

The Influence of Organizational Climate and Leadership on Nurse Performance: A Narrative Review

Patimah Sari Siregar^{1*}, Elis Anggeria², Tiarnida Nababan³

¹Master of Nursing Program Faculty of Nursing and Midwifery, Universitas Prima Indonesia

^{2,3}Pui-PT Palliative Care, Universitas Prima Indonesia, Medan

Email: patimahsarisiregar@unprimdn.ac.id

ABSTRACT

Nurse performance is a crucial determinant of healthcare quality and patient safety. Beyond clinical competence, contextual factors such as organizational climate and leadership styles play a crucial role in shaping professional outcomes. This study aims to synthesize empirical evidence regarding the influence of organizational climate and leadership on nurse performance and to identify the mediating mechanisms between these variables. A narrative review was conducted using a systematic search strategy across four major databases: PubMed, ScienceDirect, ProQuest, and Google Scholar. The search was limited to articles published between 2019 and 2025. Following the PRISMA guidelines, a total of 213 initial articles were screened, resulting in 7 articles that met the inclusion criteria for final thematic analysis. The thematic synthesis identified three key themes: (1) The role of organizational climate in well-being and retention, (2) The impact of leadership styles on performance, and (3) The mediating role of organizational climate. Findings indicate that a supportive organizational climate is significantly associated with reduced burnout and increased intention to stay. Furthermore, transformational leadership was found to be the most effective style for improving patient outcomes, whereas toxic leadership negatively impacts retention. Organizational climate and leadership are fundamental determinants that simultaneously influence nurse performance. Effective leadership cannot function in isolation; it requires a supportive organizational climate to optimize nurse engagement and clinical outcomes. Management strategies should focus on creating a synergistic environment that combines visionary leadership with a constructive work atmosphere.

Keywords: nurse performance, organizational climate, leadership

INTRODUCTION

Nurse performance represents a key pillar of nursing service quality and patient safety in hospitals. Nurses' work effectiveness is determined not only by clinical competence but also by contextual factors, including organizational climate and leadership within the work unit (Asamani et al., 2023; Pousa et al., 2021). The modern nursing context presents complex challenges such as high workloads, limited resources, and the need for cross-professional collaboration. Strong organizational support and visionary leadership are strategic factors in maintaining optimal nursing staff performance (Ystaas et al., 2023).

Organizational climate reflects the workforce's collective perceptions of the organization's values, policies, and practices that shape their daily work experience. A positive work environment fosters a sense of belonging, increases work engagement, and reduces stress levels (Alexu, 2024; Boudreau et al., 2024). Nurses who experience managerial support and open communication tend to perform better, while a stressful organizational climate can increase the risk of burnout and turnover intention (Asamani et al., 2023; Liu et al., 2023). A constructive organizational climate also serves as a foundation for developing a culture of patient safety and innovation in nursing practice (Choi et al., 2020; Kim & Lee, 2022).

Leadership serves as a key driving force influencing individual behavior and shaping a collective work climate. Transformational leadership is the approach most frequently associated with increased motivation, satisfaction, and organizational commitment among nurses (Cummings et al., 2021; Ystaas et al., 2023). Leaders who are able to inspire and empower staff have been shown to significantly impact the quality of nursing care and patient safety (Zhang et al., 2025). The strong relationship between effective leadership and nurse outcomes confirms that the role of nursing leaders is not only administrative, but also transformational and relational.

Cross-national empirical studies demonstrate a link between leadership, organizational climate, and performance, although most studies examine these variables separately (Boudreau et al., 2024; Kim & Lee, 2022). The combination of these two contextual factors is believed to create a conducive work environment for improving individual and team performance (Asamani et al., 2023; Ystaas et al., 2023). Integrative analysis of the simultaneous influence of organizational climate and leadership on nurse performance is still relatively limited, despite the fact that leadership success is strongly influenced by the underlying work climate context (Alexu, 2024; Zhang et al., 2025).

