

Too much of a good thing? The curvilinear relationship between team regulatory focus and new product novelty **過猶不及？團隊調節焦點與產品新穎性之曲線關係**

Yen-Chih Huang

Department of International Business, National Taichung University of Science and Technology

Chia-Chi Chang¹

Department of Information Management, National University of Kaohsiung

Abstract: Drawing on the regulatory focus theory, this study posited that team prevention and promotion foci have curvilinear relationships with new product novelty. Furthermore, considering the degree of knowledge tacitness leveraged by teams, we postulated that both regulatory foci interact with knowledge tacitness to influence new product novelty. We tested our hypotheses using survey data from 137 new product development teams from information technology companies. Our findings revealed an inverted U-shaped relationship between team promotion focus and new product novelty. In addition, knowledge tacitness positively moderated this curvilinear relationship. Finally, we discussed how these findings broaden our understanding of the roles of regulatory focus and knowledge tacitness within new product development teams and offered practical implications.

Keywords: New product creativity, regulatory focus, knowledge tacitness, new product development team.

摘要：本研究以調節焦點理論為學理基礎，旨在探討調節焦點與產品新穎性的曲線型關係。此外，我們也考量了知識內隱性對此關係的調節效果。本研究採取問卷調查法，樣本為資訊科技企業的 137 個新產品開發專案團隊，並

¹ Corresponding author: Chia-Chi Chang, Assistant Professor, Department of Information Management, National University of Kaohsiung, 700, Kaohsiung University Rd., Nanzih District, Kaohsiung 811, Taiwan, Email: ccchang@nuk.edu.tw

且使用階層迴歸分析進行假設驗證。實證結果發現團隊促進焦點與新產品新穎性呈現倒 U 型的關係，以及當團隊高度依賴內隱性知識的使用時，此倒 U 型關係的斜率會產生顯著的變化。本研究依據這些結論，提出了相應的理論與管理意涵。

關鍵詞：新產品創造力、調節焦點、知識內隱性、新產品開發團隊。

1. Introduction

The perception of a product as unique and differentiated from its competitors has become a sine qua non of competitiveness (Weiss *et al.*, 2013). Successful products are characterized as functional or extrinsic novelties that are highly valued by their target audience (Im and Workman, 2004). Such new product novelty (NPN) is instrumental in pioneering new market niches or deepening the penetration of existing ones (Im *et al.*, 2013). Thus, NPN equips firms to dictate market trends rather than merely respond to them (Weiss *et al.*, 2013). It plays a pivotal role in garnering a first-mover advantage and sustaining a market foothold, particularly amid technological volatility (Tellis *et al.*, 2009). Typically, firms establish new product development (NPD) teams to spearhead the generation and application of innovative and viable solutions (Drach-Zahavy and Somech, 2001; Jansen *et al.*, 2016; van Knippenberg, 2017).

Contemporary NPD teams are engaged in increasingly intricate tasks to address evolutionary market demands (Akgün *et al.*, 2007). Team members must coordinate and synchronize their work activities and discuss disparate and competing views on methods (Fong, 2003; Kratzer *et al.*, 2010). Hence, they should regulate their endeavors and behaviors toward accomplishing joint tasks under dynamic circumstances. The theory of team motivation (Chen and Kanfer, 2006) argues that team members can be jointly motivated to act in ways that align with management expectations. Studies have applied the regulatory focus theory to examine behavioral patterns and outcomes at the team level. This theory posits that the prevention and promotion foci are two distinct motivational systems that regulate goal-directed behavior (Higgins, 1998). These systems

manifest as the avoidance of negative results (prevention focus) or the pursuit of positive gains (promotion focus). Scholars have conceptualized regulatory focus as a collective construct, defining it as a group's shared motivation and strategic orientation (Owens and Hekman, 2016; Shin *et al.*, 2016). A team's collective regulatory focus steers its decision-making and actions toward different aspirational goals (Shin *et al.*, 2016). While studies have primarily employed a linear model to explain the relationship between regulatory focus and various creative outcomes (Adomako, 2017; Lai *et al.*, 2018; Lee *et al.*, 2019; Li *et al.*, 2019; Zhou *et al.*, 2012), the focal relationship appears to be more sophisticated than previously argued. This is bolstered by two streams of evidence: findings revealing nonsignificant linear relationships (Sacramento *et al.*, 2013; Shin, 2014; Shin *et al.*, 2016) and research indicating that motivational orientations can follow a non-monotonic pattern (Hirst *et al.*, 2009; Miron-Spektor and Beenen, 2015; Miron-Spektor *et al.*, 2022). This inconsistency strongly suggests that a curvilinear relationship may provide a model with greater explanatory power.

The “too-much-of-a-good-thing” effect theorizes that nearly any positive trait has an optimal level at which its beneficial influence is maximized (Pierce and Aguinis, 2013). Pierce and Aguinis (2013) warned that postulating direct linear relationships requires prudence because such an assumption risks oversimplifying the inherent complexity of real-world phenomena. Practical constraints, such as limited resources, render it highly unlikely that a “more is better” scenario would exist, where a higher level of an antecedent continuously leads to better performance. Indeed, an extremely strong regulatory focus may hinder team functioning. For instance, Zaal *et al.* (2015) observed that team members with a strong promotion focus often prioritized their own success over that of the team when personal and team interests clashed. Similarly, Li *et al.* (2021) found that highly promotion-focused engineers in research and development (R&D) departments tend to devote less effort in the creative process. These group-undermining behaviors severely compromise creative activities that rely heavily on effective intra-team knowledge sharing (Duffy *et al.*, 2006; Tyler, 2011). Scholars have cautioned against the pitfalls of an

excessively strong prevention or promotion focus (Chen *et al.*, 2024; Johnson *et al.*, 2015; Scholer and Higgins, 2012; Zivnuska *et al.*, 2017). The optimal level of each regulatory focus is distinct and must be identified by managers depending on the desired performance goal. Scholer and Higgins (2012) emphasized that achieving a moderate level of team regulatory focus enables members to harness the benefits of promotion and prevention foci while minimizing their associated drawbacks. To resolve these issues, we examined the possible curvilinear relationships between the regulatory foci and NPN.

The regulatory fit theory (Higgins, 2000) posits that desired end states rely on the match between an entity's regulatory focus and its dominant means of pursuing goals. By extending this theory to a team-level analysis, we presumed that the mechanism of goal pursuit constitutes the use of tacit knowledge. NPD is a knowledge-intensive activity that transforms market and technological knowledge into tangible product functionality (Johannessen *et al.*, 1997). Tacit knowledge plays a pivotal role in NPD because it can tackle technically complex and unprecedented problems while serving as a catalyst for novel ideas (Goffin and Koners, 2011; Wong and Radcliffe, 2000). Along this vein, studies demonstrate the positive effects of tacit knowledge on NPD performance (Goffin and Koners, 2011). However, many studies have not found significant relationships (Barthélemy, 2008; De Luca and Atuahene-Gima, 2007; Jin *et al.*, 2019; Lecuona and Reitzig, 2014; Pérez-Luño *et al.*, 2011; Ruan and Chen, 2017). Evidence reveals that knowledge tacitness is detrimental to product innovation performance (Kim *et al.*, 2013; Sheng, 2019). Scholars theorize that this effect is likely to be moderating instead of directly influential in nature (De Luca and Atuahene-Gima, 2007; Jin *et al.*, 2019; Mu *et al.*, 2008; Scaringella and Scaringella, 2025; Subramaniam and Venkatraman, 2001). To fully capture the influential patterns of tacit knowledge, researchers recommend identifying the factors with which it interacts synergistically (Pérez-Luño *et al.*, 2019; Wu and Lin, 2013; Zhao *et al.*, 2025). Knowledge application is a cognitive process that often occurs intuitively and subconsciously, particularly when leveraging well-rehearsed skills or tacit know-how (Gurteen, 1998). Furthermore, regulatory

focus is a cognitive characteristic that governs how individuals behave toward desired end states and move away from undesired ones (Scoresby *et al.*, 2021; Wallace *et al.*, 2009). Given the shared cognitive nature of regulatory focus and knowledge use, a “fit” between the two is conceptually grounded.

Throughout the NPN formation process, the NPD teams’ regulatory foci influence how their members manipulate and transform their knowledge into NPN (Nguyen *et al.*, 2024; Shin *et al.*, 2016). Prior research on NPD and organizational learning has delved into the impacts of regulatory focus (Hundeling *et al.*, 2021) and knowledge tacitness (Kim *et al.*, 2013) on creative performance; however, these impacts have been explored independently. Our study makes two primary contributions to the literature. First, this is the first study to reconcile the aforementioned mixed findings by investigating the curvilinear effects of team promotion and prevention foci on NPN. Second, the study answers scholarly calls to analyze the interplay between regulatory foci and knowledge tacitness (Figure 1).

