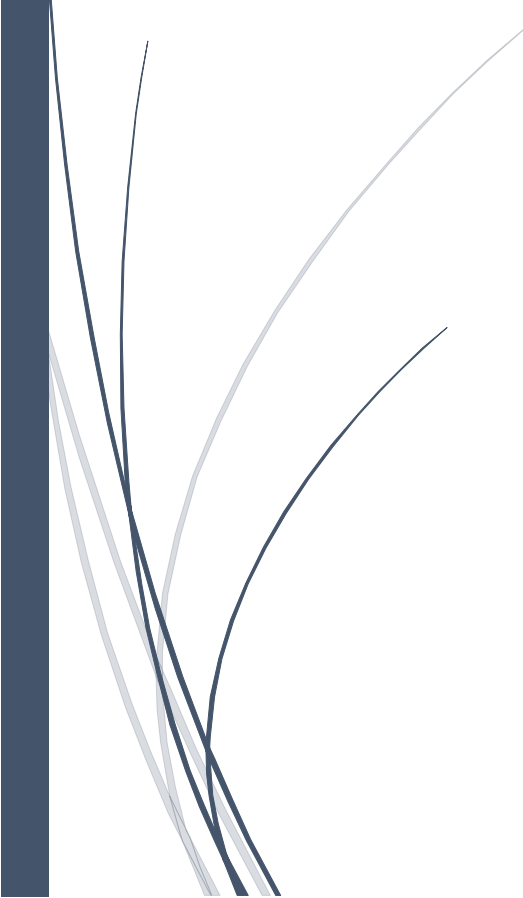




# Final Project 2

PMG 497

## Project Template



**Midocean University**

**Faculty of Management**

**Department/ Specialization .....**



**Project title**

**Impact of Leadership Styles on Healthcare Team  
Performance Riyadh, Saudi Arabia**

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**Date of submission – number of Semester**

**07/11/2025**

## **Acknowledgment**

## **Dedication**

# **Abstract**

**Purpose:**

**Methodology:**

**Findings:**

**Originality & Implication:**

***Keywords:***

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## **List of Tables:**

### **1. Chapter 1: Introduction**

## **1.1. Research Background**

Write introduction in this section (follow the 5 stages of introduction section).

Not less than 3 pages

This section includes ONLY paragraphs

## **1.2. Research Problem**

Write brief introduction to this section (paragraph)

This section divided into two sub-sections

### **1.2.1. Theoretical Gaps**

### **1.2.2. Practical Gaps**

This section ends with the main research question

## **1.3. Research Significance**

In this section, the student should clarify the importance of the study at the theoretical level, and the empirical level

**1.3.1. At the theoretical level**

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**1.4. Research Questions**

**1.5. Research Objectives**

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## **1.7. Research Model**

## **1.8. Scope of The Study**

## **1.9. The Project Structure**

## **2.Chapter 2: Literature Review**

## **2.1. Introduction**

Brief introduction for the chapter

## **2.2. The independent variable**

## **2.3. The dependent variable**

## **2.4. The relationship between the independent and the dependent variables**

## **2.5. Conclusion**

### **3. Chapter 3: Research Methodology**

### **3.1. Introduction**

This research methodology outlines a comprehensive approach to investigating the impact of leadership styles on healthcare team performance in Riyadh, Saudi Arabia. The study is designed to provide empirical evidence on how different leadership approaches influence team effectiveness, patient care quality, staff satisfaction, and organizational outcomes within the unique context of Saudi Arabian healthcare institutions.

The methodology integrates quantitative and qualitative approaches to capture the multifaceted nature of leadership dynamics in healthcare settings. Special consideration has been given to the cultural, organizational, and regulatory context of Saudi Arabia's healthcare system, including alignment with Vision 2030 healthcare transformation initiatives.

### 3.2. Operational definitions for research variables

This section provides precise operational definitions for all key variables in the study, specifying conceptual definitions, measurement instruments, scaling, scoring, and interpretation guidelines.

#### **Independent Variables: Leadership Styles**

##### **Transformational Leadership**

**Conceptual Definition:** A leadership approach characterized by inspiring and motivating followers to transcend self-interest for the good of the organization, transforming followers' values, attitudes, and beliefs to achieve exceptional outcomes.

