

The Impact of Paradoxical Leader Behaviour on Team Innovation in Cross-Functional Teams

Tomoyuki Shimbo

Graduate School of Commerce,
Waseda University

Norihiko Takeuchi

Graduate School of Business and Finance,
Waseda University

A paper accepted for presentation at the *British Academy of Management (BAM) 2025 Conference* to be held in Kent, UK, over September 1-5, 2025

Please direct all correspondence to:

Mr. Tomoyuki Shimbo
Ph.D. Student
Graduate School of Commerce,
Waseda University
1-6-1 Nishi-waseda, Shinjuku, Tokyo, 169-8050, Japan
Tel: +81-3-5286-1482
E-mail: tomoshimbo0423@fuji.waseda.jp

The Impact of Paradoxical Leader Behaviour on Team Innovation in Cross-Functional Teams

ABSTRACT

Grounded in paradox theory and social learning theory, this study develops a model wherein paradoxical leadership behaviour (PLB) shapes both individual paradox mindset (I-PM) and team paradox mindset (T-PM), thereby encouraging constructive conflict and, ultimately, fostering team innovation. We also investigate moderating effects of leader–member exchange (LMX) and empowering leadership (EPL). The proposed model was tested using 303 employee data in cross-functional teams. The results indicate that PLB significantly enhances I-PM and T-PM, which then positively impact constructive conflict and boost team innovation. Moreover, EPL intensifies the indirect effects of I-PM, whereas LMX shows no moderating influence. By introducing T-PM as a distinct team-level construct, this study demonstrates how paradoxical leadership, complemented by EPL, can channel conflicts into innovative outcomes. Findings underscore the importance of both individual and team-level mindsets in maximising cross-functional collaboration.

(6208 words)

INTRODUCTION

Innovation is often viewed as the cornerstone of sustainable organisational competitiveness (Anderson et al., 2014; Kahn, 2018). Defined as “the intentional introduction and application ... of [new] ideas, processes, products or procedures ... designed to significantly benefit the individual, the group, organization or wider society” (West & Farr, 1990, p. 282), innovation demands that organisations and their members continually combine, adapt, and recombine diverse knowledge and skills. In contemporary business environments marked by complexity and rapid changes, teams face heightened pressures to innovate more frequently and more effectively than ever before (Ilgen et al., 2005; Van Knippenberg, 2017).

From the perspective of paradox theory, tensions and contradictions are viewed as natural and persistent features of organisational life (Lewis, 2000; Smith & Lewis, 2011). Rather than attempting to eliminate such tensions, paradox theory suggests that embracing them can spur creative solutions. One structural means of leveraging these tensions is to draw on teams with diversity of skills and knowledge. Prior research distinguishes between demographic diversity and knowledge diversity (Milliken & Martins, 1996). Empirical findings consistently indicate that the latter is especially potent for driving innovation (Horwitz & Horwitz, 2007; Joshi & Roh, 2009).

Cross-functional teams (CFTs) illustrate this approach, bringing together members with distinct departmental expertise on a time-bound project (Ghobadi & D’Ambra, 2013; Holland et al., 2000). Although CFTs can integrate varied functional inputs to achieve innovation (Edmondson & Nembhard, 2009; O’Connor & DeMartino, 2006), many organisations struggle with unproductive conflict (Lin et al., 2010; Terwiesch et al., 2002). This is partly because CFT members hold competing departmental goals and social identities (Chang et al., 2024; O’Neill & McLarnon, 2018), which can hinder open collaboration.

Addressing these challenges requires leadership that harnesses, rather than suppresses, the inherent tensions in CFTs. Drawing on paradox theory and social learning theory (Bandura, 1977), we focus on paradoxical leadership behaviour (PLB)—“leader behaviors that are seemingly competing, yet interrelated, to meet competing workplace demands simultaneously and over time” (Zhang et al., 2015, p. 539). PLB’s ‘both/and’ approach (Zhang et al., 2022) appears crucial for helping CFT members navigate contradictory pressures without discarding valuable perspectives. Although research on PLB has primarily examined individual- or organisational-level outcomes (Yang et al., 2024), far less is understood about its team-level implications, especially in CFT contexts where paradoxes are amplified by interdepartmental diversity.

An additional consideration is how PLB complements other leadership behaviours to strengthen or shape its impact. Studies suggest that leadership styles can interact or overlap in ways that enhance their combined effects, often referred to as ‘leadership complementarity’. For instance, DeRue, Nahrgang, Wellman, and Humphrey (2011) note that “the interaction between diverse leadership behaviours can produce synergistic outcomes,” (p. 38) highlighting how multiple approaches may reinforce one another. Similarly, Zhang, Waldman, Liao, and Li (2022) argue that “leaders who exhibit multiple, interrelated behaviours can address contradictory demands more comprehensively” (p. 247), underscoring the potential for synergy when paradoxical leadership is coupled with other forms of leadership. In a cross-functional context, this implies that leaders who exhibit high PLB may be even more effective if they concurrently adopt empowering behaviours or

cultivate high-quality relationships with followers—yet the specific interplay between PLB and these complementary leadership forms remains underexplored.

To address these gaps, we propose a theoretical model showing how PLB fosters innovation in CFTs through the cultivation of paradox mindsets at both the individual and team levels. Specifically, we draw on Miron-Spektor et al. (2018) to conceptualise individual paradox mindset (I-PM)—“the extent to which one is accepting of and energized by tensions” (p. 26)—and extend it to the team paradox mindset (T-PM)—“the extent to which members feel that their team accepts and is energised by tension.” We argue that PLB, via social learning processes, instills acceptance of paradox in team members and supports the emergence of a broader team ethos that frames conflict as constructive rather than debilitating (Dyer & Song, 1998). Constructive conflict is hypothesised to facilitate the creative integration of knowledge, thus reinforcing CFTs’ innovative capacity.

Furthermore, we consider two potential moderating variables based on leadership theories and the notion of complementarity. First, leader–member exchange (LMX) captures the reciprocal trust and respect between a leader and team members (Graen & Uhl-Bien, 1995). We hypothesise that high-quality LMX amplifies the impact of PLB on I-PM, given that members in strong relationships are more likely to internalise leaders’ paradoxical perspectives. Second, empowering leadership (EPL) involves autonomy support and development support, potentially reinforcing the relationship between I-PM and constructive conflict by fostering an environment of autonomy (Amundsen & Martinsen, 2014). We propose that these theoretically grounded mechanisms converge to shape the extent to which paradoxical leadership can guide CFTs toward innovative outcomes.

In summary, this study makes three key contributions. First, by examining PLB in the context of CFTs, we highlight how paradoxical leader behaviours can turn interdepartmental tensions into drivers of innovation at the team level. Second, we develop and test the concept of team paradox mindset, expanding paradox theory by illustrating that acceptance of tensions extends beyond individual cognition to become a collective orientation. Third, we add to the conversation on leadership complementarity by showing how LMX and EPL jointly shape the influence of PLB, thereby offering a more nuanced understanding of when and how paradoxical leadership most effectively fosters team innovation. Figure 1 provides an overview of our conceptual framework.