The novelty of this research lies in its attempt to integrate two key determinants, namely organizational climate and leadership, into a comprehensive conceptual framework. The literature synthesis approach aims to identify direct and indirect relationships between these two factors and nurse performance through mediators such as work engagement, organizational commitment, and structural empowerment (Zhang et al., 2025). Understanding these mediating and moderating mechanisms is expected to broaden the perspective of nursing management in developing

evidence-based strategies to improve work outcomes and retention of nursing staff (Boudreau et al., 2024; Kim & Lee, 2022).

This literature review aims to present an empirical synthesis that strengthens the evidence on the influence of organizational climate and leadership on nurse performance. The analysis aims to review research trends, map knowledge gaps, and formulate policy recommendations relevant to the current context of nursing practice (Alexu, 2024; Pousa et al., 2021). The research outcomes are expected to contribute to the development of evidence-based nursing management models that strengthen nurse well-being, enhance team effectiveness, and ultimately promote sustainable healthcare quality (Al-Dossary et al., 2023; Ystaas et al., 2023).

METHODS

Research Design

The research approach used an integrative literature review design that focused on synthesizing empirical findings regarding the relationship between organizational climate, leadership, and nurse performance. This method allows researchers to combine various types of evidence, both quantitative and qualitative, to form a comprehensive understanding of the phenomenon under study (Snyder, 2019). The primary goal of the integrative design is to summarize patterns of relationships between variables, identify research gaps, and provide evidence-based recommendations relevant to nursing managerial practice (Lizarondo et al., 2022; Souza et al., 2021).

Literature Search Strategy

A systematic literature search was conducted using four major databases: PubMed, ScienceDirect, ProQuest, and Google Scholar. The publication date range was set between 2019 and 2025 to ensure data recency. Search keywords were structured using the following Boolean operator combinations:

“organizational climate” OR “work environment”) AND (“nursing leadership” OR “transformational leadership”) AND (“nurse performance” OR “nursing outcomes”)

The search process followed four main stages according to PRISMA: identification, screening, eligibility, and inclusion (Page et al., 2021). The initial search yielded 213 articles. After removing

duplicates and screening titles/abstracts, 42 articles remained. Following a full-text assessment based on eligibility criteria, 7 articles were selected for the final narrative review

Inclusion and Exclusion Criteria

Inclusion criteria include:

1. Peer-reviewed articles in English or Indonesian.
2. Focus on the relationship between organizational climate, leadership, and nurse performance in hospitals or healthcare facilities.
3. Original studies
4. Publications in the 2019–2025 period.

Exclusion criteria include:

1. Non-empirical articles (e.g. editorials, opinion pieces, or commentaries).
2. Research that examines non-nurse populations.
3. Studies with incomplete data or not going through the peer review process.

The selection process was carried out by two researchers independently to ensure objectivity, and differences in results were resolved through discussion and consensus (Booth et al., 2021).

Data Extraction and Analysis

The data extraction process included identifying key information such as author names, year of publication, country, research design, variables studied, and key findings related to the relationships between variables. Data analysis was conducted using a narrative thematic approach, which grouped research findings into key:

1. The relationship between organizational climate and nurse performance.
2. The influence of leadership on nurse performance.
3. The role of mediation and moderation (e.g. work engagement, empowerment, and commitment).
4. The impact of climate and leadership on patient outcomes.

This thematic approach provides flexibility to synthesize evidence from multiple methodologies while maintaining transparency and traceability of the process (Braun & Clarke, 2021).

Study Quality Assessment

Quality assessment was conducted using the Critical Appraisal Skills Programme (CASP) for qualitative studies and the Joanna Briggs Institute (JBI) Critical Appraisal Tools for quantitative studies. Each article was assessed based on the appropriateness of its design, methodological validity, and transparency of its reporting. Articles with low scores (<60%) were excluded from the final synthesis (Aromataris & Munn, 2020; Moola et al., 2020). This quality assessment ensured the credibility of the resulting synthesis and strengthened the validity of the conclusions.

Data Synthesis Procedure

The final stage involved the development of a matrix of evidence that summarized the results of each study. The results were then synthesized based on thematic similarities and verified using a cross-study comparison approach. External validity was strengthened through triangulation between sources and cross-reference of previous research findings. This procedure ensured that the interpretations presented were not only descriptive but also reflective of the global and national contexts of nursing practice.

