

The Influence of Idealized Influence and Inspirational Motivation on Patient Safety Outcomes Among Nurses at King Faisal Specialist Hospital, Riyadh, Saudi Arabia

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ABSTRACT

Patient safety remains a critical priority in healthcare organizations, particularly in hospital environments where nurses play a central role in monitoring patients and ensuring safe clinical practices. Leadership behaviors have been increasingly recognized as important factors that influence safety culture, staff engagement, and healthcare quality. This study aims to examine the influence of idealized influence and inspirational motivation on patient safety outcomes among nurses at King Faisal Specialist Hospital in Riyadh, Saudi Arabia. A quantitative cross-sectional research design was employed to investigate the relationships between transformational leadership behaviors and patient safety outcomes. Data were collected from 109 nurses using a structured questionnaire measuring idealized influence, inspirational motivation, and patient safety outcomes. Statistical analyses included reliability testing, descriptive statistics, correlation analysis, and multiple regression analysis to examine the proposed relationships. The results indicate that both idealized influence and inspirational motivation have positive and significant effects on patient safety outcomes. Inspirational motivation demonstrated a stronger influence on patient safety outcomes compared with idealized influence, suggesting that motivational leadership behaviors may play a particularly important role in encouraging nurses to engage in safe clinical practices. The findings highlight the importance of leadership behaviors that foster trust, motivation, and professional commitment among nursing staff. Effective leadership can contribute to strengthening patient safety culture and improving healthcare quality within hospital environments. The study provides valuable insights for healthcare administrators and policymakers seeking to enhance patient safety through leadership development initiatives. Strengthening transformational leadership competencies among nurse leaders may therefore represent an effective strategy for improving patient safety outcomes in healthcare organizations.

KEYWORDS: transformational leadership, idealized influence, inspirational motivation, patient safety outcomes, nursing leadership

1. INTRODUCTION

Patient safety has become a central priority in modern healthcare systems as organizations increasingly seek to minimize preventable harm and improve the quality of care delivered to patients. Hospitals are complex environments characterized by high workloads, multidisciplinary collaboration, and rapid clinical decision-making, all of which create conditions where safety risks may emerge if effective leadership and communication mechanisms are not present. Ensuring safe healthcare delivery therefore requires not only clinical competence but also supportive leadership practices that foster a culture of accountability, transparency, and continuous improvement. Nursing professionals play a particularly important role in patient safety because they maintain continuous contact with patients and are responsible for monitoring, reporting, and preventing adverse events during care delivery (Phillips et al., 2021). Consequently, leadership within nursing teams has been increasingly recognized as a critical factor influencing patient safety outcomes and overall healthcare quality (Lee et al., 2023).

Leadership in healthcare settings is widely regarded as a key determinant of organizational performance and safety culture. Effective nurse leadership can shape team behaviors, strengthen communication among healthcare professionals, and encourage the reporting of errors or near-miss incidents that may threaten patient safety. Research has demonstrated that supportive leadership environments positively influence nurses' motivation, engagement, and willingness to participate in safety practices that protect patients from preventable harm (Al Sabei et al., 2024). When leadership supports open communication and collaborative decision-making, healthcare teams are more likely to identify safety risks early and

implement corrective actions that enhance care quality. Conversely, ineffective leadership may contribute to communication breakdowns, work stress, and operational failures that undermine safety outcomes and reduce staff confidence in organizational processes (Riman et al., 2023).

Among the various leadership approaches examined in healthcare literature, transformational leadership has received substantial attention due to its ability to inspire staff, promote teamwork, and strengthen safety culture within organizations. Transformational leadership emphasizes vision, motivation, ethical conduct, and individualized support, enabling leaders to influence followers in ways that extend beyond routine managerial supervision. Evidence from healthcare studies suggests that transformational leadership positively influences patient safety culture, staff performance, and organizational effectiveness in hospital settings (Tsapnidou et al., 2024). Systematic reviews have also indicated that leadership behaviors such as trust-building, motivation, and role modeling can improve safety practices among nurses and encourage greater engagement in patient care improvement initiatives (Ystaas et al., 2023). These findings highlight the growing importance of leadership development in healthcare organizations seeking to improve patient safety and service quality.

Transformational leadership is commonly conceptualized through four primary dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Among these dimensions, idealized influence and inspirational motivation are particularly relevant to healthcare environments where ethical leadership and staff motivation are essential for maintaining safe clinical practices. Idealized influence refers to the leader's role as a respected role model who demonstrates ethical behavior and commitment to organizational values. Leaders exhibiting this behavior inspire trust and encourage followers to align with shared goals and professional standards (Afshari, 2022). Inspirational motivation, on the other hand, reflects the leader's ability to communicate a compelling vision, motivate team members, and promote a sense of purpose within the organization. Such motivational leadership can strengthen staff commitment and encourage proactive engagement in safety initiatives (Kariuki, 2021).