**Operational Definition:** Measured using the Multifactor Leadership Questionnaire (MLQ-5X) transformational leadership subscales, consisting of 20 items across four dimensions:

- Idealized Influence (Attributed & Behavioral): Leader exhibits exemplary behavior, earns trust and respect, demonstrates high moral and ethical standards (5 items)
- Inspirational Motivation: Leader articulates an appealing vision, communicates high expectations, expresses optimism about goal achievement (5 items)
- Intellectual Stimulation: Leader challenges assumptions, encourages innovation and creativity, solicits followers' ideas (5 items)
- Individualized Consideration: Leader attends to individual needs, acts as mentor/coach, develops followers' potential (5 items)

**Measurement Scale:** 5-point Likert scale: 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always

**Scoring:** Total score range: 0-80. Mean score calculated by summing all items and dividing by 20. Higher scores indicate greater transformational leadership behavior.

**Interpretation:** Low (0-1.5), Moderate (1.6-2.5), High (2.6-4.0)

### **Transactional Leadership**

**Conceptual Definition:** A leadership style based on exchange relationships where leader and followers engage in mutually beneficial transactions, with compliance obtained through rewards for achievement and corrective action for deviations.

**Operational Definition:** Measured using MLQ-5X transactional leadership subscales, consisting of 8 items across two dimensions:

- Contingent Reward: Leader clarifies expectations, establishes agreements about rewards for goal attainment, provides recognition when objectives are achieved (4 items)
- Management-by-Exception (Active): Leader actively monitors performance, watches for deviations from standards, takes corrective action (4 items)

**Measurement Scale:** 5-point Likert scale (0-4 as above)

**Scoring:** Total score range: 0-32. Mean score: sum/8. Higher scores indicate greater transactional leadership. Interpretation: Low (0-1.5), Moderate (1.6-2.5), High (2.6-4.0)

## **Laissez-Faire Leadership**

**Conceptual Definition:** Passive, avoidant non-leadership characterized by absence of intervention, abdication of responsibility, delay in decision-making, and failure to follow up on requests.

**Operational Definition:** Measured using MLQ-5X laissez-faire subscale, 4 items assessing leader's avoidance of involvement, delay in responding to urgent questions, and absence when needed.

**Measurement Scale:** 5-point Likert scale (0-4 as above)

**Scoring:** Score range: 0-16. Mean score: sum/4. Higher scores indicate greater laissez-faire behavior (generally associated with less effective leadership).

Interpretation: Low (0-1.0), Moderate (1.1-2.0), High (2.1-4.0)

### 3.2 Dependent Variables: Team Performance Measures

#### 3.2.1 Team Productivity

**Conceptual Definition:** The efficiency with which a healthcare team converts inputs (time, resources, effort) into outputs (patient care services, completed tasks, achieved goals).

**Operational Definition:** Composite measure consisting of:

#### **A. Subjective Productivity Assessment:**

- 6-item Team Productivity Scale assessing perceived efficiency, task completion rate, time management, resource utilization, goal achievement, and workflow optimization
- Measurement: 6-point Likert scale (1 = Strongly disagree to 6 = Strongly agree)

- Scoring: Total range 6-36; Mean range 1-6. Higher scores indicate greater productivity. Interpretation: Low (<3.0), Moderate (3.0-4.5), High (>4.5)

## **B. Objective Productivity Metrics:**

- Patient throughput: Average number of patients served per shift/day
- Procedure completion time: Average time to complete standard procedures
- Bed turnover rate: Number of patient admissions per available bed per month (for inpatient units)
- Documentation completion rate: Percentage of medical records completed within required timeframe

### 3.2.2 Quality of Care

**Conceptual Definition:** The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge and standards.

**Operational Definition:** Multi-dimensional composite measure including:

#### **A. Clinical Quality Indicators (from organizational records):**

- Hospital-acquired infection rate: Percentage of patients developing infections during hospitalization (lower is better)
- Medication error rate: Number of medication errors per 1,000 patient days (lower is better)
- 30-day readmission rate: Percentage of patients readmitted within 30 days of discharge (lower is better)
- Clinical protocol adherence: Percentage compliance with evidence-based clinical guidelines (0-100%, higher is better)

#### **B. Patient Satisfaction:**

- Mean patient satisfaction score from institutional surveys

- Scale: 1-5 where 1 = Very dissatisfied, 5 = Excellent. Scores >4.0 indicate high satisfaction
- **Team Cohesion**

**Conceptual Definition:** The extent to which team members are attracted to the group, motivated to remain in the group, and mutually influenced by one another, characterized by unity, trust, and commitment to shared goals.