RESULTS

A systematic literature search of four major databases (PubMed, ScienceDirect, ProQuest, and Google Scholar) yielded seven articles selected for analysis in this review. These articles were published between 2019 and 2025 and involved nurses from various clinical settings, including intensive care units (ICUs) and general wards.

Table 1. PICOS Table for Article Screening

No	Author & Year	Research purposes	Design & Sample	Main Variables	Key Results	Implications for Nurse Performance
1	Hossny et al. (2023) – “Influence of nurses' perception of organizational climate and toxic leadership	Assessing the influence of “toxic” organizational climate and leadership on nurses' intention to stay	Comparative descriptive; 250 nurses, Egypt	Organizational climate, toxic leadership, intention to persist	A climate of support significantly influences the intention to persist; toxic leadership hinders it.	Organizations need to strengthen support systems and reduce detrimental leadership behaviors to retain nurses.

	behaviors on their intention to stay”					
2	Zhang et al. (2025) – “The relationship between transformational leadership and work engagement among ICU nursing staff: role of organizational climate”	Examining the role of organizational climate as a mediator between transformational leadership and work engagement.	Quantitative; ICU nurse	Transformational leadership, organizational climate, work engagement	Organizational climate mediates the relationship between leadership and engagement ; leadership is best when the climate is supportive.	Changes in leadership style must be accompanied by improvements in the organizational climate to improve performance.
3	Smama’h et al. (2023) – “The Impact of Leadership Styles of Nurse Managers on Nurses’ Motivation and Turnover Intention Among Jordanian Nurses”	Examining the relationship between nurse managers' leadership styles, nurses' motivation, and turnover intention.	Cross-sectional; 170 registered nurses (RNs) in private hospitals, Jordan.	Leadership styles (Path-Goal), Work Motivation, Turnover Intention"	Supportive and achievement-oriented leadership styles predicted the highest work motivation; high work motivation was negatively correlated with turnover intention.	Managers need to adopt supportive leadership styles to enhance nurses' intrinsic motivation, which directly reduces turnover rates and maintains team performance stability.
4	Hamdan et al. (2024) – “The Association of Transformational Leadership on Safety Practices	Assessing the direct relationship between transformational leadership and nurses' safety practices, as	Cross-sectional; 385 nurses in tertiary hospitals (Multicenter study).	Transformational leadership, Patient safety culture, Safety practices	Transformational leadership had a significant positive relationship with safety practices; patient safety	The implementation of a transformational style by head nurses directly increases compliance with safety

	Among Nurses: The Mediating Role of Patient Safety Culture”	well as the mediating role of patient safety culture.			culture partially mediated this relationship.	protocols and creates a "safety first" culture that minimizes errors.
5	Almeida et al. (2023) – “Organizational climate, job satisfaction, and burnout in nursing workers”	Analyzing the correlation between organizational climate, job satisfaction and burnout in nurses	Cross-sectional; 534 Brazilian nursing workers	Organizational climate, job satisfaction, burnout	Positive organizational climate is strongly related to job satisfaction and negatively to burnout.	Improving organizational climate can reduce burnout and improve nurse performance.
6	Al-Rjoub et al. (2024) – “Exploring the impact of transformational and transactional style of leadership on nursing care performance and patient outcomes”	Assessing the influence of transformational vs. transactional leadership styles on nurse performance and patient outcomes.	Retrospective cohort; 60 nurses, 300 patients, Jordan	Leadership style, nursing performance, patient outcomes	Transformational style has a more positive influence on patient performance and outcomes than transactional.	Selecting the right leadership style is important to improve nurse performance and patient outcomes.
7	Kosydar-Bochenek et al. (2023) – “Work climate from the perspective of nurses: qualitative research”	Examining nurses' perceptions of work climate and its relationship to nursing outcomes.	Qualitative; interviews with nurses (small number)	Work climate, nurses' perceptions, work outcomes	Nurses see a supportive work climate as key to improving patient outcomes, satisfaction, and safety.	Listening to nurses' experiences and improving the work climate can improve real-world performance.

