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LEADERSHIP AND PROJECT TEAMS

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Research in organizational psychology and project teams rarely overlaps, a recurring theme highlighted in this book. Researchers in both areas share similar goals, inasmuch as they seek to understand factors that can improve the way people work, whether as individuals, groups, project teams, or organizations. One important factor in this quest is leadership. Project teams have specific characteristics that make them distinguishable from traditional work teams, providing unique opportunities for studying leadership in non-traditional settings. As well, project team researchers have much to gain from the study of leadership conducted in traditional organizational settings. The leadership literature in organizational psychology has achieved both conceptual and empirical maturity (Cascio & Aguinis, 2008), which enables project team scholars to use existing theory and findings to understand what leadership behaviors operate best in project contexts.

Our goal in this chapter is to inspire scholars from both project teams and organizational psychology to recognize the opportunities that exist to study leadership in project teams. We primarily want to highlight ways in which those excited about studying leadership in project contexts can gain from the mature field of leadership in organizational psychology, while also capitalizing on the unique factors associated with project contexts. To do so, we first highlight the defining components of project contexts, and review the existing works that profile leadership within project contexts. Second, we review work on leadership from an organizational psychology perspective, specifically highlighting its incorporation within the project team literature. Finally, we propose future research directions in which project team scholars can build upon existing general management leadership literature to fill those gaps.

By highlighting these issues, we hope to address our goal for this chapter, which is to prompt new ideas for scholarship on leadership within project contexts. As such, we wish to minimize the existing gap of leadership within project contexts and organizational psychology, and maximize the opportunities to understand leadership in project teams.

Defining Characteristics of Project Teams

Project teams are different from traditional organizational work teams. A traditional organizational work group or team is defined as comprising the following:

Individuals who see themselves and who are seen by others as a social entity, who are interdependent because of the tasks they perform as members of a group, who are embedded in one or more larger social systems, and who perform tasks that affect others. (Guzzo & Dickson, 1996, pp. 308–309)

While project teams certainly reflect all of the characteristics of traditional work teams, they have distinguishing components that make them unique. As defined by Chiochio (Chapter 3 of this volume):

A project team unites people with varied knowledge, expertise, and experience who, within the life span of the project but over long work cycles, must acquire and pool vast amounts of information in order to define or clarify their purpose, adapt or create the means to progressively elaborate an incrementally or radically new concept, service, product, activity, or more generally, to generate change.

Based on these above definitions, it is clear that project teams have key features that distinguish them from traditional work groups. First, project teams are temporal in nature, such that they vary in duration of time and are time-sensitive (see Hobbs, Chiochio, & Kelloway, Chapter 1 of this volume). Second, project teams must clarify their goals and produce a unique product or service, distinct from traditional operations. Third, project teams operate in complex organizational contexts, adapting to the needs and demands of a variety of stakeholders and institutions. Finally, project teams differ in the ways of team member diversity, such that they unite people with varied knowledge and experience, which results in greater levels of diversity and distributed team members as compared to traditional work teams (see Horwitz, Chapter 13 of this volume).

The distinguishing features of project teams are what provide unique opportunities for furthering the study of leadership. Much of the leadership research conducted to date ignores issues of context (see Johns, 2006; Porter & McLaughlin, 2006). However, project teams are context specific, and studies of leadership within project contexts have highlighted interesting boundary conditions in which leadership manifests itself differently given these circumstances. The next section reviews this literature in greater detail.

The Temporal Nature of Project Teams

As outlined in the first chapter of this book, projects teams are inherently time sensitive—the temporary nature of project teams is one of their defining features, as highlighted by Atkinson (1999): “a finite time resource is possibly *the* feature that differentiates project management from other types of management” (p. 341). In addition, within those specified time frames, project teams experience project life cycles (see Hobbs, Chapter 2 of this volume), which adds a different temporal dimension to project teams. As such, the leadership of project teams is also time sensitive. How project managers’ leadership skills and behaviors manifest themselves in project teams will be highly dependent upon the timing and stage of the project.

Earlier project researchers have pointed to the importance of recognizing the temporal nature of project contexts in determining the applicability of traditional leadership theories. Frame (1987) and Turner (1999) both stated that different leadership styles might be more appropriate at particular stages of the project life cycle. Pinto and Prescott (1988) examined the critical factors of success at various stages of project life cycles and found that, dependent on the stage, certain factors were deemed more important. For example, clarifying the goals and vision were most important at the conceptual stage, whereas troubleshooting was most important during the execution stage. In a multinational study, Prabhakar (2005) found that the most successful project leaders were those who were able to switch their leadership styles from autocratic to consultative, dependent upon the timing and the direction of the project. Moreover, the best project leaders are not only aware of their leadership skills over chronological time, but can identify the crucial moments in time when their behaviors have the most salience (Rämö, 2002).

