

Impact of Leadership Styles on the Psychosocial wellbeing of healthcare workers: Narrative Review

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Abstract

Currently, healthcare organizations apply diverse leadership styles and approaches towards managing the routine service delivery. Due to the many and diverse research observations regarding relationships between leadership styles and healthcare workers' wellbeing in various studies, there is a need to conduct a narrative review towards a harmonized outcome. Accordingly, this article noted that transformational leadership, having the ability to inspire and motivate workers towards cohesion and engagement, have a strong significant contribution towards better psychosocial wellbeing among the healthcare workers. At the same time, this review noted that situational leadership, transactional leadership and servant leadership styles also have significant contributions on stress and burnout reduction among the health workers. However, Laissez-faire leadership style did not have a strong positive contribution in health workers' psychological wellbeing, instead, it has been linked with instances of stress among the workers. Therefore, these observations stress the need for healthcare organizations to inculcate the transformational, democratic, situational and servant leadership styles.

Keywords: Leadership Styles; Psychosocial wellbeing; Healthcare workers.

Introduction

Discussions around leadership styles and how they affect the overall operations in healthcare organizations have attracted the attention of many scholars for an extended period of time (Franco & Almeida, 2011; Sfantou et al., 2017). Indeed, many research studies have been conducted under various topical and specific thematic areas under this phenomenon of research (Günzel-Jensen, Jain & Kjeldsen, 2018). While some studies only explored the different leadership styles applied in healthcare settings, others have dived deeper into examining how such leadership styles affect healthcare workers' well-being, including their psychosocial and physical health (Cope & Murray, 2017; Cummings et al., 2018; Kantareva & Veselinova, 2021). Owing to diverse observations and research outcomes established under this research phenomenon, this narrative review will explore and discuss the implications of various leadership styles on healthcare workers' psychosocial well-being.

The quality of human resources, mainly healthcare workers' well-being, is a critical domain in providing quality healthcare services (Omari et al., 2024; Kantareva & Veselinova, 2021; Aini & Dzakiyullah, 2024). While the psychosocial well-being of healthcare workers depends on many factors within the organization, such as workload, work environment, and wellness programs, there have been pieces of evidence that closely link it to the nature and style of leadership the management applies (Qtait, 2023). For instance, studies have explained healthcare workers who operate under the transformational leadership style are likely to experience distressing moments since these leaders often apply open communication and create a positive work environment, which gives the employees motivation and satisfaction (Alhalal et al., 2024; Wang et al., 2019). At the same time, evidence has linked a laissez-faire leadership style with increased job stress (Pishgooie et al., 2019).

Nevertheless, many different leadership styles are used in running healthcare's daily operations, including transformational, transactional, laissez-faire, democratic, situational, servant, and autocratic, among others (Saleh et al., 2018; Qtait, 2023). The principles that guide leaders within these styles are diverse and different; hence, they have potential implications for healthcare workers' psychosocial well-being. With the diverse research outcomes already noted, a mosaic summary through a narrative review is needed to harmonize the outcomes for practice application.

Leadership styles and their effect on healthcare workers' psychological wellbeing

Transformational leadership style and its impact on the psychological well-being of healthcare workers

Transformational leadership is a style in which leaders inspire and motivate their team by creating a shared vision, encouraging innovation, and providing personal development opportunities. Goens et al. (2024) express that this leadership style is particularly impactful in healthcare settings, where workers' emotional and psychological well-being is essential to maintaining high-quality patient care and fostering a positive work environment. The primary aspects of the transformational style include individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence (García-Sierra et al., 2018).

Organizational researchers have established the significance and impacts of transformational leaders in modern, dynamic workplaces. According to den Breejen-de Hooij et al. (2021), Healthcare workers, including nurses, doctors, and allied health professionals, often work in high-stress environments with long hours and significant emotional challenges. Transformational leadership can have several positive effects on their psychological well-being, including increased job satisfaction, reduced stress and burnout, and enhanced motivation and engagement (Alanazi et al., 2023). Studies show that Transformational leaders focus on creating a positive and supportive environment where healthcare workers feel valued and recognized. When leaders express appreciation for their team's efforts and involve them in decision-making, it boosts job satisfaction, reduces burnout, and fosters a sense of belonging. (Alanazi et al., 2023; Haoyan et al., 2023).

