

Transformational Leadership and Job Performance: A Conceptual Framework of The Mediating Role of Cognitive Readiness and Psychological Safety in The UAE Petroleum Sector

Maryam Ali Khalifa Almarri¹ and Dr. Ahmad Zainal Abidin Bin Abd Razak²

¹University Pendidikan Sultan Idris

²Department of Business and Entrepreneurship, Universiti Pendidikan Sultan Idris, 35900, Tanjung Malim, Perak, Malaysia

DOI: 10.46609/IJSSER.2026.v11i05.002 URL: <https://doi.org/10.46609/IJSSER.2026.v11i05.002>

Received: 14 April 2026 / Accepted: 10 May 2026 / Published: 15 May 2026

ABSTRACT

Although transformational leadership has been consistently associated with enhanced job performance, the theoretical mechanisms underlying this relationship remain structurally fragmented. Existing research predominantly relies on single or additive mediation models that treat cognitive and psychological processes as parallel predictors rather than dynamically interdependent mechanisms. Addressing this limitation, this paper develops a dual cognitive psychological explanatory framework that reconceptualizes transformational leadership as a relationally grounded resource structure. Drawing on Leader Member Exchange (LMX) theory and Conservation of Resources (COR) theory, the framework explains how transformational leadership simultaneously cultivates cognitive readiness and psychological safety as mutually reinforcing processes. Cognitive readiness reflects employees' adaptive reasoning and decision-making capability under uncertainty, whereas psychological safety provides the interpersonal climate that enables risk-taking and open communication. By shifting the analytical focus from mediator identification to integrative mechanism development, this study advances a more integrative and context-sensitive explanation of leadership influence. The proposed model is particularly salient in complex and risk-intensive industrial contexts where performance sustainability depends on both adaptive cognition and relational security. This reconceptualization offers a theoretically grounded foundation for future empirical investigation.

Keywords: Transformational Leadership, Cognitive Readiness, Psychological Safety, Job Performance, UAE Petroleum Sector, Conceptual Framework.

1. INTRODUCTION

Despite decades of empirical research demonstrating a positive association between transformational leadership and job performance (Banks et al., 2016; Hoch et al., 2018; Lee et al., 2020; Tian et al., 2023), the theoretical architecture explaining this relationship remains conceptually fragmented. Prior studies have identified numerous mediating mechanisms including psychological empowerment, job satisfaction, trust, and engagement yet these variables have largely been examined in isolation, resulting in additive rather than integrative explanations of leadership influence (Hannah et al., 2021; Lee et al., 2023; Wang et al., 2022). While scholarship has progressed in identifying what mediates transformational leadership effects, it remains less precise in explaining how leadership mechanisms operate as coordinated systems under organizational complexity (Hoch et al., 2018; Tian et al., 2023).

This limitation becomes particularly salient in volatility-driven and technologically complex environments characterized by digital transformation, technological disruption, and operational interdependence (Li et al., 2021; Wang et al., 2023; Sousa & Rocha, 2021). In such contexts, performance sustainability depends not only on motivational alignment but also on employees' capacity to interpret ambiguity, adapt cognitively, and engage in open communication without fear of negative repercussions (Newman et al., 2022; Frazier et al., 2017; Edmondson & Lei, 2014). Yet prevailing mediation models frequently conceptualize cognitive and emotional processes as parallel constructs rather than dynamically interdependent mechanisms, thereby underrepresenting the systemic nature of leadership influence (Hannah et al., 2021; Wang et al., 2022).

Accordingly, this paper argues that the absence of an integrative mechanism-based framework represents a structural limitation in contemporary transformational leadership theory. Although transformational leadership has been consistently associated with positive attitudinal and behavioral outcomes (Bass & Riggio, 2006; Hoch et al., 2018; Tian et al., 2023), insufficient theoretical attention has been devoted to articulating how leadership simultaneously builds adaptive cognitive capacity and interpersonal security—two complementary conditions for sustained performance in complex environments (Lee et al., 2020; Wang et al., 2022).

To address this gap, the present study develops a dual cognitive–psychological mediation architecture that reconceptualizes transformational leadership as a relationally embedded resource framework. Drawing on Leader–Member Exchange (LMX) theory (Graen & Uhl-Bien, 1995; Gottfredson et al., 2020) and Conservation of Resources (COR) theory (Hobfoll, 1989; Hobfoll et al., 2018; Halbesleben et al., 2022), the proposed framework explains how transformational leadership strengthens cognitive readiness and psychological safety as interdependent processes embedded within relational exchange quality and resource

accumulation cycles. Rather than introducing additional mediators, this approach shifts the analytical focus from mediator identification to mechanism-based structural development (Durst et al., 2023; Tian et al., 2023).

Cognitive readiness refers to employees' mental preparedness, adaptability, and decision-making capability under uncertainty (Belack et al., 2019; Sousa & Rocha, 2021), whereas psychological safety denotes a shared belief that the work environment permits interpersonal risk-taking without fear of negative consequences (Edmondson & Lei, 2014; Newman et al., 2022). Although each construct has received independent scholarly attention, limited theoretical integration has conceptualized their complementary and mutually reinforcing roles within a unified explanatory structure—particularly in technologically intensive and high-risk settings (Frazier et al., 2017; Halbesleben et al., 2022).

The UAE petroleum sector provides a theoretically compelling context for advancing this discussion. Operating within safety-critical, technologically advanced, and culturally diverse environments, the sector demands both cognitive agility and strong relational coordination to maintain operational integrity (Wang et al., 2023; Li et al., 2021). Examining transformational leadership within this setting enables a context-sensitive exploration of how leadership mechanisms unfold under uncertainty and operational risk.

Accordingly, this study advances a dual-path leadership mechanism model in which transformational leadership indirectly enhances job performance through the complementary mediation of cognitive readiness and psychological safety. By integrating relational insights from LMX theory with resource-based logic from COR theory, the framework repositions transformational leadership beyond a purely motivational paradigm and conceptualizes it as a multidimensional system that activates cognitive and psychological resources necessary for performance sustainability (Halbesleben et al., 2022; Tian et al., 2023).

This reconceptualization contributes to leadership theory in three principal ways. First, it moves beyond additive mediation logic toward a coordinated explanatory structure. Second, it introduces a dual cognitive–psychological framework grounded in relational and resource-based theory. Third, it extends transformational leadership scholarship into high-uncertainty and safety-critical industrial environments, thereby enhancing contextual sensitivity in contemporary leadership research (Lee et al., 2023; Wang et al., 2023).

The remainder of the paper proceeds as follows. Section 2 develops the theoretical integration underpinning the proposed model. Section 3 critically compares the framework with prior mediation approaches. Section 4 outlines the conceptual model and propositions. Section 5

discusses boundary conditions and theoretical implications. Section 6 presents directions for future research, and Section 7 concludes.

