

Innovation Expectation Gap and Team Breakthrough Innovation: A Self-Regulation Theory Perspective

Authors: Liu Zhiqiang, Yuping Xu, Jianwei Xu, Zhou Rong, Long Lirong, Xu Yuping

Date: 2022-09-01T00:00:00+00:00

Abstract

Based on self-regulation theory, this study investigates the process through which team leaders' innovation expectation gap drives team breakthrough innovation. Drawing from experimental results and a multi-time-point, multi-source questionnaire survey, we find that: the innovation expectation gap exerts a U-shaped effect on leader innovation investment; leader innovation investment mediates the U-shaped relationship between the innovation expectation gap and team breakthrough innovation; perceived overqualification and organizational promotion standards jointly moderate the effect of the innovation expectation gap on team breakthrough innovation via leader innovation investment. Specifically, when leader perceived overqualification is high and the organization adopts relative promotion standards, the innovation expectation gap has a stronger impact on team breakthrough innovation through leader innovation investment.

Full Text

Innovation Expectation Discrepancy and Team Radical Innovation: A Self-Regulation Theory Perspective

LIU Zhiqiang¹, XU Yuping¹, XU Jianwei², ZHOU Rong³, LONG Lirong¹

(¹School of Management, Huazhong University of Science and Technology, Wuhan 430074, China)

(²School of Internet Economics and Business, Fujian University of Technology, Fuzhou 350014, China)

(³School of Economics & Management, Nanchang University, Nanchang 330031, China)

Abstract

Drawing on self-regulation theory, this study examines how team leaders' innovation expectation discrepancy drives team radical innovation. Based on experimental findings and a multi-timepoint, multi-source survey, the results reveal that innovation expectation discrepancy exerts a U-shaped effect on leader creative process engagement; leader creative process engagement mediates the U-shaped relationship between innovation expectation discrepancy and team radical innovation; and perceived overqualification and organizational promotion criteria jointly moderate the effect of innovation expectation discrepancy on team radical innovation through leader creative process engagement. Specifically, when leaders perceive high overqualification and the organization implements relative promotion criteria, innovation expectation discrepancy has a stronger impact on team radical innovation via leader creative process engagement.

Keywords: innovation expectation discrepancy, team radical innovation, leader creative process engagement, perceived overqualification, organizational promotion criteria

Classification Code: B849:C93

1 Introduction

Given innovation's critical importance to organizations and teams' pivotal role in organizational innovation, team innovation has become a prominent research topic (Anderson et al., 2014). Team innovation refers to the integration of individual team members to generate novel and useful ideas and apply them in organizational practice (Van Knippenberg, 2017). In terms of approach, team innovation can manifest as either incremental innovation that extends existing products and processes or radical innovation that fundamentally transforms them (Nijstad et al., 2014). Compared to incremental innovation, team radical innovation is more decisive for building core competitive advantages (Liu et al., 2021). However, radical innovation pursues a leap from zero to one and involves high uncertainty, resulting in relatively limited academic exploration (Alexander & Van Knippenberg, 2014). Therefore, this study focuses specifically on team radical innovation.

From an organizational behavior perspective, team radical innovation requires three essential conditions: (1) team leaders' innovation willingness and capability, (2) team members' innovation imitation and followership, and (3) well-designed incentive mechanisms (cf., Hughes et al., 2018; Van Knippenberg, 2017; Liu et al., 2021). Since team leaders play a special role in team inspiration and mechanism design, leadership factors dominate among these three elements. Despite their critical importance, existing research on leadership and team radical innovation remains limited and warrants expansion. According to self-regulation theory, when leaders set expectations for team innovation and perceive a gap between actual innovation performance and their innovation expectations (i.e.,

innovation expectation discrepancy), their self-regulation processes become activated, prompting them to take initiative to narrow the gap between expectations and reality (Xu, Liu, et al., 2021). From this perspective, leader innovation expectation discrepancy is logically linked to team radical innovation, yet existing research has rarely explored this connection.

This study analyzes the phenomenon based on self-regulation theory. Self-regulation theory posits that a discrepancy between desired and current states is a prerequisite for action (Carver, 2004), while work engagement, as a driving state of self-regulation, reflects individuals' efforts to reduce such discrepancies (Mitchell et al., 2019). Therefore, leaders who perceive innovation expectation discrepancy may reduce the perceived gap by adjusting their work engagement, such as through creative process engagement. Creative process engagement refers to individuals' involvement in innovation-related activities, determining the flexibility of cognitive pathways, task-specific focus, and adherence to particular paths when pursuing solutions, and is closely related to creative idea generation (Zhang & Bartol, 2010). Since leaders' creative ideas constitute an important source of team innovation (Pirola-Merlo & Mann, 2004), leader creative process engagement may serve as a crucial mechanism through which innovation expectation discrepancy influences team radical innovation.

Although leader creative process engagement may enhance team radical innovation, self-regulation theory suggests that this process must also consider individual and situational factors (e.g., Parke et al., 2018; Zhan et al., 2020). Leaders' qualifications and capabilities are important determinants of team innovation (Van Knippenberg, 2017), and perceived overqualification precisely reflects the extent to which individuals believe their qualifications and capabilities exceed job requirements (Luksyte et al., 2022), making it a potentially important individual factor influencing leaders' self-regulation processes. Additionally, considering that individuals with high perceived overqualification can only exert positive effects under specific circumstances (Ma et al., 2020), and that promotion can improve the person-job mismatch status of such individuals, organizational promotion criteria—the basis and standards followed in employee promotion processes (Wei et al., 2019)—may constitute an important situational factor for the self-regulation processes of individuals with perceived overqualification. Therefore, this study introduces both perceived overqualification and organizational promotion criteria into the model, predicting that they jointly determine the effect of leader creative process engagement on team radical innovation.

In summary, this study builds on self-regulation theory to construct an indirect effect model in which innovation expectation discrepancy influences team radical innovation through leader creative process engagement, while simultaneously examining the joint moderating effect of leader perceived overqualification and organizational promotion criteria (see Figure 1 [Figure 1: see original paper]). Potential contributions include: First, by empirically testing the internal mechanism and boundary conditions through which leader innovation expect-

tation discrepancy affects team radical innovation, this study provides a new perspective for exploring how leaders drive team radical innovation. Second, by integrating self-regulation theory to reveal the role of leader creative process engagement in the process through which innovation expectation discrepancy influences team radical innovation, this study expands the generative mechanism of team innovation from a leadership perspective. Third, by integrating leader individual factors (perceived overqualification) and organizational contextual factors (organizational promotion criteria), this study examines how they jointly affect the relationship between leader creative process engagement and team radical innovation, providing a more comprehensive analytical framework for understanding the leader-driven self-regulation process of team radical innovation in the context of innovation expectation discrepancy.

1.1 Innovation Expectation Discrepancy

Innovation expectation discrepancy represents a special case of expectation discrepancy, referring to the difference between actual innovation performance and innovation expectations (cf., Eggers & Kaul, 2018; Parker et al., 2017). The concept of expectation discrepancy originated from performance feedback theory, which suggests that decision-makers set expectations based on organizational historical performance or peer organizations' performance, and decide on search, risk-taking, and change by evaluating gaps between actual and expected performance (Greve, 2003). In performance feedback theory, performance is a multidimensional concept encompassing return on assets, productivity, sales, market share, etc. (Greve, 2008). Based on this logic, as innovation constitutes a core indicator of team performance, team leaders may form team innovation expectation discrepancy, yet few studies have examined this phenomenon.

