

ORIGINAL ARTICLE

Meeting the need or falling in line? The effect of laissez-faire formal leaders on informal leadership

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Abstract

We consider the utility of two contrasting theoretical perspectives in explaining how laissez-faire formal leaders and team member motivation to lead (MTL) influences informal leadership and team task performance. The first perspective, functional leadership theory, is the dominant lens used currently to understand informal leadership. However, we suggest that social learning theory offers a compelling alternative account. In a multiwave survey study of 344 members of 72 work teams, we find support for the social learning theory predictions that laissez-faire formal leaders are perceived by team members to engage in less modeling of effective leadership and as a result are negatively associated with informal leadership and team task performance. We do not find support for the functional leadership theory predictions that laissez-faire formal leaders are positively associated with team members' informal leadership and team task performance, which would be due to an increased perceived need for leadership. The social learning effects are stronger for teams that are lower in member MTL and weaker for teams that are higher in member MTL. These results suggest social learning theory may be preferable to functional leadership theory for understanding informal leadership in teams.

KEYWORDS

leadership, motivation/self-regulation, teams/group processes

Organizational scholars have long appreciated the importance of informal leadership, which occurs when team members who do not occupy formal leadership positions engage in influence behavior that helps their team determine shared goals, motivates task activity in pursuit of those goals, and creates a positive social climate (Yukl, 1989). As Katz and Kahn (1978, p. 332) noted four decades ago, "Organizations in which influential acts are widely shared are most effective." With many organizations today adopting more complex and dynamic team forms, the importance of informal leadership has grown. Modern teams cannot rely solely on standardized strategies to perform effectively but instead must adapt on the fly by creating new knowledge through their interactions (Uhl-Bien, Marion, & McKelvey,

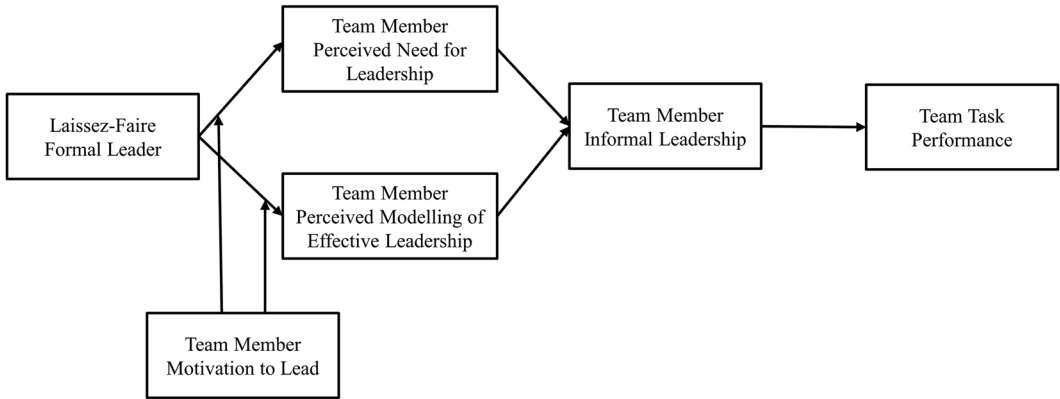


FIGURE 1 Summary of conceptual model

2007). Informal leadership can facilitate this adaptation and improve team performance, particularly in the face of knowledge asymmetries or turbulent external environments (Day, Gronn, & Salas, 2004, 2006; Nicolaidis et al., 2014; Wang, Waldman, & Zhang, 2014; Zhang, Waldman, & Wang, 2012). As such, it is not surprising that scholars and practitioners are increasingly interested in the conditions that can encourage or discourage informal leadership in teams.

Given the widespread role expectations that formal leaders should fulfill the bulk of their team's leadership responsibilities (DeRue & Ashford, 2010; Wellman, Mayer, Ong, & DeRue, 2016), one approach that might be adopted by organizations seeking to promote informal leadership is to encourage their formal leaders to be more passive. Supervisors who behave in such a manner are called *laissez-faire formal leaders*, in that they avoid making decisions or taking action and are frequently absent when needed (Avolio, 1999; Judge & Piccolo, 2004). The notion that a *laissez-faire* formal leader might encourage team members' informal leadership contributions is consistent with the theoretical perspective that is most commonly used to understand informal leadership in teams. Specifically, functional leadership theory (McGrath, 1962; Morgeson, DeRue, & Karam, 2010; Van Vugt, 2006; Zaccaro, Rittman, & Marks, 2001) has been described as the "most prominent and well-known team leadership model" (Morgeson et al., 2010, p. 8). A functional leadership account suggests that a *laissez-faire* formal leader might increase team members' informal leadership contributions by creating the perception that there is an unmet need for leadership within the team that members could satisfy by stepping up to engage in informal leadership.

Despite the dominance of functional leadership theory in the scholarly conversation pertaining to informal leadership, another perspective may also be relevant. Specifically, social learning theory (Bandura, 1977) has also been used to explain followers' responses to formal leaders (e.g., Brown, Treviño, & Harrison, 2005; Lian, Ferris, & Brown, 2012; Liu, Liao, & Loi, 2012; Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). A social learning perspective suggests that team members look to their formal leader to establish what behavior is appropriate within the team and to model how to engage in that behavior. This viewpoint suggests that team members may perceive a *laissez-faire* formal leader as engaging in less modeling of effective leadership and therefore be less likely to see leadership as appropriate or understand how to engage in it successfully. As such, social learning theory predicts a negative association between a *laissez-faire* formal leader and team members' informal leadership, in stark contrast to functional leadership theory.

We adopt a competing hypothesis approach to test the validity of these opposing theoretical explanations of the effects of a *laissez-faire* formal leader on informal leadership. As depicted in Figure 1, we develop and test a conceptual model that draws on functional leadership theory to propose a positive pathway via team members' perceived need for leadership (McGrath, 1962; Morgeson et al., 2010) and on social learning theory to propose a negative pathway via team members' perception that their supervisor models effective leadership (Dragoni, Park, Soltis, & Forte-Trammell, 2014). Given that individual differences can produce significant variation in individuals' responses to a given situation (Kenrick & Funder, 1988), we further propose that team member motivation to lead (MTL)—members' aggregate

dispositional tendency to engage in leadership behavior (Chan & Drasgow, 2001)—strengthens the functional leadership theory pathway and weakens the social learning theory pathway. We also consider the implications for team task performance.

We examine evidence for our predictions in a full-network study of 72 complete teams in Chinese organizations. In addition to our focal study, we describe supplemental analyses that provide a more complete picture of the relationship between formal and informal leadership in teams, as well as the specific moderating effects of each of the three dimensions of team member MTL—*affective-identity*, *social-normative*, and *noncalculative*. We also report two studies that we conducted to develop and validate a shorter and more reliable MTL measure.

The findings in this article make several important theoretical and practical contributions. Most significantly, our results challenge the consensus that functional leadership theory is the optimal lens for understanding informal, shared, or distributed leadership in teams (Carson, Tesluk, & Marrone, 2007; Lord, 1977; Morgeson et al., 2010; Zaccaro et al., 2001). Instead, we find support for a social learning theory pathway through team members' perception that their supervisor models effective leadership. These findings demonstrate that the absence of leadership within teams does not guarantee that members will view the team as needing leadership or act to provide it. Instead, our results suggest the importance of considering social and normative forces as antecedents of informal leadership. Second, we specify and test the theoretical mechanisms—team members' perceived need for leadership and perceived modeling of effective leadership—linking a *laissez-faire* formal leader to informal leadership. In so doing, we provide an initial glimpse of the psychological processes that link formal and informal leadership in teams. Third, prior research has largely assumed that formal leaders influence all team members' informal leadership activities in a similar way. Our results add nuance to that view by revealing how team composition (in the form of member MTL) interacts with a *laissez-faire* formal leader to predict informal leadership. Specifically, we integrate Brockner's (1983, 1988) research on behavioral plasticity with social learning theory to propose and find that the effects of a *laissez-faire* formal leader are stronger for teams that are lower in member MTL and weaker for teams higher in member MTL. Our findings also suggest how organizations can encourage informal leadership by providing team members with visible and effective role models and ensuring that teams with *laissez-faire* formal leaders are balanced by members high in MTL.