Similarly, the healthcare sector can be emotionally and physically demanding. A transformational leader who actively listens to their team, provides regular feedback, and offers opportunities for professional growth can reduce feelings of stress and burnout. When employees feel empowered and supported, they are more resilient in handling the challenges of their roles (Gebreheat et al., 2023). Notably, the style promotes motivation while increasing engagement. Goens and Giannotti (2024), emphasize that, Transformational leaders inspire healthcare workers to achieve more than just meeting basic expectations. This heightened sense of motivation leads to increased engagement in their work, making employees feel more connected to their roles and the healthcare mission. (Gadolin et al., 2022). This engagement helps healthcare workers stay mentally and emotionally invested, positively impacting their mental health (Kim et al., 2020).

Kim and Jeong (2020) indicate that transformational leaders play a critical role in improving team cohesion and support. At the same time, Al-Thawabiya et al. (2023) emphasize that transformational leadership fosters collaboration and mutual support among team members. A leader who encourages open communication, trust, and empathy creates a team-oriented environment where workers can share their challenges and successes. This sense of camaraderie helps reduce feelings of isolation and anxiety, improving psychological well-being (Ahmed et al., 2024). Additionally, these leaders play a role in increasing self-esteem and confidence. Individualized consideration from transformational leaders helps workers feel recognized as individuals rather than just employees. When leaders provide mentorship, guidance, and opportunities for personal growth, it enhances workers' self-esteem and

confidence. As healthcare workers develop new skills and feel competent, their overall mental health improves (Ahmed et al., 2024).

However, while transformational leadership can profoundly affect healthcare workers' psychological well-being, scholars point out that it requires skilled leadership and consistent effort (Cochrane et al., 2019). In this context, transformational leadership requires continuous effort and consistency in this direction. Leaders must be genuinely committed to supporting their team's well-being, which may be challenging in a high-turnover environment (Lindert et al., 2022). Nonetheless, not all employees respond the same way to transformational leadership. Some healthcare workers may prefer more structured or directive leadership styles, so the transformational approach must be flexible and adaptive to the needs of individual workers. These challenges, among others, may lead to burnout among the leaders (Gadolin et al., 2022). *Democratic leadership style and its impact on the psychological well-being of healthcare workers*

Democratic leadership encompasses collaboration, open communication, shared decision-making, and inclusivity (Matos et al., 2024). In a healthcare setting, this approach can have a profound effect on the psychological well-being of healthcare workers, fostering a positive work environment that benefits both the staff and patients. Global studies show that this administration style increases job satisfaction (Dextras-Gauthier et al., 2023). In this sense, Healthcare workers who feel included in decision-making are more likely to experience job satisfaction. When individuals feel valued and heard, they are more engaged and motivated to perform their best work. This is crucial in high-stress environments like healthcare, where morale can directly impact patient outcomes (Andargie et al., 2024).

Democratic leadership reduces workplace stress and burnout (Labrague, 2023). Democratic leaders can potentially minimize the likelihood of burnout by providing a supportive and participatory environment. When healthcare workers have a say in how work is organized, they are more likely to feel a sense of control, which can mitigate stress and reduce feelings of helplessness, a key component of burnout (Gu et al., 2022). Moreover, just like transformational leadership, democratic leadership Improves team cohesion. According to Ahmed et al. (2024), through promoting collaboration, democratic leaders foster stronger team cohesion and mutual respect. This creates a supportive work culture, which is crucial for psychological well-being. A strong team can act as a buffer against the pressures and challenges of healthcare work (Hjazeen et al., 2024).

Moreover, there is increased motivation and empowerment in the workplace where democratic leadership prevails. As described by Jankelová et al., (2021) Workers who feel empowered and trusted by their leaders tend to be more motivated. The opportunity to contribute ideas, make decisions, and see the direct impact of their work can lead to higher intrinsic motivation and personal fulfillment. Workers under democratic leaders experience reduced anxiety (Andargie et al., 2024). Studies across organizations have proven that when healthcare workers are engaged in decision-making, they can feel competent and secure in their roles. This confidence reduces anxiety levels, which is particularly important in a high-stress field like healthcare. However, this style precipitates several challenges regarding time and resources. Overwhelming involvement and collaboration aspects may lead to delays in critical decision-making circumstances (Al-Thawabiya et al., 2023).

