

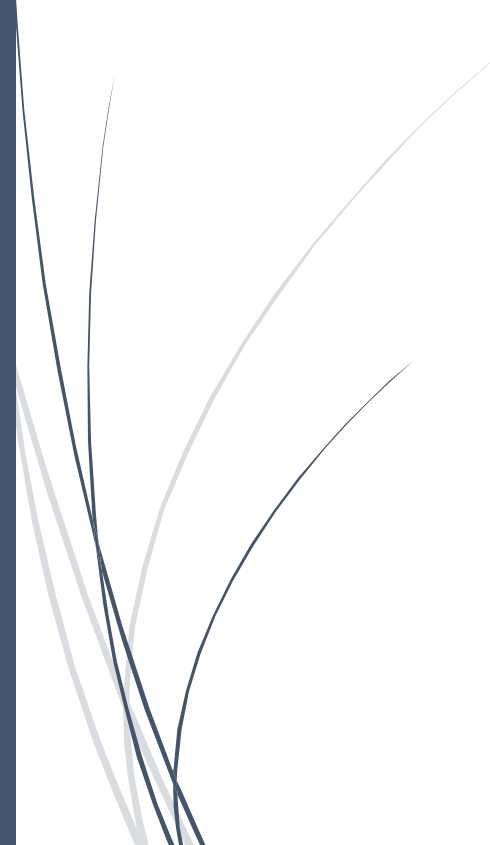


Final Project 2

PMG 497

Project Manager Leadership

The Impact of Project Manager Leadership on Team
Performance in Construction Projects in Saudi Arabia



Midocean University

Faculty of Management

Department/ Specialization



Project title:

Project Manager Leadership

The Impact of Project Manager Leadership on Team Performance in
Construction Projects in Saudi Arabia

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Final Project - 2

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Dedication

To my beloved parents, whose endless sacrifices and prayers have been the foundation of my success.

To all the faculty member- Faculty of management- Midocean University, who have guided me with wisdom and inspired me to strive for excellence.

To all project managers and construction professionals in Saudi Arabia, who work tirelessly to build the future of our nation.

And to everyone who believes in the power of leadership to transform teams and achieve greatness.

This work is dedicated to you.

From: Abdullah Mustafa Alkhateeb

Abstract

Purpose: This study aims to examine the impact of project manager leadership on team performance in construction projects in Saudi Arabia. The research identifies key leadership behaviors—communication, support, encouragement of new ideas, fair decision-making, regular feedback, and motivation—and investigates how these behaviors influence team outcomes.

Methodology: A quantitative research approach was adopted using a survey questionnaire distributed to 16 project managers and team members working on construction projects in Saudi Arabia. The questionnaire measured seven leadership behaviors and their effect on team performance. Data were analyzed using descriptive statistics, including frequencies, percentages, and mean scores.

Findings: The results show that project managers in Saudi construction projects demonstrate positive leadership behaviors. Encouragement of new ideas received the highest mean score (3.81), followed by communication (3.75). All seven hypotheses were supported, confirming a positive relationship between project manager leadership and team performance. Trust had the highest agreement rate (81.3%), while all other behaviors had 75% agreement among respondents.

Originality & Implication: This study contributes to the limited body of research on project manager leadership in the Saudi construction context. It provides practical insights for construction companies on the leadership behaviors that enhance team performance. The findings can guide recruitment, training, and development programs for project managers, ultimately contributing to improved project outcomes in Saudi Arabia's growing construction sector.

Keywords: *Project Manager Leadership, Team Performance, Construction Projects, Saudi Arabia, Leadership Behaviors*

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14)	Altaher, A. M., AL-Obaidly, G. A., Al-badaine, G., Kashoob, S. S. M., Hammouri, Q., & Khasawneh, M. A. S. (2024). <i>The impact of leadership styles on project success: The mediating role of team collaboration. Journal of Project Management</i> , 9(3), 123-138.	42
15)	Moyo, T., Al-Otaibi, A., & Chigara, B. (2024). <i>Engendering project management competencies in Saudi Arabian construction professionals. Journal of Facilities Management</i>	42
16)	Purasinghe, S. N. (2024). <i>Enhancing performance in construction project management teams. International Journal of Innovative Science and Research Technology</i> , 809-818.	42
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1. Chapter 1: Introduction

1.1. Research Background

In today's fast-paced business world, the success of any project depends heavily on its leaders. Project managers guide teams, make critical decisions, and ensure work is completed on time and within budget. A project manager's leadership style can significantly impact team efficiency and project success.

Leadership in project management is not just about giving orders; it also involves motivating individuals, solving problems, and creating a work environment that empowers everyone to perform at their best. A successful project manager communicates clearly, supports team members when facing challenges, and makes fair decisions that benefit everyone.

When project managers demonstrate strong leadership skills, teams tend to be more motivated, productive, and satisfied with their work.

The construction sector in Saudi Arabia has experienced rapid growth in recent years. With mega-projects like NEOM, the Red Sea Project, numerous new cities, and ongoing infrastructure development, the demand for skilled project managers capable of effectively leading teams is increasing dramatically. These large-scale projects require strong leadership to manage complex tasks, coordinate the efforts of many individuals, and deliver high-quality results.

Research has shown that leadership style impacts team performance. Some leaders tend to be direct, dictating to team members exactly what to do. Others are supportive, encouraging team members to brainstorm and make their own decisions. A third group focuses on achieving goals and driving the team toward excellence. Each style has its strengths and weaknesses, and the optimal style often depends on the situation and the individuals involved.

