Small Group Research
41(5) 621–651

DOI: 10.1177/1046496410373808
http://sgr.sagepub.com
SAGE

Understanding the Motivational Contingencies of Team Leadership

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Abstract

Despite increased research on team leadership, little is known about the conditions under which coaching versus directive forms of team leadership are more effective, or the processes through which team leadership styles influence team outcomes. In the present study, the authors found that coaching leadership was more effective than directive leadership when the team leader was highly charismatic and less effective than directive leadership when the team leader lacked charisma. Directive leadership was more effective than coaching leadership when team members were high in self-efficacy and less effective than coaching leadership when team members lacked self-efficacy. The moderating effects of leader charisma and team member self-efficacy were mediated through motivational pathways involving team member effort.

Keywords

teams, leadership, motivation

A growing body of research highlights how important leader behaviors are for team performance (DeRue, Nahrgang, Wellman, & Humphrey, in press;

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Druskat & Wheeler, 2003; Durham, Knight, & Locke, 1997). In fact, Zaccaro, Rittman, and Marks (2001) suggest that effective leadership is one of the more important factors in the success of organizational teams. Yet at the same time, we still have a limited understanding of how leaders create and manage effective teams (Burke et al., 2006; Kozlowski, Gully, Salas, & Cannon-Bowers, 1996; Zaccaro et al., 2001).

Research indicates that team leaders engage in a variety of behaviors aimed at facilitating team functioning and performance (Morgeson, DeRue, & Karam, 2010). One approach involves encouraging the team to manage its own affairs and developing the team's capacity to function effectively without direct intervention from the team leader. First identified by Manz and Sims (1987), and later analyzed by many other scholars (e.g., Hackman & Wageman, 2005; Morgeson, 2005; Wageman, 2001), this form of leadership focuses on coaching the team and empowering its self-management. This coaching form of leadership is particularly important given that team leaders are sometimes external to a team and not involved in its daily task activities. Using in-depth interviews and survey-based research, Manz and Sims found that team leaders who encourage and coach team self-management via self-observation, self-evaluation, and self-reinforcement were more effective than leaders who did not. Likewise, other researchers have found that supportive coaching by a team leader can lead to more effective group processes, such as learning and adaptation, and ultimately to higher levels of team performance (e.g., Edmondson, 1999; Wageman, 2001). In fact, coaching has been established as an important team leadership behavior in a broad array of contexts, including nursing (Hayes & Kalmakis, 2007), sports (Amorose & Horn, 2000; Reinboth, Duda, & Ntoumanis, 2004), and group therapy (Cohen, Mannarino, & Knudsen, 2005).

In contrast to the coaching form of leadership, some team leaders engage in a more directive style by actively intervening in a team (Morgeson, 2005). This approach involves setting clear expectations and goals, providing instructions to team members, monitoring team member performance, and directly implementing corrective actions in the team. Research indicates that this more directive form of leadership can also enhance team performance. For example, in their study of team self-management, Manz and Sims (1987) also examined more directive forms of leadership and found these directive leader behaviors led to positive team leader evaluations. Likewise, Pearce and Sims (2002) showed that directive leader behaviors can lead to higher team performance.

In their meta-analytic summary, Burke et al. (2006) showed that these different leadership styles (coaching vs. directive) can both have positive effects

on team performance. But at the same time, there is an emerging recognition in the team leadership literature that the relative effectiveness of these different styles may depend on other factors. For example, Kozlowski, Gully, Salas, et al. (1996) discussed how leader behaviors interact with a team's stage of development to shape team processes and performance. In their model, effective leaders focus on coaching team members and building shared affect and attitudes during early stages of team development but then shift their attention to applying and directing team capabilities later on. Other scholars have argued that the effectiveness of team leader behaviors depends on the nature of a team's context (e.g., novel events that disrupt team functioning; Morgeson, 2005) and such team design features as task interdependence, team size, and resource availability (Wageman, 2001). It seems likely that the relationship between leader behaviors and team performance is contingent on a variety of factors.

Although they recognize the importance of such contingencies, existing models of team leadership suffer from three important limitations. First, the discussion of contingencies in these models is generally limited to factors that are external to the team's members (e.g., task characteristics, team size, event types). A notable exception can be found in a recent study by Yun, Faraj, and Sims (2005), who showed that coaching leadership is more effective for highly experienced teams, but directive leadership is more effective for less experienced teams. This suggests that the characteristics of team members can shape how they respond to coaching and directive behaviors by a leader. We believe that models of team leadership need to incorporate other team member characteristics as potential contingency factors.

A second limitation in existing models of team leadership is that they rarely consider characteristics of the leader and how such characteristics can shape the relationship between leader behaviors and team performance. This is an important theoretical gap because leader characteristics likely influence how effective team leaders are at engaging in different types of behaviors. For example, coaching leadership is aimed at developing team member capabilities and helping team members learn to work together effectively. Leader characteristics (e.g., charisma, social influence skills) that enable someone to be more effective at motivating team members to embrace change should thus enhance the degree to which coaching leadership facilitates team performance.

Finally, existing models of team leadership stop short of identifying the underlying mechanisms that explain any contingencies in the link between leader behavior and team performance. In their review of the team leadership literature, Burke et al. (2006) noted that a key "line of inquiry [for future

research] concerns the identification of the underlying mechanisms via which leadership in teams contributes to both team performance and performance outcomes" (p. 302).

The purpose of our study is to address these limitations by developing a motivationally based contingency model of team leadership. In our model, the relationship between a leader's behaviors and team performance is contingent on the leader's charisma and the efficacy of his or her team members. We consider two specific behavioral approaches to team leadership: a coaching approach and a directive approach. Our focus on coaching and directive leadership draws on and extends prior research that conceptualizes team leadership along these two dimensions (Burke et al., 2006; Yun et al., 2005). Adopting a motivational perspective, we then theorize that coaching and directive leader behaviors interact with leader charisma and team member self-efficacy to differentially affect team performance. We argue that these contingencies operate through their effects on team member motivation, especially the amount of effort that team members devote to their tasks. Thus, not only does our theorizing identify new contingencies in team leadership, but it also extends current theory by offering insight into the underlying motivational mechanisms that explain the team performance implications of complex interactions among team leader behaviors, leader characteristics, and team member characteristics.

