



# Just What You Need: the Complementary Effect of Leader Proactive Personality and Team Need for Approval

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## Abstract

Drawing from the performance requirement matching perspective of leadership effectiveness (Zaccaro, Green, Dubrow, & Kolze, 2018), the current study investigates how leader proactive personality and team need for approval interactively relate to team commitment and subsequent team performance. We hypothesize that the positive effect of leader proactive personality on team commitment is strengthened when teams have high need for approval. Further, we expect team commitment to transmit the interactive effect between leader proactive personality and team need for approval on team performance. Survey data collected from 80 team leaders and 395 members supported the proposed mediated moderation model. Specifically, in teams with high need for approval, leader proactive personality positively predicted team commitment, which subsequently predicted team performance. In contrast, in teams with low need for approval, leader proactive personality had nonsignificant relationship with team commitment. Overall, the current findings highlight the theoretical importance of understanding leader-team complementarity and underscore the need to recognize team need for approval composition as a context that bounds the influence of leader proactivity. The present study also offers actionable input for team selection and assessment.

**Keywords** Proactive personality · Leader-team complementarity · Need for approval · Team commitment · Team performance

Proactive personality can facilitate ascendance to leadership roles (e.g., Bateman & Crant, 1993; Chan, Uy, Chernyshenko, Ho, & Sam, 2015; Fuller & Marler, 2009; Li et al., 2015) and lead to desirable leadership outcomes (e.g., Becherer & Maurer, 1999; Crant & Bateman, 2000; Crossley, Cooper, & Wernsing, 2013; Deluga, 1998). Capturing the degree to which individuals tend to “take action to influence their environments” (Bateman & Crant, 1993, p. 103), proactive

personality enables leaders to identify opportunities and bring about meaningful changes at work (Bateman & Crant, 1993). Compared with their passive counterparts, proactive team leaders are more likely to influence followers by establishing challenging goals for the team, directing teams through implementing plans, and recognizing team achievements (Crossley et al., 2013). Taken together, the current literature suggests that, from a trait perspective (see DeRue, Nahrgang,

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Wellman, & Humphrey, 2011), proactive personality is an important attribute of effective leaders.

The positive influence of leader proactive personality follows the performance requirement matching perspective of leader individual difference (Zaccaro et al., 2018). According to Zaccaro et al. (2018), a leader trait may lead to effective leadership outcomes because it matches “the role and functional expectations engendered by leadership positions” (p. 4). In line with the performance requirement matching mechanism, proactive personality provides the motivational tendency for leaders to better shape the task and social environment and thus to fulfill the requirements of their leadership positions (e.g., Crant & Bateman, 2000; Crossley et al., 2013; Deluga, 1998).

Despite the promise of leader proactive personality, evidence is scarce with respect to how contexts may influence the effect of leader proactivity. It is important to consider social complexity of teams when examining effects of leader characteristics because a seemingly universally desirable leader characteristic may fail to achieve positive influences with certain followers and teams (see Zaccaro et al., 2018). Specifically, follower characteristics comprise a key aspect of the social environment that leaders operate in and, therefore, can interact with leader proactive personality to influence team outcomes. Although the notion that leadership situation can interact with leader trait has a long history in the literature (e.g., Fiedler, 1964; Kerr & Jermier, 1978), research on leader proactivity has yet to identify follower and team characteristics that may either allow proactive leaders to exert impact on teams or prohibit them from achieving the desirable influence. Considering the importance of need fulfillment in motivating human beings (Locke, 1991), we turn to team members’ collective needs and contend that leader proactivity is more effective when it fulfills the needs of the followers and teams.

Proactive leaders engage in two important processes when motivating followers and teams. First, leaders high in proactive personality go out their way to clarify performance expectations, provide guidance, and recognize follower performance excellence for followers (Crossley et al., 2013). Second, proactive leaders also extend social support to followers and teams (Thompson, 2005; Yang, Gong, & Huo, 2011). We submit that these two mechanisms are particularly important to fulfilling the need of teams with high need for approval, which describes a general tendency to act in socially appropriate ways and to seek positive evaluations from powerful others (Martin, 1984). Need for approval traces to Murray’s (1938) affiliation motive,<sup>1</sup> one of three fundamental human motives together with need for achievement and need for power (Hill, 1987, 2009; Leary & Kelly, 2009). Need for approval plays a critical role in interpersonal interactions

because it is “a prerequisite for forming and maintaining social bonds” (Baumeister & Leary, 1995, p. 498). As such, need for approval has been considered as a key motivator at work by both researchers and practitioners (e.g., Dwyer, 2017; Schubert, 2018; Sosik & Dinger, 2007; Torres, 2018; Twenge & Campbell, 2008; Twenge & Im, 2007).

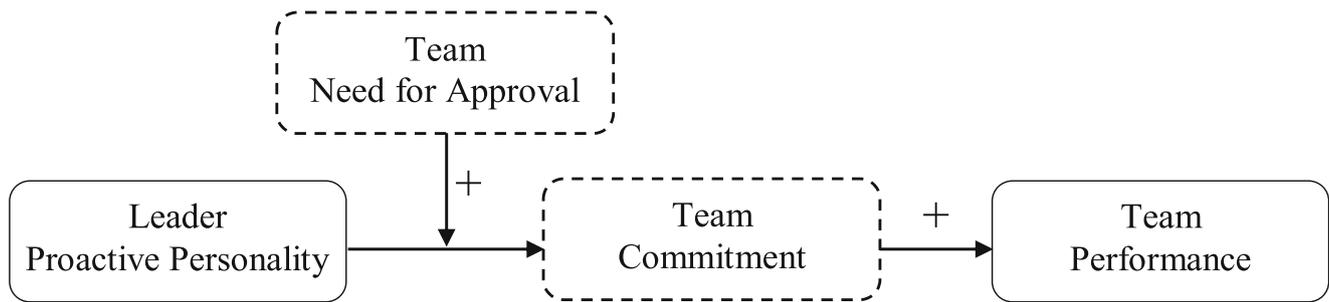
Drawing on the performance requirement matching perspective of leadership effectiveness (Zaccaro et al., 2018), we expect teams’ need for approval to qualify the effect of leader proactive personality. Teams with higher need for approval may be more suitable grounds for proactive leaders because proactive leaders can (a) provide clear guidelines and cues for appropriate behavior and (b) satisfy members’ social needs by creating a supportive environment. Both of these behaviors are more desirable for teams with high need for approval. Put another way, teams with high need for approval present stronger performance requirements and opportunities for proactive leader behaviors, compared to teams with low need for approval. As a result, teams with higher need for approval are more likely to stay committed to leaders with higher proactive personality, resulting in higher team performance.