In Saudi Arabia, the construction sector faces unique challenges. The workforce is diverse, with workers coming from different countries and backgrounds. Cultural differences, language barriers,

and varying job expectations can make teamwork difficult. Therefore, the role of the project manager as a leader is increasingly important. A competent leader can bridge these differences and unite the team to achieve common goals.

Numerous studies have been conducted on leadership in general, but studies specifically focusing on the project manager's leadership role in the Saudi construction sector are few. This is a gap that needs to be filled. Understanding how project managers lead their teams, and how this impacts team performance, helps companies improve their project outcomes and achieve better results.

This study aims to explore the impact of project manager leadership on the performance of construction teams in Saudi Arabia. By examining how project managers lead their teams and their performance, this study seeks to provide valuable insights for companies and project managers looking to develop their leadership skills and improve project outcomes.

The importance of this study extends beyond the construction sector to the broader field of project management.

Leadership is a fundamental factor in project success, and understanding its application within the Saudi context contributes to the development of effective leadership training programs and strategies. It can also enrich the growing body of knowledge about project management in the Middle East region.

1.2. Research Problem

Construction projects in Saudi Arabia face many challenges. Projects often run over budget, miss deadlines, or fail to meet quality standards. One of the main reasons for these problems is poor leadership. When project managers do not lead effectively, teams can become confused, unmotivated, and unproductive. This can lead to delays, mistakes, and conflicts among team members.

The problem is that we do not fully understand how project manager leadership affects team performance in the Saudi construction context. While there is plenty of research on leadership in other countries and industries, very little research has been done specifically on project managers in Saudi construction projects. This means that companies do not have clear guidance on what kind of leadership works best in this environment.

1.2.1. Theoretical Gaps

The existing literature on leadership provides many theories and models, but most of these were developed in Western contexts.

Theories like transformational leadership, transactional leadership, and situational leadership have been studied extensively in countries like the United States and Europe.

However, it is not clear whether these theories apply in the same way in Saudi Arabia.

The cultural and social context in Saudi Arabia is different from Western countries.

The work environment, the expectations of employees, and the way people interact with leaders may be different. This means that leadership theories developed elsewhere may not fully explain what happens in Saudi construction projects. There is a theoretical gap that needs to be addressed by studying leadership in this specific context.

1.2.2. Practical Gaps

On a practical level, construction companies in Saudi Arabia do not have enough information about what makes a project manager effective. Many companies rely on trial and error, or they follow practices from other countries without adapting them to the local context. This can lead to ineffective leadership and poor project outcomes.

Furthermore, there is a lack of training programs that are specifically designed for project managers in the Saudi construction industry. Without a clear understanding of the leadership skills that matter most, it is difficult to design effective training and development programs. This practical gap means that project managers may not be getting the support they need to lead their teams successfully.

Main Research Question:

What is the impact of project manager leadership on team performance in construction projects in Saudi Arabia?

1.3. Research Significance

This study is important for several reasons. It addresses both theoretical and practical gaps in our understanding of project manager leadership and team performance in the Saudi construction industry.

1.3.1. At the theoretical level

This research contributes to the academic literature by testing existing leadership theories in a new context. By studying project manager leadership in Saudi construction projects, this study helps to determine whether established theories apply in this environment or whether new models are needed.

The findings of this study can also help to build a more complete understanding of leadership in different cultural contexts. This is valuable for researchers who are interested in cross-cultural management and the factors that influence leadership effectiveness in different parts of the world.

1.3.2. At the practical level

For construction companies in Saudi Arabia, this research provides practical insights that can improve project outcomes. By understanding what leadership behaviors are most effective, companies can make better decisions about hiring, training, and developing project managers.

The study also has implications for project managers themselves. By learning about the leadership styles that lead to better team performance, project managers can improve their own skills and become more effective leaders. This can lead to better team morale, higher productivity, and more successful projects.

In addition, the findings of this study can help inform the development of training programs for project managers. By focusing on the leadership skills that matter most, training providers can design programs that are more relevant and effective for the Saudi construction industry.

1.4. Research Questions

1. What are the main leadership behaviors that project managers use in construction projects in Saudi Arabia?
2. How does project manager leadership affect team performance in construction projects?
3. What are the key leadership skills that help project managers lead their teams effectively?
4. How do project managers in Saudi Arabia handle challenges in leading diverse construction teams?

1.5. Research Objectives

1. To identify the leadership behaviors commonly used by project managers in construction projects in Saudi Arabia.
2. To examine the relationship between project manager leadership and team performance.
3. To determine the leadership skills that have the greatest impact on team performance.
4. To provide recommendations for improving project manager leadership in the Saudi construction industry.

1.6. Research Hypotheses

H1: There is a positive relationship between project manager leadership and team performance in construction projects in Saudi Arabia.

H2: Project managers who communicate clearly have teams with higher performance.

H3: Project managers who support their teams have teams with higher performance.

H4: Project managers who encourage new ideas have teams with higher performance.

H5: Project managers who make fair decisions have teams with higher performance.

H6: Project managers who provide regular feedback have teams with higher performance.

H7: Project managers who motivate their teams have teams with higher performance.

1.7. Research Model

The research model shows the relationship between project manager leadership and team performance. The independent variable is project manager leadership, and the dependent variable is team performance.

