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RESEARCH REPORT

Antecedents of Team Potency and Team Effectiveness: An Examination of Goal and Process Clarity and Servant Leadership

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Integrating theories of self-regulation with team and leadership literatures, this study investigated goal and process clarity and servant leadership as 3 antecedents of team potency and subsequent team effectiveness, operationalized as team performance and organizational citizenship behavior. Our sample of 304 employees represented 71 teams in 5 banks. Results showed that team-level goal and process clarity as well as team servant leadership served as 3 antecedents of team potency and subsequent team performance and team organizational citizenship behavior. Furthermore, we found that servant leadership moderated the relationships between both goal and process clarity and team potency, such that the positive relationships between both goal and process clarity and team potency were stronger in the presence of servant leadership.

Keywords: team potency, goal and process clarity, servant leadership, team performance, team OCBs

Although a substantial literature on individual motivation has amassed over decades, insufficient work has been done to advance our understanding of team motivation processes (Chen & Kanfer, 2006; Kozlowski & Bell, 2003). Teams are characterized by members working interdependently toward collective goals and by a period of stable membership (Hackman, 2002). Team potency, defined as shared confidence in a team's general capabilities (Campion, Medsker, & Higgs, 1993; Guzzo, Yost, Cambell, & Shea, 1993), is seen as one of the most important ingredients of team motivation (Bandura, 1997) and team effectiveness (Shea & Guzzo, 1987). Although the origins and consequences of individual self-efficacy are well understood, less is known about the antecedents of team potency perceptions (Tasa, Taggar, & Seijts, 2007). Despite the prevalence of designing teams to structure work (Cohen & Bailey, 1997), how the design and the clarification of team roles influence the formation of team potency remains an empirical question of particular relevance to the self-regulation and teams literatures. One suggestion is that perceived clarity of team goals and processes creates the psychological condition for the formation of potency beliefs (Chen & Bliese, 2002; Locke & Latham, 1990; Zaccaro, Ely, & Nelson, 2008).

A defining characteristic of teams is the interdependence among members (Wageman, 2001), and as interdependence increases, so does the need for team interaction and coordination. Team-level leadership may facilitate social integration, efficient processes, and smooth communication within the team, thereby enhancing team motivation (Chen & Kanfer, 2006; Morgeson, DeRue, & Karam, 2010; Zaccaro et al., 2008). Servant leadership, a construct proposed by Greenleaf (1970, 1977) and defined as leadership behaviors in which leaders persevere to be "servant first" rather than "leader first" and put their subordinates' "highest priority needs" before their own (Greenleaf, 1977, p. 14), appears to be a potentially important input for team potency. This strong focus on supporting followers suggests that servant leadership may strengthen the link between goal and process clarity and team potency by elevating team members' commitment to the goal. Goal commitment is essential for goal setting to motivate followers (Klein, Wesson, Hollenbeck, Wright, & DeShon, 2001; Locke, Latham, & Erez, 1988), such that in the absence of goal commitment, goal and process clarity become irrelevant.

Our purpose in this research was to make three contributions to the literature: (a) integrate team and leadership literatures with motivation theories by examining goal and process clarity and servant leadership as determinants of team potency beliefs; (b) extend the classic input–process–output model (Hackman, 1987) for team effectiveness by integrating goal and process clarity and servant leadership as contextual inputs that may increase team effectiveness through enhancement of team potency; and (c) incorporate servant leadership as a moderator of the relationship between goal and process clarity and team potency. Figure 1 depicts our model.

Theoretical Background and Hypotheses

Goal and Process Clarity and Team Effectiveness

In order to fully complete one's task roles, one needs to have clear expectations about (a) one's own subgoals, (b) the paths to

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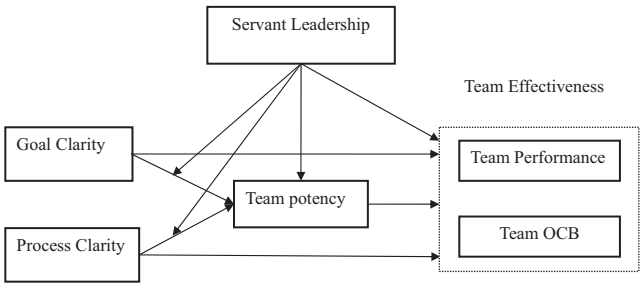

Figure 1. Proposed model of goal and process clarity, servant leadership, team potency, and team effectiveness. OCB = organizational citizenship behavior.

accomplish these subgoals, and (c) the link between one's work and the work of others (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Because individuals' roles are embedded in the larger context of teams (Rizzo, House, & Lirtzman, 1970), the clarity of team goals and individual members' roles in working toward meeting the goals has a powerful impact on team effectiveness (Gladstein, 1984). Sawyer (1992) built on role theory by further demonstrating that goal clarity and process clarity are two distinct constructs of work roles and team structure that not only heighten individuals' understanding of task goals and paths but also highlight individuals' connections to coworkers, teams, and the organization. When all team members are provided such clarity, they communicate more effectively with each other, which in turn serves to integrate each team member's tasks with those performed by others on the team. This mutual understanding facilitates the emergence of a shared vision of their subgoals, team goals, and the processes needed for accomplishing tasks within the team.

Thus, it is possible for both goal and process clarity to serve as properties that operate at the team level (Gladstein, 1984; Stewart, 2006), such that a high level of goal clarity indicates that team members as a whole clearly understand their subgoals and the connection between their work and the team's objectives. Likewise, at the team level, a high level of process clarity implies that team members clearly comprehend the procedures that must be followed in order to achieve goals. We contend that team-level goal and process clarity are positively related to team effectiveness, as indicated by team performance and team-level organizational citizenship behavior (OCB).