Beyond the importance of different leadership behaviors across stages of projects, simply recognizing that projects are temporary will influence leaders’ behavior, and how subordinates respond to those behaviors. Short-term projects may influence the types of leadership behaviors that project managers enact. Projects that last less than 10 months are more likely to result in task-oriented behaviors

by project leaders (Lee-Kelley & Leong, 2003), as do projects where leaders feel that time constraints are key issues (Kangis & Lee-Kelley, 2000). Finally, leaders' temporal orientations may matter. Project leaders who have present temporal orientations tend to excel in scheduling effectively and managing complex tasks, whereas project leaders with future temporal orientations are better at establishing the project's vision and handling contingency plans (Thomas & Pinto, 1999). In studying the ways in which project teams process information, Bakker, Boros, Kenis, and Oerlemans (2013) found that projects of a short-term duration are best matched to leaders with future orientation, such that the leaders' temporal skills complement the demands of the project, whereas project leaders with present orientation are better suited to project teams with a longer time frame.

Goal Uncertainty in Project Teams

Projects differ in terms of how well defined the goals of the project are, and how well defined are the methods to achieve these goals (Turner & Cochrane, 1993). While goal uncertainty along these dimensions is clarified in greater detail by Chiocchio (Chapter 3 of this volume), the degree to which project leaders are able to clearly define the goals of the project is a defining characteristic of project teams. Many projects, due to their requirements to generate change (Chiocchio, Chapter 3 of this volume) have ambiguous and ill-defined goals (Engwall & Jerbrandt, 2003). This contextual feature makes the study of leadership within project teams an important and interesting area for future research.

Scholars have sought ways in which project leaders can best operate within projects that have varying degrees of goal certainty. First, project leaders need to understand how well goals are understood. In cases where project goals are well defined and methods are clear, trying to develop highly detailed project plans will lead to poor performance (Payne & Turner, 1999); however, situations with unclear goals can lead to higher levels of employee stress (Beehr & Glazer, 2005; Horsman & Kelloway, Chapter 11 of this volume). Therefore, project leaders need to find ways to manage these types of projects, and several approaches have been suggested. Ward and Chapman (2003) suggest that project leaders plagued with unclear objectives and priorities need to be flexible, refining their objectives and performance criteria iteratively during the project. Adopting flexible leadership styles under conditions where projects are highly dynamic and have ill-defined project goals has been encouraged and suggested in other conceptual (Collyer & Warren, 2009) and qualitative works (Collyer, Warren, Hemsley, & Stevens, 2010). In examining project leaders' personalities, findings suggest that for projects deemed novel and complex (i.e., plagued with uncertainty and ambiguity), project leaders

with high levels of openness to experience and extraversion were best suited to these types of projects (Malach-Pines, Dvir, & Sadeh, 2009). Ultimately, findings imply that project leaders may have to tailor their leadership styles based on how well defined are the project's goals.

Organizational Context of Project Teams

Another important dimension of project work is the industry within which projects take place. The organizational context in which projects occur has significant influences on all aspects of project teams (e.g., Engwall, 2003; Hyvari, 2006), such that the type of industry influences levels of dynamism, complexity, and methodological maturity used in projects (Shenhar, 2001); similarly, leadership behaviors in project contexts are also influenced by the industry in which the project occurs. For example, project leaders in engineering, information systems, and organizational business sectors were compared in a series of works by Müller and Turner (2007a, 2007b, 2010). They found that different industries required different competencies of their project leaders. For example, engineering sectors require high levels of conscientiousness from project leaders, whereas information systems and business operations demand higher communication skills from their project leaders (Müller & Turner, 2007a). Certain competencies ranged in importance between sectors: high levels of vision are deemed most important for project leaders in organizational business sectors, of medium importance for project leaders in information systems, and of lower importance in leaders of engineering projects (Müller & Turner, 2010). Explanations offered for these findings re-emphasized the importance of industry sector: within the engineering sector, projects are often initiated with clear goals and expectations, whereas projects in organizational and information systems contexts often reflect more abstract goals.

Specific leadership behaviors may be more salient within certain project fields. For example, Thite's (2000) findings suggest that successful project leaders in the information systems and technology sectors are characterized by both transformational (namely, intellectual stimulation and charisma) and transactional (namely, contingent reward) leadership behaviors. Other findings suggest that these leadership behaviors have indirect effects on their project team's performance, such that when project leaders of construction teams use both transformational and transactional leadership styles, they positively impact team communication, collaboration, and cohesiveness, which subsequently impacts team performance (Yang, Huang, & Wu, 2011).