**Operational Definition:** Measured using adapted Team Cohesion Scale, 8 items across three dimensions:

- Social Attraction: Interpersonal liking and social bonds (3 items)
- Task Integration: Unity around work tasks and goals (3 items)

**Measurement Scale:** 7-point Likert scale (1 = Strongly disagree to 7 = Strongly agree)

**Scoring:** Total range: 8-56. Mean range: 1-7. Higher scores indicate greater cohesion. Interpretation: Low (<3.5), Moderate (3.5-5.5), High (>5.5)

## **Team Innovation**

**Conceptual Definition:** The team's capacity to generate novel and useful ideas, implement improvements and changes, and adapt effectively to challenges and opportunities.

**Operational Definition:** Measured using Team Innovation Scale (TIS), 10 items across three dimensions:

- Idea Generation: Creative problem-solving and novel solutions (4 items)

- Implementation: Putting new ideas into practice (3 items)
- Adaptability: Flexibility and responsiveness to change (3 items)

**Measurement Scale:** 5-point Likert scale (1 = Never to 5 = Very frequently)

**Scoring:** Total range: 10-50. Mean range: 1-5. Higher scores indicate greater innovation. Interpretation: Low (<2.5), Moderate (2.5-3.5), High (>3.5)

### **Patient Safety Culture**

**Conceptual Definition:** The product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine commitment to, and the style and proficiency of, an organization's health and safety management.

**Operational Definition:** Measured using Hospital Survey on Patient Safety Culture (HSOPSC), 42 items across 12 composites:

- Communication openness, Feedback and communication about errors, Frequency of events reported, Handoffs and transitions, Management support for patient safety, Non-punitive response to errors, Organizational learning, Overall perceptions of patient safety, Staffing, Supervisor/manager expectations and actions, Teamwork across units, Teamwork within units

**Measurement Scale:** 5-point Likert scales (Strongly disagree to Strongly agree; Never to Always)

**Scoring:** Calculated as percentage of positive responses (0-100%). Scores: Weak (<50%), Moderate (50-74%), Strong ( $\geq 75\%$ )

### **Mediating Variables**

### **Job Satisfaction**

**Conceptual Definition:** A positive emotional state resulting from the appraisal of one's job or job experiences, encompassing satisfaction with various facets of work.

**Operational Definition:** Measured using Job Satisfaction Survey (JSS), 36 items across 9 facets: Pay (4), Promotion (4), Supervision (4), Fringe Benefits (4), Contingent Rewards (4), Operating Procedures (4), Coworkers (4), Nature of Work (4), Communication (4).

**Measurement Scale:** 6-point Likert scale (1 = Disagree very much to 6 = Agree very much)

**Scoring:** Total range: 36-216. Interpretation: Dissatisfied (<108), Ambivalent (108-144), Satisfied (>144)

### **Work Engagement**

**Conceptual Definition:** A positive, fulfilling, work-related state of mind characterized by vigor (high energy), dedication (strong involvement), and absorption (full concentration).

**Operational Definition:** Measured using Utrecht Work Engagement Scale (UWES-17): Vigor (6 items), Dedication (5 items), Absorption (6 items).

**Measurement Scale:** 7-point frequency scale (0 = Never to 6 = Always/Every day)

**Scoring:** Mean scores calculated. Interpretation: Very low (<2.0), Low (2.0-2.99), Average (3.0-3.99), High (4.0-4.99), Very high ( $\geq 5.0$ )

### **Organizational Commitment**

**Conceptual Definition:** The psychological bond between an employee and organization, manifested in desire to remain (affective), perceived costs of leaving (continuance), and sense of obligation (normative).

**Operational Definition:** Measured using Three-Component Model scale: Affective Commitment (6 items), Continuance Commitment (6 items), Normative Commitment (6 items).

**Measurement Scale:** 7-point Likert scale (1 = Strongly disagree to 7 = Strongly agree)

**Scoring:** Mean scores per component (range 1-7). Interpretation: Low (<3.0), Moderate (3.0-4.9), High ( $\geq 5.0$ )

## **Moderating Variables**

### **Organizational Culture**

**Conceptual Definition:** Shared values, beliefs, assumptions, and practices that characterize an organization and guide member behavior.

