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REVIEW

The Role of Transformational Leadership in Improving Nurse Retention and Well-Being in Non-Western Countries: A Systematic Review

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Background: High nursing turnover threatens global healthcare stability. Transformational leadership, defined by inspiring a shared vision and intellectual stimulation, is a potential remedy, yet evidence remains Western-centric. A knowledge gap exists regarding its impact amidst the distinct cultural norms and resource constraints of non-Western systems. This review synthesizes evidence on transformational leadership's association with nurse retention and well-being in these settings.

Methods: Following PRISMA 2020 guidelines and a PROSPERO protocol (CRD420251108875), we searched PubMed, CINAHL, and Scopus (January 2015–June 2025). We included quantitative studies examining transformational leadership's impact on nurse well-being or retention in hospitals. Quality was assessed using Joanna Briggs Institute (JBI) tools. Data were analyzed using narrative synthesis due to methodological heterogeneity.

Results: Thirteen quantitative studies were synthesized. Results revealed robust positive correlations between transformational leadership and well-being, specifically job satisfaction (r = 0.48–0.76) and work engagement (r = 0.65). This leadership style significantly predicted retention, explaining up to 71% of turnover intention variance. However, findings must be viewed with caution as most studies raised "some concerns" regarding risk of bias.

Conclusion: This review provides associative evidence linking transformational leadership to enhanced nurse well-being and workforce sustainability in non-Western systems. Its value lies in direct influence and fostering healthier work environments. Healthcare organizations should invest in developing these leadership capabilities to strengthen the nursing workforce and ensure quality patient care.

Keywords: transformational leadership, nurse retention, nurse well-being, job satisfaction, patient safety, quality of care, nursing management, systematic review

Introduction

The global nursing shortage has escalated into an unprecedented crisis, threatening the stability of healthcare systems worldwide. This issue is particularly acute in certain regions; for instance, nurse turnover rates in Asia have reportedly reached 19%, significantly exceeding the global average.[1] Such high attrition precipitates a cascade of negative consequences, compromising patient safety, diminishing operational efficiency, and imposing severe financial burdens on healthcare institutions.[2,3] This exodus is driven by a confluence of factors, including increasingly complex patient acuity, unsustainable staffing ratios, and unsupportive work environments.[4] Compounded by a projected 5.9 million shortfall in the global nursing workforce by 2030, the imperative to identify and implement evidence-based retention strategies has never been more urgent.[5]

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In response, scholarly attention has pivoted toward modifiable workplace factors, with nurse manager leadership emerging as a critical leverage point for fostering positive organizational change.[6] Among various leadership paradigms, transformational leadership offers a particularly robust theoretical framework. To understand its efficacy, it is essential to first define the construct. Operationalized through the lens of Bass and Avolio's seminal framework,[7] transformational leadership is characterized not merely by the exchange of rewards for performance, but by a leader's ability to inspire followers to transcend their own self-interests for the collective good. This paradigm is globally recognized by four distinct dimensions: idealized influence, where the leader acts as a charismatic role model; inspirational motivation, involving the articulation of a compelling vision; intellectual stimulation, which challenges nurses to question assumptions and innovate; and individualized consideration, where the leader attends to each nurse's specific needs for growth and support.[8]

In the high-pressure context of healthcare, this methodology aligns with widely recognized organizational theories, including the Job Demands-Resources framework, where effective leadership acts as a crucial job resource that buffers against workplace stressors.[9] However, despite a voluminous body of research demonstrating these positive effects generally, a comprehensive and nuanced synthesis of the evidence within the specific context of nursing in non-Western regions remains elusive. While individual studies consistently report significant associations between transformational leadership and desirable outcomes like enhanced work-life quality and reduced turnover intention,[10,11] the existing evidence base is fragmented. Findings are often scattered across disparate outcomes without a targeted synthesis focused on the leader-nurse dyad.[12] Furthermore, previous systematic reviews have frequently adopted a narrow scope, examining either nurse well-being or retention in isolation. This has left the critical nexus between leadership, well-being, and retention and the complex mechanisms that underpin this relationship largely underexplored.[13]

This systematic review was therefore undertaken to bridge this knowledge gap. By primarily synthesizing empirical evidence on well-being and retention outcomes, and focusing exclusively on studies from non-Western settings, this review aims to provide a more balanced and comprehensive understanding of the nursing workforce beyond Western paradigms. Moreover, a secondary objective of this review was to explore the mechanisms underlying the effect of transformational leadership on the outcomes. To guide this inquiry, the review was structured by the Population, Intervention, Outcome (PIO) framework to address the following question:

> For the Population of practicing nurses in hospital settings, what is the effect of the Intervention of transformational leadership on the Outcomes of well-being (e.g., job satisfaction, work engagement) and retention (e.g., turnover intention)?.

