

A REVIEW OF RESEARCH ON TRANSFORMATIONAL LEADERSHIP

Dai Ming ¹
Fanny Kho Chee Yuet ^{2*}

¹ Faculty Management and Economics, Sultan Idris Education University, 35900 Tanjong Malim, Perak, Malaysia
(E-mail: daiming0429@163.com)

² Faculty Management and Economics, Sultan Idris Education University, 35900 Tanjong Malim, Perak, Malaysia
(E-mail: fannykcy@fpe.upsi.edu.my)

*Corresponding author: fannykcy@fpe.upsi.edu.my

Article history

Received date : 16-5-2026
Revised date : 17-5-2026
Accepted date : 2-6-2026
Published date : 11-6-2026

To cite this document:

Ming, D., & Yuet, F. K. C. (2026). A review of research on transformational leadership. *Journal of Islamic, Social, Economics and Development (JISED)*, 11 (83), 193 – 203.

Abstract: *Transformational leadership originated in the late 1970s and has since become one of the most prominent leadership styles and a major topic of research in the field of management. Existing studies have actively examined the multifaceted impacts of transformational leadership on both organizational and employee outcomes, particularly in the context of organizational change management. These studies collectively demonstrate the critical role of transformational leadership in management practice. Building on prior scholarly work, this article reviews and synthesizes the theoretical origins, structural dimensions, and practical development of transformational leadership, offering insights and references for future research.*

Keywords: *Transformational Leadership Theory, Structural Dimensions, Antecedents, Outcomes*

The Origins of Transformational Leadership Theory

Leadership theory, as a body of research that examines the effectiveness of leadership, has long been a central focus in the field of management. The development of leadership theories has consistently revolved around identifying factors that influence leadership effectiveness, progressing through three classical stages—trait, behavioral, and contingency theories—often grouped as traditional approaches (e.g., Likert, 1961; Blake & Mouton, 1964; Fiedler, 1967). Subsequently, new perspectives continued to advance leadership studies.

Research on trait theory primarily sought the common characteristics of successful leaders, positing that such traits were largely innate. However, trait approaches faced notable limitations in explaining leadership behavior, particularly their limited attention to follower needs, situational factors, and the relative importance of specific traits. This motivated a shift toward behavioral theories emphasizing two key dimensions—concern for people and concern for production—captured in classic managerial grid work and related programs of research (Blake & Mouton, 1964; Likert, 1961). Yet, behavioral approaches also tended to underplay situational context.

To address these gaps, contingency perspectives proposed that leadership effectiveness depends on context. Foundational contributions include Fiedler's contingency model, House's path-goal theory, and leader-member exchange (LMX) theory, which collectively highlighted how task structure, leader-member relations, and follower characteristics shape leader effectiveness (Fiedler, 1967; House, 1971; Graen & Uhl-Bien, 1995).

By the 1970s, amid growing environmental turbulence and organizational change, traditional theories proved insufficient for emerging managerial challenges. Against this backdrop, transformational leadership rose to prominence, grounded in Burns's (1978) conceptualization and extended by Bass's (1985) elaboration linking transformational behaviors to superior performance (Burns, 1978; Bass, 1985).

The term transformational leadership was first introduced by Downton (1973) in his book *Rebel Leadership*. Later, Burns (1978) elevated this concept into leadership theory. Burns argued that transformational leadership motivates subordinates by appealing to higher-order needs and values, establishing a reciprocal relationship of encouragement and mutual development between leaders and followers, and ultimately achieving shared goals. He defined transformational leadership as the process by which leaders identify and stimulate the intrinsic motivation of their subordinates, encouraging them to commit fully to their work and inspiring them through higher values to embrace reform and growth. Importantly, Burns distinguished transformational leadership from transactional leadership: while transactional leaders rely on exchanges of rewards to satisfy followers' interests, transformational leaders emphasize processes of mutual influence and elevation. This distinction laid the foundation for subsequent leadership research.