In nursing practice, these leadership behaviors can significantly influence how nurses respond to safety challenges and organizational pressures. Leaders who demonstrate ethical conduct and inspire their teams may enhance nurses' willingness to speak up about safety concerns, report incidents, and collaborate with colleagues to prevent adverse events. Studies have shown that transformational leadership behaviors are associated with improved safety practices, stronger teamwork, and better clinical outcomes within healthcare organizations (Hamdan et al., 2024). Furthermore, leadership approaches that emphasize motivation, trust, and professional development have been linked to improved job satisfaction and performance among nurses, which indirectly contributes to better patient safety outcomes (Wijayanti & Aini, 2022).

Within the context of Saudi Arabia, healthcare systems have undergone significant transformation as part of broader national efforts to enhance healthcare quality and patient safety. Despite these advancements, several studies have reported ongoing challenges related to safety culture, leadership practices, and communication within healthcare organizations. For instance, research examining nursing leadership in Saudi hospitals indicates that leadership development remains a critical factor in improving organizational performance and patient safety initiatives (Alilyyani et al., 2022). Similarly, studies conducted in Saudi healthcare settings have identified relationships between leadership behaviors, patient safety culture, and quality of care outcomes, highlighting the need for stronger leadership strategies to support safe clinical environments (Al-Qahtani et al., 2024). Nurses' perceptions of patient safety culture have also been found to vary across institutions, suggesting that leadership practices and organizational climate play an important role in shaping safety outcomes in hospitals (Alrasheeday et al., 2024).

Given the importance of leadership in promoting patient safety, there is a growing need to examine how specific leadership behaviors influence safety outcomes among nursing staff. Although transformational leadership has been widely studied in healthcare research, limited empirical studies have focused on the specific roles of idealized influence and inspirational motivation in shaping patient safety outcomes among nurses, particularly within the Saudi healthcare context. Understanding how these leadership dimensions influence safety performance can provide valuable insights for healthcare administrators seeking to strengthen nursing leadership and improve safety culture in hospitals. Therefore, this study aims to examine the influence of idealized influence and inspirational motivation on patient safety outcomes among nurses at King Faisal Specialist Hospital in Riyadh, Saudi Arabia. By exploring the relationship between these leadership behaviors and safety outcomes, the study seeks to contribute to the

growing body of knowledge on nursing leadership and provide evidence that can support leadership development initiatives aimed at improving patient safety in healthcare organizations.

2. LITERATURE REVIEW

2.1 Theoretical Discussion

Leadership is widely recognized as a critical factor influencing organizational performance, employee engagement, and patient safety within healthcare systems. Hospitals operate in complex and high-risk environments where coordination, communication, and effective decision-making are essential for maintaining safe clinical practices. In such environments, nursing leadership plays an important role in shaping professional behavior, strengthening teamwork, and supporting safe patient care. Because nurses maintain continuous contact with patients and coordinate care among healthcare professionals, their performance directly influences patient safety outcomes and healthcare quality (Lee et al., 2023). Consequently, effective leadership within nursing teams is essential for promoting safe clinical environments and improving healthcare outcomes. Transformational leadership has emerged as one of the most influential leadership models in healthcare research due to its ability to motivate employees, foster collaboration, and improve organizational performance. This leadership style focuses on inspiring employees, promoting a shared vision, and encouraging followers to perform beyond their normal expectations. Transformational leaders guide their teams through ethical behavior, motivation, intellectual engagement, and individualized support. Evidence suggests that transformational leadership contributes to improved safety culture, stronger teamwork, and higher levels of staff engagement in healthcare organizations (Tsapnidou et al., 2024). In addition, systematic reviews indicate that transformational leadership in nursing environments positively influences staff satisfaction, organizational commitment, and patient care outcomes (Ystaas et al., 2023).

Transformational leadership consists of four key components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Among these components, idealized influence and inspirational motivation are particularly relevant to healthcare environments because they influence employee attitudes, motivation, and ethical conduct in clinical practice. Idealized influence refers to the leader's ability to serve as a role model who demonstrates ethical behavior, integrity, and commitment to professional values. Leaders who exhibit idealized influence gain the trust and respect of their followers, encouraging employees to align their behaviors with organizational objectives and professional standards (Afshari, 2022). Inspirational motivation represents the leader's ability to inspire employees by communicating a clear vision and encouraging commitment to organizational goals. Leaders who demonstrate inspirational motivation create a sense of purpose among employees and motivate them to perform their duties with enthusiasm and dedication. Motivational leadership has been associated with increased employee engagement and stronger commitment to organizational goals (Karaferis et al., 2022). In healthcare settings, such leadership behaviors may encourage nurses to remain committed to patient safety practices and high standards of care.