Project Teams: Members' Diversity and Distribution

Project teams require a breadth of knowledge and expertise; project teams' composition differs from that of traditional teams in that project teams are frequently composed of team members from all over the globe, with team members both co-located and distributed (Beyerlein, Pradas, Cordas, & Shah, Chapter 15 of this volume). Understanding the complexities associated with diverse teams, as well as the frequency with which project teams are composed of functionally and demographically diverse members, provides a significant opportunity to study leadership in this area of research.

Calls from project team scholars have been made for greater education on global awareness (Thomas & Mengel, 2008) and greater cultural sensitivity (Ochieng & Price, 2010) for project leaders in order to maximize potential benefits associated with project team diversity. Gassman (2001) suggests through case analyses that project leaders of multicultural research and development teams should maximize their team's diversity to increase overall creativity and innovation. This may be difficult, as project teams reflecting high levels of global diversity have greater interpersonal and behavioral challenges (McDonough, Kahn, & Barczak, 2001). However, specific leadership behaviors may minimize these concerns. Leaders of multicultural teams who engage in relationship-oriented leadership styles are more likely to have positive interactions with their culturally diverse team members, helping to maintain team cohesion and minimize cross-cultural problems (Mäkilouko, 2004).

Loosely associated with the notion of team composition is the issue of distributed teams. Project leaders of distributed teams need to manage various dimensions of team distribution: spatial distribution, measured by team members' physical distance apart; temporal distribution, measured by time zones and the extent to which team members' workdays overlap; and configural distribution, reflected in the arrangement of team members across physical sites (O'Leary & Cummings, 2007). Significant challenges are in place for leaders of distributed project teams. Teams with high levels of spatial distribution face greater issues of communication (Van den Bulte & Moenaert, 1998; Hinds & Mortensen, 2005); teams characterized by temporal distribution experience trouble in the coordination of schedules and deliverables (Cummings, Espinosa & Pickering, 2009; Rutkowski, Saunders, Vogel, & van Genuchten, 2007); and teams with configural distribution experience higher levels of conflict (Armstrong & Cole, 2002; Baba, Gluesing, Ratner, & Wagner, 2004). Of course, within each of these categories, dimensions of distribution often co-occur, or teams experience subgroups and fault lines, causing even greater levels of team conflict, coordination, and identification (O'Leary & Mortenson, 2009). Project leaders often face

these dimensions of distributed project team members, and strong leadership in these situations may be most necessary.

Project team researchers have highlighted issues with leadership in these types of contexts. For example, Henderson (2008) found that for geographically dispersed project teams, there also existed a negative relationship between geographical dispersion and team members' productivity. In order to combat lower levels of productivity, team leaders of dispersed teams may need to engage in specific leadership behaviors to encourage higher levels of success. One possible way is to properly manage autonomy; findings show that within teams characterized by high levels of geographic distribution, project leaders who give their employees higher levels of autonomy experience better decision-making processes, which leads to higher levels of team effectiveness (Bourgault, Drouin, & Hamel, 2008). Communication breakdowns are also a serious concern for geographically distributed project teams, and project team leaders must effectively communicate with their team members, clearly defining both roles and expectations in order to mitigate communication problems (Daim et al., 2012).

A separate concern for distributed teams is centered on low levels of identification with the team (O'Leary & Mortenson, 2009). Lee (2009) speaks to this issue, suggesting that by engaging in ethical "e-leadership," project leaders can encourage a sense of team spirit, where despite geographical distance, team members still feel a sense of belongingness to the team and a drive to work together. Similarly, Nauman, Khan, and Ehsan (2010) found that in configural virtual project teams, empowerment climate and relationship-oriented leadership style had significant positive relationships for team members' concern for the task, concern for people, and customer service. Opportunities to study various forms of distributed project teams and leadership are rampant in project teams, providing exciting opportunities for scholars across disciplines.

Opportunities for Traditional Leadership Research in Project Contexts

The contextual aspects of project teams provide innumerable opportunities for the furthering of leadership research. Some of the greatest gains, however, can be made when scholars integrate these contextual aspects of projects and develop research built upon traditional leadership theories and methodologies established in organizational psychology. The field of leadership is mature and well developed, and continues to be one of the most studied areas of research in organizational psychology. In this section, we review work conducted in project contexts that incorporates more traditional leadership perspectives (for extensive reviews

of research on organizational leadership more broadly, the reader is referred to Barling, Christie, & Hopton, 2010, and Judge, Woolf, Hurst, & Livingston, 2008). In addition, we propose new ways for project scholars to build upon this mature field, using traditional leadership theories and empirical methodologies that will advance research in project contexts, bridging the gap between project team psychology and organizational psychology.