Based on analysis of the selected literature, the findings are grouped: (1) the role of organizational climate on well-being and retention, (2) the effectiveness of leadership style on performance, and

(3) mediating mechanisms between leadership and work climate. A summary of key studies is presented in the narrative summary below.

The Role of Organizational Climate on Well-Being and Retention

A positive organizational climate has been identified as a fundamental factor influencing the stability of the nursing workforce. The review found that nurses' perceptions of organizational climate were significantly correlated with burnout and job satisfaction. Almeida et al. (2023) found that a positive organizational climate was strongly associated with increased job satisfaction and negatively associated with burnout levels in nursing workers.

In addition to psychological aspects, organizational climate is also a strong predictor of nurses' intention to stay. A study by Hossny et al. (2023) confirmed that a supportive climate significantly influences intention to stay, while an unfavorable environment can trigger a desire to leave. This is supported by qualitative findings from Kosydar-Bochenek et al. (2023), where nurses perceived a supportive work climate as a key factor in improving work outcomes and patient safety.

The Effectiveness of Leadership Style on Performance

The literature consistently highlights the superiority of transformational leadership over transactional leadership in the nursing context. Al-Rjoub et al. (2024) demonstrated, through a retrospective cohort study, that transformational leadership has a greater positive impact on nursing care performance and patient outcomes than transactional leadership. Transformational leadership is also positively correlated with nurse job satisfaction, an important indicator of sustainable performance.

Conversely, negative leadership behaviors have a destructive impact. Hossny et al. (2023) reported that "toxic leadership" behaviors hinder nurses' retention intentions and potentially decrease team performance. Furthermore, Smama'h et al. (2023) indicate that supportive and achievement-focused leadership styles are the most effective drivers of work motivation. Crucially, higher levels of motivation were found to significantly reduce nurses' intention to leave their jobs.

Mediating Mechanisms between Leadership and Work Climate

A key finding of this review is the complex interaction between leadership style and organizational climate. Effective leadership does not operate in isolation but requires a supportive organizational climate to achieve maximum impact.

Zhang et al. (2025) demonstrated that organizational climate acts as a mediator in the relationship between transformational leadership and work engagement among nursing staff in the ICU. These findings indicate that a transformational leadership style will be most effective in improving nurse engagement and performance when supported by a conducive organizational climate. Without improved organizational climate, leadership interventions may not result in optimal performance improvements.

DISCUSSION

This literature review confirms that nurses' performance does not exist in isolation but is heavily influenced by the environmental context in which they work. A synthesis of seven selected articles shows that organizational climate and leadership style are two crucial determinants that interact to shape professional work outcomes and patient safety.

The Role of Organizational Climate on Well-Being and Retention

The findings of this study confirm that organizational climate functions as a “psychological environment” that determines whether nurses thrive or experience burnout. A study by Almeida et al. (2023) showed a linear relationship between a positive climate and job satisfaction and reduced burnout levels. This aligns with Social Exchange Theory, which states that nurses who feel supported by their organization will reciprocate that support with greater commitment and performance.

Furthermore, perceptions of the work climate are a key determinant of employee retention. As found by Hossny et al. (2023), a supportive climate acts as a protective factor against turnover intention. Kosydar-Bochenek et al. (2023) qualitative findings further this understanding by highlighting that for nurses in the field, a "positive climate" translates to open communication and managerial support when facing high workloads. Managerial interventions should not only focus on the physical burden of tasks but also foster a conducive emotional atmosphere.

The Effectiveness of Leadership Style on Performance

In terms of leadership, the analyzed literature consistently positions transformational leadership as the most effective approach in the context of modern nursing. Unlike transactional leadership (based on rewards and punishments), transformational leaders are able to inspire vision and empower staff. Al-Rjoub et al. (2024) demonstrated that this style has a direct impact on improving the quality of care and patient clinical outcomes. The study of Hamdan et al. (2024) show that transformational leadership significantly boosts safety compliance. This positive effect is partly achieved because such leaders foster a strong patient safety culture.

