Review Article:

The Relationship between Leadership Style, Employment Engagement, and Turnover Intentions in Healthcare Organizations in Saudi Arabia

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Abstract

Background and Aims:

Leadership style significantly impacts the work atmosphere and staff behavior such as employee engagement and turnover intention. The transformational and transactional styles of leadership are two of the most prominent types of leadership seen in healthcare companies. This study examines the extent of the Relationship between leadership style, employee engagement, and turnover intention in healthcare organizations in Saudi Arabia.

Methods:

This research study employs a systematic review methodology using the PRISMA framework to identify and interpret studies examining the relationship between leadership style, employee engagement, and turnover intention in healthcare organizations in Saudi Arabia. The studies were extracted from four prominent databases: PubMed, Google Scholar, Medline, and Scopus. The paper's quality was assessed using JBI assessment and analysis.

Result:

Out of 1230 papers, 12 studies were eligible for the analysis. All the studies revealed that there is a significant relationship between LS, EE, and TI in healthcare organizations. Moreover, effective leadership had a favorable impact on work engagement and significant consequences, including job performance, engagement, and a decline in employee TI.

Conclusion:

We found most studies found a significant correlation between transformational leadership and TI was amplified in the context of elevated levels of job satisfaction and EE. Future research might utilize quantitative and mixed methods methodologies to investigate the influence of learning systems on employee engagement and turnover intentions. The healthcare industry should prioritize the implementation of educational training programs to enhance the professional development of healthcare personnel.

Key words:

Leadership style, employee engagement, turnover intention, healthcare organizations, Saudi Arabia

Introduction:

Leadership style (LS) substantially influence the work environment and behavior of staff members. In healthcare organizations, transformational and transactional leadership styles are widely recognized as two of the most prominent types of leadership. Transformational leaders inspire their employees by setting a clear vision for the future, fostering innovative thinking, and promoting personal development.[1] These leaders serve as role models for their staff, inspiring them to surpass expectations and achieve outstanding results. In contrast, transactional leaders rely on a reward-punishment system, where employees receive compensation for achieving specific goals and face consequences for failing to achieve them. Transformational leaders, in contrast, prioritize the development of their followers' potential. This leadership style prioritizes achieving short-term goals while also maintaining the existing status quo.[2]

Healthcare-related research has demonstrated that transformative leadership can have a positive impact on Employee Engagement (EE). Engaged employees exhibit high levels of dedication, enthusiasm, and work satisfaction, resulting in enhanced patient care and improved business performance. Several studies have shown that transformational leaders play a crucial role in creating supportive working environments. These environments empower individuals to make choices and take ownership of their work. Employees experience a heightened sense of agency, which leads to higher levels of work satisfaction and reduced interest in seeking alternative employment opportunities.[3] On the contrary, transactional leadership can lead to disengagement and exhaustion among individuals. Transactional leaders promote a culture where their teams prioritize short-term goals and uphold established policies and processes. Consequently, individuals who work under transactional leaders may experience limitations in their capacity to innovate and progress in their professional lives. This restrictive environment can result in reduced job satisfaction and a greater inclination to seek alternative employment opportunities.[4]

Leaders who embrace these approaches prioritize qualities such as service to others, teamwork, and openness. Research has demonstrated that these qualities have a positive impact on EE and retention rates. Leaders who embrace servant leadership prioritize the needs of their workers and actively support their personal and professional growth. Servant leaders prioritize the needs of their team members,

creating a positive and encouraging work atmosphere. Consequently, this can enhance morale, dedication, and enthusiasm in the workplace. This type of leadership enhances employee performance, trust, and motivates them to stay with the company. Democratic leadership promotes an environment where information can freely flow, teamwork is encouraged, and consensus is reached.[5] The strategy fosters active involvement from all team members, resulting in increased morale and a sense of job satisfaction. Consequently, workers exhibit higher levels of job commitment and are less inclined to contemplate leaving their current positions. A more democratic leadership style can lead to improved team morale, creativity, and productivity.