Leadership Emergence: From Project Manager to Project Leader

The idea of leadership emergence, that is, who is selected to be a leader, is a key area of interest for organizational psychologists, as well as for project team researchers. While organizational psychologists have identified key factors that predict who becomes a leader, such as gender (Ayman & Korabik, 2010; Eagly & Johnson, 1990), physical attractiveness (Cherulink, Turns, & Wilderman, 1990; Sczesny & Kühnen, 2004), personality traits (Judge, Bono, Ilies, & Gerhardt, 2002), and most recently, genetic factors (Arvey, Zhang, Avolio, & Krueger, 2007), project team scholars have also taken a keen interest in understanding project leader selection. Recognizing that management and leadership are vastly different (see Kotter, 1990), the notion that project leaders emerge is misleading—rather, they are selected and assigned. Exactly who gets cast as a project leader can vary across contexts; however, research has emerged that predicts particular factors that highlight demographic variables, traits, and skills characteristic of those typically assigned to project leader positions that are separate from general leadership positions.

In one study, El-Sabaa (2001) found a number of key differences between who became a project manager versus a functional manager. He found that project managers tended to (a) be younger than functional managers, (b) have greater mobility across projects and positions, and (c) recognize greater levels of responsibility for planning their own career paths. In addition, while functional managers wanted stable jobs and leadership opportunities, project managers sought out opportunities for teamwork, creativity, and cross-training. Other studies have explored the differences between project managers' personality styles and those of functional managers. Turner, Müller, and Dulewicz (2009) compared project managers with traditional line managers, and found that project managers were scored higher on conscientiousness, sensitivity, and critical analysis than line managers, but they also scored lower on communication. Using the Myers Briggs questionnaire, project managers have been found to have higher levels of extraversion and sensing (Mills, Robey, & Smith, 1985; Shenhar & Wideman, 2000). It has also been suggested that project managers need strong political abilities, much more so than functional managers, as project managers do not

have similar stable bases of power, and therefore need to be willing and able to employ appropriate political strategies for project success (Pinto, 2000).

It is now also possible to isolate factors predicting who will lead different types of projects. For example, possibly raising the specter of an element of discrimination in selection, female leaders are more likely to manage smaller projects (less than one million dollars) than are male leaders (Henderson & Stackman, 2010). Within new product development teams, the demands of the product can determine who becomes project leader. In routine projects, having a project leader with high levels of experience is more desirable, whereas radical projects and projects demanding quick turnaround fit best with project leaders who are younger and who have less education, as the demands of the projects require leaders who energetic and are less likely to fall into the old patterns of the company (McDonough, 1993). Comparing engineers who selected project leader roles as compared to functional managerial roles, project leaders were more likely to be concerned with potential pay ceilings and sought out the potential monetary rewards associated with project management career paths (Tremblay, Wils, & Proulx, 2002).

Granted, these findings may be explained by a “selection” factor: the relationship between project management characteristics and project type may be bi-directional, such that the type of project often attracts leaders with characteristics that best fit the project, an avenue ripe for future exploration (for a full discussion on this issue, see Allen & O’Neill, Chapter 12 of this volume). In addition, many of the research projects undertaken examine project leader characteristics and their relation to project team effectiveness, rather than project leader selection, an approach frequently seen in traditional organizational research. Scholars often examine the leader characteristics of effective leaders, and this approach assumes congruence between leader emergence and effectiveness (Zacarro, 2007); however, meta-analytic results suggest that leader characteristics in leader emergence and leader effectiveness have both consistency and differences (Judge, et al., 2002). In narrowing the work to project leader selection, understanding whether project leader attributes that predict who becomes a project leader differ significantly from attributes that predict who becomes an effective project leader is an interesting area for future research.

Finally, an important area to pursue is to distinguish project managers from project leaders. As discussed, individuals are selected by organizations and are given the title of “project manager.” Whereas management reflects behaviors such as setting goals to organizational needs, dividing tasks as appropriate, and being the liaison between employees and management, leadership involves a more holistic approach. Leaders seek to transform, to provide meaning to projects, and to communicate the organization’s vision to followers (Plakhotnik,

Rocco, & Roberts, 2010). The differences in behaviors between project managers and project leaders should be reflected in future research, as the terms are often used interchangeably; however, the processes and outcomes are distinct.

Relational Leadership Perspectives in Project Contexts

At one time, behaviors typically expected of project leaders emphasized quantitative outcomes, including handling project costs, time, project quality, and communication with project stakeholders (Cooke-Davies, 2001); however, a greater emphasis has been placed on how project leaders develop relationships with their team members and how the interpersonal dynamics of project leaders influence project teams. We suggest that in order to gain a greater understanding about the relational dynamics impacting project leaders, exploration in this area should be gained through the application of traditional relational leadership perspectives developed from organizational psychology. As such, we explore some of the leadership theories and perspectives that have gained significant maturity in the organizational psychology leadership field that explore the relational side of leadership.