Methods

Study Design

This systematic review was conducted following a prospectively registered protocol in the International Prospective Register of Systematic Reviews (PROSPERO), with number CRD420251108875. The review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 statement to ensure methodological transparency and reporting clarity.[14] A complete depiction of the study identification, screening, and inclusion process is detailed in the PRISMA 2020 flow diagram (Figure 1).

Eligibility Criteria

Studies were included if they met a pre-defined set of eligibility criteria, structured according to the Population, Intervention, Context, Outcomes, and Study Design (PICOS) framework:

Population (P): Practicing nurses at any level (eg, registered nurses, staff nurses, nurse managers) working in hospital settings.

Intervention (I): The primary independent variable examined had to be transformational leadership, operationalized as a style comprising idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.[7]

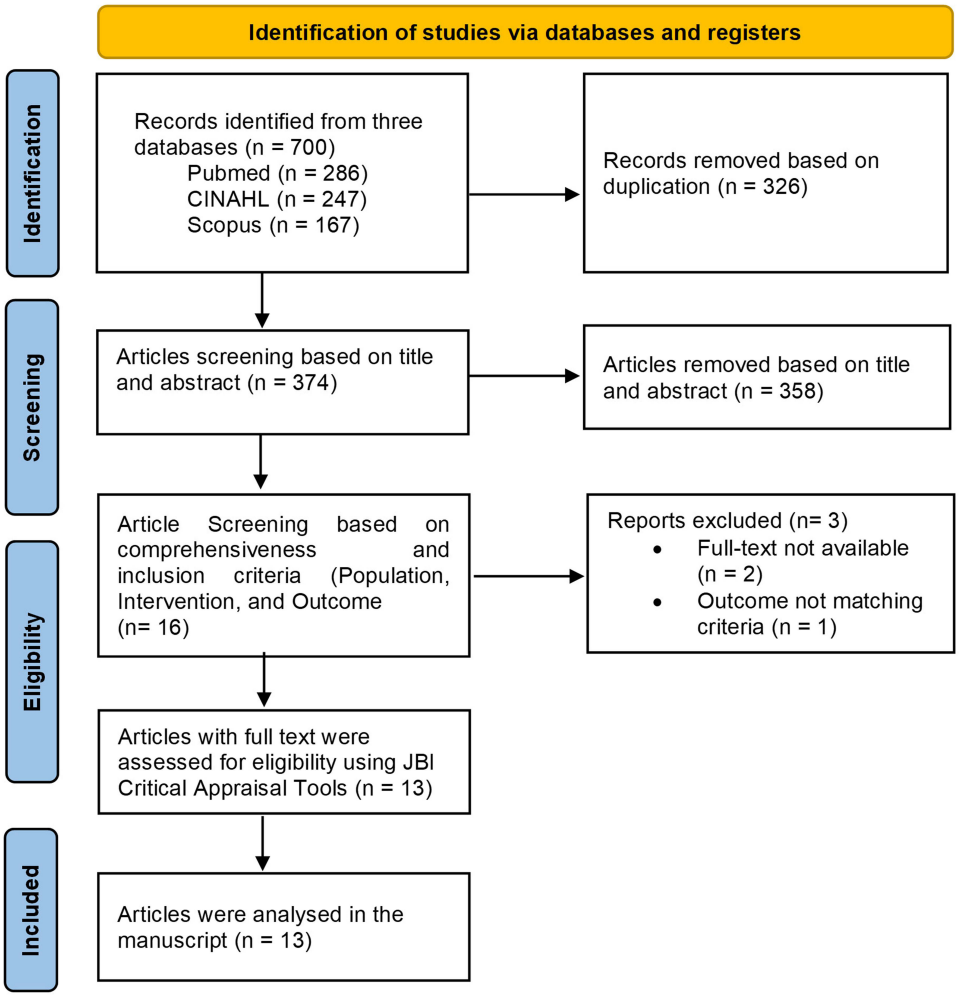

Figure 1 PRISMA 2020 Flow Diagram Adapted from Page et al (2020).[14]

Context (C): Studies conducted specifically within non-Western healthcare settings. For the purpose of this review, "non-Western" was operationally defined as countries excluding North America, Western Europe, and Australasia. This criterion was applied to focus on leadership dynamics within unique cultural and systemic frameworks distinct from the dominant Western models.