In healthcare organizations, work-life balance plays a significant role in influencing EE and attrition plans. Employment in the healthcare sector may be demanding, posing challenges for employees to achieve a satisfactory equilibrium between their professional and personal lives. Healthcare companies may support their employees in achieving a more optimal work-life balance by offering perks such as flexible scheduling, promoting personal development, and giving assistance in managing stress.[6] Mentoring and coaching programs may have a significant impact on enhancing EE and reducing turnover intentions (TI). Facilitating the collaboration between experienced professionals and individuals who are new to the field fosters a conducive atmosphere that motivates everyone to acquire knowledge and develop. These programs not only provide workers the opportunity to acquire knowledge from their mentors but also enhance their sense of camaraderie and allegiance to the organization. Participation in mentoring and coaching programs by workers can lead to a reduction in depression and a decrease in intentions to quit the firm. This is because these programs address problems at an early stage, preventing them from escalating.[7]

In recent years, the healthcare industry in Saudi Arabia has experienced significant growth, resulting in increased demands on healthcare providers and their staff. These organizations must find strategies to retain their top employees and ensure their continued engagement in their work. This research aims to investigate the relationship between LS, EE, and TI, with a particular focus on the moderating effects of transformational, transactional, and laissez-faire LSs. Healthcare organizations in Saudi Arabia must have a thorough understanding of the connection between LS, EE, and intention to leave. This understanding can help them develop

effective retention strategies and create a positive work environment. The success of any organization relies heavily on employee retention and engagement. Therefore, the findings of this research can be applied not only to the healthcare industry but also to other sectors. The objective of this study is to contribute to the existing knowledge on effective leadership practices in healthcare settings in Saudi Arabia. It aims to enhance patient care and improve the efficiency of healthcare organizations by analyzing the impact of LS on staff engagement and intentions to leave.[8]

Methods:

Search Strategy:

This research study utilizes a systematic review approach to analyze and interpret the data extracted from related studies, obtained from four well-known databases, including PubMed, Google Scholar, Medline, and Scopus. A set of essential terms and phrases were used in the search methodology to identify the most suitable studies for the current research project.[9] In forming the research question, the PICO moder was used.

- Population: Healthcare employees in Saudi Arabia.
- Phenomenon of Interest: Leadership styles (e.g., transformational, transactional, autocratic, democratic, etc.) and their impact on employee engagement and turnover intentions.
- Context: Healthcare organizations in Saudi Arabia.

The search strategy was systemically conducted following the PRISMA framework and the evaluation of the study's quality was established through JBI assessment and analysis. The search was guided by utilizing Boolean operators AND/OR, specifically the LS AND/OR employee turnover intention, employee engagement AND/OR healthcare.

Study Inclusion and Exclusion Criteria:

Inclusion criteria:

- The studies are primary research articles conducted in Saudi Arabia and published in peer-reviewed journals.
- The studies focus on the relationship between LS (e.g., transformational, transactional, authentic, passive-avoidant) and EE, TI, or both.
- The studies have a sample of healthcare professionals, such as physicians, nurses, and administrative staff.
- The studies that have been published within the last ten years ensure relevance to current healthcare practices and leadership trends.
- The studies utilized validated measurement tools to assess LS, EE, and TI.
- The studies that were available in the English language or have an English translation available.

Exclusion criteria:

- Studies that do not focus on healthcare organizations in Saudi Arabia.
- Studies that do not directly investigate the relationship between LS, EE, and TI.
- Studies that solely focus on one specific profession within healthcare, such as physicians or administrative staff, may limit the generalizability of the findings.
- Studies that use non-validated or untested measurement tools for assessing key variables.
- Studies published more than ten years ago.
- Studies that are not published in peer-reviewed journals, such as conference proceedings, theses, and dissertations.[10]
- Studies that are not available in English or do not have an English translation.

Study Selection:

After conducting an extensive search, a total of 1850 studies were found and obtained. A total of 452 studies were obtained from Medline, 650 studies from PubMed, 431 studies from Google Scholar, and 317 studies from Scopus. The aforementioned studies are relevant to the current study issue and especially investigate the correlation between LS, EE, and Turnover Intentions in Healthcare Organizations in Saudi Arabia. The selection of studies for this systematic review was based on the specific study questions and goals. The research projects that have been chosen focus on utilizing the main strategy and cross-sectional technique, using a quantitative research methodology. To identify and locate secondary databases, the investigator used criteria such as language, release date, and quantitative methodology during the intermediate phase. The application of filters was intended to identify the studies that were most frequently selected and aligned with the subject of the study. According to the study selection method, the chosen research was found to be the most suitable and relevant to the research issue.[11]

PRISMA analysis and JBI assessment:

The systematic review approach entails a methodical process of identifying and extracting pertinent sources according to specific criteria for inclusion and exclusion. Once the necessary resources, including research papers, articles, and peer-reviewed publications, were gathered, the next step was to evaluate the chosen studies. The quality of the chosen studies and their methods was evaluated through the PRISMA analysis and JBI evaluation. Multiple sources of information, such as Google Scholar, Medline, PubMed, and

Scopus, were used to collect the data.[12] There is widespread recognition of the PRISMA guidelines as a systematic approach for evaluating the quality of selected research using predetermined criteria. We have identified a total of 12 papers that are highly relevant to our current research question, based on the PRISMA standards. In addition, following the completion of the PRISMA analysis, a JBI evaluation was performed. This evaluation involved the use of an -8item checklist to ensure that the selected studies adhered to sound methodology. The studies underwent the JBI evaluation to determine their quality, resulting in a perfect score of %100. Afterward, the chosen research was thoroughly analyzed to derive meaningful implications from their findings.[13]

Results:

The systematic review's findings are presented in Table 1. The purpose of the review was to evaluate the relationship between LS, EE, and TI in healthcare organizations in Saudi Arabia. Only 12 papers were selected for screening, and they were evaluated using the JBI and PRISMA standards. A comprehensive explanation of the research's evaluation, retrieval, and findings can be found in the table provided below.

Table 1: General Characteristics of the Included Studies:

Title	Author	Date	Study Type	Source	Study Approach	Results
The relationship between Leadership Style and Turnover Intention of nurses in the public hospitals of Jordan	Alkarabsheh et al	2022	Quantitative	PubMed	Survey	The utilization of transformational leadership, which involves encouraging subordinates, promoting intellectual development, and providing personalized attention, led to reduced TI s.
LSs, work engagement and outcomes among information and communications technology professionals: A cross-national study	Gemeda & Lee	2020	Quantitative	PubMed	Cross-sectional analysis	The implementation of transformational leadership had a favorable impact on work engagement and consequential consequences, including job performance and satisfaction.
A study of Relationship between LSs and Job Security among Nurses Working in Makkah health cluster in Saudi Arabia 2021	Kamal et al.	2021	Quantitative	Scopus	Descriptive	Transformational leadership enhances employees' perception of job security, whereas transactional or laissez-faire leadership approaches do not have a significant or favourable impact.
Influence of Toxic Leadership on Turnover Intentions: The Mediating Role of Psychological Wellbeing and EE	Naeem & Khurram	2020	Quantitative	Google Scholar	Cross-sectional	Toxic leadership practices, such as public defamation, excessive control, and inequitable conduct, had a noteworthy impact on employees' inclination to leave their jobs.

The Impact of LSs on Staff Nurses' Turnover Intentions	Naseer et al.	2017	Quantitative	Medline	Survey	There was an inverse correlation between the transformational leadership approach and the tendency of staff nurses to job TI.
The influence of abusive supervision on EE, stress and Turnover Intention	Oliveira & Najnudel	2022	Quantitative	Medline	Cross-sectional	Abusive supervision, which is typified by behaviours such as depreciating, excessive criticism, and manipulation of subordinates, exhibited a significant association with reduced levels of EE, heightened levels of stress, and increased intentions to leave the organization.
Exploring the Relationship between Work Engagement and Turnover Intention among Nurses in the Kingdom of Bahrain: A Cross-Sectional Study	Opinon et al.	2021	Quantitative	Google Scholar	Cross-sectional	A notable negative correlation existed between work engagement and TI among nurses in Bahrain. There exists an inverse relationship between work engagement, comprising the extent of vigour, dedication, and absorption, and the tendency to quit one's job.
The Linkage Between LSs, Employee Loyalty, and Turnover Intention in Healthcare Industry	Romi et al.	2022	Quantitative	PubMed	Descriptive analysis	The implementation of transformational leadership, which is distinguished by its ability to inspire and intellectually stimulate employees, promoted greater levels of employee loyalty, leading to a subsequent decrease in TI.
Importance of work engagement in primary healthcare	Szilvassy & Širok	2022	Quantitative	Google Scholar	Cross-sectional	There was a positive correlation between work engagement and both patient satisfaction and healthcare quality. Moreover, there existed a correlation between elevated work engagement and diminished burnout rates within the healthcare workforce.
The relationship between Leadership style and staff work engagement: An empirical analysis of the public sector in Vietnam	Thanh et al.	2022	Quantitative	Medline	Survey	There exists a positive association between work engagement and transformational leadership, which is distinguished by the ability to motivate, encourage, and rationally challenge subordinates

The impact of transformational leadership on the Turnover Intention of the new generation of knowledgeable employees: A moderated mediation model	Xiong et al.	2023	Quantitative	PubMed	Survey	Transformational leadership exhibited a noteworthy impact on TI. The mediation model has indicated that the inverse correlation between transformational leadership and TI was amplified in the context of elevated levels of job satisfaction or engagement
Turnover Intention of hospital staff in Ontario, Canada: exploring the role of frontline supervisors, teamwork, and mindful organizing	Zaheer et al.	2019	Quantitative	Scopus	Survey	The healthcare professionals who worked in inadequately designed workspaces were more likely to express intentions to leave their jobs.

