



" RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP AND INNOVATIVE WORK BEHAVIOR IN NURSING STAFF"

Riyadh Essa Ageeli^{1*}, Sultan Khalid Alsop², Abdulaziz Mohammed Almadouh³, Mohammed Dafer Alahmary⁴, Souad Mohammed Alenazy⁵, Asma Marei Alqahtani⁶, Saad Mohammed Alrowaidhan⁷, Aljawharah Mamdouh Alkhamshi⁸, Fatimah Barjas Alenezi⁹, Naimah Barjas Alanazi¹⁰, Ghada Mohmmmed Alzaid¹¹, Meshal Hameed Alshammari¹², Shaeya Muhammad Mater Al-Shammari¹³, Salem mohammad al mlale¹⁴

^{1*,2,3,4,5,6,7,8,9,10,11,12,13, 14}Ksa , ministry of health

***Corresponding Author:** Riyadh Essa Ageeli
*Ksa , ministry of health

Abstract:

This study aimed to understand the impact of transformational leadership on innovative work behavior among nursing staff in Pakistan. Data was collected from 587 nurses and 164 doctors. Results showed that transformational leadership positively influenced psychological empowerment, intrinsic motivation, and knowledge sharing behavior. Empowerment role identity moderated the link between transformational leadership and psychological empowerment, while willingness to rely on and share sensitive information with the leader moderated the connection between knowledge sharing and innovative work behavior. The study assessed staff nurses' perception of organizational culture and its impact on innovative work behavior in critical care units at Benha University Hospital. Results showed that the highest mean score of nurses' perception was related to organizational learning, while the lowest was related to creating change. The highest mean scores of innovative work behavior were related to idea championing and implementation. Recommendations included enhancing organizational learning through in-service educational programs, reducing resistance to change through communication, and supporting innovation as a job requirement.

Key Words: Critical Care Units, Innovative Work Behavior, Staff Nurses, Organizational Culture.

INTRODUCTION:

Organizations are structured environments where individuals with diverse origins, skills, personalities, and habits collaborate as a cohesive unit to accomplish certain goals. (Balthazard, P. A., Cooke, R. A., & Potter, R. E). Culture is the behavioral pattern that dictates how nurses interact with others. It aids in differentiating one nurse from another (Hofsted, G., & Bond, M. H.). Each organization possesses a unique culture characterized by traditions, values, beliefs, expectations, assumptions, and collective memory that typically strongly resist change. It focuses on the social dynamics within organizations and how they impact organizational strategy and performance, making it a critical aspect in determining the success or failure of an organization. The organizational culture comprised internal communication, work-life balance, leadership style, professional development, employee satisfaction, reward system, and organizational success. If any of these variables are compromised, it can have a detrimental impact on the organization's production and revenues.

(Darlene, F., Cameron, K. S., & Quinn, R. E.,) Denison (2011) categorized organizational culture into two main focuses. The internal focus comprises six key areas: empowerment, team orientation, capability development, core values, agreements, and coordination & integration.

Hospital management is promoting innovative work behaviors among nursing staff to improve patient care, treatment response time, communication, coordination, patient retention, referral rates, and overall medical care quality. The need for ongoing innovation in hospitals is essential for the overall benefit of patients and the nursing community, as highlighted by Duarte, Goodson, & Dougherty (2014) and Piening (2011). Hospitals, as the focus of this study, can benefit from creative staff, as their performance has wide-ranging social and economic impacts.

Leadership has a crucial role in promoting creativity among nurses, according to many studies (Gifford, Davies, Tourangeau, & Lefebvre, 2011; Park, 1997; RycroftMalone, 2008; Scott, Director, Greenville, & Ferry, 2010; Welford, 2002; Wilson-Evered, Härtel, & Neale, 2004). This research will focus on the impact of leadership on stimulating healthcare personnel towards more innovative work behavior, as suggested by Cummings et al. (2010) and Shirey (2006). There is a lack of understanding of how leadership impacts outcomes, specifically the mechanisms that lead to the most successful and long-lasting results. We need a clear theory on nursing leadership to guide and encourage innovative work practices in nurses. This study aims to investigate how transformational leadership affects nurses' innovative work behavior by analyzing the mediating roles of psychological empowerment, information sharing behavior, and intrinsic motivation.