Insert Figure 1 about here

LITERATURE REVIEW AND HYPOTHESES

Innovation as ‘New Combinations’ and the Inherent Paradox in CFTs

From Schumpeter’s (1939) classic perspective, innovation is fuelled by ‘new combinations’ of existing elements. The creative act often hinges upon combining diverse forms of expertise, insights, or technologies in ways that have not previously been attempted. However, producing these new combinations can be fraught with contradictions and tensions (Andriopoulos & Lewis, 2009). Indeed, innovation requires organisations (and teams) to grapple with competing demands such as exploration vs. exploitation, short-term efficiency vs. long-term adaptability, and knowledge generation vs. knowledge integration (Gebert et al., 2010; Zhang et al., 2022).

CFTs were historically introduced to leverage diverse knowledge bases. Such teams bring together representatives from multiple functional areas—e.g. research and

development, manufacturing, marketing—so that novel products or processes can benefit from holistic insights (Hong, 2008; Love & Roper, 2009). In principle, this diversity cultivates richer information processing, fosters cross-pollination of ideas, and broadens strategic decision-making. In practice, however, CFT members also carry distinct departmental loyalties, roles, and objectives (Holland et al., 2000; Webber, 2002). As departmental priorities collide within the CFT, members confront paradoxical demands that exist simultaneously (O'Neill & McLarnon, 2018).

In line with Smith and Lewis (2011), a paradox is defined as “contradictory yet interrelated elements that exist simultaneously and persists over time” (p. 382). Conflict within the CFT thus can be seen as a manifestation of this paradoxical condition; that is, members are asked to satisfy the needs of their own functional area while also collaborating across areas to produce an overarching innovative outcome. This tension necessitates leadership strategies that harness paradoxical thinking—where leaders help team members avoid binary ‘either/or’ traps and instead adopt a ‘both/and’ mindset (Lewis, 2000).

Paradoxical Leadership Behaviour (PLB) and its Relevance to CFTs

PLB is “leader behaviors that are seemingly competing, yet interrelated, to meet competing workplace demands simultaneously and over time” (Zhang et al., 2015, p. 539). Rather than rigidly stressing one side of a tension (e.g. autonomy over control, performance over learning), paradoxical leaders toggle between or blend these demands, depending on situational cues (Zhang et al., 2022). Such versatility appears especially significant in CFT settings, where leaders must encourage collaboration between specialists whilst respecting their distinct identities, and must balance the hierarchical demands of the formal organisation with the more flexible structures of the project team.

Zhang et al. (2015) identified five behavioural dimensions of PLB, including “combining self-centeredness with other-centeredness” (p. 541). One can see how an emphasis on both personal authority and collective empowerment could help a CFT leader navigate departmental tensions. For instance, when conflict arises among functional members, a paradoxical leader might assert personal authority to provide decisive direction, yet also acknowledge and integrate the team’s suggestions to maintain psychological safety and buy-in. This ability to enact ‘both/and’ approaches is a hallmark of paradoxical leadership (Zhang et al., 2022; Yang et al., 2024).

Although prior studies have examined PLB, limited work has focused on how PLB translates specifically into team-level outcomes. Yang et al. (2024) investigated individual creative deviance as a function of PLB, but we still know relatively little about PLB’s effect on group-level phenomena, especially in CFTs. Moreover, while some research indicates that paradoxical leaders can foster team ambidexterity (a capacity to explore and exploit) and thereby boost innovation, the precise processes that enable this transformation have not been elaborated (Zhang et al., 2022). Therefore, we propose that PLB fosters team innovation in CFTs via a sequential, cascading process that begins with nurturing paradox mindsets at the individual and team levels, which in turn fuel constructive conflict and ultimately drive innovation outcomes.

Individual Paradox Mindset (I-PM) and Team Paradox Mindset (T-PM)

A paradox mindset, in Miron-Spektor et al.’s (2018) words, is “the extent to which one is accepting of and energized by tensions” (p. 26). At the individual level (I-PM), paradox mindset describes a person’s cognitive orientation to remain open to contradictory

demands. In workplace scenarios, employees with I-PM handle conflicts by attempting to integrate seemingly incompatible elements instead of discarding one for the other (Lewis, 2000).

While prior research has largely conceptualised paradox mindset as an individual attribute, we contend that tensions within CFTs also play out at the group level. Thus, we propose T-PM—“the extent to which members feel that their team accepts and is energised by tension”—as a collective construct distinct from, yet complementary to, I-PM. T-PM is not merely the sum of individual mindsets, but rather the team-level ethos wherein members collectively perceive that the group embraces paradoxes and conflicts in a constructive fashion.

Below, we articulate how PLB can shape both I-PM and T-PM, and how these mindsets sequentially link to constructive conflict and, ultimately, team innovation.

PLB and I-PM

Mindsets are amenable to external influences, such as role modelling by leaders (Bandura, 1977, 1986; Murphy & Dweck, 2010). According to social learning theory (Bandura, 1977), individuals pay close attention to leaders' actions and internalise the values or attitudes that guide those actions. A paradoxical leader, who constantly balances competing demands, can provide a rich model for employees to emulate. Over time, witnessing PLB may inspire members to adopt a similar acceptance of tension, thereby fostering I-PM.

Empirical support for this relationship is offered by Yang et al. (2024), who found that PLB indirectly fosters creative deviance through employees' I-PM. By extension, we posit the following:

Hypothesis 1: PLB is positively related to I-PM.

PLB and T-PM

To develop T-PM, individual members must perceive an environment that collectively embraces paradoxes. While I-PM may grow through personal observation of the leader, T-PM emerges when the leader actively structures a team climate that endorses a ‘both/and’ approach. Zhang et al. (2015) suggest that paradoxical leaders often tailor the environment to accommodate coexisting tensions. In a CFT, this could mean establishing psychological safety, encouraging open dialogues where different departmental perspectives are welcomed, and demonstrating consistent respect for others' views (even whilst presenting one's own).

As PLB involves setting norms for how to handle conflict and contradictory ideas, members begin to see that the majority in the team responds to paradoxes not with denial or avoidance, but with acceptance. Through reciprocal interactions, CFT members collectively adopt T-PM. Thus, we develop the following:

Hypothesis 2: PLB is positively related to T-PM.

Constructive Conflict in CFTs

CFTs often wrestle with conflict deriving from clashing departmental objectives or professional standpoints (Chang et al., 2024; O'Neill & McLarnon, 2018). Conflict need not be destructive; rather, it can be productive if framed constructively. Constructive conflict is “defined as personnel working harder, feeling energized by the conflict exchange and seeing

positive change” (Dyer & Song, 1998, p. 509). In the literature on conflict-handling strategies, ‘integrating’ (high concern for self and others) and ‘accommodating’ (low concern for self, high concern for others) have been found to encourage constructive conflict (Rahim, 1983; Song et al., 2006).