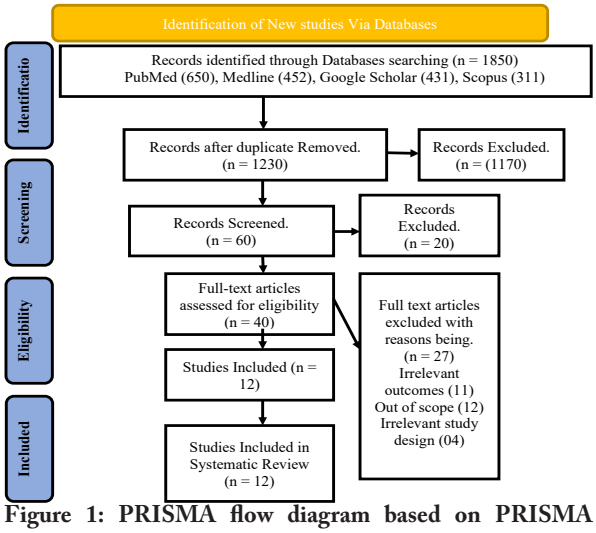


Figure 1: PRISMA flow diagram based on PRISMA Guidelines of studies evaluation for systematic review.

The PRISMA flow diagram illustrates how research is organized and incorporated from various databases, including Google Scholar, PubMed, Medline, and Scopus. After conducting a PRISMA screening, only 12 papers were deemed to be of high quality and suitable for inclusion in this systematic review out of the total number of papers examined.

Data Extraction (Quality Critical Appraisal Checklist):

Table 2 presents the outcomes of the quality critical assessment conducted on the selected studies. The JBI assessment checklist, including 8 criteria, is employed to assess the research technique of the selected study. Within the framework of the JBI evaluation, a study obtains a perfect score of one hundred percent for both its relevance and its appropriateness.

Q1. Were the criteria for inclusion in the sample clearly defined?

Q2. Were the study subjects and the setting described in detail?

Q3. Was the exposure measured in a valid and reliable way?

Q4. Were objective, standard criteria used for measurement of the condition?

Q5. Were confounding factors identified?

Q6. Were strategies to deal with confounding factors stated?

Q7. Were the outcomes measured in a valid and reliable way?

Q8. Was appropriate statistical analysis used?

Table 2: Critical Appraisal of Included studies (Cross-Sectional Studies)

Citations	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
(Alkarabsheh et al., 2022)	Y	Y	Y	Y	Y	Y	Y	Y
(Gemeda & Lee, 2020)	Y	Y	Y	Y	Y	Y	U	Y
(Kamal et al., 2021)	Y	N	Y	Y	Y	Y	Y	Y
(Naeem & Khurram, 2020)	Y	Y	U	Y	Y	N	Y	Y
(Naseer et al., 2017)	Y	Y	Y	Y	Y	N	Y	Y
(Oliveira & Najnudel, 2022)	Y	Y	Y	N	Y	Y	Y	Y
(Opinon et al., 2021)	Y	Y	Y	Y	Y	U	Y	Y
(Romi et al., 2022)	Y	Y	Y	N	Y	Y	Y	Y
(Szilvassy & Širok, 2022)	Y	Y	N	Y	Y	Y	Y	Y
(Thanh et al., 2022)	Y	Y	Y	Y	Y	Y	Y	Y
(Xiong et al., 2023)	Y	Y	Y	Y	Y	Y	Y	U
(Zaheer et al., 2019)	Y	Y	Y	Y	Y	Y	Y	Y

Y* (Yes); N* (No); NA* (Not Applicable); U* (Unclear)

The use of transformational leadership, which includes motivating employees, fostering their intellectual growth, and giving individualized support, resulted in decreased TIs.[14] In contrast, LS that gives importance to transactional methods, which focus on the use of incentives and penalties, or laissez-faire approaches, which lack direction, may be associated with higher levels of turnover intentions. The results suggest that the relationship between LS (leadership style) and employee performance is affected by the mediating influence of work satisfaction and organizational commitment.