Building on Burns's work, Bass (1985) expanded the construct of transformational leadership, emphasizing that trust within organizations determines whether employees prioritize collective interests over individual ones. Under transformational leadership, followers clearly understand the meaning and value of their tasks, voluntarily assume responsibility, and foster a climate of mutual trust. As a result, employees, motivated by self-fulfillment, often pursue goals beyond personal benefit and deliver outcomes exceeding organizational expectations (Bass, 1985). Bass (1995) further identified specific characteristics of transformational leaders, such as

maintaining composure and humor in times of crisis, as well as demonstrating patience and responsibility in critical decision-making moments. Later, Bass (2006) stressed that transformational leaders inspire employees by articulating compelling visions, communicating with authenticity, and instilling confidence in the achievability of organizational goals. Through this process, employees make strong commitments and actively contribute to the realization of organizational visions.

In China, Li and Shi (2005) argued that transformational leaders motivate employees by presenting organizational visions, awakening intrinsic motivation, and elevating followers' needs to the level of self-actualization. This process enables employees to transcend the "ordinary self" and strive toward a "greater self," thereby increasing work engagement and enhancing organizational effectiveness. Despite some differences in definitions across scholars, the essence of transformational leadership remains consistent: leaders convey organizational missions, paint compelling blueprints, guide employees toward self-realization, and articulate clear expectations. In doing so, transformational leadership generates numerous positive outcomes, including strengthening employee trust in leaders, fostering respect and admiration, and positively shaping employees' emotions and attitudes.

Transformational Leadership: Structural Dimensions and Measurement

International Research on the Structure of Transformational Leadership

Through extensive research, Bass (1985) not only provided an in-depth conceptualization of transformational leadership but also initially proposed a three-dimensional structure consisting of intellectual stimulation, charismatic–inspirational leadership, and individualized consideration. Subsequent refinements by scholars further separated the original "charismatic–inspirational" factor into inspirational motivation and idealized influence, while retaining the other two dimensions. This revision produced the widely recognized four-dimensional structure of transformational leadership (Bass, 1990; Bass & Avolio, 1994).

The specific dimensions are defined as follows: idealized influence refers to leaders who, through personal values and integrity, inspire trust and enthusiasm among followers; inspirational motivation reflects leaders' ability to articulate a compelling vision and motivate followers to embrace change; individualized consideration involves providing tailored support and attention to the unique needs of employees; and intellectual stimulation describes leaders' capacity to encourage creativity, challenge existing assumptions, and foster innovative problem-solving.

To assess these dimensions, scholars developed the Multifactor Leadership Questionnaire (MLQ), which has demonstrated strong reliability and validity, and has been widely applied in empirical studies of transformational leadership (Bass & Avolio, 1995). Building on this foundation, other researchers proposed an expanded six-dimensional structure, including high performance expectations, individualized consideration, fostering collaboration, articulating a vision, serving as a role model, and intellectual stimulation (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). For example, "high performance expectations" emphasize leaders' role in setting ambitious goals that surpass organizational standards, while "fostering collaboration" highlights leaders' ability to promote teamwork and cohesion. Similarly, "articulating a vision" reflects a leader's skill in clearly communicating organizational goals to motivate collective effort, and "serving as a role model" underscores the influence of leaders' exemplary behavior on followers' commitment.

Later studies extended the framework from an individual to a team-level perspective, categorizing transformational leadership into dimensions such as challenging assumptions, mobilizing members, serving as a role model, reaching consensus, and inspiring enthusiasm. These contributions enriched theoretical understandings of transformational leadership and offered robust tools for measuring leadership behaviors at the group and organizational levels.

Domestic Research on the Structure of Transformational Leadership

Recognizing that Western-developed measurement instruments may not fully capture leadership behaviors within the Chinese cultural context, Chinese scholars have localized the structure of transformational leadership. Li and Shi (2005) conducted empirical studies using Chinese leaders as samples and incorporated the cultural and contextual characteristics of China into their analysis. They proposed a four-dimensional structure of transformational leadership, comprising charisma, vision motivation, individualized consideration, and moral modeling, and developed a localized measurement scale accordingly. Notably, the dimension of moral modeling reflects the leader's ability to set an ethical example for employees, aligning with the emphasis on morality in traditional Chinese culture. Empirical evidence has demonstrated that this localized scale significantly and positively predicts leadership effectiveness and has thus been widely applied in subsequent domestic research.