We argue that PLB can directly foster constructive conflict in two ways. First, leaders who demonstrate both self-centredness and other-centredness epitomise an ‘integrating’ style. A leader with PLB is firm enough to offer guidance yet empathic enough to validate others’ viewpoints, thus steering conflict into channels where parties feel motivated rather than threatened. Second, paradoxical leaders may reduce the fear of negative repercussions for speaking up, making it easier for departmental representatives to state conflicting ideas and combine them fruitfully. Hence:

Hypothesis 3: PLB is positively related to constructive conflict.

The Influence of I-PM and T-PM on Constructive Conflict

Beyond the leader’s direct role, team members’ mindsets also determine how conflict unfolds. When individuals exhibit I-PM, they are predisposed to integrate contradictory elements. Particularly in CFTs, conflicts often revolve around departmental allegiances. An individual with I-PM invests in ‘both/and’ solutions, searching for new ways to merge departmental priorities instead of sacrificing one for the other. In Rahim’s (1983) conflict-handling typology, this represents an ‘integrating’ approach. As prior research indicates, integrative approaches yield constructive conflict (Song et al., 2006).

Additionally, I-PM is associated with the inclination to seek synergies among differing functional knowledge bases (Lewis, 2000). An R&D specialist and a marketing specialist may conflict, for instance, on how best to allocate limited project resources, but an I-PM individual will attempt to reconcile these viewpoints in a manner that propels the team towards innovative outcomes. Thus:

Hypothesis 4: I-PM is positively related to constructive conflict.

Similarly, T-PM generates a team norm of embracing paradoxes in a constructive manner. Norms refer to “acceptable standards of behavior within a group that are shared by the group’s members” (Robbins, 2022, p. 168). When the majority of team members believe that tensions are energising rather than debilitating, conflict ceases to threaten individual identities. Instead, members autonomously align themselves with a group ethos that sees tension as a catalyst for progress. This fosters open communication, mutual respect, and the consistent pursuit of integrative solutions—all hallmarks of constructive conflict. Therefore:

Hypothesis 5: T-PM is positively related to constructive conflict.

Constructive Conflict and Team Innovation

Team innovation refers to the introduction or application of a new idea, process, product or procedure within a team that are designed to be useful (West & Farr, 2000). This includes novel products, services, or processes that could enhance organisational performance (Lahiri, 2010; Schippers et al., 2015). Innovation in CFTs specifically requires integrating knowledge from diverse departments, bridging technical feasibility, operational viability, and market desirability.

Yet, departmental silos often obstruct information sharing. Members may retain loyalty to their home departments (Holland et al., 2000; Webber, 2002). When conflict

escalates destructively, knowledge exchange is hindered. On the other hand, if conflict is constructive, it compels members to combine insights, bridging departmental gaps without fostering antagonism (De Dreu & West, 2001; Song et al., 2006). Such constructive debate can ultimately lead to ‘new combinations’ (Schumpeter, 1939) that spark innovation. Hence, we hypothesise:

Hypothesis 6: Constructive conflict is positively related to team innovation.

Sequential Mediation Effects

Combining Hypotheses 1–6, we propose two sequential or serial mediation pathways linking PLB to team innovation: (1) PLB → I-PM → Constructive Conflict → Team Innovation and (2) PLB → T-PM → Constructive Conflict → Team Innovation.

When leaders exhibit PLB, individual followers adopt I-PM, and in parallel, the team as a whole develops T-PM. Both mindsets stimulate constructive conflict, which then fuels team innovation. Hence, we formally state:

Hypothesis 7a: PLB has a positive indirect effect on team innovation through continuously mediating I-PM and constructive conflict.

Hypothesis 7b: PLB has a positive indirect effect on team innovation through continuously mediating T-PM and constructive conflict.

Moderating Role of Leader–Member Exchange (LMX)

LMX represents the quality of the reciprocal relationship between a leader and each member, often characterised by trust, loyalty, and respect (Graen & Uhl-Bien, 1995). Drawing again on social learning theory, members who perceive high-quality LMX are more inclined to emulate and internalise a leader’s values or attitudes (Bandura, 1977, 1986). They also have greater confidence that the leader’s paradoxical behaviours are credible and worthy of replication (Neubert et al., 2013).

We thus hypothesise that LMX moderates the link between PLB and I-PM. A member with high LMX is more likely to identify strongly with the leader, accelerating the internalisation of paradoxical thinking. Conversely, where LMX is low, members may be more sceptical of the leader’s paradoxical approach, reducing its impact.

Hypothesis 8a: LMX moderates the positive relationship between PLB and I-PM such that the relationship is stronger in high-LMX situations.

If LMX amplifies the influence of PLB on I-PM, then the serial effect on constructive conflict and, eventually, on innovation should likewise be strengthened. Thus we can make the following:

Hypothesis 8b: LMX positively moderates the indirect effect of PLB on team innovation via I-PM and constructive conflict.

Moderating Role of Empowering Leadership (EPL)

EPL is “the process of influencing subordinates through power sharing, motivation support, and development support with intent to promote their experience of self-reliance, motivation, and capability to work autonomously within the boundaries of overall organizational goals and strategies” (Amundsen & Martinsen, 2014, p. 489). This concept comprises two main dimensions: (1) autonomy support, where leaders delegate authority,

provide efficacy support, and encourage proactive behaviour; and (2) development support, involving coaching, mentoring, and role modelling (Amundsen & Martinsen, 2014).

Drawing on Lewin's (1950) formula ($B = f(P, E)$), we consider how the environment (E) shapes behaviour (B). A CFT member high in I-PM (person: P) may be inclined to transform conflict into integrative problem-solving. However, the presence or absence of EPL (environment: E) can facilitate or impede these behaviour patterns (B). Specifically, if the leader grants autonomy, offers motivational support, and encourages collaboration, members feel empowered to share their views and navigate conflict constructively. If the leader is disempowering, members may revert to departmental silos out of fear or frustration, undermining constructive conflict. Hence, we develop the following:

Hypothesis 9a: EPL moderates the positive relationship between I-PM and constructive conflict such that the relationship is stronger in high-ELP situations.

Further, if EPL strengthens the I-PM → constructive conflict dynamic, it also moderates the indirect path from I-PM to team innovation through constructive conflict. Thus:

Hypothesis 9b: EPL positively moderates the indirect effect of I-PM on team innovation via constructive conflict.

Taken together, these hypothesised relationships depict a comprehensive framework in which PLB ignites paradox mindsets and cultivates constructive conflict that drives team innovation. LMX and EPL act as boundary conditions, determining how strongly these processes unfold.

METHOD

Sample and Procedures

To test our hypotheses, we conducted an online survey targeting full-time employees in Japanese private manufacturing companies. We opted to focus on larger organisations in the manufacturing sector (firms with over 1,000 employees) to ensure that cross-functional collaboration was sufficiently developed and that project teams spanned multiple functional areas. These employees had to meet the following sampling criteria: (1) be between 20 and 59 years of age and employed on a full-time basis, (2) hold a role from general staff level up to (but not including) department manager level, (3) work in (or have recently worked in) a CFT within the past year, and (4) be part of a CFT composed of at least four members, drawn from at least two distinct departments within their organisation.