Outcomes (O): Studies were required to report at least one quantitative outcome related to:

1. Nurse Well-being: Defined broadly to encompass positive psychological states (eg, job satisfaction, work engagement, organizational commitment) and negative indicators (eg, burnout) reflecting the workforce's psychological health.
2. Nurse Retention: Measured via actual turnover rates or turnover intention. While distinct from actual departure, turnover intention was included as it is widely recognized as the strongest cognitive precursor and proxy for voluntary turnover behavior.

Study Design (S): Empirical, quantitative studies (eg, cross-sectional, longitudinal, or experimental) published in English between January 2015 and June 2025.

Search Strategy

A comprehensive systematic search was conducted across three primary electronic databases: PubMed/MEDLINE, CINAHL (via EBSCOhost), and Scopus. To ensure optimal sensitivity and specificity, the search strategy was developed in consultation with a clinical information specialist. The query structure encompassed three core domains: (1) transformational leadership, (2) the nursing population, and (3) retention and well-being outcomes, utilizing a combination of standardized vocabularies (eg, MeSH terms) and free-text keywords joined by Boolean operators. The complete database-specific search strings are presented in Supplementary Table 1.

The search was strictly delimited to the period between January 2015 and June 2025. This ten-year timeframe was purposefully selected to capture contemporary leadership dynamics, specifically addressing the shift towards value-based care and the critical workforce adaptations necessitated by the recent global health crisis. Furthermore, to maintain a high standard of evidence quality, the review was confined to peer-reviewed, published articles. While we acknowledge that excluding grey literature may introduce publication bias, this criterion was prioritized to ensure that all synthesized data had undergone rigorous external scientific validation. Finally, a manual examination of the reference lists of all included studies was performed to identify any additional relevant citations.

Study Selection Process

Following deduplication using Mendeley Desktop,[15] all unique citations were subjected to a two-stage screening protocol, executed independently by two reviewers (R.A. and M.A.A). The first stage involved a title and abstract review, and citations that met preliminary criteria advanced to a full-text assessment for final eligibility. Any conflicts arising during either stage were resolved through consensus-based discussion. In instances where an agreement could not be attained, a third evaluator (M.K.) was enlisted to serve as the ultimate decision-maker. The entire study selection cascade is visually detailed in the PRISMA 2020 flow diagram (Figure 1).

Quality Assessment of Included Studies

The methodological integrity of each included study was systematically appraised by two independent reviewers (R.A. and M.A.A.) using validated instruments from the Joanna Briggs Institute (JBI). The JBI Checklist for Analytical Cross-Sectional Studies was the principal instrument used.[16] The appraisal considered key domains, including the validity of measurements, population definition, and appropriateness of statistical analysis. Discrepancies in bias ratings were resolved through consensus. This assessment was not used for study exclusion but rather to contextualize the evidence within the narrative synthesis and gauge the overall strength of conclusions.

Data Synthesis and Analysis

A narrative synthesis was employed, following the guidance by Popay et al (2006), as a quantitative meta-analysis was not feasible due to significant methodological and contextual heterogeneity among the included studies.[17] Data from each study were extracted independently by two reviewers (R.A. and M.A.A.) using a standardized data charting form, with discrepancies resolved by consensus or arbitration by a third reviewer (M.K). The extracted findings were thematically organized around three domains: (1) impact on nurse well-being, (2) influence on nurse retention, and (3) mediating and moderating mechanisms. The analysis focused on identifying consistent patterns and constructing a coherent explanatory model from the evidence.

Results

Study Selection

The study identification and selection process is detailed in the PRISMA 2020 flow diagram (Figure 1). The initial database search yielded 700 citations. After removing 326 duplicates, 374 unique articles proceeded to title and abstract screening. This resulted in the exclusion of 358 articles, leaving 16 for full-text assessment. Of these, full texts were retrieved for 14 articles; two were unobtainable despite attempts via institutional access and direct author contact. From

the 14 retrieved articles, one was excluded for not reporting a relevant outcome. This process culminated in a final sample of 13 studies for narrative synthesis.

