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**How Transformational Leadership Shapes Team Proactivity:
The Mediating Role of Positive Affective Tone and the Moderating Role of Team Task
Variety**

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Abstract

The authors examine how and when transformational leadership can contribute to team proactivity. Drawing on the affect-as-resources perspective, they propose that transformational leadership will contribute to team proactivity by cultivating positive group affective tone within teams. They further indicate that the function of positive group affective tone in shaping team proactivity will be stronger when team task variety is higher. These hypotheses were supported by results based on 76 teams in the same organization. The results reveal that the mediation effect of positive group affective tone on the association between transformational leadership and team proactivity is stronger when team task variety is high rather than low. This investigation contributes to the literature by suggesting how to promote proactivity at a team level.

Keywords: transformational leadership, proactivity, group affective tone, work design, team

How Transformational Leadership Shapes Team Proactivity:

The Mediating Role of Positive Affective Tone and the Moderating Role of Team Task

Variety

The need to be proactive has become more pressing in today's global work context (Crant, 2000) because anticipating the future and taking action in advance is an approach to mastering change in a complex and uncertain work environment (Campbell, 2000; Griffin, Neal, & Parker, 2007). Consequently, how to promote proactivity at work has become an important topic in organizational behavior research. To date, scholars have devoted a great deal of attention to understanding how to promote proactivity at an individual level (e.g., Frese & Fay, 2001; Grant & Ashford, 2008; Parker, Bindl, & Strauss, 2010). However, being proactive is also relevant for teams. Teams, as work units, are entities for achieving specific tasks, and they can be proactive when they take a proactive, self-starting, and persistent approach toward work at a collective level (Baer & Frese, 2003). Being proactive at a team level is critical because it can help teams to operate effectively to master uncertainty and change (Bindl & Parker, 2010; Williams, Parker, & Turner, 2010).

To facilitate team proactivity, past studies (Kirkman & Rosen, 1999; Williams et al., 2010) have suggested that team leaders can empower teams by enhancing capability and providing autonomy, facilitating a "can do" process in shaping team proactivity (Parker et al., 2010). They also can enlighten meaningfulness and the effect of work to trigger a "reason to" process in leading team proactivity (Parker et al., 2010). Although these findings are informative, one mechanism that has been overlooked is the affective role in shaping proactivity, or the "energized to" process in shaping team proactivity (Parker et al., 2010). Being proactive to make changes at a team level is challenging and demanding in many aspects because it takes effort for a team to identify potential opportunities, to search for

alternative ways to improve and, most importantly, to coordinate within- and between-team activities to achieve collective action to effect change (Baer & Frese, 2003; Williams et al., 2010). To overcome such challenges and demands, having capability and reasons is not sufficient if a team lacks energy to sustain such effortful activities. Therefore, it is useful to identify leaders who can affectively energize teams to be more proactive.

In this study, we suggest that transformational leaders, who tend to affectively motivate followers with inspirational communication (Bono & Ilies, 2006), can cultivate positive group affective tone, or homogeneous positive affective reactions within a team (George, 1990), to promote team proactivity. We focus on positive group affective tone as an energizing mechanism for team proactivity because positive affect increases cognitive and behavioral resources (Aspinwall, 1998; Aspinwall & Taylor, 1997; Hobfoll, 1989) for teams to set future-focused and change-oriented goals, to have better coordination within teams, and to persistently engage in activities to achieve anticipated outcomes. In addition, we propose that positive group affective tone will be more critical to promote team proactivity for teams with higher task variety. This is because higher team task variety indicates a demanding work situation that request more cognitive and behavioral resources to approach desired proactive goals and changes (Carver & Scheier, 1982). Because understanding “when” an effect happens informs “why” it happens (Baron & Kenny, 1986), this examination helps to substantiate the affect-as-resources perspective in understanding the function of positive group affective tone on team proactivity. Overall, we propose a second-stage moderated mediation model (Edwards & Lambert, 2007; Hayes, 2013; Preacher, Rucker, & Hayes, 2007) to understand how and when transformational leadership can contribute to team proactivity.

Our investigation provides three major contributions to the literature. First, our study is one of only a few studies examining mechanisms that can promote team proactivity (e.g., Erkutlu & Chafra, 2012; Kirkman & Rosen, 1999; Raub & Liao, 2012; Williams et al., 2010).

Different from previous research, we propose an energizing mechanism through which leaders can shape team proactivity. Second, by identifying the role of positive group affective tone in shaping team proactivity, our research suggests that positive affect can trigger proactivity at the team level similarly to how it does at the individual level (e.g., Bindl, Parker, Totterdell, & Hagger-Johnson, 2012). Our work establishes a basis to unpack a multilevel effect of positive affect in shaping proactivity. Finally, we indicate a boundary condition to show when positive group affective tone is more important to sustain team proactivity. Our investigation of the moderating effect of team task variety is important because it indicates the interplay between a team's tasks and its affective characteristics regarding team output, providing implications for job design for teams. We provide arguments below to underpin our hypotheses.

Theory and Hypothesis Development

Transformational Leadership and Team Proactivity: A Mediating Effect of Positive Group Affective Tone

We first elaborate why transformational leadership can lead to positive group affective tone in a team. Positive group affective tone describes the extent to which members within a team have consistent positive affective reactions at work (George, 1990; Mason & Griffin, 2003). Although group affective tone is conceptualized as an emergent group state (Kozlowski & Klein, 2000), it is relatively stable over time (test-retest reliability is .63 of 97 teams over a year) (Mason & Griffin, 2003). Such stability may be shaped by bottom-up processes such that team members will have similar affective experiences due to emotion contagion or behavioral entrainment in social interactions (Barsade & Gibson, 1998; Bartel & Saavedra, 2000; Totterdell, Kellett, Teuchmann, & Briner, 1998). Alternatively, such stability may be shaped by top-down processes such that team members will have similar affective experiences due to the attraction-selection-attrition process (i.e., retain members who have

similar affective reactions) or socialization (i.e., new members assimilate their affective reactions to the group norm) (Collins, Lawrence, Troth, & Jordan, 2013), which results in the emergence of positive affective similarity in work groups in a positive spiral (Walter & Bruch, 2008).

