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Leaders at the Helm: Shaping the Future of Hospital Administration through Data-Driven Visionary Leadership

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Abstract

This study investigates the impact of various leadership and, management practices on hospital performance, focusing on transformational leadership, effective communication, decision-making ability, change management, emotional intelligence, strategic vision, innovation, employee engagement, resource management, and patient-centred care. Using a structured questionnaire, data were collected from 350, hospital administrators, senior management, department heads, and healthcare professionals. The results highlight the significant, positive effects of these practices on hospital performance, emphasizing the need for a holistic approach to healthcare management. The study fills a critical gap in existing, literature by examining the, combined effects of these factors and their interactions. These findings provide valuable insights for hospital, administrators and policymakers, offering practical strategies for improving healthcare quality and operational efficiency. The implications of the study are significant for addressing, global healthcare disparities and enhancing, healthcare outcomes, particularly in resource-constrained, settings like Pakistan. The study also identifies, challenges and barriers to the, implementation of these, practices, providing a, comprehensive understanding of the factors, influencing hospital performance.

Keywords: Hospital performance, transformational, leadership, healthcare, management, effective communication, decision-making, operational, efficiency, Pakistan, global, healthcare.

INTRODUCTION

Hospitals are fundamental pillars of healthcare systems worldwide, delivering critical services to populations. According to the World Health Organization (2018), global healthcare spending reached approximately $7.8 trillion in 2017, reflecting the immense scale and importance of healthcare systems globally. Despite this investment, hospital performance varies widely, with significant disparities in patient outcomes and operational efficiency. Studies by Kruse et al. (2018) have shown that hospitals in developed countries often outperform those in developing nations in terms of patient care quality and resource utilization. In developed countries like the United States and the United Kingdom, hospital performance is frequently scrutinized. The U.S. healthcare system, for instance, is characterized by high costs yet inconsistent outcomes, with the Commonwealth Fund (2020) reporting that the U.S. spends nearly twice as much on healthcare compared to other high-income countries, yet has the lowest life expectancy and highest infant mortality rates among them. In the UK, the National Health Service (NHS) has faced challenges related to staff shortages and financial constraints, impacting hospital performance (Dunn et al., 2023). In Pakistan, the healthcare system faces severe challenges, including inadequate funding, poor

infrastructure, and a shortage of trained healthcare professionals. According to the Pakistan Bureau of Statistics (2019), healthcare expenditure is only 1.2% of the GDP, which is significantly lower than the global average, leading to suboptimal hospital performance and patient care. Hospital performance, as defined by Mobolaji et al. (2020), encompasses structural, process, and outcome measures. Structural measures include hospital resources like facilities and staff, process measures involve the methods and procedures used in patient care, and outcome measures refer to the results of healthcare services, such as patient health outcomes and satisfaction. These dimensions collectively determine how well hospitals deliver care and manage resources, impacting overall healthcare quality and efficiency.

Hospital performance directly influences the quality of patient care and operational efficiency, which are critical issues globally and within individual countries. Inadequate hospital performance can lead to higher patient mortality rates, lower patient satisfaction, and increased healthcare costs. For instance, poor resource management in hospitals can result in wastage, leading to financial strain and reduced capacity to deliver quality care. In countries like Pakistan, where healthcare resources are already limited, inefficiencies in hospital performance exacerbate existing issues, making it crucial to address this variable to improve healthcare outcomes.

Effective leadership and management practices are essential for improving hospital performance. Transformational leadership, which inspires and motivates employees, has been shown to enhance organizational performance (Bastari et al., 2020). Effective communication within hospitals ensures that staff are well-informed and coordinated, reducing errors and improving patient car. Decision-making ability is crucial for hospital administrators to navigate complex healthcare environments and allocate resources efficiently (Miller & McKee, 2021). Change management, emotional intelligence, strategic vision, innovation, employee engagement, and resource management are also critical factors that influence hospital performance. For example, hospitals that foster innovation and employee engagement are better equipped to implement new technologies and practices that enhance patient care (Frehn et al., 2022; Sungmala & Verawat, 2021).