2. THEORETICAL FOUNDATIONS AND INTEGRATIVE DEVELOPMENT

2.1 Reframing Transformational Leadership Beyond a Purely Motivational Lens

Transformational leadership (TL) has long been recognized as a central paradigm in leadership theory due to its emphasis on vision articulation, intellectual stimulation, and individualized consideration (Bass & Riggio, 2006; Tian et al., 2023). Meta-analytic evidence consistently demonstrates its positive association with employee engagement, satisfaction, and performance outcomes across diverse organizational contexts (Hoch et al., 2018; Banks et al., 2016; Wang et al., 2022). However, recent leadership scholarship increasingly argues that framing transformational leadership primarily as a motivational style may underestimate its broader cognitive and relational impact (Hannah et al., 2021; Lee et al., 2023; Tian et al., 2023).

Contemporary organizations operate in environments characterized by volatility, technological disruption, and complexity. Within such contexts, leadership effectiveness extends beyond inspiring commitment toward shaping how employees interpret uncertainty, process information, and adapt to rapid change (Khan et al., 2022; Li et al., 2021; Sousa & Rocha, 2021). Emerging research highlights that transformational leadership influences adaptive performance, learning agility, and innovative behavior by fostering both cognitive flexibility and psychological resilience (Newman et al., 2022; Wang et al., 2023; Wang et al., 2022).

This shift in emphasis suggests the need to reconceptualize transformational leadership as a multidimensional enabling mechanism rather than a direct predictor of performance. Instead of viewing TL solely through a motivational pathway, it can be positioned as a higher-order construct that activates specific cognitive and psychological resources necessary for performance sustainability in complex environments. Such a reframing aligns with recent calls to integrate relational and resource-based perspectives within leadership theory (Durst et al., 2023; Gottfredson et al., 2020; Halbesleben et al., 2022).

Accordingly, this paper advances a perspective in which transformational leadership serves as a catalytic force that simultaneously strengthens employees' cognitive readiness and psychological safety, thereby creating complementary mechanisms that underpin job performance in high-uncertainty sectors.

2.2 Theoretical Positioning Within Contemporary Leadership Paradigms

While multiple contemporary leadership theories emphasize relational and ethical dimensions of leader behavior, transformational leadership remains uniquely positioned to explain the

simultaneous activation of cognitive and psychological mechanisms proposed in this study. In recent years, alternative paradigms such as Servant Leadership, Ethical Leadership, and Authentic Leadership have gained prominence for their focus on moral conduct, follower development, and relational transparency (Lee et al., 2020; Hoch et al., 2018). Although these approaches provide valuable insights into leader–follower dynamics, they do not explicitly integrate intellectual stimulation and adaptive cognition as central mechanisms of influence (Tian et al., 2023).

Servant leadership, for instance, prioritizes follower well-being and empowerment but places less emphasis on structured cognitive activation under complexity. Ethical leadership underscores normatively appropriate conduct and fairness, contributing significantly to trust formation; however, it does not systematically address adaptive reasoning or decision-making capacity in uncertain environments (Wang et al., 2022). Similarly, authentic leadership highlights self-awareness and relational transparency, yet its primary explanatory strength lies in identity-based trust rather than cognitive preparedness (Gottfredson et al., 2020).

Transformational leadership, by contrast, explicitly incorporates intellectual stimulation alongside individualized consideration, thereby bridging cognitive activation and psychological climate formation (Tian et al., 2023). Intellectual stimulation encourages employees to challenge assumptions, explore alternative perspectives, and engage in higher-order reasoning—processes directly aligned with cognitive readiness. Simultaneously, individualized consideration and inspirational motivation cultivate trust, relational openness, and emotional security—conditions essential for psychological safety (Newman et al., 2022).

This dual emphasis uniquely positions transformational leadership as a suitable theoretical anchor for the proposed cognitive–psychological mechanism. Rather than selecting a leadership framework based solely on relational or ethical criteria, this study adopts transformational leadership because of its inherent structural capacity to influence both adaptive cognition and interpersonal security. Accordingly, the present framework does not merely extend transformational leadership theory but strategically situates it as the most theoretically coherent foundation for integrating relational exchange quality and resource-based capacity development within high-complexity environments.

2.3 Relational Foundations: Integrating Leader–Member Exchange (LMX)

Leader–Member Exchange (LMX) theory posits that leadership effectiveness depends fundamentally on the quality of dyadic relationships between leaders and followers (Graen & Uhl-Bien, 1995; Martin et al., 2022). High-quality exchanges are characterized by trust, mutual respect, and reciprocal commitment, which foster greater role clarity, discretionary effort, and

proactive behavior. Recent empirical studies reaffirm that relational quality significantly predicts psychological safety, knowledge sharing, and adaptive performance (Martin et al., 2022a; Newman et al., 2022).

Transformational leadership behaviors naturally cultivate high-quality LMX relationships. Through individualized consideration and ethical modeling, leaders signal reliability and fairness, strengthening relational trust (Wang et al., 2022; Tian et al., 2023). In culturally diverse and safety-critical environments, such relational bonds are particularly important because they reduce interpersonal risk and encourage open communication.

Despite conceptual overlaps, prior research often treats transformational leadership and LMX as parallel constructs rather than integrating them within a unified explanatory framework (Gottfredson et al., 2020). Few theoretical efforts have explicitly articulated how relational exchange processes operate as enabling conditions for both psychological safety and cognitive adaptability. By embedding LMX within the proposed dual-path framework, this study advances leadership theory by demonstrating that relational quality is not merely an outcome of leadership but a foundational mechanism that activates psychological and cognitive resource development.

In high-risk industries such as petroleum operations, where coordination failures may carry severe consequences, relational trust becomes a prerequisite for both performance reliability and collective problem-solving. Therefore, integrating LMX into the transformational leadership mechanism provides a relational grounding for the emergence of psychological safety and cognitive readiness.

2.4 Resource-Based Perspective: Conservation of Resources (COR) Theory

Conservation of Resources (COR) theory asserts that individuals strive to acquire and preserve valued resources such as psychological well-being, confidence, and competence—to manage stress and sustain performance (Hobfoll, 1989; Halbesleben et al., 2022). Recent developments in COR theory emphasize resource gain cycles, whereby supportive leadership behaviors facilitate the accumulation of psychological and cognitive capital (Hobfoll et al., 2018; Halbesleben et al., 2022).

From a COR perspective, transformational leadership functions as a resource-generating mechanism. By articulating a compelling vision and providing individualized support, leaders reduce uncertainty and enhance perceived control, thereby strengthening employees' psychological security. Psychological safety can thus be conceptualized as a socio-emotional resource that lowers anxiety and encourages interpersonal risk-taking (Edmondson & Lei, 2014; Newman et al., 2022).