1 | THEORY AND HYPOTHESES

Avolio and Bass (1991) proposed that a *laissez-faire* approach to the leadership role should be included as a component of the full-range leadership model. Because *laissez-faire* formal leaders avoid taking any leadership action, even in the face of potentially severe problems, *laissez-faire* behavior is the most passive approach to leadership in the full-range model (DeRue, Nahrgang, Wellman, & Humphrey, 2011). Research has established *laissez-faire* as being distinct from, for instance, low levels of transactional or transformational leader behavior (e.g., Antonakis, Avolio, & Sivasubramaniam, 2003). Although a leader who is not transformational or transactional might still engage in other forms of leader behavior (perhaps by stepping in to resolve interpersonal conflicts between team members), a *laissez-faire* formal leader does not actively engage in any leadership behavior. The association between a *laissez-faire* formal leader and team members' informal leadership has not been determined. However, *laissez-faire* formal leaders have been linked to other negative outcomes such as reduced levels of job satisfaction (Hinkin & Schriesheim, 2008; Judge & Piccolo, 2004), role clarity (Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007) and perceived leader effectiveness (DeRue et al., 2011).

As noted, we conceptualize informal leadership as leadership behavior performed by team members who do not possess formal authority. Empirical research by Yukl, Gordon, and Taber (2002) and DeRue et al. (2011) has established that although many taxonomies of leadership behavior exist in the literature, these behaviors typically fall into one of three "meta-categories": task-oriented, change-oriented, and relations-oriented leadership behaviors. Task-oriented leadership behaviors facilitate the performance of team tasks (e.g., assigning team members to task roles and monitoring task completion). Change-oriented leadership behaviors inspire change by developing and communicating a compelling vision of a team's future. Finally, relations-oriented leadership behaviors strengthen social connections

among team members through demonstrating respect and concern and resolving interpersonal conflicts. Building on this work, we conceptualize informal leadership as occurring when team members who are not formally designated leaders engage in task-oriented, change-oriented, and relations-oriented leadership behaviors. As we describe below, functional leadership theory and social learning theory offer fundamentally different views of how a laissez-faire formal leader might affect informal leadership in teams.

1.1 | A functional leadership theory perspective

Functional leadership theory is the predominant theoretical lens used to understand informal leadership in teams (Morgeson et al., 2010). The theory holds that teams have critical functions that they must fulfill to complete tasks effectively and persist as viable entities (McGrath, 1962). As a team completes its tasks, it may encounter various challenges that threaten the team's ability to achieve its collective goals (Fleishman et al., 1991; Hackman & Walton, 1986; McGrath, 1962; Zaccaro et al., 2001). Such challenges create needs within the team that members can fulfill by engaging in leadership behavior. Leadership is vital to team success because it helps fulfill these essential coordination and support functions, such as directing collective action and ensuring member motivation and cohesion (Lord, 1977; Van Vugt, 2006; Van Vugt, Hogan, & Kaiser, 2008). Thus, from a functional perspective, team leaders are those members who "do, or get done, whatever is not being adequately handled for group needs" (McGrath, 1962, p. 5).

Functional leadership theory suggests a laissez-faire formal leader is likely to create the perception among team members that important leadership needs are unfulfilled (e.g., Manz & Sims, 1987; McGrath, 1962; Scott & Davis, 2007; Wheelan & Johnston, 1996; Zaccaro et al., 2001). Formal leaders are typically expected to meet a good portion of their teams' leadership needs (Wellman et al., 2016), and members are likely to look to these individuals for leadership guidance (DeRue & Ashford, 2010). Moreover, formal leaders' leadership contributions are typically valued and seen as important by team members (Morgeson, 2005). Thus, when a team's formal leader adopts a laissez-faire approach by avoiding making decisions, being absent when needed, or failing to respond to urgent questions, team members are likely to worry that the unfulfilled leadership need within their team may harm the team's performance.

The functional perspective suggests that multiple team members, including those without formal authority, are capable of fulfilling team leadership needs (McGrath, 1962; Morgeson et al., 2010). It follows that when team members perceive an elevated need for leadership as a result of a laissez-faire formal leader, they are likely to increase their informal leadership activities in an effort to address that need. For instance, if a team member has an urgent question about how to perform a task, and his or her formal leader avoids the question or is unresponsive, other team members may feel an increased need to engage in informal leadership behaviors by providing task direction and monitoring task completion. If the formal leader adopts a less laissez-faire approach, team members might perceive less of a need for leadership and engage in less informal leadership. In other words, functional leadership theory suggests that based on the perceived need for leadership, team members who observe a laissez-faire formal leader may increase their informal leadership contributions in order "to create conditions required for effectiveness [and] to help a team address and modify dysfunctional group dynamics" (Hackman & Walton, 1986, p. 110).

Hypothesis 1: There is a positive indirect association between a laissez-faire formal leader and team member informal leadership via team member perceived need for leadership.

1.2 | A social learning theory perspective

Social learning theory has also been applied to understand how members of teams and organizations interpret and respond to their formal leaders' behavior (e.g., Brown et al., 2005; Lian et al., 2012; Liu et al., 2012; Mawritz et al., 2012; Mayer et al., 2009). The central tenant of social learning theory is that human behavior is significantly influenced by the observation of environmental stimuli (Bandura, 1977). Specifically, individuals often mimic behaviors that they witness enacted by role models. Given the importance of formal leaders, team members are particularly likely to look to these

individuals as guides of what is normative and appropriate, and to mimic the leaders' behavior (e.g., Dragoni et al., 2014; Lian et al., 2012; Liu et al., 2012; Mawritz et al., 2012; Mayer et al., 2009; Mitchell & Ambrose, 2012).

A social learning viewpoint suggests that when team members witness their formal leader adopting a laissez-faire approach, they are *unlikely* to perceive that individual as modeling effective leadership behavior. Because effective leadership involves actively engaging in task-focused, relations-focused, and change-focused behaviors (Wellman, 2017; Yukl, et al. 2002), and laissez-faire formal leaders engage in few such behaviors (Bass & Avolio, 2004), team members are unlikely to see a laissez-faire formal leader as providing an example of how to lead effectively. This assertion is supported by meta-analytic evidence establishing a strong negative correlation between a laissez-faire formal leader and perceived leader effectiveness ($r_c = -0.54$, DeRue et al., 2011).

Social learning theory further suggests that the lack of a salient model of effective leadership in teams with a laissez-faire formal leader may have two important consequences for members' informal leadership. First, it may suggest to team members that leadership behavior is not appropriate or valued within the team. To return to the prior example, when team members observe a formal leader who is unresponsive to another member's question about a work task, they may view this as a sign that offering opinions on work tasks is inappropriate (cf. Mitchell & Ambrose, 2012). The resulting perception among team members that leadership behavior is counternormative is likely to suppress members' informal leadership activity.