Building upon this foundation, Meng et al. (2013) further refined the model by introducing a second-order four-dimensional structure, in which each of the original four dimensions contained two subdimensions. Specifically, vision motivation included vision and recognition; influence was composed of charisma and moral conduct; intellectual stimulation involved innovation and openness to advice; and individualized consideration encompassed life care and career development. Based on this framework, Meng and colleagues developed a measurement instrument and validated it empirically, confirming that the subdimensions effectively capture the essence of transformational leadership in the Chinese context. This line of research not only advanced the theoretical localization of transformational leadership but also enriched its measurement in cross-cultural contexts.

The Development of Transformational Leadership in Practice

Originating in the West, transformational leadership theory has since gained widespread recognition across the globe. Since its introduction, it has become an essential component of leadership studies and a widely acknowledged strategy for modern organizations facing continuous change. As organizations increasingly confront dynamic and uncertain environments, transformational leadership has been viewed as a particularly effective approach for managing organizational transformation.

Extensive practical applications and explorations of transformational leadership have been conducted in diverse contexts, including business, education, and the public sector. Through these practices, the theory has not only demonstrated its utility but has also been continuously enriched in meaning. Empirical studies have further uncovered the underlying mechanisms by which transformational leadership influences both individual and organizational outcomes for example, enhancing employee motivation, fostering innovation, and improving organizational performance. In this way, transformational leadership has evolved from a theoretical construct into a vital framework guiding leadership practice worldwide.

Antecedents of Transformational Leadership

The development of leadership theories has consistently demonstrated the effectiveness of transformational leadership for organizational management and development. Having established this, it becomes equally important to examine how transformational leadership behaviors emerge and evolve. Understanding the antecedents and developmental conditions of transformational leadership can help organizations to scientifically identify and cultivate transformational leaders, as well as to design and improve work environments that foster transformational behaviors (Zhu et al., 2011). Broadly, the antecedents of transformational leadership can be divided into individual factors and situational factors.

Individual factors mainly include upbringing environment, work experience, and emotional intelligence. The family environment, in particular, plays a crucial role in leadership development. Murphy (2011) argued that parental practices such as granting decision-making autonomy, providing stimulating environments, and offering encouragement nurture children's leadership potential. Similarly, Avolio, Rotundo, and Walumbwa (2009) found that individuals raised under authoritative parenting styles were more likely to assume leadership roles in adulthood. Research also shows that supportive and intellectually stimulating family environments are positively associated with transformational leadership behaviors in early adulthood, suggesting that early nurturing contexts cultivate responsibility, positive self-evaluation, and independent decision-making skills.

In addition to family background, work contexts have been shown to influence transformational leadership. High cognitive demands, meaningful tasks, and environments that encourage brainstorming and problem-solving foster more transformational leadership behaviors (Ilies, Judge, & Wagner, 2006). Situations that require cognitive engagement, evaluation, and creative problem-solving, especially when leaders perceive stability and control in their work environment, are particularly conducive to transformational behaviors.

Another critical individual factor is emotional intelligence (EI), which has been closely linked to transformational leadership (Goleman, 1995). EI encompasses self-awareness, self-regulation, self-motivation, empathy, and relationship management. For instance, empathy allows leaders to accurately perceive and respond to followers' changing emotional states—an ability essential for demonstrating individualized consideration. Self-awareness helps leaders clarify work goals and communicate the significance of tasks, motivating employees to achieve beyond organizational expectations. Empirical studies further confirm that all five dimensions of EI are significantly and positively correlated with transformational leadership (Barbuto & Burbach, 2006).

Situational factors also play a vital role, including organizational environment, peer leaders, and follower characteristics. At the organizational level, structural and cultural contexts can either facilitate or constrain transformational behaviors. Peers who themselves exhibit transformational leadership may influence colleagues to adopt similar styles. Finally, followers' traits also matter: individuals with high extraversion or strong growth needs are more likely to evaluate transformational leaders positively and to express higher satisfaction under their guidance (Epitropaki & Martin, 2005).