Simultaneously, cognitive readiness represents a cognitive resource encompassing adaptive thinking, decision-making capability, and mental agility under stress (Belack et al., 2019; Khan et al., 2022). Leaders who stimulate intellectual engagement and encourage learning contribute to resource accumulation processes that enhance employees' capacity to manage complex tasks.

Integrating COR theory shifts the leadership–performance discussion from motivational outcomes toward resource-based explanations. Rather than assuming that inspiration alone drives performance, this perspective highlights how leadership behaviors build cognitive and psychological reserves that sustain performance under demanding conditions. This integration is particularly relevant in high-uncertainty environments where employees must continually adapt to technological innovation and operational risk.

2.5 Toward a Dual Cognitive Psychological Leadership Mechanism

Although prior research has examined psychological safety and cognitive readiness independently, limited theoretical work has articulated their simultaneous and complementary operation within a unified leadership mechanism (Lee et al., 2023; Newman et al., 2022; Tian et al., 2023).

The present framework advances transformational leadership theory by proposing a dual-path mechanism:

- A cognitive pathway in which transformational leadership enhances mental preparedness, adaptive reasoning, and decision-making capability.
- A psychological pathway in which transformational leadership strengthens trust, interpersonal openness, and emotional security.

These pathways are interdependent rather than isolated. Psychological safety provides the emotional climate necessary for cognitive experimentation and risk-taking, while cognitive readiness enables employees to translate psychological confidence into effective performance behavior (Wang et al., 2022; Khan et al., 2022).

By conceptualizing leadership influence through this dual mechanism, the framework extends beyond traditional single-mediator explanations and positions transformational leadership as a multidimensional resource-enabling system.

This integrative model is particularly salient in high-uncertainty, safety-critical industries such as petroleum operations, where performance depends simultaneously on adaptive cognition and collaborative trust. Through this theoretical advancement, transformational leadership is

reframed not merely as a motivational style but as an integrated resource-enabling mechanism that activates complementary cognitive and psychological capacities.

3. CRITICAL COMPARISON WITH PRIOR MEDIATION MODELS

Research examining the relationship between transformational leadership and job performance has frequently adopted mediation-based explanations. A substantial body of literature has identified psychological empowerment, job satisfaction, organizational commitment, trust, and adaptive performance as key intervening variables linking leadership to performance outcomes (Banks et al., 2016; Hoch et al., 2018; Lee et al., 2023; Newman et al., 2022; Wang et al., 2022; Tian et al., 2023). While these studies provide important theoretical and empirical insights, they predominantly rely on single-mediator or additive multi-mediator frameworks that emphasize either attitudinal, affective, or cognitive mechanisms in relative isolation.

Recent scholarship acknowledges that leadership influence operates through more complex and multifaceted processes (Hannah et al., 2021; Tian et al., 2023). However, even in contemporary models, cognitive and emotional processes are typically examined as parallel constructs rather than as dynamically interdependent mechanisms. For instance, studies focusing on adaptive performance frequently emphasize cognitive flexibility or learning orientation without integrating interpersonal safety conditions (Khan et al., 2022). Conversely, research emphasizing psychological safety often examines its impact on voice behavior, innovation, or team learning without systematically connecting it to adaptive reasoning capacity or decision-making preparedness (Newman et al., 2022; Martin et al., 2022).

This structural fragmentation reveals three central limitations in existing mediation models.

Beyond these observable limitations, a deeper conceptual issue emerges. Many mediation models in transformational leadership research are constructed within variance-based logic that prioritizes statistical significance over mechanism articulation. While such approaches provide empirical rigor, they often under-theorize how mediating constructs function as coordinated systems rather than independent predictors (Durst et al., 2023; Tian et al., 2023). As a result, the explanatory architecture of leadership influence remains modular rather than integrative.

First, most prior studies conceptualize transformational leadership as operating through singular psychological pathways, thereby underestimating the interactive role of cognition and emotion in shaping sustained performance behavior. Leadership in high-uncertainty contexts requires employees not only to experience interpersonal security but also to demonstrate adaptive cognitive capacity. Isolating either dimension risks oversimplifying the systemic nature of leadership influence (Wang et al., 2022; Khan et al., 2022).

Second, even when multiple mediators are incorporated, they are frequently modeled as statistically parallel rather than theoretically reinforcing constructs. Such approaches allow for simultaneous testing but do not explicate how psychological climate may enable cognitive experimentation, or how cognitive readiness may stabilize perceptions of interpersonal safety (Tian et al., 2023). The absence of mechanism-level theorization constrains explanatory precision.

In effect, mediators are treated as interchangeable conduits of influence rather than as structurally interdependent processes. This additive logic may obscure how psychological safety enables cognitive experimentation, and how cognitive readiness reinforces perceptions of relational security. Without theorizing this reciprocity, leadership models risk offering partial rather than systemic explanations (Halbesleben et al., 2022).

Third, many mediation frameworks remain context-neutral. Although transformational leadership has been examined across industries, limited theoretical attention has been devoted to how leadership mechanisms unfold in safety-critical, technologically intensive, and operationally interdependent environments. In such settings, performance sustainability depends on rapid decision-making, collaborative coordination, and error management under pressure (Wang et al., 2023; Sousa & Rocha, 2021). Treating mediators as isolated variables fails to capture how leadership must simultaneously activate adaptive cognition and relational security under complexity.

Furthermore, the relational foundations underlying mediation processes are often implied rather than explicitly theorized. Constructs such as trust and empowerment are frequently positioned as mediators, yet the dyadic exchange processes that enable their emergence remain underdeveloped. Integrating Leader–Member Exchange (LMX) theory provides a relational grounding that clarifies how leadership behaviors shape psychological safety and resource development through high-quality exchanges (Martin et al., 2022; Gottfredson et al., 2020).

To illustrate these limitations, Table 1 summarizes representative mediation approaches in transformational leadership research and contrasts them with the present framework.

Table 1: Representative Mediation Models in Transformational Leadership Research

Study	Mediator(s) Examined	Context	Key Theoretical Limitation
Hoch et al. (2018)	Empowerment	Cross-industry	Emphasizes motivational pathway without integrating cognitive or contextual complexity
Newman et al. (2022)	Psychological Safety	Team-level	Focuses on emotional climate without linking to adaptive cognition

Lee et al. (2023)	Adaptive Performance	General organizations	Emphasizes cognition without interpersonal safety conditions
Wang et al. (2023)	Trust & Innovation	Technology firms	Lacks integration of resource-based reinforcement logic
Present Study	Cognitive Readiness & Psychological Safety	High-uncertainty industrial context	Theorizes dynamic reinforcement within relational–resource architecture

While these studies advance understanding of leadership mechanisms, none simultaneously integrate cognitive readiness and psychological safety within a unified mechanism grounded in both relational exchange (LMX) and resource accumulation (COR) theory (Halbesleben et al., 2022; Tian et al., 2023).