Reviewing previous research, scholars have primarily drawn on firm behavior theory, prospect theory, etc., to explore how other dimensions of expectation discrepancy affect organizational behavioral choices (Greve, 2003). Although these studies provide valuable insights for understanding the effects of expectation discrepancy, organizational decision-making and team decision-making operate in different contexts, making it inappropriate to simply apply firm-level theoretical findings to team decision-making. Further exploration is therefore needed. Given that self-regulation theory is a meta-theory of individuals' goal-pursuit motivation (Xu, Liu, et al., 2021), with its core proposition being that motivated individuals strive to reduce discrepancies between desired goals and current states (Koopman et al., 2020), it can explain leaders' cognitive and behavioral responses when facing expectation discrepancy. This study therefore employs self-regulation theory to explore the internal mechanism through which leader innovation expectation discrepancy influences team radical innovation.

1.2 Self-Regulation Theory

Self-regulation theory reflects the dynamic process through which people respond to discrepancies (Puranik et al., 2021). According to this theory, after setting goals, individuals compare them with their perceived current states and respond when discrepancies exist (Carver, 2004). Self-regulation theory also posits that individuals' self-regulation processes include goal setting and goal striving stages (Diefendorff & Lord, 2008; Mann et al., 2013). Research on the goal-setting stage suggests that individuals' self-regulation process is one of advancing toward goal states through feedback (Johnson et al., 2013). If performance exceeds goals, individuals may actively shape discrepancies by setting higher goals; if performance falls short of goals, lowering goals is typically not an effective self-regulation response (Diefendorff & Lord, 2008). The goal-striving stage refers to the process of taking a series of actions to achieve established goals (Mann et al., 2013), wherein work engagement reflects individuals' efforts to achieve goals (Xu, Du, et al., 2021), making work engagement an important state in the goal-striving process (Mitchell et al., 2019). According to this theory, innovation expectation discrepancy—the difference between actual innovation performance and leader innovation expectations—may activate leaders' self-regulation processes. When actual performance exceeds leader expectations, leaders may set higher goals and achieve them through increased work engagement (including creative process engagement); when actual performance falls short of leader expectations, leaders may also increase creative process engagement to reduce perceived discrepancies. Therefore, innovation expectation discrepancy may influence team radical innovation through leader creative process engagement.

1.3 Leader Innovation Expectation Discrepancy, Leader Creative Process Engagement, and Team Radical Innovation

According to self-regulation theory, when discrepancies exist between goals and current states, individuals' self-regulation processes are activated, prompting corresponding affective, cognitive, and behavioral responses (Xu, Du, et al., 2021). Leader innovation expectation discrepancy refers to the difference between team actual innovation performance and leader innovation expectations (cf., Eggers & Kaul, 2018; Parker et al., 2017), which can activate leaders' self-regulation processes (Koopman et al., 2020). According to this theory, if team innovation performance significantly falls short of leader expectations—meaning the discrepancy between current and desired states is particularly pronounced—leaders' self-regulation processes will be activated, as unfulfilled goals create stress (Xu et al., 2019), and increased engagement can alleviate stress (Mitchell et al., 2019). We therefore infer that leaders' creative process engagement will increase. As team innovation performance improves and the gap with leader expectations narrows, leaders experience less stress and reduce their efforts in goal-directed activities (DeOrtentiis et al., 2022), meaning the increase in leader

creative process engagement diminishes. As team innovation performance further improves and approaches leader expectations, leaders' self-regulation processes are no longer activated (Xu, Liu, et al., 2021), and leader creative process engagement remains unchanged.

When team innovation performance further improves and exceeds leader expectations, leaders' self-regulation processes are reactivated (Xu, Du, et al., 2021). Leaders shift from problem-solving pressure to focusing on long-term team development (Xu et al., 2019). According to self-regulation theory, individuals modify their goals based on current states at this point (Johnson et al., 2013). When team innovation performance exceeds leader expectations, leaders feel satisfied and experience positive affect (Carver, 2004). Positive affect has an energizing effect, increasing individuals' optimism about performance. When experiencing highly positive affect, individuals exhibit approach behaviors and set higher, more challenging expectation goals (Bindl et al., 2012). Escalating expectation goals reduce the likelihood of team success, requiring leaders to increase creative process engagement to maintain successful status. As team innovation performance further improves, leaders' positive affect becomes stronger, increasing their confidence in future-oriented behaviors (Xu et al., 2019), and leader creative process engagement further increases. Based on this analysis, we propose:

Hypothesis 1: Leader innovation expectation discrepancy has a U-shaped curvilinear relationship with leader creative process engagement.

We further predict that leader innovation expectation discrepancy may exert a U-shaped influence on team radical innovation through leader creative process engagement. Specifically, when leaders encounter innovation expectation discrepancy, they increase creative process engagement. As core participants in team knowledge networks (Tang & Ye, 2015), leaders' increased creative process engagement generates a series of creative ideas (Zhang & Bartol, 2010) and drives team innovation (including radical innovation; Anderson et al., 2014). Additionally, leader creative process engagement influences employees' innovation engagement because leaders affect employee performance evaluations, and employees seek behavioral cues from leaders (Cheung et al., 2020). When leaders participate in creative behaviors and demonstrate high creativity, team members are highly likely to imitate leaders and increase their own innovation engagement (Lu et al., 2018). With simultaneous increases in both leader and team member innovation engagement, team radical innovation levels improve (Kozlowski & Klein, 2000). Based on this analysis, we propose:

Hypothesis 2: Leader creative process engagement mediates the U-shaped relationship between leader innovation expectation discrepancy and team radical innovation.

1.4 The Joint Moderating Effect of Perceived Overqualification and Organizational Promotion Criteria

As previously mentioned, perceived overqualification is an important individual factor affecting leaders' self-regulation processes. On one hand, for leaders, perceived overqualification means they believe they possess knowledge and skills exceeding job requirements (Ma et al., 2020). This belief increases their confidence in succeeding at challenging tasks like team radical innovation (resulting in higher self-efficacy; Zhang et al., 2016). Therefore, when capabilities permit, leaders with high perceived overqualification are more likely to address perceived capability-job requirement discrepancies through radical innovation approaches, thereby strengthening the promoting effect of leader creative process engagement on team radical innovation. On the other hand, if numerous internal and external organizational constraints make leaders with high perceived overqualification feel that effort cannot change their person-job mismatch status, they will perceive a lack of control over their work and career development within the organization. This sense of powerlessness creates work alienation (Xie et al., 2015), reducing their work enthusiasm (Li & Chen, 2022) and making them less likely to choose radical innovation activities requiring strong motivation. Moreover, this suboptimal person-job fit creates feelings of unfairness (Yang & Li, 2021), breaking the psychological contract with the organization and reducing willingness to invest substantial energy into work (Li & Chen, 2022), which is particularly detrimental to radical innovation activities requiring significant time and effort. Therefore, perceived overqualification may either enhance or inhibit the effect of leader creative process engagement on team radical innovation.

Organizational promotion criteria, as a typical institutional environment, may also influence the process through which leader creative process engagement affects team radical innovation. Organizational promotion criteria include absolute promotion criteria and relative promotion criteria (Liu et al., 2013). Absolute promotion criteria promote employees based on predetermined objective standards, while relative promotion criteria promote employees based on relative ranking among employees (Phelan & Lin, 2001). In design logic, absolute promotion criteria encourage employees to compete with themselves, whereas relative promotion criteria encourage employees to compete with others (Liu et al., 2013). Therefore, the more an organization 倾向于绝对标准, the less direct competition among leaders, increasing productive behaviors but not fully tapping potential; the more it 倾向于相对标准, the more intense the direct competition, fully 挖掘潜力 but easily creating antagonism. Compared to absolute promotion criteria, relative promotion criteria are more likely to evoke unconventional behaviors, which are more conducive to complex activities like radical innovation engagement. However, relative promotion criteria may also induce counterproductive behaviors (Liu et al., 2013), which conversely reduce radical innovation engagement due to attention fragmentation. Therefore, organizational promotion criteria alone do not moderate the effect of leader creative

process engagement on team radical innovation.