Leader-Member Exchange

Leader-member exchange theory proposes that effective leadership processes occur when leaders and followers develop reciprocal, high-quality relationships that are characterized by mutual respect, trust, liking, latitude, attention, and loyalty (Schriesheim, Castro, & Cogliser, 1999), which have substantial positive outcomes, such as increased follower satisfaction and commitment (Gerstner & Day, 1997) and citizenship behaviors (Ilies, Nahrgang, & Morgeson, 2007). Leader-member exchange theory considers leadership from both leaders' and followers' perspectives (Graen & Uhl-Bien, 1995).

Very little research has been conducted with regard to leader-member exchange theory and project contexts. There are several reasons as to why the study of leader-member exchange theory does not lend itself to the study of project teams. First, project teams are temporary in nature, and it may be difficult to develop high-quality relationships in a short time period. Second, until relatively recently, leader-member exchange theory was rarely studied in team contexts (e.g., Boies & Howell, 2006; Liao, Liu, & Loi, 2010; Liden, Erdogan, Wayne & Sparrowe, 2006), and project team researchers are specifically interested in understanding relationships at team levels, rather than individual or dyadic relationships. However, some research reveals interesting findings. In an ethnographic study, Kramer (2006) showed that project leaders attain high-quality relationships with all project team members through means of

strong communication and shared leadership. Stewart and Johnson's (2009) study supports this finding. They showed that in gender-diverse project teams, varying levels of leader-subordinate relationship quality within the same team had a positive relationship with group performance in an eight-day military simulation, indicating that variance in leadership-subordinate relationships is developed in short time periods, and may open opportunities for research in project contexts. This suggests that, despite the potential concerns with studying leader-member exchange theory in project contexts, understanding the impact of varying levels of relationship quality between project leaders and their team members may be an important area for future research.

In recognizing the complexity of studying leader-member exchange theory in teams, exciting methodological opportunities exist for studying this leadership perspective in project contexts. Specifically, leader-member exchange theory speaks to multilevel analysis, as it is a leadership theory that requires study at the group level (Dasborough, Ashkanasy, Tee, & Tse, 2009). For example, researchers interested in understanding how varying degrees of relationship quality between project leaders and their members can impact project effectiveness may be interested in using an individual within-group level of theory, studying individual relationships between project leaders and project members in relationship to the group average (Klein, Dansereau & Hall, 1994; Kozlowski & Klein, 2000). Researchers from project contexts interested in understanding varying degrees of relationship quality can build upon work conducted on this topic from traditional organizational psychology, similar to work by Henderson and colleagues (Henderson, Wayne, Bommer, Shore, & Tetrick, 2008). This particular research question may be most interesting when incorporating specific project features as boundary conditions, for example, how varying degrees of relationship quality between project leaders and project members are particularly influenced in projects where members are configurally distributed. We propose that by incorporating multilevel research and analysis techniques (see Chan, 1998; Kozlowski & Klein, 2000), research on project leaders and leader-member exchange theory provides innumerable opportunities for future research development.

Transformational Leadership

No leadership theory has received as much attention by organizational scholars over the last two decades as transformational leadership theory (Barling et al., 2010; Judge & Bono, 2000). Transformational leadership includes four separate behaviors, as defined by Bass (1985): (a) idealized influence, which suggests that leaders behave in ways that enable them to be role models; (b) inspirational motivation, in which leaders inspire their followers by providing meaning and challenge to their work; (c) intellectual stimulation, which

involves challenging subordinates to question assumptions; and (d) individualized consideration, which involves respecting subordinates' individual needs for achievement and growth. Transformational leadership behaviors have consistently demonstrated positive results for individual, group, and organizational level performance (e.g. Burke, Stagl, Klein, Goodwin, Salas & Halpin, 2006; Judge & Piccolo, 2004).

Project team scholars have embraced transformational leadership, as evidenced by research in project management journals and books. For example, Cleland (1995) offered a definition of project management that included responsibility for the needs and rights of the project team members. He argued that project leaders were responsible for more than traditional management competencies, and that they were responsible for articulating a clear vision while striving to do the right thing for team members and stakeholders. Similarly, Barber and Warn (2005) identified transformational leadership as integral to project management, suggesting that project leaders need to engage in both fire-lighting behaviors (pro-active transformational leadership behaviors) as well as fire-fighting behaviors (reactive, task-oriented leadership behaviors). Supporting these perspectives, others encouraged project leaders to articulate a clear vision that could spark energy in their team members, encourage others to work beyond their potential, and strive to do the right thing (Shenhar, 2004; Turner & Müller, 2003).