Addressing these factors can significantly improve hospital performance, leading to better patient outcomes, higher patient satisfaction, and more efficient use of resources. Globally, this would contribute to reducing healthcare disparities and improving overall healthcare quality. In Pakistan, improving hospital performance could alleviate some of the systemic challenges faced by the healthcare system, leading to better healthcare access and outcomes for the population. While these factors are critical for improving hospital performance, their implementation can also present challenges. For instance, transformational leadership requires significant investment in leadership development programs, which may be costly and time-consuming. Additionally, fostering a culture of innovation can lead to resistance among staff who are accustomed to traditional practices. Studies have shown that change management initiatives often face pushback from employees, making it difficult to achieve desired outcomes (Wentworth et al., 2020). These challenges highlight the complexity of improving hospital performance and the need for a comprehensive approach that addresses potential barriers. Despite the recognized importance of leadership and

management practices in influencing hospital performance, there is a lack of comprehensive studies that examine the combined effect of these factors. Most existing research focuses on individual aspects, such as leadership or innovation, without considering how these factors interact. This study aims to fill this gap by investigating the combined impact of various leadership and management practices on hospital performance, with a specific focus on the moderating effects of organizational culture and external environment. Existing literature on hospital performance has primarily explored the influence of individual factors in isolation. For instance, studies have examined the impact of transformational leadership on organizational performance (Bastari et al., 2020) or the role of innovation in improving healthcare quality (Frehn et al., 2022). However, there is limited research that comprehensively examines the interplay between multiple factors and their collective impact on hospital performance. This study is novel in its approach to exploring these relationships holistically, providing a more integrated understanding of the factors that contribute to hospital performance.

This study differs from previous research in its comprehensive methodology and conceptual framework. While earlier studies have focused on single factors, this research examines the combined effect of multiple leadership and management practices on hospital performance. Additionally, the study employs a robust sampling strategy and uses advanced statistical techniques, such as structural equation modeling, to analyze the data. This approach allows for a more nuanced understanding of the factors that influence hospital performance and their interactions. The study's results indicate that transformational leadership, effective communication, high decision-making ability, change management, emotional intelligence, strategic vision, innovation, employee engagement, resource management, and patient-centered care all positively influence hospital performance. These findings highlight the importance of a holistic approach to improving hospital performance, emphasizing the need for integrated leadership and management practices. The study contributes to the existing body of knowledge by providing empirical evidence on the combined effect of these factors, offering valuable insights for hospital administrators and policymakers. By addressing the identified gaps in the literature, this research provides a comprehensive understanding of the key factors that influence hospital performance, helping to inform strategies for improving healthcare quality and efficiency.

The findings of this study have significant practical implications for hospital administrators and policymakers. Implementing transformational leadership practices can inspire and motivate staff, leading to better patient care and organizational performance. Enhancing communication channels within hospitals can improve coordination and reduce errors, while effective decision-making processes ensure optimal resource allocation. Fostering a culture of innovation and employee engagement can drive continuous improvement and adaptation to new technologies and practices. By addressing these factors, hospitals can improve their performance, leading to better patient outcomes and higher patient satisfaction. These improvements can contribute to addressing global healthcare disparities and enhancing healthcare quality in countries like Pakistan. The remainder of the paper is composed of the following sections: a literature review, which provides an in-depth analysis of existing research on hospital

performance and the identified key factors; a methodology section, detailing the research design, data collection methods, and analytical techniques used in the study; a results section, presenting the findings of the hypotheses testing and their implications; a discussion section, interpreting the results in the context of existing literature and practical implications; and a conclusion, summarizing the key findings and contributions of the study, as well as suggestions for future research.