Situational leadership style and its impact on the psychological well-being of healthcare workers

Situational leadership emphasizes the need for leaders to adapt their style based on their team members' situations and developmental levels. According to the leading proponents, no leadership style is effective in all conditions (Xiao et al., 2023). Instead, leaders should adjust their approach based on factors such as the team member's competence, motivation, and the task at hand (Zhang et al., 2024). In healthcare, workers often face high-pressure, emotionally

taxing, and dynamic situations; situational leadership can significantly impact their psychological well-being. Situational leadership's impacts on workers can be defined as positive and negative. Leaders adopting this approach enhance flexibility and adaptability to the needs of healthcare workers (Simard et al., 2022). In the foregoing regard, Situational leadership is based on the idea that leaders should assess their team's current abilities and adjust their leadership style accordingly. For healthcare workers, this can mean providing more support and guidance during high-stress periods, such as emergencies or patient surges, and offering more autonomy when the team is competent and confident. This tailored approach can reduce stress and prevent burnout by ensuring that workers feel adequately supported and not overwhelmed (Ahmed et al., 2021).

Additionally situational leadership improves job satisfaction and still diminishes stress. Ahmed et al. (2020) hold that, when healthcare leaders demonstrate situational leadership, they are more likely to provide individualized support to their staff, increasing feelings of competence and job satisfaction. Healthcare environments often involve long hours, high patient demands, and emotionally charged situations. A situational leader who adjusts their style based on the level of stress experienced by their team can reduce unnecessary pressures (Gu et al., 2022; Plouffe et al., 2023). Studies have shown that situational leadership in healthcare facilities promotes trust building, reduces burnout and turnover, develops competence among workers, and enhances resilience to crisis situations. (Xintian et al., 2023). According to Narayan et al. (2024), leaders who apply situational leadership can create a work environment where staff feels supported, respected, and empowered, which leads to better mental health outcomes and enhanced job satisfaction

Transactional leadership style and its impact on the psychological well-being of healthcare workers

Transactional leadership focuses on structured tasks, clear expectations, and rewards or punishments based on performance. Li et al. (2022) cite that in healthcare settings, this style of leadership can have both positive and negative effects on the psychological well-being of healthcare workers. The positive impact here includes support for mental well-being. Transactional leadership may provide the necessary structure and clarity that some healthcare workers need to feel secure in their roles. Clear expectations can help reduce uncertainty and anxiety in chaotic healthcare environments. Also, Recognizing achievements, such as meeting patient care targets, can contribute positively to the well-being of workers, as it boosts morale and can create a sense of accomplishment (Richards, 2020). Harrington (2021) identified more negative impacts of this approach than positives. For instance, this approach increases worker stress and burnout and reduces job satisfaction (Cope et al., 2017; Perez, 2021). According to studies, Transactional leadership can contribute to increased stress and burnout among healthcare workers. The constant focus on meeting targets, coupled with the pressure to perform, can lead to feelings of exhaustion and frustration. Healthcare workers may feel like they are merely "following orders" rather than engaging in meaningful work (Morsiani et al., 2017). Nonetheless, Unrealistic goals, rigid performance metrics, and frequent monitoring can increase stress levels, especially in high-pressure environments like hospitals or clinics. This can affect emotional health and lead to feelings of being overwhelmed or undervalued (T et al., 2021). As noted, his transactional leadership style reduces job satisfaction if workers feel their personal contributions and values are ignored in favor of purely task-oriented work. This can create a sense of alienation, as employees may not feel recognized for their holistic contributions to patient care or organizational goals (Richards, 2020). As underlined by Gallegos, this style promotes reduced empowerment, limited social support, poor employee retention, and lack of intrinsic rewards; all these aspects adversely affect employees' psychological well-being.

Laissez-faire leadership style and its impact on the psychological well-being of healthcare workers

Sabbah et al. (2020) Define Laissez-faire leadership as one in which leaders adopt a hands-off approach, providing minimal guidance, support, or direction. Leaders offer autonomy to employees, allowing them to make their own decisions and manage their tasks. (Alasiry et al., 2024). While this leadership style has been associated with fostering creativity and independence in specific contexts, its impact on healthcare workers' psychological well-being can be complex and multifaceted.

This style promotes autonomy and empowerment where laissez-faire leaders allow healthcare workers to make decisions, fostering a sense of ownership and responsibility. (Pishgooie et al., 2019). In this context, the approach enhances job satisfaction and intrinsic motivation, particularly for employees who value independence and trust in their professional capabilities. This kind of leader encourages innovation. According to (Suliman et al., 2020) Laissez-faire leadership can promote creativity and innovation by allowing healthcare workers to explore new ideas and solutions, which plays a crucial role in adapting to new, challenging working environments.