Coaching and Directive Forms of Team Leadership

Behavioral perspectives on leadership have flourished since the mid-20th century, and so by now, there are numerous systems for classifying leader behaviors (see Fleishman et al., 1991 for a review). Despite the proliferation of these classification systems, recent reviews suggest there are two basic behavioral approaches to team leadership: a coaching (or developmental), person-focused approach and a directive, task-focused approach (Burke et al., 2006; Pearce et al., 2003).

Leaders engage in coaching behaviors to develop a team's capacity to perform key functions. They do this by encouraging team members to take responsibility for, and work together to fulfill, such functions. Coaching leaders help team members (when needed) to make coordinated and task-appropriate use of their collective resources, and they help team members through any performance problems that arise (Hackman & Wageman, 2005). Coaching leaders refrain from actively intervening in and assuming responsibility for the day-to-day tasks assigned to team members. When performance problems

occur, coaching leaders leverage these episodes as learning and developmental opportunities for team members, rather than directly intervening in the task. Such leaders consistently encourage team members to assume responsibility for their own actions and performance.

In comparison, directive leadership represents a more active and intrusive approach to team leadership (Pearce et al., 2003). Directive leaders set the team's direction, assign goals for the team and team members, and give team members specific instructions about their tasks, including what is expected of them, how it should be done, and when it must be completed. A directive leader sets clear expectations for the team and then monitors events to make sure the team is performing according to plan. When team members are not performing well, directive leaders not only point out the performance problems, but also direct poorly performing team members, telling them what to do and how to do it.

In our study, we examined the conditions under which each of these approaches to team leadership is most effective. Existing research does not sufficiently consider possible contingencies in team leadership or the underlying mechanisms that explain these relationships. We theorized that the effectiveness of coaching versus directive leadership depends on the characteristics of both a team's leader and those of the team's members. In other words, either a coaching or a directive approach to leadership can be effective when employed by the right leader, in the right context. In the next section, we identify two important contingency factors and explain how they can influence team performance through their impact on the efforts of team members.

Contingencies in Team Leadership: A Motivational Perspective

In our contingency model of team leadership, we posit that team member motivation is one mechanism through which coaching and directive leadership affect team performance. Given our interest in motivational factors, we focused on leader charisma as a leader attribute that can moderate how directive and coaching team leadership influence team performance. Charisma is important because it is one of the key resources that leaders can use to motivate their followers (Bass, 1985; Ilies, Judge, & Wagner, 2006). We also focused on the moderating effects of team members' perceptions of self-efficacy. Efficacy beliefs are important because they represent an underlying source of effort among team members that can be directed at a team's task (Bandura, 1997). In this sense, leader charisma and team member self-efficacy

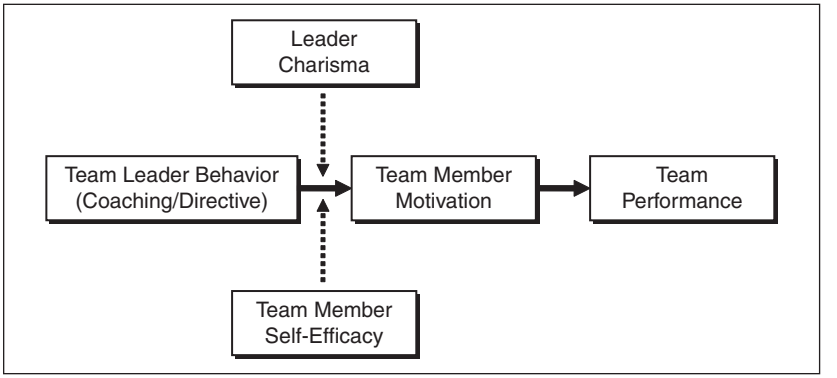

Figure 1. Contingencies in team leadership: A motivational perspective

serve as distinct contingency factors that originate from different sources, but may operate through a common motivational pathway. An illustration of our model is presented in Figure 1.

Leader Charisma

Charismatic leaders are those who "by the force of their personal abilities are capable of having profound and extraordinary effects on followers" (House & Baetz, 1979, p. 399). Charismatic leaders are often seen as agents of change who are particularly skilled at improving the performance of followers and seeking radical reforms in them to achieve a vision or goal (Conger & Kanungo, 1987). In essence, charisma is a resource that can enable leaders to be more effective at facilitating change by developing followers' beliefs and actions in ways that ultimately produce more effective methods for accomplishing an objective. The potential for leader charisma to positively affect group outcomes has been illustrated across several studies done in many organizational contexts (Bass, 1990; Dvir, Eden, Avolio, & Shamir, 2002; Lowe, Kroeck, & Sivasubramaniam, 1996).

First, we focus on how leader charisma affects coaching behaviors. For coaching leaders, the primary aim is to develop team members' individual capabilities and their ability to work together effectively. As Hackman and Wageman (2005) note, coaching leaders "help members learn new and more effective team behaviors" (p. 270). Coaching leaders help team members

align their performance behaviors with the demands of the task environment and seek to foster the development of team members' skills and knowledge related to the team task (Hackman & Wageman, 2005; Kozlowski, Gully, McHugh, Salas, & Cannon-Bowers, 1996; Schwartz, 1994). So, coaching leaders who are charismatic should be more effective at fostering change and developing their teams. In contrast, coaching leaders who lack charisma may find it difficult to inspire team members in ways that foster development and encourage the team to find ways to perform its tasks better. Whereas high levels of charisma are an asset for coaching leaders, low levels of charisma are a liability.

We posit that charisma is an asset for coaching leaders because charisma affects team members' motivation. Theories of charismatic leadership often emphasize motivational factors (Bass, 1985; House, 1977), and research suggests that charismatic leaders produce heightened levels of activation in followers, which lead in turn to increased levels of effort and motivation (Ilies et al., 2006; Shamir, Zakay, Breinin, & Popper, 1998).

