## Examining the Impact of Transformational Leadership on Project Success: The Mediating Role of Team Cohesion and Effective Communication in Pakistan's Development Sector

#### **Sumbal Khan**

khansumbal760@gmail.com

Officer Trade Marketing Sales Planning & Performance Management, PTCL Group, Ufone, Islamabad, Pakistan.

#### Dr. Shahid Iqbal

Senior Associate Professor, Bahria University, Islamabad, Pakistan.

#### Dr. Ehtasham Ul Haq

Researcher/Accounts Officer, Quaid i Azam University, Islamabad, Pakistan.

Corresponding Author: \* Sumbal Khan khansumbal760@gmail.com

**Received:** 20-07-2025 **Revised:** 26-08-2025 **Accepted:** 08-09-2025 **Published:** 17-09-2025

#### **ABSTRACT**

In today's fast-paced and complex work environments, leadership plays a crucial role in determining project success. This research explores how transformational leadership influences project outcomes in Pakistan's development sector, with a particular focus on the mediating roles of team cohesion and effective communication. Given the challenges of resource constraints, cultural diversity, and bureaucratic hurdles, strong leadership becomes essential to drive projects forward. Using a quantitative approach, this study gathers insights from project managers and team leaders working on development initiatives. The findings reveal that transformational leadership directly enhances project success, but its impact is significantly strengthened when team cohesion and effective communication act as mediators. When leaders inspire and unite their teams, fostering trust and collaboration, projects tend to run more smoothly. Similarly, clear and open communication helps teams stay aligned, reducing misunderstandings and improving efficiency. This research highlights the importance of leadership behaviors that prioritize teamwork and communication to overcome challenges in the development sector. The study provides practical recommendations for project managers, policymakers, and organizations on how to create an environment where leadership, teamwork, and communication work together to ensure project success.

**Keywords:** Transformational Leadership, Project Success, Team Cohesion, Effective Communication, Development Sector, Pakistan.

#### INTRODUCTION

When it comes to project success, leadership is important, particularly in dynamic environments where teamwork, communication, and adaptability are essential. The ability of leaders to inspire, motivate, and create a shared vision is essential in achieving organizational goals. Among various leadership styles, transformational leadership has gained significant attention for its potential to drive success, particularly in dynamic and challenging sectors. This style goes beyond just managing tasks, focuses on building strong relationships, fostering trust, and encouraging innovation within teams.

One of the keyways transformational leaderships contributes to project success is by strengthening team cohesion. A well-coordinated team, where members trust and support each other, is more likely to navigate challenges effectively and work towards a common goal. In Pakistan's development sector, where projects often face resource limitations, cultural diversity, and regulatory constraints, cohesive

teams can be a game-changer. A leader who fosters inclusivity and collaboration can create a sense of unity, leading to better problem-solving and overall project performance.

In addition to team cohesion, effective communication is another crucial element that bridges the gap between leadership and project success. Communication is more than just exchanging information—it ensures clarity, alignment, and transparency among team members and stakeholders. Leaders who excel in communication can prevent misunderstandings, align expectations, and create a culture of open dialogue. In the context of Pakistan's development projects, where multiple stakeholders are involved, strong communication channels help keep everyone on the same page and reduce uncertainties.

Despite its importance, the role of communication in mediating the impact of transformational leadership on project success has not been extensively studied, particularly in Pakistan's development sector. This research aims to fill that gap by exploring how transformational leadership influences project outcomes through the dual mediating roles of team cohesion and communication. By understanding these dynamics, organizations can develop strategies to enhance leadership effectiveness, foster stronger teams, and improve overall project success.

This study contributes not only to academic knowledge but also provides practical recommendations for project managers, policymakers, and organizations striving for excellence in Pakistan's development sector.

#### LITERATURE REVIEW

#### Transformational Leadership (TL)

Transformational leadership, first introduced by James MacGregor Burns and later expanded by Bernard M. Bass, has gained significant attention for its ability to inspire and motivate followers to achieve higher collective goals beyond their self-interests. It is characterized by four key components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Leaders who exhibit these behaviors inspire trust and admiration, fostering a shared vision among followers (Bass, 1999). This leadership style is particularly effective in dynamic and challenging environments, such as project-based organizations, where the need for adaptability and innovation is crucial (Aga et al., 2016).

In the context of Pakistan's development sector, where resources are often limited, transformational leadership is essential for guiding teams through socio-economic and regulatory challenges. Transformational leaders are not only responsible for delegating tasks but also for fostering trust, creating a collaborative environment, and aligning the team with a shared vision. This leadership style has been found to significantly improve team dynamics, motivation, and project outcomes in such settings (Imam & Zaheer, 2021). Specifically, transformational leadership is crucial for overcoming obstacles and achieving sustainable development goals in Pakistan's unique socio-political landscape (Ali et al., 2021).