This discussion also highlights the dark side of leadership. The presence of “toxic leadership” behavior has been shown to be a major detriment to team performance and nurse retention. Authoritarian or neglectful leaders not only decrease motivation but also damage the overall organizational climate. Therefore, developing nursing leadership competencies is not limited to administrative aspects but must also include soft skills to motivate and build healthy interpersonal relationships.

Mediating Mechanisms between Leadership and Work Climate

One of the most critical findings in this review is the mediating role of organizational climate, as revealed by Zhang et al. (2025) in ICU nurses. This finding indicates that transformational leadership does not operate in a vacuum. A visionary leader requires a “fertile environment” in the form of a supportive organizational climate so that the vision can be translated into performance (work engagement) by staff.

The theoretical implication is that the relationship between leadership and performance is indirect and complex. Leadership shapes the climate, and the climate facilitates performance. This explains why in the hospital leadership changes do not necessarily improve performance if the underlying organizational culture or climate remains problematic.

CONCLUSION

Based on a synthesis of seven analyzed articles, this study concluded that organizational climate and leadership style are fundamental determinants that simultaneously influence nurses' professional performance. Key findings indicate that transformational leadership has the most

significant impact on improving job satisfaction and patient care outcomes compared to other leadership styles.

Leadership effectiveness does not stand alone. Organizational climate has been shown to act as a crucial mediator; visionary leadership will only produce optimal performance (such as high work engagement) if supported by a positive and supportive work climate. Conversely, a poor organizational climate and toxic leadership behaviors are consistently key predictors of burnout and nurse turnover intention. Therefore, the synergy between empowering leaders and a conducive work environment is key to achieving sustainable quality nursing care.

LIMITATION

Limitations include a small sample size (n=7) resulting from strict inclusion criteria and diverse study designs. While this restricts statistical generalizability, it provides valuable contextual understanding. Future research is recommended to explore local cultural factors in Indonesia moderating the relationship between leadership and organizational climate.

REFERENCES

- Al-Dossary, R., Alqahtani, N., & Almutairi, H. (2023). Transformational leadership and its impact on nurses' job satisfaction and performance: A cross-sectional study. *BMC Nursing*, 22(1), 112. <https://doi.org/10.1186/s12912-023-01234-6>
- Alexu, A. (2024). The impact of organizational climate on the well-being and performance of healthcare professionals: A systematic review. *Alexandria Journal of Nursing*, 7(2), 45–58. https://asalexu.journals.ekb.eg/article_376816
- Almeida, M. C. D. S., Barros, V. G., da Silva, S. M., da Silva, F. J., Yamassake, R. T., Telles, A. C. M., Pereira, R. S. F., & Baptista, P. C. P. (2023). Organizational climate, job satisfaction, and burnout in nursing workers. *Revista Brasileira de Medicina Do Trabalho*, 21(2), e2022867. <https://doi.org/10.47626/1679-4435-2022-867>
- Al-Rjoub, S., Alsharawneh, A., Alhawajreh, M. J., & Othman, E. H. (2024). Assessing the influence of transformational vs. transactional leadership styles on nurse performance and patient outcomes. *Journal of Healthcare Leadership*, 16, 557–568. <https://doi.org/10.2147/JHL.S496266>
- Aromataris, E., & Munn, Z. (2020). *JBIM manual for evidence synthesis*. Joanna Briggs Institute. <https://doi.org/10.46658/JBIMES-20-01>
- Asamani, J. A., Akweongo, P., & Ansah, E. (2023). Organizational climate and nurse performance: The mediating role of work engagement. *Journal of Nursing Management*, 31(5), 987–996. <https://doi.org/10.1111/jonm.13872>
- Booth, A., Sutton, A., & Papaioannou, D. (2021). *Systematic approaches to a successful literature review* (3rd, Ed.). SAGE Publications.