The introduction of transformational leadership had a positive effect on work engagement, leading to improved job performance and satisfaction.[3] The cited phenomena may be ascribed to the leader's expertise in presenting a distinct and persuasive vision, promoting intellectual stimulation, and displaying a customized attitude towards subordinates, hence increasing their degree of job engagement. The research has discovered possible variations between nations, suggesting that the cultural environment may influence the effectiveness of leadership methods.

Transformational leadership positively influences employees' sense of job security, but transactional or laissez-faire leadership methods do not have a substantial or beneficial effect.[15] The impression of security indicated above may be due to the creation of a supportive and caring environment by transformational leaders. This particular setting can promote the growth of resilience in times of uncertainty, hence reducing concerns about the potential loss of jobs.

Toxic leadership behaviors, such as publicly defaming colleagues, exerting excessive control, and engaging in unfair

conduct, significantly influenced employees' propensity to quit their positions.[16] The potential importance of psychological wellness and EE as mediators in this relationship should not be underestimated. Subordinates under toxic leaders may have suffered a decrease in their psychological well-being and engagement, leading to a higher likelihood of wanting to quit the business. Developing leadership skills within a company is essential for promoting mental health and involvement, therefore decreasing turnover intentions.

Negative relationships between the use of transformative leadership and the inclination of staff nurses to experience job turnover intention.[17] The observed behavior may be explained by the influence of transformational leadership on subordinates. In this scenario, subordinates are inspired, empowered, and supported by their leaders, which leads to increased levels of work satisfaction and commitment, ultimately reducing the likelihood of resigning. On the other hand, LSs that are transactional or laissez-faire, meaning they focus on giving rewards and punishments or lack advice, may be associated with higher levels of turnover intentions.

Abusive supervision, characterized by behaviors like depreciation, excessive criticism, and manipulation of subordinates, was strongly linked to lower levels of EE, increased stress, and higher intentions to leave the organization.[18] Employees' trust in the organization and their level of work engagement are likely to be negatively affected by the presence of abusive supervision. Moreover, the employees' inclination to leave their jobs may have been exacerbated by the heightened levels of stress caused by the persistent mistreatment. The study highlighted the importance of creating a positive and professional supervisory environment to improve employee retention.

There is a significant negative correlation between work engagement and TI among nurses in Bahrain.[19] There is an inverse relationship between work engagement, which includes the level of enthusiasm, commitment, and focus, and the likelihood of quitting one's job. A greater level of work engagement is specifically linked to a decreased intention to quit the job. The identification of variables such as leadership support, equitable distribution of workload, and a salubrious work atmosphere likely had a significant impact on improving work engagement, which in turn reduced the likelihood of employee turnover.

The introduction of transformational leadership, characterized by its capacity to inspire and intellectually stimulate employees, resulted in increased employee loyalty and a subsequent reduction in TI.[20]

On the other hand, organizations that have a transactional approach and rely on rewards and punishments, or those that adopt a laissez-faire approach with minimal guidance, may not have achieved the same positive results in terms of promoting employee loyalty and reducing turnover.

A positive correlation between work engagement and both patient satisfaction and healthcare quality was found.[21] Additionally, a correlation was found between higher levels of work engagement and lower rates of burnout among healthcare professionals. The promotion of work engagement in primary healthcare has been suggested to be accomplished through supportive leadership, skill development, and recognition. These factors have the potential to enhance efficiency and improve the quality of care.

In another study, it found a positive correlation between work engagement and transformational leadership.[22] Transformational leadership is characterized by the leader's capacity to motivate, encourage, and rationally challenge subordinates. Leaders like this may have created a work environment that promotes empowerment, which in turn allows employees to feel more engaged and dedicated to their work. It is possible that transactional leadership or laissez-faire leadership may not have produced similar positive results in terms of work engagement, contrary to popular belief. The study's findings suggest that promoting transformational leadership practices could have a positive impact on work engagement in Vietnam's public sector.

Transformational leadership had a significant impact on TI.[2] Leaders who inspire, motivate, and show appreciation for the unique contributions of individual employees foster a gratifying work atmosphere that discourages employees from seeking alternative employment opportunities. The mediation model suggests that the lower correlation between transformational leadership and TI is stronger when there are higher levels of job satisfaction or engagement. Viable approaches to mitigate TIs include implementing transformational leadership practices and enhancing job satisfaction and engagement.