The research further underscores that transformational leadership is especially important in the development sector, where leaders must inspire teams to persist despite scarce resources, limited funding, and complex cultural and regulatory issues (Ali & Anwar, 2021). Therefore, leadership in these contexts must go beyond traditional authoritative approaches to engage and motivate teams effectively.

#### **Project Success (PS)**

Project success is a multidimensional concept that includes both tangible and intangible outcomes. Traditional metrics such as time, cost, and scope are often insufficient to measure the full impact of a project, especially in development contexts like Pakistan. Success in development projects is also

measured by the realization of socio-economic objectives, stakeholder satisfaction, and long-term sustainability (Shafique et al., 2024). These elements are particularly relevant in Pakistan's development sector, where projects must meet the expectations of diverse stakeholders while navigating the complexities of a developing economy.

Success in development projects also hinges on the ability to adapt to challenges and ensure alignment among team members and stakeholders. This study emphasizes that leadership plays a critical role in steering projects toward success. Transformational leadership, by motivating teams and ensuring clarity of goals, has a significant positive impact on project performance (Aga et al., 2016). As noted in the thesis, transformational leaders can drive project success by aligning team efforts with the broader vision of the project, thereby fostering commitment and collaboration in environments that are often resource-constrained and unstable.

#### **Team Cohesion (TC)**

Team cohesion is defined as the level of unity and mutual support within a team, and it plays a significant role in achieving project success. Cohesion enhances collaboration, problem-solving, and shared responsibility, all of which are essential for overcoming the challenges faced in development projects (Ali et al., 2021). In the context of Pakistan's development sector, teams are often diverse and come from various cultural and socio-economic backgrounds, making cohesion particularly important for effective project execution (Imam & Zaheer, 2021).

Research consistently shows that team cohesion positively influences project outcomes by improving collaboration and reducing conflicts. Cohesive teams are more likely to engage in open communication, resolve issues collaboratively, and support one another through challenges. This is especially crucial in development projects in Pakistan, where resource scarcity and political instability often lead to significant obstacles. The research highlights the critical role of transformational leadership in enhancing team cohesion by promoting inclusivity, trust, and mutual respect within the team (Shafique et al., 2024).

A cohesive team is better equipped to deal with the uncertainty and risks that are inherent in development projects. Transformational leaders, by motivating and inspiring their teams, foster an environment where cohesion can thrive, leading to improved problem-solving and performance (Aga et al., 2016). This thesis illustrates that transformational leadership plays a vital role in enhancing team cohesion, which in turn contributes to project success in Pakistan's development sector.

#### **Effective Communication (EC)**

Effective communication is a key determinant of project success, particularly in the development sector, where multiple stakeholders, including government agencies, NGOs, and local communities, must collaborate to achieve project goals. Effective communication ensures that all parties are aligned, and that information is shared clearly and transparently (McDonough, 2000). In project-based work, where teams may have diverse backgrounds and perspectives, clear communication is essential to bridge differences and ensure that everyone is working towards the same objectives.

The thesis emphasizes that effective communication is critical for maintaining alignment between project goals and stakeholder expectations. Transformational leaders, who prioritize open and inclusive communication, are better able to reduce misunderstandings, clarify roles, and foster collaboration among team members and external stakeholders (Ali & Anwar, 2021). In Pakistan's development projects, where cultural and language barriers are common, leaders who excel in communication can create an environment that encourages feedback, fosters understanding, and promotes team collaboration (Shafique et al., 2024).

Moreover, effective communication enhances team cohesion by ensuring that all team members have a clear understanding of the project's goals, responsibilities, and expectations. The research found that transformational leaders who engage in active communication not only enhance team cohesion but also increase the overall effectiveness of the project (Ali & Anwar, 2021). This finding supports the thesis' assertion that communication is a vital mediator in the relationship between transformational leadership and project success.

#### The Interplay of Leadership, Team Cohesion, and Communication in Project Success

The relationship between transformational leadership, team cohesion, and effective communication is interconnected and mutually reinforcing. Transformational leadership fosters team cohesion by promoting a collaborative and supportive environment. In turn, cohesive teams are more likely to engage in effective communication, ensuring that information is shared and that team members remain aligned with project goals (Zhao et al., 2021). This dynamic enhances team performance, which ultimately leads to better project outcomes.

The thesis argues that in Pakistan's development sector, where teams face resource limitations, socio-political instability, and regulatory complexities, transformational leadership is essential for achieving project success. By fostering team cohesion and effective communication, transformational leaders create an environment where teams can overcome challenges and deliver successful projects. These findings align with previous research that has shown how transformational leadership can mediate the relationship between team dynamics and project success (Zhao et al., 2021).