However, organizational promotion criteria and perceived overqualification may jointly moderate the relationship between leader creative process engagement and team radical innovation. Perceived overqualification largely makes individuals believe they are capable of innovation activities (Zhang et al., 2016). Therefore, when organizations implement relative promotion criteria, leaders with high perceived overqualification, under the influence of high self-efficacy and believing they can change their status and stand out through unconventional productive behaviors in fierce competition (without resorting to counterproductive means), are more likely to choose to increase investment in radical innovation, thereby promoting team radical innovation. However, if leaders have low perceived overqualification and lower self-efficacy for engaging in demanding activities like radical innovation, they will believe their capabilities insufficient to support continued success in radical innovation and will allocate resources to conventional or incremental innovation activities, resulting in unfavorable outcomes for team radical innovation. When organizations implement absolute promotion criteria, because direct competition cannot demonstrate capability differences between overqualified individuals and others (as absolute promotion criteria require designing certain pass rates), it is difficult to fully mobilize the risk-taking willingness of leaders with high perceived overqualification, leading them to avoid and disengage from high-effort radical innovation activities, resulting in no impact on team radical innovation. This situation is even more pronounced for leaders with low perceived overqualification. Based on the above analysis and the derivation of Hypothesis 2, we propose:

Hypothesis 3: Perceived overqualification and organizational promotion criteria jointly moderate the effect of innovation expectation discrepancy on team radical innovation through leader creative process engagement. Specifically, when leader perceived overqualification is high and the organization simultaneously implements relative promotion criteria, the U-shaped effect of innovation expectation discrepancy on team radical innovation via leader creative process engagement is strongest.

This study first employs an experimental design to examine the causal relationship between leader innovation expectation discrepancy and leader creative process engagement, as well as the effect of leader innovation expectation discrepancy on team radical innovation through leader creative process engagement.

2.1.1 Experimental Design and Participants

A single-factor (innovation expectation discrepancy: shortfall vs. no discrepancy vs. surplus) experimental design was used to test the hypotheses. We recruited 288 students from a 985 university in central China, randomly assigned them to 72 teams, and randomly allocated these 72 teams to the shortfall, no discrepancy, and surplus conditions. Due to 23 participants withdrawing from the experiment for personal reasons, we ultimately obtained a sample of 68 teams (61 four-

person teams and 7 three-person teams, totaling 265 student participants). The experimental process required teams to select a team leader through leaderless group discussion. Among the 68 selected team leaders, 64.7% were male and 35.3% were female; ages ranged from 18 to 31 years ($M = 20.74$, $SD = 2.34$). Most team leaders were undergraduate students (86.8%), 8.8% were master' s students, and 4.4% were doctoral students.

2.1.3 Experimental Manipulation and Variable Measurement

Innovation expectation discrepancy. This study manipulated leader innovation expectation discrepancy by providing different task evaluations. After completing Task 1, team leaders were asked to report their expected team creativity scores. Following a brief break, leaders were informed of their team' s actual creativity score as evaluated by experts. In the surplus condition, the expert evaluation score was 20% higher than the leader' s expected score (since the maximum score was 100, representing the highest expectation, scores exceeding 100 were calculated as 100); in the no discrepancy condition, the expert evaluation score matched the leader' s expected score; in the shortfall condition, the expert evaluation score was 20% lower than the leader' s expected score. After this manipulation, a single-item scale was used to check the effectiveness of the innovation expectation discrepancy manipulation. The item was "How do you think your team' s creative result turned out?" rated on a 7-point scale (1 = much worse than expected, 7 = much better than expected), with lower numbers indicating greater expectation shortfall and higher numbers indicating greater expectation surplus.

Leader creative process engagement. After completing Task 2, team leaders completed the leader creative process engagement scale. This scale was adapted from the mature scale developed by Zhang and Bartol (2010). Centered around the question "To what extent did you implement these behaviors when completing the headphone design task?" it formed an 11-item scale across three dimensions: problem identification, information search and encoding, and idea generation. Sample items include "I thought about problems from multiple angles" and "I carefully considered information from different sources to generate new ideas." A 7-point Likert scale was used, with higher numbers indicating greater engagement. The scale' s Cronbach' s α coefficient was 0.86.

Team radical innovation. This study used the Consensus Assessment Technique (CAT) to evaluate team radical innovation. Specifically, two raters (university teachers with professional training), blind to the experimental purpose, hypotheses, and conditions, evaluated team creativity using the 4-item scale developed by Li et al. (2008). Sample items include "This team engaged in creating completely new products" and "This team introduced completely new concepts in innovation." Ratings were on a 7-point scale (1 = strongly disagree, 7 = strongly agree), with higher numbers indicating greater agreement. Since the two raters showed high consistency ($ICC2 = 0.76$, $p < 0.001$), the average

score of the two raters was used as each team' s final score.

Control variables. This study controlled for team leader gender, age, education level, and team size as primary control variables, as leader gender, age, and education level affect team innovation (Jiang et al., 2015), while team size is related to leader behavior and significantly impacts team innovation (Li et al., 2021). Because participants were recruited online and could not be strictly randomly assigned to teams, we controlled for familiarity among team members. This variable was rated by all team members using a single item: “How familiar are you with members in your group?” rated on a 7-point scale (1 = not familiar at all, 7 = very familiar), with higher numbers indicating greater familiarity. Additionally, considering the impact of ratings on experimental results, we also controlled for team leaders' expectation scores for Task 1 and the difference between expert evaluation results and expectation scores.

2.2 Experimental Results

SPSS 25.0 was used for descriptive statistics and ANOVA, and Mplus 8 was used for regression analysis.

2.2.1 Manipulation Check

Table 1 shows descriptive statistics across conditions. To test the effectiveness of the innovation expectation discrepancy manipulation, a one-way ANOVA was conducted. Results showed significant differences in innovation expectation discrepancy across experimental groups ($F[2, 65] = 239.97, p < 0.001, \eta^2 = 0.88$). Pairwise comparisons revealed that the no discrepancy group scored higher ($M = 2.91, SD = 0.29$) than the shortfall group ($M = 1.87, SD = 0.34, t(43) = 10.86, p < 0.001, \text{Cohen' s } d = 3.25$); the surplus group scored higher ($M = 4.61, SD = 0.58$) than the no discrepancy group ($t(32.84) = 12.42, p < 0.001, \text{Cohen' s } d = 3.68$); and the surplus and shortfall groups also differed significantly ($t(35.68) = 19.40, p < 0.001, \text{Cohen' s } d = 5.72$). Thus, the manipulation of innovation expectation discrepancy was successful.

Table 1 Descriptive Statistics for Study 1 (n = 23) (n = 22) (n = 23)

Leader creative process engagement

Team radical innovation

(0.34) (0.29) (0.58) (0.48) (0.49) (0.78) (0.75) (0.53) (0.97)

Note: Standard deviations are in parentheses.