LITERATURE REVIEW

Introduction to the Dependent Variable: Hospital Performance

Hospital performance is a multifaceted construct encompassing various dimensions, including clinical outcomes, patient satisfaction, operational efficiency, and financial stability. According to Mobolaji et al. (2020), hospital performance can be evaluated using structural, process, and outcome measures. Structural measures pertain to the hospital,s resources, such as facilities and staff; process measures involve the methods and procedures used in patient care; and outcome measures refer to the results of healthcare services, including patient health outcomes and satisfaction. Hospital performance is crucial for healthcare systems as it directly impacts patient care quality, resource utilization, and overall healthcare delivery efficiency. Studies by Kruse et al. (2018) emphasize that improving hospital performance is essential for enhancing healthcare quality and patient safety. Effective hospital performance leads to better patient outcomes, reduced mortality rates, and improved patient satisfaction, which are vital indicators of a successful healthcare system.

Importance of Hospital Performance

Hospital performance is a critical variable in healthcare management due to its direct implications on patient care and organizational sustainability. High-performing hospitals not only deliver superior patient care but also operate more efficiently, thus optimizing resource utilization. For instance, a study by Tate et al. (2023) found that hospitals with higher performance levels exhibited better patient outcomes and greater efficiency in resource use. Similarly, Aiken et al. (2021) demonstrated that hospitals with higher performance ratings had lower mortality rates and higher patient satisfaction scores. The importance of hospital performance extends beyond patient outcomes. It also influences hospital reputation, financial stability, and regulatory compliance. Hospitals that perform well are more likely to attract patients and receive higher reimbursements from payers, including government and private insurers. Moreover, high performance can lead to better staff morale and retention, as healthcare professionals prefer working in environments where they can deliver quality care effectively.

Relationship Between Independent Variables and Hospital Performance

Transformational leadership is characterized by the ability to inspire and motivate employees to achieve higher levels of performance. Bass & Avolio (1994) found that transformational leaders create a positive organizational culture that fosters innovation and continuous improvement. In the context of hospitals, ransformational leadership has been linked to improved patient outcomes and

organizational performance (Wong et al., 2013). Effective communication is essential for ensuring that hospital staff are well-informed and coordinated in their efforts to provide patient care. According to Gittell et al. (2020), effective communication among hospital staff leads to better teamwork and coordination, which in turn enhances patient outcomes and operational efficiency. High-quality decision-making is crucial for hospital administrators to navigate the complex and dynamic healthcare environment. Studies by Miller and McKee (2021) indicate that effective decision-making processes contribute to better resource allocation and improved hospital performance.

Hospitals constantly face changes, whether due to new regulations, technologies, or patient care protocols. Effective change management is critical for adapting to these changes without compromising care quality. Kotter (1996) emphasized that successful change management involves clear vision, effective communication, and employee engagement, all of which are necessary for maintaining high hospital performance. Emotional intelligence (EI) in leadership involves understanding and managing one,s own emotions and those of others. Goleman (1998) argued that leaders with high EI create a supportive work environment that enhances staff satisfaction and performance, which translates into better patient care.A clear strategic vision provides direction and purpose for the organization. Maina (2020) highlighted that a well-articulated strategic vision aligns organizational efforts towards common goals, thus improving performance outcomes.

The adoption of innovative practices is essential for hospitals to stay competitive and meet evolving patient needs. Frehn et al. (2022) found that innovation positively impacts organizational performance by improving efficiency and patient care quality. Engaged employees are more committed and productive. Sungmala and Verawat (2021) demonstrated that higher employee engagement levels are associated with better patient outcomes and organizational performance. Efficient resource management ensures optimal use of hospital resources, reducing waste and improving care delivery. Sousa et al. (2021) argued that effective resource management is crucial for organizational sustainability and performance. Patient-centered care focuses on providing care that is respectful of and responsive to individual patient preferences, needs, and values. Taylor and Staniszewska (2023) emphasized that patient-centered care improves patient satisfaction and outcomes, which are critical indicators of hospital performance.

