

LEADERSHIP IN SMALL GROUPS AND TEAMS: TOWARD A THEORY OF GROUP LEADERSHIP

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ABSTRACT

Purpose – Leadership is a very large topic with a long history of scholarship. Despite this, existing theories of leadership have been mostly silent about group-level phenomena and challenges that leaders of small teams face. Our chapter begins to address this problem by specifying four functions or challenges that any theory of group leadership should address if it is to be helpful to small-group scholars looking for answers about leading teams.

Approach – In order to identify main group functions that should be managed by leaders and be developed into refined leadership theories, we review both leadership and team studies. Based on the four functions that we establish, we briefly review a selection of major leadership theories that we believe can provide the foundations for new and better group-level leadership theories.

Findings – By using two theoretical categorization (managing individual group members vs. managing group; affective/motivational vs. cognitive functions), we suggest that leaders of small groups deal with the four key

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leadership functions – (1) managing within-group interpersonal dynamics, (2) within-group coordination of information/resources, (3) group-level affect management, and (4) managing group boundaries for information/resources flow and group identity.

Value – This chapter provides specific group functions that groups and teams scholars can use as a foundation to develop better theory of small-group leadership.

Keywords: Leadership; small groups and teams; functional theory

Because groups and teams are an increasingly essential work unit, the issue of team leadership has become increasingly important. How ought teams be led to increase productivity? What are the key processes that team leaders need to manage in order for their teams to be effective? At first blush there is an enormous amount of research available on leadership (e.g., see the sheer size of the *Bass Handbook of Leadership* (2008)). However, on closer examination, there are two key problems with existing leadership theory for small groups researchers. The first is that the majority of leadership work either looks at how leaders work with individual followers (e.g., LMX theory, Graen & Uhl-Bien, 1995), or at how leaders work with the masses (e.g., leader charisma, Weber, 1947; or great-man theory, reviewed by Jennings, 1960), rather than how they work with small interactive groups of people. Surprising little of the vast literature on leadership is focused specifically at the group level. It is only very recently that a body of research is now starting to emerge that looks at a range of roles that group leaders can take to enhance group effectiveness. Several review articles and chapters have recently been published that focus on organizing the previous research findings on group and team leadership (e.g., Burke et al., 2006; Kogler Hill, 2006; Morgeson, DeRue, & Karam, 2010).

The second problem with most existing leadership research is that it tends to describe the “what” of individual leaders – describing the wide range of activities or behaviors that leaders engage in – rather than the functions or whys of leadership (Bass, 2008). This is unfortunate because useful theory focuses generally on why rather than what (Sutton & Staw, 1995); and it seems we have made little progress in the area of team leadership since McGrath (1962) observed 50 years ago that team leadership is “to do, or get done, whatever is not being adequately handled for group needs” (p. 5). Or in other words, the study of leadership should be about fulfilling group

functions not being met in the absence of leadership. Our aim here is to address this critique of the leadership literature by bringing leadership and teams research together in this chapter and point groups and teams scholars in the direction of a functional theory of group or team leadership.

This chapter has one overarching purpose – to encourage the development of a theory (or theories) of leadership for small groups and teams scholars. More specifically, we attempt to set the stage for developing better group-level theories of leadership by suggesting a set of functions or criteria that any such theory would ideally address. By group-level leadership, we refer to a *group-level* process by whereby an individual influences *a group as an entity* to achieve a common goal. Our definition is based on a previous definition of leadership (Northouse, 2006), which we employ to emphasize the unique features of the group or collective, versus leadership more generally that tends to be conceptualized either as a dyad (i.e., leader vs. individual follower) or as one individual transmitting to the masses (i.e., in the absence of one-to-one contact). That is, we assume that in order to achieve effectiveness in small groups, a group leader should deal with group-level functions that can arise in group settings and potentially challenge group goal achievement. Consequently, a good group-level leadership theory has to specify how a leader influences group-level phenomena. Following our attempt to articulate some criteria for an effective theory of group leadership, we then briefly review extant major leadership theories in order to see how well they correspond with our criteria. Finally, we make some suggestions for existing theories that we believe offer the foundation of a theory of group leadership that addresses key functions and suggest how each theory might be developed to become a better group-level theory of leadership.