Second, the members of teams with laissez-faire formal leaders are less likely to understand how to lead effectively. The modeling of effective behavior by formal leaders is an important means through which team members learn to lead (Dragoni et al., 2014). Given team members do not have a formal leadership role within their organization, they are less likely to have received formal leadership training or have prior experience leading others (DeRue & Myers, 2014). If these members do not see effective leadership modeled by their formal leader, then even if they do perceive leadership as being appropriate, they may not understand how to lead effectively. This lack of understanding may further reduce the amount of informal leadership exhibited in teams with a laissez-faire formal leader. In contrast, formal leaders who are less laissez-faire are available when needed and act decisively in response to problems facing the team. Such leaders are more likely to be perceived by team members as modeling effective leadership (i.e., developing viable strategies, inspiring others, coordinating action, etc.; Dragoni et al., 2014), and team members are likely to engage in more informal leadership as a result. Thus, based on social learning theory we hypothesize:

Hypothesis 2: There is a negative indirect association between a laissez-faire formal leader and team member informal leadership via team member perceived modeling of effective leadership.

1.3 | The moderating role of team member MTL

Interestingly, both functional leadership theory and social learning theory suggest that team members' motivation influences their responses to environmental stimuli. Functional leadership theory notes that motivation is paramount in determining how individuals respond to leadership opportunities, because leadership "requires some degree of personal *discretion* or choice concerning exactly when, where, how, and why action will be taken" (Fleishman et al., 1991, p. 258). Similarly, social learning theory suggests that observers' motivations affect the extent to which they reproduce others' behavior (Bandura, 1977; Brockner, 1983, 1988; Manz & Sims, 1981). Accordingly, we extend our theorizing to propose that team members' MTL influences the strength of both the functional leadership theory and social learning theory pathways between a laissez-faire formal leader and informal leadership.

MTL is formally defined as individuals' chronic motivation to assume leadership roles and engage in leadership behavior (Chan & Drasgow, 2001). MTL is a multidimensional construct that describes the net influence of three types of leadership motivation: (a) *affective-identity MTL*, which reflects the extent to which team members view themselves as leaders and enjoy engaging in leadership behavior; (b) *social-normative MTL*, which reflects the extent to which team members perceive a sense of duty to engage in leadership behavior; and (c) *noncalculative MTL*, which reflects the extent to which team members tend to engage in leadership independent of the associated benefits or costs. Consistent with our theoretical interest in members' total level of leadership motivation, as well as prior research

that has examined the net impact of the three MTL dimensions, (e.g., Amah, 2015; Hadley, Pittinsky, Sommer, & Zhu, 2011; Krishnakumar & Hopkins, 2014; Luria & Berson, 2013), we focus our theorizing on team members' overall MTL. Moreover, in keeping with studies that have explored team composition in terms of members' individual attributes (e.g., LePine, 2003; LePine, Colquitt, & Erez, 2000), we conceptualize team member MTL as a team-level variable consisting of the aggregate MTL of all team members.

Although both functional leadership theory and social learning theory suggest team member MTL influences the strength of the association between laissez-faire formal leaders and informal leadership, they offer competing predictions about the nature of this influence. Functional leadership theory suggests that high levels of team member MTL are likely to strengthen the positive indirect association among a laissez-faire formal leader, team members' perceived need for leadership, and team members' informal leadership activity. The members of teams that, overall, are higher in member MTL are more likely to view themselves as leaders, perceive a social obligation to lead, and engage in leadership regardless of the personal costs (Chan & Drasgow, 2001). As noted, from a functional perspective, leadership is conceptualized as, "the process of team need satisfaction in the service of enhancing team effectiveness" (Morgeson et al., 2010, p. 8). Members of teams high in member MTL are particularly likely to be attentive to those needs within their team that are being left unmet. Identifying such needs provides the high-MTL team members with an opportunity to act to enhance team effectiveness by engaging in leadership, which is something that they are inherently motivated to do. In contrast, in teams lower in member MTL, members are less likely to pay attention to whether their team's leadership needs are met, because they do not see themselves as leaders or feel an obligation to lead. Instead, the members of these teams are likely to focus on fulfilling their formal job responsibilities and leave leadership to others whom they may see as more qualified. Accordingly, functional leadership theory would predict that, relative to the members of teams lower in member MTL, members of teams higher in member MTL are more likely to respond to a laissez-faire formal leader by perceiving an elevated need for leadership and engage in increased informal leadership in an effort to meet that need.

Hypothesis 3a: Team member MTL moderates the positive indirect association between a laissez-faire formal leader and team member informal leadership via team member perceived need for leadership, such that this association is stronger for teams higher in member MTL and weaker for teams lower in member MTL.

Although functional leadership theory suggests the positive effect of a laissez-faire formal leader on informal leadership is most pronounced for teams *higher* in member MTL, social learning theory implies that the negative effect of a laissez-faire formal leader on informal leadership may be most pronounced for teams *lower* in member MTL. The impetus for this prediction lies in Brockner's (1983, 1988) work on behavioral plasticity and social learning. Plasticity refers to the extent to which individuals are susceptible to social influence (Brockner, 1988). The plasticity literature has shown that individuals who are confident or comfortable in their abilities in a particular domain are less likely to be influenced by social forces in that domain, whereas individuals who are less confident in their abilities are "more apt to yield to social cues because they are less certain about the appropriateness of their own beliefs/behaviors" (Brockner, 1983, pp. 264–265).

The behavioral plasticity view of social learning suggests that members of teams higher in member MTL—who are confident in their leadership abilities and tend to lead regardless of the circumstances—are less likely to look to their formal leader as a cue for their own behavior. As a result, the negative association between a laissez-faire formal leader and team member perceived modeling of effective leadership and subsequent informal leadership is likely to be less pronounced in these teams. This argument is consistent with prior research that has revealed that leader actions are less likely to affect followers who are confident in their abilities or see themselves as high performers (e.g., Avey, Palanski, & Walumbwa, 2011; Hirak, Peng, Carmeli, & Schaubroeck, 2012).

The members of teams lower in member MTL, however, are less likely to be confident in their leadership abilities or feel an unconditional obligation to lead. As a result, members of these teams are more likely to look to their formal leader to signal whether leadership behavior is appropriate, and to model how to engage in it. When these teams

have a laissez-faire formal leader, members are particularly likely to perceive that their leader is not modeling effective leadership, to interpret this as a signal that leadership is inappropriate, to feel uncertain about their ability to lead others effectively, and to engage in less informal leadership as a result. However, when these teams have a formal leader who is less laissez-faire, members may perceive the leader as modeling effective behavior, view leadership as appropriate, feel confident in their own ability to enact effective leadership, and engage in more informal leadership as a result (cf. Avey et al., 2011; Hirak et al., 2012).

Hypothesis 3b: Team member MTL moderates the negative indirect association between a laissez-faire formal leader and team member informal leadership via team member perceived modeling of effective leadership, such that this association is stronger for teams lower in member MTL and weaker in teams higher in member MTL.

1.4 | Implications of informal leadership for team task performance

Finally, we consider the implications of the informal leadership engendered by a laissez-faire formal leader and team member MTL for team task performance, which is defined as the extent to which a team's output meets or exceeds the standards of quality, quantity, and timeliness of those that use it (Hackman, 1987). Consistent with prior findings, we propose that when team members engage in informal leadership, it improves their team's task performance (Carson et al., 2007; Pearce & Sims, 2002). For instance, activities such as directing and coordinating other members' work through coordinating action, defining essential team roles, and monitoring task performance have been found to improve teams' task-related coordination and performance (Judge, Piccolo, & Ilies, 2004). Relations-oriented forms of leadership are likely to increase team members' motivation and reduce distractions produced by interpersonal conflict (Jehn & Mannix, 2001), allowing team members to focus their full energy on achieving outstanding task performance. Change-oriented forms of leadership may also motivate team members by explaining how their task efforts will contribute to the group's future success (Morgeson et al., 2010). Thus, regardless of whether informal leadership occurs as a result of the functional leadership pathway or the social learning pathway, teams whose members engage in more of this behavior are likely to perform better than teams whose members engage in less.