Transformational leaders can shape positive group affective tone via bottom-up and top-down processes. In terms of bottom-up processes, transformational leaders tend to motivate and stimulate followers' enthusiasm by providing inspiration talk and emotional appeals (Bass, 1985). Because leaders have a central position in interacting with followers in their own teams, they are influential persons who can influence team members' affective experiences (Barsade & Gibson, 1998; Totterdell, Wall, Holman, Diamond, & Epitropaki, 2004) via an emotion contagion process (Bono & Ilies, 2006; Sy, Côté, & Saavedra, 2005). They also can elicit followers' positive emotions when followers are implicitly entrained with leaders in communicating positive things in interactions (Kelly & Barsade, 2001). In terms of top-down processes, a transformational leadership style can be a salient feature to attract and retain members who have similar characteristics in teams (Ehrhart & Klein, 2001; George, 1990; Schneider, 1987). Accordingly, it is easy for transformational leaders to cultivate positive group affective tone within teams when they also have more followers who tend to enjoy and express positive emotion. Transformational leaders also can shape group norms regarding expressing positive emotion and having positive affective reactions within teams, which lead followers, particularly new members, to embrace positive affect at work (George, 1990; Totterdell et al., 2004). Empirically, several studies have found that transformational leaders can elicit followers' positive emotions and shape positive group affective tone within teams (Bono & Ilies, 2006; George, 1995; Sy et al., 2005). Because this proposition has been supported by previous findings, we therefore do not propose a formal hypothesis on the association between transformational leadership and positive group affective tone.

We further suggest that positive group affective tone can contribute to team proactivity based on an affect-as-resource perspective (Aspinwall, 1998; Aspinwall & Taylor, 1997; Hobfoll, 1989), which suggests that positive affect provides cognitive and behavioral resources to sustain goal-regulation activities. Because team proactivity is a goal-regulation process (DeShon, Kozlowski, Schmidt, Milner, & Wiechmann, 2004; Weingart, 1992; Weldon, Jehn, & Pradhan, 1991) in which cognitive and behavioral resources are required to bring about changes, we therefore expect that positive group affective tone can contribute to team proactivity. Specifically, teams with stronger positive group affective tone will be more open to new information and tend to generate new ideas to bring about change when they see potential opportunities. This behavior will occur because members in teams with a positive group affective tone are more likely to experience positive affect at work and thus have a higher cognitive flexibility and ability to see different things (Isen, 1987). Such cognitive benefits in idea generation and opportunities identification is very likely to occur as positive group affective tone, signaling a positive and enjoyable environment in which team members will have higher willingness to share their ideas and exchange information with other team members (Shally, Gilson, & Blum, 2009). Supporting this view, positive group affective tone has been positively linked to team creativity (Grawitch, Munz, & Kramer, 2003; Tsai, Chi, Grandey, & Fung, 2012), which is defined as “the production of novel and useful ideas concerning products, services, processes and procedures by a team of employees working together” (Shin & Zhou, 2007, p. 1710). In addition, due to the effect of positive affect on motivation (Carver & White, 1994; Elliot & Thrash, 2002), members in teams with positive group affective tone are more likely to project a future goal and strive to meet that goal with higher intrinsic (Isen & Reeve, 2005) and expectancy motivation (Erez & Isen, 2002). Such promotive tendencies will be facilitated at the team level because teams with higher positive group affective tone are more likely to have better coordination (Sy et al., 2005) and

cooperation (Barsade, 2002) to construct and achieve a shared goal. Based on the above reasoning, we suggest that positive group affective tone can contribute to team proactivity by providing cognitive and behavioral resources.

Overall, we thus expect that transformational leadership will first shape positive group affective tone, which then contributes to team proactivity. We therefore expect that group affective tone will mediate the association between transformational leadership and team proactivity.

Hypothesis 1: Transformational leadership will be positively related to positive group affective tone, which, in turn, will have a positive association with team proactivity. Positive group affective tone will have a mediation effect on the association between transformational leadership and team proactivity.

Moderating Effect of Team Task Variety

We further suggest that the level of team task variety will shape the effect of positive group affective tone on team proactivity.

Task variety is a job characteristic that is initially used to describe “the degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the person” (Hackman & Oldham, 1976, p. 257). Here, we focus on this job characteristic at a team level because teams can engage in a variety of activities when carrying out their work due to the scale, complexity and duration of projects (Campion, Medsker, & Higgs, 1993; Campion, Papper, & Medsker, 1996). We suggest that higher team task variety can enhance the association between positive group affective tone and team proactivity because, according to control theory (Carver & Scheier, 1982), higher task variety results in higher work demands, and, to achieve a proactive goal and bring constructive changes, teams must devote more cognitive and behavioral resources to sustain an initiative approach. As such, we suggest that positive group affective tone will

become more critical to sustaining team proactivity by fueling cognitive and behavior resources when team task variety becomes higher. We now provide specific arguments to elaborate on how this mechanism is operated.

First, when team task variety is high, the function of positive group affective tone in facilitating idea generation and sharing becomes more important for teams to initiate a proactive goal. Specifically, when team task variety is high, team members must devote more attention and cognitive effort to different activities to ensure that all activities necessary to complete a project are on the right track. In such work environments, team members may not have additional cognitive resources to monitor potential problems or opportunities and generate alternative ways to work to bring about change (Narayanan, Balasubramanian, & Swaminathan, 2009). As such, the function of positive group affective tone in facilitating cognitive flexibility and information processing (Isen, 1987) is helpful for teams with high task variety to generate new ideas and envision change-oriented goals. At the same time, having a positive environment for team members to propose ideas is critical when team task variety is high because suggesting an alternative approach to do the work may not be welcome (Burris, 2012; Morrison & Phelps, 1999; Parker et al., 2010); a small change can impose a large effect on all work activities. Positive group affective tone is thus important in such a work context because it denotes a positive environment for idea suggestions and information sharing (Sy et al., 2005; Tsai et al., 2012). Second, teams having higher task variety may have higher demands to coordinate different work activities. The positive function of positive group affective tone on team coordination and cooperation (Barsade, 2002; Sy et al., 2005) will thus become more desirable for these teams to coordinate different work activities. Finally, because higher task variety results in higher work demands (Chung & Ross, 1977; Parker, 1998), teams with higher task variety are required to devote more effort and to be more persistent to get work done. Having stronger motivation is thus crucial

to meet demand, and positive group affective tone can help to sustain motivation, as we mentioned earlier. In contrast, when team task variety is low, positive group affective tone will have less effect on team proactivity because fewer cognitive and behavioral resources are requested in such a situation to support an initiative action. We therefore propose a moderating effect of team task variety as follows:

Hypothesis 2: Team task variety will moderate the association between positive group affective tone and team proactivity. Specifically, the association between positive group affective tone and team proactivity will be stronger when the level of team task variety increases.

The Second-Stage Moderated-Mediation Model

Based on the above reasoning, we propose an overall second-stage moderated mediation model (Edwards & Lambert, 2007; Hayes, 2013; Preacher et al., 2007) suggesting that the mediation effect of positive group affective tone will be moderated by the level of team task variety. Specifically, the affective mechanism elicited by transformational leadership in promoting team proactivity will be more prominent when the level of team task variety increases. To test this moderated-mediation effect formally, we thus propose the following:

Hypothesis 3: Team task variety will moderate the mediation effect of positive group affective tone on the association between transformational leadership and team proactivity. Specifically, the mediation effect of positive group affective tone will be stronger when team task variety is high than when it is low.

Method

Participants and Procedure

Eighty-eight construction management teams of a large company in China were invited to participate in this study. These teams take charge of different construction projects

with a wide range of scale, providing a variety of tasks across teams. We focus only on construction management teams for two main reasons. First, because they are core business teams in the company, the company is more interested in knowing the conditions of these teams than of other teams. Second, focusing only on construction management teams provides a better basis to compare levels of task variety across teams and put all teams together in the analyses. Such comparison and analysis would be problematic if we had teams diverse in the nature of their tasks, such as including teams responsible for, for example, central execution and human resources management.

Before conducting the survey, we conducted in-depth interviews with human resource managers, several team leaders and team members to ensure that these teams have typical team characteristics (Cohen & Bailey, 1997; Hackman, 2002). Specifically, each team manages a specific construction project and the team leader takes charge of the entire project. Team members have different but interdependent tasks, such as on-site inspection, quality control, safety and risk management, and cost control. They must rely on each other to achieve a team goal. Moreover, team membership is stable over time and team boundaries are clear. A pilot test of the survey was also conducted on a small number of employees to ensure that instructions and questions in the survey could be clearly understood.

In the formal survey, multisource data were collected at two points in time. Two research assistants administered the survey on-site. At time 1, team members completed measurements of transformational leadership, positive group affective tone, task variety, team proactivity, and proactive personality as a control variable. Two weeks later (Time 2), team leaders completed a measurement of overall team performance to validate employee-report measurements. The completed questionnaires were returned directly to the researchers. Anonymity and confidentiality were assured in the cover letter and at the beginning of each survey section.

After deleting responses with incomplete information and teams with fewer than three members, we obtained data from 76 teams (407 team members and 76 team leaders). The average team size is 5.36 (Range = 3 to 12 and SD = 2.41). The response rate is 94.9% for team members and 86.4% for team leaders among the available 88 teams. The high response rates result from encouraged participation from the company and on-site survey administration. For the team members, 68.06% were male. The mean age was 30.19 years old, with SD of 8.37. The mean tenure was 86.33 months, with SD of 105.95. Regarding education, 29.2% of members completed high school, 59.7% college, and 11.1% had a bachelor's degree. For the team leaders, 96.81% were male. The mean age was 35.14 years old, with SD of 6.87. The mean tenure was 151.23 months, with SD of 103.27. The average time in a leadership position was 36.66 months, with SD of 30.53. Regarding education, 11.3% of the leaders completed high school, 63.4% college, and 25.3% had a bachelor's degree.

Measurements

Because all our measurements were originally constructed in English, we created Chinese versions for all measurements following the commonly used translation-back translation procedure (Brislin, 1970). All measurements used a response scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Transformational leadership. Transformational leadership was measured with the scale developed by Rafferty and Griffin (2004). It has 15 items measuring vision, intellectual stimulation, inspirational communication, supportive leadership, and personal recognition. Team members were asked to rate their team leaders. An example item is, "My team leader has a clear understanding of where we are going." The Cronbach's alpha was .95.

Positive group affective tone. In line with Mason and Griffin (2003) and Tsai, Chi, Grandey and Fung's (2012) approach, we used the five items to assess the degree to which

the team members at work in general felt “enthusiastic,” “excited,” “pleasure,” “energized,” and “happy.” An example item is, “Members in my work team are enthusiastic at work.” The Cronbach’s alpha was .87.

Team proactivity. Items developed by Baer and Frese (2003) were used to measure proactivity at the team level. We used four items: “People in my team actively attack problems,” “People in my team quickly use opportunities to attain goals,” “People in my team usually do more than they are asked to do,” and “People in my team are particularly good at realizing ideas.” The Cronbach’s alpha was .81.

Team task variety. We measured team task variety using three items developed by Hackman and Oldham (1975). An example item is, “The task requires us to use a number of complex or high-level skills.” The Cronbach’s alpha was .77.

Overall team performance. We used three items from Van Der Vegt and Bunderson (2005) to measure overall team performance in terms of quality, productivity and mission fulfillment. Team leaders were asked to rate their own teams. The Cronbach’s alpha was .86.