Despite extensive research on the impact of individual leadership and management practices on hospital performance, there is a lack of studies that comprehensively examine the combined effect of these practices. Most studies focus on a single aspect, such as transformational leadership or innovation, without considering how these factors interact and collectively influence hospital performance. Additionally, is limited research on the moderating effects of contextual factors, such as organizational culture and external environment, on these relationships. Given the gaps identified in the literature, this study aims to investigate the combined effect of various leadership and management practices on hospital performance. Specifically, the study seeks to understand how transformational leadership, effective communication, decision-making ability, change management, emotional intelligence, strategic vision, innovation, employee engagement, resource management, and patient-centered care collectively influence hospital performance. Additionally, the study will explore

the moderating effects of organizational culture and external environment on these relationships.

Theory and Hypothesis Development

This study is grounded in the resource-based view (RBV) theory, which posits that organizations achieve sustained competitive advantage by effectively managing their internal resources (Barney, 1991). According to RBV, leadership and management practices are valuable resources that can enhance organizational performance when managed effectively.

Hypotheses:

H1: Transformational leadership style positively influences hospital performance (Bastari et al., 2020).

H2: Effective communication skills positively influence hospital performance (Gittell et al., 2020).

H3: High decision-making ability positively influences hospital performance (Miller & McKee, 2021).

H4: Effective change management positively influences hospital performance (Tate et al., 2023; Wentworth et al., 2020).

H5: High emotional intelligence positively influences hospital performance (Igbokwe et al., 2023).

H6: Clear strategic vision positively influences hospital performance (Maina, 2020).

H7: Adoption of innovative practices positively influences hospital performance (Frehn et al., 2022).

H8: High employee engagement positively influences hospital performance (Sungmala & Verawat, 2021).

H9: Efficient resource management positively influences hospital performance (Sousa et al., 2021).

H10: Patient-centered care positively influences hospital performance (Taylor & Staniszewska, 2023).

METHODOLOGY

Research Population and Sampling

The research population for this study includes hospital administrators and healthcare professionals working in various hospitals. These respondents were chosen due to their direct involvement in hospital management and their ability to provide insightful information about leadership practices and hospital performance. A sample size of 350 respondents was targeted to ensure the reliability and validity of the results. Stratified random sampling was used to ensure that different categories of hospital staff were adequately represented.

Data Collection Process

Data was collected using a structured questionnaire survey designed to measure various leadership and management practices and their impact on hospital performance. The questionnaire included 23 items, each measured on a Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

Type of Respondents: The questionnaire was directed towards hospital administrators, senior management, department heads, and other key healthcare professionals. These respondents were crucial for the study as they possess first-hand knowledge of the leadership practices and management strategies employed in hospitals. Previous studies, such as those by Jones et al. (2019) and Smith & Lee (2020), have highlighted the significant role that hospital administrators and senior management play in shaping hospital performance outcomes.

Table 1.
Descriptive Statistics of Respondents

Characteristic	Frequency	Percentage
Administrators	105	30%
Senior Management	87	25%
Department Heads	70	20%
Healthcare Professionals	88	25%
Total	**350**	**100%**

Non-Response Bias Analysis

Non-response bias was calculated using Levene,s Test to compare the variance between respondents who participated via email and post. This test helps to ensure that the responses are consistent and that the non-response bias does not significantly affect the study,s results.

Table 2.
Levene,s Test for Non-Response Bias:

Group	N (Email)	N (Post)	F-Value	P-Value
Administrators	55	50	0.845	0.359
Senior Management	45	42	1.023	0.312
Department Heads	38	32	0.765	0.384
Healthcare Professionals	49	39	0.902	0.342

The results of Levene,s Test indicate no significant differences in variances between the email and post groups, suggesting that non-response bias is not a major concern in this study.

DISCUSSION

The sampling and data collection methods were carefully designed to ensure that the study captures a representative sample of hospital leadership and management. The use of multiple distribution methods, including email, post, Google Forms, WhatsApp links, and physical visits, helped to maximize response rates and minimize non-response bias.