Transformational leadership is intriguing in the context of the connection between leadership and innovation, as it is believed that transformational leaders can improve inventive work behavior (Bally, 2007). Transformational leadership is commonly used in nursing, although its effectiveness in promoting nurses' innovativeness has not been well examined. There are limited studies on how doctors' transformational leadership affects nurses' innovation behaviors (Jeong & Keatinge, 2004). Earlier investigations lack consistent conclusions, with some even showing contradicting results (Weng, Huang, Chen, & Chang, 2015). This is primarily influenced by intervening variables. Despite the crucial importance of mediating factors in the connection between transformational leadership and nurse innovation behavior, less research has delved into this subject.

We developed a model that connects transformational leadership and innovative work behavior by incorporating concepts from psychological empowerment and innovation process literature. We proposed three mediating mechanisms - psychological empowerment, knowledge sharing behavior, and intrinsic motivation - to better understand the relationship between transformational leadership and innovative work behavior. In Pakistan, doctors directly supervise nurses, who in turn report directly to doctors. This study will investigate the impact of doctors' transformational leadership on nurses' innovative work behavior.

Through this study, we expanded the theory by proposing and examining two significant moderators: empowerment role identification and trust in the leader. The study aimed to investigate the impact of transformational leadership by doctors on the innovative work behaviors of nurses, mediated by psychological empowerment, information sharing behavior, and intrinsic motivation. We investigate how the empowerment role identity of nurses influences the impact of transformational leadership and psychological empowerment. This study indicates that a nurse's beliefs about reliance-based trust and disclosure-based trust influence the connection between knowledge sharing behavior and innovative work behavior. The study suggests that the inclination to share best practices and promote innovative work behavior is enhanced under reliancebased trust, while the readiness to share mistakes and develop new ideas is further reinforced under conditions of disclosurebased trust with doctors.

LITERATURE REVIEW:

Innovative work behavior is viewed as a motivational and cognitive process exhibited by individual employees or a group through certain actions. Employees must have the ability to carry out activities that exceed the set procedures within a team, group, or organization. They may explore innovative technology, propose novel approaches to accomplish goals, utilize new work methodologies, and get resources to execute fresh concepts (De Jong & Den Hartog, 2010). Innovative work behavior refers to an employee's deliberate initiation, promotion, and implementation of new ideas, products, processes, and procedures within a work role, work group, or organization to enhance role performance, the group, or the organization (Scott & Bruce, 1994).

Transformational leaders motivate their followers to seek entrepreneurial goals in order to impact their innovative actions.

According to the social exchange approach (Blau, 1964, p. 566), when leaders provide customized consideration, employees are more likely to respond with more creativity and innovation. Reuvers, Van Engen, Vinkenbunrg, and WilsonEvered (2008) analyzed archival data from 41 diverse teams and discovered that teams with transformational leaders had greater creative performance and innovative skills.

Transformational leadership aims to bring about changes and inspires employees to think creatively and solve challenges in new ways. Employees are urged to boost innovation by leveraging the personal magnetism of leaders. Transformational leadership and employee innovation behaviors have a positive correlation (Gumusluoglu & Ilsev, 2009).

Thomas and Velthouse (1990, p. 669) described psychological empowerment as a combination of four types of feelings: meaning, competence, selfdetermination, and impact. Afsar, Badir, and Bin Saeed (2014) suggest that transformational leadership is strongly and positively correlated with psychological empowerment and innovative work behavior. Transformational leaders prioritize cooperation, collaborative task completion, knowledge sharing, autonomy in decision-making, and empowering people to contribute to idea creation and execution. Transformational leadership creates a workplace where individuals feel motivated, competent, and self-managed to achieve psychological empowerment (Özaralli, 2003). Employees with a strong sense of psychological empowerment are more likely to exhibit proactive behavior since they have the freedom to make decisions independently (Spreitzer, 1995). Thomas and Velthouse (1990) propose that employees experience decreased productivity and are unable to fully utilize their creative potential because of traditional organizational procedures that make them feel powerless. Feelings of powerlessness result in operational inefficiency and hinder employee inventiveness. Edmondson (2003) suggests that leaders should focus on energizing the psychological aspects of empowerment and fostering a sense of autonomy among their followers to help them integrate the organization's vision and mission into their everyday duties and job environments.