Control variables. We controlled for several demographic variables of teams, including gender composition, mean age (in years), average tenure as a team member (in months), average education level, and team size. We also controlled for the mean of proactive personality among team members for each team because previous studies have indicated that teams with members higher in proactive personality were more self-reliant and had a higher team proactivity (Williams et al., 2010). Team members were also asked to rate their own proactive personality using the four-item version of the proactive personality scale (Bateman & Crant, 1993; Wu, Parker, & Bindl, 2013; Wu, Parker, & de Jong, 2014). An example item is, “No matter what the odds, if I believe in something, I will make it happen.” The Cronbach’s alpha was .77.

Measurement Model

We examined the validity of measurements reported by team members with a series confirmatory factor analysis. We first examined a model containing five factors for the concepts of transformational leadership, positive group affective tone, team task variety, team proactivity, and proactive personality. Except for transformational leadership, each factor was indicated by items for the posited concept. To reduce the model size, we created five parcels based on the five sub-dimensions of transformational leadership to indicate the factor for transformational leadership. Factors could be related to each other, but errors of items could not. This correlated five-factor model fit well: $\chi^2 = 417.22$, $df = 179$; CFI = .93; TLI = .91; RMSEA = .057; and SRMR = .055. Except for positive group affective tone and team proactivity ($r = .69$), correlations between variables ranged from .29 to .55.

We examined alternative models to ensure that our hypothesized measurement model was preferable. Specifically, we tested a single-factor model in which all items/parcels were influenced by only one factor. This single-factor model did not fit well ($\chi^2 = 1552.92$, $df = 189$; CFI = .58; TLI = .53; RMSEA = .133; and SRMR = .116). We examined a three-factor model in which transformational leadership and proactive personality were influenced by their own factors and other concepts related to team characteristics (i.e., positive group affective tone, team task variety, and team proactivity) were influenced by another factor. This three-factor model was not acceptable ($\chi^2 = 762.33$, $df = 186$; CFI = .82; TLI = .80; RMSEA = .087; and SRMR = .077). Finally, we examined a four-factor model in which transformational leadership, proactive personality, and team task variety were influenced by their own factors, whereas positive group affective tone and team proactivity were influenced by another factor. This model helps to clarify the distinction between positive group affective tone and team proactivity; however, it was not acceptable ($\chi^2 = 575.94$, $df = 183$; CFI = .88; TLI = .86; RMSEA = .073; and SRMR = .067). These findings suggested that measurements reported by team members are distinguishable.

Data Aggregation

Because we focused on phenomena at a team level, we examined whether measurements reported by each team member can be aggregated to represent concepts at a team level. First, we examined inter-rater agreement by computing $rwg(j)$, as suggested by James, Demaree, and Wolf (1984). We obtained a mean value of 0.83 for transformational leadership, 0.86 for positive group affective tone, 0.86 for team proactivity, 0.85 for team task variety, and 0.75 for proactive personality. These values are greater than the generally accepted 0.70 value. Second, we conducted one-way ANOVA analyses and found significant between-group variances for all of these variables. Additionally, we calculated intra-class correlation (ICC1) and reliability of group mean (ICC2) values: transformational leadership, 0.18 and 0.55; positive group affective tone, 0.26 and 0.66; team proactivity, 0.19 and 0.56; team task variety, 0.21 and 0.59; and proactive personality, 0.24 and 0.62. These values are comparable to the median ICC values of aggregated constructs in the organizational literature (e.g., Bliese, 2000; Liao & Chuang, 2007). Thus, we concluded aggregation was justified for these variables.

Results

Table 1 presents descriptive statistics among research variables, including mean, standardized deviation and correlations. Transformational leadership ($r = .32, p = .005$) (e.g., Schaubroeck, Lam, & Cha, 2007), proactive personality at the team level ($r = .29, p = .011$), positive group affective tone ($r = .41, p < .001$) (e.g., George, 1995), team task variety ($r = .37, p = .001$) (e.g., Campion et al., 1996) and team proactivity ($r = .42, p < .001$) (e.g., Kirkman & Rosen, 1999) were positively related to team performance rated by team leaders. These ratings are consistent with previous findings and thus support the validity of our team-member self-report measurements. To examine our hypotheses, we performed a series of regression analyses. Scores of positive group affective tone and team task variety were mean-

centered in the following analysis with the purpose of avoiding the problem of multicollinearity when their interaction terms were included. Table 2 presents the results of these analyses.

First, we predict positive group affective tone by including all control variables (Model 1-1) and then additionally including transformational leadership (Model 1-2). We found that only transformational leadership ($B = .893, p < .001$) was positively related to positive group affective tone when it was additionally included. Next, we predicted team proactivity by including all control variables, transformational leadership and positive group affective tone (Model 2-1). We found that transformational leadership ($B = .341, p = .009$) and positive group affective tone ($B = .465, p < .001$) were positively related to team proactivity. To formally test the mediation effect of positive group affective tone on the association between transformational leadership and team proactivity, we follow the nested-equations path analytic approach (Edwards & Lambert, 2007; Hayes, 2013; Preacher et al., 2007) by integrating the equations of Models 1-2 and 2-1 to calculate the mediation effect. We rely on the PROCSS procedure developed by Hayes (Model 4, 2013) to achieve this analysis approach and use a bootstrapping method to calculate the mediation effect. Supporting Hypothesis 1, positive group affective tone had a significant mediation effect (mediation effect = .415; 95% C.I. = .222 to .638).

Next, we examine the proposed moderating effect of team task variety. We predicted team proactivity by including all control variables, transformational leadership, positive group affective tone and team task variety (Model 2-2) and then additionally included the interaction effect of positive group affective tone and team task variety (Model 2-3). We found that the model including the interaction effect explains more variance of team proactivity ($\Delta R^2 = .024, p = .026$). The interaction effect was significant ($B = .240, p = .026$) in predicting team proactivity. Figure 1 presents the interaction plot, which shows that the

relationship between positive group affective tone and team proactivity was stronger when team task variety was high (i.e., $M + 1SD$) (simple slope = .616, $p < .001$) than when team task variety was low (i.e., $M - 1SD$) (simple slope = .337, $p = .001$), supporting Hypothesis 2.