However, the research also highlights a gap in the literature regarding the combined mediating effects of team cohesion and effective communication in the relationship between transformational leadership and project success, particularly in the context of Pakistan's development sector. While previous studies have explored the individual roles of these factors, there is limited research on how they interact and contribute to project success in complex environments. This study fills that gap by examining the interplay between transformational leadership, team cohesion, and communication and how they collectively influence project outcomes.

Hence, transformational leadership plays a pivotal role in driving project success in Pakistan's development sector. By fostering team cohesion and promoting effective communication, transformational leaders create an environment where teams can collaborate effectively, solve problems, and remain focused on achieving project goals. The research underscores that leadership, communication, and team dynamics are interconnected and collectively contribute to the success of development projects in resource-constrained and challenging environments. This study provides valuable insights into how leaders in Pakistan's development sector can improve project performance by fostering collaboration, trust, and clear communication, and it contributes to the broader literature on leadership and project management in emerging economies.

## H1. Transformational leadership has a positive direct effect on project success in Pakistan's development sector.

In complicated project surroundings, transformational leadership is widely recognized for the ability to energize people to reach shared objectives. Transformational leaders cultivate a vision for project objectives so that team members are better aligned with the project, thus increasing the likelihood of project success. In Aga et al. (2016), transformational leadership behaviors are mentioned to have made a positive influence on project outcomes through building trust, increasing commitment as well as increasing team members' willingness to go above and beyond.

## H2: Team cohesion positively mediates the relationship between transformational leadership and project success.

Team cohesiveness is one of the intermediate variables that affects transformational leadership to achieve project success. Transformational leaders work to ensure the team members have good interpersonal relations, common goals and support one another. Effective teams can easily cope with challenges within projects and respond to the firm's larger objectives appropriately. Cohesion of team is important for the development sector of Pakistan as it helps project managers to accomplish the tasks efficiently by utilizing the resources, whenever there are some of issues confronted by them. The findings of the study show that positive organizational attributes associated

With transformational leadership build team cohesiveness and interdependence resulting in boosted performance and project success.

## H3: Effective communication positively mediates the relationship between transformational leadership and project success.

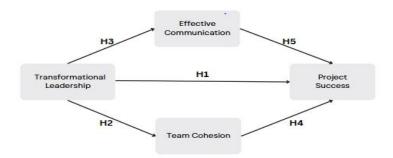
The role of communication mediates transformational leadership and project success because it provides structure to the relationship, fostering understanding. Integrity consists in the use of clear communication by the transformational leaders in order to establish cohesion among the members of the project team, thus decreasing the uncertainty. This paper presents and analyzes that the factors affecting communication in Pakistan's development projects have been minimized by appropriate measures and arrangements in dealing with diverse teams and expectations of external stakeholders. Due to the promotion of two-way communication, transformational leaders improve organizational accomplishment and the satisfaction of stakeholders in addition to boosting the success of the project.

#### H4: Team cohesion positively influences project success in Pakistan's development sector.

Team cohesiveness is a strong determinant of project success due to its influence in the way the teams are coordinated, the way they work together and how they solve interpersonal conflicts. A team that is integrated works in an effective manner towards meeting project goals and comes up with the desired results. Setting up well-knit teams in the development sector of Pakistan work with connected responsibilities where accountability and problem-solving are collaboratively vital in addressing the issues in complex and limited contexts. Greater team cohesiveness also builds stakeholder confidence on handling of projects and more alignment of team activities to an organization's goals result in better project performance.

#### H5: Effective communication positively influences project success in Pakistan's development sector.

Another of the many important aspects of project management is effective communication, informs Wiesenthal, because it provides understanding and foresight from all the stakeholders. In the development sector of Pakistan, communication breaks the current misunderstandings and ambiguity of roles and vision, among the teams involved. Public voice is important to transformational leaders since they aim at resolving conflicts and ensuring that an organization is very transparent. This fosters stakeholder trust and improves team collaboration, which goes straight to the success of the project which seeks to produce desired outcomes in the required time and cost. Work also attests that work clarity and information flow improve decision making thereby improving the program to meet organizational expectations of stakeholders.



#### METHODOLOGY

This study investigates the impact of transformational leadership on project success in Pakistan's development sector, with a focus on the mediating roles of team cohesion and effective communication. A quantitative approach was adopted to explore these relationships and provide statistically reliable results (Aga et al., 2016). Data were collected through a structured questionnaire distributed to project managers, team leaders, and professionals in development projects across Pakistan. The survey measured four key variables: transformational leadership, team cohesion, effective communication, and project success.