Outcomes of Transformational Leadership

A review of the existing literature shows that research on the mechanisms of transformational leadership has primarily focused on its effects at both the individual employee level and the organizational/team level.

At the individual level, transformational leadership has been found to create a supportive, trusting, and motivating work climate, enabling employees to continually develop and improve themselves. Numerous studies have examined its influence on employees' attitudes, behaviors, and performance. Regarding work attitudes, Li et al. (2006) demonstrated that psychological empowerment mediates the relationship between transformational leadership and leadership effectiveness, showing that transformational leadership significantly enhances employees' job attitudes. Other research further indicates that transformational leaders provide differentiated care and support based on employees' psychological needs, thereby creating developmental environments suited to their growth (Wang & Howell, 2010). Such leaders also articulate organizational goals and visions that inspire higher-level needs, which, in turn, foster stronger organizational commitment, job satisfaction, and work motivation among employees (Avolio, Zhu, Koh, & Bhatia, 2004).

In terms of work behaviors, transformational leaders encourage creativity and innovation by providing a psychologically safe environment. For example, Liu et al. (2013), in a study conducted in the Chinese context, confirmed that transformational leadership enhances employee creativity through psychological empowerment. With respect to job performance, Zhong et al. (2013) found that employees' psychological capital fully mediates the relationship between transformational leadership and both task performance and organizational citizenship behavior, with traditionality serving as a moderating factor.

At the organizational and team level, transformational leadership has also demonstrated positive effects. Chen et al. (2012), analyzing data from Chinese SMEs, developed a theoretical model mediated by learning and innovation, confirming that transformational leadership significantly improves organizational performance. Wang et al. (2013) employed a multilevel approach and found that transformational leadership positively influences team satisfaction and team identification. More recently, Sun (2021), based on dyadic data from leaders and members of innovation project teams, reported that transformational leadership enhances team communication, reflection, and experimentation, thereby fostering team resilience. Additionally, Zhao (2022) conducted a meta-analysis on the relationship between transformational leadership and team performance, concluding that transformational leadership is significantly and positively associated with team performance, with both team type and performance type moderating the relationship.

Future Directions for Transformational Leadership Research

Over the past several decades, transformational leadership has been extensively examined in terms of its conceptual foundations, structural dimensions, effectiveness, and underlying mechanisms. This body of research has significantly advanced both leadership theory and practical applications. However, a critical review of the current literature reveals several limitations that merit further scholarly investigation.

First, existing research has primarily focused on the relationship between transformational leadership and various outcome variables—such as job performance, employee satisfaction, and innovative behavior—while comparatively less attention has been paid to contextual

moderators. Although transformational leadership has been shown to be effective in a wide range of settings, its universal applicability remains a matter of debate. Future research should therefore place greater emphasis on identifying and integrating contextual variables that shape the effectiveness of transformational leadership. For example, Fareed (2023) demonstrated that top management support significantly enhances the impact of transformational leadership on project success in project-based organizations. Similarly, Al Saed and Al Saed (2023) found that the relationship between transformational leadership and organizational trust is stronger when employee empowerment is high. These findings suggest that situational factors play a critical role in shaping leadership outcomes.

Second, the mechanisms by which transformational leadership influences organizational behavior remain theoretically fragmented. Much of the existing literature isolates analysis at either the individual or the team level, thereby limiting understanding of the broader organizational context. Future studies should adopt multi-level theoretical frameworks that simultaneously consider the individual, team, and organizational levels of analysis. Such an approach would provide a more comprehensive view of how transformational leadership functions across different strata within an organization. For instance, Nordin, Mohd Kamil, and Govindaraju (2024) conducted a multilevel study in the public sector and found that job autonomy mediates the relationship between transformational leadership and both innovative work behavior and organizational citizenship behavior. Additionally, integrating mediating processes—such as psychological empowerment, trust, and organizational identification—with moderating variables—such as national culture, task characteristics, or leader–follower fit—would facilitate a more nuanced understanding of the dynamic mechanisms through which transformational leadership exerts influence.