Finally, we examine the hypothesized moderated-mediation effects using the same nested-equations path analytic approach. In brief, we integrated the equations of Models 1-2 and 2-3 and used the PROCSS procedure (Model 14, Hayes, 2013) to calculate the conditional mediation effect of positive group affective tone with a bootstrapping method. Supporting Hypothesis 3, positive group affective tone had a stronger mediation effect when team task variety is high (conditional mediation effect = .551; 95% C.I. = .308 to .892) than when team task variety is low (conditional mediation effect = .304; 95% C.I. = .070 to .0547).

We examined several alternative moderated mediation models (Edwards & Lambert, 2007) and found that team task variety did not have significant moderation effects on the association between transformational leadership and positive group affective tone or the association between transformational leadership and team proactivity.

 Insert Table 1, 2 and Figure 1 Here

Discussion

In this study, we found that transformational leadership has a positive association with positive group affective tone, which, in turn, helps energize teams to be more proactive. We also found that such an energizing effect of positive group affective tone on team proactivity is more prominent for teams with higher task variety than for those with lower. Our findings offer several theoretical and practical implications.

First, the results of this study widen the understanding of how leaders can shape team proactivity. In contrast to the role of leadership in building team capacity (“can do” process)

and work meanings (“reason to” process) (Kirkman & Rosen, 1999; Williams et al., 2010) that have been focused in previous studies, we indicate that leaders can promote team proactivity by cultivating a positive affective tone within teams, reflecting an energizing process in motivating proactivity (Parker et al., 2010). This understanding first suggests a broad practical implication, that is, that having transformational leaders is critical to make teams proactive. However, because there are several components within the concept of transformational leadership, which is more critical for sustaining team proactivity, particularly when team task variety is high? Our finding suggests that the affective component, such as inspirational communication, should play an important role because we found that establishing a positive affective tone is the key to sustaining team proactivity, particularly when team task variety is high. In addition to the focus on the affective component of transformational leadership, those aiming to lead their teams to be proactive can consider using different approaches to facilitate positive group affective tone through top-down and/or bottom-up processes, as mentioned earlier.

With a focus on the concept of positive group affective tone, our investigation contributes to the proactivity literature by extending the function of positive affect on proactivity beyond the individual level (Bindl et al., 2012; Den Hartog & Belschak, 2007; Fay & Sonnentag, 2012). Our work thus provides a basis to examine a multilevel role of positive affect in shaping proactivity. The potential multilevel effect of positive affect on proactivity has rarely been discussed, and we believe that it is an important research avenue in proactivity research. The main reason is that building a multilevel model to consider positive affect and proactivity at both individual and team levels can help us to delineate single-level and, most importantly, cross-level pathways in shaping individual and team proactivity. For example, individuals’ positive affect can be transferred to contribute to positive group affective tone via emotionally contagious processes or behavioral entrainment

(a bottom-up process), and then positive group affective tone can facilitate team proactivity by providing a positive environment for idea sharing and activities coordination, as we discussed earlier. In contrast, positive affective tone can induce individuals' positive affect by providing a norm for emotional expression and reactions in teams, and then individuals' positive affect can evoke flexible cognition and stronger motivation to envision and implement changes at the individual level (a top-down process). We recommend future studies bring a multilevel perspective to unpack the function of positive affect in shaping proactivity.

While examining the multilevel effect of positive affect, future studies can also explore whether teams with positive group affective tone may tune their proactive effort to goals that are easy to approach, instead of goals that are difficult to achieve. Studies on positive affect at the individual level have indicated a hedonic contingency effect such that "people in happy moods are more likely to strategically choose activities on the basis of the hedonic consequences of those activities" (Wegener & Petty, 1994, p. 1044-1045). If the same rule applied at the team level, it would be very likely that teams having positive affective tone will choose goals that can bring positive consequences. In other words, positive group affective tone may not only shape the cognitive and behavioral resources within a team but also the content of proactive goals for leading changes. Our study only considers the level of team proactivity and therefore leaves a research question regarding the content of proactive goals for future studies.

Our investigation on the moderating effect of team task variety indicates when positive group affective tone is more critical to sustain team proactivity. As suggested by Collins et al. (2013, p. S53), "the impact of group affective tone on group outcomes is more complex ... such that team task characteristics may play a moderating role in these relationships"; therefore, we provide an empirical examination to unpack the complex

interplay between team tasks and a team's affective characteristics in shaping team proactivity. To our knowledge, only two studies have examined when group affective tone will be more influential in shaping team performance (Klep, Wisse, & Flier, 2012; Tsai et al., 2012), and neither considered the moderating role of team task characteristics. Our study thus provides new knowledge pertaining to group affective tone research. The specific results also offer a managerial implication for teamwork design. Specifically, team task variety has been considered a motivating factor that makes teams devote more effort and utilize different talent and skills to increase team effectiveness (Campion et al., 1993; Campion et al., 1996). In line with this view, we found that team task variety is positively correlated with team proactivity. However, when we take positive affective tone into account, we found that having higher team task variety cannot make teams proactive if positive group affective tone is lacking (that is, team task variety only is positively related to team proactivity when positive group affective tone is high, [$B = .216, p = .016$], rather than low [$B = -.078, p = .481$]). This finding suggests that an increase in teams' task variety should be paired with higher positive group affective tone to fuel resources and energy to motivate teams to take initiative to bring about change.

Several limitations should be noted. First, this is a cross-sectional study, which may lead to a question on our mediation process from transformational leadership via positive group affective tone to team proactivity. Our findings thus only provide an indicative implication for the potential temporal order between variables; they cannot offer a causal conclusion. To validate our suggested moderated mediation process, a longitudinal study is required to gauge how our research variables would shape each other over time. Second, we only consider positive affective group tone as a mediator to link transformational leadership and team proactivity. To substantiate our findings, it would be better to control factors representing "can do" process, such as team efficacy, and factors representing "reason to"

process, such as work meaningfulness or shared vision, to demonstrate the uniqueness of “energized to” process in leading team proactivity.