Goal-setting theory suggests that clear goals lead to improved team performance due to their role in directing team members' attention and encouraging members to be persistent (Locke & Latham, 1990). At the team level, common objectives can be divided into multiple subgoals for individual members, and when all team members are certain about the successful completion of their own work goals, the team's objective is likely to be accomplished (Larson, 2010). Clear procedures toward the goal are also critical for team performance, because they offer an explicit plan and visible tactics for accomplishing goals (Knight, Durham, & Locke, 2001; Weingart, 1992). Furthermore, when the members of the team decipher the connection between their subtasks and the collective task, they are less likely to engage in social loafing, which can be caused by low identification with collective goals (Karau & Williams, 1993; Liden, Wayne, Jaworski, & Bennett, 2004). Team members' motivation to contribute toward the realization of collective outcomes is enhanced when members have developed a clear vision of the individual contributions needed to attain high levels of collective performance (e.g., Griffith, Fichman, & Moreland, 1989).

Team OCB is also commonly seen as beneficial and valuable for team effectiveness (Ehrhart & Naumann, 2004; Pearce & Herbik, 2004). Team-level OCB refers to the normative level of OCB performed within the team (Ehrhart, 2004). When team members have a good understanding of their own objectives and procedures and the connection between their own job and the collective tasks, they endeavor to translate their own efforts for the purpose of helping the collective effectiveness of the team. They accomplish this by engaging in OCBs, such as helping new coworkers and making suggestions to improve performance. These individual citizenship behaviors, in turn, become a standard mode of team behavior (Ehrhart & Naumann, 2004).

Team Potency as a Mediator in the Relationship Between Goal and Process Clarity and Team Effectiveness

Team potency, defined as team members' shared beliefs about their collective capabilities (Campion et al., 1993), is a critical motivational state in teams (Chen & Kanfer, 2006). Although team potency is related to collective efficacy (Bandura, 1997), potency refers to beliefs in generalized team capability for achieving general effectiveness (Guzzo et al., 1993), whereas collective efficacy is task specific (Gibson & Earley, 2007). Also, team potency is not a simple sum of the self-efficacy of individual team members, and it develops independently from individual self-efficacy (Zaccaro, Blair, Peterson, & Zazanis, 1995). We contend that team potency serves as a bridge linking goal and process clarity to team effectiveness, such that goal and process clarity are positively related to team potency, which in turn leads to team effectiveness.

We integrate motivation theories with team literature by arguing that goal and process clarity are important determinants of team potency. Three prominent theories of motivation, goal-setting theory (Locke & Latham, 1990), social cognitive theory (Bandura, 1986), and self-determination theory (Deci & Ryan, 2000), explain how goals and processes employed to achieve the goal guide self-regulatory activity (Kanfer & Ackerman, 1989). These theoretical perspectives are also salient in explaining team-level motivation, because team- and individual-level motivational processes are functionally similar (Chen & Kanfer, 2006). Based on goal-setting theory (Locke & Latham, 1990), clear and achievable goals enhance performance by directing individual action and motivating individuals to exert effort toward the performance goal. Research at the team level has shown that clear team goals are also critical for forming a common team identity (Sivunen, 2006) and developing a sense of confidence in the team's capabilities. Social cognitive theory suggests that work clarity creates an important condition needed for the formation of competence beliefs by providing enactive and vicarious experience to team members (Bandura, 1986, 1997; Chen & Bliese, 2002; Zaccaro et al., 2008). Goal and process clarity often contribute toward the sharing of information and experience. This in turn serves to increase members' confidence in the team's capabilities and ultimate success. Furthermore, drawing on self-determination theory (Deci & Ryan, 2000), people are likely to be intrinsically motivated to work when

their innate psychological needs for relatedness, competence, and autonomy are satisfied. An important component of goal clarity is that individual members understand how their subtasks relate to the overall objectives of the team (Sawyer, 1992). This understanding creates a sense of relatedness with other members in the team (Diefendorff & Lord, 2008), which fosters close interactions between members and helps to integrate team members' tasks. Additionally, when most team members are aware of what to do (i.e., goal clarity) and how to do it (i.e., process clarity), they feel more control over and autonomy in their work (Spreitzer, 1995) and develop high levels of certainty in the competence of the team (Gist & Mitchell, 1992). This sense of relatedness, autonomy, and competence motivates team members to meet the team's goals and enhances confidence in the team's capability to be successful.

Team-level motivation is distinct from individual-level motivation because it involves coordination among multiple members (Chen & Gogus, 2008). Through many interactions between members, a team develops shared beliefs regarding its general capabilities (Ford, 1996). Goal and process clarity influence team potency by enhancing collective interactions (Hackman, 1987). Team members with a clear understanding of their own tasks and the connections between their tasks and collective goals are likely to experience smooth coordination with teammates, which reduces process loss (Steiner, 1972). Smooth coordination also serves to increase social integration within the team and enhances members' expectations concerning collective capabilities to be successful across tasks and contexts. Similarly, with a high level of process clarity, team members are likely to engage in high-quality communications and avoid dysfunctional conflicts due to ambiguity regarding their responsibilities in the process (Gladstein, 1984). This harmonious relationship among team members may lead team members to possess high levels of confidence about their teamwork, which translates into perceptions of high team potency.

Potency beliefs then energize members to work together toward their common goals with tenacity, even in the face of obstacles and difficulties (Bandura, 1997), which in turn leads to high levels of team performance (Gully, Incalcaterra, Joshi, & Beaubien, 2002). Shared potency beliefs raise consciousness of team effectiveness among team members by generating a strong sense of membership in the team, which in turn motivates them to engage in discretionary behaviors, such as OCBs (Ehrhart & Naumann, 2004; Pearce & Herbik, 2004).

Hypothesis 1: Goal clarity positively relates to (a) team performance and (b) team OCB through the partial mediating effect of team potency.

Hypothesis 2: Process clarity positively relates to (a) team performance and (b) team OCB through the partial mediating effect of team potency.