To test this possibility, we propose a mediated moderation model (Fig. 1) where team members’ collective need for approval amplifies the positive effect of leader proactive personality on affective team commitment, defined as team members’ emotional identification with and attachment to the team (Bishop & Scott, 2000). Further, team commitment serves as a mediator that transmits the interactive effect of leader proactive personality and team need for approval to team performance. Such a mediated moderation model is consistent with Antonakis, Day, and Schyns’ (2012) leadership process framework and the later extension by Tuncdogan, Acar, and Stam (2017).

The current research contributes to leadership theory in two important ways. First, we identify team need for approval as an important team context that qualifies the overall positive effect of leader proactive personality, thus expanding the current knowledge that, in general, proactivity enables leaders to meet the functional requirements of their position. Our investigation also answers recent calls to systematically investigate the leadership context as a moderator of the influence of leader traits (e.g., Dinh & Lord, 2012; Zaccaro et al., 2018). Second, our examination of leader-team compatibility extends recent research that focuses on congruence on single dimensions such as proactive personality (Zhang, Wang, & Shi, 2012) and power distance values (Cole, Carter, & Zhang, 2013). From a practical viewpoint, identifying the compatibility between a leader’s proactive personality and his/her team’s need for approval guides team leader assessment and assignment and provides input for team member selection.

In the following section, we review pertinent research on leader proactive personality and present the rationale for a

<sup>1</sup> Operationalization in the original Thematic Apperception Test captured a concern to seek and maintain others’ positive appraisal of oneself (Hill, 1987).



**Fig. 1** A mediated moderation model for leader proactive personality. Note: A dashed box indicates that a variable is the team-level component of individual-level responses

team's need for approval to interact with leader proactive personality. We test the proposed mediated moderation model using data from 80 team leaders and 395 team members.

### Leader proactive personality and team need for approval

The construct of proactivity has its roots in the agentic perspective of social cognitive theory, which posits that people are proactive and reflective, not just reactive (Bandura, 2001). Consistent with the human agency idea, Bateman and Crant (1993) argued that proactive people tend to actively generate changes to the environment while less proactive people tend to be more reactive. Their work highlights proactivity as a stable characteristic that differs across individuals, with some people being more proactive than others. In the workplace, proactive employees tend to seek out challenging goals to pursue (Frese & Fay, 2001) and create situations where high levels of performance can be achieved (Seibert, Crant, & Kraimer, 1999). Indeed, employee proactive personality uniquely contributes to overall job performance above and beyond the Big Five personality variables (Thomas, Whitman, & Viswesvaran, 2010).

The theory of proactive personality has important implications on leadership functioning such that leaders with high proactive personality are believed to be in a good position to shape the team and the team environment (Bateman & Crant, 1993; Deluga, 1998). Proactive leaders are effortful in examining the internal and external environment of their teams, understanding tasks, and being anticipatory of events that are relevant to team functioning (Bateman & Crant, 1993; Crant & Bateman, 2000). In addition, proactive leaders actively facilitate their teams in regulating performance goals and monitoring achievement of goals (Crossley et al., 2013). Meanwhile, leaders with high proactive personality tend to work with their teams in the creation and development of the teams' surrounding environments (Crant & Bateman, 2000). These behaviors proactive leaders engage in can enable them to more effectively facilitate team functioning and achieve desirable team outcomes.

Building on the performance requirement matching mechanism (Zaccaro et al., 2018), however, we contend that leaders' performance requirements and expectations are socially bound by the needs and characteristics of team members. To the extent that team members' needs are compatible with leader proactive personality, leadership outcomes will be more positive. This is consistent with the interpersonal complementarity perspective that mutually appealing social interactions occur when one party's dominant tendency is complemented by the other party's relatively submissive tendency, because such complementarity is conducive to maintaining each party's interpersonal preference (Kiesler, 1983; Orford, 1994). The complementarity perspective has recently been applied to organizational research as a lens to understand the interplay between leaders and their subordinates, such as between leader extraversion and members' lack of proactivity (Grant, Gino, & Hofmann, 2011) and between leader humility and member proactive personality (Chiu, Owens, & Tesluk, 2016). Integrating the performance requirement matching (Zaccaro et al., 2018) and complementary perspectives, we argue that teams with higher need for social approval can offer greater opportunities for proactive leaders to influence team processes and outcomes.