This reconceptualization responds to calls for mechanism-based theorizing in contemporary leadership research and aligns with emerging demands for context-sensitive explanatory models.

The present framework addresses this gap by advancing a dual cognitive–psychological mediation architecture that conceptualizes adaptive cognition and interpersonal security as dynamically reinforcing components of a coordinated relational–resource system. Rather than adding another mediator to existing models, the proposed framework shifts the focus from mediator identification to mechanism architecture development (Durst et al., 2023). By theorizing the interdependence between cognitive readiness and psychological safety within high-uncertainty industrial contexts, this study extends transformational leadership theory beyond additive mediation logic and provides a more structurally coherent explanation of how leadership sustains job performance under complexity.

4. CONCEPTUAL MODEL AND PROPOSITIONAL DEVELOPMENT

4.1 Conceptual Model Overview

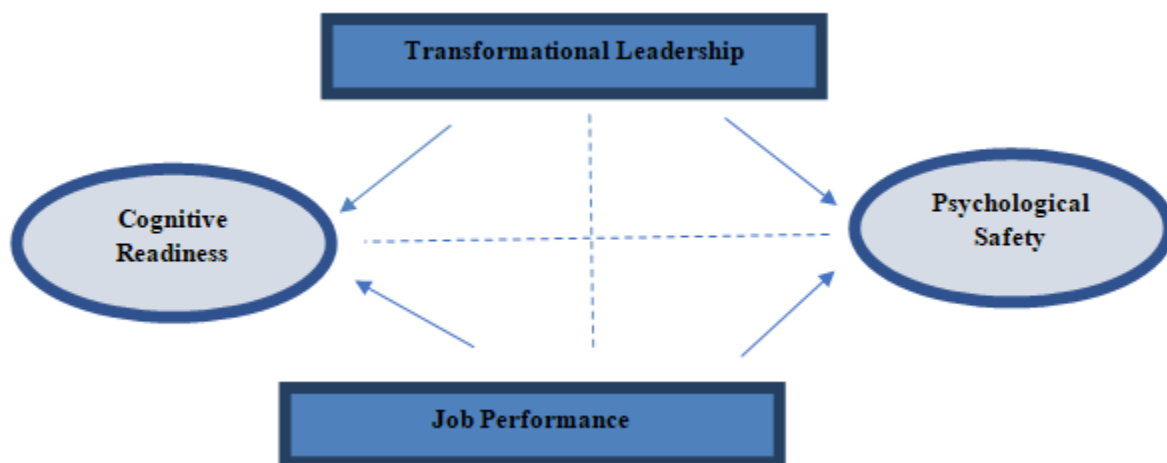
Building on the integrative foundations outlined above, this paper develops a dual-path leadership mechanism model in which transformational leadership functions as an enabling system that activates complementary cognitive and psychological processes (Tian et al., 2023; Halbesleben et al., 2022). Rather than conceptualizing leadership as a direct predictor of job performance, the model positions transformational leadership as a higher-order mechanism that shapes employees’ resource accumulation and relational climate (Durst et al., 2023).

Specifically, the framework proposes that transformational leadership enhances job performance through two interrelated pathways:

1. A cognitive pathway, whereby leadership behaviors stimulate mental preparedness, adaptive reasoning, and decision-making capability (cognitive readiness) (Khan et al., 2022).
2. A psychological pathway, whereby leadership behaviors cultivate interpersonal trust, openness, and emotional security (psychological safety) (Newman et al., 2022; Martin et al., 2022).

These pathways operate simultaneously and interactively within high-uncertainty environments. While distinct in function, they are mutually reinforcing. Psychological safety provides the emotional foundation necessary for cognitive experimentation and learning, whereas cognitive readiness enables employees to translate psychological confidence into effective task execution (Halbesleben et al., 2022).

Figure 1: Proposed Dual-Path Cognitive–Psychological Leadership Mechanism



Note: The dashed line represents dynamic reciprocal reinforcement between cognitive readiness and psychological safety.

4.2 Transformational Leadership and Cognitive Readiness

Transformational leadership promotes intellectual stimulation by encouraging employees to question assumptions, explore alternative solutions, and engage in reflective thinking (Bass & Riggio, 2006; Tian et al., 2023). Contemporary leadership research suggests that such behaviors enhance adaptive performance and learning agility, particularly in dynamic environments (Hannah et al., 2021; Wang et al., 2022; Khan et al., 2022).

Cognitive readiness extends beyond knowledge possession; it reflects an individual’s capacity to interpret ambiguity, regulate cognitive load, and respond effectively to unexpected demands

(Belack et al., 2019; Li et al., 2021). Leaders who articulate vision and provide intellectual challenge stimulate cognitive engagement, thereby strengthening employees' mental preparedness for complex tasks.

From a COR perspective, transformational leadership contributes to cognitive resource gain cycles by reducing uncertainty and promoting confidence in decision-making processes (Halbesleben et al., 2022). Within high-risk sectors such as petroleum operations, cognitive readiness becomes essential for managing safety procedures, technological systems, and real-time coordination.

Accordingly, transformational leadership can be theoretically conceptualized as a driver of cognitive readiness through its intellectual and developmental dimensions (Tian et al., 2023).

Proposition 1: Transformational leadership enhances employees' cognitive readiness by stimulating adaptive reasoning and mental preparedness.

4.3 Transformational Leadership and Psychological Safety

Psychological safety reflects a shared belief that individuals can express ideas, admit mistakes, and take interpersonal risks without fear of negative consequences (Edmondson & Lei, 2014; Newman et al., 2022). Transformational leaders foster such climates through individualized consideration, ethical modeling, and consistent support (Frazier et al., 2017; Martin et al., 2022).

High-quality relational exchanges (LMX) create trust-based environments that reduce interpersonal threat perceptions (Martin et al., 2022a; Gottfredson et al., 2020). In safety-critical industries, where open communication is vital, psychological safety enables employees to report errors, suggest improvements, and collaborate effectively (Newman et al., 2022).

By cultivating relational trust and fairness, transformational leadership reduces social anxiety and strengthens employees' emotional security (Wang et al., 2022). Within the proposed dual-path framework, psychological safety functions as a socio-emotional resource that supports sustained performance under uncertainty (Halbesleben et al., 2022).

Proposition 2: Transformational leadership fosters psychological safety by strengthening relational trust and reducing interpersonal risk perceptions.