FOUR FUNCTIONS OF GROUP LEADERSHIP

Although common definitions of leadership implicitly assume the *group* as an objective of leadership – for example, Bass (2008) conceptualized effective leadership as “the interaction among members of a *group* that initiates and maintains improved expectations and the competence of the group to solve problems or to attain goals”; and Northouse (2006) defines leadership as “a process whereby an individual influences a *group* of individuals to achieve a common goal.” Existing theories of leadership largely do not, however, explicitly deal with group-level functions that can challenge group effectiveness. We suggest four group-level functions that

can and should be managed by group leaders – these issues form the foundations of functions for developing future leadership theory at the group level. We identified these four functions in Table 1 by making two simple observations. First, that groups have both individual and group-level functions, that is, that groups can be broken down to the individuals within them so that the unit of analysis for groups is either the group and/or its individual members. Second, we note that psychologists generally consider cognitive and/or versus affective responses to phenomenon. Specifically in the case of leadership theories this has been framed as task and relationship issues (e.g., Fiedler, 1967; Guetzkow & Gyr, 1954; see summary in Bass, 1990). This suggests four broad functions in leading teams: (1) group member and individual-level affect (i.e., managing within-group interpersonal dynamics); (2) group member cognitions (i.e., within-group coordination of information/resources); (3) group-level affect issues (i.e., group-level affect management); and (4) group-level cognition issues (i.e., managing group boundaries for information/resources flowing into the group and managing group identity). Any successful theory of leadership for groups will need to take account of each of these functions. Mutatis mutandis, any

Table 1. Four Key Functions and Questions that Should be Addressed by Group-Level Leadership Theories.

	Affect/Motivation	Cognition
Group Member Management (i.e., intragroup processes, managing individual members)	Function 1 Managing within-group interpersonal dynamics (e.g., conflict and subgroup management)	Function 2 Within-group coordination of information/resources
	<i>Key Question(s)</i> How do we interact with and feel about each other?	<i>Key Question(s)</i> How do we coordinate our resources?
	Function 3 Group affect management (e.g., emergent state management)	Function 4 Bringing information/resources into the group; managing identity
Group Boundary Management (i.e., managing the group as a whole)	<i>Key Question(s)</i> How do we feel about the group?	<i>Key Question(s)</i> Who are we? How do we manage the flow of information and other resources in and out of the group?

effective group leader will need to deal successfully with these leadership functions.

Function 1: Managing Within-Group Interpersonal Dynamics – How Do We Interact with and Feel About Each Other?

One significant functional leadership challenge that small groups face is how to manage internal interpersonal dynamics, relations, and interactions among group members. These within-group dynamics were extensively studied from the Input-Process-Outcome (IPO) perspective, which is the most frequently used framework in small group and team research. According to this view, the interactions or relational patterns in teams such as conflict and communication transform inputs like member or group characteristics into team outcomes such as group performance and group member reactions (Marks, Mathieu, & Zaccaro, 2001). An accumulated body of organizational studies suggests that the interpersonal processes or relational patterns in small groups have a significant influence on group outcomes, thus requiring group leaders to manage these dynamics. For instance, research on intragroup conflict (Jehn & Bendersky, 2003), or incompatibilities among group members, finds that conflict in group members' interaction has differential but significant influences on various group outcomes (i.e., has both destructive and beneficial effects depending on the types of group outcomes and conflict). For example, research findings suggest that when group members disagree with each other on the task at hand, the conflict will decrease member satisfaction, increase anxiety and tension (which are negative outcomes), but are also likely to enhance the possibility of creative and the quality of group outcome. Thus, conflict management and resolution is a significant group requirement for achieving group goals (Behfar, Peterson, Mannix, & Trochim, 2008; Marks et al., 2001).