Healthcare workers who worked in poorly designed workplaces were more likely to indicate that they intended to leave their positions.[23] Beyond the individual and the business, the consequences of TIs affect the larger healthcare system and the standard of patient care. Increased worker turnover rates may lead to personnel shortages, which may hinder the organization's ability to provide high-quality treatment.

Discussion:

The purpose of this study is to determine how LS, EE, and TI relate to one another in Saudi Arabian healthcare organizations. According to the study's findings, LS, EE, and TI in healthcare organizations have a substantial association. Based on the findings, it was evident that proficient leadership positively affected employee work engagement and resulted in notable outcomes such as enhanced job performance, increased engagement, and a decrease in turnover incidents. This is so that workers are deterred from looking for other job options by being inspirational, motivating, and exhibiting gratitude for each individual's distinct contributions. According to the findings, there was a stronger negative link between transformative leadership and TI when job satisfaction and EE were high.

The results of this investigation are corroborated by earlier research; for instance, a study offered proof for the hypothesis that transformative leadership is favorably connected to elevated EE in healthcare settings.[24] For example, one study provided evidence in favor of this claim.[25] Similarly, it was discovered that EE is positively impacted by transactional leadership.[26] In a similar vein, another study has shown a favorable correlation between the adoption of a democratic labor standard and increased job satisfaction, improved EE, and lower turnover rates.[27] However, in research on Saudi Arabian nurses, it was found that high workloads and little prospects for professional advancement had a major impact on TI.[28] In contrast, another study showed that transformative and servant LSs can reduce TIs.[25]

Furthermore, the lack of professional growth chances has been found by to be a significant factor in employees' intentions to quit their existing employment.[29] On the other hand, several studies showed a favorable relationship between EE and LSs such as transformative, servant, and democratic.[25,30] It was also found that among healthcare workers in the Kingdom of Saudi Arabia, higher levels of EE were associated with a lower rate of TI.[31] Other Studies by have shown that transformational, servant and democratic LSs are beneficial in lowering TIs by encouraging higher EE.[24,28] Transactional leadership significantly and favorably influences workers' propensity to leave their existing jobs.

In contrast, authoritarian and laissez-faire LS have the capacity to enhance team innovation by reducing employee effort.[32] Conversely, another study has shown that LS that gives importance to democratic ideals, such as cultivating a cooperative work atmosphere, advocating for transparent communication, and promoting collective

decision-making, resulted in positive results in terms of EE.[33] Transactional leadership may not be as efficacious as transformational or servant leadership in fostering EE.[34] These findings emphasize the necessity for more investigation to comprehensively comprehend the correlation between LS and EE. Research has shown a strong connection between servant leadership and increased levels of EE in healthcare organizations. This is supported by the other research as well.[35]

The study has some limitations. We focused exclusively on the healthcare sector in Saudi Arabia. As a result, the findings cannot be applied to other nations or areas due to the lack of generalizability. The studies included in the review may have varied in their research design, sample size, and technique, and this diversity might have affected the overall quality of the evidence and the ability to make inferences based on the findings. In future studies, researchers might utilize a combination of quantitative and mixed techniques to investigate the effects of LS on EE and TI. The healthcare industry should prioritize the implementation of educational training programs to enhance the professional development of healthcare personnel. This will enable them to effectively embrace new technology and adapt to the corporate culture, resulting in improved performance. Healthcare companies should ensure that healthcare staff are given explicit job objectives and adequate resources to boost their satisfaction level. Healthcare executives are advised to implement efficient LS to effectively motivate and inspire healthcare personnel, leading to increased engagement and reduced job turnover.

Conclusion:

This study aims to investigate the relationship between LS, EE, and TI in healthcare organizations in Saudi Arabia. In order to interpret the findings, this research study utilized a systematic review methodology. A thorough search strategy was used to find studies on the relationship between LS, EE, and TI in healthcare organizations in Saudi Arabia. The research findings indicate a significant correlation between LS, EE, and TIs in healthcare organizations. The results showed that effective leadership had a positive effect on work engagement and had significant consequences, such as improved job performance, increased engagement, and a decrease in employee turnover rates. The findings demonstrated that transformational leadership is the most effective leadership style for enhancing employee engagement and mitigating turnover intentions in healthcare, particularly when coupled with elevated

levels of job satisfaction and EE. We recommend that healthcare leaders and policymakers can foster better workplace environments by developing and maintain an environment that inspires, encourages, and shows appreciation for the unique contributions of individual employees and create a rewarding work atmosphere that discourages employees from looking for other job opportunities. Additionally, healthcare organization must provide tailored leadership development programs to improve management strategies in Saudi healthcare settings.