4.4 Cognitive Readiness and Job Performance

Cognitive readiness equips employees with the capacity to analyze complex information, anticipate risks, and make effective decisions under pressure (Belack et al., 2019; Khan et al.,

2022). Recent research links adaptive cognition to performance sustainability in technology-intensive and high-uncertainty sectors (Lee et al., 2023; Li et al., 2021; Wang et al., 2022).

In operationally complex environments, job performance depends heavily on employees' ability to integrate information rapidly and respond accurately to emerging challenges. Cognitive readiness therefore functions as a critical mechanism translating leadership-induced cognitive stimulation into measurable performance outcomes (Tian et al., 2023).

Proposition 3: Cognitive readiness positively contributes to job performance in high-uncertainty and safety-critical environments.

4.5 Psychological Safety and Job Performance

Psychological safety enables employees to engage in learning behaviors, voice concerns, and collaborate effectively (Newman et al., 2022; Martin et al., 2022). In high-risk industries, open communication and error reporting directly influence performance reliability and team coordination (Wang et al., 2023).

When employees perceive interpersonal security, they are more willing to experiment, share information, and assume responsibility. Such behaviors contribute to both task performance and contextual performance outcomes (Halbesleben et al., 2022).

Proposition 4: Psychological safety positively contributes to job performance by promoting open communication and collaborative engagement.

4.6 The Dual Mediation Logic

While each pathway independently contributes to performance, the theoretical advancement of this framework lies in their integration. Traditional mediation models often isolate either emotional or cognitive mechanisms. However, in complex industrial environments, performance sustainability requires both adaptive reasoning and interpersonal security (Tian et al., 2023).

Psychological safety facilitates cognitive experimentation by reducing fear-based inhibition, whereas cognitive readiness ensures that psychological confidence translates into effective decision-making (Halbesleben et al., 2022; Khan et al., 2022). This reciprocal reinforcement strengthens performance outcomes more robustly than single-mediator explanations.

Accordingly, transformational leadership can be conceptualized as indirectly influencing job performance through a dual cognitive–psychological mechanism.

Proposition 5: Cognitive readiness and psychological safety operate as complementary mediating mechanisms linking transformational leadership to job performance.

4.7 Dynamic Reinforcement of the Dual-Path Leadership Mechanism

While cognitive readiness and psychological safety are conceptually distinct mediating pathways, their interaction constitutes the central theoretical advancement of the present framework (Tian et al., 2023). Rather than operating as parallel and statistically independent mechanisms, the dual-path structure is proposed to function through dynamic reinforcement processes that amplify leadership influence under conditions of complexity (Halbesleben et al., 2022).

Psychological safety reduces fear-based inhibition, enabling employees to question assumptions, seek clarification, and engage in exploratory dialogue (Newman et al., 2022). In the absence of interpersonal security, cognitive capacity may remain underutilized due to defensive behavior or risk aversion. Thus, psychological safety functions as an enabling condition that unlocks the expression of adaptive cognitive processes. Once emotional security is established, employees become more willing to engage in reflective reasoning, problem-solving, and experimentation core elements of cognitive readiness (Khan et al., 2022).

Conversely, cognitive readiness reinforces psychological safety through perceived competence and clarity. As employees develop adaptive reasoning capabilities and decision confidence, they experience greater control over task demands. According to Conservation of Resources (COR) theory, such resource gains initiate reinforcing cycles in which enhanced cognitive competence strengthens confidence, reduces ambiguity, and further stabilizes perceptions of interpersonal safety (Halbesleben et al., 2022). This reciprocal amplification differentiates the present model from additive dual-mediator frameworks that assume independence between mechanisms.

Importantly, the interaction between cognitive readiness and psychological safety may unfold both sequentially and reciprocally (Tian et al., 2023). Transformational leadership may initially cultivate psychological safety through relational trust and individualized consideration, which subsequently enables cognitive engagement (Martin et al., 2022b). Over time, strengthened cognitive readiness may further reinforce collective confidence and relational stability, generating a self-reinforcing resource-based configuration.

By conceptualizing these pathways as dynamically interdependent, the proposed framework advances beyond traditional mediation models that treat intervening variables as isolated explanatory channels (Durst et al., 2023). Instead, transformational leadership is positioned as activating a coordinated resource enabling mechanism in which emotional climate and cognitive capacity co-evolve to sustain job performance in high-uncertainty and safety-critical environments.

Proposition 6: Cognitive readiness and psychological safety dynamically reinforce one another over time, forming a reciprocal resource gain cycle that strengthens the indirect effect of transformational leadership on job performance.

5. BOUNDARY CONDITIONS OF THE DUAL-PATH LEADERSHIP MECHANISM

Leadership theories often assume universal applicability across organizational contexts. However, contemporary scholarship increasingly emphasizes that leadership effectiveness is context-dependent and shaped by environmental complexity, industry characteristics, and workforce composition (Hannah et al., 2021; Wang et al., 2023; Tian et al., 2023). Accordingly, the dual cognitive–psychological leadership mechanism proposed in this paper is not intended as a universally invariant model but rather as a context-sensitive framework whose explanatory strength varies across conditions.

5.1 High Uncertainty Environments

The proposed model is particularly salient in environments characterized by volatility, ambiguity, and rapid technological change. Research on adaptive performance and dynamic capability suggests that uncertainty heightens the need for cognitive flexibility and rapid decision-making (Li et al., 2021; Lee et al., 2023; Khan et al., 2022). In stable and routine settings, job performance may rely primarily on procedural adherence and established routines. However, in high-uncertainty environments, employees must frequently interpret incomplete information, adapt to emerging challenges, and coordinate dynamically (Wang et al., 2023; Sousa & Rocha, 2021).

Under such conditions, cognitive readiness becomes a critical determinant of performance sustainability, particularly in knowledge-intensive systems. Simultaneously, psychological safety enables employees to communicate uncertainties and share insights without fear of blame, thereby facilitating collective sensemaking (Newman et al., 2017; Edmondson & Lei, 2014; Newman et al., 2022). Therefore, the dual-path mechanism is expected to operate more strongly in industries undergoing digital transformation or operational complexity.

5.2 Safety Critical and High Risk Industries

The relevance of the proposed framework is amplified in safety-critical sectors such as petroleum, aviation, healthcare, and energy operations. In such contexts, performance failures may result in severe economic, environmental, or human consequences. Research on high-reliability organizations emphasizes that open communication, error reporting, and rapid decision-making are essential for maintaining operational integrity (Newman et al., 2022; Martin et al., 2022).

Psychological safety plays a crucial role in encouraging employees to voice concerns and report near-misses, which are central to error prevention and safety compliance (Edmondson & Lei, 2014; Newman et al., 2022). At the same time, cognitive readiness supports accurate and timely problem-solving under pressure, particularly in technically complex systems (Lee et al., 2023; Khan et al., 2022). The integration of these two mechanisms provides a more comprehensive explanation of leadership effectiveness in high-risk environments than single-mediator models (Tian et al., 2023).