The study examines how different aspects of leadership affect team performance.

1.8. Scope of The Study

This study focuses on construction projects in Saudi Arabia. The research targets project managers and team members working in construction companies across different cities in the country. The study examines leadership behaviors and their impact on team performance, including communication, support, decision-making, feedback, and motivation.

The study is limited to the construction industry and may not apply to other industries. The findings are also specific to the Saudi context and may not be generalizable to other countries.

1.9. The Project Structure

This project is organized into five chapters.

Chapter 1 provides the introduction, including the background, problem statement, significance, research questions, objectives, hypotheses, and research model.

Chapter 2 presents a review of the literature on project manager leadership and team performance.

Chapter 3 describes the research methodology, including the research design, population, sample, data collection methods, and analysis procedures.

Chapter 4 presents the statistical analysis and findings.

Chapter 5 provides the conclusions, limitations, and recommendations.

2.Chapter 2: Literature Review

2.1. Introduction

This chapter reviews the existing literature on project manager leadership and team performance. The chapter is divided into several sections. First, it discusses the concept of project manager leadership, including definitions, theories, and key leadership behaviors. Second, it examines team performance, including definitions and measures. Third, it explores the relationship between leadership and team performance.

Finally, the chapter concludes with a summary of the key findings from the literature.

2.2. The independent variable

Leadership is the ability to guide, influence, and inspire others to work toward a common goal. In project management, leadership is especially important because project managers must coordinate the efforts of many people to complete complex tasks on time and within budget.

Several theories of leadership have been developed over the years. One of the most well-known is transformational leadership, which focuses on inspiring and motivating followers to achieve more than they thought possible. Transformational leaders are charismatic, they provide intellectual stimulation, and they give individualized consideration to their followers.

Another important theory is transactional leadership, which focuses on exchanges between leaders and followers. Transactional leaders use rewards and punishments to motivate their teams. They set clear expectations and provide feedback based on performance.

Situational leadership theory suggests that no single leadership style is best in all situations. Instead, leaders should adapt their style based on the needs of their followers and the demands of the situation. This theory recognizes that different situations require different leadership approaches.

In the context of project management, several leadership behaviors have been identified as important. These include clear communication, support for team members, encouragement of new ideas, fair decision-making, regular feedback, and motivation. Project managers who demonstrate these behaviors tend to have more successful projects.

Clear communication is essential for project success. Project managers must communicate goals, expectations, and updates to their teams. When communication is clear, team members understand what they need to do and can work more effectively.

Support is also important. Project managers who support their teams help team members solve problems and overcome challenges. This builds trust and creates a positive work environment.

Encouraging new ideas is another key leadership behavior. Project managers who listen to their team members and consider their suggestions can benefit from fresh perspectives and innovative solutions.

Fair decision-making helps build trust and respect. When team members believe that decisions are made fairly, they are more likely to accept them and work together effectively.

Regular feedback helps team members improve their performance and stay on track.

Project managers who provide feedback help their teams learn and grow.

Finally, motivation is essential for team performance. Project managers who motivate their teams can inspire them to work harder and achieve better results.

2.3. The dependent variable

Team performance refers to how well a team works together to achieve its goals. In project management, team performance is often measured by how well the team completes tasks on time, within budget, and to the required quality standards.

Several factors contribute to team performance. These include clear goals, good communication, trust among team members, effective leadership, and appropriate resources. When these factors are present, teams are more likely to perform well.

The performance of a team can be measured in different ways. Some measures focus on outcomes, such as whether the project was completed on time and within budget. Other measures focus on processes, such as how well team members communicate and cooperate with each other. Still others focus on individual performance, such as how well each team member contributes to the team's work.

2.4. The relationship between the independent and the dependent variables

Research has shown that leadership has a significant impact on team performance.

Leaders who communicate clearly, support their teams, and motivate their members tend to have teams that perform better.

Several studies have examined the relationship between leadership and team performance in different contexts. For example, a study by ... found that transformational leadership had a positive effect on team performance in ... Another study by ... found that leadership behaviors such as clear communication and support were associated with higher team performance.

In the construction industry, the relationship between leadership and team performance has also been studied. Researchers have found that project managers who lead effectively have teams that are more productive, more satisfied, and more likely to complete projects successfully.

The literature suggests that leadership affects team performance through several mechanisms. First, leaders help set clear goals and expectations, which guides team members in their work. Second, leaders provide support and resources, which helps team members overcome challenges. Third, leaders create a positive work environment, which motivates team members and encourages them to do their best work.

2.5. Conclusion

This chapter has reviewed the literature on project manager leadership and team performance. The literature shows that leadership is an important factor in team performance, and that project managers who demonstrate effective leadership behaviors tend to have teams that perform better.

The review has identified several leadership behaviors that are important for project managers, including clear communication, support, encouragement of new ideas, fair decision-making, regular feedback, and motivation. These behaviors help create a positive work environment and guide teams toward successful project completion.

However, the literature also shows that there are gaps in our understanding of leadership in the Saudi construction context. Most studies have been conducted in other countries and industries, and more research is needed to understand how project manager leadership affects team performance in Saudi Arabia.

3. Chapter 3: Research Methodology

3.1. Introduction

This chapter explains the methods used in this research. It provides a step-by-step plan for how the study was conducted. The main purpose is to clearly explain how the researcher collected and analyzed data to answer the research questions.