The analysis using Levene,s Test further confirmed that the data collected was consistent across different groups of respondents, thereby supporting the validity of the study,s findings. These respondents are particularly important due to their strategic roles within hospitals. Studies by Jones et al. (2019), Hameed et al. (2020) and Smith & Lee (2020) emphasize the influence of leadership and management practices on hospital performance, reinforcing the relevance of this study,s focus on these key stakeholders. By addressing potential non-response bias and ensuring a diverse and representative sample, this research provides robust insights into the impact of visionary leadership on hospital administration and performance.

DATA ANALYSIS

Pretest Analysis

A pretest was conducted with a sample of 30 respondents to assess the reliability and validity of the questionnaire. The Cronbach,s alpha was calculated for each construct to determine the internal consistency.

Table 3.
Pretest Results Table

Construct	Number Of Items	Cronbach,S Alpha
Leadership Style	2	0.82
Communication Skills	2	0.85
Decision-Making Ability	2	0.80
Change Management	2	0.78
Emotional Intelligence	2	0.84
Strategic Vision	2	0.83
Innovation	2	0.79
Employee Engagement	2	0.86
Resource Management	2	0.81
Patient-Centered Care	2	0.88
Hospital Performance	3	0.87

The pretest results indicate that all constructs have a Cronbach,s alpha greater than 0.70, which is considered acceptable for internal consistency. This suggests that the questionnaire items are reliable and can effectively measure the intended constructs. Minor adjustments were made to a few items to improve clarity based on feedback from the pretest respondents.

Pilot Testing

Following the pretest, a pilot test was conducted with 100 respondents to further validate the questionnaire and to test the data collection process.

Table 4.
Pilot Test Results Table:

Construct	Number Of Items	Cronbach,S Alpha	Average Variance Extracted (Ave)
Leadership Style	2	0.83	0.62
Communication Skills	2	0.86	0.65
Decision-Making Ability	2	0.81	0.60
Change Management	2	0.79	0.58
Emotional Intelligence	2	0.85	0.63
Strategic Vision	2	0.84	0.61
Innovation	2	0.80	0.59

Employee Engagement	2	0.87	0.66
Resource Management	2	0.82	0.60
Patient-Centered Care	2	0.89	0.68
Hospital Performance	3	0.88	0.67

The pilot test results confirm the reliability and validity of the constructs, with Cronbach,s alpha values above 0.80 for all constructs and AVE values above 0.50, indicating good convergent validity. The feedback from the pilot test also confirmed that the data collection process was smooth and that respondents understood the questionnaire items clearly. This validation ensures that the final survey can reliably capture the impact of leadership and management practices on hospital performance.

The pilot test demonstrated that the questionnaire is both reliable and valid for the larger study. The high Cronbach,s alpha values indicate strong internal consistency, while the AVE values confirm that the constructs are accurately measured by the questionnaire items. The successful execution of the pilot test without significant issues suggests that the survey is ready for full-scale deployment. The feedback provided by the respondents was positive, indicating that the questions were clear and relevant to their experiences in hospital management. This solid foundation allows for confident progression to the main data collection phase, where the insights gained from a larger sample will be analyzed to draw meaningful conclusions about the influence of leadership and management on hospital performance.

RELIABILITY AND CONVERGENT VALIDITY

Reliability and Convergent Validity Results and Discussion:

Reliability and convergent validity were assessed using Cronbach,s alpha, composite reliability (CR), and average variance extracted (AVE). The Cronbach,s alpha values for all constructs were above the acceptable threshold of 0.70, indicating strong internal consistency. Composite reliability values were also above 0.70, further confirming the reliability of the constructs. AVE values were above 0.50 for all constructs, indicating good convergent validity.

Table 5.
Reliability and Convergent Validity Results Table

Construct	Cronbach,s Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Leadership Style	0.83	0.88	0.62
Communication Skills	0.86	0.89	0.65
Decision-Making Ability	0.81	0.85	0.60
Change Management	0.79	0.84	0.58
Emotional Intelligence	0.85	0.89	0.63
Strategic Vision	0.84	0.88	0.61
Innovation	0.80	0.84	0.59
Employee Engagement	0.87	0.90	0.66
Resource Management	0.82	0.86	0.60
Patient-Centered Care	0.89	0.92	0.68
Hospital Performance	0.88	0.91	0.67

Discussion: The reliability and convergent validity results confirm that the measurement model is reliable and valid. The high Cronbach,s alpha and

composite reliability values indicate that the constructs have good internal consistency. The AVE values above 0.50 demonstrate that the items adequately represent their respective constructs, supporting the convergent validity of the measurement model.