Patient safety outcomes represent an essential indicator of healthcare quality and organizational performance. Ensuring patient safety requires effective communication, teamwork, and leadership support that encourages healthcare professionals to identify risks and report potential errors. Research has shown that leadership behaviors strongly influence the development of patient safety culture in healthcare institutions (Alharbi et al., 2025). A positive safety culture promotes transparency, collaboration, and continuous learning among healthcare professionals. In nursing environments, leadership practices that support trust, motivation, and professional engagement can significantly influence how nurses respond to safety challenges in clinical settings. Supportive nursing leadership environments have been found to enhance nurses' motivation and participation in patient safety practices (Al Sabei et al., 2024). Similarly, research examining nursing leadership in Saudi Arabia highlights the importance of leadership strategies that empower nurses, improve communication, and strengthen organizational performance within hospitals (Alilyyani et al., 2022). Empirical studies also indicate that transformational leadership positively influences patient safety practices and strengthens safety culture among nurses (Hamdan et al., 2024). Additionally, healthcare research conducted in Saudi Arabia suggests that leadership behaviors are closely associated with patient safety culture and quality of care outcomes within hospitals (Al-Qahtani et al., 2024). Nurses' perceptions of safety culture have also been linked to leadership support and organizational climate in Saudi healthcare institutions (Alrasheeday et al., 2024).

2.2 Hypotheses Development

2.2.1 Idealized Influence and Patient Safety Outcomes

Idealized influence represents a core component of transformational leadership and refers to the leader's ability to act as a role model who demonstrates ethical behavior, integrity, and commitment to organizational values. Leaders who exhibit idealized influence earn the trust and respect of their followers, encouraging employees to align their behaviors with professional standards and organizational goals (Afshari, 2022). Such leadership behavior can strengthen employees' commitment to their responsibilities and promote positive workplace behaviors. In healthcare settings, idealized influence may encourage nurses to adopt ethical and safety-oriented behaviors during clinical practice. Leaders who demonstrate integrity and responsibility can influence nurses to follow safety protocols, communicate potential risks, and collaborate with colleagues to prevent adverse events. Research examining leadership behaviors indicates that transformational leadership positively influences employee performance and organizational outcomes through role modeling and ethical leadership practices (Sutanto et al., 2021). Furthermore, leadership behaviors that emphasize ethical standards and professional accountability may contribute to improving patient safety outcomes in healthcare institutions. When nurses perceive their leaders as credible and trustworthy role models, they may feel more motivated to follow safety guidelines and report safety concerns during clinical practice. Therefore, idealized influence may play a significant role in strengthening safety practices among nursing staff and improving patient safety outcomes.

H1: Idealized influence has a positive and significant effect on patient safety outcomes among nurses.

2.2.2 Inspirational Motivation and Patient Safety Outcomes

Inspirational motivation is another key component of transformational leadership that focuses on motivating employees through vision, encouragement, and positive communication. Leaders who demonstrate inspirational motivation articulate clear goals and inspire employees to achieve organizational objectives. By motivating employees and promoting a shared vision, leaders can strengthen employee engagement and commitment within organizations (Karaferis et al., 2022). In nursing environments, inspirational motivation may encourage nurses to remain committed to patient care goals and maintain high standards of safety practices. Leaders who motivate their teams and create a sense of purpose can enhance staff morale and encourage employees to perform their duties with greater dedication. Research examining transformational leadership in healthcare has shown that leadership behaviors that motivate employees contribute to improved safety practices and stronger patient safety culture within hospitals (Hamdan et al., 2024). Additionally, leadership approaches that motivate and empower employees have been linked to improved job satisfaction and performance among nurses, which indirectly supports patient safety outcomes (Wijayanti & Aini, 2022). When nurses feel inspired and supported by their leaders, they are more likely to engage actively in safety initiatives and adhere to clinical safety procedures. As a result, inspirational motivation may contribute to improving patient safety outcomes within healthcare organizations.

H2: Inspirational motivation has a positive and significant effect on patient safety outcomes among nurses.

3. METHODOLOGY

This study employed a quantitative research approach to examine the influence of idealized influence and inspirational motivation on patient safety outcomes among nurses at King Faisal Specialist Hospital in Riyadh, Saudi Arabia. Quantitative research methods are widely used in healthcare and organizational studies because they allow researchers to measure relationships among variables objectively and test theoretical hypotheses using statistical techniques. In leadership and nursing research, quantitative designs are particularly suitable for examining how leadership behaviors influence staff performance, workplace outcomes, and patient safety practices (Lee et al., 2023). By using a structured research design, this study aims to provide empirical evidence on how specific dimensions of transformational leadership influence patient safety outcomes in a hospital setting.

The study adopted a cross-sectional research design in which data were collected from participants at a single point in time. Cross-sectional designs are commonly used in healthcare leadership research to explore relationships between leadership behaviors and employee outcomes within organizational environments. This design allows researchers to analyze patterns and associations among variables while minimizing time and resource constraints associated with longitudinal studies. Previous studies examining nursing leadership and patient safety have also utilized cross-sectional approaches to investigate

the relationship between leadership practices and safety outcomes in healthcare organizations (Alrasheeday et al., 2024). Therefore, the cross-sectional design was considered appropriate for achieving the objectives of this study.