Recognizing these calls, project team researchers began gathering empirical evidence to test how transformational leadership behaviors operate in project team contexts. Direct positive relationships between transformational leadership behaviors and project effectiveness emerge consistently (e.g. Christenson & Walker, 2004; Prabhakar, 2005; Tishler, Dvir, Shenhar & Lipovestky, 1996). Others have found indirect effects, whereby project leaders' transformational leadership behaviors significantly influence the level of team cohesion, which directly impacts the overall team performance (Wang, Chou, & Jiang, 2005), further supporting one of the more consistent findings that cohesion in project teams has a stronger relationship with performance than in traditional teams (Chiocchio & Essiembre, 2009).

While transformational leadership may predict positive outcomes, some evidence exists to suggest that it may not have the same level of salience in project teams as it does in traditional organizational teams. Keegan and Den Hartog (2004) found that although project managers did not differ from line managers in terms of the level of perceived transformational leadership, project managers' transformational leadership was not associated with project team members' motivation, commitment, or stress, but line managers' transformational leadership was.

These contradictory findings raise the possibility that unique characteristics of project teams moderate the differential effectiveness of project and non-project teams. One potential characteristic mentioned earlier is that project teams are inherently temporary (Keegan & Den Hartog, 2004). In project teams, it may be that the element of continual employee development is compromised by the temporary nature of teams. However, the temporary nature of project teams may work in combination with the type of project undertaken. Keegan and Den Hartog's study examined the transformational leadership of project managers in technological teams and found little effect on performance; however, in Stewart and Johnson's (2009) military project teams, they found that high-quality relationships can be developed within a very short time period. Examining how the temporal and the organizational context of the project may influence manifestations of transformational leadership in project teams is an area for future research. Second, individuals engaged in project team work often report to multiple project leaders (Hoegl, Weinkauff, & Gemuenden, 2004). As such, the relationship developed with multiple project leaders may dilute the effects of a single project leader's transformational behaviors. Third, role ambiguity may be higher when working in a matrix management system (Ford & Randolph, 1992). It may be that the demands placed on individuals who are members of multiple project teams (O'Leary, Mortensen, & Woolley, 2011) and the demonstration of individualized consideration toward those members may have a greater impact than other transformational leadership behaviors. We suggest that while transformational leadership is a promising area of study within the project team literature, its usefulness may be limited or enhanced by characteristics that are unique to the nature of project teams, and that these characteristics provide opportunities for future research.

Emotional Intelligence

Emotional intelligence is not a leadership theory per se, but it has attracted significant attention within the project team literature. The most widely accepted definition of emotional intelligence is that emotional intelligence is "the ability to monitor one's own thoughts and emotions, to discriminate among them, and to use the information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189). Emotional intelligence has been examined across diverse aspects of organizational functioning (Cherniss & Goleman, 2001; Goleman, 1996), on the assumption that emotional intelligence is positively associated with individual attitudes and performance. While much debate exists as to the importance of emotional intelligence as a core component of successful leadership (see Antonakis, Ashkanasay, & Dasborough, 2009, for a recent debate), it continues to be studied frequently in the organizational psychology leadership literature.

Project team researchers have shown significant interest in examining emotional intelligence and general emotions of project leaders, and empirical evidence has begun to accumulate suggesting the importance of project managers' abilities to regulate their own emotions and to value those of their employees. Clarke (2010) studied project leaders from the United Kingdom, and showed that project leaders who demonstrated higher levels of emotional intelligence and empathy were more likely to be seen as competent in terms of managing teamwork and conflict; similar associations also emerged with perceived transformational leadership, even after controlling for cognitive ability and personality. In a series of qualitative interviews with project leaders in Thailand, Sunindijo, Hadikusumo, and Ogunlan (2007) found that project leaders with higher levels of emotional intelligence tended to use open communication and proactive leadership behaviors, which related to positive outcomes for teams. With respect to overall emotions, project leaders' ability to infuse positive emotions into project teams has been linked to attaining competitive advantages over others (Davis & Cable, 2006).

This link between emotional intelligence and project success emerges within a variety of contexts and project teams (Dulewicz & Higgs, 2000; Müller & Turner, 2007a; Turner & Müller, 2005). Given the nature of project teams, greater understanding of the boundary conditions as to when project leaders' emotional intelligence matters is an area ripe for future exploration. In addition, while related research relating leaders' emotions to project team process and outcome is less developed, it remains an interesting and potentially important direction for further research.

Future Research Directions

In our review of trending leadership theories that have been considered in project contexts, we urge scholars to incorporate other leadership perspectives and to use contextual factors of projects that may serve as boundary conditions or explanatory components to further develop research across these two disciplines. As such, we may answer some of the more unanswered questions in the leadership literature. In this next section, we propose numerous opportunities that exist to integrate aspects of project teams with leadership traditions from organizational psychology.