DISCRIMINANT VALIDITY

Discriminant Validity Results and Discussion:

Discriminant validity was assessed using the Fornell-Larcker criterion, which compares the square root of the AVE values with the correlations between constructs. Discriminant validity is established if the square root of the AVE for each construct is greater than the correlations between the construct and other constructs.

Table 6.
Discriminant Validity Results Table:

Construct	LS	CS	DMA	CM	EI	SV	IN	EE	RM	PCC	HP
Leadership Style (LS)	0.79										
Communication Skills (CS)	0.45	0.81									
Decision-Making Ability (DMA)	0.42	0.38	0.77								
Change Management (CM)	0.41	0.37	0.43	0.76							
Emotional Intelligence (EI)	0.46	0.44	0.40	0.39	0.79						
Strategic Vision (SV)	0.44	0.42	0.37	0.36	0.45	0.78					
Innovation (IN)	0.39	0.36	0.34	0.35	0.38	0.39	0.77				
Employee Engagement (EE)	0.47	0.44	0.41	0.40	0.46	0.43	0.41	0.81			
Resource Management (RM)	0.41	0.39	0.36	0.38	0.39	0.37	0.38	0.42	0.78		
Patient-Centered Care (PCC)	0.48	0.46	0.43	0.42	0.47	0.45	0.44	0.49	0.43	0.82	
Hospital Performance (HP)	0.49	0.47	0.45	0.44	0.48	0.46	0.45	0.50	0.46	0.52	0.82

The results of the Fornell-Larcker criterion indicate that discriminant validity is established for all constructs. The square root of the AVE for each construct (values on the diagonal) is greater than the correlations between the construct and other constructs, suggesting that the constructs are distinct and measure different concepts.

MEASUREMENT AND STRUCTURAL MODEL

The measurement model includes the constructs and their respective indicators. Reliability and validity analyses confirmed that the constructs have good internal consistency and that the indicators appropriately represent the constructs. The structural model represents the hypothesized relationships between the independent variables (leadership and management practices) and the dependent variable (hospital performance). The relationships were assessed using partial least squares structural equation modeling (PLS-SEM) to determine the path coefficients and significance levels. The measurement model,s reliability and validity were confirmed through Cronbach,s alpha, composite reliability, AVE, and discriminant validity analyses. These results validate the use of the constructs in the structural model. The structural model, tested using PLS-SEM, will provide insights into the direct effects of leadership and management practices on hospital performance, helping to understand the critical factors that influence hospital outcomes. By ensuring the measurement model,s robustness, the study can confidently proceed with analyzing the hypothesized relationships and drawing meaningful conclusions from the data.

RESULTS

Hypothesis Testing

H1: Transformational leadership style positively influences hospital performance.

Discussion: The path coefficient for transformational leadership style was 0.45 with a t-value of 4.56, indicating a significant positive influence on hospital performance. Previous literature supports this finding, with studies by (Becker et al., 2023; Hameed et al., 2019; Joseph et al., 2021; Wong et al., 2022) highlighting the critical role of transformational leadership in enhancing organizational performance. These leaders inspire and motivate their employees, leading to improved job satisfaction and performance outcomes.

H2: Effective communication skills positively influence hospital performance.

The path coefficient for communication skills was 0.42 with a t-value of 4.20, indicating a significant positive effect on hospital performance. Effective communication facilitates better coordination and reduces misunderstandings, which is consistent with the findings of Clampitt & Downs (1993). Good communication practices are essential for implementing strategies and achieving organizational goals.

H3: High decision-making ability positively influences hospital performance.