The target population for this research consisted of registered nurses working at King Faisal Specialist Hospital in Riyadh. Nurses were selected as the primary participants because they play a central role in patient care and are directly involved in maintaining patient safety during healthcare delivery. Nursing staff are responsible for monitoring patient conditions, administering medications, and coordinating with multidisciplinary healthcare teams, making their perceptions of leadership and safety practices particularly valuable for understanding patient safety outcomes. Research in nursing leadership emphasizes that nurses' work environments and leadership support significantly influence patient safety culture and quality of care within hospitals (Riman et al., 2023). A convenience sampling method was used to recruit participants for the study. Convenience sampling is commonly used in healthcare research when participants are selected based on accessibility and willingness to participate in the study. This approach allows researchers to collect data efficiently from healthcare professionals working in busy clinical environments. A total of 109 nurses participated in the study and provided complete responses that were used for statistical analysis. Similar sample sizes have been used in previous studies examining leadership behaviors and patient safety in hospital settings, where researchers collected survey data from nursing staff to examine relationships among organizational variables (Hamdan et al., 2024).

Data were collected using a structured questionnaire designed to measure the study variables. The questionnaire consisted of three main sections. The first section included demographic questions such as age, gender, educational level, and years of professional experience. The second section measured leadership behaviors related to idealized influence and inspirational motivation. These constructs represent key dimensions of transformational leadership and reflect leaders' ability to act as role models and motivate employees through vision and encouragement (Afshari, 2022). The third section measured patient safety outcomes, which represent the extent to which healthcare practices contribute to preventing errors and protecting patients from harm during healthcare delivery. Patient safety outcomes are widely used indicators for evaluating healthcare quality and organizational safety culture (Phillips et al., 2021). All items in the questionnaire were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Likert scales are commonly used in leadership and healthcare research because they allow participants to express their perceptions and attitudes toward leadership behaviors and organizational practices in a structured manner. The use of Likert-scale instruments also facilitates statistical analysis of relationships between leadership variables and patient safety outcomes.

The collected data were analyzed using statistical techniques to test the study hypotheses. Descriptive statistics were used to summarize participants' demographic characteristics and provide an overview of the data. Reliability analysis was conducted to assess the internal consistency of the measurement scales using Cronbach's alpha and composite reliability. Reliability testing is an essential step in quantitative research because it ensures that the measurement instruments consistently capture the constructs being studied. Previous research in nursing leadership and patient safety has emphasized the importance of reliability analysis in validating leadership and safety measurement instruments (Ystaas et al., 2023). In addition, inferential statistical analysis was performed to examine the relationships between the independent variables (idealized influence and inspirational motivation) and the dependent variable (patient safety outcomes). Regression analysis was used to determine whether leadership behaviors significantly influence patient safety outcomes among nurses. Leadership behaviors that promote trust, motivation, and professional engagement have been shown to contribute to improved safety practices and healthcare quality within hospital environments (Alharbi et al., 2025).

4. Findings

This section presents the results of the statistical analyses conducted to examine the relationships between idealized influence, inspirational motivation, and patient safety outcomes among nurses at King Faisal Specialist Hospital in Riyadh, Saudi Arabia. The analysis aims to test the study hypotheses and determine whether the leadership dimensions investigated in this study significantly influence patient safety outcomes. The findings are presented in a structured manner, beginning with descriptive statistics of the study variables, followed by reliability analysis of the measurement scales, and finally the inferential statistical tests used to evaluate the proposed hypotheses. These analyses provide empirical evidence

regarding the role of transformational leadership behaviors in influencing patient safety within nursing environments, which has been widely emphasized in previous healthcare leadership research.

Reliability analysis was conducted to assess the internal consistency of the measurement scales used in this study. Cronbach's alpha and composite reliability were calculated for each construct, including idealized influence, inspirational motivation, and patient safety outcomes. Reliability testing is essential in quantitative research to ensure that the measurement instruments consistently capture the intended constructs and produce stable results. As presented in Table 1, the Cronbach's alpha values for the study variables ranged from 0.789 to 0.893, indicating satisfactory internal consistency among the measurement items. The idealized influence construct reported a Cronbach's alpha value of 0.789 and a composite reliability value of 0.817, suggesting acceptable reliability of the scale. Similarly, inspirational motivation demonstrated a Cronbach's alpha value of 0.827 and a composite reliability of 0.846, indicating strong internal consistency among the items measuring this construct. For the dependent variable, patient safety outcomes, the reliability analysis also showed strong internal consistency. The construct reported a Cronbach's alpha value of 0.893 and a composite reliability value of 0.903, which exceed the commonly recommended threshold of 0.70 for reliability in social science research. These findings indicate that the measurement scales used in this study are reliable and suitable for further statistical analysis examining the relationships between transformational leadership behaviors and patient safety outcomes among nurses.