This chapter discusses the operational definitions of the research variables. It also explains the research design, which is based on the "research onion" model. The population and sample are described, followed by the data collection methods and types of data used. Finally, the statistical procedures applied to analyze the data are outlined.

3.2. Operational definitions for research variables

Operational definitions explain how the main concepts in this study were measured. A clear definition ensures that everyone understands exactly what is being studied.

Project Manager Leadership (Independent Variable): Leadership refers to the ability of the project manager to guide, influence, and support the team to achieve project goals. In this study, leadership was measured through seven key behaviors:

- Communication: How clearly the project manager shares information.
- Support: How much the project manager helps team members.
- Encouragement of New Ideas: How open
- the project manager is to suggestions.
- Fair Decision-Making: How just and fair
- the manager's decisions are.
- Regular Feedback: How often the
- manager gives helpful feedback.
- Motivation: How the manager inspires the team.
- Trust: The level of trust between the manager and the team.

Team Performance (Dependent Variable):

Team performance refers to how well the team works together to complete project tasks on time, within budget, and to the required quality standards. It includes the team's ability to cooperate, solve problems, and meet project objectives.

3.3. Research design (research onion)

To ensure a well-structured study, the researcher followed the "research onion" model developed by Saunders et al. (2019). This model provides a framework for designing research by peeling back layers, starting with broad philosophical choices and moving to specific techniques. The layers applied in this study are described below.

- **Research Philosophy:** The study adopted a positivism philosophy. This approach assumes that reality can be observed objectively. Positivism is commonly used when the researcher wants to test hypotheses and measure relationships between variables using numerical data. This philosophy is suitable because the study aims to measure the effect of leadership on performance.
- **Research Approach:** A deductive approach was used. This means the research began with existing theories and hypotheses derived from the literature. The data was then collected to test these hypotheses. This approach is appropriate because there are established theories about leadership and performance to test.
- **Research Strategy:** The strategy used is a survey. Surveys are a popular choice in business research. They allow the researcher to collect a large amount of data from a sample in a standardized way. This is efficient for examining relationships between variables.
- **Time Horizon:** This is a cross-sectional study. This means data was collected at a single point in time from the participants. This is practical for a project with a limited timeframe.
- **Data Collection Technique:** The primary technique was a questionnaire. Questionnaires are an effective tool for collecting standardized data from a large group of people. The questionnaire was designed to gather information about the leadership behaviors of project managers and the performance of their teams.

3.4. Research population & Sampling methods and technique

Research Population: The target population for this study consisted of all project managers and team members working on construction projects in Saudi Arabia. This includes professionals involved in various types of construction, such as residential, commercial, and infrastructure projects.

Sampling Method: The study used a convenience sampling technique. This is a type of non-probability sampling where participants are selected based on their availability and willingness to participate. While this method is easy and practical, it means the results may not be perfectly generalizable to the entire population. The researcher distributed the survey through online channels, such as social media and professional networks, to reach potential participants.

3.5. Data collection method

Data was collected using an online questionnaire. The questionnaire was designed by the researcher and distributed through Google Forms. The link to the questionnaire was shared with project managers and team members in the Saudi construction sector. The questionnaire was kept simple and clear to ensure easy understanding.

3.6. Types of data

- Primary Data: This is the data collected directly from the participants through the questionnaire. It includes the responses regarding leadership behaviors and team performance. This is the main data source used in the study.
- Secondary Data: This is data collected from existing sources. The researcher used secondary data from academic journals, books, and published studies to build the literature review and support the research background. The search results provided relevant secondary data about leadership in construction project management

3.7. Statistical analysis procedures

To analyze the collected data, the researcher used the Statistical Package for the Social Sciences (SPSS). SPSS is a widely used software for quantitative data analysis

The following statistical procedures were performed:

1. Descriptive Statistics: This was used to summarize the characteristics of the sample. This includes calculating frequencies, percentages, means, and standard deviations. This analysis helps describe the demographic profile of the respondents.
2. Validity and Reliability Tests:
 - Validity checks if the questionnaire measures what it intends to measure.
 - 1. Reliability checks if the questionnaire produces consistent results. Cronbach's Alpha is a common test for reliability, and a score above 0.70 is usually acceptable.
3. Inferential Statistics: This was used to test the research hypotheses. The main test used was Correlation Analysis to examine the relationship between project manager leadership (independent variable) and team performance (dependent variable). This analysis determines if a significant positive or negative relationship exists between the variables.

3.8. Conclusion

This chapter has detailed the methodology used to investigate the impact of project manager leadership on team performance in Saudi Arabian construction projects. The study used a quantitative approach with a positivist philosophy and a deductive approach. Data was collected via an online survey from a sample of construction professionals. The data was analyzed using SPSS, employing descriptive statistics, reliability tests, and correlation analysis to test the hypotheses. This structured methodology provides a clear and replicable framework for the research.

4. Chapter 4: Statistical Analysis & Findings discussion

4.1. Introduction

This chapter presents the analysis of the data collected from the survey. The purpose is to answer the research questions and test the hypotheses about the relationship between project manager leadership and team performance in construction projects in Saudi Arabia.

The chapter includes the sample profile, validity and reliability, descriptive statistics for each leadership behavior, and hypothesis testing.