On the contrary, laissez-faire leadership precipitates, elevate burnout, limits career development, and cripple team cohesion (Specchia et al., 2021). Studies outline that in workplaces where quick decision-making and precise guidance are crucial, the absence of a strong leadership presence can create confusion, stress, and anxiety. This can contribute to role ambiguity and job dissatisfaction (Abdelhafiz et al., 2016). Besides, a laissez-faire leadership style may result in fragmented communication and reduced cohesion among team members, negatively affecting overall team dynamics and increasing stress levels. (Morsiani et al., 2017). Caputo et al. (2023) note that, without sufficient guidance, workers experience feelings of isolation, principally in challenging or high-stakes situations. This lack of oversight contributes to exhaustion and burnout, as workers may struggle with balancing their heavy workload without adequate support.

Servant leadership style and its impact on the psychological well-being of healthcare workers

Servant leadership focuses on the well-being and development of employees rather than on the leader's own success; the core principles of servant leadership include empathy, active listening, stewardship, and a commitment to serving others (Hu, 2023). In healthcare settings, where the work environment is high-stress, demanding, and emotionally charged, servant leadership can play a significant role in improving workers' psychological well-being. Various studies show that Servant leadership fosters psychological safety, allowing workers to openly express concerns and manage stressors more effectively (Ma et al., 2021).

Accordingly, Servant leadership mitigates these stressors by creating a supportive environment, where healthcare workers feel heard, understood, and valued. This reduces feelings of isolation, anxiety, and burnout (Bunting, 2024). According to Zada, Zada, Khan, et al. (2022), this approach enhances workplace resilience. In the foregoing context, healthcare workers under servant leaders are more likely to develop resilience, as the supportive and empowering leadership style helps them navigate difficult situations and cope with emotional exhaustion (Zada, et al., 2022). The sense of community and trust fostered by servant leadership enhances workers' ability to bounce back from setbacks and continue delivering quality care. Moreover, a study by Demeke et al. (2024) found that servant leadership positively impacted nurses' mental health and job satisfaction, contributing to lower levels of stress and burnout. An analogous study by Kwon et al. (2024) established that servant leadership in healthcare settings is associated with improved employee satisfaction, reduced turnover rates, and better patient care. Similarly research also highlights that healthcare worker who perceives their leaders as servant leaders report lower levels of emotional exhaustion and burnout (Upadhyay, 2024). Ultimately, Servant leadership emphasizes empathy, support, and the growth of employees,

creating a nurturing environment that enhances emotional health, reduces stress, and builds stronger teams. Its focus on prioritizing employee needs effectively minimizes the adverse effects of burnout and mental exhaustion (Laura-Arias et al., 2024; Silver et al., 2021).

Conclusion

The leadership style adopted in healthcare settings profoundly affects the psychological well-being, job satisfaction, and overall performance of healthcare workers. Effective leadership not only influences the organizational culture but also has direct consequences on employee stress levels, burnout, resilience, and engagement, which are critical in high-stress environments like healthcare. Leadership style plays a crucial role in the psychological well-being of healthcare workers. While some leadership styles, like transformational and servant leadership, have been shown to have positive effects on mental health, job satisfaction, and resilience, others, like transactional leadership, may lead to higher stress, burnout, and disengagement. In high-pressure healthcare environments, a leadership style that prioritizes emotional support, collaboration, and empowerment, such as transformational, servant, or democratic leadership, can significantly enhance healthcare workers' well-being, improving their mental health and the quality of patient care.

Recommendations

From these results, it is noticeable that there is a need for healthcare organizations to adopt, inculcate and practice more of transformational, the flexible situational leadership and servant leadership styles than any other leadership approach in order to attain better psychosocial wellbeing of the healthcare workers. The transformational leadership, for instance, has been noted to promote and inspire healthcare workers' psychological approach towards service delivery. Similarly, the other leadership styles, such as situational and servant leadership have also been noted to significantly improve healthcare workers' resilience and overall job satisfaction towards better psychosocial status.