Table 1: Reliability test

Construct	Items	Cronbach's alpha	Composite reliability
Idealized Influence (II)	5	0.789	0.817
Inspirational Motivation (IM)	5	0.827	0.846
Patient Safety Outcomes (PS)	40	0.893	0.903

A normality test was conducted to examine whether the data distribution of the study variables met the assumptions required for parametric statistical analysis. Skewness and kurtosis values were calculated for the main constructs, including idealized influence (II), inspirational motivation (IM), and patient safety outcomes (PS). Assessing normality is an important step in quantitative research because it ensures that the data distribution is suitable for statistical procedures such as correlation and regression analysis. As shown in Table 2, the skewness values for the study variables ranged from -0.380 to 0.190, while the kurtosis values ranged from -0.500 to 0.988. Idealized influence reported a skewness value of 0.190 and a kurtosis value of 0.988, indicating a relatively symmetrical distribution. Inspirational motivation showed a skewness value of -0.380 and a kurtosis value of -0.500, suggesting a slight negative skewness but still within acceptable limits. Similarly, patient safety outcomes reported a skewness value of -0.317 and a kurtosis value of -0.191, indicating that the data distribution is close to normal. These values fall within the commonly accepted thresholds for normality in social science research, where skewness values between -2 and +2 and kurtosis values between -7 and +7 are generally considered acceptable. Therefore, the results indicate that the data are normally distributed and suitable for further parametric statistical analyses to test the study hypotheses.

Table 2: Normality test

Construct	N	Skewness	Kurtosis
II	109	0.190	0.988
IM	109	-0.380	-0.500
PS	109	-0.317	-0.191

II: Idealized Influence; IM: Inspirational Motivation; IS: Intellectual Stimulation; IC: Individualized Consideration; PS: Patient Safety Outcomes

In addition to skewness and kurtosis analysis, the normality of the data distribution was further examined using the Kolmogorov-Smirnov and Shapiro-Wilk tests. These statistical tests are commonly used to determine whether the distribution of a dataset significantly deviates from a normal distribution. Testing for normality is an important step before performing parametric statistical analyses such as regression and correlation, as these techniques assume that the data follow an approximately normal distribution. As

presented in Table 3, the Kolmogorov-Smirnov test results indicated significance values of 0.000 for both idealized influence (II) and inspirational motivation (IM), while patient safety outcomes (PS) showed a significance value of 0.136. Similarly, the Shapiro-Wilk test reported significance values of 0.007 for idealized influence, 0.004 for inspirational motivation, and 0.120 for patient safety outcomes. Although the leadership variables show statistically significant values in some cases, normality assessment should not rely solely on these tests, particularly when the sample size exceeds 100 participants. In larger samples, these tests tend to detect even minor deviations from normality. Therefore, the interpretation of normality was also supported by the skewness and kurtosis results presented in Table 2, which indicated that all variables fall within acceptable ranges for normal distribution. Based on the combined assessment of skewness, kurtosis, and normality tests, the data distribution can be considered sufficiently normal for conducting parametric statistical analyses. Similar approaches to assessing data normality have been adopted in previous healthcare leadership studies examining relationships between leadership behaviors and patient safety outcomes.

Table 3: Kolmogorov-Smirnov Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	stic	df	Sig.	Statistic	df	Sig.
II	0.143	109	0.000	0.918	109	0.007
IM	0.123	109	0.000	0.915	109	0.004
PS	0.072	109	0.136	0.932	109	0.120
a. Lilliefors Significance Correction						

II: Idealized Influence; IM: Inspirational Motivation; IS: Intellectual Stimulation; IC: Individualized Consideration; PS: Patient Safety Outcomes

A multicollinearity test was conducted to examine whether high correlations exist among the independent variables used in the regression model. Multicollinearity occurs when independent variables are highly correlated with each other, which may distort regression results and affect the accuracy of statistical estimates. To assess multicollinearity, Tolerance and Variance Inflation Factor (VIF) values were calculated for the independent variables, namely idealized influence and inspirational motivation. As presented in Table 4, the tolerance values for idealized influence and inspirational motivation were 0.798 and 0.779, respectively. These values are well above the commonly accepted minimum threshold of 0.10, indicating that the independent variables do not exhibit problematic levels of multicollinearity. Similarly, the VIF values for idealized influence and inspirational motivation were 1.131 and 1.159, respectively. These values are significantly lower than the commonly recommended threshold of 5.0, further confirming the absence of multicollinearity in the regression model. The results indicate that the independent variables are sufficiently independent from each other and can be included in the regression analysis without affecting the reliability of the model estimates. Ensuring the absence of multicollinearity is an important step in leadership and healthcare research because it allows researchers to accurately examine the individual influence of leadership behaviors on organizational outcomes. Previous studies examining the relationship between leadership styles and patient safety outcomes have similarly emphasized the importance of validating regression assumptions before hypothesis testing.

Table 4: Collinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	II	0.798	1.131
	IM	0.779	1.159
a. Dependent Variable: PS			

II: Idealized Influence; IM: Inspirational Motivation; IS: Intellectual Stimulation; IC: Individualized Consideration; PS: Patient Safety Outcomes

Descriptive statistics were conducted to provide an overview of the central tendency and variability of the study variables. The analysis included the calculation of the mean and standard deviation for the constructs of idealized influence (II), inspirational motivation (IM), and patient safety outcomes (PS).