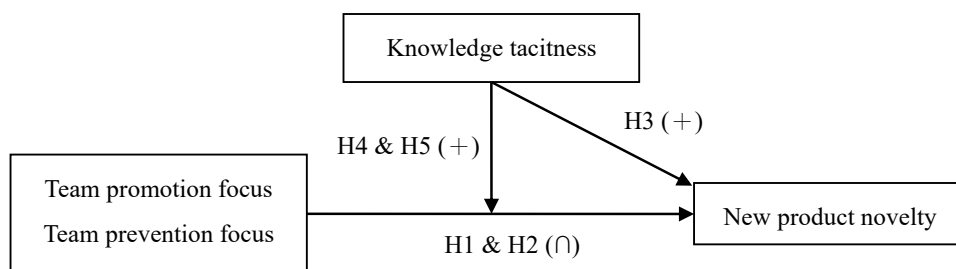


Figure 1
Conceptual model

2. Conceptual background and hypotheses development

2.1 Theoretical foundation

NPN denotes the introduction of radically innovative products or fresh

features to existing products (Bicen *et al.*, 2014; Sethi and Iqbal, 2008). As Nakata *et al.* (2018) stated, “Only something that is meaningful as well as novel can be characterized as creative—rather than bizarre” (Nakata *et al.*, 2018, p. 942). Product novelty is used to assess the creative performance of NPD (Im and Workman, 2004; Nakata *et al.*, 2018). It refers to the degree to which a firm can differentiate its product features from those of its competitors (Im *et al.*, 2015; Kim *et al.*, 2013). Novelty concerns a firm’s originality or uniqueness in comparison with that of its rival (Im and Workman, 2004; Kim *et al.*, 2013). A highly novel product can increase the likelihood of customer purchases by capturing consumer attention and heightening its perceived hedonic value (Im *et al.*, 2015). Clearly, NPN occupies a salient position in augmenting the competitive edge of a product.

Academics and practitioners have recognized the competitive implications of NPN. Tellis *et al.* (2009) underscored the critical role of novel product introductions in achieving sustainable competitive advantages. Similarly, Chuang *et al.* (2015) emphasized the significance of novelty in aligning with evolving market needs and consumer desires. This alignment is essential for the success of new products in an increasingly dynamic and complex market landscape. In addition, Hult *et al.* (2004) examined how novelty in product development impacts business performance, particularly in industries characterized by volatile technological trends. Finally, Chandy and Tellis (1998) offered insights into how the novelty of products can lead to symbiotic relationships between new and existing market offerings, enhancing overall market dynamics and product ecosystems. Novelty acts as the primary catalyst for differentiation in highly saturated markets. Only by studying novelty can the mechanisms that confer a differentiation advantage be clarified.

Similar to other forms of creativity, NPN is often realized in team settings (Taggar, 2002). While team members propose ideas about NPN, team characteristics shape how creative processes evolve and how individual contributions are integrated (Im *et al.*, 2013). Amabile *et al.* (1996) identified intrinsic task motivation as the mainspring of creativity. Regulatory focus

stemming from intrinsic motivation may be a potent team characteristic (Higgins, 1997). It affects people's willingness to improve their skills and creativity by soliciting and using feedback (Hirst *et al.*, 2009). Recent research has expanded the concept of regulatory focus from the individual to the team (Owens and Hekman, 2016). Based on the self-categorization theory, team members develop shared beliefs about their collective capabilities and efforts by comparing their perceptions and views with those of their teammates (Marks *et al.*, 2001). These shared beliefs contribute to the emergence of a unified motivational state within the team. Similarly, the theory of team motivation maintains that social interactions and comparisons allow team members to reach a consensus on the direction, intensity, and duration of endeavors to accomplish common goals (Chen and Kanfer, 2006). Building on these premises, scholars have defined collective regulatory focus as a shared motivational state within a team, where members align their efforts in terms of direction, intensity, and persistence to prevent negative consequences or achieve positive outcomes (Lee *et al.*, 2019; Owens and Hekman, 2016).

Furthermore, the team motivation theory highlights the critical role of motivation and knowledge in a team's successful pursuit of goals (Chen and Kanfer, 2006). Thus, NPN formation requires individuals to draw on their distinct knowledge and expertise to generate original and practical concepts (Amabile *et al.*, 1996). Hirst *et al.* (2009) observed that a team's motivational orientation interacts with how it utilizes and creates knowledge, thereby influencing its creative outcomes. Regulatory focus theorists recognize the interplay between regulatory focus and knowledge (Levine *et al.*, 2000; Yoon *et al.*, 2012). According to the regulatory focus theory, regulatory fit denotes the match between people's self-regulatory orientations and the strategies they use to pursue set goals (Higgins, 1997, 2002). The underlying premise is that behavioral systems direct the information search and processing strategies that individuals use to pursue a specific goal (Elliot and Church, 1997). Regulatory fit occurs when individuals use strategies that match their self-regulatory orientations. This line of research makes it theoretically plausible to explain the

variation in NPN through the joint effect of a team's collective regulatory focus and leveraged knowledge.

Building on the team motivation theory (Chen and Kanfer, 2006), this study posited that the differences in motivational orientations (i.e., promotion vs. prevention focus) shape teams' tendencies to pursue or avoid opportunities for novel creativity. Additionally, this study considered the contextual impact of the knowledge attributes involved, particularly knowledge tacitness.

2.2 Team promotion focus and new product novelty

As mentioned previously, regulatory focus and creative outcomes may display a curvilinear relationship. Promotion focus pertains to an orientation toward goals, aspirations, and the attainment of ideal states (Higgins, 1997) and acts as a catalyst for original and pioneering thinking (Hirst *et al.*, 2009). Its initial positive impact on NPN is grounded in the concept that a certain level of aspiration-driven motivation can stimulate creative thinking by encouraging risk taking, experimentation, and distancing from conventional thought patterns. Promotion-focused teams are better equipped to probe breakthrough knowledge that transcends the current product knowledge domain (Li *et al.*, 2019). Therefore, they are more likely to create a new technological frontier that remains undiscovered by their rivals. In addition, the inherent openness of promotion-focused teams makes them receptive to highly unconventional and bizarre concepts (Lin and Johnson, 2015; Pastor and Baruffaldi, 2021). This enriches their pool of creative alternatives, increasing the likelihood of generating uniquely creative solutions that differentiate them from competing products.

However, when team promotion focus intensifies, its beneficial impact on NPN reaches a tipping point that paradoxically impedes NPN. Although a promotion focus inclines teams toward exploration, which fosters creativity and innovation (Li *et al.*, 2019), some empirical studies have revealed contradictory results. As Blank and Naveh (2018) observed, R&D teams with a stronger promotion focus achieve less radically innovative outcomes. Hundeling *et al.*

(2021) also indicated that a strong collective promotion focus jeopardizes idea generation under time pressure, which is exemplified by the NPD projects (Chong *et al.*, 2010; Swink *et al.*, 2006). Indeed, promotion focus is typified by an eagerness to succeed and achieve goals (Higgins, 1998). Teams with this orientation are highly sensitive to deadlines and project timelines (Florack and Hartmann, 2007). When faced with such temporal constraints, the drive for success compels NPD teams to make a trade-off between conflicting objectives (Swink *et al.*, 2006), often leading them to adopt risk-averse behaviors (Florack and Hartmann, 2007). Consequently, their definition of “success” pivots from maximizing novelty to simply outperforming major rivals (Spanjol *et al.*, 2011). This intense emphasis on success can suppress their exploratory tendencies. As a result, team efforts are predominantly directed toward the timely introduction of new products, which frequently sacrifices the originality of the final product. When a promotion-focused team is aware that its competitors have more advantageous products, it may pursue incremental improvements along the technological path established by its rivals (Luo *et al.*, 2011; Ofek and Turut, 2008). This argument is in line with evidence suggesting that entrepreneurs with a strong promotion focus tend to prioritize their resources and time for exploitation activities over exploration activities (Burmeister-Lamp *et al.*, 2012; Koumbarakis *et al.*, 2021; Tuncdogan *et al.*, 2015). In fact, when a team has an extremely strong promotion focus, its successful ambition leads the team to undertake pseudo-innovation (Rook and van Knippenberg, 2011). It often bypasses truly groundbreaking ideas and opts instead for those that appear impressive but promise a higher likelihood of success (Miron-Spektor *et al.*, 2022). Ultimately, the team is likely to develop products that lack significant differentiation from their counterparts. We therefore posit the following hypothesis:

Hypothesis 1. Team promotion focus has an inverted U-shaped relationship with NPN.

2.3 Team prevention focus and new product novelty

A prevention focus emphasizes safety, responsibility, and the avoidance of negative outcomes (Higgins, 1997). Hence, prevention-focused teams tend to be cautious, pragmatic, and methodical (Lee *et al.*, 2019; Scholer and Higgins, 2012). NPD teams require an adequate level of prevention focus, as it enables them to rigorously analyze product novelty relative to competitors and contributes to an efficient NPD process. This regulatory focus bolsters NPN by prompting teams to systematically evaluate their products against existing market offerings (Hundeling *et al.*, 2021; Seibt and Förster, 2004). Thereby, teams can pinpoint potential gaps or overlaps that may undermine product uniqueness. With an optimal prevention focus, teams are adept at detailed benchmarking processes, carefully assessing whether their new products achieve sufficient differentiation while avoiding the risk of over-exploration, which might alienate customers (Beersma *et al.*, 2013).

The emphasis on a “moderate” level is crucial for teams to harness the strengths of a prevention focus while mitigating its latent drawbacks (Scholer and Higgins, 2012). Excessive prevention focus can stifle the creative thinking and risk taking necessary for groundbreaking advancement (Friedman and Förster, 2001; Seibt and Förster, 2004). Teams with a strong prevention focus are resistant to deviating from established and proven paths, undermining the possibility of achieving genuine NPN (Zhou *et al.*, 2012). However, an adequate prevention focus is conducive to maintaining market vigilance and sensitivity (Lechner and Mathmann, 2021). A lack of prevention focus can lead teams to neglect or misinterpret key competitive intelligence (Ahmadi *et al.*, 2017; Lechner and Mathmann, 2021), thereby misguiding their efforts to generate creative ideas (Spanjol and Tam, 2010). This ultimately compromises the novelty and distinction of the products in the market.