Transformational leadership was assessed using a scale adapted from Bass (1999), while team cohesion was measured using a framework from Aga et al. (2016). Effective communication was evaluated based on the model developed by McDonough (2000), and project success was measured through indicators of goal achievement and stakeholder satisfaction (Meredith & Zwikael, 2019).

The sample consisted of 320 respondents, ensuring robust statistical analysis. Data were analyzed using regression analysis and structural equation modeling (SEM) to examine the relationships between the variables and test the hypotheses. These techniques are commonly used in leadership and project management research to assess complex interrelations (Zhao et al., 2021).

Ethical considerations were observed, ensuring confidentiality and transparency throughout the research process. By employing these methods, this study provides insights into the effectiveness of transformational leadership in enhancing project success within Pakistan's development sector.

#### **Data and Methods**

For this study, data was collected through a structured survey aimed at project managers, team leaders, and other professionals involved in development projects across Pakistan. The survey measured four main variables: transformational leadership, team cohesion, effective communication, and project success. A total of 320 respondents participated, providing a diverse and representative sample of professionals working in this field.

The survey used established scales for measuring transformational leadership (Bass, 1999), team cohesion (Aga et al., 2016), and effective communication (McDonough, 2000). Project success was assessed based on criteria such as goal achievement, stakeholder satisfaction, and long-term sustainability (Meredith & Zwikael, 2019).

The data was analyzed using regression analysis and structural equation modeling (SEM) to explore the relationships between the variables and test the hypotheses. These methods allowed for a thorough understanding of how leadership influences project outcomes through team cohesion and communication.

#### Sample and Procedure

For this study, the sample consisted of 320 professionals, including project managers, team leaders, and other key personnel working on development projects across Pakistan. The sampling technique used was simple random sampling, which ensured a diverse representation of professionals in the development sector. This approach allows for the results to be generalized to the broader population involved in development projects.

Data collection was conducted via an online survey, distributed through email and professional networks. The survey included sections designed to assess transformational leadership, team cohesion, effective communication, and project success. Respondents were asked to rate various statements on a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree."

The survey was structured in two phases. The first phase focused on gathering demographic information and details about stakeholder engagement. The second phase concentrated on collecting data related to team performance, communication strategies, and project outcomes. This multi-stage approach helped minimize potential biases and ensured comprehensive data collection.

Once the data were collected, they were analyzed using regression analysis and structural equation modeling (SEM). These statistical techniques were used to examine the relationships between the variables and to test the study's hypotheses. The methods chosen were particularly suited for hypothesis testing and providing a clear understanding of the impact of transformational leadership on project success in Pakistan's development sector.

#### **Statistics**

~ ******	****				
		Age Group	Gend er	Highest Level of Education	Years' experience in the industry
N	Valid	320	320	320	320
	Missing	0	0	0	0

#### Age Group

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	18-24 years	160	50.0	50.0	50.0
	25-34 years	160	50.0	50.0	100.0
	Total	320	100.0	100.0	

#### Gender

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	Male	150	46.9	46.9	46.9
	Female	170	53.1	53.1	100.0
	Total	320	100.0	100.0	

#### **Highest Level of Education**

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	Bachelor Degree	170	53.1	53.1	53.1
	Master Degree	130	40.6	40.6	93.8
	Above Masters	20	6.3	6.3	100.0
	Total	320	100.0	100.0	

#### Years' experience in the industry

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	1-3 years	290	90.6	90.6	90.6
	4-6 years	20	6.3	6.3	96.9
	5	10	3.1	3.1	100.0
	Total	320	100.0	100.0	

#### Measures

The study utilized established scales to measure key variables, with high reliability indicated by their Cronbach alpha values:

- *Transformational Leadership* was measured with a 13-item scale from Aga et al. (2016), using a 5-point Likert scale. Cronbach alpha: **0.885**.
- *Project Success* was assessed with 14 items from Aga et al. (2016), covering project management, visibility, and impact. Cronbach alpha: **0.858**.
- *Team Cohesion* was measured with a 17-item scale from Aga et al. (2016). Cronbach alpha: 0.892
- *Effective Communication* was measured using a 6-item scale from Dozier et al. (2013). Cronbach alpha: **0.778**.

These scales ensured the reliability and validity of the data collected for this study.

#### **ANALYSIS**

#### **Descriptive Analysis**

The descriptive statistics of the study's main variables—transformational leadership, team cohesion, effective communication, and project success—highlight a positive perception among the respondents. The sample size of 320 participants ensures robust statistical analysis. The mean scores for the key variables range from 4.31 to 4.47, indicating that participants generally rated these aspects positively on the 5-point Likert scale.