In contrast to coaching leadership, directive leadership is much less about developing team members' capabilities. Directive leaders provide team members with a clear course of action by communicating expectations, goals, and specific task instructions. As some have argued, in the substitutes for leadership literature (Dionne, Yammarino, Atwater & James, 2002; Kerr & Jermier, 1978), team members with a clear course of action have less to gain from the inspirational actions of charismatic leaders. There is simply less need for leadership because the team understands its mission and the path required for achieving that mission. The expectations and goals set by a directive leader help team members to focus their efforts. Thus, whereas a lack of charisma can be a liability for coaching leaders, it may not be a problem for directive leaders.

Thus, we hypothesize the following:

Hypothesis 1: The relationship between team leader behaviors and team performance will be moderated by leader charisma such that (a) when leader charisma is high, coaching team leadership will be more effective than directive team leadership and (b) when leader charisma is low, directive team leadership will be more effective than coaching team leadership.

Hypothesis 2: The moderating effect of leader charisma on team leader behaviors will be mediated by team member effort.

Team Member Self-Efficacy

Theories of leadership in general (e.g., Hersey & Blanchard, 1982), and of team leadership in particular (e.g., Kozlowski, Gully, Salas, et al., 1996), often claim that the appropriateness of leader behaviors depends on the followers. Of particular importance is what followers believe about their ability to accomplish the task at hand. These beliefs determine how much task-related effort followers will expend and how long that effort will be sustained in the face of challenging situations (Bandura, 1986; Dweck, 1986; Farr, Hofmann, & Ringenbach, 1993). Moreover, team members often have difficulty focusing on team goals and developing appropriate team strategies, until they are sure that they can perform their own roles effectively (Kozlowski, Gully, Nason, & Smith, 1999). Self-efficacy embodies beliefs relevant to these issues. Self-efficacy is defined as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). Individuals who perceive themselves as efficacious can muster sufficient effort to produce successful outcomes. Individuals who do not perceive themselves as efficacious are less likely to muster and sustain such effort. Meta-analytic evidence supports these claims (Stajkovic & Luthans, 1998).

We theorize that the impact of directive and coaching leadership on team performance will depend on the average level of team member self-efficacy. This is different than collective efficacy, which focuses on beliefs shared among team members about their team's ability to achieve its overall objectives (DeRue, Hollenbeck, Ilgen & Feltz, 2010; Gully, Incalcaterra, Joshi, & Beaubien, 2002; Tasa, Taggar, & Seijts, 2007). We focus on self-efficacy because we believe that individual beliefs about personal abilities, as opposed to any collective beliefs about a team, will be more predictive of team members' motivational reactions to team leader behaviors. This is because motivation and reactions to leader behaviors are individual processes and not the property of a team.

Directive leaders facilitate team performance by setting expectations, giving team members specific instructions, and then monitoring team members' performance for any problems that need to be corrected. When team members have high self-efficacy, the directive leader's expectations and task-specific instructions provide a target toward which team members can direct the effort and motivation that comes from feeling efficacious. Compared with team members with low self-efficacy, those with high self-efficacy are more likely to feel that they can accomplish task objectives. As a result, they are more likely to put forth effort and persist until those

objectives are accomplished. Thus, directive leaders have a much greater pool of team member motivation to draw on when team member self-efficacy is high.

If team members suffer from low self-efficacy, however, then we expect them to respond to directive leadership negatively. Less efficacious team members will feel that they cannot meet the leader's expectations or effectively carry out the leader's instructions, and so they will be less likely to put forth the effort required to accomplish task objectives. In other words, directive leaders are attempting to set expectations and give specific instructions to people who already have low expectations regarding task performance, and who lack the motivation necessary to persist when task objectives are not initially met. As Kozlowski, Gully, Salas, et al.'s (1996) model of team leadership suggests, it is more appropriate for leaders who have followers with low self-efficacy to employ a coaching approach. When coaching their followers, such leaders should try to develop the capacity of team members in ways that enhance their capacity to perform effectively. By taking a coaching approach, a team leader can sometimes build team members' sense of efficacy and reshape their expectancies regarding task performance in ways that increase their motivation and capacity to perform.

Thus, we hypothesize the following:

Hypothesis 3: The relationship between team leader behaviors and team performance will be moderated by team member self-efficacy such that (a) when team member self-efficacy is low, coaching team leadership will be more effective than directive team leadership and (b) when team member self-efficacy is high, directive team leadership will be more effective than coaching team leadership.

Hypothesis 4: The moderating effect of team member self-efficacy on team leader behaviors will be mediated by team member effort.

Method

Research Participants and Task

Research participants were 400 upper-level undergraduate students enrolled in an introductory management course at a large Midwestern university. Their average age was 21.8 years; 53.8% of the participants were male. Each student was part of a team that consisted of four regular members and one leader, resulting in a total of 80 teams. All individuals were randomly

assigned to teams and all teams were randomly assigned to experimental conditions. In return for their participation, the students received class credit and were eligible for a cash prize. At the end of each experimental session, the top performing team based on overall team performance was awarded $10 per team member.

Participants engaged in a dynamic, networked, military command-and-control simulation. The task was a modified version of a simulation called Dynamic Decision Making (DDD; see Hollenbeck et al., 2002 and Moon et al., 2004 for details) that was developed to study team behavior. This version of the simulation was suitable for teams with little or no military experience. In our study, each team engaged in two 30-minute simulation exercises that were the same across all teams. In each exercise, team members were charged with keeping unfriendly targets from moving into a restricted geographic space while allowing friendly targets to travel freely throughout that space. Each team member had four vehicles that he or she could use to travel through and monitor the space.

This task required a high degree of interdependence among team members. For instance, each member was stationed at a single computer terminal and could only monitor a specific portion of the geographic space from that terminal. Individually, no team member could monitor all the targets in the space, but collectively, the team could monitor the entire space and all of the targets. Furthermore, each team member had only a single type of vehicle (four in total), and the vehicles differed in their speed and power. Certain targets could only be disabled by certain types of vehicles. Thus, team members had to work together in order to identify the targets as either friendly or unfriendly and then to successfully engage all the unfriendly targets. Together, these features of the task ensured that team members were interdependent, which met the common definition of teams in the literature (Kozlowski & Bell, 2003).

