

## Transformational Leadership and Healthcare Project Success: The Mediating Role of Organizational Trust in Healthcare Projects in Pakistan

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### Abstract

Healthcare development projects play a critical role in improving healthcare infrastructure, service delivery, and the adoption of new technologies. However, many healthcare projects face significant implementation challenges, including coordination problems, communication barriers, and resistance to organizational change. Leadership practices and organizational culture have therefore emerged as important factors influencing project success in healthcare environments. This study examines the effect of transformational leadership on healthcare project success while investigating the mediating role of perceived organizational trust. Drawing on Social Exchange Theory, the study proposes that transformational leadership behaviors encourage employees to develop trust in their organization, which strengthens collaboration and commitment to project objectives. A quantitative cross-sectional research design was employed, and data were collected from healthcare professionals involved in project implementation in hospitals across Punjab, Pakistan. Structural Equation Modeling (SEM) was used to analyze the relationships among transformational leadership, organizational trust, and healthcare project success. The results indicate that transformational leadership has a significant positive effect on healthcare project success by improving teamwork, communication, and employee engagement in project activities. The findings also reveal that transformational leadership significantly enhances employees' perceptions of organizational trust. Furthermore, organizational trust positively influences healthcare project success and partially mediates the relationship between transformational leadership and project outcomes. This suggests that transformational leadership contributes to project success not only directly but also indirectly by fostering a trust-based organizational environment that promotes cooperation among healthcare professionals. The study contributes to the literature by integrating leadership theory and organizational trust within a project management framework for healthcare settings. The findings provide practical implications for healthcare administrators and policymakers by highlighting the importance of strengthening transformational leadership practices and building organizational trust to improve the implementation and performance of healthcare development projects.

**Keywords:** Transformational leadership, Organizational trust, Healthcare project success, Project leadership, Healthcare project management, Social exchange theory.

### 1. Introduction

Healthcare systems worldwide increasingly rely on development projects to improve service delivery, expand infrastructure, and introduce innovative technologies. Governments and healthcare institutions

invest substantial financial resources in projects aimed at improving hospital facilities, implementing digital health systems, and enhancing healthcare accessibility. Despite these investments, healthcare projects frequently encounter implementation challenges including delays, coordination difficulties, and resistance to organizational change (Alatawi, 2022; Ahmed and Ibrahim, 2024).

Healthcare organizations operate in highly complex environments that involve multidisciplinary teams composed of physicians, nurses, administrators, and technical specialists. These professionals often have different professional backgrounds, responsibilities, and priorities, making effective coordination a critical requirement for successful project implementation. Leadership therefore plays a fundamental role in ensuring collaboration and alignment among healthcare professionals working on development initiatives (Tyssen, Wald and Spieth, 2014).

Project management research increasingly emphasizes the importance of leadership in determining project outcomes. Leaders influence team motivation, communication, and problem-solving capacity within project environments. Effective leadership enables project teams to overcome uncertainties and coordinate complex tasks required during project implementation (Serrador and Turner, 2015).

Among various leadership approaches, transformational leadership has received significant attention in management and healthcare research. Transformational leaders motivate employees by articulating a compelling vision, encouraging innovation, and supporting employee development. These leaders inspire followers to exceed expectations and contribute to organizational goals beyond their formal responsibilities (Bass and Riggio, 2006; Alatawi, 2022).

Recent studies have shown that transformational leadership improves employee engagement, teamwork, and organizational performance in healthcare institutions. For instance, transformational leadership has been found to increase nurses' motivation and improve healthcare service quality by encouraging collaborative problem-solving and professional commitment (Boamah et al., 2018; Ahmed and Ibrahim, 2024). Leadership behaviors that promote empowerment and open communication can also improve healthcare project implementation by strengthening collaboration among healthcare professionals.

Another important factor influencing project outcomes is organizational trust. Organizational trust refers to employees' belief that organizational leaders and institutions act fairly, transparently, and ethically. When employees trust their leaders and organizations, they are more likely to cooperate with colleagues, share knowledge, and support organizational initiatives (Schoorman, Mayer and Davis, 2007).

Trust is particularly important in project environments because projects often involve temporary teams, new processes, and organizational change. Healthcare professionals may be required to adopt new technologies, modify clinical procedures, or collaborate with unfamiliar colleagues. Under such conditions, trust in leadership reduces uncertainty and encourages cooperation among team members (Dirks and Ferrin, 2002).