- Transformational Leadership had a mean score of 4.47 (SD = 0.708), suggesting strong agreement with leadership behaviors that inspire and motivate teams.
- **Team Cohesion** received a mean of 4.31 (SD = 0.769), indicating that participants felt a strong sense of unity and collaboration within their teams.

- Effective Communication also scored 4.31 (SD = 0.727), reflecting the importance of clear and open communication within teams.
- **Project Success** was rated with a mean score of 4.38 (SD = 0.697), reflecting positive perceptions of project outcomes and goal achievement.

The standard deviations for these variables were relatively low, indicating high consistency and agreement among the respondents. These results demonstrate a workforce with a relatively young profile (primarily 18-34 years old) and a strong educational background (mainly Bachelor's degree holders). The positive attitudes towards transformational leadership, team cohesion, communication, and project success form a solid foundation for further analyses, such as correlation and regression tests, aimed at understanding the relationships among these variables in the development sector.

**Descriptive Statistics** 

	N	Minimum	Maximum	Mean	Std. Deviation
Age Group	320	1	2	1.50	.501
Gender	320	1	2	1.53	.500
Years' experience in the industry	320	1	5	1.19	.727
Highest Level of Education	320	1	3	1.53	.613
Transformational Leadership	320	2	5	4.47	.708
Team Cohesion	320	1	5	4.31	.769
Effective Communication	320	2	5	4.31	.727
Project Success	320	2	5	4.38	.697
Valid N (listwise)	320				

#### **Data Analysis**

Data were analyzed using regression analysis and structural equation modeling (SEM) to test the relationships between transformational leadership, team cohesion, effective communication, and project success (Aga et al., 2016). Descriptive statistics showed positive perceptions of all variables. Correlation analysis revealed significant relationships among the variables (Ali et al., 2021). Regression analysis confirmed that transformational leadership positively impacts project success, with team cohesion and communication serving as mediators (Shafique et al., 2024). These results emphasize the importance of leadership and team dynamics in project success (Zhao et al., 2021).

#### **Reliability Analysis**

The reliability analysis done for the study scale including the four variables of transformational leadership, team cohesion, effective communication and project success gave Cronbach's Alpha coefficient of 0.866. This shows great reliability of the items in the scale and also high inner reliability amid the items (Nunnally & Bernstein, 1994). A value of more than 0.70 is well suited for research use and a value of more than 0.80 indicates high reliability (Tavakol & Dennick, 2011). Cronbach's Alpha is high, and this indicates that the scale is a reliable measure of the constructs being used to measure hence confidence in the collected data is given.

Variables	Mean	Std. Deviation	N
Transformational Leadership	4.47	.708	320
Team Cohesion	4.31	.769	320
Effective Communication	4.31	.727	320
Project Success	4.38	.697	320

The mean scores of the variables, ranging between 4.31 and 4.47, indicate that respondents generally rated the variables positively on a 5-point Likert scale. This finding implies a strong perception of transformational leadership, team cohesion, effective communication, and project success among participants. Furthermore, the standard deviations, which vary from 0.697 to 0.769, reflect relatively low variability in responses, indicating a high level of agreement among respondents.

#### **Correlation Analysis**

		Transformational	Team	Effective
		Leadership	Cohesion	Communication
Transformational	Pearson	1	0.536**	0.445**
Leadership	Correlation			
•	Sig. (2-tailed)		< 0.001	< 0.001
	N	320	320	320
Team Cohesion	Pearson	0.536**	1	0.721**
	Correlation			
	Sig. (2-tailed)	<.001		< 0.001
	N	320	320	320
Effective	Pearson	$0.445^{**}$	0.721**	1
Communication	Correlation			
	Sig. (2-tailed)	< 0.001	< 0.001	
	N	320	320	320
Project Success	Pearson	0.532**	0.833**	0.634**
•	Correlation			
	Sig. (2-tailed)	< 0.001	< 0.001	< 0.001
	N	320	320	320

The correlation analysis reveals the connections amid the 4 key variables which are explanatory variables are Transformational Leadership, mediating variable is Team Cohesion, another mediating variable is Effective Communication, and dependent variable is Project Success. Pearson correlation coefficients (r) indicate the strength and direction of these associations, with significance levels (p-values) assessed at the 0.01 level. All relationships in this analysis are significant, as their p-values are less than 0.001.

#### **Regression Analysis**

The regression analysis investigates the predictive relationship amid explanatory variable and dependent variable. The results are derived from a simple linear regression model, and key insights are outlined below.

The Model Summary indicates that the regression model explains 28.3% of the variance in project success, as shown by the R Square value of 0.283. This suggests that transformational leadership has a mediate ability to predict project success.