Characteristics of the Included Studies

This review is grounded in 13 quantitative, cross-sectional studies published between 2016 and 2024. The evidence base is notably concentrated in non-Western contexts, with research conducted in Jordan, Saudi Arabia, China, Malaysia, Indonesia, Ghana, Pakistan, Taiwan, Turkey, and Bahrain. Sample sizes ranged from 97 to 400 practicing nurses. The Multifactor Leadership Questionnaire (MLQ) represents the most prevalently employed tool for the assessment of leadership attributes.[7] Primary outcomes were grouped into two domains: nurse well-being (eg, job satisfaction, work engagement) and nurse retention (primarily turnover intention). Six studies employed advanced statistical modeling (SEM or PLS-SEM) to explore complex relationships. A summary is presented in Table 1.

Table 1 Characteristics of Study

Author (s), Year	Country	Study Design	Setting	Sample	Leadership Measurement	Primary Outcomes	Statistical Analysis
Alloubani et al, (2019)[18]	Jordan	Cross-sectional, correlational	3 public and 3 private hospitals	400 (managers, nurses, patients)	MLQ 5X Short	Job satisfaction, patient-rated care quality	Pearson correlation, Multiple regression
Choi et al, (2016)[19]	Malaysia	Cross-sectional, SEM	1 public and 1 private hospital	200 nursing staff	Adapted MLQ	Mediating role of empowerment on TL-job satisfaction	PLS-SEM
Magbity et al, (2020)[20]	Ghana	Cross-sectional, correlational	5 hospital types	250 nurses	MLQ 5X-Short	Impact of leadership styles on turnover intention	Pearson correlation, Multiple regression
Pattali et al, (2024)[21]	Bahrain	Cross-sectional, SEM	8 private hospitals	296 nurses	Adapted scales	Moderating role of POS on TL-turnover intention link	PLS-SEM
Peng & Tseng, (2019)[22]	Taiwan	Cross-sectional, dyadic	Regional teaching hospital	234 nurse-supervisor dyads	MLQ 5X-Short	Moderated mediation of engagement and conscientiousness	Moderated Mediation, CFA
Uslu Sahan & Terzioglu, (2022)[23]	Turkey	Cross-sectional, correlational	University hospital	153 (managers, nurses)	Leadership Practices Inventory (LPI)	Impact of TL on commitment and job satisfaction	Pearson correlation, Linear regression
Asif et al, (2019)[24]	Pakistan	Cross-sectional, SEM	17 government hospitals	386 female nurses	7-item scale (Carless et al).	Full mediation of empowerment and JS on TL-patient outcomes	SEM, CFA
Al-Dossary, R. (2022)[25]	Saudi Arabia	Cross-sectional, correlational	71 hospitals	390 (managers and nurses)	MLQ	TL relationship with work engagement and commitment	Pearson correlation, *t*-test

(*Continued*)

Table 1 (Continued).

Author (s), Year	Country	Study Design	Setting	Sample	Leadership Measurement	Primary Outcomes	Statistical Analysis
Abu-Qutaish et al, (2025)[26]	Jordan	Cross-sectional, correlational	3 government hospitals	125 nurses	Adapted MLQ	Impact of TL on work motivation and engagement	Pearson correlation, Multiple regression
Rindu et al, (2020)[27]	Indonesia	Cross-sectional, SEM	2 private hospitals	97 nurses	Modified questionnaire	Indirect effects of TL on turnover intention	PLS-SEM
Alkharabsheh et al, (2017)[28]	Jordan	Cross-sectional, SEM	9 public hospitals	354 nurses	MLQ-5X	Partial mediation of culture on TL-turnover intention	SEM, CFA
Alluhaybi et al, (2024)[29]	Saudi Arabia	Cross-sectional, correlational	4 public hospitals	278 nurses	MLQ-5X	Relationship between leadership styles and engagement	Pearson correlation, Multiple regression
Zhang et al, (2025)[30]	China	Cross-sectional, SEM	ICUs in 6 tertiary hospitals	359 ICU nurses	Adapted MLQ	Mediating role of climate on TL-work engagement	SEM, CFA

Abbreviations: MLQ, Multifactor Leadership Questionnaire; LPI, Leadership Practices Inventory; SEM, Structural Equation Modeling; PLS-SEM, Partial Least Squares SEM; CFA, Confirmatory Factor Analysis; POS, Perceived Organizational Support; TL, Transformational Leadership; JS, Job Satisfaction.

Quality Appraisal and Risk of Bias of Included Studies

The methodological integrity of the 13 included studies was evaluated using the JBI Checklist for Analytical Cross-Sectional Studies.[16] As detailed in Table 2, a widespread limitation was identified: the inadequate identification and control of confounding variables. Specifically, 10 of the 13 studies did not account for crucial contextual factors known to influence nurse outcomes, such as practice environment characteristics or staffing ratios.[31,32] As a result of this notable deficiency, the comprehensive risk of bias for these investigations was assessed as exhibiting "Some Concerns," notwithstanding the robustness of other methodological domains. This widespread failure to control for confounders means a causal relationship between transformational leadership and nurse outcomes cannot be definitively established from this body of evidence. The findings are therefore interpreted as associative.