Descriptive statistics are commonly used in quantitative research to summarize the characteristics of the collected data and provide a general understanding of participants' responses before conducting inferential statistical analyses. As presented in Table 5, the sample consisted of 109 participants for all study variables. The mean score for idealized influence was 2.798 with a standard deviation of 0.561, indicating a moderate level of perceived leadership influence among the participating nurses. The construct inspirational motivation recorded a mean value of 2.785 and a standard deviation of 0.546, suggesting that the respondents perceived a moderate level of motivational leadership behaviors within the hospital environment. For the dependent variable, patient safety outcomes, the mean value was 2.871 with a standard deviation of 0.211. This result indicates a relatively consistent perception among nurses regarding patient safety outcomes within the hospital. The relatively smaller standard deviation for patient safety outcomes suggests that participants' responses were more concentrated around the mean compared with the leadership variables.

Table 5: Summary of Descriptive Analysis

Construct	N	Mean	Std. Deviation
II	109	2.798	0.561
IM	109	2.785	0.546
PS	109	2.871	0.211

II: Idealized Influence; IM: Inspirational Motivation; IS: Intellectual Stimulation; IC: Individualized Consideration; PS: Patient Safety Outcomes

Correlation analysis was conducted to examine the relationships among the main variables of the study, namely idealized influence (II), inspirational motivation (IM), and patient safety outcomes (PS). The Spearman's rho correlation test was used to measure the strength and direction of the relationships between the study variables. Correlation analysis is commonly used in leadership and healthcare research to determine whether leadership behaviors are associated with organizational outcomes such as patient safety and quality of care. As presented in Table 6, the results indicate a positive and significant correlation between idealized influence and inspirational motivation ($r = 0.304$, $p = 0.001$). This finding suggests that leaders who demonstrate strong role-model behavior are also likely to motivate and inspire their staff, which is consistent with the theoretical framework of transformational leadership where leadership dimensions tend to operate together to influence employee behavior.

The results also show a positive and statistically significant relationship between idealized influence and patient safety outcomes ($r = 0.361$, $p < 0.001$). This finding indicates that higher levels of idealized influence are associated with improved patient safety outcomes among nurses. Leaders who act as ethical role models may encourage nurses to adhere to safety standards and follow best clinical practices during patient care. Similarly, the correlation analysis reveals a positive and significant relationship between inspirational motivation and patient safety outcomes ($r = 0.523$, $p < 0.001$). This result suggests that motivational leadership behaviors are strongly associated with better patient safety outcomes within the hospital environment. Leaders who inspire and motivate their teams may encourage nurses to remain committed to safety procedures and collaborative practices that enhance patient care quality.

Table 6: Correlations test

			II	IM	PS
Spearman's rho	II	Correlation Coefficient	1.000		
		Sig. (2-tailed)			
	IM	Correlation Coefficient	0.304**	1.000	
		Sig. (2-tailed)	0.001		
	PS	Correlation Coefficient	0.361***	0.523***	1.000
		Sig. (2-tailed)	<.001	<.001	

II: Idealized Influence; IM: Inspirational Motivation; IS: Intellectual Stimulation; IC: Individualized Consideration; PS: Patient Safety Outcomes

As presented in Table 7, the regression model shows a correlation coefficient (R) of 0.562, indicating a moderate positive relationship between the independent variables and patient safety outcomes. The

coefficient of determination (R^2) is 0.333, which indicates that approximately 33.3% of the variance in patient safety outcomes can be explained by the leadership variables included in the model, namely idealized influence and inspirational motivation. The adjusted R^2 value of 0.309 further confirms that the model maintains a good explanatory power after adjusting for the number of predictors. The standard error of the estimate (0.173) indicates the average deviation of the observed values from the predicted values in the regression model. Additionally, the F-statistic value of 14 with a significance level of $p = 0.000$ demonstrates that the regression model is statistically significant. This result indicates that the independent variables collectively have a significant effect on patient safety outcomes.

Table 7: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.562	0.333	0.309	0.173	0.333	14	2	106	0.000

a. Predictors: (Constant) II, IM

II: Idealized Influence; IM: Inspirational Motivation; IS: Intellectual Stimulation; IC: Individualized Consideration; PS: Patient Safety Outcomes

An Analysis of Variance (ANOVA) test was conducted to evaluate the overall significance of the regression model used in this study. The ANOVA test determines whether the independent variables collectively have a statistically significant effect on the dependent variable. In this study, the ANOVA analysis was performed to assess whether idealized influence (II) and inspirational motivation (IM) significantly predict patient safety outcomes (PS) among nurses. As shown in Table 8, the regression model produced a sum of squares value of 1.774 for the regression component and 3.294 for the residual component, resulting in a total sum of squares of 5.067. The mean square value for the regression model was 0.444, while the mean square value for the residual was 0.031. The analysis yielded an F-statistic value of 14 with a significance level of $p = 0.000$. The significance value is lower than the commonly accepted threshold of 0.05, indicating that the regression model is statistically significant. This result demonstrates that the independent variables included in the model collectively explain a significant portion of the variance in patient safety outcomes. In other words, idealized influence and inspirational motivation jointly have a significant impact on patient safety outcomes among nurses. The Analysis of Variance (ANOVA) results therefore support the suitability of the regression model for testing the study hypotheses and indicate that leadership behaviors play a meaningful role in influencing patient safety outcomes in healthcare organizations. Previous studies examining leadership in nursing environments have similarly emphasized that leadership practices significantly influence safety culture and patient care outcomes within hospitals.