The team leader was not positioned at a computer terminal. Instead, he or she was free to move around and interact with team members. This provided the team leader with several unique abilities. For example, the leader was the only person who could monitor the entire geographic space. This allowed the leader to monitor team members' actions, identify opportunities and threats for the team, and facilitate team member coordination and communication. Moreover, the team leader was free to interact with team members in ways that were consistent with the leadership manipulation. For example, if the leader needed to coach team members, provide them with instructions, or implement corrective actions, then he or she was free to do so.

Procedure

Each team was scheduled for a 3-hour session. Roles within the teams were randomly assigned. The leader role was assigned first; then the leader was given private instructions according to the experimental condition. Subsequently, the team member roles were assigned.

All individuals and teams, regardless of experimental condition, next received (the same) training on the simulation. This training consisted of two separate modules. First, all participants watched a 15-minute video that introduced them to the simulation. Second, all participants were given hands-on instruction and time to practice all the possible tasks in the simulation. This second module, which lasted approximately 45 minutes, allowed participants to learn the basic computer mouse movements and operations associated with the simulation.

After their training was complete, team members completed an online survey that included a self-efficacy measure. The trainer then informed the team of a performance-based incentive. Teams had an opportunity to earn up to $50 based on their overall performance in the simulation. Prior to the first simulation exercise, teams were given 5 minutes to discuss their strategies for the simulation. Most teams used the entire time exactly in this way. The teams then performed the first of two 30-minute simulations. Between the first and second simulation, the leader was instructed (privately) to lead a team discussion session and prepare the team for the next simulation using behaviors consistent with the leadership manipulation. Teams were given approximately 10 minutes to discuss their performance strategies between the simulations, and again, most teams used the entire time for such discussions. Teams then performed the second simulation. After completing that simulation, team members and their leader completed another survey, which included the measure of leader charisma. Teams were then informed of their performance relative to other teams in the experimental session, and the top performing team was rewarded. To conclude the research session, participants were thanked for their participation.

Manipulations and Measures

Team leader behavior. All teams were randomly assigned to one of two conditions. In the coaching condition, the leader was instructed to support the growth and development of his or her team. In the directive condition, the leader was instructed to set the team's direction and goals, establish expectations for the team, and actively direct the actions of team members by providing

explicit instructions, monitoring team performance for opportunities to make corrective actions, and then implementing those corrective actions. The specific instructions given to team leaders can be found in Appendix A.

We assessed the effectiveness of this manipulation by measuring the degree to which team members perceived their leader as engaging in directive leader behaviors. Two items were used for this manipulation check: "When it comes to my team's work, my team leader gave instructions on how to carry it out" and "My team leader set challenging and realistic goals." Ratings of each item were made using a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). The two ratings made by each person were averaged together to produce a single index (coefficient alpha was .82, indicating that the index had good reliability). We expected team leaders in the directive condition to earn higher index scores than team leaders in the coaching condition, and that is in fact what occurred. The mean index score for leaders in the directive condition ($M = 3.77$) was significantly higher than the mean score for leaders in the coaching condition ($M = 3.53$), $t(df) = 1.81(79)$, $p < .05$, one-tailed. To see whether team members agreed in their assessments of the leader, we computed the intraclass correlation coefficient (ICC) as a test of intermember reliability. James (1982) recommends using the ICC as a criterion for aggregation, and in this case, we found support for aggregation ($ICC_1 = .29$; $ICC_2 = .62$; $p < .01$). These results provided evidence supporting the validity of our leader behavior manipulation.

Leader charisma. After the second simulation, but before team results were shared, team members were asked to rate the leader's charisma using Yukl and Falbe's (1991) measure. This measure included three items (see Appendix B for the actual items). On each item, participants made a rating on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). Once again, an index was created by averaging the ratings together. The coefficient alpha for that index was .88, indicating that it had good reliability, and aggregation analyses again suggested that team members agreed in their assessments of the leader ($ICC_1 = .30$; $ICC_2 = .63$; $p < .01$). We also asked team leaders to rate their own charisma using the same three items, which were also averaged to produce an index of leader charisma ($\alpha = .92$). These self-ratings converged with the team member ratings ($r = .33$; $p < .05$), providing additional support for the charisma measure.

Team member self-efficacy. After the training session, but before the first simulation exercise, each team member completed Quinones's (1995) measure of self-efficacy. This measure included 10 items (see Appendix B). Team members rated each item on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). Ratings across the 10 items were averaged together to produce an

index. The coefficient alpha for that index was .92, indicating that it had good reliability. To obtain an aggregate assessment of team members' self-efficacy, we calculated the mean score for the team. Agreement was unnecessary in this case because we are focused on team members' self-efficacy ratings and therefore used an additive model (Klein & Kozlowski, 2000) for operationalizing the construct.

Team member effort. To assess team member effort, we measured how quickly team members identified and engaged targets. Speed of identification and speed of engagement (two separate variables) provide good measures of effort because all the tasks involved a simple point-and-click operation of the computer mouse, making it unlikely that any skill or ability-related differences among team members would affect how quickly members identified or engaged targets. Speed of identification was operationalized as the number of seconds that elapsed between the time a target appeared in the geographic space and the time that target was identified by a team member. Speed of engagement was operationalized as the number of seconds that elapsed between the time a target appeared in the geographic space and the time that target was engaged by a team member. Because a greater number of seconds reflected slower play, and thus less effort, we reverse-coded each measure so that higher numbers reflected more effort. To obtain an assessment of team members' effort, we calculated the mean score for the team across both simulation exercises. The correlation between speed of identification in the first and second simulations was .74 ($p < .01$); the correlation between speed of engagement in the first and second simulations was .69 ($p < .01$). The correlation between the overall team member effort in the first and second simulations was .71 ($p < .01$). ICC_1 and ICC_2 values for team member effort across the two simulations were .42 and .59, respectively ($p < .01$). So, there was justification for using the mean index across simulations.