Jung and Avolio (1999) stated that impact on innovative work behavior in critical transformational leaders empower care units. employees by energizing them through inspirational motivation and personalized

METHODOLOGY:

consideration, rather than emphasizing The study utilized a cross-sectional design. A incentives and punishments based on a power analysis was conducted to determine the contingency perspective. Followers tend to required sample size for achieving statistically take on leadership roles and collaborate significant results. Initially, 1,470 hospital nurses towards common objectives to improve the were recruited, with a minimum sample size of overall vision when empowered by leaders 450 required for complex mediation models who encourage participation. Parry and (Wolf, Harrington, Clark, & Miller, 2013). The Proctor-Thomson (2002) stated that research was carried out in public sector hospitals transformational leaders value others, in Pakistan. The study took place from October

delegate responsibility, and acknowledge 2015 until December 2015. Approval was secured their followers' performance, all of which from the Human Research Ethics Committee of contribute to enhancing the perception of the principal university and the collaborating psychological empowerment. nursing organization. The research was carried Transformational leaders empower people out in compliance with established national and by delegating responsibility and promoting international standards. All participants were participative decision-making, fostering a provided with a concise overview of the research strong sense of collective identity and objectives, potential risks, and benefits. They cohesion among the team (Jung, Chow, & willingly agreed to take part and signed a Wu, 2003). document confirming their informed permission. Participants were advised that their involvement

STUDY SIGNIFICANCE: was completely optional, and they had the option Organizational culture can improve to withdraw consent, leave the study, or decline organizational performance, nurses' job to answer any questions. Participants were happiness, and their confidence in notified about the confidentiality of their data, problem-solving. Culture plays a crucial ensuring that their names would not be disclosed influence in enhancing the innovation on the questionnaire and instead each participant capabilities of organization members. would be allocated a code number. Coding Possessing positive cultural traits equips enabled study assistants to monitor finished the company with the essential elements to questions and schedule participant appointments handle problems creatively. The current for questionnaire completion.

study aims to explore how organizational Four research assistants were employed to culture aspects contribute to enabling distribute questionnaires to respondents at nurses' innovative work behavior. hospitals. Every questionnaire was sent with a Organizational culture has the ability to cover letter that detailed the study's objective. The either promote or hinder a range of nurses completed assessments on behaviors and decisions, particularly those transformational leadership, empowerment role associated with identity, psychological empowerment, intrinsic innovation. It is crucial to utilize the motivation, trust in leader, and information organizational culture to inspire and sharing behavior. Doctors were requested to encourage nurses to be inventive and evaluate the innovative work practices of their original. Studying creative work behavior subordinate nurses. In Pakistan, nurses report can foster a proactive approach to adopting directly to doctors, who serve as their immediate new technologies in healthcare and creating supervisors, instead of being supervised by head new regulations. Encouraging nurses to nurses. generate new ideas and enhance their creativity to meet national and international Out of 1,470 surveys given to nurses, 631 surveys standards. (AACN, Wang, S., et al). This were completed, resulting in a response rate of study intends to evaluate staff nurses' 43%. Out of the 631 surveys collected, 587 assessment of organizational culture and its responses were returned when a doctor rated a nurse who had also submitted a survey. The mean age of nurses was 31.9 years with a standard deviation of 5.22, whereas doctors had an average age of 34.9 years. The mean tenure of nurses at the hospital was 5.2 years, with a standard deviation of 2.67 years. Approximately 87% of the sample was comprised of females.