At the individual level, need for approval reflects an individual's tendency to gain positive evaluations by relevant others in social situations (Martin, 1984). Although initially conceptualized as a response style (Crowne & Marlowe, 1960; Marlowe & Crowne, 1961), need for approval has been recognized and studied as a substantive trait in recent research (e.g., Crowne, 1991; Eby & Dobbins, 1997; Lin, Hung, & Chiu, 2008; McCrae & Costa, 1983; Sosik & Dinger, 2007; Twenge & Campbell, 2008; Twenge & Im, 2007), and the term need for approval has even permeated from academic research to people's daily language as a means to understand the motives behind interpersonal behavior (e.g., Dwyer, 2017; Schubert, 2018; Torres, 2018). Individuals high on need for approval tend to show sensitivity to social cues, susceptibility to interpersonal influence, and conformity to social expectations (e.g., Endler, Minden, & North, 1973; Smith & Flenning, 1971; Strickland, 1970; Thompson, 1978). In the work setting, need for approval gives rise to a proclivity to

engage and cooperate in teamwork (Eby & Dobbins, 1997) and prompts individuals to reciprocate perceived organizational support with high performance (Armeli, Eisenberger, Fasolo, & Lynch, 1998). With a focus on the team level in the current study, we conceptualize *team need for approval* as a team composition variable (e.g., LePine, 2003; Porter et al., 2003) that reflects a team's collective dependence on social expectations, and we expect teams with higher rather than lower need for approval to be more responsive to a proactive leader.

We propose two possible mechanisms by which proactive leaders can meet the expectations of team members with high need for approval. First, proactive leaders can clarify performance parameters, thereby creating a task environment where teams with high need for approval can seek positive appraisals and avoid inappropriate actions. Proactive leaders can provide performance cues to subordinates by setting goals (Crossley et al., 2013), facilitating goal regulation, and recognizing exceptional performance. In uncertain situations at work, proactive leaders' inclination to make things happen (Bateman & Crant, 1993; Fuller & Marler, 2009) can help identify clear objectives and reduce ambiguities in task environments. As a result, teams with high need for approval may particularly value and even expect such leader behaviors because meeting the goals and standards upheld by the leader provides a clear path to acquiring social approval from the leader and peers.

Second, proactive leaders can satisfy members' social needs by creating a supportive environment. Proactive leaders are likely to seek out opportunities to build interpersonal relations with subordinates and provide them with high levels of support (Thompson, 2005; Yang et al., 2011). Moreover, proactive leaders shape social cues and establish team norms (Taggar & Ellis, 2007). Following the proactive leader's example provides team members with clear opportunities to seek each other's approval and offer each other support.

Having presented the rationales for the leader-team complementarity, we turn to affective team commitment as a team-level intermediate outcome because commitment ensues from the motivation process where individuals seek to satisfy their personal needs (Locke, 1997; Meyer, Becker, & Vandenberghe, 2004). Consistent with existing studies on team commitment, we focus on the affective form of commitment because affective team commitment likely exerts important mediating influence between team antecedents and team effectiveness (e.g., Bishop & Scott, 2000; Drach-Zahavy & Freund, 2007; Kukenberger, Mathieu, & Ruddy, 2015; Le Blanc & González-Romá, 2012). Following convention (Bishop & Scott, 2000), we adopt the label *team commitment* to refer to affective team commitment throughout the rest of this paper. Our focus on the team level of analysis also assumes that, due to their interdependence and interconnectedness, team members share a similar affective tone (George, 1996) regarding commitment to the team (Drach-Zahavy &

Freund, 2007). The shared affective tone will manifest in the convergence of members' individual team commitment within teams, which is assessed empirically with the direct-consensus model (Chan, 1998) of within-team agreement (see Drach-Zahavy & Freund, 2007; Le Blanc & González-Romá, 2012; Porter, 2005; Rousseau & Aubé, 2014).

As we proposed above, teams with high need for approval present greater needs and opportunities for leader proactivity. First, to the extent that team need for approval is matched by high leader proactivity, team members will find it easy to identify with the team because the team environment affords them the opportunity to sustain the positive interactions with the leader and their peers, thereby satisfying their needs. Second, team commitment may stem in part from individual's commitment to the team leader (Vandenberghe, Bentein, & Stinglhamber, 2004). The team leader serves as arguably the most salient representative of the organization in the team (e.g., Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Individual members' positive emotional reactions to the leader and the subsequent loyalty are likely transferred to the team (Kabins, Xu, Bergman, Berry, & Willson, 2016). Third, teams with high need for approval are more attuned to proactive leaders' commitment to their work team (Crant & Bateman, 2000; Thomas et al., 2010) and may emulate the proactive leader as their role model (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). On the contrary, teams with low need for approval may not possess the predilection to desire the leaders' proactive efforts, which in turn limits the effect of leader proactivity on team motivation. The imbalance between leader proactivity and low team need for approval thus negates the influence of leader proactivity in fostering a high level of team commitment. Therefore, we argue that team need for approval serves as a boundary condition for the effect of leaders' proactivity on team commitment.

**Hypothesis 1** Team need for approval moderates the relationship between leader proactive personality and team commitment such that the positive relationship is stronger when team need for approval is higher.

We expect the hypothesized interaction between leader proactive personality and team need for approval to influence team performance. By creating clear performance cues and fostering a supportive environment, proactive leaders will better meet the expectations of teams with high, rather than low, need for approval. In consequence, teams with high need for approval internalize relevant performance behaviors as their obligations, whereas the same leader initiatives may not receive similar positive reactions from teams with low need for approval.

We propose that it is through team commitment that the joint effect of leader proactive personality and team need for approval influences team performance. Researchers have

suggested that team commitment reflects team functioning in mature teams (Ilgen, Hollenbeck, Johnson, & Jundt, 2005) and that commitment to the team has a stronger effect on team outcomes than commitment to other targets, such as organizational commitment (Anderson & Thomas, 1996; Neining, Lehmann-Willenbrock, Kauffeld, & Henschel, 2010), because teams are more proximate and salient in employees' everyday work (Ricketta & van Dick, 2005). In addition, within a team context, the level of commitment reflects the extent to which the team is motivated to accept goals and meet expectations (Ellemers, de Gilder, & van den Heuvel, 1998) set by the leader. When leader-team complementarity promotes team commitment, team members are more likely to gain positive experience and commit to team goals, which may further enhance members' motivation to work collaboratively with each other toward team goals (Pearce & Herbig, 2004). Indeed, team commitment has been shown to be an important mediator in the relationship between leader reward behavior and team performance (Rousseau & Aubé, 2014). Also, the joint influence of job structuring and stress on team performance is transmitted by team commitment (Drach-Zahavy & Freund, 2007). Jointly considering the relationship theorized in hypothesis 1, we propose team commitment as the focal mediator.