Hypothesis 4: Team member informal leadership is positively associated with team task performance.

2 | METHODS

To test our model, we conducted a three-wave, multisource survey of 72 teams, in which we invited all team members to participate. This study received Institutional Review Board approval from Arizona State University under protocol #6787 (*Filling the void: Laissez-faire supervision and group members' informal leadership behavior*) in addition to approval from Wuhan University's Economics and Management School as a suitable human research project. We assessed all study variables at the team level and used a full-network approach to assess informal leadership. All participants completed paper and pencil surveys at three time points to minimize the potential for common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). The data collection period extended from December 2017 to February 2018. At Time 1, team members rated their supervisor's laissez-faire approach and their own MTL. At Time 2 (approximately 2 weeks after Time 1), team members reported their perceived need for leadership and their perception that their supervisor models effective leadership. At Time 3 (approximately 2 weeks after Time 2), team members assessed one another's informal leadership and team task performance.

2.1 | Participants

We distributed surveys to the members of 85 functional teams in 18 small- to mid-sized organizations in a metropolitan area of central China. The companies were diverse in terms of industry (13.9% manufacturing, 40.3% service, 22.2%

retail, 16.7% education, and 6.9% others), size (45.8% had fewer than 1,000 employees, and 54.2% had 1,000 or more employees), age (30.6% were older than 10 years; 41.7% were 6–10 years old; others were 5 years old or less), and ownership (30.6% state-owned, 44.4% private, and 25% foreign or joint ventures). Each team was composed of one formal supervisor and at least three other members ($M_{\text{team size}} = 5.43$ (not including the supervisor), $\text{min} = 3$, $\text{max} = 7$). The specific work performed by the teams varied and included service, research and development, marketing, and production functions. However, each team had shared performance goals and an internal, formally appointed supervisor. To improve the response rate, participants who responded to all three surveys were entered into a randomized drawing for one of 40 \$50 gift cards.

In all, we received matched survey data across all three time periods from 347 nonsupervisor members of 74 teams (an overall response rate of 87.1%). Missing data are particularly problematic for network surveys (Burt, 1987; Huisman, 2009; Kossinets, 2006), so we excluded two teams for which less than 50% of members completed the network items. This yielded a final sample of 344 participants nested in 72 teams, with an average response rate for the network items of 89.5%. Participants in the final sample had an average age of 30.72 years ($SD = 5.88$), an average organizational tenure of 3 years ($SD = 3.00$), and an average team tenure of 2.23 ($SD = 2.05$). Note that 45.8% of participants were female and 84.3% had a bachelor's degree or higher. Although the teams' formal supervisors are not included in our final data set, the supervisors had an average age of 35.25 years ($SD = 4.61$), an average organizational tenure of 5.83 years ($SD = 4.40$), and an average team tenure of 3.77 years ($SD = 3.06$). The majority of leaders were male (71.4%), and 95% had obtained a bachelor's degree or higher.

2.2 | Measures

Unless otherwise indicated, all measures used a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*).

2.2.1 | Laissez-faire formal leader

Team members rated their supervisor's laissez-faire approach using the four-item measure of laissez-faire leadership from the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1995, used with permission). The Cronbach's alpha for these items was 0.86, and an example item is "The leader I described is absent when needed."

2.2.2 | Team member MTL

The most commonly used MTL measure (Chan & Drasgow, 2001) is quite long (27 items), which we worried would increase the potential for response fatigue. Additionally, many of the items are reverse coded, which caused the scale to perform inconsistently in pilot testing. In light of these issues, we followed Hinkin's (1995, 1998) recommendations to conduct two additional studies to develop and validate a shortened MTL measure. Details of the validation process appear in the Appendix.

We used the 10-item scale that emerged from our two validation studies to assess focal team members' MTL. The shortened scale includes each of the three underlying MTL dimensions proposed by Chan and Drasgow (2001). Four items assess affective-identity MTL, three items assess social-normative MTL, and three items assess noncalculative MTL. Example items are "I usually want to be the leader in the groups that I work in" (affective-identity MTL), "I feel that I have a duty to lead others if I am asked" (social-normative MTL), and "If I agree to lead a group, I would never expect any advantages or special benefits" (noncalculative MTL).

Given our theoretical interest in team members' overall level of MTL rather than one or more specific dimensions, we aggregated participants' responses across all three dimensions to assess team members' overall MTL ($\alpha = 0.84$). Although MTL is not a unidimensional construct, our approach is consistent with prior studies that have employed multidimensional measures but focused on the overarching construct in their theorizing and analysis (e.g., work engagement, Christian, Eisenkraft, & Kapadia, 2015; core self-evaluations, Judge, Erez, Bono, & Thoresen, 2003), as well as those that have assessed overall MTL rather than specific dimensions (e.g., Amah, 2015; Hadley et al., 2011; Krishnakumar & Hopkins, 2014; Luria & Berson, 2013). We aggregated members' individual MTL scores to form our measure of team member MTL.

2.2.3 | Team member perceived need for leadership

We assessed team members' perceived need for leadership using an adapted version of the approach reported by Lambert, Tepper, Carr, Holt, and Barelka (2012). Specifically, we asked team members to self-report the extent to which they felt their team needed each of the three dimensions of informal leadership behavior (task oriented, relations oriented, and change oriented). To assess the informal leadership dimensions, we used three subscales from the Team Leadership Questionnaire (TLQ; Morgeson et al., 2010). We assessed task-oriented informal leadership with the *structure and plan* subscale, relations-oriented informal leadership with the *support social climate* subscale, and change-oriented leadership with the *define mission* subscale. The specific subscales were selected due to their high level of overlap with measures of initiating structure, consideration, and vision articulation (Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Stogdill, 1963), three mainstream leadership constructs that align with the task-focused, relations-focused, and change-focused elements of leadership (Wellman, 2017). Thus, our measurement approach allowed us to assess the three major dimensions of informal leadership using items from a single instrument.

To minimize survey length, ensure an adequate response rate, and be consistent with our network measure of informal leadership (described below), we created a single item for each dimension of informal leadership (cf. Lyons & Scott, 2012) that integrated the TLQ items for each dimension. We instructed participants to "Please indicate the extent to which your team currently needs its members who are not formal leaders to perform each of the following activities" (1 = *not at all*, 7 = *an extremely large extent*). An example item is "Direct task activities by engaging in behaviors such as defining and structuring the work of the team, identifying when key aspects of the team's work need to be completed, developing or helping develop standardized operating procedures and standardized processes, clarifying team performance strategies, making sure members have clear roles" (task-oriented leadership). Team members' perceived need for the three informal leadership dimensions was strongly positively correlated (r 's = 0.78–0.82), so we aggregated the three items to create a single measure of team members' perceived need for leadership ($\alpha = 0.92$).

2.2.4 | Team member perceived modeling of effective leadership

To assess the extent to which team members perceived their formal leader to model effective leadership behavior, we used the four-item measure of modeling effective leadership developed by Dragoni et al. (2014). The Cronbach's alpha for this measure is 0.95. An example item is, "My leader models how to effectively steer a team in a successful direction."

2.2.5 | Team member informal leadership

Consistent with precedent in the literature (e.g., Carson et al., 2007; Mayo, Meindl, & Pastor, 2003), we used a full-network approach to assess team members' informal leadership behavior at the team level. Network ratings are difficult to obtain but provide a highly accurate picture of informal leadership activity (DeRue, 2011).