Third, we measured all main research constructs using team-member reports and demonstrated validity of these measurements by showing positive correlations with team performance rated by team leaders. Although this approach is not ideal, it is ecologically reasonable, particularly in our research context. Specifically, the construction-management teams we focused on are based in different places and responsible for different projects. Only leaders and members in the same team are able to gauge clearly their activities within teams and overall performance. Therefore, we decided to request team members to rate leadership, positive affective group tone and team proactivity because it was assumed that they would have a better sense than would team leaders to observe related activities within teams. We decided to request team leaders to rate team performance because they would have a better view of their team’s performance against those criteria. Although a concern exists with using team-leader-rated team performance because team leaders may bring subjective bias into the ratings, we can at least avoid the potential problem of common method bias in which team members were requested to rate team performance at the same time. Nevertheless, to alleviate concerns with the use of subjective ratings from team members and leaders, future studies should consider using objective measures of team performance as outcomes.

Although our measurements are valid, it could be argued that the concern of common method bias still exists because our main research constructs are measured using the same method (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We do not think common method bias will threaten our conclusions. Following Podsakoff et al.’s (2003) suggestions, we have taken actions to reduce common method bias in survey administration by informing our participants that the survey is anonymous and that there are no right or wrong answers for each question. Empirically, results of confirmatory factor analysis showed that our

measurements were empirically distinct from each other. Additionally, we found a significant interaction effect between positive group affective tone and team task variety in predicting initiative climate. Such an interaction effect is unlikely to be detected when common method variance is high (Siemsen, Roth, & Oliveira, 2010).

Finally, in this study, we conceptualize team proactivity from an energizing perspective that emphasizes a generative component of proactivity such as initiating changes for a better future before encountering problems. Nevertheless, a team can also be proactive in solving problems that they have encountered, rendering a necessity perspective of proactivity (Fay & Sonnentag, 2002). These two perspectives of proactivity create a need to identify whether, when and how different forms of proactivity could be operating. Our measure of team proactivity did not differentiate proactivity into different components; the measure thus cannot help address this research question directly. However, this question is relevant to our research because it raises a concern about the role of negative group affective tone in shaping team proactivity. At the individual level, Den Hartog and Belschak (2007) indicated that negative affect can be considered as an indicator of a necessity for change and found a positive association between negative affect and personal initiative when positive affect was controlled for. The effect is largely due to the function of negative affect in motivating an individual to envision a better situation (Bindl et al., 2012). Although more evidence is required to establish the reliability of such an effect, these findings highlight an affect-as-information perspective (Schwarz, 2012) in shaping an individual's judgment and action. At the team level, whether negative group affective tone can similarly shape team proactivity could be an important research question. Because teams with negative group affective tone tend to have more conflict and less cooperation among team members, negative group affective tone may not sustain team proactivity that requires collaboration and coordination among members. Although negative group affective tone can indicate a strong

need for improvement, it may point toward a need for improvement in team climate specifically, rather than improvement for team task performance. If our reasoning were supported, there would be an asymmetric effect of negative affect in shaping proactivity across individual and team levels. As such, to unpack the role of affect in shaping proactivity more broadly, future studies should consider using proactivity measures that differentiate proactivity into different elements (e.g., proactivity for leading changes for a better future vs. proactivity for solving encountered problems), examining positive and negative affect at the same time and investigating a multilevel model consolidating team and individual process.

References

- Aspinwall, L. G. (1998). Rethinking the role of positive affect in self-regulation. *Motivation and Emotion, 22*, 1–32.
- Aspinwall, L. G., & Taylor, S. E. (1997). A stitch in time: Self-regulation and proactive coping. *Psychological Bulletin, 121*(3), 417-436.
- Baer, M., & Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior, 24*, 45-68.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly, 47*, 644-675.
- Barsade, S. G., & Gibson, D. E. (1998). Group emotion: a view from top and bottom. In D. Gruenfeld, E. A. Mannix & M. A. Neale (Eds.), *Research on Managing Groups and Teams* (Vol. 1, pp. 81-102). Greenwich, CT: JAI Press.
- Bartel, C. A., & Saavedra, R. (2000). The collective construction of work group moods. *Administrative Science Quarterly, 45*, 197-231.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior, 14*(2), 103-118.
- Bindl, U. K., & Parker, S. K. (2010). Proactive work behaviour: Forward-thinking and change-oriented action in organizations In S. Zedeck (Ed.), *APA handbook of*

industrial and organizational psychology. Washington, DC: American Psychological Association.

- Bindl, U. K., Parker, S. K., Totterdell, P., & Hagger-Johnson, G. (2012). Fuel of the self-starter: How mood relates to proactive goal regulation. *Journal of Applied Psychology, 97*, 134-150.
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 349-381). San Francisco, CA: Jossey-Bass, Inc.
- Bono, J. E., & Ilies, R. (2006). Charisma, positive emotions and mood contagion *Leadership Quarterly, 17*(4), 317-334
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1*, 185-216.
- Burris, E. R. (2012). The risks and rewards of speaking up: Managerial responses to employee voice. *Academy of Management Journal, 55*, 851-875.
- Campbell, D. J. (2000). The proactive employee: Managing workplace initiative. *Academy of Management Executive, 14*(3), 52-66.
- Campion, M. A., Medsker, G. J., & Higgs, A. C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology, 46*, 823-850.
- Campion, M. A., Papper, E. M., & Medsker, G. J. (1996). Relations between work team characteristics and effectiveness: A replication and extension. *Personnel Psychology, 49*, 429-452.

- Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality-social, clinical, and health psychology. *Psychological Bulletin*, *92*(1), 111-135.
- Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS Scales. *Journal of Personality and Social Psychology*, *67*, 319-333.
- Chung, K. H., & Ross, M. F. (1977). Differences in motivational properties between job enlargement and job enrichment. *Academy of Management Review*, *2*, 113-122.
- Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, *23*, 239-290.
- Collins, A. L., Lawrence, S. A., Troth, A. C., & Jordan, P. J. (2013). Group affective tone: A review and future research directions. *Journal of Organizational Behavior*, *34*, S43-S62.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, *26*(3), 435-462.
- Den Hartog, D. N., & Belschak, F. D. (2007). Personal initiative, commitment and affect at work. *Journal of Occupational and Organizational Psychology*, *80*, 601-622.
- DeShon, R. P., Kozlowski, S. W. J., Schmidt, A. M., Milner, K. R., & Wiechmann, D. (2004). A multiple-goal, multilevel model of feedback effects on the regulation of individual and team performance. *Journal of Applied Psychology*, *89*, 1035-1056.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, *12*, 1-22.

- Ehrhart, M. G., & Klein, K. J. (2001). Predicting followers' preferences for charismatic leadership: the influence of follower values and personality. *Leadership Quarterly*, *12*, 153-179.
- Elliot, A. J., & Thrash, T. M. (2002). Approach-avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*, *5*, 804-818.
- Erez, A., & Isen, A. M. (2002). The influence of positive affect on the components of expectancy motivation. *Journal of Applied Psychology*, *87*, 1055-1067.
- Erkutlu, H., & Chafra, J. (2012). The impact of team empowerment on proactivity: The moderating roles of leader's emotional intelligence and proactive personality. *Journal of Health Organization and Management*, *26*, 560-577.
- Fay, D., & Sonnentag, S. (2002). Rethinking the effects of stressors: A longitudinal study on personal initiative. *Journal of Occupational Health Psychology*, *7*(3), 221-234.
- Fay, D., & Sonnentag, S. (2012). Within-person fluctuations of proactive behavior: How affect and experienced competence regulate work behavior. *Human Performance*, *25*, 72-93.
- Frese, M., & Fay, D. (2001). Personal initiative (PI): An active performance concept for work in the 21st century. In B. M. Staw & R. M. Sutton (Eds.), *Research in Organizational Behavior* (Vol. 23, pp. 133-187). Amsterdam: Elsevier Science.
- George, J. M. (1990). Personality, affect, and behavior in groups. *Journal of Applied Psychology*, *75*, 107-116.
- George, J. M. (1995). Leader positive mood and group performance: The case of customer service. *Journal of Applied Social Psychology*, *25*, 778-794.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, *28*, 3-34.

- Grawitch, M. J., Munz, D. C., & Kramer, T. J. (2003). Effects of member mood states on creative performance in temporary workgroups. *Group Dynamics: Theory, Research, and Practice*, 7, 41-54.
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50, 327 - 347.
- Hackman, J. R. (2002). *Leading teams: Setting the stage for great performances*. Boston, MA: Harvard Business School Press.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159-170
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16, 250-279.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513-524.
- Isen, A. M. (1987). Positive affect, cognitive processes and social behavior. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (pp. 203-253). New York: Academic.
- Isen, A. M., & Reeve, J. (2005). The influence of positive affect on intrinsic and extrinsic motivation: Facilitating enjoyment of play, responsible work behavior, and self control. *Motivation and Emotion*, 29(4), 297-325.
- James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology*, 69, 85-98.

- Kelly, J. R., & Barsade, S. G. (2001). Mood and emotions in small groups and work teams. *Organizational Behavior and Human Decision Processes*, 86, 99-130.
- Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal*, 42(1), 58-74.
- Klep, A. H. M., Wisse, B., & Flier, H. v. d. (2013). When sad groups expect to meet again: Interactive affective sharing and future interaction expectation as determinants of work groups' analytical and creative task performance. *British Journal of Social Psychology*, 52, 667-85.
- Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 3-90). San Francisco, CA, US: Jossey-Bass.
- Liao, H., & Chuang, A. (2007). Transforming service employees and climate: A multilevel, multisource examination of transformational leadership in building long-term service relationships. *Journal of Applied Psychology*, 92, 1006-1019.
- Mason, C. M., & Griffin, M. A. (2003). Group absenteeism and positive affective tone: A longitudinal study. *Journal of Organizational Behavior*, 24, 667-687.
- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, 42(4), 403-419.
- Narayanan, S., Balasubramanian, S., & Swaminathan, J. M. (2009). A matter of balance: Specialization, task variety, and individual learning in a software maintenance environment. *Management Science*, 55, 1861-1876.
- Parker, S. K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, 83(6), 835-852.

- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, *36*, 827-856.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879-903.
- Preacher, K. J., Rucker, D. D., & Hayes, A. (2007). Assessing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, *42*, 185-227.
- Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *Leadership Quarterly*, *15*, 329-354.
- Raub, S., & Liao, H. (2012). Doing the right thing without being told: Joint effects of initiative climate and general self-efficacy on employee proactive customer service performance. *Journal of Applied Psychology*, *97*, 651-667.
- Schaubroeck, J., Lam, S. S. K., & Cha, S. E. (2007). Embracing transformational leadership: Team values and the impact of leader behavior on team performance. *Journal of Applied Psychology*, *29*, 1020-1030.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, *40*, 437-453.
- Schwarz, N. (2012). Feelings-as-Information Theory. In P. V. Lange, A. Kruglanski & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 289-308): Sage.
- Shally, C. E., Gilson, L. L., & Blum, T. C. (2009). Interactive effects of growth need strength, work context, and job complexity on self-reported creative performance. *Academy of Management Journal*, *52*, 489-505.
- Shin, S. J., & Zhou, J. (2007). When is educational specialization heterogeneity related to creativity in research and development teams? Transformational leadership as a moderator. *Journal of Applied Psychology*, *92*, 1709-1721.

- Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods, 13*, 456-476.
- Sy, T., Côté, S., & Saavedra, R. (2005). The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology, 90*, 295-305.
- Totterdell, P., Kellett, S., Teuchmann, K., & Briner, R. B. (1998). Evidence of mood linkage in work groups. *Journal of Personality and Social Psychology, 74*, 1504-1515.
- Totterdell, P., Wall, T., Holman, D., Diamond, H., & Epitropaki, O. (2004). Affect networks: A structural analysis of the relationship between work ties and job-related affect. *Journal of Applied Psychology, 89*, 854-867.
- Tsai, W.-C., Chi, N.-W., Grandey, A. A., & Fung, S.-C. (2012). Positive group affective tone and team creativity: Negative group affective tone and team trust as boundary conditions. *Journal of Organizational Behavior, 33*, 638-656.
- Van Der Veegt, G. S., & Bunderson, J. S. (2005). Learning and performance in multidisciplinary teams: the importance of collective team identification. *Academy of Management Journal, 48*, 532-547.
- Walter, F., & Bruch, H. (2008). The positive group affect spiral: a dynamic model of the emergence of positive affective similarity in work groups. *Journal of Organizational Behavior, 29*, 239-261.
- Wegener, D. T., & Petty, R. E. (1994). Mood management across affective states: The hedonic contingency hypothesis. *Journal of Personality and Social Psychology, 66*, 1034-1048.
- Weingart, L. R. (1992). Impact of group goals, task component complexity, effort, and planning on group performance. *Journal of Applied Psychology, 77*, 682-693.

- Weldon, E., Jehn, K. A., & Pradhan, P. (1991). Processes that mediate the relationship between a group goal and improved group performance. *Journal of Personality and Social Psychology, 61*, 555-569.
- Williams, H. M., Parker, S. K., & Turner, N. (2010). Proactively performing teams: The role of work design, transformational leadership, and team composition. *Journal of Occupational and Organizational Psychology, 83*, 301-324.
- Wu, C.-H., Parker, S. K., & Bindl, U. K. (2013). Who is proactive and why? Unpacking individual differences in employee proactivity. In A. B. Bakker (Ed.), *Advances in Positive Organizational Psychology* (Vol. 1, pp. 261-280). Bingley, UK: Emerald Group Publishing.
- Wu, C.-H., Parker, S. K., & de Jong, J. P. J. (2014). Need for cognition as an antecedent of individual innovation behavior. *Journal of Management, 40*, 1511–1534.

Table 1.

Descriptive statistics among research variables (n = 76)

	<i>M</i>	<i>SD</i>	Correlations												
			1	2	3	4	5	6	7	8	9	10			
1. Gender composition (percentage of males)	0.68	0.22													
2. Age	30.10	4.39	.12												
3. Tenure in teams (months)	22.05	18.82	.11	.21											
4. Education	2.78	0.39	-.17	-.56**	-.26*										
5. Team size	5.36	2.41	-.02	.05	-.12	-.06									
6. Proactive personality	3.48	0.54	-.07	-.20	-.04	.22	-.04								
7. Transformational leadership	4.21	0.44	-.17	-.04	-.11	.11	-.19	.50**							
8. Positive affective tone	5.72	0.61	-.06	.06	.01	-.10	-.15	.36**	.67**						
9. Team task variety	5.79	0.58	-.18	.09	.06	.16	-.05	.31**	.40**	.36**					
10. Team proactivity	5.69	0.53	-.11	.02	.10	.09	-.09	.45**	.68**	.74**	.47**				
11. Leader-rated team performance	5.58	1.04	-.11	-.07	.06	.18	-.23*	.29*	.32**	.41**	.37**	.42**			

* $p < .05$, ** $p < .01$.

Table 2.

Results of regression analysis (n = 76)

	Positive affective tone				Team proactivity					
	Model 1-1		Model 1-2		Model 2-1		Model 2-2		Model 2-3	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Intercept	-.574	1.120	-3.213	.999	.075	.736	3.098	.797	2.885	.778
Gender composition	-.194	.296	.056	.243	-.051	.171	-.018	.172	-.075	.168
Age	.008	.018	-.002	.015	.011	.010	.007	.011	.011	.010
Tenure in teams	-.002	.004	.001	.003	.005*	.002	.004*	.002	.005*	.002
Education	-.297	.211	-.284	.170	.246*	.123	.201	.126	.224	.122
Team size	-.038	.028	-.007	.023	.016	.016	.015	.016	.020	.016
proactive personality	.455**	.125	.090	.117	.100	.083	.086	.083	.053	.082
Team task variety	---	--	--	--	--	--	.108	.075	.069	.075
Transformational leadership			.893**	.145	.341**	.127	.316*	.128	.343**	.124
Positive affective tone					.465**	.086	.444**	.086	.477**	.085
Positive affective tone × Team task variety									.240*	.105
<i>F</i>	2.793*		9.123**		16.775**		15.366**		15.230**	
<i>R</i> ²	.195		.484		.667		.677		.701	
<i>R</i> ² change			.289**						.024*	

* $p < .05$, ** $p < .01$.

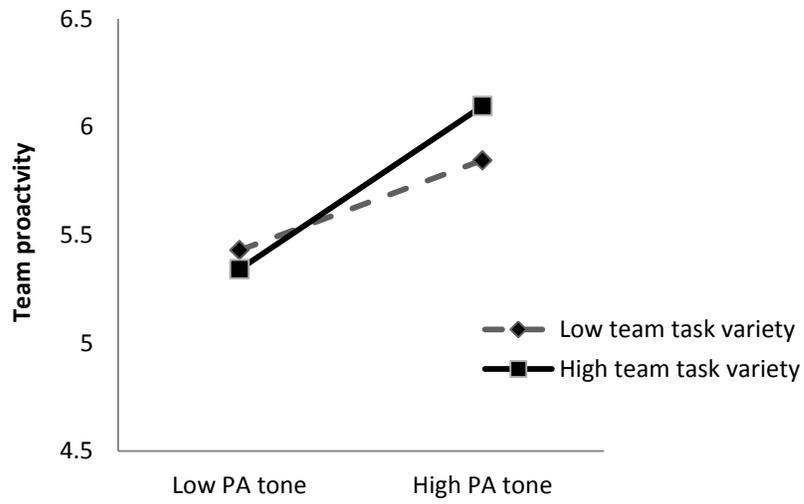


Figure 1. Interaction plot of positive affective tone and team task variety in predicting team proactivity (PA tone = positive affective tone).