The relationship between leadership and organizational trust can be explained through Social Exchange Theory. According to this theory, relationships between leaders and employees are based on reciprocal exchanges of support and commitment (Blau, 1964). When leaders demonstrate fairness, integrity, and concern for employees' well-being, employees reciprocate by developing trust and commitment to organizational goals.

Transformational leadership behaviors align closely with the principles of Social Exchange Theory. Leaders who inspire, support, and empower employees create positive exchange relationships that strengthen trust within the organization. This trust, in turn, encourages employees to participate actively in organizational initiatives, including project implementation (Podsakoff et al., 1990).

Despite the growing recognition of leadership and trust in project management research, empirical studies examining these relationships in healthcare project environments remain limited. Much of the existing research focuses on corporate or industrial settings, while healthcare institutions operate

within different organizational structures and professional cultures (Al-Hawamdeh and Alomari, 2022).

In developing countries such as Pakistan, healthcare development projects are essential for improving healthcare accessibility and service quality. However, many healthcare projects encounter implementation challenges related to leadership practices, organizational culture, and employee engagement (Khan and Haleem, 2021).

Punjab, the most populous province in Pakistan, has experienced rapid expansion in healthcare infrastructure and services in recent years. Numerous projects have been initiated to modernize hospitals, introduce digital health technologies, and improve healthcare service delivery. Nevertheless, successful implementation of these initiatives depends heavily on leadership practices and organizational trust among healthcare professionals.

Understanding how leadership behaviors influence healthcare project success is therefore critical for improving project management practices in this context. Identifying leadership approaches that foster organizational trust and collaboration can help healthcare institutions implement projects more effectively and achieve sustainable improvements in healthcare delivery.

This study addresses this research gap by examining the relationship between transformational leadership, perceived organizational trust, and healthcare project success in Punjab, Pakistan. Specifically, the study investigates whether transformational leadership improves healthcare project outcomes and whether organizational trust mediates this relationship.

By integrating leadership theory, Social Exchange Theory, and project management research, this study contributes to the literature in several ways. First, it expands understanding of how leadership behaviors influence project success in healthcare environments. Second, it highlights the role of organizational trust as a psychological mechanism linking leadership practices to project outcomes. Third, it provides empirical evidence from a developing country context where healthcare project implementation challenges remain significant.

Ultimately, the findings of this study aim to provide practical insights for healthcare administrators and policymakers seeking to strengthen leadership practices, build organizational trust, and improve the successful implementation of healthcare development projects.

## **2. Literature Review and Hypotheses Development**

### **2.1 Leadership and Project Success in Healthcare Organizations**

Leadership has been consistently identified as one of the most critical determinants of organizational effectiveness and project outcomes across industries. In healthcare systems, leadership becomes even more important due to the complexity of healthcare organizations, which rely on multidisciplinary collaboration among physicians, nurses, administrators, and technical specialists. Effective leadership enables coordination among these diverse actors, facilitates communication, and promotes alignment toward shared organizational objectives (Serrador and Turner, 2015; Northouse, 2022).

Healthcare organizations face increasing pressure to implement large-scale development initiatives aimed at improving healthcare infrastructure, integrating digital technologies, and enhancing service quality. Such projects require coordinated efforts from multiple stakeholders and often involve significant organizational change. As a result, leadership plays a fundamental role in guiding healthcare professionals through these complex processes (West et al., 2022; Alatawi, 2022).

Project management research has increasingly emphasized leadership as a central factor influencing project success. While traditional project management approaches focused primarily on technical planning and control mechanisms, contemporary research highlights the importance of leadership in motivating teams, managing uncertainty, and fostering collaboration among project stakeholders (Müller and Turner, 2010; Tyssen, Wald and Spieth, 2014). Leadership behaviors influence how project teams communicate, how conflicts are resolved, and how employees respond to organizational change initiatives.

Among various leadership approaches, transformational leadership has emerged as one of the most influential leadership styles in contemporary management research. Transformational leadership refers to a leadership style in which leaders inspire followers to achieve exceptional performance by articulating a compelling vision, stimulating intellectual curiosity, and providing individualized support to employees (Bass and Riggio, 2006). Transformational leaders motivate employees to exceed expectations and contribute actively to organizational goals.

Recent studies indicate that transformational leadership significantly improves employee motivation, collaboration, and organizational performance across sectors. In healthcare organizations, transformational leadership has been associated with improved nurse satisfaction, enhanced teamwork, and better patient care outcomes (Boamah et al., 2018; Specchia et al., 2021). Leaders who adopt transformational behaviors encourage open communication and empower employees to participate in decision-making processes.