Surpassing competitors with a novel product depends not only on innovation capacity but also on rigorous competitor analysis and disciplined execution—areas in which a prevention focus naturally excels (Friedman and

Förster, 2001; Seibt and Förster, 2004). An adequate prevention focus compels a team to value market and competitor analyses and embed the resulting insights into its product's core specifications. Thus, we postulate the following hypothesis:

Hypothesis 2. Team prevention focus has an inverted U-shaped relationship with NPN.

2.4 Knowledge tacitness and new product novelty

Tacit knowledge is defined by its inertia and stickiness (Nonaka, 1994; Szulanski, 1996) and exists in an unstructured form. Developed over time through experience, reflection, and intuition, tacit knowledge typically defies articulation and codification (Eisenhardt and Santos, 2002; Gupta and Govindarajan, 2000). The sticky quality of tacit knowledge makes it difficult to imitate, imperfectly mobile, and unique to the knowledge owner. Such inimitable and distinctive properties allow a firm to stimulate creative solutions to market opportunities and problems and equip it with the capability to build and sustain an innovative edge (Berman *et al.*, 2002). In the realm of NPD, this type of knowledge is fundamentally instrumental in creative endeavors because of its potential to foster unique and innovative solutions. For instance, Leonard and Sensiper (1998) focused on group innovation and theorized that when team members possess substantial tacit knowledge, they can contribute novel ideas and perspectives. Reagans and McEvily (2009) contended that effectively sharing and utilizing tacit knowledge expands the repertoire of creative problem-solving approaches. This is particularly relevant in NPD, where unique and unexplored ideas are paramount. O'Reilly and Tushman (2021) observed that organizations that can proficiently harness tacit knowledge are more likely to accomplish breakthrough innovations because this knowledge often triggers radical and original ideas. Hargadon and Fanelli (2002) claimed that most novel ideas stem from tacit knowledge, which enables a firm to deviate from its established innovative trajectories and explore new possibilities. Overall, when incorporating a greater amount of tacit knowledge into new product concepts, an

NPD team is likely to offer more distinctive and unique solutions to customers, thereby amplifying NPN. Building on these insights, we hypothesize the following:

Hypothesis 3. The degree of tacitness of the knowledge used by an NPD team is positively related to NPN.

2.5 Interacting effects of regulatory foci and knowledge tacitness

The literature has identified two distinct mechanisms that shape team regulatory focus. First, team regulatory focus can be situationally induced by leaders who frame contexts and tasks to activate specific regulatory foci. Leaders function as “meaning makers” and can influence their followers’ regulatory focus through specific language use, symbols, and contextual manipulation (Brockner and Higgins, 2001). This “regulatory focus trickle-down” effect occurs through leader behaviors that create situational cues and task framings (Johnson *et al.*, 2017). Second, team regulatory focus manifests through a bottom-up aggregation of its members’ chronic dispositions. Individual team members bring their own dispositional regulatory foci, developed via past socialization processes and parenting styles, into a team setting (Rietzschel, 2011). These individual chronic regulatory foci coalesce into team-level regulatory focus through collective identity, shared understanding, and voice behaviors that promote team consensus (Owens and Hekman, 2016). The collective regulatory focus emerging from this bottom-up process directs the team’s strategic orientation toward the pursuit of disparate goals.

The regulatory fit theory posits a natural match between an individual’s regulatory focus and the dominant means used to pursue goals. As Higgins and Spiegel (2004) stressed, this strategy ensures the consistency of preferences regardless of whether the regulatory foci are trait-based or situation-elicited. The existing body of research definitively concludes that dispositional and situational regulatory foci are functionally equivalent in terms of their influence on an individual’s attitude toward knowledge utilization. Boldero and Higgins (2011) offered compelling evidence that regulatory focus, stemming from chronic

predispositions or external cues, exerts parallel effects on decision-making behavior. Similarly, Lee and Aaker (2004) found that both situationally induced and trait-based regulatory foci consistently influence information reception and attitude changes. Lam and Chiu (2002) confirmed that these two regulatory foci have similar relationship patterns with creativity. Overall, there was no significant difference between chronically held and situationally induced regulatory focus in terms of the resulting decision-making behaviors and actions. This similarity extends to how they leverage knowledge. Specifically, the essence of the interaction between regulatory focus and the use of tacit knowledge remains consistent, irrespective of a trait-based or situationally induced focus.

Promotion-focused teams naturally gravitate toward risk taking and experimentation, fueled by the belief that failures are stepping stones to sustained success (Owens and Hekman, 2016). This openness to exploration aligns perfectly with the use of tacit knowledge, which is experiential and often difficult to articulate (Nonaka, 1994). Leonard and Sensiper (1998) highlighted that groups adept at harnessing tacit knowledge typically generate dramatic breakthroughs. Promotion-focused teams are more likely to unlock the innovative potential of tacit knowledge because of their inherent ingenuity and receptivity to new ideas (Owens and Hekman, 2016; Shin *et al.*, 2016). In teams with a strong collective promotion focus, the resulting open atmosphere deepens socialization among members (Johnson *et al.*, 2010). Such socialization is a favorable condition for the exchange, comprehension, and internalization of tacit knowledge. In other words, this open mindset uniquely positions promotion-focused teams to capitalize on valuable but elusive knowledge. Thus, promotion-focused teams are expected to expedite NPN generation.

As mentioned earlier, an excessively high level of team promotion focus is detrimental to NPN (Li *et al.*, 2021; Zaal *et al.*, 2015). In this respect, tacit knowledge can also create a buffer against the potential negative impact of a promotion-focused context by providing a solid and intuitive foundation for uncertainty management and problem solving (Amabile *et al.*, 1996; Chen *et al.*,

2014). Leveraging tacit knowledge cultivates a collective mindset geared toward systematic troubleshooting and innovative problem solving (Subramaniam and Venkatraman, 2001), which effectively counterbalances the potential downsides of a promotion focus, such as excessive risk taking and imprudence. For instance, tacit knowledge enables promotion-focused teams to avoid viewing proposed creative ideas through rose-colored glasses (Johnson *et al.*, 2015). Moreover, experience-based tacit knowledge reins in the inherent idealism and adventurousness of promotion-focused teams (Menkhoff *et al.*, 2006), guiding them to formulate more grounded ideas that offer a competitive edge. Consequently, tacit knowledge equips these teams to intuitively distill a pool of divergent ideas, isolating original and superior ideas compared with what their rivals can produce (Kim *et al.*, 2013). Accordingly, this study postulates the following hypothesis:

Hypothesis 4. The degree of tacitness of the knowledge used by an NPD team moderates the inverted U-shaped relationship between team promotion focus and NPN. At the same level of team promotion focus, a higher degree of knowledge tacitness leads to greater NPN.

Conversely, prevention focus, which is characterized by safety, risk aversion, and adherence to established norms (Higgins, 1998), can create friction with the pioneering application of tacit knowledge. The value derived from tacit knowledge hinges on the circumstances under which it is leveraged (Subramaniam and Venkatraman, 2001). Prevention-focused teams prioritize stability and minimize errors (Scholer and Higgins, 2012). They generally trust knowledge that can be verified by data, a condition that tacit knowledge cannot fulfill (Li *et al.*, 2019). Therefore, these teams struggle to explore the new possibilities offered by tacit knowledge. A prevention focus can limit a team's ability to recognize the value of tacit knowledge and inhibit its capacity to exploit its potential completely. Gino and Pisano (2008) pointed out that a risk-averse mindset stifles creativity. When performing tasks that rely heavily on tacit knowledge, a team's strong prevention focus may result in dyssynergy.

In particular, the conservatism of prevention-focused teams may negate the

advantages of tacit knowledge. Tacit knowledge promotes learning through reflection and past experiences, as evidenced in project team learning contexts, which can assist in avoiding the repetition of mistakes (Goffin and Koners, 2011). On the one hand, prevention focus may lead NPD teams to utilize tacit knowledge to avert errors and negative outcomes rather than to foster innovative outputs. On the other hand, tacit knowledge enables resilient problem-solving methods based on intuition and experience (Goffin and Koners, 2011; Koskinen, 2000). However, these approaches contrast with prevention-focused teams that favor tried and tested methods as well as established routines (Li *et al.*, 2019). By being overly cautious, prevention-focused NPD teams may undervalue constructive insights gained from the tacit knowledge of creative ideation. This leads to the further underutilization of this knowledge.

Overall, a prevention-focused team's inherent risk aversion and conservatism may confine its ability to exploit tacit knowledge. Edmondson and Moingeon (1999) observed that cultures that discourage experimentation and risk taking stifle the application of tacit knowledge, precipitating a rapid decline in product novelty. The idiosyncrasies of tacit knowledge appear to clash with prevention-focused teams' emphasis on established practices. Consequently, it is difficult for these teams to translate their tacit knowledge into novel product concepts. In essence, NPD teams dominated by a prevention focus are unable to realize the full potential of tacit knowledge, which substantially diminishes the generation of NPN. Hence, we speculate the following hypothesis:

Hypothesis 5. The degree of tacitness of the knowledge used by an NPD team negatively moderates the inverted U-shaped relationship between team prevention focus and NPN. When the level of tacitness increases, the rate of NPN growth associated with rising team prevention focus slows down, while the rate of NPN decline accelerates.