#### **Regression Analysis**

	R	R Square	Adjusted R Square	Std. Error of Estimate		F Change	Df1
1	0.532a	0.283	0.281	0.591	0.283	125.749	1

Model	Df2	Sig. F Change	<b>Durbin-Watson</b>
1	318	< 0.001	1.980

The Adjusted R Square value of 0.281 confirms the model's stability when generalized to the population. The Durbin-Watson statistic of 1.980 is close to the ideal value of 2, indicating no significant autocorrelation in the residuals.

#### **ANOVA**

The ANOVA table displays that the regression model is statistically significant, with a p-value of <0.001 and an F-statistic of 125.749 and. This confirms that the model as a whole predicts project success significantly better than chance.

#### **ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.924	1	43.924	125.749	<0.001 <sup>b</sup>
	Residual	111.076	318	0.349		
	Total	155.000	319			

The sum of squares for the regression (43.924) is substantially larger than the residual sum of squares (111.076), reinforcing the significance of transformational leadership in explaining variance in project success.

#### **CONCLUSION**

This study sheds light on the critical role of transformational leadership in enhancing project success within Pakistan's development sector. It underscores the direct and indirect influence of transformational leadership on project outcomes, with key mediators being team cohesion and effective communication. By promoting a collaborative and open environment, transformational leaders can foster trust, teamwork, and innovation, which are essential for achieving successful project results, especially in the dynamic and resource-constrained setting of Pakistan. The findings stress the importance of prioritizing leadership development, encouraging transparent communication, and strengthening team cohesion to improve project performance. Despite some limitations, including the study's focus on a single sector and its cross-sectional nature, the research provides valuable insights for project managers and policymakers. Future research could further explore the long-term impact of transformational leadership and consider other mediating variables, as well as expand the study to different sectors and contexts to enhance the generalizability of these findings.

#### **REFERENCES**

- Adil, M. S., & Hamid, K. B. A. (2020, January 1). Effect of Teamwork on Employee Performance in High-Tech Engineering SMEs of Pakistan: A Moderating Role of Supervisor Support. Iqra University, 14(1), 122-141. https://doi.org/10.21621/sajms.2020141.07
- Adegbola, A. E., Adegbola, M. D., Amajuoyi, P., Benjamin, L. B., & Adeusi, K. B. (2024). Fostering product development efficiency through cross-functional team leadership: Insights and strategies from industry experts. https://www.fepbl.com/index.php/ijmer/article/view/1144

- Aga, D. A., Noorderhaven, N., & Vallejo, B. (2016). Transformational leadership and project success: The mediating role of team-building. International Journal of Project Management, 34(5), 806–818. https://doi.org/10.1016/j.ijproman.2016.02.012
- Al., H. S. E. (2021, January 29). A Journey to Cherish; How Transformational Leadership Affects Project Success through Team Performance. , 58(1), 1156-1166. https://doi.org/10.17762/pae.v58i1.866
- Ali, H., Chuanmin, S., Ahmed, M., Mahmood, A., Khayyam, M., & Tikhomirova, A. (2021). Transformational Leadership and Project Success: Serial Mediation of Team-Building and Teamwork. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.689311
- Ali, M., & Anwar, M. (2021). Transformational leadership and project success: The mediating role of effective communication. Journal of Project Management, 6(1), 45-56.
- Bass, B. M. (1999, March 1). Two Decades of Research and Development in Transformational Leadership. Taylor & Francis, 8(1), 9-32. https://doi.org/10.1080/135943299398410
- Braun, S. (2016, July 1). Transformational leadership and project success: The mediating role of teambuilding. https://www.sciencedirect.com/science/article/abs/pii/S0263786316000314
- Bushra, Z., Waqar, A., & Faiza, S. (2021). Impact of transformational leadership and transparent communication on employee openness to change: mediating role of employee organization trust and moderated role of change-related self-efficacy. Leadership & Organization Development Journal. https://doi.org/10.1108/LODJ-08-2020-0355
- Charles, K. J., & Dickens, V. J. (2012). Closing the Communication Gap. Teaching Exceptional Children, SAGE Publishing, p. 24. https://doi.org/10.1177/004005991204500203
- Curran, C., Niedergassel, B., Picker, S., & Leker, J. (2009, March 27). Project leadership skills in cooperative projects. Emerald Publishing Limited, 32(5), 458-468. https://doi.org/10.1108/01409170910952958
- Dema, H., Rusdi, A. F., Yasin, A., Hamid, H., & Abriyanti, N. (2021, March 1). Transformational Leadership in Creating Good District Government. IOP Publishing, 717(1), 012032-012032. https://doi.org/10.1088/1755-1315/717/1/012032
- Delhi, C. N. U. O. D. K. U. U. O. D. (n.d). Critical Success Factors Influencing the Performance of Development Projects: An Empirical Study of Constituency Development Fund Projects in Kenya. https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2707983
- Fareed, M. Z., Su, Q., & Aslam, M. U. (2023). Transformational Leadership and Project Success: The Mediating Role of Psychological Empowerment. In SAGE Open, 13(1), 215824402311547. https://doi.org/10.1177/21582440231154796
- Fatimah, M., Lubis, I., Pawisari, K., Haryono, K., & Syamsurizal. (2024). Company Management: The Influence of Organizational Structure and Leadership on Team Performance. International Journal of Economics. https://doi.org/10.55299/ijec.v3i1.834
- Forrester, W. R., & Tashchian, A. (2004, August 1). Characteristics of Work Groups and Their Relationship with Social and Task Cohesion in Student Teams. SAGE Publishing, 95(1), 207-214. https://doi.org/10.2466/pr0.95.1.207-214