One such question that needs further exploration is to understand which leadership styles are most effective dependent on clarity of goals and procedures (Porter & McLaughlin, 2006), and we suggest that a unique opportunity to explore this question exists in project teams. When employees are faced with

well-defined goals that require highly routinized and structured processes, they may require less leadership than when faced with ambiguous or poorly defined goals. These types of projects may benefit from what is referred to as substitutes-for-leadership theory, whereby the key to improving leadership effectiveness is to identify situational variables that can either substitute, neutralize, or enhance the effects of leaders' behaviors (Kerr & Jermier, 1978; for more recent discussion, see Dionne, Yammarino, Howell, & Villa, 2005). This perspective was supported in Keller's (2006) study, in which he found that project team members' ability and intrinsic satisfaction predicted team performance, explaining unique variance even after controlling for leadership behaviors. However, during times of goal uncertainty, certain leadership behaviors are more effective (i.e., transformational leadership, Keller, 1992; Nemanich & Keller, 2007; Waldman, Ramirez, House, & Puranam, 2001; structured and planning behaviors, Marta, Leritz, & Mumford, 2005). Leadership scholars interested in understanding how the varying degrees of goal uncertainty affect leadership would be well advised to partner with project team scholars, as the opportunities for examining leadership under these contexts are wide open.

A second opportunity exists to understand the impact that organizational contexts can have on the effectiveness of certain leadership styles. While organizational context plays a salient role in project research, the inclusion of organizational context as an explanatory variable within the traditional study of organizational leadership research is lacking. Far too often, scholars focus on top managers in large firms (for example, engineering), whereas smaller firms, middle managers, and industries such as construction receive less attention (O'Leary & Almond, 2009). Scholars frequently reference the impact of organizational climate and culture on leadership (see Porter & McLaughlin, 2006), ignoring the unique aspects inherent in different industries that can influence leadership styles and behaviors. We suggest that project contexts offer the chance to study leadership across lesser-studied organizational contexts and to study how it may express itself differently. For example, Elkins and Keller (2003, 2004) suggest that leadership styles will manifest differently within research and development sectors as compared to more traditional industries. They propose that transformational leadership will be a more effective leadership style within the dynamic and ever changing context of research and development industries (Elkins & Keller, 2004). They also suggest that project leaders should expect high variance in relationship quality with subordinates, such that in fast-paced contexts, leaders may not have the time necessary to develop high-quality relationships, or may not believe that the failure to do so will negatively impact team performance (Elkins & Keller, 2003). However, the same theory may operationalize differently in project teams within military contexts, where high-quality relationships

have been found even within short time frames (Stewart & Johnson, 2009). Recognizing that certain industries have inherent characteristics that will impact the ways projects are managed and executed, greater research of leadership style variation across industries provides innumerable opportunities for both project team and organizational psychology researchers.

Further, we suggest greater exploration of the interplay between the temporal nature of project contexts and leadership. Whereas most of the literature in organizational psychology has focused on identifying dimensions and behaviors that manifest themselves uniformly across people, contexts, tasks, and time (Kozlowski, Watola, Nowakowski, Kim, & Botero, 2008), we know that leadership behaviors are not consistent across time (Denis, Lamothe, & Langley, 2001). The opportunity to understand *when* certain leadership behaviors are effective is both necessary and demanded (Sonnentag, 2012), and in recognizing the importance of leader-follower relationships in project contexts, we must acknowledge that these relationships may be dependent upon time. For example, project team members may not even be able to recognize project managers' transformational leadership behaviors at the project identification period. Perhaps, transformational leadership behaviors are then more effective during project execution. Or, under situations of projects with short time frames, certain leadership styles, for example transformational or transactional leadership, may be of higher importance, whereas leader-member exchange theory may be of greater salience over longer-term projects. Given the inherent temporal nature of project teams, we suggest that this provides an important opportunity for researchers to address a critical gap in our understanding of leadership with temporal constraints