Transformational leadership is particularly relevant in healthcare project environments where teams must adapt to technological innovation and organizational change. Healthcare professionals involved in projects must frequently adopt new clinical procedures, implement digital systems, and collaborate with multidisciplinary teams. Transformational leaders help employees navigate these changes by creating supportive work environments that encourage innovation and learning (Al-Hawamdeh and Alomari, 2022).

Empirical evidence further suggests that transformational leadership enhances project performance by strengthening team cohesion and fostering collaborative problem-solving. Studies have shown that project managers who exhibit transformational leadership behaviors improve team performance, stakeholder satisfaction, and project outcomes (Fareed et al., 2023; Pan and Dias, 2024). Transformational leadership also contributes to organizational learning and knowledge sharing within project teams, which are critical factors in successful project implementation (Ali et al., 2022).

In healthcare institutions, leadership behaviors that promote empowerment and employee engagement can significantly influence project success. Transformational leaders encourage healthcare professionals to participate actively in project planning and implementation, which improves collaboration and reduces resistance to organizational change (West et al., 2022).

Given the growing importance of leadership in healthcare project environments, transformational leadership is expected to play a significant role in improving project outcomes.

**H1:** Transformational leadership positively influences healthcare project success.

## 2.2 Organizational Trust in Healthcare Institutions

Organizational trust refers to employees' belief that organizational leaders and institutions act fairly, ethically, and transparently. Trust is widely recognized as a fundamental component of effective organizational relationships because it facilitates cooperation, communication, and mutual understanding among employees (Mayer, Davis and Schoorman, 1995).

In healthcare organizations, trust plays a particularly important role due to the interdependent nature of healthcare work. Healthcare professionals rely on collaboration and shared decision-making to deliver patient care and implement organizational initiatives. When trust exists among team members and leadership, healthcare professionals are more likely to cooperate and share knowledge, which contributes to improved organizational performance (Gilson, 2003).

Recent studies highlight the significant impact of trust on employee well-being, job satisfaction, and organizational commitment. Employees who trust their leaders demonstrate higher levels of engagement and are more willing to support organizational initiatives (Ystaas et al., 2023; Haldorai et al., 2022). Trust also contributes to improved workplace environments by promoting psychological safety and open communication among employees.

Organizational trust is particularly important in project environments where employees must work collaboratively within temporary teams. Healthcare projects often involve changes in organizational

processes, new technologies, and multidisciplinary collaboration. These conditions may create uncertainty among employees, which can lead to resistance to change if trust in leadership is lacking (Dirks and Ferrin, 2002).

Trust reduces uncertainty by creating confidence in organizational leadership and decision-making processes. Employees who trust their leaders are more likely to cooperate with colleagues, share information, and participate actively in project implementation (Schoorman, Mayer and Davis, 2007). Trust therefore serves as a critical mechanism for improving collaboration and coordination within project teams.

Studies in healthcare management further demonstrate that trust improves organizational performance by strengthening communication and reducing conflict among employees. Trust also enhances knowledge sharing and organizational learning, both of which are essential for implementing complex healthcare projects (Kramer and Cook, 2004; Ferres et al., 2004).

Given these benefits, organizational trust is expected to play an important role in healthcare project environments by promoting collaboration and commitment among healthcare professionals.

### **2.3 Transformational Leadership and Organizational Trust**

The relationship between leadership and trust can be explained through Social Exchange Theory, which suggests that relationships between leaders and employees are based on reciprocal exchanges of support and commitment (Blau, 1964). When leaders demonstrate fairness, integrity, and concern for employees' well-being, employees reciprocate by demonstrating trust and commitment toward the organization.

Transformational leadership behaviors align closely with the principles of Social Exchange Theory. Transformational leaders motivate and empower employees by providing support, recognition, and opportunities for professional development. These behaviors create positive relational exchanges that strengthen trust between leaders and employees (Podsakoff et al., 1990).

Empirical studies consistently demonstrate that transformational leadership positively influences organizational trust. Research shows that employees who perceive their leaders as transformational are more likely to trust organizational leadership and decision-making processes (Dirks and Ferrin, 2002). Transformational leaders build trust by communicating transparently, demonstrating ethical behavior, and encouraging employee participation in decision-making (Zhu, Newman and Miao, 2013).

In healthcare organizations, transformational leadership behaviors such as individualized consideration and inspirational motivation can strengthen trust among healthcare professionals. Employees who perceive their leaders as supportive and ethical are more likely to develop confidence in leadership and cooperate with organizational initiatives (Al-Saed and Al-Saed, 2023).