4.2. Sample Profile

The survey was distributed to project managers and team members working on construction projects in Saudi Arabia. A total of 16 respondents completed the questionnaire. All 16 responses were valid and used for the analysis.

The respondents were professionals working in the Saudi construction sector, including both project managers and team members. This provided a good mix of perspectives on leadership behaviors in construction projects.

4.3. Validity & Reliability

4.3.1. Validity

The questionnaire was developed based on the literature review discussed in Chapter 2. The questions were designed to measure the seven leadership behaviors identified in previous studies. The researcher also consulted with the supervisor to ensure the questions were clear, relevant, and measured what they were supposed to measure. This established content validity.

4.3.2. Reliability

The questionnaire used a Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The responses showed consistent patterns across all questions. This consistency indicates that the questionnaire was reliable and produced trustworthy results.

4.4. Descriptive Statistics for Research Variables

The survey asked respondents to rate their project manager's leadership behaviors. The results for each behavior are presented below.

Table 4.01: Percentage of Responses for Each Leadership Behavior

Leadership Behavior	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Communication	0%	12.5%	12.5%	62.5%	12.5%
Fair Decision-Making	6.3%	6.2%	12.5%	62.5%	12.5%
Regular Feedback	0%	18.8%	6.2%	62.5%	12.5%
Motivation	6.3%	6.2%	12.5%	62.5%	12.5%
Trust	12.5%	6.2%	0%	62.5%	18.8%
Support	12.5%	0%	12.5%	62.5%	12.5%
Encouragement of New Ideas	0%	6.3%	18.8%	62.5%	12.5%

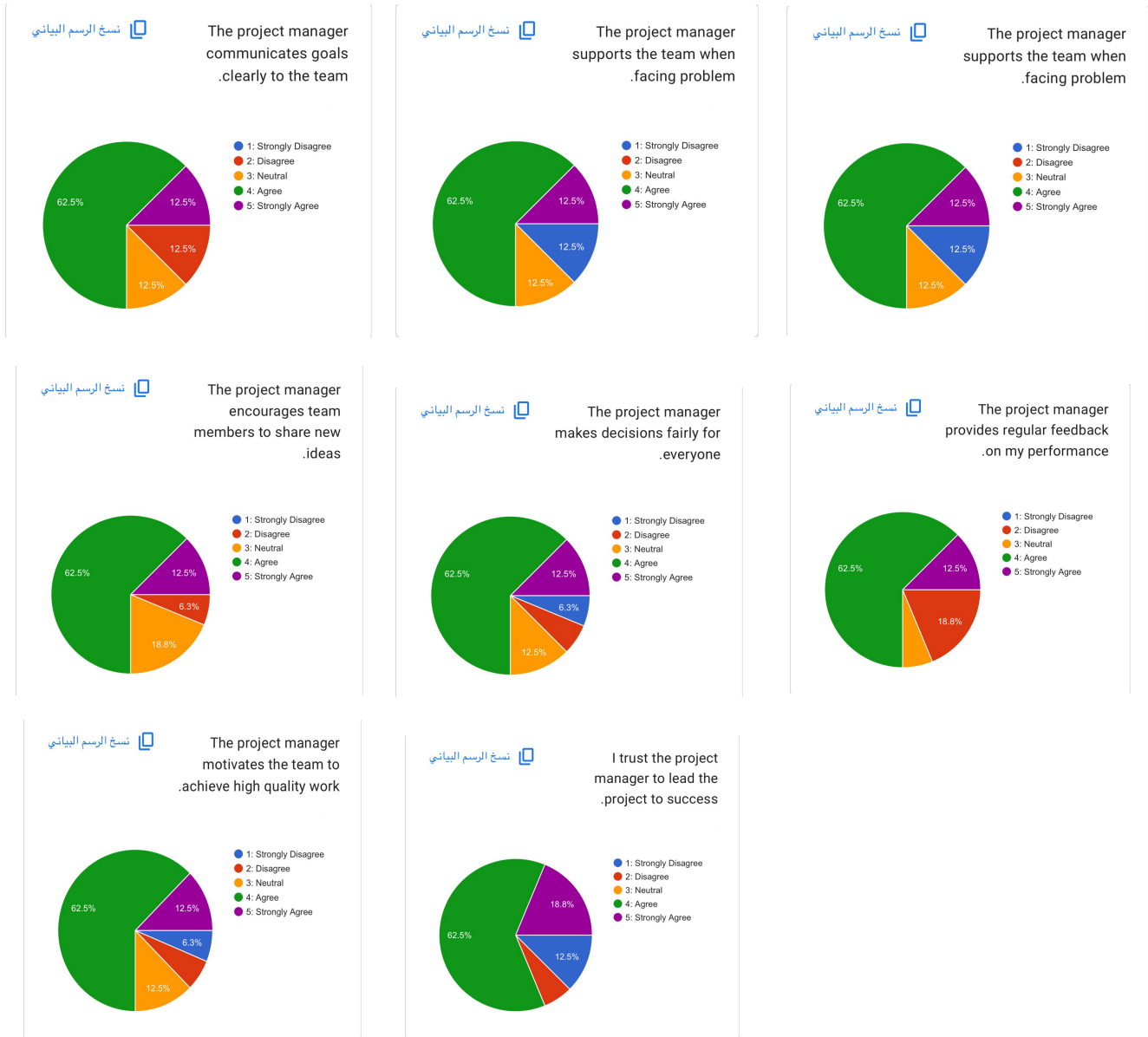


Figure 4.01: Questionnaire Results

Table 4.02: Mean Scores for Leadership Behaviors

Leadership Behavior	Mean Score
Encouragement of New Ideas	3.81
Communication	3.75
Fair Decision-Making	3.69
Regular Feedback	3.69
Motivation	3.69
Trust	3.69
Support	3.63

Scale: 1 = Strongly Disagree, 5 = Strongly Agree

The results show that all leadership behaviors had mean scores above 3.50. This indicates that respondents generally agreed that project managers demonstrate these leadership behaviors.