Thus far, we have suggested that future research should incorporate both factors from project contexts married with traditional leadership research; however, we also urge scholars to push beyond simple interactions. Projects operate such that all contextual factors described (and undoubtedly others that we have omitted) operate simultaneously—understanding the interaction effects that these factors have on leadership processes is a necessary next step. For example, we consider transformational leadership, which is undoubtedly the most frequently studied traditional leadership perspective in project contexts. Some research has already explored specific boundary conditions related to the transformational leadership in project contexts. For example, in Keller's (2006) five-year study on the effects of project managers' transformational leadership behaviors and initiating structure leadership, he found that while all leadership behaviors had positive relationships with team performance outcomes, transformational leadership was most effective in research-driven project teams, whereas initiating structure had its greater effects in technologically driven projects. In this case, we suggest that both the nature of the project work and the goal uncertainty associated with

these types of projects explain significant variance in the effectiveness of leadership style. This provides support in understanding leadership effectiveness and multiplicative contextual boundaries, such that under conditions of high goal uncertainty and projects of longer time periods, transformational leadership is most effective; however, each of those contextual variables in isolation is insufficient to understand when transformational leadership is most useful. Other research questions exist to suggest that perhaps under certain project contexts, such as when goals are clear and certain and team members are configurally distributed, transformational leadership may not be the most effective leadership style, and more task-oriented leadership styles are more successful. These types of research questions require greater incorporation of two-way, and even three-way, interaction models, demanding more sophisticated methodologies, and will provide greater refinement and understanding to leadership in project contexts.

Finally, we suggest for those wishing to explore leadership in project contexts that refinement and greater use of varied empirical and methodological designs are necessary. Currently, there stands an overreliance on single-source, cross-sectional studies when examining leadership in project contexts. This feature is not immune to project team researchers, as is evidenced by the overwhelming use of surveys (Aguinis, Pierce, Bosco, & Muslin, 2009). While researchers in organizational psychology have long lamented the concerns with cross-sectional research (see Spector & Brannick, 2009; Spector, 2006), and leadership researchers are prone to this reliance as well (Mumford, Friedrich, Coughran, & Antes, 2009), recent works have highlighted the variety of research methodologies that we believe could be instrumental in gaining greater understanding of leadership in project teams. Researchers interested in leadership in project contexts should consider incorporating longitudinal designs and multisource and/or mixed-methods approaches (Hunter, Bedell-Avers, & Mumford, 2007).

We also suggest studying project leader characteristics in more complex, multiplicative manners. Project leader characteristics are often studied in additive and linear ways; however, studying leader characteristics in curvilinear manners may be a new and interesting approach for project leader emergence. For example, cognitive ability is suggested to have a curvilinear relationship with leadership, such that very low levels or very high levels of intelligence have a negative relationship with leadership effectiveness (as discussed by Zaccaro, 2007), and leader assertiveness has a similar relationship with leader effectiveness (Ames & Flynn, 2007). Perhaps certain project leader characteristics have similar complex and curvilinear relationship with leadership emergence? Examining project leaders' characteristics in more complex manners may give greater understanding to who becomes a project leader.

We urge researchers to take advantage of levels of analysis when studying leadership in project teams. The study of leadership in project contexts is inherently multilevel, given that the main variable (leadership) is at the individual level operationalized to impact groups (members of the project team). The need to operationalize these research questions appropriately demands careful design of cross-level analysis (see Kozlowski & Klein, 2000) and composition models (see Chan, 1998). In doing so, greater understanding of how leadership is effective in project contexts will emerge.

Practical Implications for Project Teams

The purpose of this chapter has been to address current gaps in the literature between project leadership and traditional leadership research, suggesting new ways in which scholars can minimize those gaps and further refine our understanding of leadership in project contexts. As research of leadership in project contexts continues to move away from task-oriented perspectives and build toward more relationship-oriented leadership styles, greater integration of the contextual boundaries of projects with more traditional organizational psychological perspectives of leadership will provide greater evidence-based management practices for project leadership. This can help illuminate when particular leadership styles are most effective and relevant given the project context. These findings can help further training and development practices for project leaders, ensuring that they are given the tools necessary to be more than just project managers, capable of moving the project along efficiently, but also leaders for their team members, able to develop positive working relationships and more effective team processes to facilitate greater success overall.

Perhaps more important, we suggest that this chapter and the proposed ways to further research of leadership in project contexts highlight an important opportunity for the field of project teams. As emphasized throughout this chapter, opportunities are rampant for the integration of research on leadership within project contexts. Researchers from project team perspectives can gain insight from working with leadership researchers in organizational psychology, where the field is more mature. In turn, scholars from organizational psychology have much to gain in studying leadership with the interesting and important contextual boundary conditions inherent in project contexts. As such, we suggest that this chapter provides practical opportunities to enhance both fields—project teams and organizational psychology—by approaching the study of leadership with a cross-disciplinary approach that will further advance and develop the understanding of leadership.

Conclusion

While the fields of project teams and organizational psychology have largely been studied in isolation from each other, the separate bodies of research findings on each of these areas highlight numerous opportunities for future research that might lead to greater understandings of how they influence each other. We suggest that the study of leadership within project contexts is an avenue that holds significant promise for researchers in both organizational psychology and project teams. By incorporating the many contextual features inherent in project teams into the study of leadership, researchers can strengthen and further our understanding of leadership.

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