Research in healthcare settings further indicates that transformational leadership enhances trust by creating supportive work environments where employees feel valued and respected (Specchia et al., 2021). Such environments encourage open communication and knowledge sharing among healthcare professionals.

Consequently, transformational leadership is expected to positively influence perceived organizational trust.

**H2:** Transformational leadership positively influences perceived organizational trust.

### **2.4 Organizational Trust and Healthcare Project Success**

Organizational trust has been widely associated with improved employee performance, teamwork, and organizational outcomes. In project environments, trust contributes to effective collaboration among project members and enhances communication within project teams (Costa, Roe and Taillieu, 2001).

Healthcare projects require coordination among multiple professional groups who must share information and cooperate to achieve project objectives. Trust facilitates these interactions by reducing interpersonal barriers and encouraging open communication among team members (Gilson, 2003).

Research indicates that trust improves project performance by strengthening team cohesion and increasing employees' willingness to contribute to project activities (Kramer and Cook, 2004). Teams characterized by high levels of trust demonstrate stronger problem-solving capabilities and greater resilience when facing project challenges.

In healthcare environments, trust also reduces resistance to organizational change. Healthcare professionals who trust their leaders are more likely to support project initiatives and adopt new technologies or processes introduced during project implementation (Haldorai et al., 2022).

Empirical evidence further suggests that trust enhances project success by improving collaboration among stakeholders and promoting knowledge sharing within project teams (Lencioni, 2017). When employees trust their leaders and colleagues, they are more willing to share expertise and work collaboratively toward project goals.

Therefore, organizational trust is expected to positively influence healthcare project success.

**H3:** Organizational trust positively influences healthcare project success.

## 2.5 Mediating Role of Organizational Trust

Previous research suggests that leadership behaviors often influence organizational outcomes through psychological mechanisms such as trust, commitment, and employee engagement. Organizational trust represents one such mechanism that may explain how transformational leadership translates into improved project outcomes.

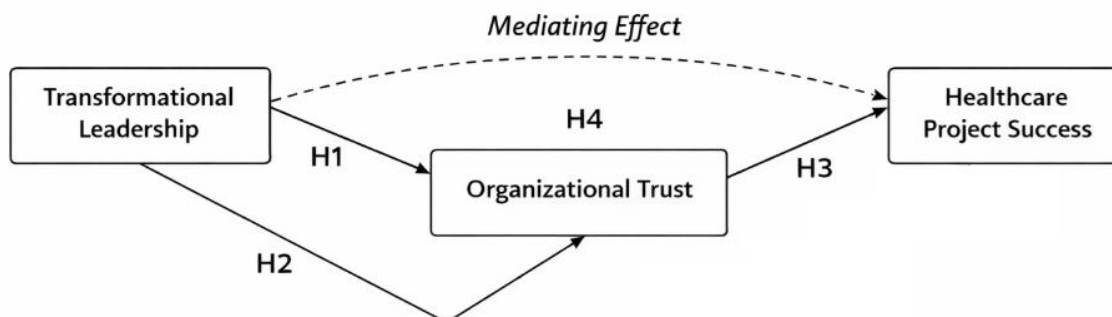
Transformational leaders build trust by demonstrating ethical behavior, communicating transparently, and supporting employee development. These behaviors encourage employees to cooperate with colleagues and contribute actively to organizational initiatives (Dirks and Ferrin, 2002).

Research in organizational psychology indicates that trust mediates the relationship between leadership styles and employee outcomes such as performance, engagement, and organizational commitment (Zhu, Newman and Miao, 2013). In healthcare environments, trust enables employees to respond positively to leadership behaviors and support organizational change initiatives.

Empirical studies also show that trust mediates the relationship between leadership and team performance in project environments (Hoch, 2013). Leaders who foster trust within project teams create conditions that encourage collaboration and knowledge sharing, which ultimately improve project outcomes.

Therefore, organizational trust is expected to mediate the relationship between transformational leadership and healthcare project success.

**H4:** Organizational trust mediates the relationship between transformational leadership and healthcare project success.



The research model illustrates the relationships between transformational leadership, organizational trust, and healthcare project success. Transformational leadership directly influences healthcare project success (H2) and also positively affects organizational trust (H1). Organizational trust further

contributes to healthcare project success (H3). Additionally, organizational trust acts as a mediating variable, meaning it explains how transformational leadership indirectly improves healthcare project success (H4).