2.2.2 Hypothesis Testing

ANOVA results showed that innovation expectation discrepancy significantly affected leader creative process engagement ($F[2, 65] = 25.63, p < 0.001, \eta^2 = 0.44$). Pairwise comparisons (see Figure 2 [Figure 2: see original paper]) revealed that leaders in the no discrepancy group ($M = 4.72, SD = 0.49$) had significantly lower creative process engagement than those in the shortfall group

($M = 5.59$, $SD = 0.48$, $t(43) = 6.01$, $p < 0.001$, Cohen's $d = 1.79$) and the surplus group ($M = 5.98$, $SD = 0.78$, $t(37.44) = 6.48$, $p < 0.001$, Cohen's $d = 1.92$). Creative process engagement did not differ significantly between the surplus and shortfall groups ($t(36.38) = 2.03$, $p = 0.050$). Hypothesis 1 was supported.

Figure 2 Effect on Leader Creative Process Engagement

Regarding team radical innovation, innovation expectation discrepancy had a significant effect ($F[2, 65] = 13.01$, $p < 0.001$, $\eta^2 = 0.29$). Pairwise comparisons showed that the no discrepancy group ($M = 2.38$, $SD = 0.53$) had significantly lower team radical innovation than the shortfall group ($M = 3.32$, $SD = 0.75$, $t(43) = 4.83$, $p < 0.001$, Cohen's $d = 1.45$) and the surplus group ($M = 3.47$, $SD = 0.97$, $t(34.49) = 4.70$, $p < 0.001$, Cohen's $d = 1.39$). Team radical innovation did not differ significantly between the surplus and shortfall groups ($t(44) = 0.60$, $p = 0.555$).

Regression analysis showed that after adding leader creative process engagement, the curvilinear effect of innovation expectation discrepancy on team radical innovation decreased from $\beta = 0.83$, $p = 0.002$ to $\beta = 0.31$, $p = 0.379$, while the curvilinear effect of innovation expectation discrepancy on leader creative process engagement remained significant ($\beta = 1.06$, $p < 0.001$), and the effect of leader creative process engagement on team radical innovation was also significant ($\beta = 0.50$, $p = 0.010$). To test the significance of the mediation effect, we followed Hayes and Preacher's (2010) method, estimating the instantaneous indirect effects of innovation expectation discrepancy on team radical innovation through leader creative process engagement under shortfall, no discrepancy, and surplus conditions, and using bootstrapping (20,000 resamples) to estimate 95% confidence intervals. Results showed that when innovation expectation discrepancy was a shortfall, its indirect effect through leader creative process engagement was significantly negative (indirect effect = -1.22 , 95% CI = $[-3.50, -0.15]$); when there was no discrepancy, the indirect effect was non-significant (indirect effect = -0.18 , 95% CI = $[-1.45, 0.41]$); and when it was a surplus, the indirect effect was significantly positive (indirect effect = 0.87 , 95% CI = $[0.20, 2.01]$). That is, from shortfall to no discrepancy, innovation expectation discrepancy reduced team radical innovation by hindering leader creative process engagement, while from no discrepancy to surplus, innovation expectation discrepancy enhanced team radical innovation by promoting leader creative process engagement. Hypothesis 2 was supported.

2.2.3 Robustness Checks

We re-examined the mediation effect after removing all control variables, and the results did not differ substantively from those with control variables. We also re-examined the mediation effect after deleting two teams where the leader's expected score $\times 1.2$ exceeded 100 points, and the results did not differ substantively from those without deletion. The model's robustness was supported.

Although Study 1 supported Hypotheses 1 and 2, the experiment used a student sample, limiting external validity. Moreover, Study 1 only tested partial hypotheses without validating the full model. Therefore, we designed Study 2 to test the model using a survey method.

3.1.1 Sample and Procedure

This study collected data at the team level. The sample was drawn from new R&D institutions in a southern Chinese province, randomly selected. The 46 participating companies represented industries including transportation and urban construction, biomedicine, and information services. At the initial stage, we contacted senior leaders or HR departments of these companies. After obtaining consent, researchers conducted on-site surveys of R&D team leaders from May to July 2021 (Time 1). Researchers explained the study purpose to team leaders and emphasized confidentiality principles. One month later (Time 2), researchers conducted second on-site surveys for some companies and online surveys (via email or WeChat) for remaining companies due to pandemic restrictions. Participants at Time 2 included R&D team leaders, team members, and company leaders.

At Time 1, team leaders completed questionnaires on innovation expectation discrepancy, their own creative process engagement, perceived overqualification, and other variables. A total of 114 questionnaires were distributed, with 102 returned (89.47% response rate). At Time 2, company leaders rated team radical innovation levels, while team leaders and members jointly rated organizational promotion criteria. This phase yielded 87 company leader questionnaires (85.29% response rate), 91 team leader questionnaires (89.22% response rate), and 324 employee questionnaires (75.70% response rate). After excluding questionnaires with missing key variables or obvious response patterns, 76 valid matched questionnaires remained, with an average of 3.72 employees per team.

Demographic information collected at Time 1 showed that among the 76 valid team leaders, 85.5% were male and 14.5% were female; ages ranged from 26 to 56 years ($M = 39.13$, $SD = 7.18$); 3.9% had high school or technical secondary education, 9.2% had junior college degrees, 67.1% had bachelor's degrees, 17.1% had master's degrees, and 2.7% had doctoral degrees.

3.1.2 Variable Measurement

All scales used in this study were either well-established foreign scales with recognized reliability and validity or revised versions of such scales. To ensure consistency between Chinese and English versions, standard translation-back-translation procedures were adopted. Unless otherwise specified, all scales used 7-point Likert scales.

Innovation expectation discrepancy (T1). We adapted Lovelace et al.'s (2001) scale to measure innovation expectation discrepancy. The scale asked

“Compared to your expectations, how do you think your team’s innovation performance is?” and measured four aspects: innovativeness of team work outcomes, number of creative ideas generated by the team, technical content of team work outcomes, and team adaptability to environmental changes. The scale ranged from 1 (much worse than expected) to 4 (about the same as expected) to 7 (much better than expected), with lower numbers indicating greater expectation shortfall and higher numbers indicating greater expectation surplus. The scale’s Cronbach’s α coefficient was 0.95.

Leader creative process engagement (T1). Consistent with Study 1, we used Zhang and Bartol’s (2010) scale for leaders’ self-rating of creative process engagement. The scale’s Cronbach’s α coefficient was 0.94.

Perceived overqualification (T1). We used Maynard et al.’s (2006) overqualification scale to measure leaders’ perceived overqualification levels. The 9-item scale includes sample items such as “My job requires less education than I have,” “My work experience is not necessary to be successful at this job,” and “This job does not require the job skills that I have.” Ratings ranged from 1 (strongly disagree) to 7 (strongly agree), with higher numbers indicating greater agreement. The scale’s Cronbach’s α coefficient was 0.91.

Organizational promotion criteria (T2). As mentioned earlier, based on different comparison objects, organizational promotion criteria can be distinguished into absolute promotion criteria and relative promotion criteria. The former encourages employees to surpass themselves (meeting fixed standards), essentially encouraging comparison with their past selves; the latter encourages employees to compete with others, selecting the best and eliminating the worst. However, since absolute and relative promotion criteria represent two extremes of organizational promotion criteria, with proximity to one end indicating distance from the other, this study, following Wei et al. (2019), treated organizational promotion criteria as a continuous variable and measured it using one promotion type (absolute or relative). For scale selection, we used Liu et al.’s (2017) 3-item scale, with sample items such as “In this organization, promotion depends on relative performance ranking compared to other employees” and “In this organization, employees who perform better than others will be quickly promoted.” Ratings ranged from 1 (strongly disagree) to 7 (strongly agree), with higher scores indicating more relative promotion criteria and lower scores indicating more absolute promotion criteria. The scale’s Cronbach’s α coefficient was 0.90.