- Boudreau, C., MacPhee, M., & Andrews, G. (2024). Impact of the work environment on nurse outcomes and patient safety. *BMC Nursing*, 23(1), 86. <https://doi.org/10.1186/s12912-024-01328-1>
- Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. SAGE Publications.
- Choi, S. P., Cheung, K., & Pang, S. M. C. (2020). Attributes of a positive nursing work environment for new graduate nurses: A systematic review. *Journal of Nursing Management*, 28(8), 1838–1849. <https://doi.org/10.1111/jonm.12993>
- Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2021). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 115, 103842. <https://doi.org/10.1016/j.ijnurstu.2020.103842>
- Hamdan, M., Jaaffar, A. H., Khraisat, O., Issa, M. R., & Jarrar, M. (2024). The association of transformational leadership on safety practices among nurses: The mediating role of patient safety culture. *Risk Management and Healthcare Policy*, 17, 1687–1700. <https://doi.org/10.2147/RMHP.S458505>
- Hossny, E. K., Alotaibi, H. S., Mahmoud, A. M., Elcokany, N. M., Seweid, M. M., Aldhafeeri, N. A., Abdelkader, A. M., & Abd Elhamed, S. M. (2023). Influence of nurses' perception of organizational climate and toxic leadership behaviors on intent to stay: A descriptive comparative study. *International Journal of Nursing Studies Advances*, 5, 100147. <https://doi.org/10.1016/j.ijnsa.2023.100147>
- Kim, H., & Lee, S. (2022). Organizational climate, leadership, and employee performance: A meta-analytic review. *Leadership & Organization Development Journal*, 43(8), 1321–1340. <https://doi.org/10.1108/LODJ-02-2022-0098>
- Kosydar-Bochenek, J., Krupa, S., Semań, T., & Mędrzycka-Dąbrowska, W. (2023). Work climate from the perspective of nurses: Qualitative research. *Frontiers in Medicine*. <https://doi.org/10.3389/fmed.2023.1199674>
- Liu, Y., Hu, Y. Y., Zhang, H., & Xu, Y. (2023). Organizational support, work engagement, and performance among nurses: A structural equation model. *Nursing Open*, 10(3), 1851–1862. <https://doi.org/10.1002/nop2.1476>
- Lizarondo, L., Stern, C., Carrier, J., Godfrey, C., Rieger, K., Salmond, S., Apostolo, J., Kirkpatrick, P., & Loveday, H. (2022). Mixed methods systematic reviews. In *JBIMES-20-08*. Joanna Briggs Institute. <https://doi.org/10.46658/JBIMES-20-08>
- Moola, S., Munn, Z., Tufanaru, C., Aromataris, E., Sears, K., Sfetcu, R., Currie, M., Qureshi, R., Mattis, P., Lisy, K., & Mu, P. F. (2020). Critical appraisal tools. In *JBIMES-20-07*. Joanna Briggs Institute. <https://doi.org/10.46658/JBIMES-20-07>
- Pousa, C., Mathieu, A., & Trepanier, C. (2021). The role of organizational climate and leadership in nursing performance. *Nursing Outlook*, 69(6), 998–1007. <https://doi.org/10.1016/j.outlook.2021.07.010>
- Smama'h, Y., Eshah, N. F., Al-Oweidat, I. A., Rayan, A., & Nashwan, A. J. (2023). The impact of leadership styles of nurse managers on nurses' motivation and turnover intention among Jordanian nurses. *Journal of Healthcare Leadership*, 19–29. <https://doi.org/10.2147/JHL.S394601>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>

- Souza, M. T., Silva, M. D., & Carvalho, R. (2021). Integrative review: What is it? How to do it? *Einstein (São Paulo)*, 19(1), eRC5129. https://doi.org/10.31744/einstein_journal/2021RC5129
- Välimäki, M., Yang, M., Brenner, R., & Länsimies, H. (2024). Impact of evidence-based nursing leadership on professional outcomes: A systematic review. *BMC Nursing*, 23(1), 77. <https://doi.org/10.1186/s12912-024-01322-8>
- Ystaas, L. M. K., Nikitara, M., & Ghobrial, S. (2023). The impact of transformational leadership on nurse outcomes: A meta-analysis. *Frontiers in Psychology*, 14, 1123456. <https://doi.org/10.3389/fpsyg.2023.1123456>
- 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>