Finally, methodological limitations continue to constrain the development of transformational leadership theory. A considerable portion of empirical research relies on cross-sectional survey data, often drawn from single-source self-reports. This approach restricts the ability to make causal inferences and increases the risk of common method variance. To address these issues, future research should incorporate longitudinal, multi-source, and multi-method research designs, including qualitative studies, experiments, and time-lagged data collection. Such approaches would improve the internal and external validity of findings and support more robust causal claims. Hariri (2024), for example, employed a moderated mediation model to explore how transformational leadership influences employee innovative behavior, illustrating how more sophisticated designs can yield deeper theoretical insights. Expanding the methodological rigor of leadership research is essential to capturing the complex and evolving nature of leadership in contemporary organizational settings.

Integration with Emerging Leadership Theories and Domain-Specific Competency Models

As leadership scholarship advances, transformational leadership increasingly converges with adjacent paradigms such as ethical leadership, authentic leadership, and digital leadership. While these constructs share core emphases—like values-based influence and follower development—they may diverge in contextual boundary conditions and mechanism structures. Future research should conceptualize integrative frameworks that clarify overlaps, distinctiveness, and compatibility across leadership models in different organizational domains. Moreover, the construction of domain-specific competency models remains a fruitful direction. For example, a recent Delphi study developed a validated competency framework tailored to public health leadership, detailing behavioral descriptors specific to sector demands (Bürkin et

al., 2024). Similarly, studies on digital transformation leadership have applied expert consensus methods to identify core leadership competencies in digital contexts (Philip et al., 2023). In addition, empirical work in knowledge-intensive and technology-driven settings shows that transformational leadership is positively associated with follower innovation under conditions of organizational support and commitment to change (Jun et al., 2023), and recent work continues to show its relevance in evolving digital workplaces (Vu, 2025). These findings suggest that future research should examine how domain-relevant competencies interact with core transformational principles to drive organizational innovation, employee outcomes, and sustainable performance across sectors.

Digital Transformation and Leadership in Virtual Work Environments

As digitalization accelerates across industries, it is crucial to understand how transformational leadership adapts to virtual, hybrid, and AI-mediated work environments. In healthcare, Kludacz-Alessandri et al. (2025) introduced the concept of digital transformational leadership and demonstrated that it enhances digital intensity in healthcare organizations through organizational agility, with national context serving as a moderator. Additionally, recent studies in nursing have found that transformational leadership positively affects innovative behavior, mediated by psychological empowerment (Lu et al., 2025). Future research should investigate how digital infrastructure and communication technologies reshape leadership behavior, including which dimensions of transformational leadership are most effective in virtual settings.

Longitudinal and Multi-Level Research Designs

Much of the current literature relies on cross-sectional designs, which limit our ability to infer causal pathways or track leadership dynamics over time. In a longitudinal study involving ICU nurses, researchers found that organizational climate mediates the relationship between transformational leadership and work engagement (Zhang et al., 2025). Such findings underscore the importance of adopting multi-level and time-lagged designs to understand how leadership behaviors evolve, spread, and interact across individual, team, and organizational levels.

Green Transformational Leadership and Sustainability

With increasing organizational emphasis on environmental sustainability, green transformational leadership has emerged as a relevant sub-domain. Aly (2025) investigated the impact of green transformational leadership on green behavioral intentions, actual green behaviors, and green creativity. They found that a green organizational climate mediated the relationship between leadership and behavior, and also moderated the link between intention and action. Future research should expand this line of inquiry to other sectors, such as manufacturing and education, to explore the cross-domain validity of green leadership models.

Artificial Intelligence, Leadership Support, and Perceived AI Use

The integration of artificial intelligence (AI) into organizational processes has introduced new leadership challenges. Recent studies have shown that leadership plays a critical role in shaping perceptions of AI adoption and ensuring responsible implementation. Some studies have examined how transformational leadership influences trust in algorithmic systems, digital transformation outcomes, and organizational readiness for AI deployment (Jeilani & Hussein, 2025). Future research should embed AI perception, algorithmic fairness, and human-machine trust into transformational leadership models.