References:

1. Ntseke, T., Mitonga-Monga, J., & Hoole, C.. Transformational leadership influences on work engagement and turnover intention in an engineering organization. SA Journal of Human Resource Management, 2022 Dec 2;20:2013..
2. Xiong, B., Wu, X., & Sui, Q. The impact of transformational leadership on the turnover intention of the new generation of knowledgeable employees: A moderated mediation model. Frontiers in Psychology, 2023 Jan, 13.
3. Gemeda, H. K., & Lee, J.. LSs, work engagement and outcomes among information and communications technology professionals: A cross-national study. Heliyon, 4)6 ,2020). NCBI.
4. Yücel, İ.. Transformational Leadership and Turnover Intentions: The Mediating Role of Employee Performance during the COVID19- Pandemic. Administrative Sciences, 81 ,(3)11 ,2021
5. Nur, E. M., Lubis, A. R., Tabrani, M., & Djalil, M. A.. Effects of Leadership, EE and Job Satisfaction on Employee Performance: An Empirical Study in Indonesia. The Journal of Asian Finance, Economics and Business, ,(6)8 2021 1139–1129.
6. Sulamuthu, G., & Yusof, H.. Leadership Style and Employee Turnover Intention. 2018,
7. Alilyyani, B., Kerr, M. S., Wong, C., & Wazqar, D. Y.. The influence of authentic leadership on nurses› turnover intentions and satisfaction with quality of care in Saudi Arabia: A structural equation modelling study. Journal of Nursing Management. 2022,
8. AL-Dossary, R. N. 2022. Leadership

Style, Work Engagement and Organizational Commitment Among Nurses in Saudi Arabian Hospitals. Journal of Healthcare Leadership, 2022, Volume 81–71 ,14.

9. Munn, Z., Peters, M. D. J., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E.. Systematic Review or Scoping review? Guidance for Authors When Choosing between a Systematic or Scoping Review Approach. BMC Medical Research Methodology, ,2018 1)18).
10. Patino, C. M., & Ferreira, J. C.. Inclusion and Exclusion Criteria in Research studies: Definitions and Why They Matter. Jornal Brasileiro de Pneumologia, 84 ,(2)44 ,2018. ncbi.
11. Peters, M. D. J., Godfrey, C. M., Khalil, H.,McInerney,P.,Parker,D.,&Soares,C. B.. Guidance for Conducting Systematic Scoping Reviews. International Journal of Evidence-Based Healthcare, ,2015 146–141 ,(3)13.
12. Brennan, S. E., & Munn, Z.. PRISMA 2020: a reporting guideline for the next generation of systematic reviews. JBI Evidence Synthesis, –906 ,(5)19 ,2021 908.
13. Aromataris, E., Stern, C., Lockwood, C., Barker, T. H., Klugar, M., Jadotte, Y., Evans, C., Ross-White, A., Lizarondo, L., Stephenson, M., McArthur, A., Jordan, Z., & Munn, Z.. JBI Series Paper 2: Tailored evidence synthesis approaches are required to answer diverse questions: a pragmatic evidence synthesis toolkit from JBI. Journal of Clinical Epidemiology 2022.
14. Alkarabsheh, O. H. M., Jaaffar, A. H., Wei Fong, P., Attallah Almaaitah, D. A., & Mohammad Alkharabsheh, Z. H.. The relationship between leadership style and turnover intention of nurses in the public hospitals of Jordan. Cogent Business & Management, 1)9 ,2022).
15. Kamal, H., Almarwany, Alzhrani, F., Husni, H., Althubyani, H., Dakhilallah, R., Alharthi, S., Alzahrani, A., Alhilali, I., Jaber, M., Alomairi, J., Almalki, A., Shatarah, T., Mohammed, S., Sulaimani, A., Mohammed, S., & Amri, A.. A study of Relationship between LSs and Job Security among Nurses Working in

Makkah health cluster in Saudi Arabia 2021. European Journal of Molecular & Clinical Medicine, 04)08 ,2021).