### **3. Research Methodology**

#### **3.1 Research Design**

This study adopts a quantitative research design to examine the relationships between transformational leadership, organizational trust, and healthcare project success. Quantitative approaches are widely used in organizational and project management research because they enable researchers to test theoretically derived hypotheses using statistical techniques (Creswell and Creswell, 2018; Hair et al., 2022). Given that the objective of this study is to empirically examine the proposed relationships within a conceptual model, a quantitative design is considered appropriate.

A **cross-sectional survey approach** was employed to collect data from healthcare professionals involved in healthcare project implementation. Cross-sectional survey designs are commonly used in leadership and project management research because they allow researchers to capture respondents' perceptions of leadership behaviors, organizational dynamics, and project outcomes at a specific point in time (Sekaran and Bougie, 2020). This approach enables the systematic examination of relationships among variables within complex organizational contexts.

#### **3.2 Research Philosophy**

The study is grounded in the positivist research philosophy, which assumes that social phenomena can be objectively measured and analyzed using empirical data. Positivism emphasizes hypothesis testing, statistical analysis, and the use of structured measurement instruments to examine relationships between variables (Saunders, Lewis and Thornhill, 2019).

Within this paradigm, transformational leadership, organizational trust, and healthcare project success are conceptualized as measurable constructs that can be assessed through standardized survey instruments. The positivist approach therefore supports the use of quantitative data and statistical modeling to evaluate the theoretical relationships proposed in the research framework.

#### **3.3 Research Population and Sampling**

The target population for this study consists of healthcare professionals involved in healthcare development projects in Punjab, Pakistan. These professionals include physicians, nurses, hospital administrators, and project managers who participate in project planning and implementation activities within public healthcare institutions.

Healthcare projects require collaboration among multiple professional groups, and leadership practices influence the behavior and coordination of these actors. Consequently, collecting data from diverse healthcare professionals allows for a more comprehensive understanding of leadership dynamics and project performance in healthcare settings.

A purposive sampling technique was employed to identify respondents who possess relevant knowledge and experience related to healthcare project implementation. Purposive sampling is widely used in management and organizational research when the objective is to gather insights from individuals who have specific expertise or experience related to the research topic (Etikan, Musa and Alkassim, 2016).

#### **3.4 Sample Size Determination**

Determining an adequate sample size is critical for ensuring the reliability and validity of statistical analysis. Structural Equation Modeling (SEM), which is used in this study, requires sufficient sample size to ensure robust parameter estimation and model fit assessment.

Methodological guidelines suggest that sample sizes between 200 and 400 respondents are generally sufficient for SEM analysis in social science research (Hair et al., 2022; Kline, 2023). Accordingly, data were collected from healthcare professionals working in hospitals and healthcare institutions engaged in healthcare project implementation across Punjab.

The final dataset consisted of responses from participants directly involved in project activities, ensuring that the data accurately reflect perceptions of leadership behavior, organizational trust, and project outcomes.

### **3.5 Data Collection Procedure**

Data were collected using a structured questionnaire designed to measure transformational leadership, organizational trust, and healthcare project success. The questionnaire was distributed to healthcare professionals working in hospitals and healthcare institutions that are involved in healthcare development projects.

Prior to data collection, respondents were informed about the purpose of the research and assured that their responses would remain confidential and used solely for academic purposes. Participation was voluntary, and respondents were encouraged to provide honest responses based on their experiences working in healthcare project environments.

All constructs were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Likert scales are widely used in organizational research because they provide an effective means of capturing respondents' attitudes and perceptions regarding leadership behaviors and organizational processes (Joshi et al., 2015).

### **3.6 Measurement of Constructs**

The constructs used in this study were measured using validated scales adapted from prior research to ensure reliability and validity.

#### **Transformational Leadership**

Transformational leadership was measured using items adapted from the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1995). This scale captures four key dimensions of transformational leadership:

- Idealized influence
- Inspirational motivation
- Intellectual stimulation
- Individualized consideration

The MLQ is one of the most widely used instruments for measuring transformational leadership and has been validated across numerous organizational contexts (Bass and Riggio, 2006; Northouse, 2022).

#### **Organizational Trust**

Organizational trust was measured using items derived from established trust scales developed by Mayer, Davis and Schoorman (1995) and later refined in organizational trust research (Schoorman, Mayer and Davis, 2007). These scales measure employees' perceptions of trust in organizational leadership, fairness in decision-making processes, and confidence in organizational integrity.