**Hypothesis 2** Team commitment mediates the interactive effect between leader proactive personality and team need for approval on team performance.

## Method

### Sample and procedure

Ninety-eight managers enrolled in MBA classes at a large university in northern China were invited to participate in the research study, among whom 85 volunteered to participate. After filling out the leader questionnaire, the managers were asked to provide the email addresses for all of their immediate subordinates (i.e., direct reports) who regularly worked together in a team setting. Subordinates were then invited to participate in an anonymous survey. In both the leader and the member questionnaires, a distinction was made between a work team led by the focal manager versus a work unit, such as a department, headed by the focal manager, and all respondents were instructed to focus on the former. Two or more subordinate surveys were returned for 80 of the managers, resulting in a total of 395 member surveys, with an average of 94.70% within-team response rate ( $SD = 11.78\%$ ). Data from the 80 managers (81.6% response rate at the team level) and 395 members were retained. Team responses ranged from 3 to 6, with an average of 4.94 ( $SD = 0.85$ ) member surveys per team. The managers were on

average 33 years old ( $SD = 5$ ), with 55% female. The subordinates were on average 28 years old ( $SD = 5$ ), with 57% female. On average, the managers had supervised their teams for 19 months ( $SD = 16$ ). Because dyadic tenure may influence team commitment, we include this manager-subordinate dyadic tenure as an a priori control variable in subsequent analysis. Results without controlling dyadic tenure would reach the same substantive conclusions.

## Measures

All measures were rated on a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree), except for team performance, which was based on a 5-point scale (1 = strongly disagree; 5 = strongly agree). Team members provided ratings for individual need for approval and team commitment, whereas team leaders rated their own proactive personality and their teams' performance. The survey instruments were translated into Chinese following recommendations from Brislin (1970).

**Individual need for approval** We assessed individual need for approval ( $\alpha = .92$ ) with a 5-item measure from Martin (1984). A sample item is, "I am willing to argue only if I know that my friends will back me up."

**Individual team commitment** Individual team commitment was assessed with an 8-item measure ( $\alpha = .96$ ) validated by Bishop and Scott (2000). A sample item is, "I am proud to tell others that I am part of this team."

**Leader proactive personality** Leaders rated their proactive personality ( $\alpha = .83$ ) with the 6-item Abbreviated Proactive Personality Scale validated by Claes, Beheydt, and Lemmens (2005). A sample item is, "If I see something I don't like, I fix it."

**Team performance** We utilized leader's ratings to capture the nuances and complexity of team performance, as opposed to using objective performance measures that may be influenced by external factors outside of the team's control (Campbell, 1990). Leaders rated the performance of their teams with four items ( $\alpha = .72$ ) based on Liden, Wayne, and Stilwell (1993). Originally designed to measure individual performance in Liden et al. (1993), these four items were modified in Hu and Liden (2011) to measure team performance. We adapted the items from questions to statements so that they could be rated on a 5-point Likert scale. The items were as follows: "My team has been effectively fulfilling its roles and responsibilities"; "My team is superior to other teams in work performance"; "The overall level of performance I observe for my team is outstanding"; and "In my personal view, my team has a high level of overall effectiveness."

## Results

### Confirmatory factor analysis

We first conducted confirmatory factor analysis (CFA) with MPlus 7.3 (Muthén & Muthén, 2012) to examine the factor structure of current measures in member and leader surveys separately. First, the member surveys assessed need for approval and team commitment, which were nested within teams. We created a two-level CFA model consisting of two latent factors (i.e., need for approval and team commitment) at the within-team and between-team levels, respectively. The CFA model provided acceptable fit to the data,  $\chi^2 = 444.80$ ,  $df = 128$ , CFI = .92, TLI = .91, RMSEA = .079. Second, the leader surveys measured leader proactive personality and team performance. A CFA model with two latent factors (i.e., proactive personality and team performance) yielded adequate fit to the data,  $\chi^2 = 54.72$ ,  $df = 34$ , CFI = .92, TLI = .89, RMSEA = .087, whereas a single factor solution provided poor fit,  $\chi^2 = 99.14$ ,  $df = 35$ , CFI = .75, TLI = .68, RMSEA = .151;  $\Delta\chi^2 = 44.42$ ,  $df = 1$ ,  $p < .001$ . Thus, the CFA analyses supported the expected factor structures of the present measures.

### Within-team agreement and descriptive statistics

The member surveys measured both team commitment and need for approval at the individual level, whereas the study hypotheses focused on the team level. Thus, individual-level measures would need to be aggregated to the team level for hypothesis testing. In the case of team commitment, the degree to which members felt committed to the team could reflect shared experience and perceptions within each team (Bliese, Chan, & Ployhart, 2007) as a result of member interaction and mutual influence. Prior studies that evaluated team commitment using the direct-consensus model (e.g., Drach-Zahavy & Freund, 2007; Le Blanc & González-Romá, 2012; Porter, 2005) have shown that members' perceptions of their team commitment emerged at the team level (Kozlowski & Klein, 2000). Similarly, we assessed the emergence of team-level commitment using ICC(1) and  $r_{WG(j)}$ . ICC(1) reflects the proportion of observed variance in team commitment scores that was associated with team membership whereas  $r_{WG(j)}$  indicates the interrater agreement among members of each team on ratings of the eight team commitment items. Both ICC(1) of .28 and the average  $r_{WG(j)}$  of .90 (based on a rectangular random distribution) reached the conventional cutoff for aggregation.<sup>2</sup>

<sup>2</sup> The majority of teams ( $N = 77$ ) showed at least moderate agreement on team commitment;  $r_{WG(j)}$  ranged from .57 to 1.00. Removal of the three teams (4%) that failed to come to agreement, as indicated by  $r_{WG(j)}$  values below the .30 cutoff (LeBreton & Senter, 2008), did not change the results of hypothesis testing. We retained all 80 teams in the main analysis thanks to a suggestion by an anonymous reviewer.