Ultimately, we could recruit the samples that satisfy the above criteria through an online survey platform. The survey asked respondents to consider a specific CFT they were either currently involved in or had participated in within the last year. This approach helped anchor responses in a concrete team scenario. Eventually, 303 valid responses were collected. Of the final sample, 230 respondents were male (75.9%) and 73 were female (24.1%), with an average age of 38.8 years ($SD = 10.6$). This distribution is broadly reflective of middle-level professionals in large Japanese manufacturing contexts.

Measures

We employed well-established scales with demonstrated validity and reliability, using translation-back-translation procedures (Schaffer & Riordan, 2003) when necessary. Unless otherwise noted, all scales used a seven-point Likert format (1 = "not at all" to 7 =

“exactly”).

Paradoxical Leadership Behaviour (PLB)

We used the 22-item scale developed by Zhang et al. (2015). A sample item is: “My leader shows a desire but allows others to share the leadership role” (p. 548). Because PLB has five sub-dimensions, we conducted a second-order confirmatory factor analysis (CFA) to confirm a higher-order factor structure. Goodness-of-fit indices were acceptable ($\chi^2(204) = 433.81$; IFI = .94; TLI = .93; CFI = .94; RMSEA = .06). Cronbach’s α for the overall scale was .95, and the sub-dimensions ranged from .77 to .87.

Individual Paradox Mindset (I-PM)

We drew on a nine-item scale from Miron-Spektor et al. (2018) to measure I-PM. A sample item is: “When I consider conflicting perspectives, I gain a better understanding of an issue” (p. 44). In the final analysis, two items (one each from the I-PM and T-PM measures) were dropped due to low factor loadings, leaving eight items per scale.

Team Paradox Mindset (T-PM)

We adapted the same Miron-Spektor et al. (2018) scale to frame items at the team level. For instance: “I think my team can understand things better with several incompatible perspectives”. We define T-PM as “the extent to which members feel that their team accepts and is energised by tension”. CFA confirmed I-PM and T-PM as distinct constructs. Cronbach’s α was .81 for I-PM and .71 for T-PM.

Constructive Conflict

We employed the four-item scale from Song & Thieme (2006). An example item is: “We see constructive changes occur on projects because of conflict” (p. 354). Cronbach’s α was .76.

Team Innovation

We used the four-item scale from De Dreu & West (2001), exemplified by: “Team members often implement new ideas to improve the quality of our products and services” (p. 1197). One item with a low loading was dropped, leaving three items (Cronbach’s $\alpha = .71$).

Leader–Member Exchange (LMX)

We adopted the Japanese version of the seven-item LMX-7 scale (Graen & Uhl-Bien, 1995), as used in Jung & Takeuchi (2016). An example item is: “Do you know where you stand with your leader . . . do you usually know how satisfied your leader is with what you do? (Does your member usually know)” (p. 237). Cronbach’s α was .89.

Empowering Leadership (EPL)

An 18-item scale from Amundsen & Martinsen (2014) was utilised, containing two sub-dimensions (autonomy support and development support). A sample item is: “My leader gives me power” (p. 493). Second-order CFA confirmed a good fit for these two sub-dimensions ($\chi^2(134) = 298.79$; IFI = .95; TLI = .94; CFI = .95; RMSEA = .06). Cronbach’s α was .95 overall, with sub-dimensions from .88 to .93.

Control variables

We controlled for members’ demographic factors (gender, age, education level,

position rank, tenure, and departmental affiliation), team size, organisational size, and leader's demographic attributes (gender and age), when running regression analyses to reduce confounding influences. Specifically, we coded gender as 0 (male) or 1 (female) for both members and leaders. Age was categorised in four brackets (1 = "20–29", 2 = "30–39", 3 = "40–49", 4 = "50+") for members and leaders. Education was grouped in three categories (1 = "high school or less", 2 = "university or less", 3 = "postgraduate or higher"). Team size was broken down (1 = "5 or less", 2 = "10 or less", 3 = "15 or less", 4 = "20 or less", 5 = "21 or more"), and organisational size was (1 = "1,000–4,999", 2 = "5,000–8,999", 3 = "9,000+ employees").

Confirmatory Factor Analyses (CFAs) and Analytic Strategy

First, we conducted a series of CFAs to check discriminant validity across the seven focal constructs: PLB, I-PM, T-PM, constructive conflict, team innovation, LMX, and EPL. Given the large number of items, item parceling was employed for PLB and EPL, wherein items were averaged by sub-dimension (Hui et al., 2004; Little et al., 2002; Tang et al., 2020). This approach streamlined the number of observed indicators, making the model more tractable.

As shown in Table 1, The hypothesised seven-factor model showed adequate fit ($\chi^2(539) = 1114.89$; CFI = .91; TLI = .90; IFI = .91; RMSEA = .06), and all factor loadings were significant. We compared this model to six alternative models, each combining or collapsing some of the constructs, but the hypothesised seven-factor model yielded the best fit (e.g., $\Delta\chi^2$ comparisons with $p < .001$). These findings indicate that our measures captured seven distinct but related constructs.

After confirming the measurement model, we tested the hypotheses through hierarchical multiple regression and mediation/moderation analyses. We applied bias-corrected bootstrapping with 5,000 replications to estimate confidence intervals for indirect and conditional indirect effects (Preacher & Hayes, 2008). We deemed $p < .05$ to be significant for two-tailed tests.

Insert Tables 1 & 2 about here

RESULTS

Table 2 presents the means, standard deviations, and correlation coefficients for the main variables. PLB was positively correlated with I-PM ($r = .39$, $p < .001$), T-PM ($r = .43$, $p < .001$), and constructive conflict ($r = .54$, $p < .001$). Likewise, constructive conflict correlated positively with I-PM ($r = .58$, $p < .001$) and T-PM ($r = .65$, $p < .001$). Team innovation showed a substantial positive correlation with constructive conflict ($r = .60$, $p < .001$).

Hypothesis Tests for Main Effects (H1–H6).

Table 3 displays a series of hierarchical regression analyses for testing our hypotheses. First, for Hypothesis 1, which posited that paradoxical leadership behaviour (PLB) would be positively related to individual paradox mindset (I-PM), the analysis indicated a significant positive coefficient ($\beta = .36$, $p < .001$). Thus, H1 was supported. Hypothesis 2, predicting that PLB would positively affect team paradox mindset (T-PM), also received support ($\beta = .50$, $p < .001$).

Next, Hypothesis 3 proposed that PLB would exhibit a direct positive relationship

with constructive conflict. The results showed a significant effect ($\beta = .53, p < .001$), confirming H3. Moving on to Hypothesis 4, which examined the influence of I-PM on constructive conflict, the findings revealed a positive coefficient ($\beta = .22, p < .001$), thereby supporting H4. Similarly, Hypothesis 5 posited that T-PM would be positively associated with constructive conflict, and the data showed a significant positive link ($\beta = .36, p < .001$). Finally, Hypothesis 6 predicted that constructive conflict would enhance team innovation, and this was confirmed ($\beta = .27, p < .001$). Taken together, all six main-effect hypotheses (H1–H6) were supported by the regression analyses.