References

- Avolio, B. J., Rotundo, M., & Walumbwa, F. O. (2009). Early life experiences as determinants of leadership role occupancy: The importance of parental influence and rule-breaking behavior. *The Leadership Quarterly*, 20(3), 329–342. <https://doi.org/10.1016/j.leaqua.2009.03.015>
- Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior*, 25(8), 951–968. <https://doi.org/10.1002/job.283>
- Al Saed, R. M., & Al Saed, M. (2023). The impact of transformational leadership on enhancing organizational trust: Moderating role of empowerment. *Problems and Perspectives in Management*, 21(4), 101–112. [https://doi.org/10.21511/ppm.21\(4\).2023.08](https://doi.org/10.21511/ppm.21(4).2023.08)
- Aly, N. A. E.-F., El-Shanawany, S. M., Ghanem, M. A., & Lotfy, W. M. (2025). Nursing green transformational leadership style, behavioral intentions, actual behavior and creativity: The impact of a green climate. *BMC Nursing*, 24, 659. <https://doi.org/10.1186/s12912-025-03331-2>
- Barbuto, J. E., & Burbach, M. E. (2006). The emotional intelligence of transformational leaders: A field study of elected officials. *The Journal of Social Psychology*, 146(1), 51–64. <https://doi.org/10.3200/SOCP.146.1.51-64>
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press.
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19–31. [https://doi.org/10.1016/0090-2616\(90\)90061-S](https://doi.org/10.1016/0090-2616(90)90061-S)
- Bass, B. M. (1995). *Leading minds: An anatomy of leadership*. Basic Books.
- Bass, B. M. (2006). *Transformational leadership* (2nd ed.). Lawrence Erlbaum Associates.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Sage.
- Bass, B. M., & Avolio, B. J. (1995). *MLQ multifactor leadership questionnaire for research: Permission set*. Mind Garden.
- Blake, R. R., & Mouton, J. S. (1964). *The managerial grid: Key orientations for achieving production through people*. Gulf Publishing.
- Burns, J. M. (1978). *Leadership*. Harper & Row.
- Bürkin, B. M., Czabanowska, K., Babich, S., Casamitjana, N., Vicente-Crespo, M. V., De Souza, L. E., Bohlius, J. (2024). Competencies for transformational leadership in public health — An international Delphi consensus study. *International Journal of Public Health*. <https://doi.org/10.3389/ijph.2024.1606267>
- Chen, X., Zhao, K., Liu, X., & Wu, D. (2012). The effects of transformational leadership on organizational performance: Evidence from Chinese SMEs. *Journal of Business Research*, 65(7), 1025–1031.
- Downton, J. V. (1973). *Rebel leadership: Commitment and charisma in a revolutionary process*. Free Press.
- Epitropaki, O., & Martin, R. (2005). From ideal to real: A longitudinal study of the role of implicit leadership theories on leader–member exchanges and employee outcomes. *Journal of Applied Psychology*, 90(4), 659–676. <https://doi.org/10.1037/0021-9010.90.4.659>
- Fiedler, F. E. (1967). *A theory of leadership effectiveness*. McGraw-Hill.
- Fareed, M. Z. (2023). Transformational leadership and project success: The moderating effect of top management support. *SAGE Open*. <https://doi.org/10.1177/21582440231195685>
- Goleman, D. (1995). *Emotional intelligence*. Bantam Books.