As need for approval is a relatively stable dispositional variable, we followed the common approach in team personality literature (e.g., Bell, 2007; LePine, 2003) and operationalized team need for approval with the additive model (Chan, 1998) by taking the average need for approval among team members. Although within-team agreement is not a prerequisite for additive compositional models, according to Bliese et al. (2007), stable individual attributes such as personality and intelligence may cluster by groups due to the attraction-selection-attrition processes (Schneider, 1987). Indeed, there was some evidence that need for approval was somewhat homogeneous within teams, ICC(1) = .15, and team members generally agreed on their need for approval ratings, average  $r_{WG(j)} = .79$ .

Table 1 presents the team-level descriptive statistics and intercorrelations for key study variables as well as leader demographic variables. As expected, the outcome variable team performance is positively associated with leader proactive personality ( $r = .36$ ,  $p < .001$ ) and team commitment ( $r = .40$ ,  $p < .001$ ). Although not hypothesized, a significant association was observed between average dyadic tenure and team commitment,  $r = .22$ ,  $p < .05$ , suggesting that teams that on average worked with their leaders for a longer period of time tended to be more committed. In addition, the descriptive statistics indicate the current sample had a moderate standing on need for approval with a standard deviation similar to that of other study variables ( $M = 4.21$ ,  $SD = 0.72$ ), which alleviated a potential concern that need for approval would be too high in the current sample obtained from a collectivistic culture (see Sheldon, Elliot, Kim, & Kasser, 2001). Next, we proceed to test the study hypotheses below.

### Test of hypothesized model

We performed multilevel modeling in Mplus to test the study hypotheses. Researchers have increasingly recognized that multilevel structural equation modeling (MSEM) provides simultaneous modeling of indirect effects in multilevel data and thus offers a superior alternative to the traditional piecemeal approach to multilevel mediation (Preacher, Zhang, & Zyphur, 2011; Preacher, Zyphur, & Zhang, 2010). In MSEM, a variable that varies at two levels of analysis would be decomposed into two latent variables, one at the within-team level and the other at the between-team level. In the present study, need for approval, team commitment, and dyadic tenure had both within- and between-team variances. As we did not have any hypotheses at the within-team level of analysis, we created the hypothesized model at the between-team level of analysis and simply allowed the three latent variables (need for approval, team commitment, and dyadic tenure) to freely covary at the within-team level. Given the modest sample size at the team level, we used observed

**Table 1** Descriptive statistics and intercorrelations for team-level variables

	1	2	3	4	5	6	7	8
1. Average dyadic tenure (months)	–							
2. Leader proactive personality	-.07	–						
3. Team need for approval	-.06	.06	–					
4. Team commitment	.22*	.18	-.04	–				
5. Team performance	.01	.36***	.00	.40***	–			
6. Leader gender	.09	.01	.03	.05	.01	–		
7. Leader age	.41***	-.03	-.03	-.08	.08	.30**	–	
8. Leader tenure	.41	-.18	-.03	-.33**	-.09	.17	.74***	–
<i>M</i>	18.94	5.66	4.21	5.44	4.20	.45	33.06	2.95
<i>SD</i>	11.47	.83	.72	.72	.45	.50	5.50	.99

*N* = 80

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

variables as input for the analysis.<sup>3</sup> To aid interpretation, we performed grand-mean centering on need for approval, leader proactive personality, and dyadic tenure prior to the analysis.

The hypothesized model provided reasonable fit to the data,  $\chi^2 = 11.85$ ,  $df = 11$ ,  $CFI = .96$ ,  $TLI = .93$ ,  $RMSEA = .014$ . We further explored whether leader proactive personality, team need for approval, and their interaction term had significant direct effects on team performance. Using the Satorra-Bentler scaled chi-square difference test (Satorra & Bentler, 2010) to compare nested models produced from maximum likelihood estimation with robust standard errors, we found that adding the three direct paths to team performance did not improve the model fit ( $\Delta\chi^2 = 5.38$ ,  $\Delta df = 3$ ,  $p = .15$ ), nor did the addition of a single direct path from leader proactive personality to team performance ( $\Delta\chi^2 = 3.61$ ,  $\Delta df = 1$ ,  $p = .06$ ). We thus retained the more parsimonious a priori model and present the unstandardized estimates at the team level of analysis in Fig. 2.

Hypothesis 1 states that team need for approval strengthens the effect of leader proactive personality on team commitment. As expected, leader proactive personality positively predicted team commitment,  $B = 0.73$ ,  $p < .001$ . Need for approval did not significantly influence team commitment,  $B = -0.17$ ,  $p = .45$ . Supporting hypothesis 1, team need for approval strengthened the positive association between leader proactive personality and team commitment,  $B = 1.50$ ,  $p = .004$ .