Serial Mediation (H7a and H7b).

A 95% bias-corrected bootstrapping procedure was employed to assess the sequential mediation hypothesised in H7a and H7b, where paradoxical leadership behaviour (PLB) was proposed to influence team innovation via individual paradox mindset (I-PM) or team paradox mindset (T-PM), followed by constructive conflict. For Hypothesis 7a, which tested the path $PLB \rightarrow I-PM \rightarrow \text{Constructive Conflict} \rightarrow \text{Team Innovation}$, the indirect effect was $\beta = .06$ (95% CI [.03, .10]), indicating statistical significance since the confidence interval did not include zero.

Similarly, for Hypothesis 7b, examining the path $PLB \rightarrow T-PM \rightarrow \text{Constructive Conflict} \rightarrow \text{Team Innovation}$, the indirect effect was $\beta = .07$ (95% CI [.03, .11]), also statistically significant. As both indirect paths were confirmed by non-zero confidence intervals, H7a and H7b were supported.

Insert Table 3 about here

Moderation Analyses for LMX (H8a and H8b)

To test Hypothesis 8a, an interaction term ($PLB \times LMX$) was included in the regression model predicting individual paradox mindset (I-PM), as shown in Model 6 of Table 3. The result was not statistically significant ($\beta = .09, p < .10$). For Hypothesis 8b, a moderated mediation analysis was conducted to assess whether LMX conditioned the indirect effect in the $PLB \rightarrow (I-PM \rightarrow \text{Constructive Conflict} \rightarrow \text{Team Innovation})$ chain; the index of moderated mediation was $\beta = .02$ (95% CI [−.020, .072]), indicating a nonsignificant effect. Consequently, both H8a and H8b were rejected.

Moderation Analyses for EPL (H9a and H9b)

Hypothesis 9a posited that empowering leadership (EPL) would moderate the positive relationship between I-PM and constructive conflict. As shown in Model 8 of Table 3, the interaction term ($I-PM \times EPL$) was significant ($\beta = .11, p < .05$), which is consistent with H9a. Figure 2 illustrates the interaction effect by plotting the relationship between I-PM and constructive conflict at high versus low levels of EPL. As shown in Figure 2, the slope for high EPL is steeper, indicating that when EPL is more pronounced, higher I-PM corresponds to a substantially greater increase in constructive conflict compared to conditions of low EPL. This pattern confirms that EPL strengthens the positive linkage between I-PM and constructive conflict, thereby supporting the moderating effect proposed in Hypothesis 9a.

For Hypothesis 9b, a moderated mediation test was conducted on the path from I-PM to team innovation via constructive conflict. The conditional indirect effect was larger under high EPL ($\beta = .45$, 95% CI [.323, .557]) compared to low EPL ($\beta = .29$, 95% CI [.173, .409]), and this difference was significant ($\beta = .41$, 95% CI [.013, .082]), thereby supporting H9b.

Additionally, although not originally hypothesised, EPL showed a direct positive association with constructive conflict ($\beta = .47, p < .001$).

DISCUSSION

In this study, we explored how paradoxical leadership behaviour promotes innovation in cross-functional teams through a sequential mechanism involving paradox mindset (both I-PM and T-PM) and constructive conflict. Our findings confirm that PLB contributes to CFT innovation via two parallel mediation chains. First, leaders' paradoxical behaviours spark individual acceptance of competing demands (I-PM), which then channels conflict towards constructive outcomes and innovation. Second, these same behaviours cultivate a collective team ethos of acceptance towards tension (T-PM), leading similarly to constructive conflict and innovation. Moreover, empowering leadership magnifies the impact of I-PM on constructive conflict and, subsequently, on innovation. By contrast, the hypothesised moderating effect of LMX does not emerge from our data.

These findings shed new light on the processes by which CFT leaders can transform interdepartmental tensions into innovation drivers. When team members see that leaders genuinely balance autonomy with control, self-centredness with other-centredness, and other paradoxes, they internalise a mindset that tension is natural and even beneficial. Over time, that attitude spreads through the team, forming a potent T-PM that legitimises open debate and knowledge exchange. Empowering leadership practices further empower members to voice concerns, propose alternatives, and merge functional viewpoints in constructive conflict. This synergy ultimately fosters novel solutions and innovative outputs.

Theoretical Implications

Extending PLB Research to the Team Level

While paradoxical leadership has been mostly examined at the individual or organisational levels (Yang et al., 2024), we demonstrate that PLB also plays a critical role in shaping team processes and outcomes. By integrating ideas from social learning theory and team dynamics, we reveal a coherent path from PLB to team innovation via I-PM, T-PM, and constructive conflict.

Introducing the Concept of Team Paradox Mindset (T-PM)

Previous studies predominantly focus on paradox mindset as an individual characteristic (Miron-Spektor et al., 2018). We propose T-PM as “the extent to which members feel that their team accepts and is energised by tension,” distinct from the mere aggregation of individual mindsets. Identifying T-PM as a collective norm that shapes how teams respond to conflict offers a fruitful avenue for future scholars to investigate how teams can collectively embrace, rather than fear, contradictory demands.

Elucidating the Complementarity of PLB with Other Leadership Models

Our findings highlight that paradoxical leadership can be even more effective when combined with empowering leadership. This perspective on complementary leadership styles underscores that leaders who oscillate between tensions (PLB) benefit from simultaneously providing autonomy and development support (EPL). While our hypothesis regarding LMX was not upheld, further exploration might clarify whether certain relational dynamics or organisational contexts moderate the role of PLB differently. In any case, we show that EPL specifically strengthens the route from paradox mindsets to team innovation by encouraging

constructive conflict.

Practical Implications

Selecting and Developing Leaders with High PLB

Organisations aiming to foster innovation should consider (a) appointing leaders who already exhibit strong paradoxical leadership tendencies, and/or (b) developing PLB capabilities among existing managers. The 22-item scale from Zhang et al. (2015) can be used diagnostically to gauge how leaders balance contradictory demands. Those who score high might be prime candidates to lead critical CFT initiatives. Additionally, companies could implement leadership training that cultivates paradox mindsets. Since prior research emphasises that ‘conceptual understanding’ and ‘practice’, coupled with ‘acquiring different perspectives and broadening horizons’ and ‘practice’, are sufficient conditions to enhance paradox mindsets (Ochiai et al., 2023), training programmes should combine theoretical modules on paradoxes with practical exercises and action-learning projects to instil both awareness and behavioural skills.

Enabling Leaders to Demonstrate EPL in CFT Settings

Our moderated mediation results suggest that empowering leadership accelerates the effect of paradox mindsets on constructive conflict and subsequent innovation. In short, a paradoxical leader alone may spark acceptance of tensions, but members might still feel inhibited about expressing conflicting viewpoints unless they receive explicit autonomy and developmental support. CFT project owners and senior management can therefore encourage and resource leaders to demonstrate EPL. For example, clarifying that CFT leaders have genuine authority to delegate tasks across departmental boundaries, or incentivising them to coach and mentor team members, may create an environment in which constructive conflict thrives.