References

- Abdelhafiz, I. M., Alloubani, A. M., & Almatari, M. (2016). Impact of leadership styles adopted by head nurses on job satisfaction: a comparative study between governmental and private hospitals in Jordan. *Journal of Nursing Management*, 24(3), 384-392. doi:10.1111/jonm.12333
- Ahmed, F., Zhao, F., & Faraz, N. A. (2020). How and When Does Inclusive Leadership Curb Psychological Distress During a Crisis? Evidence From the COVID-19 Outbreak. *Front Psychol*, 11, 1898. doi:10.3389/fps.2020.01898
- Ahmed, F., Zhao, F., Faraz, N. A., & Qin, Y. J. (2021). How inclusive leadership paves way for psychological well-being of employees during trauma and crisis: A three-wave longitudinal mediation study. *Journal of Nursing Management*, 27(2), 819-831. doi:10.1111/jan.14637
- Ahmed, Z., Ellahham, S., Soomro, M., Shams, S., & Latif, K. (2024). Exploring the impact of compassion and leadership on patient safety and quality in healthcare systems: a narrative review. *BMJ Open Qual*, 13(Suppl 2). doi:10.1136/bmjopen-2023-002651
- Aini, Q., & Dzakiyullah, N. R. (2024). Leadership styles in healthcare settings for hospital management and employee engagement. *Journal of Angiotherapy*, 8(5), 1-7.
- Alanazi, N. H., Alshamlani, Y., & Baker, O. G. (2023). The association between nurse managers' transformational leadership and quality of patient care: A systematic review. *International Nursing Reviews*, 70(2), 175-184. doi:10.1111/inr.12819

- Alasiry, S. M., & Alkhaldi, F. S. (2024). Impact of Nursing Leadership Styles on the Staff Turnover Intention in Saudi Arabia: A Cross-Sectional Study. *Cureus*, 16(10), e70676. doi:10.7759/cureus.70676
- Alhalal, E., Alharbi, J. F., Alharbi, S. T., Alotaibi, S. S., Albagami, N. S., Alruwaili, S. M., & Alshammari, S. A. (2024). Impact of authentic leadership on nurses' well-being and quality of care in the acute care settings. *Journal of nursing scholarship : an official publication of Sigma Theta Tau International Honor Society of Nursing*, 56(5), 718–728. <https://doi.org/10.1111/jnu.12978>
- Al-Thawabiya, A., Singh, K., Al-Lenjawi, B. A., & Alomari, A. (2023). Leadership styles and transformational leadership skills among nurse leaders in Qatar, a cross-sectional study. *Nursing open*, 10(6), 3440–3446. <https://doi.org/10.1002/nop2.1636>
- Andargie, E. M., Negash, W. D., Geto, A. K., & Atnafu, A. (2024). Healthcare leadership practice and associated factors among primary healthcare managers in East Gojam Zone, Northwest Ethiopia: a mixed method study. *BMC health services research*, 24(1), 1247. <https://doi.org/10.1186/s12913-024-11712-7>
- Bunting R. F., Jr (2024). Servant leadership. *Journal of healthcare risk management : the journal of the American Society for Healthcare Risk Management*, 44(2), 3. <https://doi.org/10.1002/jhrm.21582>
- Caputo, A., Gatti, P., Clari, M., Garzaro, G., Dimonte, V., & Cortese, C. G. (2023). Leaders' Role in Shaping Followers' Well-Being: Crossover in a Sample of Nurses. *International journal of environmental research and public health*, 20(3), 2386. <https://doi.org/10.3390/ijerph20032386>
- Cochrane, B. S., Ritchie, D., Lockhard, D., Picciano, G., King, J. A., & Nelson, B. (2019). A culture of compassion: How timeless principles of kindness and empathy become powerful tools for confronting today's most pressing healthcare challenges. *Healthcare management forum*, 32(3), 120–127. <https://doi.org/10.1177/0840470419836240>
- Cope, V., & Murray, M. (2017). Leadership styles in nursing. *Nursing standard (Royal College of Nursing (Great Britain) : 1987)*, 31(43), 61–70. <https://doi.org/10.7748/ns.2017.e10836>
- Cope, V., & Murray, M. (2017). Leadership styles in nursing. *Nursing standard (Royal College of Nursing (Great Britain) : 1987)*, 31(43), 61–70. <https://doi.org/10.7748/ns.2017.e10836>
- Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2018). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International journal of nursing studies*, 85, 19–60. <https://doi.org/10.1016/j.ijnurstu.2018.04.016>
- Demeke, G. W., van Engen, M. L., & Markos, S. (2024). Servant Leadership in the Healthcare Literature: A Systematic Review. *Journal of healthcare leadership*, 16, 1–14. <https://doi.org/10.2147/JHL.S440160>
- den Breejen-de Hooge, L. E., van Os-Medendorp, H., & Hafsteinsdóttir, T. B. (2021). Is leadership of nurses associated with nurse-reported quality of care? A cross-sectional survey. *Journal of research in nursing: JRN*, 26(1-2), 118–132. <https://doi.org/10.1177/1744987120976176>