**Operational Definition:** Measured using Organizational Culture Assessment Instrument (OCAI) based on Competing Values Framework. Respondents distribute 100 points across four culture types for six dimensions: Dominant Characteristics, Organizational Leadership, Management of Employees, Organizational Glue, Strategic Emphases, Criteria of Success.

### **Culture Types:**

- Clan: Collaborative, family-like (flexibility & internal focus)

- Adhocracy: Entrepreneurial, innovative (flexibility & external focus)
- Market: Competitive, results-oriented (control & external focus)
- Hierarchy: Structured, formalized (control & internal focus)

**Scoring:** Average scores calculated for each culture type (0-100). Dominant culture is highest score.

### **Team Size**

**Conceptual Definition:** The number of individuals comprising a work team.

**Operational Definition:** Total number of full-time equivalent (FTE) staff members in the team. Categories: Small ( $\leq 5$ ), Medium (6-10), Large (11-15), Very Large ( $> 15$ ).

### **Years of Experience**

**Conceptual Definition:** Duration of professional work in healthcare.

**Operational Definition:** Self-reported total years working in healthcare profession. Categories: Early career (0-5), Mid-career (6-10), Experienced (11-15), Veteran ( $> 15$ ).

### **Control Variables**

**Demographic Controls:** Age (continuous, years), Gender (Male/Female), Nationality (Saudi/Non-Saudi), Education (Diploma/Bachelor/Master/Doctorate), Professional Category (Physician/Nurse/Allied Health/Administrative).

**Organizational Controls:** Facility Type (Public/Private), Facility Size (Small  $< 100$  beds/Medium 100-300/Large  $> 300$ ), Healthcare Level (Primary/Secondary/Tertiary), Accreditation Status (CBAHI/JCI/Both/None).

### 3.6 Outcome Variables

- Staff Turnover Intention: Turnover Intention Scale (TIS-6), 7-point Likert, range 6-42
- Actual Turnover Rate:  $(\text{Employees who left} / \text{Average employees}) \times 100$ , past 12 months
- Absenteeism Rate:  $(\text{Unscheduled absence days} / \text{Total scheduled days}) \times 100$ , past 6 months

### 3.3. Research design (research onion)



### **3.4. Research population & Sampling methods and technique**

Target Population: Healthcare leaders and team members in public, private, and specialized healthcare institutions in Riyadh, Saudi Arabia.

Sampling Strategy: Multi-stage stratified sampling approach:

1. Institutional Level: Stratified sampling of 15 healthcare institutions representing:
  - Public hospitals (5 institutions)
  - Private hospitals (5 institutions)
  - Specialized medical centers (3 institutions)
  - Primary healthcare centers (2 institutions)
2. Leadership Level: Purposive sampling of 200+ healthcare leaders including:
  - Senior executives and department heads
  - Middle management and supervisors
  - Team leaders and charge nurses
  - Both Saudi nationals and expatriate professionals
3. Team Member Level: Systematic random sampling of 1000+ healthcare professionals:
  - Physicians across various specialties
  - Registered nurses and nursing assistants
  - Allied health professionals

- Administrative and support staff

#### **Inclusion Criteria:**

- Healthcare institutions operating in Riyadh for minimum 3 years
- Leaders with minimum 2 years experience in current position
- Team members with minimum 1 year tenure in current organization
- Willingness to participate in multiple data collection phases

### **3.5. Data collection method**

#### **Quantitative Data Collection:**

1. Leadership Style Assessment: Modified Multifactor Leadership Questionnaire (MLQ-5X) adapted for Saudi cultural context, including additional scales for cultural leadership behaviors
2. Team Performance Measures:
  - Productivity metrics (patient throughput, case completion rates)
  - Quality indicators (patient safety scores, clinical outcomes)
  - Team satisfaction surveys (job satisfaction, organizational commitment)
  - Innovation measures (process improvements, technology adoption)
  - Retention data (turnover rates, absenteeism)

3. Cultural Assessment: Saudi Cultural Values Scale and Islamic Work Ethics Scale
4. Organizational Context Measures: Vision 2030 transformation stage assessment, digital maturity index, organizational culture inventory

**Qualitative Data Collection:**

1. Semi-structured Interviews: 60-90 minute interviews with selected leaders and team members exploring leadership experiences, cultural factors, and transformation challenges
2. Focus Groups: 8-10 participant discussions examining team dynamics, cultural influences, and leadership preferences across different professional groups
3. Ethnographic Observations: Structured observations of leadership behaviors, team interactions, and cultural practices in healthcare settings

Document Analysis: Review of organizational policies, Vision 2030 implementation plans, performance reports, and cultural artifacts

### **3.6. Types of data**

This study will collect multiple types of data from various sources to comprehensively examine the research questions. Data types are classified based on source, nature, and collection timing.