Faultlines research also highlights the importance of managing intragroup relationships (Lau & Murnighan, 1998). As lines are formed based on one or more demographic attribute(s), faultlines split a group into subgroups which tends to create negative intergroup (i.e., subgroup) outcomes. For example, Lau and Murnighan (2005) found that members of strong-faultline groups identified only with their demographically similar subgroups and not with the group as a whole, which could cause intergroup relational conflict. Within-group communications were effective for weak-faultline groups, but had no value in strong-faultline groups. By highlighting

the possibility of subgroup development in a group and consequent negative outcomes, faultlines research suggests that it is important to explore and manage the informal and naturally occurring interpersonal relationships and interactions in groups.

We argue here that effective group leadership can and should deal with these within-group interpersonal dynamics through one of two ways. First, the leaders should read and understand the relational landscapes of the group – how group members relate and interact with each other and how it affects group processes and outcomes in a particular moment. The relational or interaction patterns of group members may manifest as relatively temporal phenomena such as short-term task conflict or may take the form of continuous issues such as sustained faultlines, causing serial conflict. Thus, the leaders should observe and understand the relational patterns of their group members in situ and whether it leads to positive or negative processes or outcomes. For instance, strong faultlines formed in a diverse group may cause relationship conflict in groups which generally creates negative outcomes to individual and groups, but weak faultlines developed in a diverse group could foster task conflict and consequently intensive communication among members which might facilitate quality group outcomes. In this sense, scanning and understanding current relational dynamics is likely to be a critically important capability to leading groups.

In addition to understanding the relational patterns of the group in particular moment, the group leaders need to identify ways to capitalize on the relational or interactional patterns at hand depending on the group outcomes that the leaders seek. For instance, group leaders might be able to assign roles or tasks to group members depending on their relational position in groups. Group members who are in between two subgroups could be assigned the role of liaison facilitating the constructive communication between two subgroups; a demographically minority member could be provided high authority or official status which can enhance their participation and influence on the group task. Or, the effectiveness of relational patterns may rely on the stage of group tasks. For instance, when a work group with a strong faultline is aiming for a novel product development, the group leaders might want to let the two groups work separately during the idea stage in order to maximize the variety of idea generated (capitalizing on the strong faultline), but it would be more effective for the leaders to weaken the faultline when the generated ideas are to be discussed and winnowed into realistic and viable final options.

Hence, development of leadership theory that focuses on managing within-group interpersonal dynamics is a productive direction for leadership

study. It would show how leaders can understand and capitalize on existing relational patterns in their groups as well as change the interpersonal dynamic in a favorable way.

Function 2: Within-Group Coordination of Information/Resources – How Do We Coordinate Our Actions with Others in the Team?

The second function for team leaders is related to the first one in its level of analysis being at the level of the individual team member. However, because group members work interdependently to achieve their group goal, it focuses on coordinating the individuals and how information flows among them. It is crucial for team members to align their actions, and coordinate effectively. Here we are focused on coordination, as opposed to cooperation. The problem of coordination is fundamentally cognitive in origin and requires shared understanding and common knowledge to be solved (Kretschmer & Puranam, 2008). In many small groups, it was found that lack of mutual knowledge leads to coordination failure, which could lead to group ineffectiveness. This is different from the *desire* to coordinate, also known as cooperation – which is an affect issue rather than a cognitive problem (Srikanth & Peterson, 2011). The concepts are clearly distinguishable – the problem of cooperation arises from the failure of aligning interests and can be dealt with from a motivational approach while the problem of coordination is cognitive and even with the best of intentions sometimes people fail to communicate clearly with each other (e.g., see Cronin & Weingart, 2007). Thus, we suggest that how leaders solve the coordination issue in a group should be the crucial criterion for a good group-level leadership theory.

Specifically, there are three roles that leaders can play to help their group members coordinate with each other – interdependence manager, knowledge variation manager, and integrator of work outcome and effort. First, leaders can and should manage interdependence among group members, which is a prerequisite for resolving coordination problems. If a group member does not have to work together with other members to produce task output (i.e., lack of task interdependence) or the member is rewarded only based on his/her own work task output (i.e., lack of outcome interdependence), coordination would not be required for the group. Although these task and outcome interdependence are typically considered issues of organizational design, leaders oftentimes have a large degree of discretion and authority in determining this level of interdependence (Wageman, 1995).