Team radical innovation (T2). Consistent with Study 1, we used Li et al.’s (2008) mature scale to measure team radical innovation levels. The scale’s Cronbach’s α coefficient was 0.91.

Control variables (T1). Following Study 1, we controlled for team leader gender, age, education level, and team size. Additionally, because different industries vary in innovation level and type, we classified the 76 teams according to National Bureau of Statistics industry classification standards and controlled

for industry effects using dummy variables.

3.2 Data Analysis and Results

We used SPSS 25.0 for Harman' s single-factor test, descriptive statistics, and correlation analysis, and Mplus 8 for common method latent factor model testing, confirmatory factor analysis, and hypothesis testing.

3.2.1 Confirmatory Factor Analysis

To examine the discriminant validity of the five latent variables—innovation expectation discrepancy, leader creative process engagement, perceived overqualification, organizational promotion criteria, and team radical innovation—we conducted cross-level confirmatory factor analysis. Given the large number of measurement items for leader creative process engagement and perceived overqualification, we performed item parceling (3 parcels each, with leader creative process engagement parcels based on dimensions and perceived overqualification parcels based on the balanced method). Results showed that the five-factor model achieved acceptable fit indices ($\chi^2/df = 2.00$, CFI = 0.93, TLI = 0.91, RMSEA = 0.05, SRMRwithin = 0.01, SRMRbetween = 0.12) and fit better than alternative four-factor, three-factor, and two-factor models, indicating good discriminant validity for further analysis.

3.2.2 Common Method Bias Test

This study used multi-source, multi-timepoint data collection to avoid common method bias. Before data analysis, Harman' s single-factor method was used to test for common method bias. Results showed that the first unrotated factor explained 28.28% of variance, below the 40% threshold. Additionally, a common method latent factor model test showed that after including the common latent factor, model fit indices were: $\chi^2/df = 1.80$, CFI = 0.95, TLI = 0.93, RMSEA = 0.05, SRMRwithin = 0.02, SRMRbetween = 0.10. Compared to the model without the common method factor, improvements in CFI, TLI, and RMSEA were all below 0.02, indicating no significant improvement in model fit. In summary, no significant common method bias was detected.

3.2.3 Descriptive Statistics and Correlation Analysis

Table 2 presents means, standard deviations, and correlations for major variables. Results show that leader innovation expectation discrepancy was not significantly correlated with team radical innovation ($r = 0.07$, $p = 0.547$), while leader creative process engagement was significantly positively correlated with team radical innovation ($r = 0.34$, $p = 0.002$), providing preliminary support for subsequent hypothesis testing.

Table 2 Descriptive Statistics and Correlations for Study 2

1. Gender a

3. Education level b
 4. Team size
 5. Industry 1
 6. Industry 2
 7. Industry 3
 8. Leader innovation expectation discrepancy
 9. Leader creative process engagement
 10. Perceived overqualification
 11. Organizational promotion criteria
 12. Team radical innovation
- 0.24* 0.23* 0.25*
-0.31** -0.57** -0.32** -0.30**
0.51** –
0.27* –
0.34**

Note: $N = 76$; and ** indicate $p < 0.05$ and $p < 0.01$, respectively; a Gender: 0 = male, 1 = female; b Education level: 1 = junior high school or below, 2 = high school or technical secondary school, 3 = junior college, 4 = bachelor's degree, 5 = master's degree, 6 = doctoral degree.*

3.2.4 Hypothesis Testing

Since organizational promotion criteria were rated by both leaders and employees, we conducted aggregation analysis before model testing. Results showed that organizational promotion criteria could be aggregated to the team level ($Rwg_{mean} = 0.84$, $Rwg_{median} = 0.88$). In model testing, innovation expectation discrepancy, leader creative process engagement, perceived overqualification, and organizational promotion criteria were mean-centered.

Hypothesis 1 proposed a U-shaped relationship between leader innovation expectation discrepancy and leader creative process engagement. As shown in Model 1 of Table 3, the squared term of innovation expectation discrepancy had a significant positive effect on leader creative process engagement ($\beta = 0.30$, $p < 0.001$), with the curve inflection point within the range of X values, supporting the U-shaped relationship. Hypothesis 1 was supported.

To test Hypothesis 2, we first examined the relationship between innovation expectation discrepancy and team radical innovation. Model 2 in Table 3 showed that the squared term of innovation expectation discrepancy had a significant positive effect on team radical innovation ($\beta = 0.21$, $p = 0.004$), supporting the U-shaped relationship. We then entered both innovation expectation discrepancy and leader creative process engagement into the regression equation, where the squared term of innovation expectation discrepancy became non-significant (see Model 3). To test mediation significance, we followed Hayes and Preacher's (2010) method, estimating instantaneous indirect effects of innovation expectation discrepancy on team radical innovation through leader creative process engagement at low ($-2SD$ and $-1SD$), medium ($0SD$), and high ($+1SD$ and

+2SD) levels, using bootstrapping to estimate 95% confidence intervals. Results (see Table 4) showed significant indirect effects at low (-2SD, indirect effect = -0.29, 95% CI = [-0.78, -0.05]), medium (0SD, indirect effect = 0.26, 95% CI = [0.07, 0.49]), and high (+1SD, indirect effect = 0.53, 95% CI = [0.15, 1.02]; +2SD, indirect effect = 0.80, 95% CI = [0.24, 1.59]) levels of innovation expectation discrepancy. However, at the low level (-1SD, indirect effect = -0.01, 95% CI = [-0.18, 0.12]), the indirect effect was non-significant. Hypothesis 2 was supported.

Table 3 Regression Analysis Results

Leader creative process engagement	
Leader innovation expectation discrepancy	
Leader innovation expectation discrepancy squared	
Leader creative process engagement	
Perceived overqualification	
Organizational promotion criteria	
Leader creative process engagement × Perceived overqualification	
Leader creative process engagement × Organizational promotion criteria	
Perceived overqualification × Organizational promotion criteria	
Leader creative process engagement × Perceived overqualification × Organizational promotion criteria	
Team radical innovation	
	-0.52* 0.03** 0.61*** 0.30***
Coefficient SE	
	0.20* 0.21**
	0.42*
	-0.50* 0.50*
Note:	p < 0.05, ** p < 0.01, *** p < 0.001.*

Model 3 results showed that the interaction between leader creative process engagement and perceived overqualification and organizational promotion criteria significantly affected team radical innovation ($\beta = 0.50$, $p = 0.018$). We plotted the moderating effect using values one standard deviation above and below the mean (see Figure 3 [Figure 3: see original paper]). When perceived overqualification was high and the organization implemented relative promotion criteria, the simple slope was significant ($\beta = 0.51$, $p = 0.022$). At this point, the high overqualification/relative criteria group differed significantly from the high overqualification/absolute criteria group (simple slope difference = 0.98, $p = 0.017$) and the low overqualification/relative criteria group (simple slope difference = 0.93, $p = 0.023$), but not from the low overqualification/absolute criteria group (simple slope difference = 0.13, $p = 0.773$). Thus, perceived overqualification and organizational promotion criteria jointly moderated the relationship between leader creative process engagement and team radical innovation.