5.3 Multicultural and Diverse Workforce Contexts

Industries such as the UAE petroleum sector operate within highly multicultural workforce environments. Cultural diversity can enhance creativity but may also increase communication barriers and relational uncertainty. Research on leader–member exchange suggests that relational trust and exchange quality are especially critical in culturally diverse teams, where perceptions of fairness and inclusion shape psychological safety (Martin et al., 2022b; Gottfredson et al., 2020).

Furthermore, cognitive readiness may vary across employees due to differences in training backgrounds and experiential learning. Transformational leadership behaviors that promote intellectual stimulation and knowledge sharing have been associated with enhanced adaptive capability across diverse teams (Hoch et al., 2018; Wang et al., 2022). Leadership that encourages cross-cultural dialogue and shared learning can therefore harmonize cognitive diversity while strengthening interpersonal security (Tian et al., 2023).

5.4 Organizational Maturity and Structural Complexity

The proposed dual-path mechanism may also vary depending on organizational maturity and structural design. In highly hierarchical organizations with rigid communication structures, psychological safety may be constrained despite transformational intentions. Research indicates that structural rigidity and punitive error cultures inhibit open dialogue and learning behaviors (Newman et al., 2017; Halbesleben et al., 2022).

Similarly, cognitive readiness development may depend on access to learning systems, digital infrastructure, and knowledge-sharing platforms (Hannah et al., 2021; Sousa & Rocha, 2021). Without organizational support mechanisms, leadership behaviors alone may be insufficient to activate sustained cognitive and psychological development. Therefore, the model assumes that organizational systems support leadership behaviors rather than inhibit them. Structural barriers may weaken the strength of the proposed pathways.

5.5 Theoretical Implications of Boundary Conditions

By articulating these boundary conditions, the present framework advances leadership theory in two ways. First, it rejects universalist assumptions and situates transformational leadership within contextual contingencies (Hannah et al., 2021; Tian et al., 2023). Second, it highlights the importance of environmental complexity in shaping the interaction between cognitive and psychological mechanisms (Wang et al., 2023; Halbesleben et al., 2022).

Rather than presenting transformational leadership as a static predictor of performance, the framework positions it as a dynamic relational–resource system whose effectiveness depends on contextual alignment and structural support mechanisms (Durst et al., 2023).

5.6 Digital Transformation and AI-Integrated Environments

The relevance of the proposed dual-path mechanism becomes increasingly pronounced in digitally transformed and AI-integrated organizational environments. As industries adopt automation, predictive analytics, and intelligent monitoring systems, employees are required to interpret complex data streams and make rapid decisions in collaboration with technological systems (Li et al., 2021; Sousa & Rocha, 2021).

In such settings, cognitive readiness becomes indispensable for navigating information overload, algorithmic ambiguity, and accelerated decision cycles (Lee et al., 2023; Khan et al., 2022). At the same time, AI-integrated operations may introduce uncertainty, role redefinition, and concerns regarding job security. Psychological safety therefore becomes critical in enabling employees to voice concerns, seek clarification, and adapt to evolving digital workflows (Newman et al., 2022; Tian et al., 2023).

Without a psychologically secure climate, technological complexity may generate resistance, silence, or disengagement. Furthermore, in knowledge-intensive organizations where innovation and problem-solving are central to competitive advantage, the interaction between cognitive readiness and psychological safety is amplified. Employees must feel safe to experiment while possessing the cognitive capacity to translate experimentation into effective solutions. Thus, the dual-path mechanism proposed in this paper is particularly salient in digitally evolving and AI-enabled work systems.

6. THEORETICAL CONTRIBUTIONS

This paper offers a structural theoretical advancement of transformational leadership scholarship by reframing leadership influence as a relationally grounded resource framework rather than a predominantly motivational style (Tian et al., 2023; Halbesleben et al., 2022). While existing research has extensively documented the positive association between transformational leadership and performance outcomes, the underlying explanatory architecture has remained

fragmented, frequently relying on isolated mediators or context-neutral assumptions (Lee et al., 2023; Durst et al., 2023). The present framework addresses this fragmentation by integrating relational exchange quality and resource accumulation dynamics within a unified dual-path mechanism (Martin et al., 2022; Halbesleben et al., 2022).

6.1 Repositioning Transformational Leadership as a Relational–Resource System

First, this study reconceptualizes transformational leadership beyond its traditional motivational emphasis. Rather than framing leadership as primarily inspiring commitment or enhancing satisfaction, the model positions transformational leadership as a higher-order enabling mechanism that systematically activates employees’ cognitive and psychological resources (Wang et al., 2022; Tian et al., 2023). This shift responds to growing scholarly concerns that motivation-centric explanations are insufficient in digitally accelerated and high-uncertainty environments where performance sustainability depends on adaptive reasoning and emotional stability (Khan et al., 2022; Sousa & Rocha, 2021).

By embedding relational trust (LMX) and resource gain cycles (COR) within the transformational leadership paradigm, the framework advances a more structurally grounded explanation of how leadership operates under complexity (Martin et al., 2022; Halbesleben et al., 2022).

6.2 Advancing a Dual Cognitive–Psychological Mediation Architecture

Second, the paper introduces a dual mediation structure that moves beyond additive or single-path explanations (Durst et al., 2023). Existing leadership models often examine empowerment, trust, or adaptive performance independently, thereby isolating emotional and cognitive mechanisms (Lee et al., 2023; Wang et al., 2022). The proposed framework instead conceptualizes cognitive readiness and psychological safety as dynamically interdependent processes that co-evolve within an integrated relational–cognitive structure (Tian et al., 2023).

This architecture advances theoretical precision by demonstrating that sustainable performance under uncertainty requires both adaptive cognition and interpersonal security (Halbesleben et al., 2022). The model therefore shifts the focus from identifying “which mediator matters” to explaining “how complementary mechanisms jointly sustain performance.”

6.3 Integrating Relational and Resource-Based Theories Within a Single Mechanism

Third, this study bridges two influential yet rarely integrated theoretical traditions: Leader–Member Exchange (LMX) theory and Conservation of Resources (COR) theory (Martin et al., 2022; Halbesleben et al., 2022). By synthesizing relational exchange quality and resource

accumulation logic within the transformational leadership framework, the model advances a more comprehensive explanatory foundation. Leadership is not merely a behavioral style but a system that simultaneously shapes relational climate and resource capacity (Tian et al., 2023).

This integration contributes to contemporary leadership theory by clarifying the mechanism through which relational trust translates into resource reinforcement and, ultimately, performance sustainability (Durst et al., 2023).