We used the full-network approach to capture the three dimensions of informal leadership. Each team member was given a roster of the other members of his or her team. Roster methods of administering network surveys have been shown to improve recall and reduce measurement error relative to other methods (Holland & Leinhardt, 1973). Members rated one another on three items, reporting the extent to which each member directed task-oriented, relations-oriented, and change-oriented leadership behavior at them (1 = *not at all*, 7 = *an extremely large extent*). Consistent with the approach described for the perceived need for leadership items, each item assessed one dimension of informal leadership by integrating the five TLQ items for that dimension (cf. Lyons & Scott, 2012). An example item is, "To what extent does this person direct your task activities by engaging in behaviors such as defining and structuring the work of the team, identifying when key aspects of the team's work need to be completed, developing or helping develop standardized operating procedures and standardized processes, clarifying team performance strategies, making sure members have clear roles" (task-oriented leadership).

We then employed the approach for calculating density in valued network relations described by Sparrowe, Liden, Wayne, and Kraimer (2001) and used by Carson et al. (2007). We calculated a density score for each of the three informal leadership dimensions by summing all ratings on that dimension and dividing that value by the total number of

possible informal leadership ties among team members. Because of our theoretical interest in informal leadership, we did not include formal supervisors in our density calculations. Thus, higher density scores for a team on a particular leadership dimension reflect that nonsupervisor team members, on average, engaged in more of that form of informal leadership. We aggregated the three scores to form our measure of team member informal leadership ($\alpha = 0.99$).

2.2.6 | Team task performance

All members assessed their team's task performance using the four-item measure developed by Aubé and Rousseau (2005). A sample item is, "My team is productive" ($\alpha = 0.92$).

2.2.7 | Control variables

To ensure our results are not influenced by individual differences that may be associated with informal leadership behavior, we included *team member education* and *leader education* as control variables. We also included the 10-item measure of *charismatic formal leader* behavior (idealized influence and inspirational motivation) from the MLQ (Bass & Avolio, 1995, $\alpha = 0.88$) to establish the influence of laissez-faire beyond a commonly studied type of active formal leadership. Because our analysis is at the team level, we further controlled for *team size*. The pattern of results and significance levels do not change when these control variables are included. For parsimony, we report the results below without control variables (Bernerth & Aguinis, 2016).

2.3 | Aggregation statistics

Before testing our hypotheses, we calculated aggregation statistics for the nonnetwork variables in our study to check the within-team consistency in participants' responses (Bliese, 2000; James, Demaree, & Wolf, 1984). The statistics for laissez-faire formal leader (ICC (1) = 0.20, ICC (2) = 0.51, $F = 2.02$, $p = 0.00$, median $\text{rwg}_{(j) \text{ uniform}} = 0.80$), team member MTL (ICC (1) = 0.24, ICC (2) = 0.57, $F = 2.31$, $p = 0.00$, median $\text{rwg}_{(j) \text{ uniform}} = 0.96$), team member perceived need for leadership (ICC (1) = 0.26, ICC (2) = 0.58, $F = 2.37$, $p = 0.00$, median $\text{rwg}_{(j) \text{ uniform}} = 0.81$), team member perceived modeling of effective leadership (ICC (1) = 0.25, ICC (2) = 0.56, $F = 2.29$, $p = 0.00$, median $\text{rwg}_{(j) \text{ uniform}} = 0.96$), and team task performance (ICC (1) = 0.30, ICC (2) = 0.62, $F = 2.60$, $p = 0.00$, median $\text{rwg}_{(j) \text{ uniform}} = 0.96$) all suggested significant within-team agreement. As such, we aggregated all study variables to the team level in our analysis.

3 | RESULTS

Table 1 presents the descriptive statistics and intercorrelations between study variables. The teams in our study were nested within organizations, potentially producing correlated errors between teams in the same organization. To account for the hierarchical nature of our data and obtain a more robust and conservative test of our hypotheses (Preacher, Zyphur, & Zhang, 2010), we used Analysis Type = Complex in Mplus (Muthén & Muthén, 2015). This approach employs the Huber-White sandwich estimator to compute standard errors corrected for the nonindependence of observations (Huber, 1967; White, 1982). Because traditional bootstrapping is not recommended with multilevel data (Bauer, Preacher, & Gil, 2006), we tested Hypotheses 1, 2, and 3 by using R software (Tofighi & MacKinnon, 2011) to create Monte Carlo confidence intervals (Preacher & Selig, 2012) for the indirect effects from a laissez-faire leader to team member informal leadership through the two mediators and the conditional indirect effects at high and low levels of team member MTL. In these analyses, we also controlled for the direct effects of our predictors on the dependent variables and correlated the two mediators: perceived need for leadership and perceived modeling of effective leadership. We grand mean centered all predictor variables before entering them into our models (Aiken & West, 1991).

Table 2 summarizes the path modeling results. The model is fully saturated and thus necessarily exhibits perfect fit (comparative fit index [CFI] = 1.00, Tucker-Lewis index [TLI] = 1.00, root mean squared error of approximation

TABLE 1 Descriptive statistics and correlations

	M	SD	1	2	3	4	5	6	7	8	9
1. Leader education	4.02	0.87	—								
2. Team member education	3.64	0.81	0.64**	—							
3. Team size	5.43	0.73	-0.12	-0.36**	—						
4. Charismatic formal leader ^{T1}	5.59	0.55	-0.10	-0.15	0.16	—					
5. Laissez-faire formal leader ^{T1}	2.23	0.86	0.01	-0.10	0.05	-0.23*	—				
6. Team member motivation to lead (MTL) ^{T1}	5.11	0.56	-0.13	-0.05	0.16	0.47**	0.02	—			
7. Team member perceived need for leadership ^{T2}	5.09	1.00	-0.15	-0.36**	0.27*	0.29*	-0.07	0.36**	—		
8. Team member perceived modeling of effective leadership ^{T2}	5.69	0.68	-0.07	0.05	0.06	0.52**	-0.43**	0.37**	0.29*	—	
9. Team member informal leadership ^{T3}	4.28	1.16	-0.31*	-0.29*	0.03	0.27*	-0.25*	0.38**	0.45**	0.48**	—
10. Team task performance ^{T3}	5.88	0.68	0.01	0.15	-0.21	0.35**	-0.32**	0.48**	0.18	0.56**	0.47**

Note. $N = 72$ teams (maximum). Education code: 1 = junior high school or below; 2 = high school diploma; 3 = some college; 4 = bachelor's degree; 5 = master's degree; 6 = doctorate degree. T1 = Time 1; T2 = Time 2; T3 = Time 3.

* $p < 0.05$ (two-tailed); ** $p < 0.01$ (two-tailed).

TABLE 2 Path modeling results for interaction effects

Variable	Dependent variables														
	Perceived need for leadership			Perceived modeling of effective leadership			Team member informal leadership			Team task performance					
	Model 1			Model 2			Model 3			Model 4					
	<i>b</i>	SE	<i>p</i>	<i>b</i>	SE	<i>p</i>	<i>b</i>	SE	<i>p</i>	<i>b</i>	SE	<i>p</i>			
Laissez-faire formal leader	-0.07	0.11	0.52	-0.37**	0.06	-0.47**	0.00	-0.12	0.12	-0.09	0.29	-0.14	0.11	-0.17	0.21
Motivation to lead (MTL)	0.68**	0.18	0.38**	0.42**	0.10	0.34**	0.00	0.38†	0.20	0.18†	0.06	0.38**	0.14	0.31**	0.01
Laissez-faire formal leader × MTL	-0.26	0.19	0.17	0.25**	0.09	0.21*	0.01	-0.19	0.12	-0.09	0.12	0.14	0.11	0.11	0.21
Perceived need for leadership								0.33†	0.17	0.28†	0.06	-0.08	0.05	-0.12	0.12
Perceived modeling of effective leadership								0.53**	0.20	0.31**	0.01	0.28*	0.11	0.27*	0.02
Team member informal leadership												0.13*	0.06	0.23*	0.03
R ²								0.15*	0.08	0.05	0.37**	0.07	0.00	0.46**	0.00

Note. *N* = 72 teams. Model is fully saturated, with CFI = 1.00 and *df* = 0.