Thus, group leaders need to regulate the interdependence level in their focal group, thus consequently determining the level of coordination needed among the entire group members.

Leaders could also serve in the role of a transactive memory system – which reflects the knowledge on “which group members know what” (Wegner, 1987). The critical focus of coordination in group is to ensure that group members share mutual knowledge. To be specific, members need to know what kinds of expertise, knowledge, and ability that each member has in order to coordinate each other for goal achievement. Since generally there is diversity in terms of individual members’ knowledge, ability, and skills, it would be an important task for leaders (and also group members) to understand and remember what kinds of (unique) knowledge each member has to achieve coordination. This leader role parallels the function of transactive memory system which refers to combination of the knowledge possessed by particular group members and an awareness of who knows what (Liang, Moreland, & Argote, 1995). Although it seems that the development of and common use/application of this transactive memory system was assumed to be the task of group members “on their own,” the task would be difficult or incomplete when members are responsible only to know their own task capabilities (especially when group size is large or members cannot communicate on an ongoing basis to figure out the others’ knowledge by themselves). In order to lead group members to achieve common goals in the most effective way, group leaders can identify the unique knowledge/ability/skills of each member and serve as the transactive memory storage function for their group.

Finally, group leaders need to coordinate and integrate member’s efforts and task output – a function that is hard to be implemented by group members themselves. Organizational researchers have argued that individuals generally fail to coordinate effectively due to the tendency to focus on (a) the process of partitioning the task more than the process of integration (i.e., partition focus) and (b) individual components when they try to diagnose problems or intervene to provide a solution (i.e., component focus) (Heath & Staudenmayer, 2000). The partition and component foci are problematic, but difficult to avoid because groups do need to divide tasks (i.e., division of labor) in order to increase task efficiency and output quality – capitalizing on the diversity of individual abilities, skills, and knowledge. Thus, group leaders, who have an understanding of each member’s unique capabilities and his/her task role, need to integrate the divided task role and output, thereby making quality problem-solving possible.

Hence, development of leadership theory that focuses on within-group coordination of information and resources is a productive direction for leadership study. This function focuses on how leaders align group members’ action by influencing group structure (i.e., interdependence), serving as group memory storage, and integrating efforts and task output.

Function 3: Group Affect Management – How Do We Feel About the Group?

A third critical function for effective team leadership is a group-level factor that focuses on emergent states in groups such as norms, group affect, and cohesion (Cohen & Bailey, 1997). Emergent states are distinct concepts from interactional processes in that they describe “... motivational and affective states of teams rather than nature of their member interactions; thus, they denote team qualities that represent member attitudes, values, cognitions, and motivations instead of interaction processes or relational actions among team members” (Marks et al., 2001, p. 357). In fact, group interpersonal processes can produce the emergent states which can also cyclically influence the group processes. For instance, a group which experiences high conflict would most likely manifest low cohesion, which then increases the subsequent level of conflict.

Importantly, previous group studies have found that emergent states are substantial group phenomena which affect group outcomes in a complex way (Cohen & Bailey, 1997). For example, group cohesion has been found to generally increase group performance (Gully, Devine, & Whitney, 1995) but it can also sometimes impair group decision-making quality (Mullen, Anthony, Salas, & Driskell, 1993). Also, several studies found that group affective states influence group processes and performance (e.g., Barsade, 2002; Bartel & Saavedra, 2000). Managing emergent states becomes more important given the fact that the states such as norms, cohesion, and affective tone tend to dynamically change, thereby exerting different influences on outcomes over time. Therefore, group leaders are needed to manage the emergent states in their groups. To be specific, we suggest that leaders need to (1) understand what types and level of affective and motivational states their groups are undergoing and (2) manage the states in order to shape the group states in a constructive direction. It is important for leaders to scan and understand the emotional states that their group experiences. Group leaders should sense what kinds of norms operate in their groups (e.g., norms on how members should interact

with each other or how things should be done in the group), understand how the group members view and evaluate themselves (e.g., collective efficacy or collective esteem), or perceive what kinds of affect prevail or are inhibited in their groups (e.g., group affective tone, psychological safety, or evaluative apprehension). On a related note, the ability to attend to and recognize the composition of various shared emotions in a group has been hypothesized as a critical qualification for a leader, especially when the group undergoes strategic change which can generate significant emotional reactions from the group members (Sanchez-Burks & Huy, 2009).