3. Methodology

3.1 Sampling and data

We adopted a cross-sectional survey to collect data on NPD projects in IT firms. A sample of 300 firms was systematically and randomly selected from the Taiwan Manufacturing Business Directory published by the China Credit Information Service, Ltd. We chose the Taiwanese IT industry for two reasons. First, the industry is characterized by short product life cycles and rapidly evolving technologies, compelling firms to intensively engage in innovation and NPD activities to keep pace with these changes. Second, Taiwanese IT products have significant global market dominance across various categories. For example, Taiwan holds over 60% of the global chipmaking market share (The Economist, 2023). Therefore, the Taiwanese IT industry is an ideal context for providing empirical insights into NPD activities.

The unit of analysis was the NPD project team. We initiated contact with a preliminary informant in each firm, typically a manager from the R&D, engineering, marketing, or product departments. Their role was to facilitate cooperation and identify eligible NPD projects, along with two key informants: a project leader and a member directly involved in each project. Two key criteria guided the selection of the NPD projects. First, only projects completed and launched within the past two years were included. This timeframe minimized recall bias and promoted data accuracy (Miller *et al.*, 1997). Second, only products commercialized and introduced to the market at least six months prior to the assessment were considered. This ensured a more precise evaluation of the NPD performance. Finally, 256 eligible projects from 112 companies were selected.

To ensure the questionnaires' cultural relevance and accuracy in the Taiwanese context, we conducted the standard back-translation procedure. First, two independent translators with extensive experience translated the English questionnaires into Chinese. Second, these Chinese versions were back-translated by different professionals to ensure conceptual equivalence. To guarantee consistency with the original instrument and its meaning, the

back-translated English versions were meticulously compared with the initial questionnaires. Finally, for further validation, the questionnaires were pretested with a group of 15 managers actively involved in NPD projects. Their valuable feedback was instrumental in refining the measures and tailoring them to the specific nuances of the Taiwanese context.

To mitigate the potential effects of common method variance, we employed two structured questionnaires. The project leaders received a questionnaire encompassing all research constructs except for knowledge tacitness. However, the team members only received questions related to this construct. This distinction capitalizes on project leaders' broader oversight, enabling them to provide more objective insights into team members' behavior (Akgün *et al.*, 2007; Kumar *et al.*, 1993). To promote participation, we assured all respondents that their responses would be kept completely confidential and reported only in aggregate form. Additionally, as a token of appreciation for their time, each participant received a summary of the study findings. We gathered 137 valid combined questionnaires across 137 NPD projects (96 firms) after excluding 18 questionnaires because of missing data. The effective response rate was 54% (137/256).

The final sample comprised 137 NPD teams (274 team members) from 96 Taiwanese IT firms operating in several industries, including electronic parts and components ($n = 25$), communications and the Internet ($n = 7$), computer and peripheral equipment ($n = 29$), optoelectronics ($n = 14$), and semiconductors ($n = 21$). Regarding firm size, 40% of the companies had fewer than 1,000 employees, 52% had between 1,001 and 10,000 employees, and 8% had more than 10,000 employees. The respondents were predominantly male (79%). Approximately 61% of the participants were 21–30 years old, 36% were 31–40, and 3% were over 40. The vast majority of participants (87%) held a bachelor's degree or higher. In terms of organizational tenure, 85% had served for less than 5 years, 13% for 6–10 years, and the remaining 2% for 11 years or more.

3.2 Measures

3.2.1 Knowledge tacitness

Knowledge tacitness has been operationalized as the extent to which the knowledge involved in an NPD project is not systematically organized, structured, or documented as the knowledge base of the business unit (Kim *et al.*, 2013; Kogut and Zander, 1993). Following Kim *et al.* (2013), a four-item, 6-point Likert-type scale was used to assess the degree of knowledge tacitness. An example item is “The knowledge that we used in this project was not systematically structured.”

3.2.2 Team promotion focus and prevention focus

Two 7-point scales that include 10 items were used to gauge promotion focus (5 items) and prevention focus (5 items). Scales for team promotion and prevention foci were developed and validated by Owens and Hekman (2016) and Hundeling *et al.* (2021), respectively. The ratings were averaged for each dimension to generate separate scores for team promotion and prevention foci.

3.2.3 New product novelty

Following Im and Workman (2004), we employed a four-item 6-point scale to gauge the extent of the newness of the product. A sample item is “Compared with your competitors, the new product you developed can be considered revolutionary.”

3.2.4 Control variables

Four variables were selected as the control variables. Following prior NPD research (Kim *et al.*, 2013), we included firm and team sizes as the control variables in the model. Larger organizations generally possess greater slack resources to bolster innovation and NPD initiatives (Bartsch *et al.*, 2013). Firm size was calculated as the natural logarithm of the total number of full-time employees. Additionally, we controlled for functional diversity, measured as the

number of functional areas represented by the NPD team. Including a diverse range of functional specialties within a team broadens perspectives and fuels innovativeness (Moorman and Miner, 1997; Ratcheva, 2009), but it can complicate the creative process by requiring additional effort to reconcile disparate viewpoints (Chi *et al.*, 2009). Finally, R&D intensity represents a firm's internal absorptive capacity, which affects its innovative output (Cohen and Levinthal, 1990). This variable was calculated by dividing a firm's R&D expenditure by its sales.

3.3 Common method variance

Common method variance is a pervasive problem in survey research. To alleviate its potential effect, we performed ex-ante measures by gathering data from project team leaders and members and employing different Likert scales to gauge the constructs (Podsakoff *et al.*, 2003; Raineri, 2017). In addition, the control variables used objective measures rather than subjective assessments, making the data relatively free of methodological bias. The curvilinear nature of our hypotheses, unlike the linear ones, minimizes the risk of respondents inferring the study's objectives and potentially responding in a socially desirable way (Doty *et al.*, 1993; Evans, 1985). Consequently, common method variance is unlikely to have biased our results.

3.4 Confirmatory factor analysis

We drew on the two-step approach delineated by Anderson and Gerbing (1988), which commenced with a confirmatory factor analysis before hypothesis testing. We began our analysis by estimating a four-factor measurement model. Items with standardized factor loadings below 0.5 were excluded. This resulted in a streamlined model with 15 items. The final purified model demonstrated satisfactory fit indices: normed chi-square = 1.29 (108.17/84), RMSEA = 0.02, SRMR = 0.04, IFI = 0.99, NNFI = 0.98, CFI = 0.99, and NFI = 0.94. These indices suggested that the model provided a reasonable fit to the data, validating its appropriateness for testing the proposed hypotheses. The reliability and

validity of the measures were assessed using Fornell and Larcker's (1981) stringent criterion. The confirmatory factor analysis showed that the composite reliabilities (knowledge tacitness = 0.94, team promotion focus = 0.89, team prevention focus = 0.91, and NPN = 0.94) were above the widely accepted threshold of 0.7, thus demonstrating strong reliability. Each of the indicators loaded significantly onto its original construct ($p < 0.01$). The average variance extracted values (AVE), which ranged between 0.71 and 0.81 (knowledge tacitness = 0.79, team promotion focus = 0.72, team prevention focus = 0.71, NPN = 0.81), exceeded the level of 0.5. Thus, all constructs exhibited convergent validity. Discriminant validity was established by verifying whether the shared variances between the pairs of constructs were lower than the AVE estimates for individual constructs (Fornell and Larcker, 1981). The shared variances between the pairs of all possible scale combinations ranged from 0 to 0.28, which were below the AVE estimates for each construct (0.71 ~ 0.81). Thus, the criterion for discriminant validity was met.

4. Analysis and results

Table 1 presents the descriptive statistics and correlations. To test the hypotheses, a hierarchical regression analysis was employed. Following Aiken *et al.* (1991), both independent and moderating variables were mean-centered. This approach aims to minimize the threat of multicollinearity in the equations in which the interaction terms are generated. The variance inflation factors for each coefficient in the regression models were meticulously assessed. The maximum variance inflation factor was 2.12, which was below the suggested threshold of 10. This indicated that multicollinearity did not pose significant issues in the analysis.

Hypothesis 1 posited that the relationship between team promotion focus and NPN would follow an inverted U-shaped curve. In Table 2, Model 2 showed that the coefficient of team promotion focus was not significant ($\beta = 0.09$, $t = 0.76$, n.s.), whereas the coefficient of the squared term of team promotion focus was negatively significant ($\beta = -0.42$, $t = -3.54$, $p < 0.01$). Hence, the focal

relationship had an inverted U-shape, which supported Hypothesis 1.

Table 1
Correlation matrix and descriptive statistics

Variable	1	2	3	4	5	6	7	8
1. Firm size ^a								
2. Team Size	−0.17							
3. R&D intensity	0.19	−0.03						
4. Functional diversity	−0.16	−0.35	−0.02					
5. Team promotion focus	0.16	0.05	0.43	0.01	<i>0.52</i>			
6. Team prevention focus	−0.12	−0.13	−0.46	0.01	−0.53	<i>0.50</i>		
7. Knowledge tacitness	−0.02	0.06	0.16	0.03	0.23	−0.38	<i>0.62</i>	
8. NPN	0.08	0.01	0.26	0.09	0.17	−0.46	0.33	<i>0.66</i>
Mean	2.89	18.68	3.39	3.36	3.59	3.87	4.17	3.43
Standard deviation	0.74	15.60	0.84	0.70	0.72	0.58	0.62	0.94

Note. Correlations above 0.16 are significant at $p < 0.05$ level (two-tailed test).
Italic figures on the diagonal are the AVE square root for the constructs. N=137.

^a Logarithm of the number of employees.

Hypothesis 2 predicted that team prevention focus would have an inverted U-shaped relationship with NPN. Model 2 revealed that the coefficient of team prevention focus was negatively significant ($\beta = -0.82$, $t = -7.74$, $p < 0.001$), but the coefficient of the squared term of team prevention focus was not significant ($\beta = -0.17$, $t = -1.35$, n.s.). Thereby, Hypothesis 2 was not supported.