†*p* < 0.10 (two-tailed); **p* < 0.05 (two-tailed); ***p* < 0.01 (two-tailed).

[RMSEA] = 0.00, standardized root mean squared residual [SRMR] = 0.00). Hypothesis 1 (2) predicts a positive (negative) indirect association between a laissez-faire formal leader and team member informal leadership via team member perceived need for leadership (team member perceived modeling of effective leadership). As shown in Table 2, Models 1 and 2, the relationship between a laissez-faire formal leader and team member perceived need for leadership is not significant ($b = -0.07$, $SE = 0.11$, $p = 0.52$), but the relationship between a laissez-faire formal leader and team member perceived modeling of effective leadership is negative and significant ($b = -0.37$, $SE = 0.06$, $p = 0.00$). Team member perceived need for leadership is marginally positively associated with team member informal leadership ($b = 0.33$, $SE = 0.17$, $p = 0.06$), and team member perceived modeling of effective leadership is positively associated with team member informal leadership ($b = 0.53$, $SE = 0.20$, $p = 0.01$). Additionally, the Monte Carlo-based confidence interval for the indirect effect of a laissez-faire formal leader on team member informal leadership through team member perceived need for leadership includes zero (*indirect effect* = -0.023 , 95% CI [-0.135 , 0.045]). However, the confidence interval for the indirect effect through team member perceived modeling of effective leadership does not include zero (*indirect effect* = -0.197 , 95% CI [-0.414 , -0.037]). Although we did not formally hypothesize a direct effect of a laissez-faire formal leader on team member informal leadership, we tested this relationship and found it to be negative and significant ($b = -0.34$, $SE = 0.15$, $p = 0.02$). However, as shown in Table 2, Model 3, when team member perceived need for leadership and perceived modeling of effective leadership are included in the path model as mediators, the direct effect of a laissez-faire formal leader on team member informal leadership becomes nonsignificant ($b = -0.12$, $SE = 0.12$, $p = 0.29$). These results support Hypothesis 2, but not Hypothesis 1.

Hypotheses 3a (3b) predicts that the indirect association between a laissez-faire formal leader and team member informal leadership via team member perceived need for leadership (perceived modeling of effective leadership) is stronger when team member MTL is higher (lower). To test these hypotheses, we included a product term representing the laissez-faire formal leader \times team member MTL interaction in our path model. As shown in Table 2, Model 1, the interaction term is a not significant predictor of team member perceived need for leadership ($b = -0.26$, $SE = 0.19$, $p = 0.17$). However, as shown in Table 2, Model 2, the interaction term is a significant predictor of team member perceived modeling of effective leadership ($b = 0.25$, $SE = 0.09$, $p = 0.01$). As depicted in Figure 2, simple slopes analysis revealed that a laissez-faire formal leader is negatively associated with team member perceived modeling of effective leadership in teams lower in member MTL ($b = -0.51$, $SE = 0.09$, $p = 0.00$) but less negatively associated with team member perceived modeling of effective leadership in teams higher in member MTL ($b = -0.23$, $SE = 0.06$, $p = 0.00$). The difference between the simple slopes at high and low member MTL is significant ($b = 0.28$, $SE = 0.10$, $p = 0.01$).

Furthermore, Monte Carlo confidence intervals revealed that the negative indirect association between a laissez-faire formal leader and team member informal leadership through team member perceived modeling of effective leadership is less negative when team members are higher (1 *SD* above the mean) in MTL (*indirect effect* = -0.12 , 95% CI [-0.228 , -0.031]) and more negative when team members are lower (1 *SD* below the mean) in MTL (*indirect effect* = -0.27 , 95% CI [-0.480 , -0.073]). These conditional indirect effects are significantly different (Δ *indirect effect* = 0.15 , 95% CI [0.024 , 0.314]). However, the relationship between a laissez-faire formal leader and team member informal leadership through team member perceived need for leadership was not significant at either low (*indirect effect* = 0.02 , 95% CI [-0.122 , 0.125]) or high (*indirect effect* = -0.09 , 95% CI [-0.238 , 0.014]) levels of team member MTL, and these two indirect effects are not significantly different (Δ *indirect effect* = -0.11 , 95% CI [-0.276 , 0.047]). Thus, Hypothesis 3b was supported, but not Hypothesis 3a.

Finally, Hypothesis 4 predicts that team member informal leadership is positively associated with team task performance. As shown in Table 2, the relationship between team member informal leadership and team task performance is positive and significant ($b = 0.13$, $SE = 0.06$, $p = 0.03$), supporting Hypothesis 4.

3.1 | Supplemental analyses

In addition to testing our hypotheses, we conducted targeted post hoc analyses (Hollenbeck & Wright, 2017) to further explore the association between formal and informal leadership in teams. First, we considered whether our

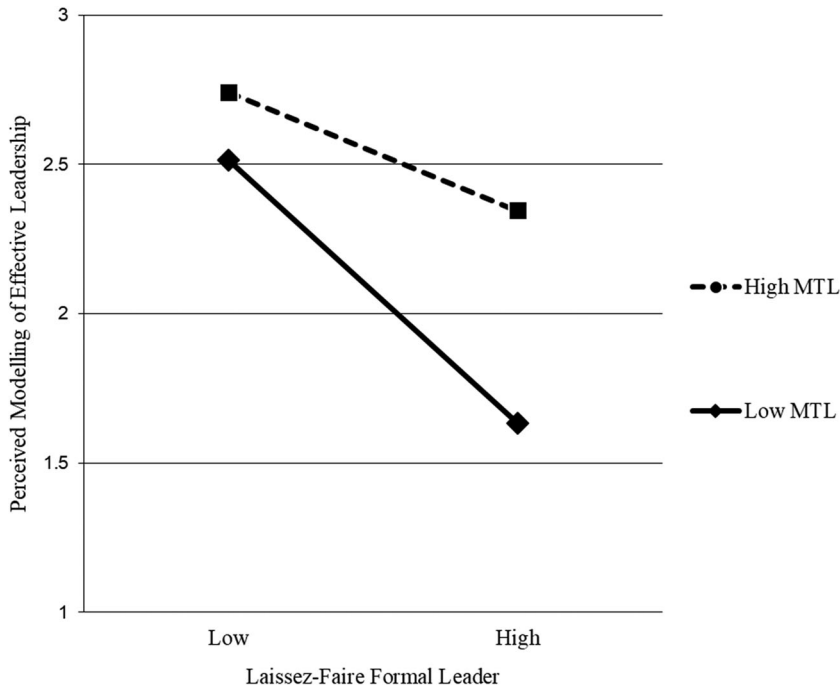


FIGURE 2 Laissez-faire formal leader and team member motivation to lead predicting team member perceived modeling of effective leadership

results extend to active (as well as passive) formal leaders. To explore this possibility, we reran our models replacing laissez-faire formal leader with charismatic formal leader as the independent variable. We found that a charismatic formal leader is positively associated with the social learning mediator (team member perceived modeling of effective leadership, $b = 0.54$, $SE = 0.12$, $p = 0.00$) but not the functional leadership mediator (team member perceived need for leadership, $b = 0.31$, $SE = 0.21$, $p = 0.15$). Both perceived need for leadership ($b = 0.33$, $SE = 0.16$, $p = 0.04$) and perceived role modeling of effective leadership ($b = 0.67$, $SE = 0.18$, $p = 0.00$) are positively associated with team member informal leadership. However, unlike for laissez-faire, the interaction between charismatic formal leader and team member MTL is not a significant predictor of team member's perceived modeling of effective leadership ($b = -0.12$, $SE = 0.18$, $p = 0.50$).