Emotional Intelligence theory (e.g., Goleman, 1999) suggests that beyond perceiving the emergent states in situ, leaders can strengthen them or change them to other states depending on the types of group outcomes they pursue. In fact, previous studies found that leaders can influence emergent states of groups in many ways. When it comes to group affect, the shared affective states of group can be influenced by group leaders' affective states through an emotional contagion process (Sy, Côté, & Saavedra, 2005). Groups' motivational and evaluative views on themselves such as collective efficacy can be shaped through specific group leader behavior such as empowering (Srivastava, Bartol, & Locke, 2006). Group leaders were found to influence norms about inclusion and equality in diverse groups through their relationship building with each group member (Nishii & Mayer, 2009). Thus, leaders can reinforce or reshape emergent states of their groups by displaying their affect and emotion, and relationship building with group members.

Hence, a good group-level theory of leadership should be developed to highlight the function leaders engage in to influence group emergent states and manage the affective experience of the whole group.

Function 4: Bringing Information/Resources into the Group – Who Are We? How Do We Manage the Flow of Resources In and Out?

An important and unique feature of group versus individual or mass leadership is that boundary management is a critical issue. Work groups are embedded in a larger organization, and the boundary of one group is what distinguishes it from other groups in the organization, as well as from the organization as a whole. Although relatively less emphasized in small group literature, this concept of boundary or demarcation is highlighted in the open-system perspective of organizational literature (Scott, 2004), which

proposes that for survival, collective units such as groups or organizations should externally interact with their environment "beyond their boundary." When it comes to small group settings, we suggest that the existence of group boundary brings out two significant challenges to group effectiveness, thereby raising the need for group leaders to engage in boundary management.

The first boundary challenge that a group faces is to effectively coordinate with other parts of organization beyond the group itself, in order to regulate the flow of resources and information. This issue has been widely researched in the information processing perspective of organizations (e.g., Tushman & Nadler, 1978). From this view, groups in large organizations generally face uncertainty* (i.e., absence of information), which consequently requires gathering, interpreting, and synthesis of information from others outside their groups. To make matters even more complicated, coordination problems arise from unit (i.e., group) specialization which discourage the use of common norms and languages (Heath & Staudenmayer, 2000). Consequently, research in this tradition proposes that people whose roles include significant boundary spanning (i.e., leaders) need to actively communicate with other parts of organization in order to collect and process information, thereby reducing the uncertainty that their group faces, as well as increasing the coordination between groups (Tushman, 1977; Tushman & Katz, 1980; Tushman & Nadler, 1978). Although not explicitly mentioned, many studies that examine leader external activities (i.e., boundary management) seem to take this theoretical position by highlighting information/resource transfer and communication function of boundary management (Ancona, 1990; Ancona & Caldwell, 1988, 1992).

In addition to coordination issues, however, group boundary management also includes identity formation challenges. Specifically, the challenge is how to balance both *unique group identity* and *common organizational identity* in work groups simultaneously. Social psychologists suggest that having a distinguishable and positive group identity is important for individuals since it satisfies individual basic needs such as self-enhancement (i.e., self-esteem), uncertainty reduction, and distinctiveness (Brewer, 1991; Hogg & Terry, 2000). On the other hand, however, strong group identity might be detrimental for the organization as a whole since group identification might lead to intergroup bias, which prevents group members from cooperating with other parts of organization (Hewstone, Rubin, & Willis, 2002; Richter, West, Dick, & Dawson, 2006). This suggests that group leaders should not only provide a unique sense of group identity but

also a common sense of organizational identity to their group members, which is in line with dual identification perspective arguing that simultaneous activation of subgroup (e.g., group) and superordinate (e.g., organization) identity can decrease intergroup bias (Gaertner, Dovidio, & Bachman, 1996).