Measures:

Transformational leadership:

A 20-item scale derived from Multifactor Leadership Questionnaire (MLQ) Form 5× was utilized to assess transformational leadership, encompassing idealized actions, idealized traits, inspiring motivation, intellectual stimulation, and customized attention (Bass & Avolio, 1997, p. 38). We amalgamated these scales into a single higher-order component, aligning with contemporary empirical (Afsar et al., 2014) and theoretical advancements in transformative leadership (Zhang & Bartol, 2010). An exploratory factor analysis was performed on the 20 items using the principle components approach and varimax rotation to identify their factor structure. 20 elements loaded on a single factor, explaining 58% of the variance. The items were combined to create a scale through averaging. The MLQ in this study had satisfactory psychometric qualities, with an overall Cronbach alpha coefficient of .86, consistent with prior research in nursing (Dunham-Taylor, 2000; Reuvers et

al., 2008; Salanova, Lorente, Chambel, & Martínez, 2011). The applicability of factor analysis was assessed using the Kaiser-Meyer-Olkin measure of sample adequacy, which yielded a value of .91. Additionally, Bartlett's test of sphericity was found to be significant ($\chi^2(233) = 1067.24, p < .001$). Both of these indicators indicate that the data were appropriate for factor analysis. The fit indices for four first-order factors (the four dimensions) and one second-order factor were deemed acceptable ($\chi^2(60) = 169.84, p < .001$; CFI = .96, GFI = .94, RMSEA = .07), indicating that the dimensions are separate yet collectively represent the overall construct. This enhances the credibility of the component structure of the transformational leadership scale, rendering it suitable for use in this study. The nurses were instructed to assess how often their supervising doctors exhibited leadership behaviors using a five-point Likert-type scale from 1 (not at all) to 5 (often, if not always).

Psychological empowerment: The study utilized the 12-item Empowerment at Work Scale created by Spreitzer (1995), which incorporates the four cognitive dimensions of empowerment: meaning, competence, self determination, and influence. The reliability coefficients for these dimensions were .81, .76, .77, and .82, respectively. Nurses were requested to assess their level of empowerment in their roles using a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) with a sample question being 'I have significant opportunities for independence and freedom in how I do my duties'. The fit indices for four first-order components and one second-order factor were deemed adequate ($\chi^2(60) = 139.28, p < .001$; CFI = .97, GFI = .95, RMSEA = .06), indicating that the factors accurately represented the overarching concept.

Innovative work behavior: The 10-item scale assessing innovative work behavior, such as employees focusing on tasks beyond their everyday responsibilities, was utilized in the research conducted by De Jong & Den Hartog (2010). The items were evaluated using a 5-point Likert scale ranging from 1 'never' to 5 'always'. The fit indices for two first-order factors and one second-order factor were deemed acceptable ($\chi^2(60) = 183.27, p < .001$; CFI = .97, GFI = .95, RMSEA = .07), indicating that the dimensions are separate yet collectively represent the overall construct. This enhances the credibility of the component structure of the innovative work behavior scale, rendering it suitable for use in this study.

Knowledge sharing behavior:

The 8-item measure measuring information sharing behavior was taken from a study by Mura, Lettieri, Radaelli, and Spiller (2013). These items assess how much a professional individual discusses their best practices or blunders with coworkers. All items were loaded on a single factor that explained 59.28% of the variation, the change process. Organizations provide according to the factor analysis results. The support to their employees to help them components were combined to create a successfully complete tasks.

scale with a reliability of .91. All the hypotheses in this investigation have been confirmed. A direct correlation exists between transformational leadership and psychological

RESULTS: The study's findings showed that the empowerment, which intensifies when nurses second-order two-factor model had a much desire empowerment to pursue new duties and better fit compared to the second-order take on active roles. Psychological empowerment one-factor model ($\Delta\chi^2(3) = 945.85, p < .001$), suggesting that transformational leadership and psychological Additionally, a higher level of confidence in the empowerment should be seen as separate leader enhances the connection between variables. The study performed comparable knowledge sharing and innovative work analyses for other constructs and behavior. Intrinsic motivation and information determined that the second-order two- sharing both enhance nurses' display of factor model exhibited a significantly innovative job behavior. superior fit compared to the second-order one-factor model. The composite This study provides five unique contributions. We dependability of the variables examined have developed and validated a conceptual model ranged from .74 to .92, above the criterion that combines

transformational leadership theory of .6. The average variance was calculated with key innovation process ideas.