Team performance. Teams started each simulation with 50,000 defensive points and 1,000 offensive points. Teams could not gain defensive points, but they could lose defensive points if unfriendly targets entered the restricted geographic space. Teams gained offensive points for each unfriendly target that was destroyed in that space but lost offensive points for mistakenly destroying targets outside the restricted space or destroying friendly targets anywhere. Thus, for each simulation exercise, teams had both an offensive and a defensive score. To assess aggregate team performance, we standardized the data by subtracting the sample mean from each datum, summed the offensive and defensive scores for each simulation, and then took the mean score across both simulations. The correlation for offensive scores across the two simulations was .49 ($p < .01$), and the correlation for defensive scores

across simulations was .71 ($p < .01$). The correlation between overall team performance in the first and second simulation was .59 ($p < .01$). ICC_1 and ICC_2 values for team performance across the two simulations were .59 and .74, respectively ($p < .01$).

Data Analyses

To examine the contingencies associated with team leader behaviors, leader characteristics, and team member characteristics, we used moderated regression analyses. To begin, we dummy coded the team leader behaviors, using coaching behavior as the referent condition (*coaching* = 0; *directive* = 1). All the measured variables were centered by subtracting the variable's mean from each datum, which helps reduce multicollinearity among the variables and their interaction terms (Cohen, Cohen, Aiken, & West, 2003). With team performance as the dependent variable, we then entered team leader behaviors, leader charisma, and team member self-efficacy in the first step of the regression. Next, two interaction terms were created by multiplying the leader behavior dummy code by the leader charisma and by the team member self-efficacy index scores, and then entering these two interaction terms in the second step of the regression. To determine the variance in team performance explained by each interaction, we also conducted separate moderated regression analyses for leader charisma and team member self-efficacy. Moderated regression analysis was used for testing Hypotheses 1 and 3. To test Hypotheses 2 and 4, which suggested that team member effort would mediate the moderating effects of leader charisma and team member self-efficacy, we used Muller, Judd, and Yzerbyt's (2005) methodology for testing mediated moderation.

Results

Table 1 presents the means, standard deviations, and correlations for all the variables. Based on these data, there were moderate levels of leader charisma and team member self-efficacy in our sample. On average, teams required 104 seconds to identify and engage targets in the simulation, which is generally equivalent to the performance levels observed in previous pilot tests with similar ad hoc groups. Our manipulation of team leadership had no significant effect on team member effort or team performance, and probably because of random assignment of leader behavior conditions, was not related to leader charisma or team member self-efficacy. So, any differential effects of coaching versus directive team leadership had to be contingent on other

Table 1. Descriptive Statistics and Correlations

Variable	Mean[a]	*SD*[a]	1	2	3	4	5
1. Leader behavior[b]	0.48	0.50	—				
2. Leader charisma	3.63	0.53	−.04	—			
3. Team member self-efficacy	3.58	0.34	−.06	.03	—		
4. Team member effort	−104.01	18.68	.02	.02	.14	—	
5. Team performance	38671.74	3183.21	.00	.22*	.22*	.61**	—

Note: $N = 80$ teams.
a. Unstandardized.
b. Dummy coded (*coaching* = 0; *directive* = 1).
*$p < .05$. **$p < .01$.

factors. Both leader charisma and team member self-efficacy were positively related to team performance (also see Table 2, Model 1), and team member effort was positively related to team performance. These results offered preliminary evidence that a motivational pathway may be the mechanism that links leadership with team performance.

Hypotheses 1a and 1b predicted that a leader's behavioral style (coaching, directive) would interact with leader charisma to affect team performance. Specifically, when leader charisma was high, we expected coaching leadership to be more effective than directive leadership (Hypothesis 1a). But when leader charisma was low, we expected directive leadership to be more effective than coaching leadership (Hypothesis 1b). As shown in Table 2 (Model 2), leader charisma interacted with leadership behavior in just this way ($\beta = -.22$; $p < .05$). As an aid in understanding the form of the interaction, the relationship between team performance and leader behavior for high and low levels of leader charisma (defined as +1 and −1 standard deviations from the mean, respectively; see Aiken & West, 1991) is shown in Figure 2. As expected, coaching leaders who were highly charismatic fostered higher levels of team performance than did directive leaders or coaching leaders who were not very charismatic. Moreover, directive team leaders fostered higher levels of team performance than coaching team leaders who lacked charisma. We conducted a simple slopes analysis for this interaction and found that the difference between coaching and directive team leaders was significant for low-charisma leaders ($p < .01$), but not for high-charisma ones ($p = .28$). Hypotheses 1a and 1b were thus supported.

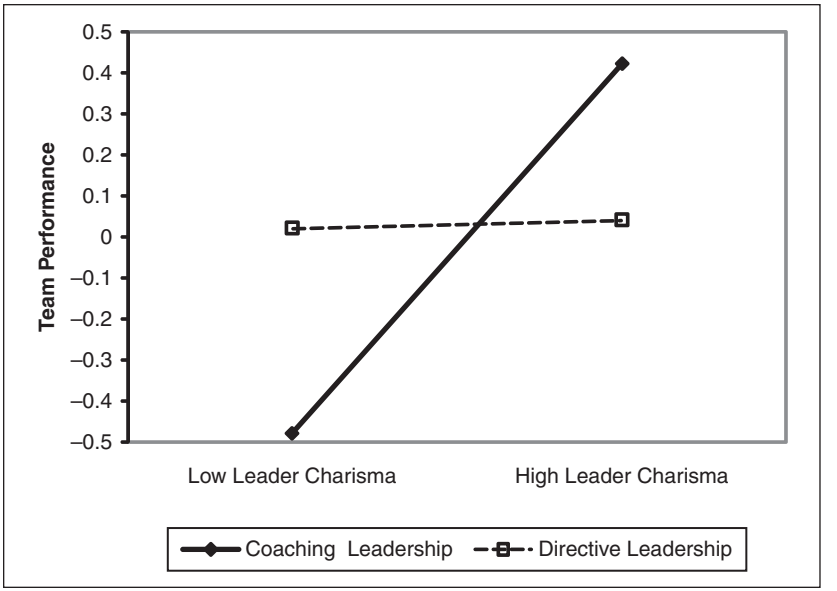

Figure 2. Interactive effects of leader behavior and leader charisma on team performance