Servant Leadership and Team Effectiveness

Servant leadership, a type of leadership with a strong ethics component (Avolio & Gardner, 2005), promotes organizational functioning through high levels of employee trust in management (Ehrhart, 2004; Graham, 1991; Greenleaf, 1977). Liden, Wayne, Zhao, and Henderson (2008) described servant leadership as composed of seven leader behaviors: behaving ethically, emotional healing, putting subordinates first, helping subordinates grow and succeed, empowering, creating value for the community, and conceptual skills. Although it preceded the most popular contemporary leadership theories, servant leadership (Greenleaf, 1970) has received relatively less attention in the academic literature, making it necessary to distinguish servant leadership from other major leadership theories. A defining characteristic of servant leaders is the emphasis on personal integrity in all realms of life, work, family, and community (Ehrhart, 2004) that extends beyond other leadership approaches, such as transformational leadership. Internalized moral standards guide servant leaders to serve as role models for their followers (Graham, 1991) and to show deep concern for followers' growth and development. Whereas transformational leaders are seen as putting their organization's values first and encouraging employees to sacrifice their own interests to satisfy the collective (Piccolo & Colquitt, 2006), servant leaders put the best interest of followers as their top priority. Empirical research has confirmed the unique impact of servant leadership on employee outcomes after controlling for other leadership behaviors, such as transformational leadership and leader–member exchange (Ehrhart, 2004; Liden et al., 2008).

Servant leadership can function at both individual and team levels. At the team level, servant leadership can serve as a type of "ambient stimulus" (Hackman, 1992) in which an overall pattern of leadership behaviors is presented to all members of the team (Ehrhart, 2004; Liao & Chuang, 2007; Morgeson et al., 2010; Walumbwa, Hartnell, & Oke, 2010). The exchange process between leaders and their work teams is central to servant leadership theory (Liden et al., 2008). Although social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) are often employed to explain dyadic relationships between supervisors and individual subordinates, team-level servant leadership also involves an exchange process in which leaders help the team by affirming the strengths and potential of the team, as well as providing developmental support for the team as a whole. Team members reciprocate the benefits they have received by exerting effort, including OCBs that are directed toward team performance. In a finding suggestive of this proposed social exchange process, servant leadership significantly influenced team-level OCB via the mediating role of procedural justice climate (Ehrhart, 2004). Walumbwa et al. (2010) further demonstrated that team-level servant leadership is positively related both to team-level procedural justice climate and to service climate and individual-level self-efficacy and commitment to supervisor, which in turn influences individual OCB in the team.

Team Potency as a Mediator Between Servant Leadership and Team Effectiveness

There are at least two reasons why servant leadership increases team potency and subsequent team effectiveness. First, servant leaders act in the best interest of their subordinates (Walumbwa et al., 2010) and care about each individual member's needs and personal growth (Mayer, Bardes, & Piccolo, 2008). Servant leaders gain team member trust and build long-term relationships by showing genuine concern for all team members (Liden et al., 2008). And because it is the leader's team, follower trust in leadership acts to elevate team members' trust in the capabilities of the team to be effective. Second, given the complexity of modern

work environments, many potential changes and unexpected problems arise that require team members' collaboration to solve. Servant leaders possess high conceptual skills and provide direction (Van Dierendonck, in press) that guides team members to cultivate an accurate understanding of the changing environment and facilitates the development of team shared mental models (Zaccaro, Rittman, & Marks, 2001). We contend that this guidance from servant leaders is crucial for effective collaboration among team members (Cannon-Bowers, Salas, & Converse, 1993) and results in enhanced team member confidence in their collective capabilities, even in the face of uncertainty and obstacles. Furthermore, servant leaders convey the importance of personal integrity, honesty, and fairness to the team (Russell & Stone, 2002), which promotes authentic and problem-driven communication (Harter, 2002; Spears & Lawrence, 2004) and creates a spiritual climate within the team (Liden et al., 2008). A spiritual climate leads team members to cooperate with and care about each other (Fry, Vitucci, & Cedillo, 2005; Pawar, 2008) and to be optimistic about their team's capabilities to be effective (Wong & Davey, 2007).

As illustrated in Figure 1, we anticipated that servant leadership would directly influence team outcomes, such as performance (Liden et al., 2008) and OCBs (Ehrhart, 2004), and would indirectly affect these outcomes through its positive relationship with team potency. We derive our expectation of partial mediation from the functional leadership perspective (Hackman, 2002), arguing that a high level of team potency is needed for team servant leadership to promote team effectiveness, because it directs members' attention to the common goal, increases their efforts, and enables them to be persistent in the face of adversity (Bandura & Locke, 2003).

Hypothesis 3: Servant leadership relates positively to (a) team performance and (b) team OCB through the partial mediating effect of team potency.

Servant Leadership as a Moderator in the Relationship Between Goal and Process Clarity and Team Potency

Goal and process clarity positively affect work performance only when team members are committed to the goal (Locke & Latham, 1990; Maier & Brunstein, 2001). This increases the importance of leaders who can energize team motivation by enhancing team members' identification and commitment to the work and goals of the team (Zaccaro et al., 2008). We contend that servant leadership is well suited for elevating team commitment to the goal and amplifying the positive influence of goal and process clarity on team potency. This is because servant leaders, rather than engaging in opportunistic behaviors, prioritize individual members' personal growth and career development (Greenleaf, 1977; Matteson & Irving, 2006) and align the work objectives with individual members' needs. The employee-centered focus of servant leaders is manifested in greater team member acceptance of and commitment to work goals and helps to translate goal and process clarity into perceptions of team potency.

This subordinate-first emphasis also helps servant leaders gain employee commitment to the organization (Liden et al., 2008) and to the supervisor (Walumbwa et al., 2010). We contend that commitment to the supervisor and organization is manifested in team members' commitment to team goals, because the leader is considered the prototypic member of the team (Hogg, 2001) and the representative of the organization (Erdogan & Liden, 2002). Thus, when team members feel attached to the leader and the organization, they tend to embrace the goals and processes guided by the leader. Furthermore, empowering behaviors, a key dimension of servant leadership (Liden et al., 2008), are especially salient with respect to getting team members involved in the goal-setting process, enabling them to be more committed to goals, and strengthening the role of goal and process on team potency beliefs (Arnold, Arad, Rhoades, & Drasgow, 2000; Deci, Connell, & Ryan, 1989; Morgeson et al., 2010). Indeed, empirical evidence has clearly demonstrated the salience of team leaders in emphasizing the importance of goal and process clarity for developing team potency (Cohen, Chang, & Ledford, 1997; Sivunen, 2006). Hence, goal and process clarity are accelerated to form team potency beliefs in the presence of a servant leader who enables members to embrace team values and encourages commitment to team goals.