Figure 3 Moderating Effect Plot

Low overqualification, absolute promotion
High overqualification, absolute promotion

Low overqualification, relative promotion
High overqualification, relative promotion
Low leader creative process engagement
High leader creative process engagement

Hypothesis 3 predicted that perceived overqualification and organizational promotion criteria jointly moderate the effect of innovation expectation discrepancy on team radical innovation through leader creative process engagement, with the curvilinear effect being strongest when leader perceived overqualification is high and the organization implements relative promotion criteria. As shown in Table 4, when innovation expectation discrepancy was low (-2SD), leader perceived overqualification was high, and the organization implemented relative promotion criteria, the indirect effect was significant (indirect effect = -0.63, 95% CI = [-1.54, -0.15]). At this point, the high overqualification/relative criteria group differed significantly from the high overqualification/absolute criteria group (indirect effect difference = -0.67, 95% CI = [-2.08, -0.08]) and the low overqualification/relative criteria group (indirect effect difference = -0.63, 95% CI = [-2.16, -0.11]), but not from the low overqualification/absolute criteria group (indirect effect difference = -0.09, 95% CI = [-1.05, 0.36]). The moderating effect of perceived overqualification and organizational promotion criteria was supported.

When innovation expectation discrepancy was at a medium level (0SD), leader perceived overqualification was high, and the organization implemented relative promotion criteria, the indirect effect was significant (indirect effect = 0.32, 95% CI = [0.03, 0.70]). However, the high overqualification/relative criteria group did not differ significantly from the low overqualification/absolute criteria group (indirect effect difference = -0.17, 95% CI = [-0.79, 0.53]), the high overqualification/absolute criteria group (indirect effect difference = 0.35, 95% CI = [-0.12, 0.97]), or the low overqualification/relative criteria group (indirect effect difference = 0.31, 95% CI = [-0.16, 1.04]).

When innovation expectation discrepancy was high (+1SD, +2SD), leader perceived overqualification was high, and the organization implemented relative promotion criteria, the indirect effects were significant (+1SD, indirect effect = 1.17, 95% CI = [0.57, 2.07]; +2SD, indirect effect = 1.77, 95% CI = [0.85, 3.24]). At these levels, the high overqualification/relative criteria group differed significantly from the high overqualification/absolute criteria group (+1SD, indirect effect difference = 1.24, 95% CI = [0.34, 2.55]; +2SD, indirect effect difference = 1.87, 95% CI = [0.55, 4.06]) and the low overqualification/relative criteria group (+1SD, indirect effect difference = 1.16, 95% CI = [0.31, 2.70]; +2SD, indirect effect difference = 1.76, 95% CI = [0.50, 4.25]), but not from the low overqualification/absolute criteria group (+1SD, indirect effect difference = 0.17, 95% CI = [-0.80, 1.41]; +2SD, indirect effect difference = 0.25, 95% CI = [-1.19, 2.19]). The joint moderating effect was supported. In summary, Hypothesis 3 received partial support.

Table 4 Instantaneous Indirect Effects of Leader Innovation Expectation Dis-

crepancy on Team Radical Innovation

[-0.78, -0.05]

[-0.18, 0.12]

Conditional indirect effects

[-1.54, -0.15]

[-1.05, 0.36]

[-2.08, -0.08]

[-2.16, -0.11]

[-0.35, 0.24]

[-0.22, 0.11]

[-0.49, 0.26]

[-0.45, 0.23]

[0.07, 0.49]

[0.03, 0.70]

[-0.79, 0.53]

[-0.12, 0.97]

[-0.16, 1.04]

[0.15, 1.02]

[0.57, 2.07]

[-0.80, 1.41]

[0.34, 2.55]

[0.31, 2.70]

[0.24, 1.59]

[0.85, 3.24]

[-1.19, 2.19]

[0.55, 4.06]

[0.50, 4.25]

Note: 20,000 bootstrap resamples. Difference 1 = high overqualification/relative criteria vs. low overqualification/absolute criteria; Difference 2 = high overqualification/relative criteria vs. high overqualification/absolute criteria; Difference 3 = high overqualification/relative criteria vs. low overqualification/relative criteria.

3.3 Robustness Checks

Research suggests that perceived overqualification may increase turnover intentions (Harari et al., 2017), which in turn affect work engagement (Li & Chen, 2022). To rule out this factor's influence, we included leader turnover intention as a control variable in the model for robustness testing. This variable was measured using Scott et al.'s (1999) 4-item scale. After removing one item with low factor loading, the variable's Cronbach's α coefficient was 0.92. Robustness test results did not differ substantively from those without turnover intention. Additionally, we re-examined all hypotheses after removing all control variables, and results did not differ substantively from those with control variables. The model's robustness was supported.

4.1 Research Conclusions

Based on self-regulation theory, this study explored the mechanism and boundary conditions through which leader innovation expectation discrepancy drives team radical innovation. Through an experimental study and a multi-timepoint, multi-source survey, we found that innovation expectation discrepancy has a U-shaped effect on leader creative process engagement (Hypothesis 1). Leader creative process engagement mediates the U-shaped relationship between innovation expectation discrepancy and team radical innovation (Hypothesis 2). Perceived overqualification and organizational promotion criteria jointly moderate the process through which innovation expectation discrepancy affects team radical innovation via leader creative process engagement (Hypothesis 3). Specifically, the combination of high perceived overqualification and relative promotion criteria strengthens the effect of innovation expectation discrepancy on team radical innovation through leader creative process engagement more than the combination of high perceived overqualification and absolute promotion criteria or low perceived overqualification and relative promotion criteria. However, there was no significant difference between the high overqualification/relative criteria combination and the low overqualification/absolute criteria combination in how innovation expectation discrepancy affects team radical innovation through leader creative process engagement. A possible explanation is that under absolute promotion criteria, when team innovation performance reaches a certain standard, team leaders may receive promotion or rewards, and when it falls below a certain level, they may face demotion or punishment. Leaders with low perceived overqualification, though aware of their insufficient qualifications, may still have to take risks and choose radical innovation to maintain their achieved status.

4.2 Theoretical Contributions

This study makes several distinct theoretical contributions. First, unlike existing literature on the antecedents of team radical innovation, this study introduces the concept of expectation discrepancy to the team level, exploring the formation mechanism and boundary conditions of team radical innovation from an innovation expectation discrepancy perspective. This advances expectation discrepancy research at the team level while providing a more comprehensive explanation for the origins of team radical innovation. Although scholars have extensively studied expectation discrepancy, their findings have primarily focused on the firm level (e.g., Eggers & Kaul, 2018; Xu et al., 2019). This study addresses this gap by examining how leader innovation expectation discrepancy affects team radical innovation. Furthermore, while breakthrough innovation research has gradually expanded from the firm level to the individual/team level, research on team radical innovation antecedents, mechanisms, and boundary conditions remains insufficient (Liu et al., 2021). Although scholars recognize that leaders influence team innovation (Anderson et al., 2014; Hughes et al., 2018), existing research has only examined the impact of leadership styles on

team radical innovation (e.g., Alexander & Van Knippenberg, 2014; Nijstad et al., 2014), neglecting the role of leader innovation expectation discrepancy. By identifying innovation expectation discrepancy as an important antecedent of team radical innovation and revealing its U-shaped effect, this study provides a new perspective for team radical innovation antecedent research.