## 5.1 Primary Data

Primary data are collected directly by the researcher specifically for this study's objectives.

### 5.1.1 Quantitative Primary Data

#### **Survey Responses:**

- Leadership style ratings (MLQ-5X responses)
- Self-reported team performance measures
- Job satisfaction scores (JSS)
- Work engagement levels (UWES)
- Organizational commitment ratings
- Organizational culture assessments (OCAI)
- Patient safety culture perceptions (HSOPSC)
- Demographic and professional characteristics

#### **Data Characteristics:**

- Nature: Numerical, structured, standardized
- Scale types: Ordinal (Likert scales), Nominal (categorical variables), Ratio (age, years of experience)
- Analysis: Statistical analysis, suitable for hypothesis testing and generalization

### 5.1.2 Qualitative Primary Data

#### **Interview Data:**

- Audio-recorded semi-structured interviews with healthcare leaders

- Verbatim transcripts of interview conversations
- Field notes on non-verbal cues, context, observations

### **Focus Group Data:**

- Audio-recorded focus group discussions
- Complete transcripts of group interactions
- Moderator notes on group dynamics, dominant voices, consensus/disagreement

### **Data Characteristics:**

- Nature: Textual, narrative, rich descriptions
- Format: Unstructured to semi-structured
- Analysis: Thematic analysis, suitable for understanding meanings, experiences, contexts

### **Secondary Data**

Secondary data are collected from existing organizational records and were not originally generated for this research.

### **Organizational Performance Records**

- Patient satisfaction scores from institutional surveys (past 12 months)
- Clinical quality indicators: Hospital-acquired infection rates, Medication error rates, 30-day readmission rates, Protocol adherence rates
- Human resources data: Staff turnover rates (voluntary departures), Absenteeism records (unscheduled absences), Tenure and demographic information
- Patient safety incident reports

### **Data Characteristics:**

- Nature: Quantitative, archival, objective measures
- Advantages: Unbiased by respondent perceptions, longitudinal availability
- Limitations: May have missing data, standardization varies across facilities
- Use: Triangulation with primary data to validate performance measures

### 5.2.2 Documentary Data

- Organizational policies and procedures manuals
- Job descriptions and organizational charts
- Accreditation reports and quality assessments
- Leadership development and training materials

#### **Purpose:**

- Provide contextual background for qualitative analysis
- Understand formal organizational structures and expectations
- Triangulate with interview data about leadership practices
- **Data Classification Summary**

| Data Type              | Source                   | Nature                | Analysis Method      |
|------------------------|--------------------------|-----------------------|----------------------|
| Primary Quantitative   | Survey responses         | Numerical, structured | Statistical analysis |
| Primary Qualitative    | Interviews, Focus groups | Textual, narrative    | Thematic analysis    |
| Secondary Quantitative | Organizational records   | Numerical, archival   | Statistical analysis |

| <b>Data Type</b>         | <b>Source</b>               | <b>Nature</b>   | <b>Analysis Method</b> |
|--------------------------|-----------------------------|-----------------|------------------------|
| Secondary<br>Documentary | Organizational<br>documents | Textual, formal | Content analysis       |

## **Data Triangulation**

The study employs data triangulation—using multiple data sources and types to cross-validate findings and enhance credibility. Convergence of findings across quantitative surveys, qualitative interviews, and archival records strengthens confidence in conclusions. Divergent findings will be explored to understand contextual nuances and boundary conditions of relationships.

### **3.7. Statistical analysis procedures**

This section outlines comprehensive statistical procedures for analyzing quantitative data, including data preparation, descriptive analysis, assumptions testing, and advanced multivariate techniques.

## **Data Preparation and Screening**

Double-entry verification for 10% of paper surveys. Range and logic checks for all variables. Reverse coding of negatively worded items. Missing data analysis using Little's MCAR test. Missing data handling: Cases with >20% missing excluded; otherwise multiple imputation with 20 datasets. Outlier detection via Z-scores ( $|z| > 3.29$ ) and Mahalanobis distance. Data transformation as needed for normality.