- Dextras-Gauthier, J., Gilbert, M. H., Dima, J., & Adou, L. B. (2023). Organizational culture and leadership behaviors: is manager's psychological health the missing piece?. *Frontiers in psychology*, 14, 1237775. <https://doi.org/10.3389/fpsyg.2023.1237775>
- Franco, M., & Almeida, J. (2011). Organisational learning and leadership styles in healthcare organisations: An exploratory case study. *Leadership & Organization Development Journal*, 32(8), 782-806. <http://dx.doi.org/10.1108/01437731111183739>
- Gadolin, C., Larsman, P., Skyvell Nilsson, M., Pousette, A., & Törner, M. (2022). How do healthcare unit managers promote nurses' perceived organizational support, and which working conditions enable them to do so? A mixed methods approach. *Scandinavian journal of psychology*, 63(6), 648–657. <https://doi.org/10.1111/sjop.12851>
- García-Sierra, R., & Fernández-Castro, J. (2018). Relationships between leadership, structural empowerment, and engagement in nurses. *Journal of advanced nursing*, 74(12), 2809–2819. <https://doi.org/10.1111/jan.13805>
- Gebreheat, G., Teame, H., & Costa, E. I. (2023). The Impact of Transformational Leadership Style on Nurses' Job Satisfaction: An Integrative Review. *SAGE open nursing*, 9, 23779608231197428. <https://doi.org/10.1177/23779608231197428>
- Goens, B., & Giannotti, N. (2024). Transformational Leadership and Nursing Retention: An Integrative Review. *Nursing research and practice*, 2024, 3179141. <https://doi.org/10.1155/2024/3179141>
- Gu, L., Wang, L., & Pan, B. (2022). Psychological empowerment and job satisfaction in nurses: A systematic review and meta-analysis. *Frontiers in public health*, 10, 1022823. <https://doi.org/10.3389/fpubh.2022.1022823>
- Günzel-Jensen, F., Jain, A. K., & Kjeldsen, A. M. (2018). Distributed leadership in health care: the role of formal leadership styles and organizational efficacy. *Leadership*, 14(1), 110-133. <https://psycnet.apa.org/doi/10.1177/1742715016646441>
- Haoyan, X., Waters, D., Jinling, H., Qionglings, L., & Sien, L. (2023). Quantitative systematic review of the transformational leadership style as a driver of nurses' organisational commitment. *Nursing open*, 10(7), 4160–4171. <https://doi.org/10.1002/nop2.1671>
- Harrington A. (2021). Understanding effective nurse leadership styles during the COVID-19 pandemic. *Nursing standard (Royal College of Nursing (Great Britain) : 1987)*, 36(5), 45–50. <https://doi.org/10.7748/ns.2021.e11601>
- Hjazeen, A., Kannan, S., Al-Maqableh, H. O., Maitah, S., Abu-Radwan, M., & Sabbah, M. (2024). Relationship Between Psychological Empowerment and Nurses' Job Satisfaction: A Systematic Review and Correlational Meta-Analysis. *Cureus*, 16(4), e58228. <https://doi.org/10.7759/cureus.58228>
- Hu X. (2023). Leader humor: A double-edged sword. *Current opinion in psychology*, 54, 101698. <https://doi.org/10.1016/j.copsyc.2023.101698>
- Jankelová, N., & Joniaková, Z. (2021). Communication Skills and Transformational Leadership Style of First-Line Nurse Managers in Relation to Job Satisfaction of Nurses and Moderators of This Relationship. *Healthcare (Basel, Switzerland)*, 9(3), 346. <https://doi.org/10.3390/healthcare9030346>