Second, grounded in self-regulation theory, this study identifies leader creative process engagement as a key mechanism through which leader innovation expectation discrepancy influences team radical innovation, compensating for limitations in understanding leader innovation effects from team processes and states while expanding research on the consequences of creative process engagement. Previous research on the leader-team innovation relationship typically adopted team process (e.g., team knowledge sharing, team reflexivity), team state (e.g., team identification, team voice climate), or integrated (e.g., team work quality) perspectives (e.g., Jiang et al., 2015; Klacik et al., 2020). This study uses self-regulation theory to reveal the “black box” between leader innovation expectation discrepancy and team radical innovation from a creative process engagement perspective, offering new insights for leader-team innovation research. Additionally, while previous research has focused on how employee creative process engagement affects employee creativity (Zhang & Bartol, 2010) and in-role performance (Du et al., 2016), this study advances creative process engagement outcome research by demonstrating that leader creative process engagement positively affects team radical innovation.

Third, by combining leader individual differences and situational factors with the relationship between leader creative process engagement and team radical innovation, this study delineates more accurate boundary conditions for how innovation expectation discrepancy contributes to team radical innovation and contributes to research on perceived overqualification and organizational promotion criteria. First, although previous research suggests that the leader-team innovation relationship is moderated by various factors (Hughes et al., 2018), these studies have typically focused on single variables from leadership or contextual perspectives. This study examines the joint moderating effect of perceived overqualification and organizational promotion criteria on the leader creative process engagement-team radical innovation relationship within an integrated framework, enriching understanding of team innovation boundary conditions. Second, as a special person-environment misfit phenomenon, perceived overqualification has attracted widespread scholarly attention but remains controversial in its conclusions (Ma et al., 2020). Responding to Yang and Li's (2021) call to examine perceived overqualification effects from management systems, this study finds that under relative promotion criteria, leaders with high perceived overqualification are more likely to achieve team radical innovation through unconventional means, providing a new pathway for realizing the positive effects of perceived overqualification. Third, this study finds no substantive difference between the high overqualification/relative criteria combination and the low overqualification/absolute criteria combination in the leader creative process engagement-team radical innovation relationship, reminding us that organiza-

tional promotion criteria are not inherently good or bad and that individual characteristics of those subject to the criteria must be considered when examining their effects.

Finally, this study contributes to the development of self-regulation theory. According to Diefendorff and Lord (2008), self-regulation theory can be divided into structural (focusing on feedback loops), content (focusing on goal types and their effects on behavior and performance), and stage theories (focusing on different stages of self-regulation). These sub-theories have different foci and need integration into a unified framework for a more comprehensive understanding of goal-directed behavior. This study responds to their call by integrating various self-regulation theories into a unified model to examine their joint effects on leader behavior and team innovation performance, advancing self-regulation theory research. Furthermore, this study integrates control theory and social cognitive theory within the structural perspective of self-regulation. Specifically, control theory's core is the negative feedback loop triggered by discrepancy, where individuals act to reduce discrepancy (Carver, 2004), while social cognitive theory suggests that people may actively shape discrepancy by setting higher goals (Diefendorff & Lord, 2008). This study adopts a dynamic self-regulation perspective, proposing that when innovation expectation shortfall occurs, leaders reduce discrepancy by increasing creative process engagement, and when innovation expectation surplus occurs, leaders set higher goals and increase creative process engagement to achieve them, contributing to self-regulation theory development.

4.3 Management Implications

This study also yields important management implications. First, by revealing the U-shaped relationship between innovation expectation discrepancy and team radical innovation, this study reminds managers that the key to team-level innovation lies not only in team goals but also in the discrepancy between leaders' goals (expectations) and actual team innovation performance. As long as leaders perceive a discrepancy between team innovation performance and their goals (expectations), they will enhance team radical innovation by adjusting creative process engagement. Therefore, organizational managers should encourage team leaders to set innovation goals (expectations) and remind them to compare these goals with actual team performance.

Second, by uncovering the joint moderating effect of perceived overqualification and organizational promotion criteria, this study reminds managers that enhancing radical innovation requires simultaneous consideration of team leaders' individual characteristics and organizational rules. Specifically, managers should regularly communicate with team leaders to understand their perceived overqualification and maximize team radical innovation through organizational promotion criteria. Of course, when organizational promotion criteria are fixed, managers can also adjust leaders' perceived overqualification by providing growth opportunities, thereby achieving team radical innovation.

4.4 Limitations and Future Directions

Despite its valuable findings, this study has several limitations and areas for improvement. First, although Study 2 controlled for industry effects using dummy variables, it could not completely avoid confounding effects from industry diversity. Future research could test the robustness of conclusions using single-industry data. Second, this study argued that when team innovation performance exceeds leader innovation expectations, leaders may modify goal-performance discrepancy by setting higher goals, but did not empirically test this argument. Future research could incorporate dynamic goals into the model to increase theoretical rigor. Third, this study examined innovation expectation discrepancy's effect on team radical innovation through leader creative process engagement as a self-regulation strategy, but self-regulation theory also emphasizes the important role of affect in self-regulation (Koopman et al., 2020). Future research could further refine and supplement the theoretical model from an affective perspective. Finally, this study examined perceived overqualification and organizational promotion criteria as important individual and situational factors in leaders' self-regulation processes, but other factors also influence individual self-regulation processes (e.g., Parke et al., 2018; Xu, Liu, et al., 2021), which future research could explore.

References

- Alexander, L., & Van Knippenberg, D. (2014). Teams in pursuit of radical innovation: A goal orientation perspective. *Academy of Management Review*, *39*(4), 423-438.
- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, *40*(5), 1297-1333.
- 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*(1), 134-150.
- Carver, C. S. (2004). Self-regulation of action and affect. In K. D. Vohs & R. F. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp. 13-39). Guilford Press.
- Cheung, S. Y., Huang, E. G., Chang, S., & Wei, L. (2020). Does being mindful make people more creative at work? The role of creative process engagement and perceived leader humility. *Organizational Behavior and Human Decision Processes*, *159*, 39-48.
- DeOrtentiis, P. S., Van Iddekinge, C. H., & Wanberg, C. R. (2022). Different starting lines, different finish times: The role of social class in the job search process. *Journal of Applied Psychology*, *107*(3), 444-457.
- Diefendorff, J. M., & Lord, R. G. (2008). Goal-striving and self-regulation processes. In R. Kanfer, G. Chen, & R. D. Pritchard (Eds.), *Work motivation:*

Past, present, and future (pp. 151-196). New York: Routledge.

Du, Y., Zhang, L., & Chen, Y. (2016). From creative process engagement to performance: Bidirectional support. *Leadership & Organization Development Journal*, 37(7), 966-982.

Eggers, J., & Kaul, A. (2018). Motivation and ability? A behavioral perspective on the pursuit of radical invention in multi-technology incumbents. *Academy of Management Journal*, 61(1), 67-93.

Greve, H. R. (Ed.). (2003). *Organizational learning from performance feedback: A behavioral perspective on innovation and change*. Cambridge University Press.

Greve, H. R. (2008). A behavioral theory of firm growth: Sequential attention to size and performance goals. *Academy of Management Journal*, 51(3), 476-494.

Harari, M. B., Manapragada, A., & Viswesvaran, C. (2017). Who thinks they're a big fish in a small pond and why does it matter? A meta-analysis of perceived overqualification. *Journal of Vocational Behavior*, 102, 28-47.

Hayes, A. F., & Preacher, K. J. (2010). Quantifying and testing indirect effects in simple mediation models when the constituent paths are nonlinear. *Multivariate Behavioral Research*, 45(4), 627-660.

Hughes, D. J., Lee, A., Tian, A. W., Newman, A., & Legood, A. (2018). Leadership, creativity, and innovation: A critical review and practical recommendations. *The Leadership Quarterly*, 29(5), 549-569.

Jiang, W., Gu, Q., & Wang, G. G. (2015). To guide or to divide: The dual-side effects of transformational leadership on team innovation. *Journal of Business and Psychology*, 30(4), 677-691.