In Hypothesis 2, we predicted that team member effort would mediate the interactive effect of leader charisma and coaching leadership on team performance. To provide evidence of mediated moderation, a set of data must meet three conditions (Muller et al., 2005). First, the independent variable (leader behavior) must interact with the moderator (leader charisma) to affect the outcome of interest (team performance). Our tests of Hypothesis 1 showed that the data met this first condition. Second, the interaction between leader behavior and leader charisma must predict the mediator (team member effort). To test this condition, we conducted a separate hierarchical regression analysis in which team member effort was predicted from leader behavior, leader charisma, and the interaction between those variables. As shown in Table 3, leader behavior indeed interacted (though the effect was only marginally significant) with leader charisma ($\beta = -.20$; $p < .10$) to influence team member effort. The data thus met the second condition for mediated moderation. The third and final condition required that the interaction between leader behavior and leader charisma be reduced in magnitude (and become nonsignificant for full mediated moderation) when team member

Table 2. Results of Hierarchical Regression Analysis Predicting Team Performance From Leader Behavior, Leader Charisma, Team Member Self-Efficacy, and Team Member Effort

	β		
Independent Variable	Model 1: Main Effects	Model 2: Moderated Effects	Model 3: Mediated Moderation Effects
Leader behavior[a]	.03	.03	.01
Leader charisma	.22*	.23*	.21*
Team member self-efficacy	.22*	.24*	.15
Leader behavior × leader charisma		−.22*	−.11
Leader behavior × team member self-efficacy		.22*	.09
Team member effort			.54**
R^2	.10	.19	.45
ΔR^2		.09*	.26**
F	2.76*	4.18*	34.32**
ΔF		1.42*	30.14**

Note: N = 80 teams.
a. Dummy coded (*coaching* = 0; *directive* = 1).
*p < .05. **p < .01.

effort was included as a predictor of team performance. As shown in Table 2 (Model 3), the interaction term for leader behavior and leader charisma dropped from −.22 to −.11 and became nonsignificant when team member effort was added to the regression. Thus, team member effort fully mediated the interactive effect of leader behavior and leader charisma on team performance, supporting Hypothesis 2.

Hypotheses 3a and 3b suggested that leadership behavior (coaching vs. directive) would interact with team member self-efficacy to influence team performance. Specifically, when team members were low in self-efficacy, we expected coaching leadership to be more effective than directive leadership (Hypothesis 3a). In contrast, when team members were high in self-efficacy, we expected directive leadership to be more effective than coaching leadership (Hypothesis 3b). As shown in Table 2 (Model 2), team member self-efficacy indeed interacted with leader behavior (β = .22; p < .05) to predict team performance. To help understand the form of this interaction, the relationship between team performance and leader behavior for high and low levels of team member self-efficacy (defined as +1 and −1 standard deviations from

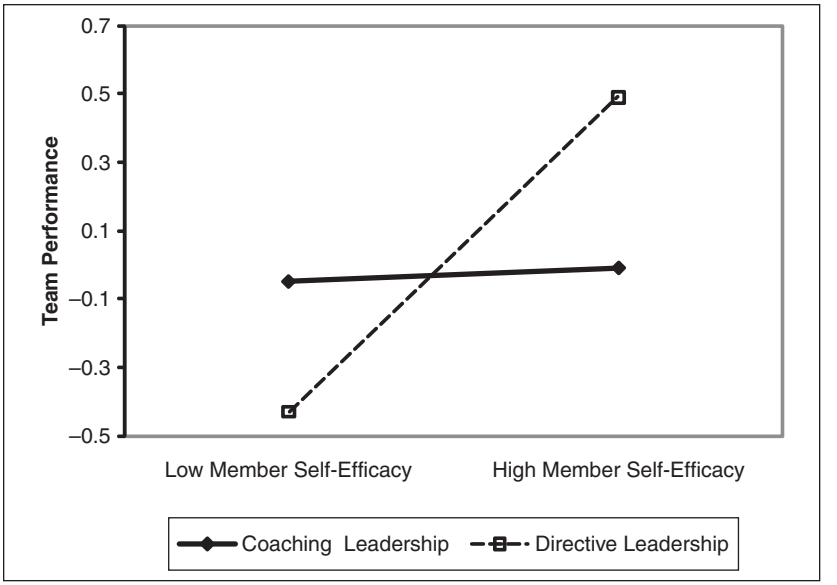

Figure 3. Interactive effects of leader behavior and team member self-efficacy on team performance

the mean, respectively; see Aiken & West, 1991) is shown in Figure 3. This figure shows that directive leadership produced higher levels of team performance than coaching leadership when team members were high in self-efficacy. When team members were low in self-efficacy, however, coaching leaders produced higher levels of team performance than did directive leaders. We conducted a simple slopes analysis for this interaction and found that the difference between coaching and directive leaders was significant when team member self-efficacy was low ($p < .01$), but not when it was high ($p = .21$). Hypotheses 3a and 3b were thus supported.

Hypothesis 4 predicted that team member effort would mediate the interactive effect of team member self-efficacy and team leader behaviors on team performance. To test for mediated moderation, we again followed the procedure outlined by Muller et al. (2005). The support we found for Hypothesis 3 met the first of the three conditions. And as shown in Table 3, team leader behavior and team member self-efficacy had no main effects on team member effort, but they did have an interactive effect ($\beta = .23$; $p < .05$), so the second condition was also met. Finally, when team member effort was included

Table 3. Results of Hierarchical Regression Analysis Predicting Team Member Effort From Leader Behavior, Leader Charisma, and Team Member Self-Efficacy

	β	
Independent Variable	Main Effects	Moderated Effects
Leader behavior[a]	.03	.03
Leader charisma	.14	.16
Team member self-efficacy	.02	.02
Leader behavior × leader charisma		−.20†
Leader behavior × team member self-efficacy		.23*
R^2	.02	.11
ΔR^2		.09*
F	0.51	3.71*
ΔF		3.20*

Note: N = 80 teams.
a. Dummy coded (*coaching* = 0; *directive* = 1).
†$p < .10$. *$p < .05$. **$p < .01$.

as a predictor of team performance, the interaction between leader behavior and team member self-efficacy was reduced in magnitude (from .22 to .09) and became nonsignificant (see Model 3 in Table 2). Thus, team member effort fully mediated the interactive effect of team leader behavior and team member self-efficacy on team performance, supporting Hypothesis 4.