Limitations and Future Directions

First, because we relied on single-source self-report data, there is a possibility that common method variance inflated certain relationships. Although our CFA results and modelling approaches partially mitigate this concern, future research should incorporate multi-source or multi-time designs. Collecting data from both leaders and members (or measuring team innovation through external assessment) can help confirm the robustness of the present findings.

Second, as we focused on CFTs, which are temporary and inherently interdepartmental, their paradoxical tensions might be more pronounced than in standard work teams that remain within a single department for extended periods. Thus, the generalisability of our model to other team structures must be explored. In more traditional or long-term teams, departmental conflicts might be less salient, or LMX might have a stronger role given deeper relational histories. Future studies can compare PLB’s effects across different team forms.

Third, while this study introduced T-PM as a new concept, more conceptual and empirical work is needed to clarify its relationship to other forms of collective cognitions and specifically to the notion of collective PM (i.e. the aggregation of I-PM). Are there antecedents of T-PM that go beyond leaders’ paradoxical behaviours? Do team composition factors, like diverse functional backgrounds or high psychological safety, facilitate T-PM? Investigating such questions can refine our understanding of how paradox mindsets function

at various levels.

Finally, our rejection of the LMX hypotheses indicates that the role of relationship quality in shaping PLB's effects may be more nuanced than we expected—particularly in the time-bounded CFT environment. Future research could examine whether project duration, prior interpersonal history, or organisational culture modifies LMX's impact on adopting paradoxical thinking. Additionally, national cultural contexts, such as collectivist vs. individualist orientations, might influence whether or how PLB fosters paradox mindsets in cross-functional groups.

CONCLUSION

This research has advanced our understanding of how paradoxical leadership behaviour can galvanise team innovation in cross-functional settings by nurturing acceptance of tensions and fostering constructive conflict. We have introduced a novel concept—team paradox mindset—to illuminate how team-wide acceptance of contradictory demands can spark creative integration of diverse knowledge bases. Our findings also underscore the importance of empowering leadership in magnifying the pathways from paradox mindset to innovation. Overall, these insights highlight that, in the face of intricate and conflicting demands, leaders who skilfully balance 'both/and' imperatives—and empower others to do the same—are well positioned to lead CFTs toward truly innovative outcomes.

By elucidating the mechanisms and boundary conditions of paradoxical leadership in CFT contexts, we open possibilities for future research to explore how organisations can design leadership development efforts that enable leaders to turn potential tensions into productive drivers of innovation. We hope this work inspires additional empirical studies examining paradox mindset at both individual and team levels and encourages practitioners to leverage PLB alongside empowering leadership to maximise the creative potential of cross-functional collaborations.

REFERENCES

- 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.
- Andriopoulos, C., & Lewis, M. W. (2009). Exploitation-exploration tensions and organizational ambidexterity: Managing paradoxes of innovation. *Organization Science*, 20(4), 696-717.
- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Chang, P. C., Xu, X., Gao, X., & Lee, A. Y. P. (2024). Do good relationships contribute to innovative behaviour? A study of relationship conflict affecting team innovative behaviour. *Asian Journal of Social Psychology*, 27(3), 408-421.
- DeRue, S. D., Nahrgang, J. D., Wellman, N., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, 64(1), 7-52.

- Drach-Zahavy, A., & Somech, A. (2001). Understanding team innovation: The role of team processes and structures. *Group Dynamics: Theory, Research, and Practice*, 5(2), 111-123.
- Dyer, B., & Song, X. M. (1998). Innovation strategy and sanctioned conflict: A new edge in innovation? *Journal of Product Innovation Management*, 15(6), 505-519.
- Edmondson, A. C., & Nembhard, I. M. (2009). Product development and learning in project teams: The challenges are the benefits. *Journal of Product Innovation Management*, 26(2), 123-138.
- Gebert, D., Boerner, S., & Kearney, E. (2010). Fostering team innovation: Why is it important to combine opposing action strategies? *Organization Science*, 21(3), 593-801.
- Ghobadi, S., & D'Ambra, J. (2013). Modeling high-quality knowledge sharing in cross-functional software development teams. *Information Processing & Management*, 49(1), 138-157.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247.
- Holland, S., Gaston, K., & Gomes, J. (2000). Critical success factors for cross-functional teamwork in new product development. *International Journal of Management Reviews*, 2(3), 231-259.
- Hong, J. F. L., & Vai, S. (2008). Knowledge-sharing in cross-functional virtual teams. *Journal of General Management*, 34(2), 21-37.
- Horwitz, S. K., & Horwitz, I. B. (2007). The effects of team diversity on team outcomes: A meta-analytic review of team demography. *Journal of Management*, 33(6), 987-1015.
- Hui, C., Lee, C., & Rousseau, D. M. (2004). Psychological contract and organizational citizenship behavior in China: Investigating generalizability and instrumentality. *Journal of Applied Psychology*, 89(2), 311-321.
- Ilgen, D. R., Hollenbeck, J. R., Johnson, M., & Jundt, D. (2005). Teams in organizations: From input-process-output models to IMOI models. *Annual Review of Psychology*, 56, 517-543.
- Kahn, K. B. (2018). Understanding innovation. *Business Horizons*, 61(3), 453-460.
- Lahiri, N. (2010). Geographic distribution of R&D activity: How does it affect innovation quality? *Academy of Management Journal*, 53(5), 1194-1209.
- Lewin, K. & Dorwin Cartwright (Ed.). (1950). *Field Theory in Social Science*. Haper.
- Lewis, M. W. (2000). Exploring paradox: Toward a more comprehensive guide. *Academy of Management Review*, 25(4), 760-776.
- Lin, J., Qian, Y., Cui, W., & Miao, Z. (2010). Overlapping and communication policies in product development. *European Journal of Operational Research*, 201(3), 737-750.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to

- parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, 9(2), 151-173.
- Love, J. H., & Roper, S. (2009). Organizing innovation: Complementarities between cross-functional teams. *Technovation*, 29(3), 192-203.
- Milliken, F. J., & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21(2), 402-433.
- Miron-Spektor, E., Ingram, A., Keller, J., Smith, W. K., & Lewis, M. W. (2018). Microfoundations of organizational paradox: The problem is how we think about the problem. *Academy of Management Journal*, 61(1), 26-45.
- Murphy, M. C., & Dweck, C. S. (2010). A culture of genius: How an organization's lay theory shapes people's cognition, affect, and behavior. *Personality and Social Psychology Bulletin*, 36(3), 283-296.
- Neubert, M. J., Wu, C., & Roberts, J. A. (2013). The influence of ethical leadership and regulatory focus on employee outcomes. *Business Ethics Quarterly*, 23(2), 269-296.
- Ochiai, B., Sekiguchi, T, Takeuchi N., Imamura, M., & Nakamura, S. (2023). Effectiveness of educational interventions aimed at improving paradox mindset. —Analysis using QCA —. The 26th Annual Convention of Japanese Association of Administrative Science, 204-211. Minamiosawa, Tokyo.
- O'Connor, G. C., & DeMartino, R. (2006). Organizing for radical innovation: An exploratory study of the structural aspects of RI management systems in large established firms. *Journal of Product Innovation Management*, 23(6), 475-497.
- O'Neill, T. A., & McLarnon, M. J. (2018). Optimizing team conflict dynamics for high performance teamwork. *Human Resource Management Review*, 28(4), 378-394.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Rahim, M. A. (1983). *Rahim Organizational Conflict Inventory–II*. Consulting Psychologists Press.
- Robbins, S. P. (2022). *Essential of Organizational Behavior* (15th ed.). Pearson Education.
- Schaffer, B. S., & Riordan, C. M. (2003). A review of cross-cultural methodologies for organizational research: A best-practices approach. *Organizational Research Methods*, 6(2), 169-215.
- Schippers, M. C., West, M. A., & Dawson, J. F. (2015). Team reflexivity and innovation: The moderating role of team context. *Journal of Management*, 41(3), 769-788.
- Schumpeter, J. A. (1939). *Business cycles: A theoretical, historical, and statistical analysis of the capitalist process*. McGraw Hill.
- Simsarian Webber, S. (2002). Leadership and trust facilitating cross-functional team success. *Journal of Management Development*, 21(3), 201-214.