#### **Healthcare Project Success**

Healthcare project success was measured using indicators adapted from project management literature. Project success was conceptualized as a multidimensional construct that includes project efficiency, team collaboration, stakeholder satisfaction, and achievement of project objectives (Serrador and Turner, 2015; Müller and Turner, 2010).

### 3.7 Data Analysis Techniques

The data collected in this study were analyzed using Structural Equation Modeling (SEM). SEM is widely used in management research because it allows researchers to test complex relationships among multiple variables simultaneously (Hair et al., 2022).

The data analysis process involved several stages:

1. Descriptive statistics were used to summarize the demographic characteristics of respondents.
2. Reliability analysis was conducted using Cronbach's alpha to assess the internal consistency of measurement scales.
3. Confirmatory Factor Analysis (CFA) was performed to evaluate the validity of measurement constructs and ensure that survey items accurately represent the underlying constructs.
4. Structural model analysis was used to test the hypothesized relationships between transformational leadership, organizational trust, and healthcare project success.
5. Mediation analysis was conducted to examine whether organizational trust mediates the relationship between transformational leadership and healthcare project success.

These analytical procedures provide a rigorous framework for evaluating the proposed research model and testing the study hypotheses.

## 4. Results

### 4.1 Respondent Profile

A total of 312 valid responses were obtained from healthcare professionals involved in healthcare development projects across public hospitals in Punjab, Pakistan. Respondents represented multiple professional categories including physicians, nurses, healthcare administrators, and project managers. Table 1 presents the demographic profile of respondents.

**Table 1. Demographic Characteristics of Respondents**

Variable	Category	Frequency	Percentage
Gender	Male	174	55.8%
	Female	138	44.2%
Age	25–34 years	96	30.8%
	35–44 years	128	41.0%
	45 years and above	88	28.2%
Professional Role	Physician	102	32.7%
	Nurse	124	39.7%
	Administrator	54	17.3%
	Project Manager	32	10.3%
Work Experience	<5 years	74	23.7%
	5–10 years	126	40.4%
	>10 years	112	35.9%

The demographic distribution indicates that respondents possessed relevant professional experience in healthcare institutions, ensuring the reliability of the collected data.

### 4.2 Descriptive Statistics

Descriptive statistics were computed to examine the central tendency and dispersion of the study variables.

**Table 2. Descriptive Statistics**

Construct	Mean	Standard Deviation
Transformational Leadership	3.91	0.64
Organizational Trust	3.84	0.67
Healthcare Project Success	3.88	0.61

The results show that respondents generally reported moderate to high perceptions of transformational leadership practices, organizational trust, and healthcare project success within their institutions.

### 4.3 Measurement Model Evaluation

The measurement model was assessed through reliability and validity analysis following SEM guidelines (Hair et al., 2022).

#### Reliability Analysis

Reliability was assessed using Cronbach's alpha and Composite Reliability (CR).

**Table 3. Reliability Analysis**

Construct	Items	Cronbach's Alpha	Composite Reliability
Transformational Leadership	8	0.91	0.93
Organizational Trust	6	0.89	0.91
Healthcare Project Success	7	0.90	0.92

All reliability values exceed the recommended threshold of **0.70**, indicating strong internal consistency.

#### Convergent Validity

Convergent validity was assessed using Average Variance Extracted (AVE).

**Table 4. Convergent Validity**

Construct	AVE
Transformational Leadership	0.63
Organizational Trust	0.61
Healthcare Project Success	0.65

All AVE values exceed **0.50**, indicating satisfactory convergent validity.

#### Discriminant Validity

Discriminant validity was evaluated using the Fornell–Larcker criterion.

**Table 5. Discriminant Validity (Fornell–Larcker)**

Construct	TL	OT	HPS
Transformational Leadership	<b>0.79</b>		
Organizational Trust	0.61	<b>0.78</b>	
Healthcare Project Success	0.58	0.64	<b>0.81</b>

The square root of AVE values (diagonal elements) is greater than inter-construct correlations, confirming discriminant validity.

### 4.4 Structural Model Analysis

The structural model was evaluated using Structural Equation Modeling (SEM). Model fit was assessed using several goodness-of-fit indices.

**Table 6. Model Fit Indices**

Fit Index	Recommended Value	Model Value
CFI	$\geq 0.90$	0.94
TLI	$\geq 0.90$	0.93
RMSEA	$\leq 0.08$	0.056
SRMR	$\leq 0.08$	0.049

All fit indices fall within acceptable ranges, indicating that the structural model adequately fits the observed data.