In contrast, the absence of servant leadership in the team may neutralize the positive relationship between goal and process clarity and team potency. Without a servant leader, teams lack a powerful stimulus for boosting their commitment to team goals, which makes team members indifferent toward the goal and processes. This in turn decreases their confidence in the team's capabilities and weakens or even eliminates the motivational effect of goal and process clarity on team potency beliefs (Locke et al., 1988).

Hypothesis 4: Servant leadership moderates the relationships between (a) goal clarity, and (b) process clarity and team potency, such that the relationship is stronger the more the leader engages in servant leadership.

Method

Sample and Procedure

The study was conducted in five banks in China. Employees worked in different functional teams, such as accounting and trust. Each of the teams had a common team task in which every member had a clear role and worked interdependently with teammates toward common goals. To ensure full team membership, we limited participation in the study to employees with a minimum of 6 months tenure in their current teams.

The 570 employees representing 95 teams and the 80 upper level managers whom we invited to participate were allowed to complete the surveys at home and mail them to us in self-addressed stamped envelopes. Seven teams' surveys were discarded due to the lack of upper level managers' ratings. A total of 71 teams was included in the analyses, with 304 employees (response rate = 53.3%) and 60 upper level managers (response rate = 75%) forming the final sample. The average team response rate was 74.92%, greater than the 60% recommended by Timmerman (2005). Every team's performance and OCB was rated by two upper level managers. We did not choose team leaders as the raters, given that team performance indirectly reflects on their management capability. The 60 upper level managers, working independently of one another, rated team performance and OCB.

Every pair of upper level managers rated an average of 2.37 teams. The average team size was 4.28. Most respondents were men (59%). Their average tenure was 2.99 years in their teams and 4.78 years within the organization.

Measures

Goal and process clarity. Team members rated goal clarity ($\alpha = .87$) and process clarity ($\alpha = .84$) with five items developed by Sawyer (1992). A sample item for goal clarity asked participants to think of "the degree of clarity felt about my duties and responsibilities," and a sample item for process clarity evaluated the degree of clarity felt about "the procedures I use to do my job are correct and proper" (1 = *very uncertain* to 7 = *very certain*).

Team potency. Team potency was rated by team members with Riggs and Knight's (1994) seven-item scale. An example item is "The team I work with has above average ability" (1 = *strongly disagree* to 7 = *strongly agree*; $\alpha = .78$).

Servant leadership. Team members assessed their leaders with Liden et al.'s (2008) 28-item Servant Leadership Scale. An example item is "My manager seems to care more about my success than his/her own" (1 = *strongly disagree* to 7 = *strongly agree*). Confirmatory factor analysis (CFA) results, with factor loadings shown in Figure 2, revealed support for a higher order model, $\chi^2(342) = 465$, normed fit index (NFI) = .95, comparative fit index (CFI) = .99, root-mean-square error of approximation (RMSEA) = .07, standardized root-mean-square residual (SRMR) = .03, which paralleled fit of the first-order factor model, $\Delta\chi^2(14) = 22.52$, *ns.* As shown in Figure 2, the first-order factors (i.e., seven dimensions) are distinct, but all fell under a higher order factor (i.e., the construct of servant leadership). Therefore, we used overall servant leadership as a latent factor and averaged all items ($\alpha = .96$) to represent team-level servant leadership.

Team performance. Using a four-item scale by Liden, Wayne, and Stilwell (1993), two upper level managers rated each team's performance. An example item is "rate the overall level of performance that you observe for this team" (1 = *unacceptable* to 7 = *outstanding*). The two managers' evaluations were averaged to form every team's performance score (interrater reliability = .95; based on individual ratings, $\alpha = .96$).

Team-level OCB. Two upper level managers assessed team-level OCB with seven items adopted from Smith, Organ, and Near (1983). An example item is "In general, the team members help others who have been absent" (1 = *never* to 7 = *always*). The interrater reliability was .98, and alpha was .89, based on all managers' individual ratings.

Task interdependence. Task interdependence was assessed with five items developed by Pearce and Gregersen (1991). A sample item is "team members work closely with others in doing their work" (1 = *strongly disagree* to 7 = *strongly agree*; $\alpha = .79$). Task interdependence was used to assess whether the study teams satisfied the criteria for a team (Wageman, 2001).

Control variables. We controlled for mean team tenure, team age, and organizational tenure, given their importance in previous research (Schaubroeck, Lam, & Cha, 2007). Results of analysis of variance showed that there were significant differences with respect to the hypothesized variables across the five banks. Thus, we dummy coded the five banks and controlled for the effects of organizational membership on the dependent variables.

Data Aggregation and Level of Analysis

Given that all of our analyses were at the team level, we assessed the team-level properties of our measures in several ways. First, we examined task interdependence, a prominent and defining feature of work teams, and found that all teams in our sample had a high mean level of task interdependence ($M = 4.94$, $SD = 0.50$). The within-group agreement test (James, Demaree, & Wolf, 1984) further showed that all team members had a common perception of their task interdependence, indicated by a high $r_{wg(j)}$ value of .92.