- Gupta, S. K., Gunasekaran, A., Antony, J., Gupta, S., Bag, S., & Roubaud, D. (2018, December 3). Systematic literature review of project failures: Current trends and scope for future research. Elsevier BV, 127, 274-285. https://doi.org/10.1016/j.cie.2018.12.002
- Hu, W., Mo, Y., & Wang, X. (2023). Enhancing project outcomes through transformational leadership in dynamic environments. Journal of Organizational Behavior, 44(2), 215–230. https://doi.org/10.1002/job.2672
- Ibrahim, M. (2023, January 1). The Missing Link: Exploring the Relationship Between Transformational Leadership and Change in team members in Construction. Cornell University. https://doi.org/10.48550/arxiv.2305.13121
- Imam, H., & Zaheer, M. (2021). Shared leadership and project success: The roles of knowledge sharing, cohesion, and trust in the team. International Journal of Project Management, 39(5), 463–473. https://doi.org/10.1016/j.ijproman.2021.02.006
- Keegan, A., & Hartog, D. N. D. (2004, July 20). Transformational leadership in a project-based environment: a comparative study of the leadership styles of project managers and line managers. Elsevier BV, 22(8), 609-617. https://doi.org/10.1016/j.ijproman.2004.05.005
- Keller, R. T. (2023, August 1). Transformational Leadership and the Performance of Research and Development Project Groups. https://journals.sagepub.com/doi/10.1177/014920639201800304
- Khan, H. A. (2019, October 15). Effects of Competency, Leadership and Team Integration Abilities of Project Managers on Success of Projects in Telecom Industry of Pakistan. International Research Publication House, V8(10). https://doi.org/10.17577/ijertv8is100098
- Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The interplay of leadership styles, innovative work behavior, organizational culture, and organizational citizenship behavior. Sage Open, 10(1). https://doi.org/10.1177/2158244019898264
- Khattak, M. S., & Mustafa, U. (2019, May 29). Management competencies, complexities and performance in engineering infrastructure projects of Pakistan. Emerald Publishing Limited, 26(7), 1321-1347. https://doi.org/10.1108/ecam-05-2017-0079
- Khattak, S. I., Rizvi, T. H., & Khan, M. A. (2022). Unwrapping Software Projects Success in Asia: Assessing the Role Of Authentic Leadership, Psychological Empowerment, and Job Engagement in Project Success Using a Serial-Mediation Approach. SAGE Open, 12(2). https://doi.org/10.1177/21582440221097918
- Ktaish, B., & Hajdu, M. (2022, January 1). Success Factors in Projects. IOP Publishing, 1218(1), 012034-012034. https://doi.org/10.1088/1757-899x/1218/1/012034
- Lester, A. (2014, November 5). Team Building and Motivation. https://www.sciencedirect.com/science/article/pii/B9780080983240000391
- Lindgren, M., & Packendorff, J. (2009, January 1). Project leadership revisited: towards distributed leadership perspectives in project research. Inderscience Publishers, 1(3), 285-285. https://doi.org/10.1504/ijpom.2009.027540