Johnson, R. E., Howe, M., & Chang, C.-H. (2013). The importance of velocity, or why speed may matter more than distance. *Organizational Psychology Review*, 3(1), 62-85.

Klaic, A., Burtscher, M. J., & Jonas, K. (2020). Fostering team innovation and learning by means of team-centric transformational leadership: The role of teamwork quality. *Journal of Occupational and Organizational Psychology*, 93(4), 942-966.

Koopman, J., Lin, S.-H., Lennard, A. C., Matta, F. K., & Johnson, R. E. (2020). My coworkers are treated more fairly than me! A self-regulatory perspective on justice social comparisons. *Academy of Management Journal*, 63(3), 857-886.

Kozlowski, S. W., & 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). Jossey-Bass.

- Li, C., Dong, Y., Wu, C. H., Brown, M. E., & Sun, L. Y. (2021). Appreciation that inspires: The impact of leader trait gratitude on team innovation. *Journal of Organizational Behavior*, 43(4), 693-708.
- Li, G. P., & Chen, Y. A. (2022). The influence of perceived overqualification on the innovation behavior of the new generation of employees in the post-1990s. *Science Research Management*, 43(1), 184-191.
- Li, Y., Liu, Y., Li, M., & Wu, H. (2008). Transformational offshore outsourcing: Empirical evidence from alliances in China. *Journal of Operations Management*, 26(2), 257-274.
- Liu, Z. Q., Deng, C. J., Liao, J. Q., & Long, L. R. (2013). Status-striving motivation, criteria for status promotion and employees' innovative behavior choice. *China Industrial Economics*, (10), 83-95.
- Liu, Z. Q., Deng, C. J., Wu, B., & Ge, L. (2017). Workplace Conflict, Status-conferral Criteria and Job Performance: Status Competition Perspective. Paper presented at the meeting of Academy of Management, Briarcliff Manor, NY.
- Liu, Z. Q., Zhou, R., Zhou, K., & Yan, R. X. (2021). Radical innovation in the field of OBHRM: Current status, integration and prospects. *Chinese Journal of Management*, 18(9), 1401-1411.
- Lovelace, K., Shapiro, D. L., & Weingart, L. R. (2001). Maximizing cross-functional new product teams' innovativeness and constraint adherence: A conflict communications perspective. *Academy of Management Journal*, 44(4), 779-793.
- Lu, X., Xie, B., & Guo, Y. (2018). The trickle-down of work engagement from leader to follower: The roles of optimism and self-efficacy. *Journal of Business Research*, 84, 186-195.
- Luksyte, A., Bauer, T. N., Debus, M. E., Erdogan, B., & Wu, C.-H. (2022). Perceived overqualification and collectivism orientation: Implications for work and nonwork outcomes. *Journal of Management*, 48(2), 319-349.
- Ma, C., Lin, X., & Wei, W. (2020). Linking perceived overqualification with task performance and proactivity? An examination from self-concept-based perspective. *Journal of Business Research*, 118, 199-209.
- Mann, T., De Ridder, D., & Fujita, K. (2013). Self-regulation of health behavior: Social psychological approaches to goal setting and goal striving. *Health Psychology*, 32(5), 487-498.
- Maynard, D. C., Joseph, T. A., & Maynard, A. M. (2006). Underemployment, job attitudes, and turnover intentions. *Journal of Organizational Behavior*, 27(4), 509-536.
- Mitchell, M. S., Greenbaum, R. L., Vogel, R. M., Mawritz, M. B., & Keating, D. J. (2019). Can you handle the pressure? The effect of performance pressure

on stress appraisals, self-regulation, and behavior. *Academy of Management Journal*, 62(2), 531-552.

Nijstad, B. A., Berger-Selman, F., & De Dreu, C. K. (2014). Innovation in top management teams: Minority dissent, transformational leadership, and radical innovations. *European Journal of Work and Organizational Psychology*, 23(2), 310-322.

Parke, M. R., Weinhardt, J. M., Brodsky, A., Tangirala, S., & DeVoe, S. E. (2018). When daily planning improves employee performance: The importance of planning type, engagement, and interruptions. *Journal of Applied Psychology*, 103(3), 300-312.

Parker, O. N., Krause, R., & Covin, J. G. (2017). Ready, set, slow: How aspiration-relative product quality impacts the rate of new product introduction. *Journal of Management*, 43(7), 2333-2356.

Phelan, S. E., & Lin, Z. (2001). Promotion systems and organizational performance: A contingency model. *Computational & Mathematical Organization Theory*, 7(3), 207-232.

Pirola-Merlo, A., & Mann, L. (2004). The relationship between individual creativity and team creativity: Aggregating across people and time. *Journal of Organizational Behavior*, 25(2), 235-257.

Puranik, H., Koopman, J., & Vough, H. C. (2021). Excuse me, do you have a minute? An exploration of the dark- and bright-side effects of daily work interruptions for employee well-being. *Journal of Applied Psychology*, 106(12), 1857-1877.

Scott, C. R., Connaughton, S. L., Diaz-Saenz, H. R., Maguire, K., Ramirez, R., Richardson, B., ...Morgan, D. (1999). The impacts of communication and multiple identifications on intent to leave: A multimethodological exploration. *Management Communication Quarterly*, 12(3), 400-435.

Tang, C., & Ye, L. (2015). Diversified knowledge, R&D team centrality and radical creativity. *Creativity and Innovation Management*, 24(1), 123-135.

Van Knippenberg, D. (2017). Team innovation. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 211-233.

Wei, L. H., Liu, Z. Q., Liao, S. D., Long, L. R., & Liao, J. Q. (2019). Collective psychological ownership, status conferral criteria and team creativity. *Acta Psychologica Sinica*, 51(6), 677-687.

Xie, W. X., Yang, C., & Zhou, F. (2015). Overqualification and employee's job crafting: The impacts of work alienation and psychological resilience. *Science of Science and Management of S. & T.*, 36(2), 149-160.

Xu, D., Zhou, K. Z., & Du, F. (2019). Deviant versus aspirational risk taking: The effects of performance feedback on bribery expenditure and R&D intensity. *Academy of Management Journal*, 62(4), 1226-1251.

Xu, L., Liu, Z., Ji, M., Dong, Y. T., & Wu, C.-H. (2021). Leader perfectionism-friend or foe of employee creativity? Locus of control as a key contingency. *Academy of Management Journal*. Advance online publication. <https://doi.org/10.5465/amj.2019.0165>

Xu, X.-M., Du, D., Johnson, R. E., & Lu, C.-Q. (2021). Justice change matters: Approach and avoidance mechanisms underlying the regulation of justice over time. *Journal of Applied Psychology*. Advance online publication. <https://doi.org/10.1037/apl0000973>

Yang, W. W., & Li, C. P. (2021). The relationship between perceived overqualification and individual performance and mediating mechanisms: A meta-analytic review and examination of emotional and cognitive processing systems and cultural contexts. *Acta Psychologica Sinica*, *53*(5), 527-554.

Zhan, X. J., Lu, N., Luo, W. H., & Zhu, Y. H. (2020). Research on the mechanism of coaching leadership on employees' taking charge from the perspective of self-regulation theory. *Management Review*, *32*(8), 193-203.

Zhang, M. J., Law, K. S., & Lin, B. (2016). You think you are big fish in a small pond? Perceived overqualification, goal orientations, and proactivity at work. *Journal of Organizational Behavior*, *37*(1), 61-84.

Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, *53*(1), 107-128.

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv – Machine translation. Verify with original.