## **Descriptive Statistics**

Frequencies and percentages for categorical variables. Means, standard deviations, ranges, skewness, and kurtosis for continuous variables. Histograms, Q-Q plots, boxplots for distribution assessment. Cross-tabulations for categorical relationships.

## **Psychometric Properties**

Reliability: Cronbach's alpha (target  $\geq 0.70$ ), item-total correlations, test-retest ICC with subsample ( $n=50$ ). Validity: Confirmatory Factor Analysis using AMOS. Model fit indices: CFI, TLI  $\geq 0.90$ , RMSEA  $\leq 0.08$ , SRMR  $\leq 0.08$ . Factor loadings  $\geq 0.40$ . Convergent validity: AVE  $\geq 0.50$ . Discriminant validity: AVE > squared correlations.

## **Assumptions Testing**

Normality: Shapiro-Wilk/Kolmogorov-Smirnov tests, visual inspection.

Homogeneity: Levene's test. Linearity: Scatterplots, partial regression plots.

Multicollinearity: VIF <10, tolerance >0.10. Independence: Durbin-Watson statistic (1.5-2.5 acceptable).

## **Inferential Statistics**

Correlation: Pearson's  $r$  or Spearman's  $\rho$  ( $\alpha=0.05$ ). Effect sizes: Small  $r=0.10-0.29$ , Medium  $r=0.30-0.49$ , Large  $r\geq 0.50$ . Regression: Simple, multiple, and hierarchical regression. Control variables entered first, then leadership styles, then interactions.  $R^2$ , adjusted  $R^2$ ,  $\beta$  coefficients, 95% CIs. ANOVA: One-way and MANOVA with post-hoc tests (Tukey HSD or Games-Howell). Effect sizes:  $\eta^2$  or  $\eta p^2$ .

## **Structural Equation Modeling**

CFA for measurement model, then structural model testing hypothesized relationships. Same fit indices as validity testing. Path coefficients with SEs and p-values.  $R^2$  for endogenous variables. Model comparison using  $\chi^2$  difference tests and information criteria (AIC, BIC).

## **Mediation Analysis**

Bootstrap approach using Hayes PROCESS macro. 5,000-10,000 bootstrap samples. Bias-corrected 95% CIs for indirect effects. Significant if CI excludes zero. Report total, direct, and indirect effects. Proportion mediated calculated.

## **Moderation Analysis**

Mean-center variables. Create interaction terms. Hierarchical regression with controls, main effects, then interactions. Simple slopes analysis at high/low

moderator levels if significant interaction. Johnson-Neyman technique for regions of significance.

## **Software and Significance**

Software: SPSS 28, AMOS 28, PROCESS macro, G\*Power 3.1. Significance:  $\alpha=0.05$  (two-tailed). Bonferroni or FDR correction for multiple comparisons. 95% CIs for all estimates. Effect sizes reported for all analyses. Power analysis:  $\alpha=0.05$ , power=0.80, medium effect.

### **3.8. Conclusion**

This comprehensive research methodology provides a rigorous framework for investigating the impact of leadership styles on healthcare team performance in Riyadh, Saudi Arabia. The mixed-methods approach will yield both quantitative evidence of relationships between leadership and performance, and qualitative insights into mechanisms and contextual factors unique to the Saudi healthcare environment.

The study's findings will contribute to the academic literature on healthcare leadership while providing practical guidance for healthcare organizations in Saudi Arabia. Results will support evidence-based leadership development initiatives aligned with Saudi Vision 2030's healthcare transformation goals and will inform policies and practices to enhance healthcare quality and workforce satisfaction.

By respecting cultural values, employing rigorous methods, and engaging diverse stakeholders, this research will generate credible, actionable knowledge to advance leadership effectiveness and team performance in Saudi Arabian healthcare settings.

## **4. Chapter 4: Statistical Analysis & Findings discussion**

#### **4.1. Introduction**

#### **4.2. Sample profile (descriptive statistics for research sample)**

#### **4.3. Validity & reliability tests for the questionnaires**

**4.4. Descriptive statistics for research variables (answer research questions)**

**4.5. Testing Hypotheses & Findings Discussion**

#### **4.6. Conclusion**

### **5. Chapter five: Research limitations, Recommendations & Conclusion**

## **5.1. Research Limitations & Future Research**

## **5.2. Research Recommendations**

## **5.3. Conclusion**

## **References**

## **Appendix**