We propose that leader external boundary management, or active interaction with other part of organization, can be one way to deal with the tension between a unique group identity and a common organization identity. According to the self-categorization theory and social identity theory (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), individuals' multiple group membership and identities are selectively and dynamically activated (and become dominant) depending on the social context that the individuals are placed in. We suppose that leader boundary management can operate as the social context, thus affecting the extent to which members' group and organizational identity becomes salient and stay dominant. For instance, leaders' active boundary management might heighten group members' organizational identity by making perceived group boundary more permeable and providing group members the actual opportunities to interact with other part of organization. This reinforced organizational identity might lead to a decreased saliency of group identity, due to a mostly dissolved group boundary (Choi, 2002). On the other hand, however, leader boundary management can heighten group identity as well by exposing their group members to reference group (i.e., other groups) for intergroup comparison or potentially activating the group members' distinctiveness motives (Brewer, 1991; Choi, 2002). In a similar vein, leaders have traditionally been seen as the core links between work group (Likert, 1961) and the organization as a whole, and leader boundary-spanning activities were focused as a way to manage the boundary between teams and entire organization (or upper management) (Druskat & Wheeler, 2003).

Hence, a good group-level leadership theory would need to take account of the function leaders play in boundary management between their group and others. We need to develop a better understanding of how and why leader boundary management influences identity formation within groups as well as intergroup coordination. To our knowledge, not only group studies in general (Choi, 2002) but also leadership studies have relatively paid little attention to external boundary activities. Hence, the processes underlying leader boundary management and group/organization identity as well as intergroup coordination would be the promising venue for leadership theory development.

A LOOK AT EXISTING LEADERSHIP THEORIES AGAINST OUR PROPOSED LEADERSHIP FUNCTIONS

Having established the functions of leadership and thus criteria for a useful theory of group or team-level leadership, we turn now to looking at a selection of the major theoretical perspectives in the leadership literature to discuss how well they are currently situated to help scholars interested in pursuing research on leadership in small groups. We review the key ideas and propositions of each theory and then present a brief discussion of how well it compares against the criteria we have just established.

Social Identity Theory of Leadership

The social identity theory of leadership or prototype-based leadership theory is a clear discipline-based and process-oriented theory (Hogg, 2001). Building on the social identity and self-categorization theories (Tajfel & Turner, 1979), Hogg suggests that it is the prototypicality that confers a leader the ability to influence group members, through group members' social categorization and prototype-based social attraction processes. In other words, group members who are more "prototypical" or ideal as a member are those who are most likely to be recognized as a leader and are most likely to be influential in leadership roles.

According to social categorization theory, individuals divide the social world into in-groups and out-groups in order to gain a positive sense of self (i.e., self-enhancement motives) or reduce subjective uncertainty involved in social world (i.e., uncertainty-reduction motives) by forming distinctive group membership. In the process of social categorization, individual perception of prototype emerges, thereby defining what it means to be a member of a certain group (prototypes as fuzzy sets of attributes that defined and prescribe attitudes, feelings, and behaviors that characterize one group and distinguish it from other groups, Hogg, 2001, p. 187). The central argument of the social identity theory of leadership is that an individual emerges and endures as a leader in a group when the person fits the prototype of the groups (especially when group members highly identify themselves with their groups) (Northouse, 2006). Since a prototypical individual in a group is seen to best embody the group behavior, to be socially attractive, and to have intrinsic leadership ability (through internal

attributional process) (Hogg, 2001), the person gets to obtain high influence in the group.

Comparison Against Leadership Functions

This theory is clearly focused on managing group boundaries (Function 4). Leaders emerge because they help define us as a group, and they are more influential when they resemble the group prototype. The theory's focus on social identity and categorization process can offer implication for developing a new group-level leadership theory focused on external boundary management. Leader boundary management is highly likely to affect group members' group and organization identity formation (and consequently identification), through its influence on perceived social context of group members which can change saliency of group membership and identity. Thus, by explicating the processes through which group members' identity are shaped by leader boundary management, the social identity theory of leadership can further enhance our understanding of leadership process in group settings. There is little in this theory of leadership that addresses the other criteria, but it is particularly silent on issues of information management and coordination activities in groups (i.e., Function 2). The theory hypothesizes about who will be influential and why, but not how successful they might be at coordination of group effort or working across representation gaps.