Hypothesis 3 postulated that knowledge tacitness would exert a positive effect on NPN. Model 2 reported that knowledge tacitness was significantly and positively related to NPN ($\beta = 0.38$, $t = 3.03$, $p < 0.01$), supporting Hypothesis 3.

Hypothesis 4 concerned whether knowledge tacitness would moderate the relationship between team promotion focus and NPN. In Table 2, Model 5 confirmed that the interaction between knowledge tacitness and the linear term of team promotion focus was not significant ($\beta = -0.28$, $t = -1.40$, n.s.).

Conversely, the interaction between knowledge tacitness and the squared team promotion focus was positively significant ($\beta = 0.41$, $t = 2.28$, $p < 0.05$). We followed the “quadratic effects with one moderator” tool provided by Dawson (2014) to graph this result in Figure 2. The conventional approach of plotting

Table 2
Moderated regression analysis

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	-1.37 (1.41)	2.84* (1.47)	2.78† (1.46)	2.91* (1.46)	2.73† (1.43)
Control variables					
Firm size	0.08 (0.12)	0.06 (0.10)	0.06 (0.10)	0.04 (0.10)	0.04 (0.10)
Team size	0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
R&D intensity	36.18** (12.11)	4.08 (12.23)	4.71 (11.95)	5.37 (12.18)	6.72 (11.95)
Functional diversity	0.14 (0.11)	0.06 (0.09)	0.07 (0.09)	0.03 (0.09)	0.05 (0.09)
Independent variables					
Team promotion focus		0.09 (0.12)	0.16 (0.12)	0.05 (0.12)	0.12 (0.12)
Team promotion focus ²		-0.42** (0.12)	-0.54*** (0.12)	-0.42** (0.12)	-0.56*** (0.12)
Team prevention focus		-0.66** (0.19)	-0.82*** (0.19)	-0.66** (0.19)	-0.66** (0.15)
Team prevention focus ²		-0.11 (0.16)	-0.23 (0.13)	-0.11 (0.16)	-0.11 (0.16)
Knowledge tacitness (KT)		0.31* (0.15)	0.13 (0.15)	0.31* (0.15)	0.15 (0.17)
Moderating effects					
KT × Team promotion focus			-0.80 (0.16)		-0.28 (0.20)
KT × Team promotion focus ²			0.49** (0.17)		0.41* (0.18)
KT × Team prevention focus				0.29 (0.21)	0.43† (0.25)
KT × Team prevention focus ²				0.29 (0.20)	0.19 (0.21)
F	2.92*	7.86***	7.58***	6.85***	6.75***
Adj. R2	0.06	0.32	0.41	0.38	0.42
ΔR^2		0.28	0.04	0.02	0.04
F for ΔR^2		10.91***	4.40*	1.83	4.21*

Note. Standard errors are in parentheses. N=137

†p<0.1, *p<0.05, ** p<0.01, ***p<0.001

interaction effects at ± 1 standard deviation of the moderator captures approximately 68% of the sample distribution (Aiken *et al.*, 1991). The results revealed that knowledge tacitness altered the inverted U-shaped form by shifting the curve upward. As shown in the graph, the curve for high knowledge tacitness (dashed red line) was positioned consistently higher than the curve for low knowledge tacitness (solid blue line). In this case, even when the range was expanded to ± 3 standard deviations to encompass 99.7% of the sample, the original inverted U-shaped relationship and relative positioning of the high and low tacit knowledge groups were robust and without distortion. At any given level of team promotion focus, the high tacit knowledge group consistently demonstrated greater NPN than its low knowledge counterpart. This pattern provided visual support for Hypothesis 4. Finally, Hypothesis 5 speculated that knowledge tacitness would moderate the relationship between team prevention focus and NPN. Model 3 demonstrated that its interaction term with the squared team prevention focus was nonsignificant ($\beta = 0.19$, $t = 0.93$, n.s.), which contradicted Hypothesis 5.

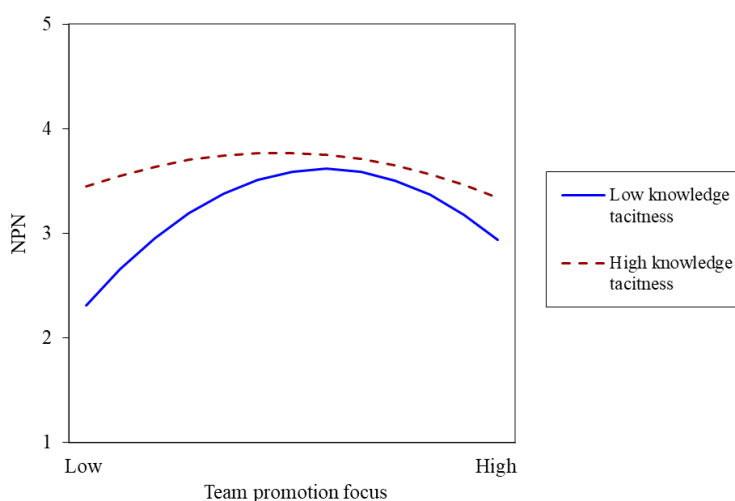


Figure 2

The moderating effect of knowledge tacitness on the relationship between team promotion focus and NPN

5. Discussion and Conclusions

5.1 Theoretical implications

This study delves into the synergistic effects of team regulatory focus and knowledge on NPN, making several noteworthy contributions to the literature. It bridges two distinct areas of organizational research: teams' motivational orientation and tacit knowledge in creative processes. Prior research has examined these domains separately: team regulatory focus in relation to goal achievement and innovative performance (Lai *et al.*, 2018; Li *et al.*, 2019) and tacit knowledge as a facilitator of organizational learning and NPN (Goffin and Koners, 2011; Kim *et al.*, 2013; Swift *et al.*, 2010). By revealing the interplay between these elements and their influence on NPN, this study offers a holistic understanding of the multifaceted drivers of innovation within NPD teams. It extends motivational theory to organizational settings by demonstrating how a team's collective focus can shape the way tacit knowledge is utilized and transformed into NPN.

The inverted U-shaped relationship between team promotion focus and NPN has intriguing implications for academia. The findings deepen our understanding of how regulatory focus influences organizational behavior and innovation. Prior research has primarily explored linear effects, but our work unveils a more nuanced dynamic, with a moderate level of regulatory focus being the most beneficial for NPN in NPD teams. This resonates with the viewpoint of regulatory focus theorists (Scholer and Higgins, 2012; Shin *et al.*, 2016), who argued that promotion focus facilitates creativity and innovation only when its detrimental impacts are effectively suppressed. They warned that team leaders should not focus solely on the innovative potential of this regulatory focus while overlooking the risks associated with an excessively high level. Our results offer empirical support for these arguments.

Our findings indicated that the relationship between team prevention focus and NPN was linearly negative, as opposed to the expected inverted U-shape. It is plausible that the inherent nature of prevention focus conflicts with the rapid

prototyping and fail-fast mentalities typical of the IT industry (Li *et al.*, 2019). This result is in accordance with the finding that groups' prevention focus is negatively related to their creativity (Lee *et al.*, 2019). Nonetheless, some evidence indicates a nonsignificant linear relationship between team prevention focus and creative outcomes (Li *et al.*, 2019; Shin *et al.*, 2016). Hirst *et al.* (2009) and Miron-Spektor *et al.* (2022) proposed that this relationship may exhibit an exponential or inverted U-shaped form. Accordingly, we cannot exclude the likelihood of a curvilinear relationship between team prevention focus and NPN. This issue can be addressed by reexamining it in a different industrial context.

Regarding the nonsignificant interaction between team prevention focus and knowledge tacitness, we offer a possible explanation. Although tacit knowledge is instrumental in NPN, the cognitive processing modes of prevention-focused teams appear to attenuate these benefits. Individuals with a strong prevention focus tend to trust and excel at utilizing structured knowledge. This cognitive processing mode may inhibit the team's ability to capitalize on tacit knowledge. In addition, the application of technical tacit knowledge is contingent on procedural knowhow (Simonin, 1999), which is generally withheld by prevention-focused team members (Guo *et al.*, 2022). Thus, teams in a prevention-focused state are likely to implicitly underutilize tacit knowledge that cannot be easily verified through logic or data. In such circumstances, tacit knowledge fails to benefit intuitive judgment and flexible troubleshooting, thereby impeding NPN generation. Ultimately, the two coexist without interacting.

Our findings provide compelling evidence that a team's promotion focus and tacit knowledge can work synergistically to expedite the generation of NPN. This aligns with Johnson *et al.* (2010) and Swift *et al.* (2010), who asserted the interplay between knowledge tacitness and promotion focus in organizational learning. It also echoes recent studies on innovation management, such as Lin *et al.* (2023), who investigated how tacit or explicit knowledge and motivation orientations affect innovation performance.

5.2 Practical implications

From a practical standpoint, our findings suggest that NPD teams that achieve an optimum level of promotion focus outperform those with consistently low or high levels of overall NPN. Furthermore, the effective utilization of tacit knowledge complements team promotion focus in enhancing NPN. Given that regulatory focus is a situational factor that can be intentionally evoked (Wu *et al.*, 2008), practitioners should cultivate an environment that leverages tacit knowledge and elicits team promotion focus. First, project leaders must identify an optimal team promotion focus by carefully arranging team members with complementary skills and shaping a culture that encourages experimental, risk-taking, and goal-driven behaviors to ensure that the team's motivational focus aligns with the desired outcomes. Second, they should center on promoting discussions on experiences and intuitive insights as well as fostering close collaborations where tacit knowledge can be effectively exchanged and applied. This may involve implementing mentorship programs, holding collaborative problem-solving sessions, and facilitating informal knowledge-sharing networks. This evidence highlights the importance of aligning team composition and leadership styles with the goal of optimizing the use of tacit knowledge to enhance NPN.