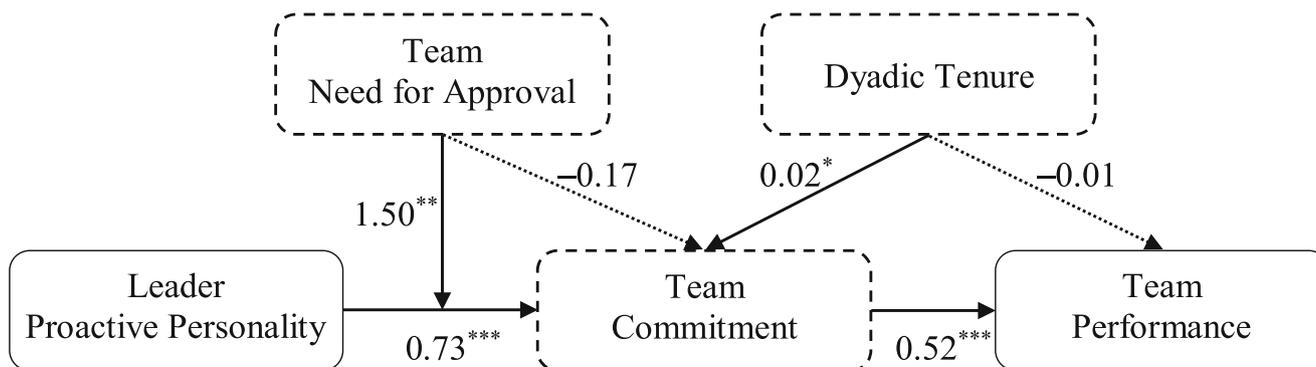
We performed a simple slopes analysis to further discern this interaction (see Fig. 3), using the techniques by Bauer and Curran (2005) and Preacher, Curran, and Bauer (2006). While the relationship between team leader proactive personality and team commitment was positive in teams with high need for

approval,  $B = 1.47$ ,  $p < .001$ , this relationship was near zero in teams with low need for approval,  $B = -0.00$ ,  $p = .97$ . Figure 4 presents the region of significance for the conditional effect of leader proactive personality. When team need for approval was higher than 3.84 (i.e.,  $-0.51$  standardized score), team leader proactive personality positively predicted team commitment.

Hypothesis 2 predicted that team commitment mediates the interactive effect between leader proactive personality and team need for approval on team performance. In testing for hypothesis 1, we have supported the significant interaction on the mediator. We utilized the Monte Carlo approach to directly estimate the confidence interval of the indirect effect associated with the interaction term (Morgan-Lopez & MacKinnon, 2006), which was the product of path *a* (the effect of the interaction term on team commitment) and path *b* (the effect of team commitment on team performance). Specifically, we followed Selig and Preacher (2008) to create 20,000 Monte Carlo repetitions to simulate the indirect effect. For the point estimate for the mediated moderation effect of .78, we obtained a 95% confidence interval of [0.21, 1.48],  $p < .05$ . Thus, supporting hypothesis 2, team commitment mediated the interactive effect between leader proactive personality and team need for approval on team performance.

We conducted additional multilevel path analyses to rule out competing explanations for the current results. First, as leader gender, age, and tenure may sometimes influence team commitment and team performance, we included these variables as additional controls and found the same hypothesized results. Second, one might posit that team performance could interact with team need for approval to affect team commitment, such that teams with higher need for approval are more likely to show commitment when they perform well, but such a possibility was not supported by a model predicting team commitment with team performance, team need for approval, and their interaction term. Third, we explored a three-way

<sup>3</sup> A MSEM with item parcels as input (results available from the first author) yielded similar support for the study hypotheses.



**Fig. 2** Unstandardized estimates from team-level modeling results. Note:  $N_{\text{between}} = 80$ ,  $N_{\text{within}} = 395$ . \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . Dotted lines indicate nonsignificant effects. A dashed box indicates that a variable is the team-level component of individual-level responses

interaction involving leader proactive personality, team need for approval, and team commitment to check whether team commitment might strengthen the leader-team complementarity effect on team performance. The three-way interaction was not supported by the data. Details of these additional modeling results are available from the first author.

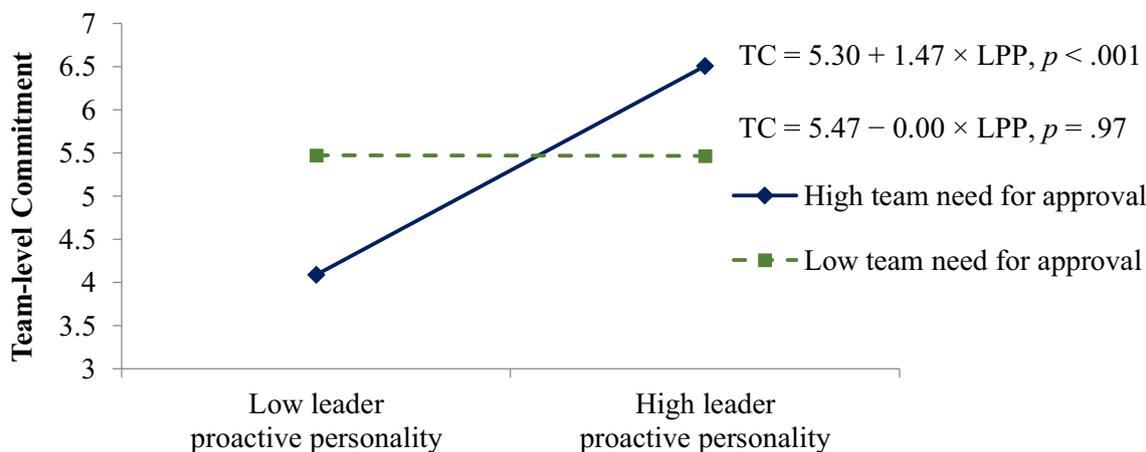
**Discussion**

The extant literature has primarily focused on the positive main effect of leader proactive personality on team outcomes. Extending research on leader proactive personality, our study examined team collective characteristics as contextual boundary conditions. Integrating the performance requirement matching (Zaccaro et al., 2018) with the interpersonal complementarity perspectives (Kiesler, 1983; Orford, 1994), we argue that proactive leaders can better meet the performance expectations in teams with high rather than low need for approval. The result of the complementarity manifests in members’ shared emotional attachment to their teams (i.e., team

commitment), which subsequently relates to team performance. Data from 80 team leaders and 395 members supported the proposed model: Leader proactive personality and team need for approval interactively related to team performance via team commitment.