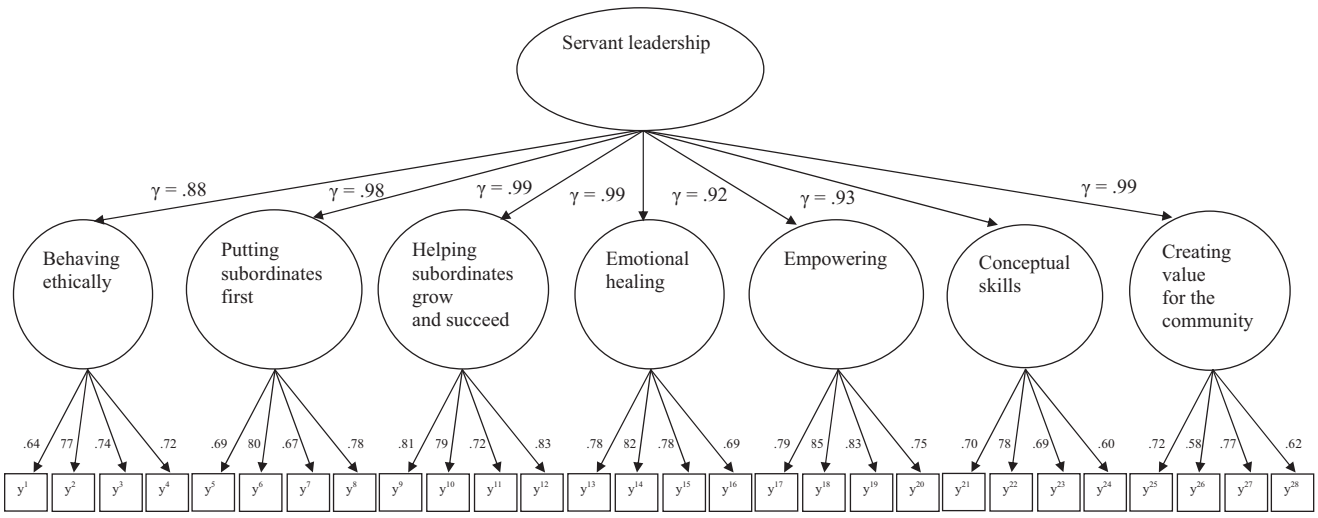

Figure 2. Results of second-order confirmatory factor analysis results for servant leadership. $\chi^2(343) = 465$, normed fit index = .95, comparative fit index = .99, root-mean-square error of approximation = .07, standardized root-mean-square residual = .03. *y*s represent items reflecting first-order factors; the numbers below the first-order factors represent factor loadings for the items.

This high interdependence among the individual members of teams supported the nature of work teams and provided initial support for the aggregation for all the variables to the team level.

Estimated $r_{wg(j)}$ values for all study variables were acceptable: .96 for goal clarity, .95 for process clarity, .91 for team potency, .95 for team performance, .98 for team OCB, and .99 for servant leadership. Intraclass correlations, ICC1 (reliability of the team means) and ICC2 (to determine whether it was appropriate to create an average rating for a team), were generally acceptable: respectively, goal [.39, .76] and process [.58, .74] clarity; team potency [.16, .69]; servant leadership [.16, .69]; team performance [.64, .78]; team OCB [.63, .77]. Thus, aggregation of all variables was appropriate (Bliese, 2000).

Analysis Strategy

We tested our hypotheses with hierarchical linear modeling (Raudenbush & Bryk, 2002), because pairs of upper level managers rated multiple teams' performance and OCB ($M = 2.37$, $SD = 2.31$). This makes the relationships with these variables nonindependent, potentially biasing the results (Bliese, 2002). The ICC1 values for team performance (.46, $p < .01$) and team OCB (.23, $p < .05$) suggested a lack of independence among multiple teams rated by the same upper level managers. Thus, we estimated a multilevel model where teams (Level 1) are nested within the upper level managers (Level 2). We followed Bauer, Preacher, and Gil's (2006) lower level mediation approach to test whether team potency mediates the relationships among goal and process clarity, servant leadership, and team effectiveness.

Results

Table 1 shows descriptive statistics, reliabilities, and correlations of all variables. We conducted two sets of CFAs, one for team member data and one for variables based on upper level manager data, to assess the discriminant validities of all variables. For the variables rated by team members (i.e., goal clarity, process clarity, team potency, and servant leadership), the CFA results presented in Table 2 suggested that the hypothesized four-factor model (i.e., the four variables as four separate factors) yielded a better fit (CFI = .99, NFI = .98, RMSEA = .03, SRMR = .02) than a three-factor model (i.e., goal clarity and process clarity as a combined factor) and a one-factor model (all four variables as a combined factor). Team performance and OCB, both rated by upper level managers, were found via a CFA to be distinct, as a two-factor model (CFI = .99, NFI = .96, RMSEA = .05, SRMR = .02) provided a better fit than a one-factor model.

Hypothesis Testing

As shown in Table 3, results of the X→Y models (Models 1a and 1b) showed that all three hypothesized variables significantly and positively related both to team performance (goal clarity, $c = .29$, $p < .01$; process clarity, $c = .14$, $p < .05$; servant leadership, $c = .77$, $p < .001$) and to team OCB (goal clarity, $c = .41$, $p < .01$; process clarity, $c = .19$, $p < .01$; servant leadership, $c = .59$, $p < .001$). Although the X→M and M→Y models were tested simultaneously, we reported the results separately for clarity (e.g., Bacharach, Bamberger, & Doveh, 2008). Results of the X→M

Table 1
Team Construct Means, Standard Deviations, Reliabilities, and Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Organization 1	0.25	0.44	—														
2. Organization 2	0.24	0.43	.31**	—													
3. Organization 3	0.21	0.41	−.30*	−.28*	—												
4. Organization 4	0.20	0.40	−.29*	−.27*	−.26*	—											
5. Organization 5	0.10	0.30	−.18	−.16	−.16	−.15	—										
6. Team mean age (years)	28.1	2.91	.33**	−.33**	−.23	.32**	−.12	—									
7. Organizational tenure (years)	4.78	2.96	.40**	−.30**	−.37**	.35**	−.17	.92**	—								
8. Mean team tenure (years)	2.99	1.67	.28*	−.36**	−.21	.31**	−.04	.73**	.76**	—							
9. Goal clarity	5.74	0.80	.10	.01	.17	−.03	−.21	−.10	−.21	−.28*	(.87)						
10. Process clarity	5.68	0.67	.13	−.14	.16	.07	−.29*	.13	.04	−.04	.72**	(.84)					
11. Team potency	5.23	0.61	.46**	.01	.06	−.27*	−.30*	.09	.09	−.13	.32**	.30**	(.78)				
12. Servant leadership	4.93	0.51	.41**	−.01	−.02	−.17	−.21	.27*	.25*	.07	.20	.12	.59**	(.96)			
13. Team performance	5.31	0.76	.54**	−.20	.10	−.31**	−.21	.14	.09	.06	.42**	.32**	.59**	.60**	(.96)		
14. Team-level OCB	4.96	0.68	.51**	−.04	−.07	.24*	−.24*	.18	.18	.03	.33**	.33**	.48**	.58**	.72**	(.89)	
15. Task interdependence	4.94	0.50	.44**	.01	−.15	−.19	−.20	.04	.08	−.01	.37**	.37**	.50**	.46**	.58**	.78**	(.79)

Note. $N = 71$. Cronbach's alpha reliabilities are reported along the diagonal. *SD* = standard deviation; OCB = organizational citizenship behavior.
* $p < .05$. ** $p < .01$.