Our results offer guidance for developing employee training programs and evaluation criteria aimed at leveraging tacit knowledge and crafting an adequate team promotion focus. By training teams to effectively tap into and use their collective tacit knowledge, organizations can better navigate the challenges of innovation in risk-averse environments. Team members should be equipped to identify and harness untapped tacit knowledge within their teams and align it with a promotion-focused approach to creative thoughts. Tacit knowledge is embedded in practical experience and is not acquired through systematic or formal training. Hence, an NPD project team that aims to attain superior NPN requires team members with abundant practical experience and an appropriate level of promotion focus. When selecting or assigning individuals to teams,

managers should establish criteria that integrate these factors for hiring and performance evaluations. Team leaders who incorporate this focus into their recruitment criteria pave the way for teams that excel in creativity while remaining mindful of practical limitations. The process begins with the formulation of specific hiring criteria that encapsulate both aspirational and pragmatic aspects of the job role. These criteria include attributes such as adaptability, problem-solving skills, a track record of measured risk-taking, and the demonstrated ability to balance long-term goals with short-term realities. In the interview and assessment process, leaders can employ behavioral and situational questions, along with practical simulations, to gauge candidates' alignment with these criteria. This method ensures that the selected team members are not driven purely by the lure of success and advancement but also possess the acumen to foresee and navigate potential challenges and risks.

5.3 Limitations and future research

This study had some limitations that offer promising directions for future research. First, the participants worked on successful projects at Taiwanese IT firms. This sample may limit the generalizability of our findings to other industries and regions. For example, Millson (2015) noted that curvilinear relationships may be context- or industry-specific. Although our results are relevant to other volatile, hypercompetitive environments, the specific relationships found may vary across industries or cultural contexts. Future research should examine this issue using a broader sample. Second, the cross-sectional data restricted our ability to draw causal inferences from the hypothesized model. Given that some observed effects may be longitudinal, future studies employing a longitudinal design could yield valuable insights. For instance, the positive effect of knowledge tacitness on NPN may change over time when NPD teams progressively prefer to utilize tacit knowledge (Kim *et al.*, 2013). Third, while this study narrowly focused on NPN, future research should broaden the framework to encompass other creative outcomes and their corresponding moderators. Fourth, NPN can be measured at the team and

corporate level. Cooper and Kleinschmidt (1995) advised that success at the organizational or business unit level may not necessarily translate into success at the individual project level. Therefore, the findings presented herein should be applied at the firm level with caution.

Fifth, our model omitted the intervening mechanisms that underpin the focal relationships. Exploring processes such as team learning, knowledge integration, and team psychological safety may enhance the model's explanatory power. By empirically testing these mechanisms, subsequent research could offer a more process-oriented theory of team creativity, thereby generating more granular practical and theoretical implications. Finally, our analysis did not address potential boundary conditions such as team compositional characteristics (e.g., diversity and homogeneity) and internal dynamics (e.g., cooperation, competition, and coopetition) (Baruch and Lin, 2012; Cox *et al.*, 1991). These factors may alter the interplay between a team's collective regulatory focus and its use of tacit knowledge (Dimotakis *et al.*, 2012). Examining the moderating effects of these team attributes would be a fruitful extension of this research.

References

- Adomako, S. (2017). CEOs' regulatory foci and firm-level product innovativeness in competitive environments. *Journal of Business and Industrial Marketing*, 32(5), 640–651.
- Ahmadi, S., Khanagha, S., Berchicci, L., and Jansen, J. J. (2017). Are managers motivated to explore in the face of a new technological change? The role of regulatory focus, fit, and complexity of decision-making. *Journal of Management Studies*, 54(2), 209–237.
- Aiken, L. S., West, S. G., and Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Akgün, A. E., Byrne, J. C., Lynn, G. S., and Keskin, H. (2007). New product development in turbulent environments: Impact of improvisation and unlearning on new product performance. *Journal of Engineering and Technology Management*, 24(3), 203–230.

- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., and Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154–1184.
- Anderson, J. C., and Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423.
- Barthélemy, J. (2008). Opportunism, knowledge, and the performance of franchise chains. *Strategic Management Journal*, 29(13), 1451-1463.
- Bartsch, V., Ebers, M., and Maurer, I. (2013). Learning in project-based organizations: The role of project teams' social capital for overcoming barriers to learning. *International Journal of Project Management*, 31(2), 239–251.
- Baruch, Y., and Lin, C. P. (2012). All for one, one for all: Coopetition and virtual team performance. *Technological Forecasting and Social Change*, 79(6), 1155-1168.
- Beersma, B., Homan, A. C., Van Kleef, G. A., and De Dreu, C. K. (2013). Outcome interdependence shapes the effects of prevention focus on team processes and performance. *Organizational Behavior and Human Decision Processes*, 121(2), 194-203.
- Berman, S. L., Down, J., and Hill, C. W. (2002). Tacit knowledge as a source of competitive advantage in the National Basketball Association. *Academy of Management Journal*, 45(1), 13-31.
- Bicen, P., Kamarudin, S., and Johnson, W. H. (2014). Validating new product creativity in the eastern context of Malaysia. *Journal of Business Research*, 67(1), 2877-2883.
- Blank, T. H., and Naveh, E. (2018). Competition and complementation of exploration and exploitation and the achievement of radical innovation: The moderating effect of learning behavior and promotion focus. *IEEE Transactions on Engineering Management*, 66(4), 598-612.
- Boldero, J. M., and Higgins, E. T. (2011). Regulatory focus and political decision making: When people favor reform over the status quo. *Political*

Psychology, 32(3), 399-418.

- Brockner, J., and Higgins, E. T. (2001). Regulatory focus theory: Implications for the study of emotions at work. *Organizational Behavior and Human Decision Processes*, 86(1), 35-66.
- Burmeister-Lamp, K., Lévesque, M., and Schade, C. (2012). Are entrepreneurs influenced by risk attitude, regulatory focus or both? An experiment on entrepreneurs' time allocation. *Journal of Business Venturing*, 27(4), 456-476.
- Chandy, R. K., and Tellis, G. J. (1998). Organizing for radical product innovation: The overlooked role of willingness to cannibalize. *Journal of Marketing Research*, 35(4), 474-487.
- Chen, G., and Kanfer, R. (2006). Toward a systems theory of motivated behavior in work teams. *Research in Organizational Behavior*, 27, 223-267.
- Chen, I. J., Lee, Y., and Paulraj, A. (2014). Does a purchasing manager's need for cognitive closure (NFCC) affect decision-making uncertainty and supply chain performance? *International Journal of Production Research*, 52(23), 6878-6898.
- Chen, Y. R., Chung, T. S., Lin, C. H., and Low, A. (2024). When do stock options affect CEO risk-taking? The moderating role of CEO regulatory focus. *Journal of Business Finance and Accounting*, 51(7-8), 1724-1761.
- Chi, N. W., Huang, Y. M., and Lin, S. C. (2009). A double-edged sword? Exploring the curvilinear relationship between organizational tenure diversity and team innovation: The moderating role of team-oriented HR practices. *Group and Organization Management*, 34(6), 698-726.
- Chong, D. S., Van Eerde, W., Chai, K. H., and Rutte, C. G. (2010). A double-edged sword: The effects of challenge and hindrance time pressure on new product development teams. *IEEE Transactions on Engineering Management*, 58(1), 71-86.
- Chuang, F. M., Morgan, R. E., and Robson, M. J. (2015). Customer and competitor insights, new product development competence, and new product creativity: Differential, integrative, and substitution effects. *Journal*

- of Product Innovation Management*, 32(2), 175-182.
- Cohen, W. M., and Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Cooper, R. G., and Kleinschmidt, E. J. (1995). Benchmarking the firm's critical success factors in new product development. *Journal of Product Innovation Management*, 12(5), 374–391.
- Cox, T. H., Lobel, S. A., and McLeod, P. L. (1991). Effects of ethnic group cultural differences on cooperative and competitive behavior on a group task. *Academy of Management Journal*, 34(4), 827-847.
- Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, 29(1), 1–19.
- De Luca, L. M., and Atuahene-Gima, K. (2007). Market knowledge dimensions and cross-functional collaboration: Examining the different routes to product innovation performance. *Journal of Marketing*, 71(1), 95-112.
- Dimotakis, N., Davison, R. B., and Hollenbeck, J. R. (2012). Team structure and regulatory focus: The impact of regulatory fit on team dynamic. *Journal of Applied Psychology*, 97(2), 421-434.
- Doty, D. H., Glick, W. H., and Huber, G. P. (1993). Fit, equifinality, and organizational effectiveness: A test of two configurational theories. *Academy of Management Journal*, 36(6), 1196–1250.
- Drach-Zahavy, A., and Somech, A. (2001). Understanding team innovation: The role of team processes and structures. *Group Dynamics: Theory, Research, and Practice*, 5(2), 111–123.
- Duffy, M. K., Shaw, J. D., Scott, K. L., and Tepper, B. J. (2006). The moderating roles of self-esteem and neuroticism in the relationship between group and individual undermining behavior. *Journal of Applied Psychology*, 91(5), 1066–1077.
- Edmondson, A., and Moingeon, B. (1999). Learning, trust and organizational change. In M. Easterby-Smith, L. Araujo, and J. Burgoyne (Eds.), *Organizational learning and the learning organization* (pp. 157–175). Sage

Publications.