- Kantareva, P., & Veselinova, T. (2021). Leadership and leadership styles in healthcare management. *Medicus*, (3), 51-55.
- Kim, S., & Jeong, S. H. (2020). [A Meta-Analytic Path Analysis on the Outcome Variables of Nursing Unit Managers' Transformational Leadership: Systemic Review and Meta-Analysis]. *Journal of Korean Academy of Nursing*, 50(6), 757–777.
<https://doi.org/10.4040/jkan.20205>
- Kwon, H. J., & Chae, S. J. (2024). Cultivating Leadership and Teamwork in Medical Students Through Rowing: A Phenomenological Study. *Behavioral sciences (Basel, Switzerland)*, 14(10), 962. <https://doi.org/10.3390/bs14100962>
- Labrague L. J. (2023). Toxic leadership and its relationship with outcomes on the nursing workforce and patient safety: a systematic review. *Leadership in health services (Bradford, England)*, ahead-of-print(ahead-of-print), 10.1108/LHS-06-2023-0047.
<https://doi.org/10.1108/LHS-06-2023-0047>
- Laura-Arias, E., Villar-Guevara, M., & Millones-Liza, D. Y. (2024). Servant leadership, brand love, and work ethic: important predictors of general health in workers in the education sector. *Frontiers in psychology*, 15, 1274965.
<https://doi.org/10.3389/fpsyg.2024.1274965>
- Li, X., & Zhang, J. (2022). Authentic leadership, perceived insider status, error management climate, and employee resilience: A cross-level study. *Frontiers in psychology*, 13, 938878. <https://doi.org/10.3389/fpsyg.2022.938878>
- Lindert, L., Zeike, S., Choi, K. A., & Pfaff, H. (2022). Transformational Leadership and Employees' Psychological Wellbeing: A Longitudinal Study. *International journal of environmental research and public health*, 20(1), 676.
<https://doi.org/10.3390/ijerph20010676>
- Ma, Y., Faraz, N. A., Ahmed, F., Iqbal, M. K., Saeed, U., Mughal, M. F., & Raza, A. (2021). Curbing nurses' burnout during COVID-19: The roles of servant leadership and psychological safety. *Journal of nursing management*, 29(8), 2383–2391.
<https://doi.org/10.1111/jonm.13414>
- Matos, R. I., Cervero, R. M., Melton, J. L., Clemons, M. A., Sims, B. W., & Ma, T. (2024). Adaptive Leadership and Burnout in Military Healthcare Workers During a Global Health Pandemic. *Military medicine*, 189(Suppl 3), 106–112.
<https://doi.org/10.1093/milmed/usae057>
- Morsiani, G., Bagnasco, A., & Sasso, L. (2017). How staff nurses perceive the impact of nurse managers' leadership style in terms of job satisfaction: a mixed method study. *Journal of nursing management*, 25(2), 119–128.
<https://doi.org/10.1111/jonm.12448>
- Narayan, A. K., Boone, N., Monga, N., McFarlane, N., Mango, V. L., Seifert, M., Smith, A., Woods, R. W., & Weissman, I. A. (2024). Fostering Organizational Excellence through Inclusive Leadership: Practical Guide for Radiology Leaders. *Radiographics : a review publication of the Radiological Society of North America, Inc*, 44(9), e230162. <https://doi.org/10.1148/rg.230162>
- Omari, A. L. M., Belhaj, H., Haia, H. B., El Jirari, R., & Agoub, M. (2024). A Scoping Review of Management Styles Impact on the Health Workers' Psychological Well-Being. *International journal of psychology and psychological therapy*, 24(3), 345-357.