Table 2 Methodological Quality Assessment of Included Studies

Author (Year)	D1	D2	D3	D4	D5	D6	D7	Overall
Alloubani et al, (2019)[18]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns
Choi et al, (2016)[19]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns
Magbity et al, (2020)[20]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns
Pattali et al, (2024)[21]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns
Peng & Tseng, (2019)[22]	Low	Low	Low	Low	Low	Low	Low	Low
Uslu Sahan & Terzioglu, (2022)[23]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns
Asif et al, (2019)[24]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns

(*Continued*)

Table 2 (Continued).

Author (Year)	D1	D2	D3	D4	D5	D6	D7	Overall
Al-Dossary, R. (2022)[25]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns
Abu-Qutaish et al, (2025)[26]	Low	Low	Low	Low	Low	Low	Low	Low
Rindu et al, (2020)[27]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns
Alkharabsheh et al, (2017)[28]	Low	Low	Low	Low	Low	Low	Low	Low
Alluhaybi et al, (2024)[29]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns
Zhang et al, (2025)[30]	Low	Low	Low	Low	Concerns	Concerns	Low	Concerns

Note: Key: Low = Low risk of bias; Concerns = Some concerns. The overall risk was rated as "Some Concerns" if confounding factors were not identified (D5) or not controlled for (D6), reflecting a significant potential for bias. Domains: D1: Participant Selection Criteria; D2: Participant Characteristics & Setting; D3: Exposure Measurement Validity; D4: Outcome Measurement Validity; D5: Confounding Factors Identification; D6: Confounding Control Strategies; D7: Statistical Analysis Appropriateness.

Summary of Quantitative Evidence

The findings from the 13 included studies are organized by thematic domain below.

Domain 1: Nurse Well-Being

Transformational leadership demonstrated a consistent positive association with nurse well-being across the included studies (Table 3). Alloubani et al (2019) reported the strongest correlation, identifying a robust link between transformational leadership and job satisfaction ($r = 0.759$, $p < 0.001$).[18] Similarly, regarding work engagement, Alluhaybi et al (2024) found a significant positive correlation ($r = 0.65$, $p < 0.01$),[29] while Zhang et al (2025) confirmed through path analysis that transformational leadership had a significant direct positive effect on engagement ($\beta = 0.645$, $p < 0.01$).[30] Furthermore, in regression models, Abu-Qutaish et al (2025) established that this leadership style significantly predicted both work motivation ($\beta = 0.342$) and work engagement ($\beta = 0.277$).[26]

Table 3 Summary of Key Findings: Nurse Well-Being

Author (Year)	Outcome (s) Measured	Analysis	Effect Size & Significance	Relationship
Alloubani et al (2019)[18]	Job Satisfaction	Pearson's r	r = 0.759, p < 0.001	Strong, positive
	Quality of Care (Regression)	Multiple Reg.	β = 0.48, p < 0.001	Strong predictor
Choi et al (2016)[19]	TL → Job Satisfaction (direct)	Path Analysis	β = 0.231, p = 0.013	Significant positive
Sahan & Terzioglu (2022)[23]	Job Satisfaction (General)	Pearson's r	r = 0.488, p < 0.001	Moderate positive
	Organizational Commitment	Pearson's r	r = 0.299, p < 0.001	Weak positive
Al-Dossary (2022)[25]	Work Engagement (TL)	Pearson's r	r = 0.48–0.55, p < 0.01	Moderate to strong positive
Abu-Qutaish et al (2025)[26]	Work Motivation	Multiple Reg.	β = 0.342, p < 0.001	Significant predictor
	Work Engagement	Multiple Reg.	β = 0.277, p < 0.001	Significant predictor
Alluhaybi et al (2024)[29]	Work Engagement (TL)	Pearson's r	r = 0.65, p < 0.01	Strong positive
Zhang et al (2025)[30]	TL → Work Engagement (direct)	Path Analysis	β = 0.645, p < 0.01	Significant positive

Notes: Pearson's r = Pearson correlation coefficient; a positive value indicates a direct relationship between variables. β = Beta regression coefficient; indicates the strength and direction of the relationship in regression analysis. p = Statistical significance value; p < 0.05 is considered statistically significant. Multiple Reg. = Multiple Regression. Path Analysis = Path analysis, used to examine direct and indirect relationships between variables. Strong, positive = Strong positive relationship. Moderate positive = Moderate positive relationship. Weak positive = Weak positive relationship. Significant predictor = Statistically significant predictor variable. The arrow symbol (→) denotes the direction of influence or relationship between variables.
Abbreviation: TL, Transformational Leadership.