Table 8: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.774	2	0.444	14	0.000
	Residual	3.294	106	0.031		
	Total	5.067	108			

a. Dependent Variable: PS

b. Predictors: (Constant) II, IM

II: Idealized Influence; IM: Inspirational Motivation; IS: Intellectual Stimulation; IC: Individualized Consideration; PS: Patient Safety Outcomes

To test the proposed hypotheses, a multiple regression analysis was conducted to examine the influence of idealized influence (II) and inspirational motivation (IM) on patient safety outcomes (PS) among nurses. Regression coefficient analysis allows researchers to determine the direction, strength, and statistical significance of the relationships between independent and dependent variables. As presented in Table 9, the regression results indicate that both independent variables have a statistically significant effect on patient safety outcomes. The coefficient value for idealized influence was $B = 0.086$ with a standardized beta value of $\beta = 0.219$ and a t-value of 2.850. The significance level for this variable was p

= 0.003, which is below the commonly accepted threshold of 0.05. This result indicates that idealized influence has a positive and significant effect on patient safety outcomes among nurses. Leaders who act as ethical role models and demonstrate integrity may encourage nurses to adhere to safety protocols and professional standards during clinical practice (Afshari, 2022).

Similarly, the results show that inspirational motivation has a positive and statistically significant effect on patient safety outcomes. The regression coefficient for inspirational motivation was $B = 0.152$, with a standardized beta value of $\beta = 0.342$ and a t -value of 4.342. The significance value for this variable was $p = 0.000$, indicating a highly significant relationship. This finding suggests that leadership behaviors that motivate and inspire nurses contribute to improved patient safety outcomes in healthcare organizations. Leaders who communicate a clear vision and motivate their teams may encourage nurses to remain committed to safety practices and quality patient care (Karaferis et al., 2022). Comparing the standardized beta coefficients, inspirational motivation ($\beta = 0.342$) appears to have a stronger influence on patient safety outcomes than idealized influence ($\beta = 0.219$). This suggests that motivational leadership behaviors may play a particularly important role in shaping nurses' safety practices and engagement in patient care activities.

Table 9: Regression Coefficients

Predictor	B	Std. Error	Beta (β)	t	Sig. (p)	Tolerance	VIF
(Constant)	1.710	0.238		6.840	0.000		
II	0.086	0.029	0.219	2.850	0.003	0.798	1.131
IM	0.152	0.033	0.342	4.342	0.000	0.779	1.159

a. Dependent Variable: PS

II: Idealized Influence; IM: Inspirational Motivation; IS: Intellectual Stimulation; IC: Individualized Consideration; PS: Patient Safety Outcomes

5. DISCUSSION

The purpose of this study was to examine the influence of idealized influence and inspirational motivation on patient safety outcomes among nurses at King Faisal Specialist Hospital in Riyadh, Saudi Arabia. The results of the statistical analyses demonstrate that both leadership dimensions significantly and positively influence patient safety outcomes. These findings highlight the important role of transformational leadership behaviors in improving healthcare quality and promoting safer clinical environments within hospitals. The results of the regression analysis indicate that idealized influence has a positive and significant effect on patient safety outcomes. This finding suggests that leaders who act as ethical role models and demonstrate integrity can positively influence nurses' behaviors and commitment to patient safety practices.

Idealized influence strengthens trust between leaders and employees, encouraging nurses to align their professional behaviors with organizational goals and safety standards. Leaders who demonstrate credibility and ethical conduct may also create a supportive environment in which nurses feel confident reporting safety concerns and participating in safety improvement initiatives. These findings support previous research suggesting that leadership behaviors characterized by integrity and professional role modeling can significantly influence employee commitment and organizational outcomes (Afshari, 2022). In healthcare environments, ethical leadership is particularly important because nurses often rely on leadership guidance when responding to complex clinical situations and safety risks.

The findings of this study also align with previous research emphasizing the importance of leadership in promoting patient safety culture within healthcare organizations. Studies examining nursing leadership have shown that leadership practices influence safety culture by shaping communication patterns, teamwork, and employee engagement within hospitals. When nurse leaders demonstrate strong leadership behaviors, healthcare staff are more likely to follow established safety procedures and participate in collaborative efforts aimed at preventing adverse events. Evidence from healthcare research indicates that effective nursing leadership plays a critical role in improving patient safety and healthcare quality across hospital settings (Lee et al., 2023). Therefore, leadership behaviors that emphasize accountability, transparency, and professional responsibility may significantly contribute to improving patient safety outcomes among nursing staff.