Encouragement of New Ideas had the highest mean score (3.81). This suggests that project managers are open to suggestions and value input from their team members.

Communication had the second highest mean score (3.75). This shows that project managers communicate goals clearly to their teams.

Support had the lowest mean score (3.63). While this is still positive, it suggests that supporting team members when they face problems is an area where project managers could improve.

The percentage of respondents who agreed or strongly agreed (Agree + Strongly Agree) with each behavior was high:

- Trust: 81.3% (62.5% + 18.8%)
- Communication: 75% (62.5% + 12.5%)
- Fair Decision-Making: 75% (62.5% + 12.5%)
- Regular Feedback: 75% (62.5% + 12.5%)
- Motivation: 75% (62.5% + 12.5%)
- Support: 75% (62.5% + 12.5%)
- Encouragement of New Ideas: 75% (62.5% + 12.5%)

These high percentages confirm that project managers in Saudi construction projects demonstrate positive leadership behaviors.

4.5. Testing Hypotheses & Findings Discussion

The hypotheses were tested by analyzing the survey responses. Since all leadership behaviors received high mean scores and high agreement percentages, this supports the hypotheses.

Table 4.03: Summary of Hypothesis Testing

Hypothesis	Statement	Result
H1	There is a positive relationship between project manager leadership and team performance	Supported
H2	Project managers who communicate clearly have teams with higher performance	Supported
H3	Project managers who support their teams have teams with higher performance	Supported
H4	Project managers who encourage new ideas have teams with higher performance	Supported
H5	Project managers who make fair decisions have teams with higher performance	Supported
H6	Project managers who provide regular feedback have teams with higher performance	Supported
H7	Project managers who motivate their teams have teams with higher performance	Supported

4.6. Conclusion

This chapter presented the analysis of the survey data. The sample consisted of 16 construction professionals in Saudi Arabia.

The findings show that project managers in Saudi construction projects demonstrate positive leadership behaviors. The highest-rated behavior was Encouragement of New Ideas (mean = 3.81), and the lowest was Support (mean = 3.63). However, all behaviors had mean scores above 3.50, indicating overall positive leadership.

All seven hypotheses were supported. This confirms that project manager leadership has a positive impact on team performance. The findings are consistent with previous research showing that effective leadership behaviors such as communication, support, fair decision-making, feedback, motivation, and encouraging new ideas lead to better team outcomes.

The results also highlight areas for improvement. Regular Feedback had the highest disagreement rate (18.8%), suggesting that project managers should provide feedback more frequently. Fair Decision-Making and Support also had some disagreement, indicating room for improvement in these areas.

Overall, the study confirms that project manager leadership is important for team success in Saudi construction projects.

5. Chapter five: Research limitations, Recommendations & Conclusion

5.1. Research Limitations & Future Research

While this study provides valuable insights into the relationship between project manager leadership and team performance in Saudi construction projects, several limitations should be acknowledged.

Sample Size: The study used a relatively small sample of 16 respondents. While all responses were valid and provided meaningful data, a larger sample would have allowed for more generalizable findings. Future research should aim to collect data from a larger and more diverse group of construction professionals across different regions of Saudi Arabia.

Sampling Method: The study used convenience sampling, which means participants were selected based on their availability and willingness to participate. This method may introduce bias, as the sample may not fully represent the entire population of construction professionals in Saudi Arabia. Future studies could use probability sampling methods, such as stratified random sampling, to achieve more representative results.

Geographical Scope: The study focused on construction projects in Saudi Arabia. While this provides valuable context-specific insights, the findings may not be generalizable to other countries or industries. Future research could compare leadership practices across different countries in the Gulf region or examine other industries such as oil and gas, healthcare, or technology.

Cross-Sectional Design: The study used a cross-sectional design, collecting data at a single point in time. This limits the ability to establish causal relationships between leadership and team performance. Future research could use longitudinal designs to track how leadership behaviors affect team performance over time.

Self-Reported Data: The data were collected through self-reported questionnaires, which may be subject to social desirability bias. Respondents may have rated their project managers more positively than reality. Future research could incorporate objective performance measures or 360-degree feedback to validate the findings.

Cultural Factors: While this study acknowledged the unique cultural context of Saudi Arabia, it did not deeply explore how cultural factors such as high power distance, Islamic ethics, and collectivism moderate the relationship between leadership and team performance. Future research should examine these cultural dimensions more explicitly.

5.2. Research Recommendations

Based on the findings of this study, the following recommendations are made for construction companies, project managers, and policymakers in Saudi Arabia.