- Smith, W. K., & Lewis, M. W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*, 36(2), 381-403.
- Song, M., Dyer, B., & Thieme, R. J. (2006). Conflict management and innovation performance: An integrated contingency perspective. *Journal of the Academy of Marketing Science*, 34(3), 341-356.
- Tang, G., Chen, Y., van Knippenberg, D., & Yu, B. (2020). Antecedents and consequences of empowering leadership: Leader power distance, leader perception of team capability, and team innovation. *Journal of Organizational Behavior*, 41(6), 551-566.
- Terwiesch, C., Loch, C. H., & Meyer, A. D. (2002). Exchanging preliminary information in concurrent engineering: Alternative coordination strategies. *Organization Science*, 13(4), 355-419.
- van Knippenberg, D. (2017). Team innovation. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 211-233.
- West, M.A., & Farr, J.L. (1990). *Innovation and creativity at work: Psychological and organizational strategies*. Wiley.
- Yang, N., Chen, H., & Wang, X. H. (2024). Paradoxical leadership behavior and employee creative deviance: The role of paradox mindset and leader–member exchange. *Journal of Business and Psychology*, 39(3), 697-713.
- Zhang, M. J., Zhang, Y., & Law, K. S. (2022). Paradoxical leadership and innovation in work teams: The multilevel mediating role of ambidexterity and leader vision as a boundary condition. *Academy of Management Journal*, 65(5), 1652-1679.
- Zhang, Y., Waldman, D. A., Han, Y. L., & Li, X. B. (2015). Paradoxical leader behaviors in people management: Antecedents and consequences. *Academy of Management Journal*, 58(2), 538-566.
- Zhang, Y., Waldman, D. A., Liao, Z., & Li, J. (2022). Paradoxical leadership: A systematic review and challenges for future research. *Journal of Management*, 48(1), 243–273.

Figure 1 Analytical framework of the present study

PARADOXICAL LEADERSHIP IN CROSS-FUNCTIONAL TEAMS

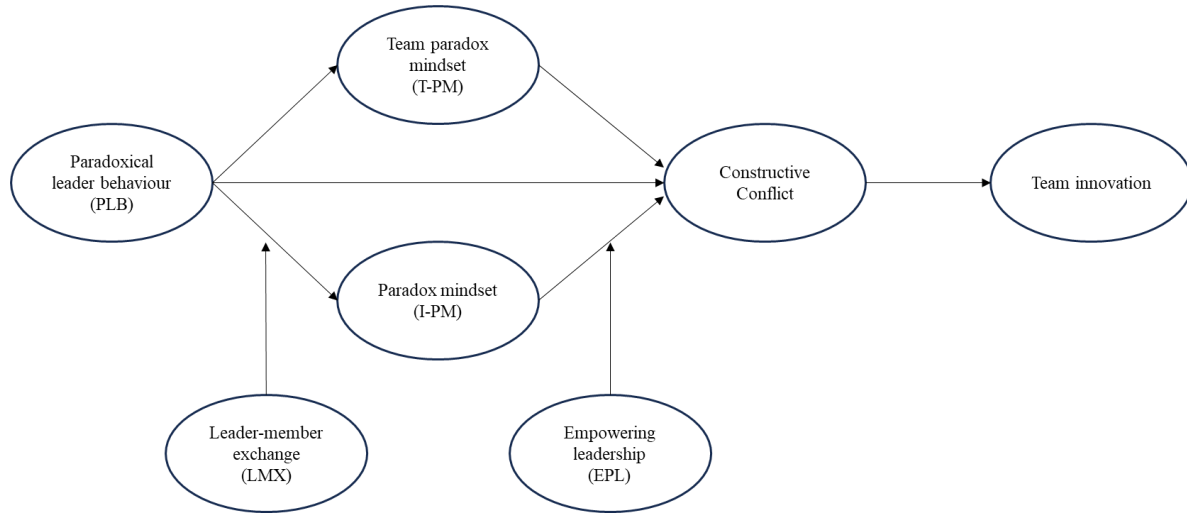


Table 1 Confirmatory factor analysis

Model	χ^2	df	IFI	CFI	TLI	RMSEA	$\Delta\chi^2$ ^h	Δ df ⁱ
<i>Baseline model</i>								
Seven-factor model ^a	1114.89	539	.91	.91	.90	.06		
<i>Alternative models</i>								
Alternative Model 1 ^b	1234.39	545	.89	.89	.88	.07	119.50	6
Alternative Model 2 ^c	1336.00	550	.88	.88	.87	.07	221.10	11
Alternative Model 3 ^d	1781.22	555	.81	.81	.79	.09	666.33	16
Alternative Model 4 ^e	1852.03	558	.80	.80	.78	.09	737.14	19
Alternative Model 5 ^f	2668.55	560	.67	.67	.64	.11	1553.66	21
Alternative Model 6 ^g	2422.82	560	.71	.70	.69	.11	1307.92	21

Notes: n =303. ^aThe standard model assumes that all 70 items are grouped into seven hypothetical factors: PLB, I-PM, T-PM, Constructive Conflict, Team Innovation, LMX, and EPL. ^bAlternative Model 1 assumes that the 70 items are classified into six factors: PLB, Constructive Conflict, Team Innovation, LMX, EPL, and are assumed to be classified into six factors: PLB, Constructive Conflict, Team Innovation, and the mediating factor Mindset (items related to I-PM and T-PM are grouped into one latent factor). ^cIn alternative model 2, it is assumed that the 70 items are classified into five factors: PLB, constructive conflict, team innovation and the mediating factor mindset (items related to I-PM and T-PM are grouped into one latent factor), adaptation factors (items related to LMX and EPL are grouped into one latent factor). ^dIn alternative model 3, the 70 items are divided into constructive conflict, team innovation, two mediating factors (items related to I-PM and T-PM are grouped into one latent factor) and leadership factors (items related to PLB, LMX and EPL are grouped into one latent factor). ^eIn alternative model 4, the 70 items are grouped into four factors: team innovation, three mediating factors (items related to I-PM, T-PM, items related to constructive conflict are grouped into one latent factor), and leadership factors (items related to PLB, LMX, and EPL are grouped into one latent factor). ^fAlternative Model 5 assumes that the 70 items are grouped into two factors: Team Innovation and Other Factors (items related to PLB, I-PM, T-PM, Constructive Conflict, LMX, and EPL are grouped into one latent factor). ^gAlternative Model 6 assumes that all 70 items are grouped into one factor and is used as an alternative model. ^h $\Delta\chi^2$ represents the increment in χ^2 value from the full measurement model to each of the six alternative factor models listed above. ⁱ Δ degrees of freedom represents the increment in degrees of freedom from the full measurement model to each of the six alternative factor models listed above. ***p < .001.