Second, given the confirmatory factor analysis that we conducted during our measure development suggested that a three-factor MTL model offers a superior fit to a one-factor model, we explored the moderation effect of each MTL dimension separately. The interactions containing only affective-identity MTL or social-normative MTL each significantly predict team members' perceived modeling of effective leadership ($b = 0.33$, $SE = 0.07$, $p = 0.00$ for affective-identity MTL, $b = 0.28$, $SE = 0.10$, $p = 0.01$ for social-normative MTL). However, the effects do not hold when the noncalculative MTL dimension is used as the moderator ($b = 0.11$, $SE = 0.11$, $p = 0.29$).

Finally, we considered whether MTL might influence the extent to which team members respond to the perceived need for leadership or the perceived modeling of effective leadership by engaging in informal leadership (i.e., second-stage moderation). To test this possibility, we added MTL as a moderator of the associations between team member perceived need for leadership (perceived need for leadership \times MTL) and team member perceived modeling of effective leadership (perceived modeling of effective leadership \times MTL) and team members' informal leadership. Neither of the two interactions is significant ($b = -0.14$, $SE = 0.22$, $p = 0.54$, and $b = 0.17$, $SE = 0.50$, $p = 0.74$, respectively).

4 | DISCUSSION

There is significant consensus that functional leadership theory is useful in understanding informal leadership in teams. However, social learning theory presents a contrasting account of the effects of laissez-faire formal leaders on informal leadership and team task performance. To address this tension, we developed a conceptual model that proposed a positive indirect effect of laissez-faire formal leaders on team members' informal leadership and team task performance via the perceived need for leadership (functional leadership theory) and a negative indirect effect via team members' perceived modeling of effective leadership (social learning theory). We further considered how team members' MTL might influence the strength of the functional leadership and social learning pathways.

The results of a three-wave study involving the members of 72 complete work teams support the social learning pathway, but not the functional leadership pathway. Team members perceive a laissez-faire formal leader as engaging in less modeling of effective leadership, and as a result engage in less informal leadership. Although the perceived need for leadership is marginally positively associated with team member informal leadership, this need does not vary as a function the extent to which formal leaders adopt a laissez-faire approach. Consistent with our social learning predictions, we also observed that a laissez-faire formal leader is more negatively associated with informal leadership in teams that are lower, rather than higher, in member MTL.

4.1 | Theoretical implications

Our results make several important theoretical contributions. First, our findings challenge the established view that functional leadership theory provides the optimal lens for understanding informal, shared, or distributed leadership in teams. Our results suggest that the perceived role modeling of effective leadership may be a more powerful predictor of informal leadership than the perceived need and that future models of team leadership would be well-served to incorporate elements of social learning theory. In some ways, our results are consistent with prior research that has shown that laissez-faire formal leaders generally have negative effects on team members' cognition, behavior, and performance (e.g., DeRue et al., 2011; Hinkin & Schriesheim, 2008). However, it was not possible to predict our findings a priori due to the fact that functional predictions have been supported in other leadership studies (e.g., Burke et al., 2006; Lord, 1977; Morgeson, 2005; Morgeson et al., 2010).

Second, we take important steps toward understanding the mechanisms (Hedstrom & Swedberg, 1998) explaining the association between a laissez-faire formal leader and team members' informal leadership. Although formal leaders are frequently highlighted as an important precursor to informal leadership (Carson et al., 2007; Morgeson et al., 2010; Zhang et al., 2012), prior studies have stopped short of assessing the cognitive and social pathways through which they influence team members' informal leadership behavior. Our results identify the perceived modeling of effective leadership as one such pathway. Our supplemental analyses further reveal that this pathway also explains the positive effects of a charismatic formal leader on informal leadership.

Finally, our findings reveal the importance of individual differences in determining informal leadership responses to formally designated leaders. Prior research that has explored the relationship between formal and informal leadership (e.g., Carson et al., 2007; Zhang et al., 2012) has tended assumed that formal leaders affect all team members' informal leadership in a similar way. In contrast, we drew on the behavioral plasticity view of social learning (Brockner, 1983, 1988) to hypothesize that the members of teams lower in MTL are more likely to look to their formal leader for cues to govern their own leadership activities. Our results establish that, relative to members of teams higher in member MTL, the perceptions and actions of members of teams lower in member MTL are more likely to be affected by a laissez-faire formal leader. In light of these findings, future models of informal leadership would be well served to consider not only the behavior of formal leaders (e.g., Carson et al., 2007) or team member attributes (e.g., DeRue, Nahrgang, & Ashford, 2015) but also the interactions of these two types of predictors (cf. Mischel & Shoda, 1995; Tett & Burnett, 2003).

4.2 | Practical implications

Our results underscore the importance of minimizing the extent to which formal leaders adopt a laissez-faire approach. Although it seems plausible that encouraging passivity on the part of formal leaders might inspire other team members to step up and engage in informal leadership, we show decisively that this does not occur. Instead, organizations attempting to develop their informal leadership capabilities should train their formal leaders to be less laissez-faire by, for instance, taking an active role in decision making, stepping in to resolve problems, and making themselves very accessible to team members. Although our supplemental analysis suggests that charismatic formal leaders are positively associated with informal leadership, our theorizing suggests that other forms of active task-oriented, relations-oriented, or change-oriented leader behavior might have a similar effect. Organizations could encourage such behavior by providing formal leaders with training that highlights specific behaviors, and by designing organizational reward and performance evaluation systems to discourage passivity in formal leaders.

However, it may not always be possible to avoid selecting laissez-faire formal leaders, train them to behave differently, or expediently remove them after they are in place. In these instances, our results suggest two ways organizations might offset the negative influence of such leaders. First, organizations might take steps to ensure that team members have access to other leaders within the organization with a less laissez-faire leadership style. This could include the top management team, or “skip” level leaders who are two to five levels above the team members (Detert & Treviño, 2010). Witnessing other leaders who are less laissez-faire may increase team members’ perceptions that others in the organization model effective leadership, and encourage them to disregard their immediate supervisor’s laissez-faire approach.

Second, organizations could ensure that teams with laissez-faire formal leaders are staffed with members who are high in MTL. These team members, who engage in consistently high levels of informal leadership, even when faced with a laissez-faire formal leader, can offset the negative effects of such a leader and help the team maintain a high level of task performance. We observed a nonhypothesized direct effect of team member MTL on informal leadership, suggesting that in general staffing teams with members high in MTL may promote informal leadership. Moreover, the significant interaction we found between MTL and laissez-faire formal leadership, as well as the results of our supplemental analysis, in which the charismatic formal leader \times MTL interaction was not a significant predictor of team member perceived modeling of effective leadership, suggest that having a team composed of members high in MTL may be particularly valuable when the team’s formal leader is laissez-faire.

4.3 | Limitations, strengths, and future research directions

As with all research, the study reported here is subject to certain limitations. First, we focused on testing functional leadership and social learning hypotheses and mediators because of the prevalence of functional leadership theory in the literature on informal leadership and the fact that social learning theory offers predictions that are so divergent. Although our results suggest that the perceived modeling of effective leadership is one mechanism through which laissez-faire formal leaders affect informal leadership, other potential mediators exist. For instance, the negative effects of laissez-faire formal leaders could also be due to a deterioration of their social exchange relationships with team members (Blau, 1964, Cropanzano & Mitchell, 2005; Graen & Uhl-Bien, 1995), the depletion of team members’ personal resources (Hobfoll, 1989), or a lack of role clarity (Skogstad, Hetland, Glasø, & Einarsen, 2014). Future research might explore the validity of these and other theoretical explanations of the effects of laissez-faire formal leaders on informal leadership in teams.