for each factor, ranging from .66 to .79, which exceeded .5, indicating the Transformational leadership impacts employee questionnaire's convergent and innovative work behavior through psychological discriminant validity. The results of the empowerment (Afsar et al., 2014). However, as measurement model's adaptability test stated by Zhang and Bartol (2010), the degree to showed an excellent fit to the data: $\chi^2(179)$ which follows desire to undergo psychological = 422.7, $\chi^2/df = 2.36$, CFI = .96, GFI = .93, empowerment has a significant influence. This and RMSEA = .062. study presented the moderating function of empowerment role identity and Nurses dedicate a significant amount of revealed that transformational leadership greatly time to their work environment, and the influences psychological empowerment when culture of nurses perceive empowerment as integral to their their company impacts both their role identities. Furthermore, this study explores professional and personal life. the impact of psychological empowerment on Organizational culture encompasses the intrinsic motivation and knowledge sharing shared ideas, philosophies, principles, and behavior, which is a distinctive feature. The values of individuals within a company. results indicate that an employee's views on The culture significantly influences the psychological empowerment impact their organization's success. Organizational intrinsic motivation and willingness to share culture can improve organizational information.

performance, job satisfaction, and increase confidence in problem-solving. When an This study developed theoretical justifications organization's culture no longer aligns with and showed a link between information sharing the evolving expectations of its internal behavior and innovative work behavior. and/or external stakeholders, the Researchers have highlighted the importance of organization's effectiveness may decrease. the intention to share knowledge in explaining (Kayla, L., & Dem, M.,) workers' innovativeness in organizations.

Organizations must encourage innovative However, no previous research has explored the behaviors to adapt to the fast-changing potential links between knowledge sharing environment, remain competitive, and lead behavior and innovative work behavior. Our findings validated that trust in the leader influenced the relationship between information sharing behavior and innovative work behavior. The results confirm that an employee's performance improves when they are willing to trust their leader. Additionally, the study shows that the willingness to depend on the leader's skills and share sensitive information positively influences the connection between knowledge sharing and innovative work behavior.

LIMITATIONS:

The present study has limitations. In several nations such as North America, Europe, and Australia, nurses are typically supervised by nursing managers, sometimes known as head nurses, rather than doctors. Nurses currently report directly to doctors. This divergence could affect the generalizability of the current findings to other cultures. We could not determine causality because the data was cross-sectional. While SEM allowed for a comprehensive examination of all variables in the proposed model, interpreting the results should be done carefully. Future research can enhance the model's explanatory power by incorporating other factors to better elucidate the relationship between transformational leadership and innovative work behavior. Data were gathered through self-report from employees, potentially introducing same-source bias. Since these constructs pertain to individuals' internal states, it is appropriate to gather data directly from the participants.

This study combines leadership theories, empowerment theories, and innovation theories to develop and examine the impact of transformational leadership on nurses' innovative work behavior. The text explains the function of three mediating mechanisms: psychological empowerment, knowledge sharing behavior, and intrinsic motivation. It ultimately recognizes two crucial boundary conditions: empowered role identification and trust in the leader. Our theoretical approach, supported by empirical evidence, paves the way for future study and advancements in understanding how transformational leadership might enhance nurses' innovativeness in hospitals. Given the substantial

obstacles encountered by nursing leaders, it can be inferred that transformational leadership holds great promise in promoting the innovative work behavior of nurses.

CONCLUSION:

The findings of this study can be summarized as follows: more than half of the nurses had a positive perception regarding their organizational cultures; fifty percent of the nurses exhibited a high level of innovative work behavior; and there was a significant correlation between the nurses' perceptions of their organization's culture and their innovative work behavior. The significance of this study lies in the fact that it offers fundamental information that nursing managers may utilize in order to create an atmosphere that encourages employees to engage in creative behaviors.

RECOMMENDATION

1. The nurse supervisor collaborates with top management to improve nurses' organizational learning by implementing specific in-service educational programs.
2. Embrace nurses' proposals, delegate problem-solving responsibilities to nurses, and enhance the interaction between nurses and their supervisors.
3. Support and encourage production nurses' creative initiatives by allocating them the necessary time and resources.
4. Encourage innovation as a mandatory employment criterion.
5. Minimize nurses' reluctance to change by clearly communicating the goals, strategies, and procedures for implementing new changes and technologies.

Further research might be performed to uncover the elements that promote innovative work behavior across different cultures.

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