Table 2
Confirmatory Factor Analysis Results for Hypothesized Variables

Model	χ^2	*df*	$\Delta\chi^2$	Δdf	NFI	CFI	SRMR	RMSEA
			Independent variables[a]					
Model 1: Four-factor	123.45	183			.98	.99	.02	.03
Model 2: Three-factor[c]	146.02	186	22.57***	3	.94	.98	.03	.06
Model 3: One-factor[b]	567.96***	189	444.51***	6	.81	.89	.12	.17
			Dependent variables[c]					
Model 4: Two-factor	43.51	43			.96	.99	.02	.05
Model 5: One-factor[d]	179.36***	44	135.85***	1	.89	.93	.09	.21

Note. $N = 71$. In Models 1, 2, and 3, to reduce the number of parameters and maintain adequate degrees of freedom, we assigned the items to parcels within and across subdimensions of servant leadership (Bagozzi & Edwards, 1998). *df* = degrees of freedom; NFI = normed fit index; CFI = comparative fit index; SRMR = standardized root-mean-square residual; RMSEA = root-mean-square error of approximation.
[a] Independent variables include goal clarity, process clarity, team potency, and servant leadership. [b] Models 2 and 3 were compared with Model 1. [c] Dependent variables include team performance and team OCB. [d] Model 5 was compared with Model 4.
*** $p < .001$.

model (Model 2) showed that goal clarity (a = .31, $p < .01$), process clarity (a = .25, $p < .05$), and servant leadership (a = .29, $p < .01$) were all significantly related to team potency. When all of the independent variables were entered into the model, there was a positive relationship between team potency and both team performance ($b = .49$, $p < .01$; Model 3a) and team OCB ($b = .38$, $p < .01$; Model 3b). Also as indicated at Models 3a and 3b, after we included team potency in the model, goal clarity ($c' = .14$, *ns*; $c' = .29$, *ns*) and process clarity ($c' = .01$, *ns*; $c' = .09$, *ns*) were no longer significantly related to team performance and team OCB, respectively. However, servant leadership remained significantly related to team performance ($c' = .63$, $p < .001$) and team OCB ($c' = .48$, $p < .01$). Furthermore, with regard to Hypotheses 1a and 1b, when goal clarity was the independent variable, the indirect effect was significantly positive for the team performance as outcome model, $E(a_jb_j) = .16$, $p < .05$, $SE = .04$, 95% CI [.07, .24], and the team OCB model, $E(a_jb_j) = .12$, $p < .05$, $SE = .07$, 95% CI [.03, .38]. For Hypotheses 2a and 2b, with process clarity as the independent variable, the indirect effect was consistent with hypotheses for the team performance as the outcome model, $E(a_jb_j) = .10$, $p < .05$, $SE = .06$, 95% CI [.01, .21], and for team OCB as outcome model, $E(a_jb_j) = .10$, $p < .05$, $SE = .05$, 95% CI [.01, .21].When servant leadership was the independent variable, the indirect effect was significant in the hypothesized direction for team performance as the outcome, $E(a_jb_j) = .15$, $p < .05$, $SE = .07$, 95% CI [.01, .29], and for team OCB as the outcome, $E(a_jb_j) = .12$, $p < .05$, $SE = .07$, 95% CI [.01, .25].

Before reaching conclusions concerning support for hypotheses, we compared the hypothesized partial mediation models with alternative models using multilevel structural equation modeling techniques (Raykov & Mels, 2007) and LISREL 8.7 software (Jöreskog & Sörbom, 1993). Due to the strong impact of goal and process clarity and servant leadership on team potency as well as the close connection between team potency and team effectiveness, it is possible for the influences of goal and process clarity and servant leadership on team effectiveness to be fully reliant on team potency. Hence, the hypothesized model was compared to three full mediation models in which the effects of all three independent variables (i.e., goal clarity in Model 1, process clarity in Model 2, and servant leadership in Model 3) on team effectiveness are fully mediated via team potency (with the paths from goal clarity, process clarity, and servant leadership to team effectiveness removed). Results showed that the full mediation models (Models 1 and 2) yielded fit superior to the models proposed in Hypotheses 1a, 1b, 2a, and 2b: Model 1, $\Delta\chi^2(4) = 9.82$, $p < .05$; Model 2, $\Delta\chi^2(4) = 11.96$, $p < .05$. This indicates that removing the paths from goal clarity and process clarity to team performance and OCB significantly improves the hypothesized models, supporting the full mediation models for goal and process clarity as independent variables. The results also supported the partial mediation model proposed in Hypotheses 3a and 3b, as the model containing the paths from servant leadership to team performance and team OCB was better than the model not containing these direct paths (Model 3), $\Delta\chi^2(4) = 1.83$, *ns*.

Regarding Hypotheses 4a and 4b (see Table 4), we found a positive interaction between goal clarity and servant leadership in predicting team potency ($\gamma_{110} = .52$, $p < .01$; Model 3) and a positive interaction between process clarity and servant leadership in predicting team potency ($\gamma_{120} = .27$, $p < .05$; Model 3). Furthermore, we obtained the pseudo ΔR^2 value for expressing the effect size of the interaction (Raudenbush & Bryk, 2002). The pseudo $\Delta R^2_{\text{within-group}}$ value of .04 and pseudo $\Delta R^2_{\text{total}}$ value of .07 indicated that the two interaction terms explained additional 4% within-group variance and additional 7% total variance in the outcome variable (i.e., team potency), respectively. To determine the nature of the interaction, we tested the simple slopes for teams with high servant leadership (1 *SD* higher) and low servant leadership (1 *SD* lower) in Figure 3 and Figure 4. In support of Hypothesis 4a, we found that the positive relationship between goal clarity and team potency was stronger in the presence ($\beta = .31$, $p < .01$) than in the absence ($\beta = -.22$, $p < .05$) of high servant leadership. The relationship between process clarity and team potency was more positive for high ($\beta = .22$, $p < .01$) than for low ($\beta = -.05$, *ns*) servant leadership, supporting Hypothesis 4b.