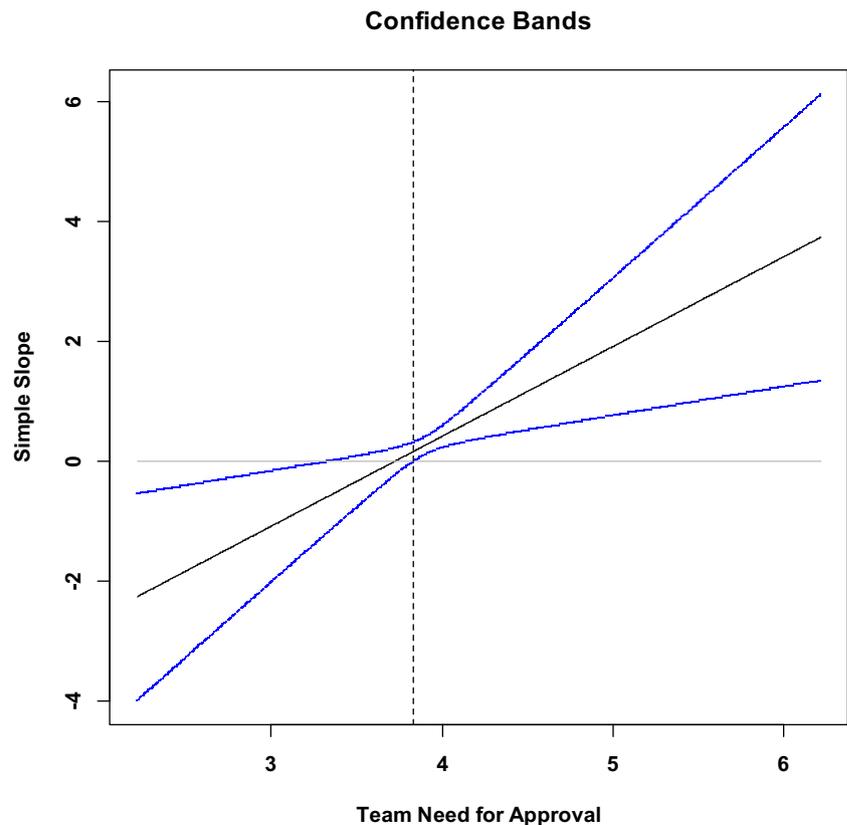
**Implications for research and practice**

The present findings offer relevant input for research on teams and leadership. First, we identified team need for approval as a source of performance expectations for team leaders, thus expanding the current literature that views leader proactivity as a motivational tendency that matches functional expectations for leaders in general. Despite the early notion that leadership effectiveness depends on the situation (e.g., Fiedler, 1964), there has been limited examination of team composition as a team situational factor that defines behavioral expectations for leaders. Indeed, studying team composition in personality, motivational traits, and needs can provide a richer understanding of context for organizational behavior (Johns, 2006). For instance, relating to the meta-analytic finding that



**Fig. 3** Interactive effect of team need for approval and leader proactive personality on team commitment. Note: TC = team commitment at the team level; LPP = leader proactive personality

**Fig. 4** Region of significance for the conditional effect of leader proactive personality on team commitment. Note: The effect of leader proactive personality on team commitment was positive and significant when team need for approval was 3.84 or above



managers' ambition predicted their adaptive performance (Huang, Ryan, Zabel, & Palmer, 2014), we can anticipate adding subordinates' needs as a qualifying condition to the ambition-adaptive performance relationship: Although ambition can provide the motivational drive for managers to meet the adaptive demands of their jobs in general, the success of ambitious managers may depend on their subordinates' desire to avoid uncertainty or maintain positive social appraisal.

Second, we identified team commitment as a critical team emergent state that transmits the match between leader proactive personality and team need for approval onto team performance (Morgeson, DeRue, & Karam, 2010). Recent research suggests that, when subordinates perceive met expectations about leader behaviors, such as in leaders' public recognition of good performance (Proell, Sauer, & Rodgers, 2016) and empowerment (Wong & Kuvaas, 2018), they are likely to experience positive outcomes at the individual level of analysis. Our finding suggests that, when the team's need for approval is met with leader's proactive behaviors, team members may respond as a collective to become more attached to the team. Thus, the present study paves the way for the explicit modeling of met expectations about leader behaviors at the team level of analysis.

Third, the current study provides an impetus for researchers to better understand the need for approval construct at work. Despite the important role of need for approval in ensuring

social bonding and smooth interpersonal interactions (Baumeister & Leary, 1995), need for approval has received limited research in the organizational psychology and management literature (see Armeli et al., 1998; Eby & Dobbins, 1997; Lin et al., 2008 for notable exceptions). One possible reason could be the restricted range of need for approval in the general workforce, as organizations are unlikely to select and retain employees who show a blatant disregard for others' appraisal. It is also possible this lack of research reflects individualistic cultural values that tend not to emphasize need for approval (cf. Sheldon et al., 2001). Regardless of the reason, researchers may start to assess employees' approval motive, model its antecedents, and unpack its consequences.