6.4 Contextualizing Leadership Mechanisms in High-Uncertainty Industrial Environments

Fourth, the framework explicitly situates transformational leadership within high-uncertainty, safety-critical, and digitally evolving contexts (Wang et al., 2023; Sousa & Rocha, 2021). Rather than assuming universal applicability, the model demonstrates how leadership mechanisms intensify under complexity, technological disruption, and multicultural workforce conditions (Hannah et al., 2021; Tian et al., 2023). This contextual sensitivity enhances theoretical relevance and responds to calls for more environment-contingent leadership models.

6.5 A Shift from Mediator Identification to Mechanism Architecture

Collectively, these contributions move transformational leadership research beyond incremental mediator addition toward structural mechanism refinement (Durst et al., 2023). By articulating leadership influence as a coordinated integrative framework, the present framework offers a more integrative and context-aware explanation of performance sustainability in dynamic organizational environments (Halbesleben et al., 2022; Tian et al., 2023).

7. FUTURE RESEARCH AGENDA

The dual-path leadership mechanism proposed in this paper opens several promising avenues for future research. By conceptualizing transformational leadership as an integrative relational–cognitive framework that simultaneously activates cognitive readiness and psychological safety, the framework invites scholars to extend empirical, methodological, and contextual investigations in multiple directions (Tian et al., 2023; Durst et al., 2023).

7.1 Empirical Validation Through Longitudinal Designs

First, future research may empirically examine the dynamic nature of the proposed dual mediation mechanism using longitudinal research designs. Leadership influence unfolds over time, particularly when shaping cognitive adaptability and psychological climate (Hannah et al., 2021; Halbesleben et al., 2022). Cross-sectional designs may underestimate the temporal evolution of resource accumulation and relational trust (Martin et al., 2022).

Longitudinal studies would allow researchers to assess whether cognitive readiness and psychological safety develop sequentially or simultaneously in response to sustained transformational leadership behaviors (Tian et al., 2023). Such designs would strengthen causal inference and provide deeper insight into the stability and durability of the proposed mechanisms.

7.2 Multi-Level and Cross-Level Analysis

Second, future investigations may explore the model across multiple organizational levels. While the present framework focuses primarily on individual-level processes, psychological safety often operates at the team level, and leadership behaviors may influence collective cognitive readiness within work units (Newman et al., 2022; Martin et al., 2022).

Multi-level modeling could examine whether team-level psychological safety amplifies or moderates the relationship between individual cognitive readiness and job performance (Lee et al., 2023). Cross-level analyses would enhance theoretical precision by identifying how leadership effects cascade across organizational hierarchies (Tian et al., 2023).

7.3 Cross-Industry and Cross-Cultural Comparisons

Third, future research may test the generalizability of the proposed model across industries and cultural contexts. Although the framework is particularly salient in high-risk and high-uncertainty environments, comparative studies across stable versus dynamic industries could clarify contextual contingencies (Wang et al., 2023; Sousa & Rocha, 2021).

Additionally, cross-cultural investigations may examine whether cultural values such as power distance or uncertainty avoidance moderate the strength of psychological safety and cognitive readiness mechanisms (Hannah et al., 2021). Such studies would contribute to the global refinement of transformational leadership theory (Tian et al., 2023).

7.4 Expanding the Resource-Based Perspective

Fourth, scholars may extend the model by integrating additional resource-based constructs such as resilience, learning orientation, or knowledge-sharing climate (Halbesleben et al., 2022). While the present framework emphasizes cognitive readiness and psychological safety, other psychological and cognitive resources may further enrich understanding of leadership influence under complexity (Wang et al., 2022).

Future research could also investigate potential reciprocal relationships, exploring whether enhanced cognitive readiness strengthens employees' perceptions of psychological safety over

time, thereby creating reinforcing resource gain cycles (Halbesleben et al., 2022; Tian et al., 2023).

7.5 Methodological Innovation and Mixed-Methods Approaches

Finally, methodological innovation may enhance exploration of the dual-path mechanism. Mixed-methods research combining quantitative surveys with qualitative interviews could uncover nuanced relational processes underlying psychological safety development (Newman et al., 2022). Experimental designs may also simulate high-uncertainty scenarios to observe cognitive and emotional responses to leadership behaviors (Khan et al., 2022).

By encouraging diverse methodological approaches, future research can refine, challenge, and extend the theoretical propositions articulated in this paper (Durst et al., 2023).

8. CONCEPTUAL APPROACH

The present paper adopts a theory-building conceptual approach grounded in integrative literature synthesis and mechanism-based reasoning (Durst et al., 2023; Tian et al., 2023). Rather than conducting empirical testing, the study systematically analyzes and synthesizes prior leadership, relational, and resource-based theories to develop a unified explanatory framework (Halbesleben et al., 2022; Martin et al., 2022).

The conceptual development proceeded in three stages. First, foundational leadership theories—particularly transformational leadership, Leader–Member Exchange (LMX), and Conservation of Resources (COR)—were critically examined to identify overlapping and complementary explanatory mechanisms (Graen & Uhl-Bien, 1995; Hobfoll et al., 2018). Second, contemporary empirical findings published within the last decade were reviewed to identify emerging trends emphasizing adaptive cognition, psychological climate, and contextual complexity in leadership research (Hannah et al., 2021; Newman et al., 2022; Wang et al., 2023; Lee et al., 2023). Third, these theoretical strands were integrated into a dual cognitive–psychological mediation structure designed to address identified fragmentation in existing mediation models (Durst et al., 2023; Tian et al., 2023).

The development of propositions followed a deductive logic process, whereby conceptual linkages were derived from theoretical alignment and reinforced by contemporary empirical evidence (Wang et al., 2022; Khan et al., 2022). Rather than proposing isolated mediators, the framework emphasizes systemic interaction between relational exchange quality and resource accumulation dynamics (Halbesleben et al., 2022).

This approach aligns with contemporary calls for mechanism-based theory development in organizational research, which emphasize clarifying “how” and “under what conditions” leadership effects unfold (Durst et al., 2023; Tian et al., 2023). By synthesizing relational and resource-based perspectives within a unified structure, the paper advances theoretical precision without relying on empirical data collection.

The purpose of this conceptual approach is not to replace empirical inquiry but to provide a theoretically grounded model capable of guiding future research and contextualized empirical validation in high-uncertainty industrial environments (Wang et al., 2023).

It is important to clarify that the present framework does not merely introduce additional mediators into the transformational leadership literature. Rather than extending additive mediation logic, this study advances a mechanism-architecture perspective that reconceptualizes how leadership effects unfold (Durst et al., 2023). Traditional mediation models typically identify intervening variables as independent explanatory channels. In contrast, the proposed framework theorizes cognitive readiness and psychological safety as dynamically interdependent processes embedded within an integrative resource-based framework (Halbesleben et al., 2022; Tian et al., 2023). By shifting the focus from mediator enumeration to structural mechanism integration, this study reframes transformational leadership as a multidimensional enabling architecture rather than a linear causal pathway.