Team-Member and Leader-Member Exchange Theory

The Team-Member and Leader-Member Exchange theory (TMX; Seers, 1989) was first suggested to advance role-making literature which explains how individual employees figure out and confirm his/her role in work settings through their interpersonal interaction with others. To be specific, based on social exchange theory and organizational role theory, the role-making concept suggests that individual employees' understanding of role and actual implementation of the role is the product of their interaction with role sender, who are usually the employees' supervisor and coworkers. Although supervisors had been largely focused on as role senders in leader-member exchange theory, there were little studies exploring group member (i.e., coworkers) as role senders. This is the motivation behind TMX study.

The TMX concept captures the individual group member's perception of his or her exchange relationship with the peer group as a whole. As LMX

theory proposes that a group leader engages in role-making with each group member, thereby ending up developing high-quality exchange relationship characterized by expanded responsibility and trust, or low-quality relationship characterized by formal job description, each individual group members is assumed to develop reciprocal relationships with other group members. Compared to LMX, however, since many employees spend more time interacting with peers, and also have multiple peer group members with whom to interact, peer groups have been suggested to have greater influence in the role-making process than does the supervisor at least in some settings. TMX contributed significantly to predictions of job satisfaction and positively related to performance (Seers, 1989).

Comparison Against Leadership Functions

TMX theory has merit in that it regards group as unit. That is, rather than examining the exchange quality at the dyadic level as LMX, the theory assumes that each group member builds an exchange relationship with group as a whole, thereby positioning itself as a clear group-level theory. However, it does not say anything about how leaders can intervene the relational interaction among group members, which can be a productive venue for a group-level *leadership* theory (Function 1). Thus, in order to become a complete group-level leadership theory, TMX can be incorporated with LMX (which examines dyadic relationships between members and leaders), thus developing the explanation of how leaders develop and influence a group-level relationship with entire group, as well as its members, and which can address the affective and motivational emergent state of the group (i.e., Function 3).

The Evolutionary Perspective of Leadership

The evolutionary perspective on leadership (e.g., Van Vugt, 2006; Van Vugt, Hogan, & Kaiser, 2008) suggests two things. First, it suggests that the natural and fundamental state of existence for human beings is in small groups. Second, it suggests that leadership and followership are natural states designed to solve human problems, and that the relationship between leaders and followers is naturally ambivalent as followers are always suspicious of leaders' motives (Nicholson, 2000). Like TMX, it is a true group-level analysis of leaders.

Comparison Against Leadership Functions

The evolutionary perspective on leadership addresses the issue of how groups manage their boundaries (Function 4) by focusing on group leader's role in intergroup competition. It also provides implications for interpersonal dynamics and emergent state management (Functions 1 and 3) in that leaders are assumed to intervene within-group conflict before it overwhelms whole group members. However, like other evolutionary theories, the purpose of this perspective is offering a fundamental root explanation of a social phenomenon (i.e., who becomes the leader or acquires formal authority in groups) rather than suggesting descriptive or normative explanations of what leaders do (should) once they are in power. Thus, although we appreciate the value of this new lens on leadership, it would not be comparable to other leadership theories.

Multiple Linkage Model

Yukl's multiple linkage model (2006) is a comprehensive model presenting effective leader behaviors in group settings. Based on earlier models of leadership and group effectiveness, the models delineate in how leader behavior and situational variables interact to affect group-level intervening variables, which he suggests to be the determinants of group performance. The intervening variables include task commitment (i.e., the extent to which group members strive to attain a high level of performance and show a high degree of personal commitment to group objective), ability and role clarity (i.e., the extent to which group members understand their individual job responsibility and have the skills to do it), organization of the work (i.e., the extent to which effective performance strategies are used and the work is efficiently organized), cooperation and mutual trust (i.e., the extent to which group members trust each other and identify with the work group), resource and support (i.e., the extent to which the group obtains required resource and support from other units), and external coordination (i.e., the extent to which activities of the group are synchronized with the interdependent activities in other parts of the organization and other organization). These intervening variables are proposed to interact with each other to determine the effectiveness of a group. If there is a serious deficiency in one intervening variable, group effectiveness lowers; the relative importance of the intervening variables depends on the type of groups and other aspects of the situation.