PARADOXICAL LEADERSHIP IN CROSS-FUNCTIONAL TEAMS

Table 2 Means, standard deviations, and correlations

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Gender	.24	.43	--																
2. Age	2.31	1.11	-.279**	--															
3. Educational level	2.09	.70	.003	-.101	--														
4. Position rank	.45	.50	-.183**	.363**	.070	--													
5. Tenure	13.97	11.11	-.274**	.719**	-.245**	.324**	--												
6. Departmental affiliation	.26	.44	-.001	-.053	.361**	-.128*	-.092	--											
7. Organisational size	2.08	.94	-.010	-.004	.097	-.126*	.008	.111	--										
8. Team size	9.41	2.29	-.039	.033	.049	.002	.020	.126*	.288**	--									
9. Leader's gender	.09	.28	.378**	-.204**	.094	-.016	-.140*	.086	-.082	-.038	--								
10. Leader's age	4.09	.85	-.134*	.500**	-.031	.113	.378**	.024	.055	.016	-.199**	--							
11. PLB	4.59	.96	.033	-.133*	.006	.066	-.140*	.023	.111	-.099	.010	-.081	--						
12. I-PM	4.21	.96	-.035	-.155**	-.001	.127*	-.176**	.012	.011	.023	-.019	-.152**	.392**	--					
13. T-PM	4.24	.98	-.039	-.105	.024	.113*	-.116*	-.016	-.027	-.044	.013	-.117*	.507**	.656**	--				
14. CC	4.26	1.03	-.059	-.089	.011	.117*	-.121*	.024	.037	.018	.035	-.118*	.543**	.578**	.652**	--			
15. TI	4.18	1.11	-.063	-.104	-.030	.051	-.090	.022	.013	.033	.059	-.149**	.439**	.494**	.624**	.600**	--		
16. LMX	4.59	1.05	.041	-.144*	-.039	.084	-.129*	-.018	.107	-.043	.093	-.134*	.841**	.390**	.515**	.536**	.475**	--	
17. EPL	4.54	1.00	.027	-.137*	-.021	.084	-.123*	.017	.103	-.048	.070	-.095	.812**	.485**	.599**	.627**	.552**	.801**	--

Notes: $n = 303$. PLB=Paradoxical leader behaviour; I-PM=Paradox mindset; T-PM=Team paradox mindset; CC=Constructive conflict; TI=Team innovation; LMX=Leader-member exchange; EPL=Empowering leadership.

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

Table 3 Hierarchical regression analyses

PARADOXICAL LEADERSHIP IN CROSS-FUNCTIONAL TEAMS

		I-PM			T-PM			CC						TI			I-PM			CC		
		Model1			Model2			Model3			Model4			Model5			Model6			Model7		
		β	t	p	β	t	p	β	t	p	β	t	p	β	t	p	β	t	p	β	t	p
Step1	Gender	-.07	-1.02		-.07	-1.29		-.11	-1.95		-.07	-1.42		-.07	-1.33		-.07	-1.13		-.06	-1.29	
	Age	-.06	-1.04		-.02	-.27		.03	.42		.05	.82		-.01	-.09		-.06	-.76		.08	1.22	
	Educational level	-.07	-1.56		.01	.19		-.04	-.67		-.03	-.55		-.05	-1.04		-.06	-1.01		.01	.20	
	Position rank	.18	3.85	**	.09	1.51		.10	1.74		.03	.54		-.04	-.84		.17	2.93	**	.02	.40	
	Tenure	-.15	-2.37		-.05	-.71		-.11	-1.44		-.05	-.85		.03	.43		-.15	-1.84		-.07	-1.03	
	Departmental affiliation	.03	.9		-.02	-.39		.02	.36		.02	.43		.02	.50		.03	.54		.01	.22	
	Organisational size	-.02	.73		-.08	-1.40		-.02	-.44		.01	.20		-.01	-.21		-.03	-.49		-.02	-.53	
	Team size	.07	.2		.03	.57		.08	1.51		.05	1.21		.05	1.18		.06	1.07		.04	.81	
	Leader's gender	-.08	-1.26		-.06	-1.01		.05	1.00		.06	1.29		.06	1.34		-.07	-1.09		-.04	-.73	
	Leader's age	-.04	-.73		.01	.17		-.07	-1.19		-.03	-.61		-.06	-1.17		-.05	-.89		.04	.82	
	R^2_1	.31	***		.23			.26	*		.26	*		.23			.31			.26	*	
Step2	PLB	.36	6.57	***	.50	9.66	***	.53	10.65	***	.27	5.65	***	.09	1.72		.23	2.35	*	.33	6.85	***
	R^2_2	.46	***		.53	***		.57	***		.57	***		.48	***		.46	***		.59	***	
	$\Delta R^2_{(1-2)}$	.15	***		.30	***		.32	***		.32	***		.25	***		.15	***		.33	***	
Step3	I-PM										.22	4.02	***	.06	1.06							
	T-PM										.36	6.24	***	.36	5.50	***						
	LMX																.17	1.75				
	EPL																			.47	9.79	***
	R^2_3										.73	***		.66	***		.47	***		.71	***	
	$\Delta R^2_{(2-3)}$										.16	***		.18	***		.01			.12	***	
Step4	CC													.27	4.39	***						
	PLB*LMX																.09	1.66				
	I-PM*EPL																			.11	2.54	*
	R^2_4													.69	***		.48	***		.72	***	
	$\Delta R^2_{(3-4)}$													.03	***		.01			.01	***	

Notes: n=303. Standardized regression coefficients (β s) are presented. PLB=Paradoxical leader behaviour; I-PM=Paradox mindset; T-PM=Team paradox mindset; CC=Constructive conflict; TI=Team innovation; LMX=Leader-member exchange; EPL=Empowering leadership. R^2_1, R^2_2, R^2_3 and R^2_4 denote the adjusted R squares generated by the first-, second-, third- and forth-step regressions, respectively. $\Delta R^2_{(1-2)} = R^2_2 - R^2_1$, $\Delta R^2_{(2-3)} = R^2_3 - R^2_2$, $\Delta R^2_{(3-4)} = R^2_4 - R^2_3$. * $p < .05$; ** $p < .01$; *** $p < .001$ □

Figure2 The moderating effect of EPL on the relationship between I-PM and constructive conflict