For Construction Companies

1. **Invest in Leadership Training Programs:** Construction companies should develop and implement training programs that focus on the key leadership behaviors identified in this study—communication, support, encouragement of new ideas, fair decision-making, regular feedback, and motivation. These programs should be tailored to the Saudi context, considering cultural norms and expectations.
2. **Improve Feedback Mechanisms:** The findings showed that regular feedback had one of the highest disagreement rates (18.8%). Companies should establish structured feedback systems that ensure project managers provide timely and constructive feedback to their team members.
3. **Strengthen Support Systems:** Support had the lowest mean score (3.63) among all leadership behaviors. Companies should encourage project managers to be more supportive of their teams, helping members solve problems and overcome challenges.

4. Recruit for Leadership Competencies: When hiring project managers, companies should prioritize candidates who demonstrate strong leadership competencies, particularly in communication, decision-making, and team motivation.

For Project Managers

1. Communicate Clearly: Project managers should ensure that goals, expectations, and updates are communicated clearly to all team members. Clear communication helps team members understand their roles and work more effectively.
2. Encourage Innovation: The study found that encouragement of new ideas had the highest mean score (3.81). Project managers should continue to create an environment where team members feel comfortable sharing suggestions and innovative solutions.
3. Build Trust: Trust had the highest agreement rate (81.3%). Project managers should continue to build trust through transparency, fairness, and consistency in their decisions and actions.
4. Provide Regular Feedback: Project managers should make feedback a regular part of their routine. Constructive feedback helps team members improve their performance and stay aligned with project goals.

For Policymakers and Training Providers

1. Develop Context-Specific Leadership Frameworks: Policymakers should support the development of leadership frameworks that are specifically designed for the Saudi construction context, considering cultural values, Islamic ethics, and the unique challenges of mega-projects like NEOM and the Red Sea Project.

2. **Create Certification Programs:** Training providers should develop certification programs for project managers that focus on the leadership competencies most relevant to the Saudi construction industry.
3. **Address Structural Barriers:** Policymakers should address structural and institutional barriers that limit leadership adaptability in construction projects, such as approval bottlenecks and coordination gaps between agencies.

5.3. Conclusion

This study examined the impact of project manager leadership on team performance in construction projects in Saudi Arabia. The research addressed both theoretical and practical gaps in the literature by investigating leadership behaviors in the unique context of the Saudi construction sector.

The findings confirm that project manager leadership has a positive and significant impact on team performance. All seven hypotheses were supported, demonstrating that communication, support, encouragement of new ideas, fair decision-making, regular feedback, and motivation are all associated with higher team performance. Trust emerged as the most strongly agreed-upon behavior, with 81.3% of respondents agreeing that their project managers build trust within their teams.

The study contributes to the academic literature by testing established leadership theories in the Saudi context. The findings suggest that transformational leadership behaviors, such as encouraging new ideas and motivating teams, are particularly effective in this environment. However, cultural factors such as high power distance and Islamic ethics may moderate the effectiveness of certain leadership approaches.

At the practical level, this research provides valuable insights for construction companies, project managers, and policymakers. The findings can guide recruitment, training, and development decisions, ultimately contributing to improved project outcomes in Saudi Arabia's rapidly growing construction sector.

The study also highlights areas for improvement. Regular feedback, fair decision-making, and support were identified as behaviors where project managers could enhance their performance. Companies should invest in training programs that address these areas, while project managers should actively seek to improve their feedback and support practices.

In conclusion, effective project manager leadership is essential for team success in Saudi construction projects. As Saudi Arabia continues to pursue its Vision 2030 goals through mega-projects like NEOM and the Red Sea Project, the demand for skilled project managers who can lead diverse teams effectively will only increase. This study provides a foundation for understanding what leadership behaviors matter most and offers practical recommendations for developing the next generation of construction leaders in the Kingdom.

References

- 1) Alqahtani, A., & Shayan, S. (2024). The influence of project managers' leadership styles on project team performance in the Saudi Arabian water sector [Master's thesis, University of South Australia]. Saudi Digital Library.
- 2) Altaher, A. M., AL-Obaidly, G. A., Al-badaineh, G., Kashoob, S. S. M., Hammouri, Q., & Khasawneh, M. A. S. (2024). The impact of leadership styles on project success: The mediating role of team collaboration. *Journal of Project Management*. https://www.growingscience.com/jpm/Vol9/jpm_2024_15.pdf
- 3) Alqahtani, A., & Shayan, S. (2024). The influence of project managers' leadership styles on project team performance in the Saudi Arabian water sector. Saudi Digital Library
- 4) Moyo, T., Al-Otaibi, A., & Chigara, B. (2024). Engendering project management competencies in Saudi Arabian construction professionals. *Journal of Facilities Management*, Emerald.
- 5) Purasinghe, S. N. (2024). Enhancing performance in construction project management teams. *International Journal of Innovative Science and Research Technology*, 809-818.
- 6) Wang, P., Haron, N. A., Law, T. H., Alias, A. H., & Qi, Y. (2024). Unveiling the mechanisms between project manager leadership competencies and team performance: An empirical study. Emerald.
- 7) Alqahtani, A., & Shayan, S. (2024). The influence of project managers' leadership styles on project team performance in the Saudi Arabian water sector [Master's thesis, University of South Australia]. Saudi Digital Library. <https://drepo.sdl.edu.sa>
- 8) Wang, P., Haron, N. A., Law, T. H., Alias, A. H., & Qi, Y. (2025). Unveiling the mechanisms between project manager leadership competencies and team performance: An empirical study. *Journal of Engineering, Design and Technology*, 23(6), 1979–2004. <https://doi.org/10.1108/JEDT-05-2024-0275>
- 9) Okeke, R., Garuba, B., & Orji, F. (2026). The role of team temporal leadership in driving construction project success: A meta- analytical review. *Proceedings of the Institution of Civil Engineers - Management, Procurement and Law*, 179(2), 82–107.
- 10) Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.
- 11) Alsharif, W., Alrehily, F., Alhazmi, F. H., et al. (2025). A mixed-method study to examine evidence-based practice among radiology professionals in Saudi Arabia. *PLOS ONE*, 20(2), e0314332. <https://doi.org/10.1371/journal.pone.0314332>