The path coefficient for decision-making ability was 0.38 with a t-value of 3.85, showing a significant positive impact on hospital performance. Effective decision-making is crucial for organizational success, as noted by Miller and McKee (2021), who emphasized the importance of high-quality decisions in achieving superior performance.

H4: Effective change management positively influences hospital performance.

The path coefficient for change management was 0.35 with a t-value of 3.70, indicating a significant positive effect on hospital performance. Effective change management is critical for adapting to new challenges and opportunities, as highlighted by (Tate et al., 2023; Wentworth et al., 2020). Hospitals that manage change well are more likely to succeed in a dynamic healthcare environment.

H5: High emotional intelligence positively influences hospital performance.

The path coefficient for emotional intelligence was 0.40 with a t-value of 4.05, showing a significant positive impact on hospital performance. Emotional intelligence enables leaders to manage their own emotions and those of others effectively, which is crucial for maintaining a positive work environment, as discussed by Goleman (1998).

H6: Clear strategic vision positively influences hospital performance.

The path coefficient for strategic vision was 0.39 with a t-value of 3.95, indicating a significant positive influence on hospital performance. A clear strategic vision provides direction and purpose, which is essential for achieving long-term success, as highlighted by Maina (2020).

H7: Adoption of innovative practices positively influences hospital performance.

Discussion: The path coefficient for innovation was 0.37 with a t-value of 3.80, showing a significant positive effect on hospital performance. Innovation is key to staying competitive and meeting patient needs, as discussed by Frehn et al. (2022).

Key Findings:

H8: High employee engagement positively influences hospital performance.

Discussion: The path coefficient for employee engagement was 0.43 with a t-value of 4.40, indicating a significant positive impact on hospital performance. Engaged employees are more committed and productive, which is crucial for organizational success, as noted by Sungmala and Verawat (2021).

H9: Efficient resource management positively influences hospital performance**.**

Discussion: The path coefficient for resource management was 0.36 with a t-value of 3.75, showing a significant positive effect on hospital performance. Efficient resource management ensures optimal utilization of resources, which is critical for operational efficiency, as highlighted by Sousa et al. (2021).

H10: Patient-centered care positively influences hospital performance.

Discussion: The path coefficient for patient-centered care was 0.44 with a t-value of 4.50, indicating a significant positive influence on hospital performance. Patient-centered care improves patient satisfaction and outcomes, which is crucial for hospital success, as discussed by Taylor and Staniszewska (2023).

Table 7.
Hypothesis Testing Results Table

Hypothesis	Path	Path Coefficient	t-Value	Standard Error	Result
H1: Transformational Leadership → HP	Transformational Leadership → HP	0.45	4.56	0.10	Supported
H2: Communication Skills → HP	Communication Skills → HP	0.42	4.20	0.10	Supported
H3: Decision-Making Ability → HP	Decision-Making Ability → HP	0.38	3.85	0.10	Supported
H4: Change Management → HP	Change Management → HP	0.35	3.70	0.09	Supported
H5: Emotional Intelligence → HP	Emotional Intelligence → HP	0.40	4.05	0.10	Supported
H6: Strategic Vision → HP	Strategic Vision → HP	0.39	3.95	0.10	Supported
H7: Innovation → HP	Innovation → HP	0.37	3.80	0.09	Supported
H8: Employee Engagement → HP	Employee Engagement → HP	0.43	4.40	0.10	Supported
H9: Resource Management → HP	Resource Management → HP	0.36	3.75	0.09	Supported
H10: Patient-Centered Care → HP	Patient-Centered Care → HP	0.44	4.50	0.10	Supported

CONCLUSION

The primary problem investigated in this study was to understand the impact of various leadership and management practices on hospital performance. Given the critical role that hospitals play in providing healthcare services, it is essential to explore how different

aspects of leadership and management can influence their overall effectiveness. Hospitals face numerous challenges, including resource constraints, high patient volumes, and the need to maintain high standards of care. Effective leadership and management are crucial for addressing these challenges and ensuring that hospitals can deliver quality healthcare services efficiently. This study aimed to fill the gap in existing literature by examining the specific leadership and management practices that significantly contribute to hospital performance.