- Eisenhardt, K. M., and Santos, F. M. (2002). Knowledge-based view: A new theory of strategy. *Handbook of Strategy and Management*, 1(1), 139-164.
- Elliot, A. J., and Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72(1), 218-232.
- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, 36(3), 305–323.
- Florack, A., and Hartmann, J. (2007). Regulatory focus and investment decisions in small groups. *Journal of Experimental Social Psychology*, 43(4), 626-632.
- Fong, P. S. (2003). Knowledge creation in multidisciplinary project teams: An empirical study of the processes and their dynamic interrelationships. *International Journal of Project Management*, 21(7), 479–486.
- Fornell, C., and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Friedman, R. S., and Förster, J. (2001). The effects of promotion and prevention cues on creativity. *Journal of Personality and Social Psychology*, 81(6), 1001–1013.
- Gino, F., and Pisano, G. (2008). Toward a theory of behavioral operations. *Manufacturing and Service Operations Management*, 10(4), 676–691.
- Goffin, K., and Koners, U. (2011). Tacit knowledge, lessons learnt, and new product development. *Journal of Product Innovation Management*, 28(2), 300–318.
- Gupta, A. K., and Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal*, 21(4), 473-496.
- Guo, M., Brown, G., and Zhang, L. (2022). My knowledge: The negative impact of territorial feelings on employee's own innovation through knowledge hiding. *Journal of Organizational Behavior*, 43(5), 801-817.

- Gurteen, D. (1998). Knowledge, creativity and innovation, *Journal of Knowledge Management*, 2(1), 5–13.
- Hargadon, A., and Fanelli, A. (2002). Action and possibility: Reconciling dual perspectives of knowledge in organizations. *Organization Science*, 13(3), 290-302.
- Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, 52(12), 1280–1300.
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology*, 30, 1–46.
- Higgins, E. T. (2000). Making a good decision: value from fit. *American Psychologist*, 55(11), 1217–1230.
- Higgins, E. T. (2002). How self-regulation creates distinct values: The case of promotion and prevention decision making. *Journal of Consumer Psychology*, 12(3), 177-191.
- Higgins, E. T., and Spiegel, S. (2004). Promotion and prevention strategies for self-regulation. *Handbook of Self-Regulation: Research, Theory, and Applications*, 171-187.
- Hirst, G., Van Knippenberg, D., and Zhou, J. (2009). A cross-level perspective on employee creativity: Goal orientation, team learning behavior, and individual creativity. *Academy of Management Journal*, 52(2), 280–293.
- Hult, G. T. M., Hurley, R. F., and Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*, 33(5), 429-438.
- Hundeling, M., Auerswald, M., and Rosing, K. (2021). Team regulatory focus and its role for idea generation, idea implementation, and innovative performance: A dynamic perspective. *The Journal of Creative Behavior*, 55(4), 984-1003.
- Im, S., Bhat, S., and Lee, Y. (2015). Consumer perceptions of product creativity, coolness, value and attitude. *Journal of Business Research*, 68(1), 166-172.
- Im, S., Montoya, M. M., and Workman, J. P. Jr. (2013). Antecedents and

- consequences of creativity in product innovation teams. *Journal of Product Innovation Management*, 30(1), 170–185.
- Im, S., and Workman, J. P. Jr. (2004). Market orientation, creativity, and new product performance in high-technology firms. *Journal of Marketing*, 68(2), 114–132.
- Jansen, J. J., Kostopoulos, K. C., Mihalache, O. R., and Papalexandris, A. (2016). A socio-psychological perspective on team ambidexterity: The contingency role of supportive leadership behaviours. *Journal of Management Studies*, 53(6), 939–965.
- Jin, J. L., Shu, C., and Zhou, K. Z. (2019). Product newness and product performance in new ventures: Contingent roles of market knowledge breadth and tacitness. *Industrial Marketing Management*, 76, 231–241.
- Johannessen, J. A., Olsen, B., and Olaisen, J. (1997). Organizing for innovation. *Long Range Planning*, 30(1), 96–107.
- Johnson, P. D., Smith, M. B., Wallace, J. C., Hill, A. D., and Baron, R. A. (2015). A review of multilevel regulatory focus in organizations. *Journal of Management*, 41(5), 1501–1529.
- Johnson, R. E., Chang, C. H., and Yang, L. Q. (2010). Commitment and motivation at work: The relevance of employee identity and regulatory focus. *Academy of Management Review*, 35(2), 226–245.
- Johnson, R. E., King, D. D., Lin, S. H. J., Scott, B. A., Walker, E. M. J., and Wang, M. (2017). Regulatory focus trickle-down: How leader regulatory focus and behavior shape follower regulatory focus. *Organizational Behavior and Human Decision Processes*, 140, 29–45.
- Kim, N., Im, S., and Slater, S. F. (2013). Impact of knowledge type and strategic orientation on new product creativity and advantage in high-technology firms. *Journal of Product Innovation Management*, 30(1), 136–153.
- Kogut, B., and Zander, U. (1993). Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 24(4), 625–645.
- Koskinen, K. U. (2000). Tacit knowledge as a promoter of project success.

- European Journal of Purchasing and Supply Management*, 6(1), 41–47.
- Koumbarakis, P., Bergmann, H., and Volery, T. (2021). The impact of founder's regulatory focus on the process of firm birth and firm abandonment. *Management Decision*, 59(5), 919–937.
- Kratzer, J., Leenders, R. T. A., and Van Engelen, J. M. (2010). The social network among engineering design teams and their creativity: A case study among teams in two product development programs. *International Journal of Project Management*, 28(5), 428–436.
- Kumar, N., Stern, L. W., and Anderson, J. C. (1993). Conducting interorganizational research using key informants. *Academy of Management Journal*, 36(6), 1633–1651.
- Lai, C. Y., Hsu, J. S. C., and Li, Y. (2018). Leadership, regulatory focus and information systems development project team performance. *International Journal of Project Management*, 36(3), 566–582.
- Lam, T. W. H., and Chiu, C. Y. (2002). The motivational function of regulatory focus in creativity. *The Journal of Creative Behavior*, 36(2), 138–150.
- Lechner, A. T., and Mathmann, F. (2021). Bringing service interactions into focus: Prevention-versus promotion-focused customers' sensitivity to employee display authenticity. *Journal of Service Research*, 24(2), 284–300.
- Lecuona, J. R., and Reitzig, M. (2014). Knowledge worth having in 'excess': The value of tacit and firm-specific human resource slack. *Strategic Management Journal*, 35(7), 954–973.
- Lee, A. Y., and Aaker, J. L. (2004). Bringing the frame into focus: The influence of regulatory fit on processing fluency and persuasion. *Journal of Personality and Social Psychology*, 86(2), 205–218.
- Lee, E. S., Park, T. Y., and Paik, Y. (2019). Does shared group identification lead to group creativity? Group regulatory focus as a moderator. *Journal of Applied Social Psychology*, 49(2), 117–129.
- Leonard, D., and Sensiper, S. (1998). The role of tacit knowledge in group innovation. *California Management Review*, 40(3), 112–132.
- Levine, J. M., Higgins, E. T., and Choi, H. S. (2000). Development of strategic

- norms in groups. *Organizational Behavior and Human Decision Processes*, 82(1), 88–101.
- Li, C. R., Lin, C. J., and Liu, J. (2019). The role of team regulatory focus and team learning in team radical and incremental creativity. *Group and Organization Management*, 44(6), 1036–1066.
- Li, C. R., Yang, Y., Lin, C. J., and Xu, Y. (2021). Within-person relationship between creative self-efficacy and individual creativity: The mediator of creative process engagement and the moderator of regulatory focus. *The Journal of Creative Behavior*, 55(1), 63–78.
- Lin, S. H. J., and Johnson, R. E. (2015). A suggestion to improve a day keeps your depletion away: Examining promotive and prohibitive voice behaviors within a regulatory focus and ego depletion framework. *Journal of Applied Psychology*, 100(5), 1381–1397.
- Lin, X., Lu, L., Ozer, M., and Tang, H. (2023). Am I motivated to share knowledge for better innovative performance? An approach and avoidance framework. *Journal of Applied Psychology*, 108(1), 138–151.
- Luo, Y., Sun, J., and Wang, S. L. (2011). Emerging economy copycats: Capability, environment, and strategy. *Academy of Management Perspectives*, 25(2), 37–56.
- Marks, M. A., Mathieu, J. E., and Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of Management Review*, 26(3), 356–376.
- Menkhoff, L., Schmidt, U., and Brozynski, T. (2006). The impact of experience on risk taking, overconfidence, and herding of fund managers: Complementary survey evidence. *European Economic Review*, 50(7), 1753–1766.
- Miller, C. C., Cardinal, L. B., and Glick, W. H. (1997). Retrospective reports in organizational research: A reexamination of recent evidence. *Academy of Management Journal*, 40(1), 189–204.
- Millson, M. R. (2015). Exploring the nonlinear impact of organizational integration on new product market success. *Journal of Product Innovation*

Management, 32(2), 279–289.