Domain 2: Nurse Retention

The review identified a consistent protective effect of transformational leadership on turnover intention (Table 4). Magbity et al (2020) documented a significant inverse correlation between transformational leadership and the intention to leave ($r = -0.377$, $p < 0.05$), noting that their regression model explained 38.4% of the variance in turnover intention.[20] In a more recent study, Pattali et al (2024) reported an even stronger predictive model, accounting for 71% of the variance ($R^2 = 0.710$) in turnover intention.[33] This negative association was supported by path analyses in studies by Alkharabsheh et al (2017) and Pattali et al (2024), which both reported significant negative direct effects of leadership on turnover intention ($\beta = -0.155$ and $\beta = -0.166$, respectively).[21,28] However, Rindu et al (2020) reported a non-significant direct path ($\beta = -0.078$, $p > 0.05$),[27] suggesting that in certain contexts, the influence of leadership on retention may be fully mediated by other factors rather than direct.

Domain 3: Mechanisms and Pathways

While the primary objective of this review was to assess the impact of leadership on well-being and retention, several included studies provided secondary data elucidating the potential mechanisms underlying these relationships (Table 5). These findings suggest that the influence of transformational leadership is frequently indirect, channeled through specific mediating variables. For instance, Choi et al (2016) reported that structural empowerment served as a partial mediator between leadership and job satisfaction,[19] while Zhang et al (2025) indicated that organizational climate partially

Table 4 Summary of Key Findings: Nurse Retention

Author (Year)	Outcome (s) Measured	Analysis	Effect Size & Significance	Relationship
Magbity et al (2020)[20]	Turnover Intention (TL)	Pearson's r	$r = -0.377$, $p < 0.05$	Significant negative
	Turnover Intention (Laissez-faire)	Pearson's r	$r = 0.42$, $p < 0.05$	Significant positive
Pattali et al (2024)[21]	Turnover Intention (TL)	Path Analysis	$\beta = -0.166$, $p = 0.010$	Significant negative
	Overall model	Multiple Reg.	$R^2 = 0.710$	Explains 71% of variance
Rindu et al (2020)[27]	TL → Turnover Intention (direct)	Path Analysis	$\beta = -0.078$, $p > 0.05$	Not significant
Alkharabsheh et al (2017)[28]	TL → Turnover Intention (direct)	Path Analysis	$\beta = -0.155$, $p = 0.007$	Significant negative

Notes: Turnover Intention = The intention of employees (nurses) to leave their job or organization. Significant negative = A significant negative relationship (higher TL is associated with lower turnover intention). Significant positive = A significant positive relationship (higher laissez-faire leadership is associated with higher turnover intention). Not significant = No significant relationship found. Explains 71% of variance = The overall model accounts for 71% of the variance in turnover intention ($R^2 = 0.710$). The arrow symbol (→) denotes the direction of influence or relationship between variables.
Abbreivation: TL, Transformational Leadership.

Table 5 Summary of Key Findings: Mechanisms Mediators & Moderators

Author (Year)	Pathway Investigated	Analysis	Finding/Effect	Type of Effect
Choi et al (2016)[19]	TL → Empowerment → Job Satisfaction	Mediation	$\beta = 0.175$, $p = 0.001$	Partial mediation
Peng & Tseng (2019)[22]	TL → Work Engagement → Job Performance	Mediation	Indirect effect = 0.17, $p < 0.01$	Partial mediation
Asif et al (2019)[24]	TL → (SE, JS) → Patient Outcomes	Mediation	Direct effects non-significant	Full mediation
Rindu et al (2020)[27]	TL → (OC, WS) → Turnover Intention	Mediation	Indirect effects significant	Full mediation
Alkharabsheh et al (2017)[28]	TL → Org. Culture → Turnover Intention	Mediation	Indirect effect = −0.088, $p = 0.001$	Partial mediation
Zhang et al (2025)[30]	TL → Org. Climate → Work Engagement	Mediation	Indirect effect = 0.410, $p < 0.01$	Partial mediation

(*Continued*)

Table 5 (Continued).