16. Naeem, F., & Khurram, S.. Influence of Toxic Leadership on Turnover Intention: The Mediating Role of Psychological Wellbeing and EE. Papers.ssrn.com. 2020,
17. Naseer,A.,Perveen,K.,Afzal,M.,Waqas, A., & Gillani, S. A.. The Impact of LSs on Staff Nurses› Turnover Intentions. Www.semanticscholar.org. 2017,
18. Oliveira, L. B., & Najnudel, P. S.. The influence of abusive supervision on EE, stress and turnover intention. Revista de Gestão. 2022,
19. Opinon, F. B., Alhourani, F., Mihdawi, M., & Afaneh, T.. Exploring the RelationshipbetweenWorkEngagement and Turnover Intention among Nurses in the Kingdom of Bahrain: A Cross-Sectional Study. Open Journal of Nursing, 1109–1098 ,(12)11 ,2021.
20. Romi, M. V., Alsubki, N., Almadhi, H. M., & Propheto, A. The Linkage Between LSs, Employee Loyalty, and Turnover Intention in Healthcare Industry. Frontiers in Psychology, ,2022 13.
21. Szilvassy, P., & Širok, K. Importance of work engagement in primary healthcare. BMC Health Services Research, ,2022 1)22).
22. Thanh, N. H., Quang, N. V., & Anh, N. The relationship between leadership style and staff work engagement: An empirical analysis of the public sector in Vietnam. Humanities and Social Sciences Communications, 1)9 ,2022).
23. Zaheer, S., Ginsburg, L., Wong, H. J., Thomson, K., Bain, L., & Wulffhart, Z. Turnover intention of hospital staff in Ontario, Canada: exploring the role of frontline supervisors, teamwork, and mindful organizing. Human Resources for Health, 1)17 ,2019).
24. Ariyani, N., & Hidayati, S.. Influence of Transformational Leadership and Work Engagement On Innovative Behavior. ETIKONOMI, 284–275 ,(2)17 ,2018.
25. M Alshahrani, F. M., & Baig, L. A.. Effect of LSs on Job Satisfaction Among Critical Care Nurses in Aseer, Saudi Arabia. Journal of the College

of Physicians and Surgeons--Pakistan: JCPSP, 370–366 ,(5)26 ,2016.

26. Alghamdi, F.. Ambidextrous leadership, ambidextrous employee, and the interaction between ambidextrous leadership and employee innovative performance. Journal of Innovation and Entrepreneurship, 1)7 ,2018).
27. Hamour, H. M. J. A.. The Effect of Leadership Styles on Creative Behavior: the Mediating Role of Succession an Applied Study in Jordanian Medium and Small Companies. International Journal of Professional Business Review: Int. J. Prof. Bus. Rev., 12 ,(2)8 ,2023.
28. Arslan Yürümezoğlu, H., Kocaman, G., & Mert Haydarİ, S.. Predicting nurses› organizational and professional turnover intentions. Japan Journal of Nursing Science. 2018,
29. Magbity, J. B., Ofei, A. M. A., & Wilson, D.. LSs of Nurse Managers and Turnover Intention. Hospital Topics, ,(2)98 ,2020 6–1.
30. Abdullah, A. S. bin, & Al, E.. Leadership, Task Load And Job Satisfaction: A Review Of Special Education Teachers Perspective. Turkish Journal of Computer and Mathematics Education (TURCOMAT), –5300 ,(11)12 ,2021 5306.
31. Alotaibi, Abdullah Ghazi Al-toom. Work Environment and Its Relationship with Job Satisfaction among Nurses in Riyadh Region, Saudi Arabia. Diss. Majmaah University, 2022.
32. Liu, J., Zhu, B., Wu, J., & Mao, Y.. Job satisfaction, work stress, and turnover intentions among rural health workers: a cross-sectional study in 11 western provinces of China. BMC Family Practice, 1)20 ,2019).
33. Guterresa, L., Armanu, A., & Rofiaty, R.. The role of work motivation as a mediator on the influence of education-training and leadership style on employee performance. Management Science Letters, 1504–1497 ,(7)10 ,2020.
34. Alshmemri, M., Maude, P., & Shahwan-Akl, L.. Herzberg›s Two-Factor Theory. Life Science Journal, 16–12 ,(5)14 ,2017.
35. Ozturk, A., Karatepe, O. M., & Okumus, F.. The effect of servant leadership on hotel employees› behavioral

consequences: Work engagement versus job satisfaction. International Journal of Hospitality Management, ,97 ,2021 102994.