In addition to implications on research, the current findings also provide actionable guidelines for practice. First, our results shed light on team leader selection and placement practice. To maximize the positive influence of proactive leaders, organizations need to ensure that team members are predisposed to cooperate. Although it may still be beneficial to select a proactive leader in general, cautions should be taken in the examination of compatibility between leader proactive personality and team characteristics. Organizations interested in selecting or placing team leaders should recognize that a proactive leader may have relatively limited influence on his/her team when team members have low need for approval; in such a situation, the proactive leader may adopt other

strategies to foster team commitment, such as empowering team members (Kukenberger et al., 2015) and leading with a high moral standard (Rego, Vitória, Magalhães, Ribeiro, & Cunha, 2013). Second, from a team selection perspective, when organizations are in the process of assembling team members or transferring members across teams, it behooves the organizations to consider how potential members are compatible with the leader. Proactive leaders may want to recruit and select team members with high need for approval. As for employees, when they have the opportunity to self-select into a team, they may evaluate whether the team leader's proactive personality is complementary to their own needs, in addition to their potential fit with the other team members. Third, aside from selection and assessment, training may be offered to leaders to enhance leadership effectiveness. On the one hand, organizations may promote leader proactive behaviors (e.g., Strauss & Parker, 2018), especially for leaders in a favorable team context with high team need for approval. On the other hand, leaders may also be trained to recognize the team composition of need for approval and adjust their proactive behaviors accordingly.

### Limitations and future research

Despite drawing from a diverse sample of leaders and teams, our study is limited in three important ways that should be addressed in future research. First, the current use of cross-sectional data, although coming from different sources, prohibits strong causal inference stated in the research model. For instance, team leaders provided ratings of team performance, thus giving rise to the possibility that common method bias may have inflated the association between leader proactive personality and team performance.<sup>4</sup> In addition, it could be possible that teams with high performance tended to be more committed in general (Porter, 2005). Indeed, one may expect a complex dynamic mediated relationship (Pitariu & Ployhart, 2010) between team commitment and team performance, where high levels of one variable at an earlier time point lead to high levels of another variable at a later time. To establish a clear causal relationship, an experimental study is needed that (a) randomly assigns leaders and members to interact with each other and (b) assesses team commitment and team performance over time. Indeed, a more complex and controlled design such as a laboratory study would enable the examination of the interactive impact of leader personality and team composition in molding the full spectrum of team emergent processes (Kozlowski & Ilgen, 2006) over time.

Second, driven by our theoretical interest in the interplay between leader proactive personality and team need for approval, we only examined a single leader trait, and thus could

not rule out the influence of other related leader characteristics. For instance, proactive personality is moderately related to need for dominance<sup>5</sup> (Bateman & Crant, 1993), which may also play a complementary role to team need for approval. We do not expect the current pattern of findings to be caused by leader dominance because the theoretical mechanisms we supplied above do not apply on dominance and because the two variables only moderately overlap. However, it is possible that leader need for dominance may amplify the potential influence of leader proactivity. Therefore, our study points to the need to conduct a comprehensive assessment of the dimensions on which the leader-team compatibility can be modeled.

Third, the present study did not include specific behaviors that leaders enact in clarifying performance parameters and creating a supportive social environment, leaving open the question which of the two mechanisms has a stronger influence in meeting the needs of team members. A comprehensive survey of proactive leader behaviors along these two dimensions can further elucidate the processes through which proactive leaders meet team needs. Moreover, future research may examine whether meeting members' need for approval in one dimension (e.g., creating a supportive environment) can compensate for the lack of proactivity in the other dimension (e.g., facilitating performance).

Fourth, we approached leader proactive personality from the trait perspective (Bateman & Crant, 1993) and thus did not address the potential for changes in proactive personality due to work experience (Li, Fay, Frese, Harms, & Gao, 2014). Future research may explore whether leaders change their proactive personality over time because of their team's need for approval. That is, skilled leaders may adapt their proactivity level to optimally fit the team's need and maximize team performance. Finally, the current research model does not take into account other processes through which proactive leaders influence team outcomes. As an example, proactive leaders may actively select members high on need for approval onto their teams. Although this notion received limited support in the current data due to the nonsignificant association between leader proactive personality and team need for approval, the current data were not focused on selection procedures, and other processes (e.g., similarity; Zhang et al., 2012; impression management; Stevens & Kristof, 1995) may be in play simultaneously. Interested researchers may design future studies to address how leader-team compatibility plays out in the member selection decision process.

Our findings also provide several promising venues for future research. First, considering team need for approval as a contextual variable, researchers may investigate whether proactive efforts to improve the team functioning, such as

<sup>4</sup> The concern over common method bias is somewhat mitigated because the mediator, team commitment, was rated by team members.

<sup>5</sup> In an unrelated data collection of employees in China ( $N = 262$ ), we found a moderate association between proactive personality and dominance,  $r = .34$ ,  $p < .001$ .

team building and interpersonal training, produce different outcomes depending on team need for approval. It is conceivable that teams with higher need for approval may be more receptive of and dedicated to such improvement efforts. Second, while we found within-team agreement on team commitment in the vast majority of teams in the current data, the agreement should not be assumed across all teams. The lack of agreement on members' team commitment is a potential area for future investigation, as dispersion (Chan, 1998) could stem from a substantive team phenomenon. For instance, members may have diverging levels of commitment to the same team due to the leader's differential treatment of team members (Liden, Sparrowe, & Wayne, 1997), or demographic faultlines giving rise to subgroup conflict (Lau & Murnighan, 1998), or even the lack of interpersonal complementarity among team members. Finally, research on personality states at work suggests that individuals dynamically adjust their momentary levels of a particular trait (i.e., personality states) in response to situations (e.g., Huang & Ryan, 2011). In a similar vein, researchers may conceptualize distributions of proactive states at work and examine whether leaders dynamically modify their daily proactivity in response to members with different need for approval.

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