In sum, partial support was found for Hypotheses 1a, 1b, 2a, and 2b, as tests of alternative models found the strongest support for full mediation as opposed to the hypothesized partial mediation. Hypotheses 3a, 3b, 4a, and 4b were fully supported, even after testing alternative models.

Table 3
Hierarchical Multilevel Fixed Model Analysis Results of Team Potency as a Mediator

	Total effects		Fixed effects		
	X→Y		X→M	M→Y	
Step	Model 1a	Model 1b	Model 2	Model 3a	Model 3b
Dependent variables	Y: Team performance	Y: Team OCB		Y: Team performance	Y: Team OCB
Step 1: Control variables					
Organization 1	.82***	.78***	.67***	.52**	.73**
Organization 2	.12	.37**	.13	.02	.12
Organization 3	.41	.36*	.22	.32	.35
Organization 4	.06	.16	−.09	−.08	.17
Team mean age	.08	.01	.05	.01	.01
Organizational tenure	.05	−.01	−.02	−.04	−.01
Team mean tenure	−.14*	−.03	−.13*	.08	−.03
Step 2: Independent variables					
Goal clarity	.29** (*c*)	.41** (*c*)	.31** (*a*)	.14 (*c′*)	.29 (*c′*)
Process clarity	.14* (*c*)	.19** (*c*)	.25* (*a*)	.01 (*c′*)	.09 (*c′*)
Servant leadership	.77*** (*c*)	.59** (*c*)	.29** (*a*)	.63*** (*c′*)	.48** (*c′*)
Step 3: Mediator					
Team potency				.49** (*b*)	.38** (*b*)
			X: goal clarity	Estimated var (a_jb_j) = 0.03 $E(a_jb_j)$ = 0.16 95% CI [0.07, 0.24]; *SE* = 0.04 $E(a_jb_j + c'_j)$ = 0.30 95% CI [0.13, 0.46]; *SE* = 0.09	Estimated var (a_jb_j) = 0.02 $E(a_jb_j)$ = 0.12 95% CI [0.03,0.38]; *SE* = 0.07 $E(a_jb_j + c'_j)$ = 0.41 95% CI [0.14,0.69]; *SE* = 0.14
			X: process clarity	Estimated var (a_jb_j) = 0.02 $E(a_jb_j)$ = 0.10 95% CI [0.01, 0.21]; *SE* = 0.06 $E(a_jb_j + c'_j)$ = 0.19 95% CI [0.05, 0.43]; *SE* = 0.12	Estimated var (a_jb_j) = 0.01 $E(a_jb_j)$ = 0.10 95% CI [0.01,0.21]; *SE* = 0.05 $E(a_jb_j + c'_j)$ = 0.19 95% CI [0.04,0.41]; *SE* = 0.05
			X: servant leadership	Estimated var (a_jb_j) = 0.01 $E(a_jb_j)$ = 0.15 95% CI [0.01, 0.29]; *SE* = 0.07 $E(a_jb_j + c'_j)$ = 0.78 95% CI [0.48, 0.77]; *SE* = 0.15	Estimated var (a_jb_j) = 0.01 $E(a_jb_j)$ = 0.12 95% CI [0.01,0.25]; *SE* = 0.07 $E(a_jb_j + c'_j)$ = 0.60 95% CI [0.32,0.87]; *SE* = 0.14

Note. $N = 71$. X = goal clarity/process clarity; M = team potency; Y = team performance/team organizational citizenship behavior (OCB); var = variance; CI = confidence interval; *SE* = standard error.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

Theoretical Implications

A key contribution of the current study is to demonstrate that goal clarity and process clarity as well as team servant leadership serve as three important antecedents of team potency and subsequent team effectiveness. Furthermore, the study emphasized the importance of team servant leadership as a moderator of the positive relationship between goal and process clarity and team potency. The findings contribute to the team motivation and leadership literatures in the following ways.

The first major implication of our findings was that we proposed and found that goal and process clarity enhanced team performance and team OCB by cultivating team potency beliefs. This result is particularly noteworthy because it complements the substantial body of findings supporting the significance of team potency in building team performance (Gully et al., 2002) and enhances theory by shedding light on how team potency emerges. Within true team contexts, characterized by interdependence as with those studied here, goal and process clarity offer team members a clear view of their goals, paths to the goals, and the connection between their own work and the team's goal. This guides the team regulation process and promotes the quality of interactions within the team, nurturing a sense of confidence in the team's potential effectiveness. Second, we found that team servant leadership also enhanced team effectiveness by elevating team

Table 4
Hierarchical Multilevel Analysis Results of the Moderating Role of Servant Leadership in the Relationship Between Goal and Process Clarity and Team Potency

Variable	Team potency		
	Model 1	Model 2	Model 3
Step 1: Control variables			
Organization 1, γ_{10}	.88***	.57**	.56**
Organization 2, γ_{20}	.39	.19	.16
Organization 3, γ_{30}	.52*	.33	.35
Organization 4, γ_{40}	−.10	−.16	−.15
Team mean age, γ_{50}	.03	0	0
Organizational tenure, γ_{60}	.06	.05	.06
Team mean tenure, γ_{70}	.16**	.11*	.14
Step 2: Independent variables			
Goal clarity, γ_{80}		.20	.04
Process clarity, γ_{90}		.16	.09
Servant leadership, γ_{100}		.40**	.46**
Step 3: Moderator			
Goal Clarity × Servant Leadership, γ_{110}			.52**
Process Clarity × Servant Leadership, γ_{120}			.27*
$R^2_{\text{within-group}}$	.15	.17	.21
$R^2_{\text{between-group}}$	.18	.58	.74
R^2_{total} [a]	.13	.29	.36
$\Delta R^2_{\text{within-group}}$		.03	.04
$\Delta R^2_{\text{between-group}}$		.40	.16
$\Delta R^2_{\text{total}}$		.16	.07

Note. $N = 71$.
[a] $R^2_{\text{total}} = R^2_{\text{within-group}} \times (1 - \text{ICC1}) + R^2_{\text{between-group}} \times \text{ICC1}$. ICC1 indicates the proportion of variance in the outcome variable that resides between groups. ICC1 for team potency as the outcome is .29.
* $p < .05$. ** $p < .01$. *** $p < .001$.

potency. This finding integrates team leadership with motivation literature and responds to the call for more attention to the role of team leadership in motivating teams (Morgeson et al., 2010; Zaccaro et al., 2008).