Author (Year)	Pathway Investigated	Analysis	Finding/Effect	Type of Effect
Pattali et al (2024)[21]	TLE × POS → Turnover Intention	Moderation	$\beta = 0.225$, $p < 0.01$	POS enhances effect
Peng & Tseng (2019)[22]	Moderation by Conscientiousness	Mod. Med.	Effect significant only for high C.	Conditional effect

Notes: The arrow symbol (→) denotes the direction of influence or relationship between variables.
Abbreviations: TL, Transformational Leadership; SE, Structural Empowerment; JS, Job Satisfaction; OC, Organizational Commitment; WS, Work Stress; POS, Perceived Organizational Support; TLE, Transformational Leadership Experience; Org., Organizational; Mod. Med., Moderated Mediation; C., Conscientiousness.

mediated the effect on work engagement.[30] Similarly, Rindu et al (2020) found that the link to turnover intention was fully mediated by organizational commitment and work stress.[27] Additionally, the effectiveness of this leadership style appeared to be conditional; Pattali et al (2024) observed that Perceived Organizational Support (POS) significantly moderated the relationship with turnover intention,[21] and Peng and Tseng (2019) noted that the positive indirect effects on job performance were significant and stronger among nurses with high conscientiousness.[22]

Discussion

This systematic review synthesizes evidence from 13 quantitative studies, exclusively rooted in non-Western contexts, to elucidate the relationship between transformational leadership, nurse well-being, and retention. By strictly focusing on regions distinct from Western paradigms, including the Middle East, Southeast Asia, and Africa, this review offers a unique perspective on how leadership functions within healthcare systems often characterized by specific cultural norms and systemic resource challenges.

While the aggregated data suggest a consistent positive association, indicating that this leadership style is linked to a more stable and engaged workforce, these results warrant a cautious interpretation due to the methodological limitations of the primary studies, particularly the prevalence of cross-sectional designs. However, the robustness of the findings across diverse non-Western settings suggests that transformational leadership resonates deeply within these specific nursing workforces.

Interpretation within Non-Western Health Services The effectiveness of transformational leadership in these regions can be interpreted through specific cultural and systemic lenses. Many of the included studies originate from societies characterized by high power distance and collectivism, such as Saudi Arabia, China, and Indonesia.[34,35] In non-Western healthcare structures, which often maintain rigid hierarchical boundaries between management and staff, transformational leaders who practice Individualized Consideration act as a critical bridge. By reducing psychological distance and empowering nurses, these leaders likely satisfy a need for support that is otherwise unmet in traditional bureaucratic systems, as evidenced by the strong associations with engagement reported in these cultural contexts.[25,30]

Furthermore, distinct health service characteristics in these regions amplify the value of this leadership style. In developing economies facing chronic resource constraints, the leader's ability to provide Inspirational Motivation functions as a primary job resource within the Job Demands-Resources (JD-R) framework.[36] In these settings, effective leadership buffers nurses against the stress of high patient ratios and limited infrastructure. Additionally, in regions reliant on expatriate workforces, such as the Gulf Cooperation Council (GCC) countries included in this review, transformational leadership appears vital for fostering social integration and a cohesive organizational climate among a culturally diverse nursing staff.[21]

The enduring association between transformational leadership and the well-being of nursing professionals corresponds with extensive meta-analytic findings.[37,38] By fostering environments where nurses feel valued and motivated, transformational leaders appear to cultivate a positive psychological state that is crucial for organizational stability. Similarly, the negative association with turnover intention can be interpreted through social exchange theory [39] and the Job Demands-Resources (JD-R) model.[36] Recent evidence highlighting that leadership style can account for up to 71% of the variance in turnover intention,[33] further solidifies the premise that transformational leadership functions as an

essential job resource that mitigates the effects of occupational demands and cultivates an atmosphere of commitment, consequently diminishing nurses' propensity to resign.