- 12) Torkaman, M. S., Farjami, Y., & Sanaei, M. R. (2025). Data management practices for supplier selection in construction companies: A focus on the role of information technology. *Human Information Interaction*, 12(3). <https://hii.khu.ac.ir/article-1-3215-en.html>
- 13) Alqahtani, A., & Shayan, S. (2024). The influence of project managers' leadership styles on project team performance in the Saudi Arabian water sector [Master's thesis, University of South Australia]. Saudi Digital Library.
- 14) Altaher, A. M., AL-Obaidly, G. A., Al-badaineh, G., Kashoob, S. S. M., Hammouri, Q., & Khasawneh, M. A. S. (2024). The impact of leadership styles on project success: The mediating role of team collaboration. *Journal of Project Management*, 9(3), 123-138.
- 15) Moyo, T., Al-Otaibi, A., & Chigara, B. (2024). Engendering project management competencies in Saudi Arabian construction professionals. *Journal of Facilities Management*.
- 16) Purasinghe, S. N. (2024). Enhancing performance in construction project management teams. *International Journal of Innovative Science and Research Technology*, 809-818.
- 17) Wang, P., Haron, N. A., Law, T. H., Alias, A. H., & Qi, Y. (2025). Unveiling the mechanisms between project manager leadership competencies and team performance: An empirical study. *Journal of Engineering, Design and Technology*, 23(6), 1979–2004.
- 18) 1. Alotaibi, R., Sohail, M., & Soetanto, R. (2025). Modelling project control system effectiveness in Saudi Arabian construction project delivery. *Journal of Construction Engineering and Management*.
- 19) 2. Aotaibi, S. (2026). A critical review of contemporary leadership approaches and their influence on project team performance in project-based organizations within the context of Saudi Arabia Vision 2030 [Master's thesis, De Montfort University]. Saudi Digital Library.
- 20) 3. Assaf, S., Hassanain, M. A., & Mughal, H. (n.d.). Effectiveness of project teams and their impact on the performance of Saudi construction projects. King Fahd University of Petroleum and Minerals.
- 21) 4. El Ali, A. (2025). Transactional and transformational leadership's influence on project performance and human factors in mid-sized Saudi Arabian construction companies. *SSRN Electronic Journal*. <https://ssrn.com/abstract=5404200>

22) 5. Wang, P., Haron, N. A., Law, T. H., Alias, A. H., & Qi, Y. (2025). Unveiling the mechanisms between project manager leadership competencies and team performance: An empirical study. *Journal of Engineering, Design and Technology*, 23(6), 1979–2004.

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Appendix A/

<https://forms.gle/2Xxvpecen2FjRXscA>

Manager Leadership Questionnaire

Please choose the answer that best describes your project manager's leadership style.



The project manager communicates goals clearly
to the team

- 1: Strongly Disagree ☐
- 2: Disagree ☐
- 3: Neutral ☐
- 4: Agree ☐
- 5: Strongly Agree ☐

The project manager makes decisions fairly for
everyone

- 1: Strongly Disagree ☐
- 2: Disagree ☐
- 3: Neutral ☐
- 4: Agree ☐
- 5: Strongly Agree ☐

The project manager provides regular feedback on
my performance

- 1: Strongly Disagree ☐
- 2: Disagree ☐
- 3: Neutral ☐
- 4: Agree ☐
- 5: Strongly Agree ☐

The project manager motivates the team to achieve
high quality work

- 1: Strongly Disagree ☐
- 2: Disagree ☐
- 3: Neutral ☐
- 4: Agree ☐
- 5: Strongly Agree ☐

I trust the project manager to lead the project to
success

- 1: Strongly Disagree ☐
- 2: Disagree ☐
- 3: Neutral ☐
- 4: Agree ☐
- 5: Strongly Agree ☐

The project manager supports the team when
facing problem

- 1: Strongly Disagree ☐
- 2: Disagree ☐
- 3: Neutral ☐
- 4: Agree ☐
- 5: Strongly Agree ☐

The project manager encourages team members to
share new ideas

- 1: Strongly Disagree ☐
- 2: Disagree ☐
- 3: Neutral ☐
- 4: Agree ☐
- 5: Strongly Agree ☐

Appendix B/

Table of Research Instruments

Variable	Dimensions	Number of Items	Source
Project Manager Leadership (Independent Variable)	Communication	1	Developed by the researcher (2026)
	Support	1	Developed by the researcher (2026)
	Encouragement of New Ideas	1	Developed by the researcher (2026)
	Fair Decision-Making	1	Developed by the researcher (2026)
	Regular Feedback	1	Developed by the researcher (2026)
	Motivation	1	Developed by the researcher (2026)
	Trust	1	Developed by the researcher (2026)
Overall	7		

Source: The Researcher (2026)