J.M. (1999), "Organizational and contextual influences on the emergence and effectiveness of charismatic leadership", *The Leadership Quarterly*, Vol. 10 No. 2, pp. 257-83.

- Sims, H.P. Jr and Manz, C.C. (1996), *Company of Heroes: Unleashing the Power of Self-Leadership*, Wiley, New York, NY.
- Steffy, B.D. and Jones, J.W. (1988), "The impact of family and career planning variables on the organizational, career, and community commitment of professional women", *Journal of Vocational Behavior*, Vol. 32, pp. 196-212.
- Steiner, I.D. (1972), *Group Process and Productivity*, Academic Press, New York, NY.
- Verespej, M.A. (1990), "When you put the team in charge", *Industry Week*, Vol. 9 No. 29, pp. 30-2.
- Waitley, D. (1995), *Empires of the Mind: Lessons to Lead and Succeed in a Knowledge-Based World*, William Morrow, New York, NY.
- Weick, K.E. (1979), *The Social Psychology of Organizing*, 2nd ed., Addison-Wesley, Reading, MA.
- Wood, R.E. and Bandura, A. (1989), "Social cognitive theory of organizational management", *Academy of Management Review*, Vol. 14, pp. 361-84.

Corresponding author

Michelle C. Bligh can be contacted at: michelle.bligh@cgu.edu