The basic argument of this model is that any leader actions that can correct the deficiencies in the above intervening variables would improve

group effectiveness (Yukl, 2006). Thus, group leader's role is to recognize specific deficiencies in the intervening variables and to act skillfully to engage in actions that can correct the deficiencies. Also, the model proposes various situational variables that can "substitute" leader behavior (i.e., factors that can influence the intervening variables independent of leader behavior) and "neutralize" the effect of leader behavior (i.e., factors that limit a leader's discretion in making changes and reacting to problems). In addition, in the long run, effective group leaders can modify the situational factors in a favorable way (i.e., increase substitute and reduce neutralizers), thus making group effectiveness more possible.

Comparison Against Leadership Functions

The multiple linkage model is clearly at the group level in that it (1) aims to explain how leadership can affect group effectiveness and (2) focuses on group-level intervening processes (intervening variables in Yukl's term). In fact, the list of intervening variables embraces all four of the criteria we suggested above. "External boundary management" can be seen as the action to achieve external coordination. "Within-group coordination management" can help group members to get clarity about their roles. "Internal interpersonal dynamic management" and "(motivational and affective) Emergent state management" can build mutual trust and cooperation among group members. In this sense, one may view that the model to meet all our criteria, thus showing the best example we could find of a group-level leadership theory.

That being said, the multiple linkage model is not a perfect group-level model of leadership because the theory does not explicate specific processes through which the three components of the model (i.e., leader behavior, intervening variables, and situational variables) interacts with each other to determine group effectiveness. To be specific, this model does not suggest a theoretical mechanism that can explain how leader behaviors change each intervening variable or does not clearly distinguish among the intervening variables (e.g., whether "cooperation and mutual trust" is group process or emergent state), the distinction that can help to elucidate underlying mechanism. Also, although it was explicitly assumed that the multiple intervening variables interact with each other in determining group effectiveness, in what way they interact is not specified. In fact, Yukl (2006) himself admits some of these weakness of the multiple linkage model, thereby stating that it is still more a "general conceptual framework than a refined theory (p. 237)." Therefore, more theoretical consideration (such as clarification of processes underlying the interaction among the leader

behavior, intervening variables, and situational variables) as well as among intervening variables is required to make this model as a good leadership theory.

CONCLUSIONS

Our purpose in this chapter has been to point groups and teams scholars in the direction of a functional theory of team leadership, first by considering what a comprehensive theory of group-level leadership might look like, and then applying those criteria to a variety of well-known theories of leadership. In doing this, we have reached a number of conclusions about the state of affairs for the study of leadership in small groups. First, there is both "a lot" out there already in the area of leadership. It is an area of research that has already received a great deal of attention in the scholarly and popular press. However, there is surprisingly little out there that looks specifically at the issue of leadership of small groups – most of the existing literature looks either at the dyadic relationship between leader and follower, or it looks at mass leadership where the leader is unlikely to have direct contact with followers. Group leadership is clearly different from these two streams in the existing literature.

The second and related conclusion we have reached is the observation that the multiple linkage model of leadership by Yukl (2006) is the only theory of leadership that fulfils all four of our basic functions for leadership at the group-level. However, even that theory will not fully meet groups scholars' needs as a leadership theory because the model does not suggest a theoretical mechanism that links leader behaviors with specific group-level intervening variables. This suggests the need for more work on models or theories of group leadership. Given that there are no fully adequate models or theories of group leadership, we strongly encourage small groups researchers to join us in working in this important topic area. We as small group researchers need to think about and develop leadership models that work for us at the team level.

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