Finally, support for the interaction between servant leadership and goal and process clarity represents an especially critical extension of servant leadership and team potency theories. This finding suggests that the motivational effects of goal and process clarity may disappear when commitment to the goal (Locke & Latham, 1990) is lacking. Our results clearly demonstrated that goal and process clarity contribute the most to the emergence of team potency when accompanied by servant leaders, whose employee-centered focus is beneficial for facilitating team confidence and effective team behaviors. In contrast, the results showed that in the absence of servant leadership, the impact of goal and process clarity on team potency was no longer positive or even became negative.

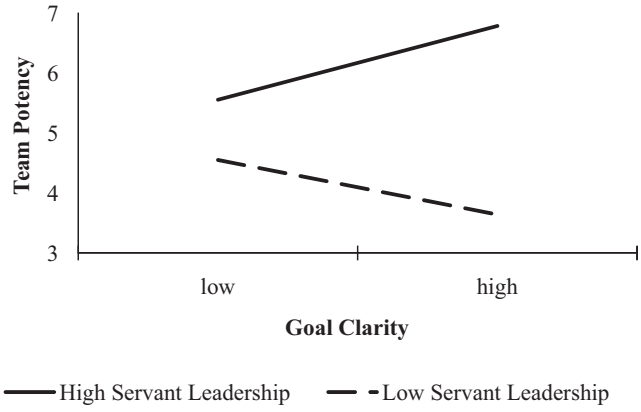

Figure 3. Interaction between goal clarity and servant leadership on team potency.

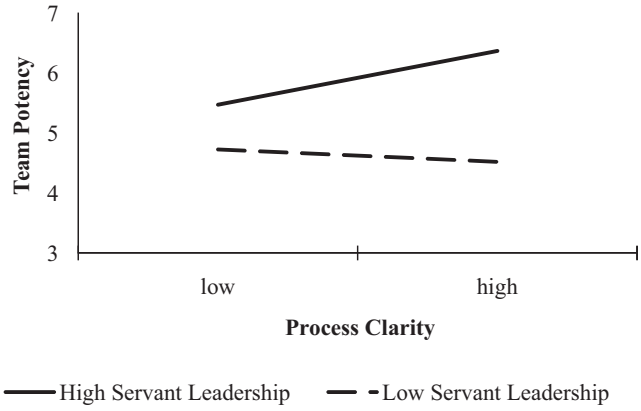

Figure 4. Interaction between process clarity and servant leadership on team potency.

Practical Implications

The current study has a number of implications for practice regarding the role of goal and process clarity in building effective teams. The findings highlight the importance of teamwork design. The positive effect of goal and process clarity calls attention to the potential benefits of managerial interventions on goal setting, team role design, and process control. One implication of these findings is that for building high potency beliefs in teams and subsequent team outcomes, it is valuable for team members to understand both their own individual task goals and procedures and the connection between their own work and the team goal. This serves to reduce possible conflicts between team members regarding their responsibilities and reduces the possibility of social loafing problems.

In addition, our results demonstrate that role clarity alone is not adequate for developing team potency. Leadership training is also needed in order to assist leaders in developing servant leadership behaviors in order to shape employees' shared beliefs in the team's general effectiveness. Therefore, organizations should train leaders to encourage followers to provide service to their teams by developing such behaviors as healing, performing ethically, and empowering. This suggestion is consistent with current needs in organizations and society to foster ethical organizations that are dedicated to serving the needs of employees as well other stakeholders (Cameron, 2008; Luthans & Youssef, 2007).

Strengths, Limitations, and Future Directions

Strengths include (a) the external validity achieved by collecting data from five organizations and (b) internal validity, given that the

data were collected from employees and upper level managers. Collecting data from different sources reduced the potential for same-source bias in our study. The results supported by hierarchical linear modeling tests increased our confidence by partialing out rater effects due to upper level managers rating multiple teams. Using upper level managers rather than team leaders to rate the team performance and OCB reduced potential rating bias due to social desirability. Also, matching two upper level managers' evaluations to a specific team enhanced reliability and decreased the likelihood of measurement errors.

Despite the study's strengths, the findings in the current study should be considered in light of several limitations. First, the sample was set in the banking industry, therefore limiting the generalizability of the results. The current investigation of banks could be generalized to traditional teams characterized by stable membership, a shared goal, and a common leader (Hackman, 2002). However, for other settings, such as cross-functional teams and virtual teams, time may be needed to build teamwork and gather leadership support within the team. For example, because cross-functional teams tend not to meet regularly, goal and process clarity may not promote the quality of team member interactions and collective potency beliefs, and servant leadership may not be as powerful in facilitating the positive value of goal and process clarity in team potency as they were in the traditional teams. Second, the relatively small team size ($M = 4.28$) may prevent the results from being generalized to larger teams. Third, relationships among goal and process clarity, team potency, and servant leadership may have been influenced by common method variance, because these variables were assessed via employees' self-reports within one time period. Even if the common method bias was not a problem in predicting upper level manager ratings of team performance and OCB, method variance in the predictors might still influence main effects. However, it has been demonstrated that interaction effects may actually become deflated as a result of common method variance (Evans, 1985; McClelland & Judd, 1993).

Finally, variables other than those studied here may influence team potency beliefs. Thus, one promising direction for future research is to examine other determinants of team potency. Potential antecedents of team potency include person–team fit (Hollenbeck et al., 2002) and team positive affective tone (George, 1990). For instance, in a team with high levels of positive mood, members who are emotionally tied together are inclined to be confident about their collective capabilities.

In conclusion, the current research added to the motivation, team, and leadership literatures by examining the positive value of goal and process clarity as well as servant leadership on team potency and subsequent team effectiveness. Also, servant leadership was shown to help strengthen the positive association between goal and process clarity and team potency. We hope that our study encourages researchers to explore additional antecedents of team potency and team effectiveness.

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