Discussion

The purpose of the present study was to examine selected contingencies in the relationship between team leader behaviors and team performance. Specifically, we investigated how leader charisma and team member self-efficacy interact with two different approaches to leadership (coaching and directive) to influence team member motivation and overall team performance. Our results suggest that leader charisma and team member self-efficacy each have unique effects on the relationship between team leadership, team member effort, and overall team performance. A coaching approach to team leadership had a stronger positive effect on team performance when the leader was highly charismatic, but coaching leadership was less effective than directive leadership when leader charisma was low. Charisma was thus an important asset for coaching leaders. Moreover, we

found that when team member self-efficacy was low, a coaching approach to leadership was more effective, but when team member self-efficacy was high, a directive approach resulted in higher team performance. These interactions were mediated by team member effort.

Strengths and Limitations

Our study had several strengths that should be noted. First, much of the existing literature on team leadership relies on subjective measures of team processes and performance. In contrast, our study uses objective measures of team member effort and team performance, which helps avoid many of the methodological problems associated with self-report data and enabled us to empirically link team leader behaviors with team member effort and overall team performance.

A second strength of our study was its ability to assess causal mechanisms. We manipulated team leader behaviors and controlled the team context in ways that would be nearly impossible in a field setting. For example, in field settings, teams often differ on a variety of meaningful factors (e.g., task characteristics, developmental stages), and these between-team differences would make it difficult to isolate the motivational and performance implications of contingencies associated with directive and coaching form of team leadership. By conducting a controlled experiment, we were able to isolate the effects of team leadership and rule out other factors as potential explanations for our results.

Finally, the importance of contingencies is well-documented in the leadership literature (see Vroom & Jago, 2007 for a review). However, scholars often note how rarely researchers have studied the underlying theoretical mechanisms that explain these contingencies. In our study, we used mediated moderation analyses (Muller et al., 2005) to show empirically that team member motivation mediates key contingencies in team leadership.

Notwithstanding these strengths, our study also had some limitations that should be noted and might guide future research. First, we tested our hypotheses via a laboratory experiment with college students, so it is not clear to what extent our findings will generalize beyond this setting. For this reason, we encourage researchers to test our theoretical propositions in other contexts, and examine whether our findings generalize to field settings where team leaders must adapt to changing work demands and may have a harder time assessing the efficacy of individual team members. Another potential limitation of our study concerns the manipulation of team leadership. Because leaders were selected randomly and leader behaviors were manipulated, it is

not clear if leaders selected through natural organizational processes or leaders whose behaviors vary more naturally would display the same pattern of relationships found in our study. Also, leaders selected at random might not have the same credibility with followers, or identify as strongly with the leadership role, as leaders formally appointed to leadership roles by an organization (DeRue & Ashford, in press; DeRue, Ashford, & Cotton, 2009). These credibility and identification processes may influence how our findings generalize to field settings. We also tried to minimize (within conditions) any variability in leadership behaviors. As a result, our manipulation may have produced even stronger effects than one would observe in field settings. And we encourage other researchers to focus not only on the actual behavior of leaders, but also on the intentions underling that behavior. It would also be interesting to explicitly model and test the impact of blended leadership behaviors that mix the coaching and directive approaches. Finally, we encourage researchers to consider the possibility that our model may be recursive—the efforts and performance of team members may influence leader behaviors.

Implications for Theory and Practice

Our study contributes to the understanding of team leadership in several unique ways and thus has important implications for both theory and practice. First, current theory and research on leadership has generally considered a limited set of contingencies, focusing primarily on features of the situation (e.g., event types) or on a team's task (e.g., task interdependence). Contrary to traditional leadership theories (e.g., House & Mitchell, 1974), theories of team leadership have generally overlooked the issue of whether the effectiveness of different team leader behaviors is contingent on the personal characteristics of the leader or those of team members. In our study, we extended existing models of team leadership by showing that both leader charisma and team member self-efficacy serve as important boundary conditions on the relationship between leader behaviors and team performance.

Our contingency model of team leadership has several important implications for managerial practice in organizations. For one thing, team leaders must find a match between their behavioral approach to leadership, their own personal characteristics, and the characteristics of their team's members. Only when a match occurs will team leaders be able to effectively facilitate key team processes and generate high levels of team performance. Thus, our findings suggest that it might be important for team leaders to adapt their behavioral approach to circumstances over time. In particular, as team members develop a stronger sense of self-efficacy, team leaders should try to

adapt their behavior accordingly. For example, coaching leadership will help develop team member self-efficacy, but as team member efficacy grows, directive leadership will be necessary to focus that efficacy and the resulting effort toward task accomplishment. One implication of this finding is that leaders must be able to accurately identify team members' self-efficacy beliefs. Although our study did not explicitly examine adaptations in leadership behavior over time, or the ability of leaders to identity team members' efficacy beliefs, our results imply that moving from a coaching to a directive form of leadership as a team develops should (if it can be done) be helpful.

Interestingly, this conclusion runs counter to suggestions that leaders should act in a *less* directive manner as a team develops (Kozlowski, Gully, Salas, et al., 1996) and its members acquire a clearer understanding of performance demands. One way to reconcile this apparent contradiction is to recognize that directive forms of team leadership do not necessarily imply micromanagement. An important role of team leaders is to help provide broader strategic direction and help establish challenging team goals, two forms of direction that do not require strong hierarchical control. Future research should investigate the extent to which team leaders can effectively adapt their behavioral approach to leadership and how that adaptation process influences team functioning, particularly as the team develops.

Finally, the contingencies identified in our study offer insight into how organizations might select and assign team leaders. For example, if a particular team needs coaching and development, then our results suggest that a team leader should be selected who has the charisma necessary to motivate team members to embrace learning and development. Less charismatic leaders in this situation would be unable to facilitate the necessary developmental processes, and team performance would suffer as a result.