Second, we based our hypotheses and measurement related to social learning theory on existing research that emphasizes the importance of formal leaders’ modeling of effective leadership behavior (Dragoni et al., 2014). A focus on the perceived modeling of effective leadership also allowed us to align our mechanism with our focal outcome, team members’ informal (effective) leadership. However, an alternative, and perhaps more direct, test of social learning would involve assessing the extent to which team members perceive that their formal leader models a laissez-faire approach, as well as the extent to which team members’ themselves are laissez-faire. Although it would clearly be

valuable for future research to assess such modeling, we are comfortable with our research design and interpretation of results due to the existence of meta-analytic evidence that laissez-faire leaders are almost universally seen as ineffective (DeRue et al., 2011; Judge & Piccolo, 2004). Moreover, any imprecision in our assessment of the role modeling mechanism would make it less, rather than more, likely that we would find support for the proposed social learning pathway, which further increases our confidence in the results of our comparative test (Cooper & Richardson, 1986).

Finally, although our theorizing focused on individuals' overall MTL, our supplemental analyses revealed that the pattern of results that we observed pertained to the affective-identity and social-normative dimensions of MTL but not the noncalculative dimension. The difference may be due to the fact that the behavioral plasticity logic that we used in our interaction hypothesis is more relevant to team members' confidence and self-assurance as leaders (affective-identity MTL) and their attention to social pressures to lead (social-normative MTL) than to the outcomes of their personal cost-benefit analysis pertaining to leadership (noncalculative MTL). However, our results are particularly noteworthy in light of the fact that although Chan and Drasgow's (2001) initial conceptual work suggested the three MTL dimensions have similar antecedents and consequences, their empirical results revealed substantial differences. This is perhaps not surprising given each of the three aspects of leadership motivation involves a unique psychological process. Nevertheless, our results speak to the need for additional research and theorizing pertaining to the similarities and differences in the three MTL dimensions (Badura, Grijalva, Galvin, Owens, & Joseph, 2018).

In addition to the noted opportunities for replication and extension, the present research is characterized by several strengths. The measurement of our independent variable, mediator, and dependent variable was separated by time and assessment approach (i.e., traditional survey items as well as network questionnaires). This aspect of our research design dramatically reduces the likelihood that our results can be attributed to common method variance (Podsakoff et al., 2012). Although many network leadership studies adopt single-item measures, our study used a three-item network measure, which increases the likelihood that it accurately captures the entire informal leadership construct. Finally, we validated a shorter and more reliable measure of MTL, thereby overcoming the reliability issues with the original measure that we observed in pilot testing.

5 | CONCLUSION

A broader conceptualization of who the potential leaders in teams are, as well as the ways that their leadership behavior can be encouraged, is vital if organizations are to successfully meet the coordination demands that are presented by the modern business environment. The present article contributes to an emerging body of research and theory related to informal leadership by demonstrating that a social learning perspective is preferable to the more widely used functional leadership perspective in explaining the effect of laissez-faire formal leaders on team members' informal leadership. We hope that our findings will challenge scholars to think more deeply about the relationship between formal and informal leadership in teams, and to conduct additional investigations of the antecedents and consequences of informal leadership behavior.

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APPENDIX: SHORTENED MTL MEASURE DEVELOPMENT AND VALIDATION

We followed Hinkin's (1995, 1998) recommendations to develop a shorter and more reliable MTL scale. This validation effort was conducted under Institutional Review Board approval from Arizona State University's protocol #1218 (*Filling the void: Laissez-faire supervision and group members' informal leadership behavior*). We first generated a pool of items assessing the three MTL dimensions that were proposed by Chan and Drasgow (2001). We included the original 27 items and 13 new items that were short, simple, and not double-barreled or reverse-coded (Hinkin, 1998). We assessed content validity by providing 10 management PhD students with an overview of the MTL construct and the definitions of each dimension and asking them to match each item to the provided definition. We eliminated 12 items that did not meet Hinkin's (1998) recommended 75% minimum threshold of respondents' accurate matching of items to their intended definition.

We administered the remaining 28 items to a sample of 202 individuals who were recruited via Amazon Mechanical Turk. The average age of participants in this sample was 32.35 years ($SD = 8.99$), 45% were female, 59% were Caucasian, the average length of work experience was 11.56 years ($SD = 8.22$), and average organizational tenure was 5.38 years ($SD = 4.09$). Participants rated the extent to which each item described their views on leadership, and we submitted their responses to an exploratory factor analysis with principle components extraction and Varimax rotation. Three nonreverse coded factors emerged with eigenvalues greater than one and represented the affective-identity, social–normative, and noncalculative MTL dimensions proposed by Chan and Drasgow (2001). These items collectively explained 63.99% of the total variance (affective-identity accounted for 47.34% of the variance, whereas noncalculative and social–normative captured 9.86% and 6.80% of the variance, respectively).

To reduce the scale, we removed items with factor loadings less than 0.60 and cross-loadings greater than 0.35. To ensure parsimony and consistency with the original Chan and Drasgow (2001) measure, we retained a maximum of four items per measure, and used the original items wherever possible. This resulted in a 10-item measure, with four items assessing affective-identity MTL, and three items assessing each of the two remaining MTL dimensions. A confirmatory factor analysis revealed that a three-factor model with the affective-identity, social–normative, and noncalculative MTL items each loading on a separate factor fit the data well ($\chi^2(32) = 57.46$, $p = 0.00$, CFI = 0.98, TLI = 0.97, RMSEA = 0.06, SRMR = 0.04) and better than a one-factor model ($\chi^2(35) = 352.06$, $p = 0.00$, CFI = 0.75,

TLI = 0.68, RMSEA = 0.21, SRMR = 0.12, $\Delta\chi^2(3) = 294.6, p = 0.00$). The MTL dimensions were strongly associated: The unstandardized estimates between dimensions were 1.08 (between the affective-identity and social-normative factors), 0.72 (between the affective-identity and noncalculative factors), and 0.71 (between the social-normative and noncalculative factors). Each of the factor loadings were significant and loaded on the appropriate factor. Furthermore, the average variance explained for each of the factors was greater than the 0.50 threshold proposed by Fornell and Larcker (1981). We also found that the average variance explained by each factor was greater than the shared factor variance. The shortened MTL scale is provided below. Nine of the 10 items are from Chan and Drasgow's (2001) original measure, and one is adapted from that measure (reverse coding removed). Internal consistency reliabilities for all the factors were 0.80 and above.

SHORTENED MTL MEASURE (FACTOR LOADINGS IN PARENTHESES)

Affective-identity MTL

1. I usually want to be the leader in the groups that I work in (0.91).
2. Most of the time, I prefer being a leader rather than a follower when working in a group (0.91).
3. I have a tendency to take charge in most groups or teams that I work in (0.88).
4. I am the type of person who likes to be in charge of others (0.81).

Social-normative MTL

1. I feel that I have a duty to lead others if I am asked (0.88).
2. I agree to lead whenever I am asked or nominated by the other members of my group or team (0.85).
3. It is appropriate for people to accept leadership roles or positions when they are asked (0.68).

Noncalculative MTL

1. I never expect to get more privileges if I agree to lead a group (0.81).
2. I do not consider "what is in it for me" when agreeing to lead others (0.73).
3. If I agree to lead a group, I would never expect any advantages or special benefits (0.73).