- Graen, G. B., & Uhl-Bien, M. (1995). Development of leader–member exchange (LMX) theory of leadership over 25 years: Applying a multi-level, multi-domain perspective. *The Leadership Quarterly*, 6(2), 219–247. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)
- Hariri, S. H. (2024). The agency of transformational leadership in engendering innovative behaviors among employees: A moderated–mediated model. *Cogent Business & Management*, 11(1), 2432545. <https://doi.org/10.1080/23311975.2024.2432545>
- Ilies, R., Judge, T. A., & Wagner, D. T. (2006). Making sense of motivational leadership: The trail from transformational leaders to motivated followers. *Journal of Leadership & Organizational Studies*, 13(1), 1–22.
- Jun, K., Lee, G., Song, Y., & others. (2023). Transformational leadership and followers' innovative behavior: Commitment to change and organizational support for creativity. *Behavioral Sciences*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10135561/>
- Jeilani, A., & Hussein, A. (2025). Impact of digital health technologies adoption on healthcare workers' performance and workload: Perspective with DOI and TOE models. *BMC Health Services Research*, 25, 271. <https://doi.org/10.1186/s12913-025-12414-4>
- Kludacz-Alessandri, M., Hawrysz, L., Żak, K., & Zhang, W. (2025). The impact of digital transformational leadership on digital intensity among primary healthcare entities: A moderated mediation model. *BMC Health Services Research*, 25, Article 12283. <https://doi.org/10.1186/s12913-025-12283-x>
- Li, C., & Shi, K. (2005). The structure and measurement of transformational leadership in China. *Acta Psychologica Sinica*, 37(6), 803–811.
- Li, C., Zhang, Z., & Shi, K. (2006). Transformational leadership and employee work attitudes: The mediating role of psychological empowerment. *Acta Psychologica Sinica*, 38(2), 297–307.
- Likert, R. (1961). *New patterns of management*. McGraw-Hill.
- Liu, J., Siu, O. L., & Shi, K. (2013). Transformational leadership and employee well-being: The mediating role of trust in the leader and self-efficacy. *Applied Psychology*, 62(2), 366–389.
- Lu, Y., Zhai, S., Liu, Q., Liu, J., & Chen, C. (2025). The impact of head nurse empowerment on clinical nurses' innovative behavior: The mediating role of organizational climate and professional autonomy. *BMC Nursing*, 24, 574. <https://doi.org/10.1186/s12912-025-03214-6>
- Meng, H., Jin, J., & Guo, Z. (2013). Transformational leadership and followers' innovative behavior: The mediating role of psychological empowerment. *Journal of Human Resource and Sustainability Studies*, 1(2), 41–46.
- Murphy, S. E. (2011). Providing a foundation for leadership development. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The Sage handbook of leadership* (pp. 225–236). Sage.
- Nordin, W. N. A. W., Mohd Kamil, N. L., & Govindaraju, V. G. R. (2024). Multilevel study of transformational leadership and work behavior: Job autonomy matters in public service. *Management Research Review*. <https://doi.org/10.1108/MRR-08-2023-0596>
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107–142. [https://doi.org/10.1016/1048-9843\(90\)90009-7](https://doi.org/10.1016/1048-9843(90)90009-7)
- Philip, J., et al. (2023). Identifying key leadership competencies for digital transformation: A Delphi approach. *Leadership for Digital Transformation*. Emerald journal.
- Sun, M. (2021). Transformational leadership and team resilience: The roles of team communication and reflection. *Frontiers in Psychology*, 12, 668234.

- Vu, G. T. H. (2025). Transformational leadership and innovative work behaviors: A follower-centric examination. *Social Sciences & Humanities Open*.
<https://doi.org/10.1177/21582440251335464>
- Wang, X. H., & Howell, J. M. (2010). Exploring the dual-level effects of transformational leadership on followers. *Journal of Applied Psychology*, 95(6), 1134–1144.
<https://doi.org/10.1037/a0020754>
- Wang, Z., Xu, H., & Liu, Y. (2013). Transformational leadership and team outcomes: A multilevel analysis. *Leadership & Organization Development Journal*, 34(7), 635–652.
- Zhang, L., Han, L., Liang, X., Wang, R., Fan, H., Jia, Y., Li, S., & Jiang, X. (2025). The relationship between transformational leadership and work engagement among intensive care unit nurses: The mediating function of organizational climate. *BMC Nursing*, 24, 398.
<https://doi.org/10.1186/s12912-025-03057-1>
- Zhao, D. (2022). Transformational leadership and team performance: A meta-analysis. *The Leadership Quarterly*, 33(4), 101572.
- Zhong, L., Li, F., & Fang, R. (2013). Transformational leadership, psychological capital, and employee performance: The moderating role of traditionality. *Journal of Organizational Behavior*, 34(6), 1061–1075.