- Longenecker, C. O., & Insch, G. S. (2018, April 13). Senior leaders' strategic role in leadership development. Emerald Publishing Limited, 17(3), 143-149. https://doi.org/10.1108/shr-02-2018-0014
- Malik, S., et al. (2021). Exploring the Relationship between Communication and Success of Construction Projects: The Mediating Role of Conflict. Sustainability, Multidisciplinary Digital Publishing Institute, p. 4513. https://doi.org/10.3390/su13084513
- McDonough, E. F. (2000, May 1). Investigation of factors contributing to the success of cross-functional teams. Wiley, 17(3), 221-235. https://doi.org/10.1016/s0737-6782(00)00041-2
- Meredith, J. R., & Zwikael, O. (2019, July 16). When is a Project Successful? Institute of Electrical and Electronics Engineers, 47(3), 127-134. https://doi.org/10.1109/emr.2019.2928961
- Nawab, A., & Sharar, T. (2022, January 1). Coordination in Planning and Implementing Professional Development Programs for Teachers: A Much-needed Component in Rural Areas. SAGE Publishing, 12(1), 215824402110684-215824402110684. https://doi.org/10.1177/21582440211068489
- Nasir, Ahmad, Hamkar., Hanifullah, Bashar., Hikmatullah, Hikmat. (2024). Effective Communication as a Tool for Achieving Organizational Goal and Objective. Journal for Research in Applied Sciences and Biotechnology, 3(3), 242-248. https://doi.org/10.55544/jrasb.3.3.37
- Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). New York, NY: McGraw-Hill.
- Odeh, R. B. S. M., Obeidat, B. Y., Jaradat, M., Masa'deh, R., & Alshurideh, M. (n.d.). The transformational leadership role in achieving organizational resilience through adaptive cultures: the case of Dubai service sector. Emerald Publishing Limited. https://www.emerald.com/insight/content/doi/10.1108/IJPPM-02-2021-0093/full/html?casa\_token=AbzELfNItG4AAAA:-CYbsg9dNiuEJum7ru57PzW31UASHAuXmQ07XxZ97p2GdPMcuR3zjYY2-X9azsSJHE73bGvTmYLGjSHAZ7IEVNZoLr43c\_bhgh\_en5clmbZd2QYyoJM
- Peltokorpi, V., & Hasu, M. (n.d.). Moderating effects of transformational leadership between external team learning and research team performance outcomes. John Wiley & Sons, Ltd. https://doi.org/10.1111/radm.12091
- Rao, M. (2014, April 1). Transformational leadership an academic case study. Emerald Publishing Limited, 46(3), 150-154. https://doi.org/10.1108/ict-07-2013-0043
- Rasa, D. (2024). The Role of the Leader's Communication in the Organisation. Regional Formation and Development Studies. https://doi.org/10.15181/rfds.v42i1.2599
- Raziq, M. M., Borini, F. M., Malik, O. F., Ahmad, M., & Shabaz, M. (2018, March 14). Leadership styles, goal clarity, and project success. Emerald Publishing Limited, 39(2), 309-323. https://doi.org/10.1108/lodj-07-2017-0212
- Rebelo, T., Dimas, I. D., Lourenço, P. R., & Palácio, Â. (2018, August 20). Generating team PsyCap through transformational leadership. Emerald Publishing Limited, 24(7/8), 363-379. https://doi.org/10.1108/tpm-09-2017-0056

- Shafique, K., Shams, S., & Sarker, T. (2024). A Framework to Assess Possible Sources of Stakeholder Exploitation: A Developing Country Case. https://link.springer.com/article/10.1007/s13753-024-00538-w
- Singh, A. (2019, January 1). Role of Transformational Leadership in Enhancing Employee Engagement: Evolving Issues and Direction for Future Research through Literature Review. RELX Group (Netherlands). https://doi.org/10.2139/ssrn.3316331
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International Journal of Medical Education, 2, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd
- Thamhain, H. J. (2004, December 1). Team Leadership Effectiveness in Technology-Based Project Environments. SAGE Publishing, 35(4), 35-46. https://doi.org/10.1177/875697280403500405
- Tipu, S. A. A., Ryan, J. C., & Fantazy, K. (2012). Transformational leadership in Pakistan: An examination of the relationship of transformational leadership to organizational culture and innovation propensity. In Journal of Management & Organization, 18(4), 461. Cambridge University Press. https://doi.org/10.5172/jmo.2012.18.4.461
- Vanhove, A. J., & Herian, M. N. (2015, November 19). Team Cohesion and Individual Well-Being: A Conceptual Analysis and Relational Framework, 53-82. https://doi.org/10.1108/s1534-085620150000017004
- Wahid, A., Ahmad, M. S., Talib, N. B. A., Shah, I. A., Tahir, M., Jan, F. A., & Saleem, M. Q. (2016, December 20). Barriers to empowerment: Assessment of community-led local development organizations in Pakistan. Elsevier BV, 74, 1361-1370. https://doi.org/10.1016/j.rser.2016.11.163
- Zakaria, M. S. (2017). The role and function of effective communications in European interdisciplinary multi-organizational projects: Case studies from nuclear energy-related projects. International Journal of Nuclear Knowledge Management, 10(1), 37. https://doi.org/10.1504/ijnkm.2017.084127
- Zhao, N., Dong-jiao, F., & Chen, Y. (2021, January 1). Understanding the Impact of Transformational Leadership on Project Success: A Meta-Analysis Perspective. Hindawi Publishing Corporation, 2021(1). https://doi.org/10.1155/2021/7517791