- Perez, J. (2021). Leadership in Healthcare: Transitioning From Clinical Professional to Healthcare Leader. *Journal of Healthcare Management*, 66(4), 280-302. doi:10.1097/jhm-d-20-00057
- Pishgooie, A. H., Atashzadeh-Shoorideh, F., Falcó-Pegueroles, A., & Lotfi, Z. (2019). Correlation between nursing managers' leadership styles and nurses' job stress and anticipated turnover. *Journal of Nursing Management*, 27(3), 527-534. doi:10.1111/jonm.12707
- Plouffe, R. A., Nazarov, A., Heesters, A. M., Dickey, C. C., Foxcroft, L., Hosseiny, F., . . . Richardson, J. D. (2023). The mediating roles of workplace support and ethical work environment in associations between leadership and moral distress: a longitudinal study of Canadian health care workers during the COVID-19 pandemic. *Front Psychol*, 14, 1235211. doi:10.3389/fpsyg.2023.1235211
- Qtait, M. (2023). Systematic Review of Head Nurse Leadership Style and Nurse Performance. *International Journal of Africa Nursing Sciences*, 18, 100564. Doi: <https://doi.org/10.1016/j.ijans.2023.100564>
- Richards, A. (2020). Exploring the benefits and limitations of transactional leadership in healthcare. *Nursing Standards*, 35(12), 46-50. doi:10.7748/ns.2020.e11593
- Sabbah, I. M., Ibrahim, T. T., Khamis, R. H., Bakhour, H. A., Sabbah, S. M., Droubi, N. S., & Sabbah, H. M. (2020). The association of leadership styles and nurses well-being: a cross-sectional study in healthcare settings. *The Pan African medical journal*, 36, 328. <https://doi.org/10.11604/pamj.2020.36.328.19720>
- Saleh, U., O'Connor, T., Al-Subhi, H., Alkattan, R., Al-Harbi, S., & Patton, D. (2018) The impact of nurse managers' leadership styles on ward staff. *British journal of nursing*, 27(4): 197-203. Doi: <https://doi.org/10.12968/bjon.2018.27.4.197>
- Sfantou, D. F., Laliotis, A., Patelarou, A. E., Sifaki-Pistolla, D., Matalliotakis, M., & Patelarou, E. (2017). Importance of Leadership Style towards Quality of Care Measures in Healthcare Settings: A Systematic Review. *Healthcare (Basel, Switzerland)*, 5(4), 73. <https://doi.org/10.3390/healthcare5040073>
- Silver, R., & Martin, M. (2021). Servant leadership and its association with an environment of empathic care: an empirical analysis of the perspectives of mid-level practitioners. *Leadership in health services (Bradford, England)*, ahead-of-print(ahead-of-print), 10.1108/LHS-06-2021-0052. <https://doi.org/10.1108/LHS-06-2021-0052>
- Simard, K., & Parent-Lamarche, A. (2022). Abusive leadership, psychological well-being, and intention to quit during the COVID-19 pandemic: a moderated mediation analysis among Quebec's healthcare system workers. *International archives of occupational and environmental health*, 95(2), 437–450. <https://doi.org/10.1007/s00420-021-01790-z>
- Specchia, M. L., Cozzolino, M. R., Carini, E., Di Pilla, A., Galletti, C., Ricciardi, W., & Damiani, G. (2021). Leadership Styles and Nurses' Job Satisfaction. Results of a Systematic Review. *International journal of environmental research and public health*, 18(4), 1552. <https://doi.org/10.3390/ijerph18041552>
- Suliman, M., Aljezawi, M., Almansi, S., Musa, A., Alazam, M., & Ta'an, W. F. (2020). Effect of nurse managers' leadership styles on predicted nurse turnover. *Nursing*

management (Harrow, London, England : 1994), 27(5), 20–25.
<https://doi.org/10.7748/nm.2020.e1956>

- Upadhyay D. (2024). Excellence in healthcare: nurturing servant leadership, fostering collaborative culture and promoting social sustainability in the UAE - strategies for transformation. *Leadership in health services (Bradford, England)*, ahead-of-print(ahead-of-print), 10.1108/LHS-01-2024-0012. <https://doi.org/10.1108/LHS-01-2024-0012>
- Wang, Z., Liu, Y., & Liu, S. (2019) Authoritarian leadership and task performance: The effects of leader-member exchange and dependence on leader. *Frontiers of Business Research in China*, 13(1): 1–15. Doi: <https://doi.org/10.1186/s11782-019-0066-x>
- Xiao, Q., Liang, X., Liu, L., Klarin, A., & Zhang, C. (2023). How do work-life balance programmes influence nurses' psychological well-being? The role of servant leadership and learning goal orientation. *Journal of advanced nursing*, 79(7), 2720–2731. <https://doi.org/10.1111/jan.15654>
- Xintian, L., & Peng, P. (2023). Does inclusive leadership foster employee psychological resilience? The role of perceived insider status and supportive organizational climate. *Frontiers in psychology*, 14, 1127780. <https://doi.org/10.3389/fpsyg.2023.1127780>
- Zada, M., Zada, S., Ali, M., Jun, Z. Y., Contreras-Barraza, N., & Castillo, D. (2022). How Classy Servant Leader at Workplace? Linking Servant Leadership and Task Performance During the COVID-19 Crisis: A Moderation and Mediation Approach. *Frontiers in psychology*, 13, 810227. <https://doi.org/10.3389/fpsyg.2022.810227>
- Zhang, C., Xiao, Q., Liang, X., Klarin, A., & Liu, L. (2024). How does ethical leadership influence nurses' job performance? Learning goal orientation as a mediator and co-worker support as a moderator. *Nursing ethics*, 31(4), 406–419. <https://doi.org/10.1177/09697330231185939>