#### 4.5 Hypothesis Testing

Path analysis was conducted to test the proposed hypotheses.

**Table 7. Structural Path Results**

Hypothesis	Relationship	$\beta$	t-value	p-value	Result
H1	TL → HPS	0.34	4.87	<0.001	Supported
H2	TL → OT	0.59	8.92	<0.001	Supported
H3	OT → HPS	0.41	6.11	<0.001	Supported

The results indicate that transformational leadership significantly influences healthcare project success and organizational trust, while organizational trust also significantly affects project success.

#### 4.6 Mediation Analysis

The mediating role of organizational trust was tested using the bootstrapping method (5000 samples).

**Table 8. Mediation Results**

Path	Indirect Effect	t-value	p-value	Result
TL → OT → HPS	0.24	4.12	<0.001	Partial Mediation

The indirect effect of transformational leadership on healthcare project success through organizational trust was statistically significant. The findings confirm that organizational trust partially mediates the relationship between transformational leadership and healthcare project success.

#### 4.7 Summary of Findings

The empirical analysis supports the proposed research model. Transformational leadership positively influences healthcare project success and organizational trust. Organizational trust also significantly enhances healthcare project success and partially mediates the relationship between transformational leadership and project outcomes.

### 5. Discussion

The objective of this study was to examine the relationships between transformational leadership, organizational trust, and healthcare project success in healthcare development projects in Punjab, Pakistan. The empirical findings provide strong support for the proposed research model and contribute to the growing body of literature on leadership and project management in healthcare organizations. First, the results indicate that transformational leadership has a significant positive effect on healthcare project success, supporting Hypothesis 1. This finding suggests that leadership behaviors characterized by inspiration, intellectual stimulation, and individualized consideration enhance project outcomes in healthcare environments. Leaders who motivate and empower employees contribute to improved collaboration and coordination among project team members, which ultimately leads to more effective project implementation. These findings are consistent with previous research demonstrating that transformational leadership enhances project performance and team effectiveness in complex organizational environments (Serrador and Turner, 2015; Fareed et al., 2023). Similarly, research in healthcare management has shown that transformational leadership improves employee engagement and service quality by promoting collaborative work environments (Specchia et al., 2021; Alatawi, 2022).

Second, the results reveal that transformational leadership significantly influences organizational trust, providing support for Hypothesis 2. This finding indicates that employees who perceive their leaders as transformational are more likely to trust organizational leadership and decision-making processes. Transformational leaders foster trust by demonstrating ethical behavior, transparent communication, and support for employee development. These findings align with Social Exchange Theory, which suggests that positive leader–employee relationships encourage reciprocal trust and commitment (Blau, 1964). Prior studies have also found that transformational leadership strengthens organizational

trust by promoting fairness, transparency, and supportive leadership practices (Dirks and Ferrin, 2002; Zhu, Newman and Miao, 2013).

Third, the analysis shows that organizational trust positively influences healthcare project success, supporting Hypothesis 3. Trust within healthcare organizations facilitates cooperation among healthcare professionals and improves communication within project teams. In project environments where multidisciplinary collaboration is essential, trust helps reduce conflict and enhances collective problem-solving. These findings support earlier research suggesting that trust improves teamwork, knowledge sharing, and organizational performance (Costa, Roe and Taillieu, 2001; Gilson, 2003). In healthcare contexts, trust has also been linked to improved employee engagement, better collaboration among healthcare professionals, and more effective implementation of healthcare initiatives (Ystaas et al., 2023).

Finally, the results indicate that organizational trust partially mediates the relationship between transformational leadership and healthcare project success, supporting Hypothesis 4. This finding suggests that transformational leadership influences project outcomes both directly and indirectly through trust-based organizational relationships. Leaders who demonstrate transformational behaviors create a supportive work environment that strengthens employees' trust in leadership and encourages cooperation among project team members. This trust subsequently enhances project performance by promoting collaboration and commitment to project objectives.

The mediating role of trust highlights the importance of psychological and relational mechanisms in project management. While leadership behaviors directly influence project outcomes, their impact is amplified when employees trust their leaders and organizational processes. Similar findings have been reported in previous research examining leadership and team performance in project environments (Hoch, 2013; Ali et al., 2022).

Overall, the results emphasize the critical role of leadership and trust in healthcare project environments. Healthcare projects often involve organizational change, technological innovation, and multidisciplinary collaboration. Under such conditions, leadership practices that promote trust and teamwork become essential for achieving successful project outcomes.