The study formulated ten hypotheses to explore the relationships between different leadership and management practices and hospital performance. These hypotheses posited that transformational leadership, effective communication, high decision-making ability, effective change management, high emotional intelligence, clear strategic vision, adoption of innovative practices, high employee engagement, efficient resource management, and patient-centered care positively influence hospital performance. To test these hypotheses, a structured questionnaire was developed and distributed to hospital administrators, senior management, department heads, and key healthcare professionals. A sample size of 350 respondents was targeted to ensure the reliability and validity of the results. The data collection methods included email, post, Google Forms, WhatsApp links, and physical visits, ensuring a comprehensive reach to potential respondents. The reliability and validity of the questionnaire were confirmed through pretests and pilot tests, using Cronbach,s alpha, composite reliability, and average variance extracted (AVE) for reliability and convergent validity, and the Fornell-Larcker criterion for discriminant validity.

RESULTS

The results of the hypotheses testing indicated that all ten leadership and management practices positively influenced hospital performance. Transformational leadership had a path coefficient of 0.45, indicating its strong positive impact on hospital performance. Effective communication and high decision-making ability also showed significant positive effects, with path coefficients of 0.42 and 0.38, respectively. Change management and emotional intelligence were crucial as well, with path coefficients of 0.35 and 0.40, respectively. Clear strategic vision, adoption of innovative practices, high employee engagement, efficient resource management, and patient-centered care all had significant positive impacts, with path coefficients ranging from 0.36 to 0.44. These findings are consistent with existing literature, which highlights the importance of these practices in organizational performance. For example, transformational leadership is widely recognized for its ability to inspire and motivate employees, leading to better performance outcomes. Effective communication reduces misunderstandings and facilitates better coordination, while high decision-making ability ensures that quality decisions are made that benefit the organization.

CONTRIBUTION OF THE STUDY

This study makes several important contributions to the field of healthcare management. Firstly, it provides empirical evidence on the specific leadership and management practices that significantly influence hospital performance. By identifying these key factors, the study offers valuable insights for hospital administrators and policymakers aiming to improve hospital performance. Secondly, the study adds to the existing

body of literature by confirming the relevance of these practices in the context of hospital management. This reinforces the importance of effective leadership and management in achieving organizational success in healthcare settings.

IMPLICATIONS OF THE STUDY

The findings of this study have several practical implications. Hospital administrators and policymakers can use the insights gained from this study to implement and strengthen leadership and management practices that are shown to positively influence hospital performance. For instance, investing in leadership development programs that promote transformational leadership, enhancing communication channels, and fostering a culture of innovation can lead to significant improvements in hospital performance. Additionally, the study highlights the importance of emotional intelligence and employee engagement, suggesting that efforts to improve these areas can contribute to better organizational outcomes.

LIMITATIONS AND DISCUSSION FOR FUTURE STUDIES

While this study provides valuable insights, it has certain limitations that should be considered. Firstly, the study relied on self-reported data from respondents, which may be subject to bias. Future studies could use a mixed-methods approach, incorporating both quantitative and qualitative data, to gain a more comprehensive understanding of the factors influencing hospital performance. Secondly, the study was conducted in a specific geographical context, and the findings may not be generalizable to other regions or countries. Future research could explore the impact of leadership and management practices in different cultural and organizational settings to validate the findings of this study. In conclusion, this study underscores the critical role of effective leadership and management practices in enhancing hospital performance. By identifying and empirically validating the key factors that influence hospital performance, the study provides valuable insights for hospital administrators, policymakers, and researchers. The findings highlight the importance of transformational leadership, effective communication, high decision-making ability, change management, emotional intelligence, strategic vision, innovation, employee engagement, resource management, and patient-centered care in achieving organizational success in healthcare settings. These insights can be used to inform strategies and interventions aimed at improving hospital performance and ultimately, the quality of healthcare services provided to patients.

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