- Miron-Spektor, E., and Beenen, G. (2015). Motivating creativity: The effects of sequential and simultaneous learning and performance achievement goals on product novelty and usefulness. *Organizational Behavior and Human Decision Processes*, 127, 53–65.
- Miron-Spektor, E., Vashdi, D. R., and Gopher, H. (2022). Bright sparks and enquiring minds: Differential effects of goal orientation on the creativity trajectory. *Journal of Applied Psychology*, 107(2), 310–327.
- Moorman, C., and Miner, A. S. (1997). The impact of organizational memory on new product performance and creativity. *Journal of Marketing Research*, 34(1), 91–106.
- Mu, J., Peng, G., and Love, E. (2008). Interfirm networks, social capital, and knowledge flow. *Journal of Knowledge Management*, 12(4), 86–100.
- Nakata, C., Rubera, G., Im, S., Pae, J. H., Lee, H. J., Onzo, N., and Park, H. (2018). New product creativity antecedents and consequences: Evidence from South Korea, Japan, and China. *Journal of Product Innovation Management*, 35(6), 939–959.
- Nguyen, M., Sharma, P., and Malik, A. (2024). Leadership styles and employee creativity: The interactive impact of online knowledge sharing and organizational innovation. *Journal of Knowledge Management*, 28(3), 631–650.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14–37.
- Ofek, E., and Turut, O. (2008). To innovate or imitate? Entry strategy and the role of market research. *Journal of Marketing Research*, 45(5), 575–592.
- O'Reilly, C. A., III, and Tushman, M. L. (2021). *Lead and disrupt: How to solve the innovator's dilemma*. Stanford University Press.
- Owens, B. P., and Hekman, D. R. (2016). How does leader humility influence team performance? Exploring the mechanisms of contagion and collective promotion focus. *Academy of Management Journal*, 59(3), 1088–1111.
- Pastor, J. C., and Baruffaldi, L. (2021). The role of regulatory focus on a

- peer-feedback process: A longitudinal study with MBA students. *Academy of Management Learning and Education*, 20(4), 539-561.
- Pérez-Luño, A., Alegre, J., and Valle-Cabrera, R. (2019). The role of tacit knowledge in connecting knowledge exchange and combination with innovation. *Technology Analysis and Strategic Management*, 31(2), 186-198.
- Pérez-Luño, A., Medina, C. C., Lavado, A. C., and Rodríguez, G. C. (2011). How social capital and knowledge affect innovation. *Journal of Business Research*, 64(12), 1369-1376.
- Pierce, J. R., and Aguinis, H. (2013). The too-much-of-a-good-thing effect in management. *Journal of Management*, 39(2), 313-338.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., and Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Raineri, A. (2017). Linking human resources practices with performance: The simultaneous mediation of collective affective commitment and human capital. *The International Journal of Human Resource Management*, 28(22), 3149-3178.
- Ratcheva, V. (2009). Integrating diverse knowledge through boundary spanning processes – The case of multidisciplinary project teams. *International Journal of Project Management*, 27(3), 206-215.
- Reagans, R., and McEvily, B. (2009). Network structure and knowledge transfer: The effects of cohesion and range. *Administrative Science Quarterly*, 54(2), 240-267.
- Rietzschel, E. F. (2011). Collective regulatory focus predicts specific aspects of team innovation. *Group Processes and Intergroup Relations*, 14(3), 337-345.
- Rook, L., and van Knippenberg, D. (2011). Creativity and imitation: Effects of regulatory focus and creative exemplar quality. *Creativity Research Journal*, 23(4), 346-356.

- Ruan, A., and Chen, J. (2017). Does formal knowledge search depth benefit Chinese firms' innovation performance? Effects of network centrality, structural holes, and knowledge tacitness. *Asian Journal of Technology Innovation*, 25(1), 79-97.
- Sacramento, C. A., Fay, D., and West, M. A. (2013). Workplace duties or opportunities? Challenge stressors, regulatory focus, and creativity. *Organizational Behavior and Human Decision Processes*, 121(2), 141–157.
- Scaringella, L., and Scaringella, M. (2025). Disentangling the human aspects of open innovation: The mediation of absorptive capacity and the moderation of knowledge tacitness. *Journal of Knowledge Management*, 29(6), 1914-1950.
- Scholer, A. A., and Higgins, E. T. (2012). Too much of a good thing? Trade-offs in promotion and prevention focus. In R. M. Ryan (Ed.), *The Oxford handbook of human motivation* (pp. 65–84). New York, NY: Oxford University Press.
- Scoresby, R. B., Withers, M. C., and Ireland, R. D. (2021). The effect of CEO regulatory focus on changes to investments in R&D. *Journal of Product Innovation Management*, 38(4), 401-420.
- Seibt, B., and Förster, J. (2004). Stereotype threat and performance: How self-stereotypes influence processing by inducing regulatory foci. *Journal of Personality and Social Psychology*, 87(1), 38–56.
- Sethi, R., and Iqbal, Z. (2008). Stage-gate controls, learning failure, and adverse effect on novel new products. *Journal of Marketing*, 72(1), 118-134.
- Sheng, M. L. (2019). Foreign tacit knowledge and a capabilities perspective on MNEs' product innovativeness: Examining source-recipient knowledge absorption platforms. *International Journal of Information Management*, 44, 154-163.
- Shin, Y. (2014). Positive group affect and team creativity: Mediation of team reflexivity and promotion focus. *Small Group Research*, 45(3), 337–364.
- Shin, Y., Kim, M., Choi, J. N., and Lee, S. H. (2016). Does team culture matter? Roles of team culture and collective regulatory focus in team task and

- creative performance. *Group and Organization Management*, 41(2), 232–265.
- Simonin, B. L. (1999). Ambiguity and the process of knowledge transfer in strategic alliances. *Strategic Management Journal*, 20(7), 595-623.
- Spanjol, J., and Tam, L. (2010). To change or not to change: how regulatory focus affects change in dyadic decision-making. *Creativity and Innovation Management*, 19(4), 346-363.
- Spanjol, J., Tam, L., Qualls, W. J., and Bohlmann, J. D. (2011). New product team decision making: Regulatory focus effects on number, type, and timing decisions. *Journal of Product Innovation Management*, 28(5), 623-640.
- Subramaniam, M., and Venkatraman, N. (2001). Determinants of transnational new product development capability: Testing the influence of transferring and deploying tacit overseas knowledge. *Strategic Management Journal*, 22(4), 359–378.
- Swift, M., Balkin, D. B., and Matusik, S. F. (2010). Goal orientations and the motivation to share knowledge. *Journal of Knowledge Management*, 14(3), 378–393.
- Swink, M., Talluri, S., and Pandejpong, T. (2006). Faster, better, cheaper: A study of NPD project efficiency and performance tradeoffs. *Journal of Operations Management*, 24(5), 542-562.
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17(S2), 27-43.
- Taggar, S. (2002). Individual creativity and group ability to utilize individual creative resources: A multilevel model. *Academy of Management Journal*, 45(2), 315–330.
- Tellis, G. J., Prabhu, J. C., and Chandy, R. K. (2009). Radical innovation across nations: The preeminence of corporate culture. *Journal of Marketing*, 73(1), 3–23.
- The Economist. (2023, March 6). Taiwan's dominance of the chip industry makes it more important. *The Economist*. Retrieved from <https://www.>

- economist.com/special-report/2023/03/06/taiwans-dominance-of-the-chip-industry-makes-it-more-important.
- Tuncdogan, A., Van Den Bosch, F., and Volberda, H. (2015). Regulatory focus as a psychological micro-foundation of leaders' exploration and exploitation activities. *The Leadership Quarterly*, 26(5), 838–850.
- Tyler, T. R. (2011). *Why people cooperate: The role of social motivations*. Princeton, N.J.: Princeton University Press.
- van Knippenberg, D. (2017). Team innovation. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 211–233.
- Wallace, J. C., Johnson, P. D., and Frazier, M. L. (2009). An examination of the factorial, construct, and predictive validity and utility of the regulatory focus at work scale. *Journal of Organizational Behavior*, 30(6), 805–831.
- Weiss, M., Hoegl, M., and Gibbert, M. (2013). The influence of material resources on innovation projects: The role of resource elasticity. *R&D Management*, 43(2), 151–161.
- Wong, W. L. P., and Radcliffe, D. F. (2000). The tacit nature of design knowledge. *Technology Analysis and Strategic Management*, 12(4), 493–512.
- Wu, C., McMullen, J. S., Neubert, M. J., and Yi, X. (2008). The influence of leader regulatory focus on employee creativity. *Journal of Business Venturing*, 23(5), 587–602.
- Wu, L. W., and Lin, J. R. (2013). Knowledge sharing and knowledge effectiveness: learning orientation and co-production in the contingency model of tacit knowledge. *Journal of Business and Industrial Marketing*, 28(8), 672–686.
- Yoon, Y., Sarial-Abi, G., and Gürhan-Canli, Z. (2012). Effect of regulatory focus on selective information processing. *Journal of Consumer Research*, 39(1), 93–110.
- Zaal, M. P., Van Laar, C., Ståhl, T., Ellemers, N., and Derks, B. (2015). “Self-promotion”: How regulatory focus affects the pursuit of self-interest at the expense of the group. *European Journal of Social Psychology*, 45(5), 587–598.

- Zhao, D., Tang, N., Hai, S., and Zhao, L. (2025). Dual effects of AI-enabled job non-routinization on creativity: The moderating role of tacit knowledge awareness. *Journal of Business Research*, 198, 115482.
- Zhou, Q., Hirst, G., and Shipton, H. (2012). Context matters: Combined influence of participation and intellectual stimulation on the promotion focus–employee creativity relationship. *Journal of Organizational Behavior*, 33(7), 894–909.
- Zivnuska, S., Kacmar, K. M., and Valle, M. (2017). The mechanisms of regulatory focus: Mindfulness, leader-member exchange, and motivational outcomes. *Career Development International*, 22(1), 37–49.