Considering the many traits and attributes that have been theorized to influence leadership processes and outcomes (see Zaccaro, Kemp, & Bader, 2004 for a review), our study also opens up a multitude of avenues for future research on how team leader behaviors interact with leader and team member characteristics to affect team performance. We were particularly interested in the motivational implications of team leadership, and so we chose to focus on leader charisma and team member self-efficacy as potential moderators of the relationship between leadership behaviors and team performance. However, future research might adopt alternative perspectives that lead to the discovery of other important leader and team member characteristics. For example, whereas we examined team member self-efficacy, future research might consider collective efficacy (DeRue et al., 2010). Future research might also embrace an information-processing perspective (e.g., Hinsz, Tindale, &

Vollrath, 1997) and examine how the cognitive abilities of a team's leader, or the cognitive abilities of its members, can shape the behaviors that team leaders use to manage information within the team, and how such behaviors influence team processes and performance. For example, team members with greater cognitive ability may be more efficient and accurate at processing information related to team functioning, which would reduce the need for a leader to monitor and process information for them.

We also encourage researchers to heed the advice of Zaccaro (2007) and integrate situational perspectives on team leadership with the trait or attribute-oriented approach used in this study. For example, certain characteristics of work tasks (e.g., autonomy) foster higher levels of motivation (Campion & Thayer, 1985; Hackman & Oldham, 1980; Morgeson & Humphrey, 2006). Future research might examine the motivational and performance implications of team leader behaviors when both task characteristics and the characteristics of a team's leader and its members are considered simultaneously. For example, autonomy (a task characteristic) may be particularly motivating when team members are experienced with a task, but demotivating otherwise. Examining potential contingency factors in this way would yield a more integrative contingency theory of team leadership than any of those that now exist.

Another important contribution of our study is its emphasis on the underlying motivational mechanisms that explain contingencies in team leadership. Prior research on such contingencies has generally fallen short of identifying these mechanisms. We theorized about the motivational implications of contingencies in team leadership and then provided empirical evidence for how team member motivation serves as a mediator of the link between team leader behaviors and team performance. That finding has important implications for current theory because this is the first study to document team member motivation as a mechanism through which team leader behaviors affect team performance. Future research should extend this motivational perspective by exploring other mediational mechanisms that could explain important contingencies in team leadership. For example, researchers might explore how leader behaviors influence intrinsic or extrinsic motivation or explore such nonmotivational processes as identification with the leader. In addition, given the emergence of affective events theory (Weiss & Cropanzano, 1996) as a way of analyzing the impact of discrete events on individual psychological processes, future research might try to extend that theory to the team level and build on existing research that suggests a key function of team leaders is to manage events that occur in the team context (Morgeson, 2005; Morgeson & DeRue, 2006). Drawing from

affective events theory and research on affect in teams (George, 1990), we believe that the nature of team events, and the ways in which team leaders go about managing those events, could influence team functioning through affective pathways such as affective tone (Sy, Cote, & Saavedra, 2005) and collective emotion (Barsade, Ward, Turner, & Sonnenfeld, 2000; Bartel & Saavedra, 2000; Ilies, Wagner, & Morgeson, 2007). These extensions of our theory and empirical findings would go a long way toward enhancing understanding of team leadership and the contingencies that explain how leadership processes influence team performance.

Appendix A

Instructions Provided to Leaders in the Directive Condition

Prior to the first simulation. As the leader, your job is to direct this team. You should set the team's direction and give specific instructions regarding what individual members should be doing and when they should be doing it. Ensure that your team members stick to your plan for accomplishing your objectives. Monitor your team members' actions, and correct them when they are not following your plan. Tell them not only when they are wrong, but what they should be doing instead. It is important that you are clear and directive in your leadership.

Between the first and second simulation. You will now have 10 minutes to discuss Game 1 and prepare for Game 2. Your job will be to direct the discussion. Make sure you clearly communicate your observations about the first game to your team members. Additionally, make sure you clearly state your goals and plans for the second game. It is important that you direct the discussion so as to obtain maximum performance in the second game.

Instructions Provided to Leaders in the Coaching Condition

Prior to the first simulation. As the leader, your job is to coach this team. You should support their growth and learning so that your team will fulfill its potential. Help your members make coordinated and task-appropriate use of their collective resources in accomplishing the team's work. Monitor your team members, encouraging them when they have difficulties and praising them when they do well. Provide aid when requested, and make sure your team members have the information that they need. It is important that you take this coaching-like approach in your leadership.

(continued)

Appendix A (continued)

Between the first and second simulation. You will now have 10 minutes to discuss Game 1 and prepare for Game 2. Your job will be to serve as a coach during the discussion. Make sure your team members share their observations about the first game. Additionally, make sure your team members create plans for the second game. It is important that you serve as a coach during the discussion so as to obtain maximum performance in the second game.

Appendix B

Leader Charisma (Yukl & Falbe, 1991)

1. He/she knows how to appeal to the emotions and values of people.
2. He/she is the type of person that I would like to have as a close friend.
3. He/she has the ability to communicate a clear vision of what our team could accomplish or become.

Team-Member Self-Efficacy (Quinones, 1995)

1. I feel confident in my ability to perform this task effectively.
2. I think I can reach a high level of performance in this task.
3. I am sure I can learn how to perform this task in a relatively short period of time.
4. I don't feel that I am as capable of performing this task as other people. (reverse-scored)
5. On the average, other people are probably much more capable of performing this task than I am. (reverse-scored)
6. I am a fast learner for these types of tasks, in comparison with other people.
7. I am not sure I can ever reach a high level of performance in this task, no matter how much practice and training I get. (reverse-scored)
8. It would take me a long time to learn how to perform this task effectively. (reverse-scored)
9. I am not confident that I can perform this task successfully. (reverse-scored)
10. I doubt that my performance will be very adequate in this task. (reverse-scored)

Acknowledgments

We would like to thank Sean Burke and Carrie Beia for their support in collecting data for this study.

Declaration of Conflicting Interests

The author(s) declared no conflicts of interest with respect to the authorship and/or publication of this article.

Funding

We would like to thank the Eli Broad College of Business for its financial support.

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