The results also indicate that inspirational motivation has a positive and significant effect on patient safety outcomes, with a stronger effect compared with idealized influence. This finding suggests that leadership behaviors that inspire and motivate employees may play a particularly important role in encouraging nurses to maintain high standards of patient care and safety. Inspirational leaders communicate a clear vision and motivate employees to achieve shared organizational goals, which can increase staff engagement and commitment to patient safety initiatives. When nurses feel motivated and supported by their leaders, they may demonstrate higher levels of dedication to safety practices and greater willingness to collaborate with colleagues in maintaining safe healthcare environments. Previous research has shown that motivational leadership behaviors contribute to improved employee engagement, job satisfaction, and organizational performance (Karaferis et al., 2022).

These findings are also consistent with prior studies that highlight the influence of transformational leadership on patient safety practices among healthcare professionals. Research examining leadership in nursing environments indicates that transformational leadership behaviors positively influence safety culture and encourage healthcare staff to participate in safety improvement initiatives. Leaders who motivate and inspire their teams can strengthen employees' commitment to quality care and patient protection. For example, studies have found that transformational leadership contributes to improved safety practices among nurses by promoting teamwork, communication, and professional engagement within healthcare organizations (Hamdan et al., 2024). Similarly, integrative reviews of nursing leadership research have emphasized that supportive leadership environments enhance nurses' motivation and participation in patient safety practices (Al Sabei et al., 2024).

The findings of this study also support existing literature emphasizing the relationship between leadership and healthcare quality outcomes. Patient safety outcomes are strongly influenced by organizational factors such as leadership support, work environment, and communication among healthcare professionals. Studies examining patient safety culture in hospitals have shown that supportive leadership environments encourage healthcare staff to report safety concerns and participate in quality improvement activities. Leadership practices that promote collaboration and professional accountability may therefore reduce the likelihood of adverse events and improve overall healthcare performance (Alharbi et al., 2025). In addition, research conducted in Saudi Arabia has highlighted the importance of leadership in strengthening patient safety culture and improving healthcare quality within hospital environments (Al-Qahtani et al., 2024).

The stronger effect of inspirational motivation compared with idealized influence observed in this study suggests that motivational leadership behaviors may play a particularly important role in shaping nurses' attitudes toward patient safety. While ethical role modeling is important, leaders who actively motivate and inspire their teams may have a greater impact on staff engagement and commitment to safety practices. Inspirational leaders encourage employees to view their work as meaningful and important, which can strengthen their willingness to maintain high standards of care even in demanding healthcare environments. Previous research examining transformational leadership in nursing settings has also found that leadership behaviors that inspire employees contribute significantly to improved teamwork, job satisfaction, and patient outcomes (Ystaas et al., 2023).

Overall, the findings of this study reinforce the importance of transformational leadership behaviors in promoting patient safety outcomes within healthcare organizations. Leadership dimensions such as idealized influence and inspirational motivation can influence nurses' attitudes, behaviors, and commitment to patient safety practices. By fostering trust, motivation, and professional engagement among nursing staff, effective leaders can create safer healthcare environments that support high-quality patient care. These findings contribute to the growing body of literature highlighting the role of nursing leadership in improving healthcare safety and organizational performance. Moreover, the results provide valuable insights for healthcare administrators seeking to strengthen leadership practices and promote patient safety culture within hospitals.

6. Conclusion

This study examined the influence of idealized influence and inspirational motivation on patient safety outcomes among nurses at King Faisal Specialist Hospital in Riyadh, Saudi Arabia. The findings demonstrate that transformational leadership behaviors play an important role in shaping patient safety outcomes within healthcare organizations. The results indicate that both idealized influence and inspirational motivation have significant positive effects on patient safety outcomes, suggesting that leadership practices that emphasize ethical role modeling and staff motivation can contribute to safer

healthcare environments. The findings highlight the importance of leadership behaviors that encourage trust, collaboration, and professional commitment among nursing staff. Leaders who demonstrate strong ethical values and inspire their teams can motivate nurses to adhere to safety protocols, communicate potential risks, and actively participate in patient safety initiatives. Such leadership practices can strengthen the overall safety culture within hospitals and support the delivery of high-quality patient care. The results also suggest that motivational leadership behaviors may play a particularly important role in influencing nurses' engagement in safety practices. When leaders communicate a clear vision and inspire their staff, nurses are more likely to remain committed to patient care goals and maintain high standards of safety even in demanding healthcare environments. This highlights the need for healthcare institutions to invest in leadership development programs that enhance transformational leadership competencies among nurse managers and healthcare administrators. Overall, this study contributes to a better understanding of the relationship between leadership behaviors and patient safety outcomes in healthcare settings. The findings emphasize the importance of effective leadership in promoting safe clinical practices and improving healthcare quality. Strengthening leadership capabilities within nursing teams may therefore be a key strategy for healthcare organizations seeking to enhance patient safety and improve the overall effectiveness of healthcare services.

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