An additional insight of this review is its elucidation of the indirect pathways through which leadership exerts influence. The evidence suggests that the effects of leadership on outcomes are predominantly channeled through mediating variables. Specifically, this review found that factors such as structural empowerment,[19,24] a positive organizational context,[28,30] and the mitigation of work stress [27] were significant mediators. This underscores that transformational leaders create impact not just through direct inspiration, but by actively shaping a healthier practice environment. Furthermore, the review highlights that leadership effectiveness is not uniform but is moderated by organizational factors, such as perceived organizational support.[21] Specifically, nurses with high conscientiousness are better able to translate the motivational energy from leadership into tangible job performance.[22] These findings align with contingency theories of leadership, which argue that the efficacy of a leader is contingent upon the dynamic interaction between the leader's approach and contextual variables.[40,41]

Finally, this review revealed mixed findings regarding transactional leadership, with one study finding a positive association with engagement and another reporting no significant link to turnover. This inconsistency may be explained by the multidimensional nature of this leadership style. Transactional leadership comprises distinct components, such as contingent reward (often seen as positive) and management-by-exception (which can be active or passive, and often viewed negatively).[8] The differential effects of these components could explain the mixed findings. Therefore, future research should assess these dimensions separately to clarify their respective impacts on nurse outcomes, a recommendation echoed in broader leadership literature.[37]

Implications for Practice

The findings from this review have multi-level implications and suggest the potential value of reframing leadership development as an essential, proactive strategy for organizational health and patient safety. For Health Policymakers and Regulatory Bodies, the consistent link between leadership and nurse outcomes suggests that leadership quality should be treated as a key indicator of health system performance. We recommend the integration of transformational leadership competencies into systemic quality frameworks, such as national hospital accreditation standards,[42] to elevate leadership development to a systemic healthcare priority and promote a baseline standard of quality across institutions.

For Hospital Administrators and Executives, this review provides evidence to view investment in leadership as a core clinical and financial imperative, not merely a human resources function. The indirect pathways through empowerment, climate, and stress reduction directly impact workforce stability and quality of care. Therefore, leadership development programs should be positioned as a strategic investment linked to institutional key performance indicators (KPIs), including patient safety metrics, patient satisfaction scores, and workforce retention rates.[37,38]

Finally, these findings have implications for Fostering Interprofessional Collaboration. Nurse managers do not lead in a vacuum, and organizations must empower them with the necessary autonomy and resources. Developing transformational nurse leaders can serve as a catalyst for a more collaborative culture across all clinical disciplines. By improving communication and psychological safety,[43] these leaders can enhance the entire practice environment, underscoring that the positive effects of their leadership are not confined to nursing but benefit the whole patient care team. Although this study provides evidence-based recommendations, these findings should be interpreted with caution due to the methodological limitations of the primary studies.

Implication to Future Research

Future research within non-Western healthcare systems requires more rigorous methodological approaches to validate these findings. To move beyond associative evidence, investigators should prioritize longitudinal designs that can establish causality and meticulously control for confounding variables, such as nurse-to-patient ratios and practice environment quality. Additionally, given the reliance on expatriate workforces in many non-Western regions (eg, the Middle East), it is critical to investigate the role of migrant nurses. Future inquiries should explicitly examine how high proportions of migrant staff influence the effectiveness of transformational leadership, and whether cultural congruence between leaders and diverse nursing staff acts as a significant moderating factor. Finally, further analysis of mediating

mechanisms such as structural empowerment and psychological safety is needed to fully map the pathways through which leadership impacts retention in these unique cultural contexts.

Strengths and Limitations of Study

A major strength of this review is its comprehensive synthesis of recent evidence specifically from diverse non-Western settings, filling a critical gap in the literature. However, several limitations must be acknowledged. First, the prevalence of cross-sectional methodologies in the included studies constrains the capacity to draw causal inferences. Second, the reliance on self-reported assessments introduces the potential for common method bias. Third, the exclusion of grey literature may contribute to publication bias. Most importantly, the methodological quality appraisal revealed that a significant proportion of the included studies (10 out of 13) exhibited "some concerns" regarding risk of bias, primarily due to the failure to control for confounding variables such as staffing ratios. Consequently, the conclusions drawn from this synthesis must be interpreted with caution, viewing the findings as indicative of strong associative trends rather than definitive causal evidence.

Conclusion

This systematic review synthesizes evidence regarding the relationship between transformational leadership and nurse well-being and retention, specifically within non-Western healthcare contexts. Transformational leadership is significantly and positively associated with nurse well-being and retention. While the findings indicate a consistent positive association, they warrant a prudent interpretation. The reliance on cross-sectional designs and the limited control for confounding variables in the primary studies preclude the establishment of definitive causal links. Consequently, the evidence suggests rather than proves that transformational leadership functions as a critical resource, likely exerting its influence indirectly by fostering supportive organizational climates and mitigating workplace stress. Therefore, while developing these leadership competencies appears to be a promising strategy for stabilizing the nursing workforce, such interventions should be implemented with the understanding that rigorous longitudinal research is still required to fully validate their causal impact.

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