This study adopts a conceptual theory-development approach and does not include empirical data.

9. CONCLUSION

This paper advances transformational leadership scholarship by developing a dual cognitive–psychological mechanism that reconceptualizes how leadership influences job performance in complex industrial environments (Tian et al., 2023; Wang et al., 2023). Rather than treating transformational leadership as a direct motivational predictor, the proposed framework positions it as an integrative relational–cognitive framework that simultaneously strengthens employees’ cognitive readiness and psychological safety (Halbesleben et al., 2022; Lee et al., 2023).

By integrating insights from Leader–Member Exchange (LMX) theory and Conservation of Resources (COR) theory, the model offers a more comprehensive and mechanism-based explanation of leadership effectiveness (Martin et al., 2022; Halbesleben et al., 2022). The framework demonstrates that performance sustainability in high-uncertainty and safety-critical industries depends not only on inspiration and commitment but also on adaptive reasoning and interpersonal security (Khan et al., 2022; Newman et al., 2022).

The dual-path mechanism presented in this paper addresses fragmentation in prior mediation research by articulating the complementary interaction between cognitive and psychological processes (Durst et al., 2023; Tian et al., 2023). Through contextualizing transformational leadership within technologically advanced and operationally complex environments, the study responds to contemporary calls for more integrative, context-sensitive leadership theories (Hannah et al., 2021; Wang et al., 2023).

While the framework remains conceptual in nature, it establishes a theoretically grounded foundation for future empirical validation across industries and cultural contexts (Tian et al., 2023). By advancing a multidimensional and context-aware perspective, this paper contributes to ongoing efforts to refine transformational leadership theory for dynamic organizational realities.

REFERENCES

Banks, G. C., McCauley, K. D., Gardner, W. L., & Guler, C. E. (2016). A meta-analytic review of authentic and transformational leadership: A test for redundancy. *The Leadership Quarterly*, 27(4), 634–652. <https://doi.org/10.1016/j.leaqua.2016.02.006>

Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Lawrence Erlbaum Associates.

Belack, C., Moffat, J., & Wendelboe, A. M. (2019). Cognitive readiness in complex environments: Conceptual foundations and measurement considerations. *Journal of Cognitive Engineering and Decision Making*, 13(2), 79–95. <https://doi.org/10.1177/1555343419834114>

Durst, S., Lindvall, J., & Bruns, G. (2023). Advancing mechanism-based theorizing in organizational research: Toward greater explanatory clarity. *Journal of Organizational Analysis*, 31(2), 245–260.

Edmondson, A. C., & Lei, Z. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 23–43. <https://doi.org/10.1146/annurev-orgpsych-031413-091305>

Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., & Vacheva, V. (2017). Psychological safety: A meta-analytic review and extension. *Personnel Psychology*, 70(1), 113–165. <https://doi.org/10.1111/peps.12183>

Gottfredson, R. K., Wright, S. L., & Heaphy, E. D. (2020). A critique of the leader–member exchange construct: Back to square one. *The Leadership Quarterly*, 31(6), 101385. <https://doi.org/10.1016/j.leaqua.2020.101385>

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader–member exchange (LMX) theory of leadership over 25 years. *The Leadership Quarterly*, 6(2), 219–247. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)

Halbesleben, J. R. B., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. (2022). Getting to the “COR”: Understanding the role of resources in conservation of resources theory. *Journal of Management*, 48(5), 1177–1203. <https://doi.org/10.1177/01492063211062877>

Hannah, S. T., Schaubroeck, J. M., & Peng, A. C. (2021). Transformational leadership and complex systems: Toward a multilevel process explanation. *Academy of Management Annals*, 15(1), 1–42.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>

Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103–128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>

Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. (2018). Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis. *Journal of Management*, 44(2), 501–529. <https://doi.org/10.1177/0149206316665461>

Khan, M. M., Mubarik, M. S., & Islam, T. (2022). Transformational leadership and adaptive performance: The mediating role of learning agility. *European Management Journal*, 40(6), 859–871. <https://doi.org/10.1016/j.emj.2021.11.002>

Lee, A., Willis, S., & Tian, A. W. (2020). When empowering leadership works and when it does not: A meta-analytic review of empowering leadership, psychological empowerment, and employee outcomes. *Journal of Applied Psychology*, 105(9), 1011–1042. <https://doi.org/10.1037/apl0000447>

Lee, A., Willis, S., & Tian, A. W. (2023). Transformational leadership and adaptive performance: A multilevel review and integration. *Journal of Organizational Behavior*, 44(1), 3–27.

Li, Y., Li, N., & Chen, Y. (2021). Digital transformation and employee adaptive performance: The role of leadership and learning climate. *Information & Management*, 58(7), 103501.

Martin, S. R., Guillaume, Y. R. F., Thomas, G., Lee, A., & Epitropaki, O. (2022a). Leader–member exchange (LMX) and performance: A meta-analytic review. *Journal of Applied Psychology, 107*(2), 192–218. <https://doi.org/10.1037/apl0000902>

Martin, R., Guillaume, Y., Thomas, G., Lee, A., & Epitropaki, O. (2022b). Leader–member exchange (LMX) and performance: A meta-analytic review. *Journal of Organizational Behavior, 43*(4), 587–609. <https://doi.org/10.1002/job.2581>

Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: A systematic review of the literature. *Human Resource Management Review, 27*(3), 521–535. <https://doi.org/10.1016/j.hrmr.2017.01.001>

Newman, A., Donohue, R., & Eva, N. (2022). Psychological safety: A systematic review of the literature. *Human Resource Management Review, 32*(3), 100762. <https://doi.org/10.1016/j.hrmr.2020.100762>

Sousa, M. J., & Rocha, Á. (2021). Digital learning and career development: The role of digital transformation in organizational performance. *Journal of Business Research, 124*, 653–661. <https://doi.org/10.1016/j.jbusres.2020.11.058>

Tian, A. W., Song, Z., & Li, C. (2023). Revisiting transformational leadership: A multi-level meta-analytic review of mechanisms and boundary conditions. *The Leadership Quarterly, 34*(2), 101642. <https://doi.org/10.1016/j.leaqua.2022.101642>

Wang, G., Xu, X., & Liu, Y. (2022). Transformational leadership and employee outcomes: A meta-analytic examination of underlying mechanisms. *Journal of Organizational Behavior, 43*(6), 873–892. <https://doi.org/10.1002/job.2591>

Wang, G., Oh, I.-S., Courtright, S. H., & Colbert, A. E. (2023). Transformational leadership and performance across contexts: An integrative review. *The Leadership Quarterly, 34*(2), 101620.