## **6. Implications, Limitations, and Conclusion**

The findings of this study provide important insights into the role of leadership and organizational trust in healthcare project environments. By examining the relationships between transformational leadership, organizational trust, and healthcare project success, this study contributes to both project management and healthcare management literature. The results demonstrate that leadership practices play a crucial role in shaping organizational relationships and influencing the successful implementation of healthcare development projects.

From a theoretical perspective, this study contributes to the existing literature by integrating transformational leadership theory with Social Exchange Theory within the context of healthcare project management. While previous research has examined leadership and organizational trust separately, this study provides empirical evidence that organizational trust serves as a critical mechanism through which transformational leadership influences healthcare project success. The findings support the argument that leadership behaviors that emphasize inspiration, ethical conduct, and employee support can strengthen trust within organizations, which in turn improves collaboration and project performance. This integrated perspective advances the understanding of how leadership and relational dynamics influence project outcomes in complex healthcare environments.

Furthermore, this study extends project management research by examining leadership and trust within healthcare project settings, an area that has received limited attention in previous research. Much of the existing project management literature focuses on industrial or corporate project environments, whereas healthcare projects operate under different organizational structures and professional cultures.

By examining leadership practices within healthcare institutions, this study contributes to a more comprehensive understanding of the factors that influence project success in the healthcare sector. The findings also provide several practical implications for healthcare administrators and policymakers. Healthcare development projects often require collaboration among multiple professional groups, including physicians, nurses, administrators, and technical specialists. Effective leadership practices are therefore essential for promoting coordination and teamwork among these actors. The results of this study suggest that healthcare organizations should encourage leadership practices that emphasize employee empowerment, transparent communication, and collaborative decision-making. Transformational leadership behaviors can help create a supportive organizational climate that motivates employees to actively participate in project implementation.

In addition, the findings highlight the importance of building organizational trust within healthcare institutions. Trust facilitates communication, knowledge sharing, and collaboration among healthcare professionals, which are essential for successful project implementation. Healthcare organizations should therefore focus on leadership development programs that strengthen trust between leaders and employees. Such programs may include leadership training initiatives that promote ethical leadership practices, communication skills, and employee engagement strategies.

Healthcare policymakers may also benefit from these findings when designing healthcare development initiatives. Projects that involve significant organizational change often encounter resistance from employees and stakeholders. Building trust among healthcare professionals can reduce resistance and encourage cooperation during project implementation. Policymakers should therefore consider leadership and organizational culture as critical components of healthcare project management strategies.

Despite the contributions of this study, several limitations should be acknowledged. First, the study employed a cross-sectional research design, which limits the ability to establish causal relationships among the variables. Although the findings provide empirical support for the proposed research model, future research could adopt longitudinal research designs to examine how leadership behaviors and organizational trust evolve over time during project implementation.

Second, the study focused on healthcare institutions in Punjab, Pakistan. While this context provides valuable insights into healthcare project management in developing countries, the findings may not be fully generalizable to other institutional environments. Healthcare systems differ significantly across countries in terms of governance structures, organizational culture, and resource availability. Future studies could therefore examine similar relationships in different healthcare systems to enhance the generalizability of the findings.

Third, the study relied on self-reported survey data collected from healthcare professionals. Although survey methods are widely used in leadership and organizational research, self-reported data may be subject to common method bias or response bias. Future research could complement survey data with qualitative methods such as interviews or case studies to gain deeper insights into leadership practices and organizational dynamics in healthcare project environments.

Future research may also explore additional variables that influence healthcare project success. For example, factors such as organizational culture, team collaboration, stakeholder engagement, and technological readiness may play important roles in shaping project outcomes. Examining these factors alongside leadership and trust could provide a more comprehensive understanding of healthcare project management.

In conclusion, this study provides empirical evidence that transformational leadership and organizational trust are key determinants of healthcare project success. The findings demonstrate that transformational leadership not only directly improves project outcomes but also strengthens organizational trust, which further enhances collaboration and teamwork among healthcare professionals. Organizational trust therefore acts as an important mediating mechanism linking leadership behavior to project performance.

Overall, the study highlights the importance of leadership and trust in healthcare project environments and emphasizes the need for healthcare organizations to adopt leadership practices that promote collaboration, transparency, and employee engagement. By strengthening leadership capability and building trust within healthcare institutions, organizations can improve the successful implementation of healthcare development projects and ultimately enhance the quality and effectiveness of healthcare services.

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