Natural Resources for Human Health
eISSN: 2583-1194

Original Research

Received 17 July 2026
Revised 15 Aug 2026
Accepted 27 Aug 2026

Natural Resources for Human Health 2026, Vol. 6 (19s): 210–225

KEYWORDS:
transformational leadership, transactional leadership, servant leadership, organizational identification, employee performance, Saudi Arabia

Effects of Transformational, Transactional, and Servant Leadership on Employee Performance in Hospitals Operated by the Ministry of National Guard–Health Affairs, Saudi Arabia: The Mediating Role of Organizational Identification

Meshal Gaber Alonze[1], Dr. Ahmad Alharbi[2], Dr. Mohamad Idrakisyah[3]

[1]Email. Abu_kayan@hotmail.com
[2]Deputy Executive Director Ambulatory Care Services
[3]Senior Lecturer

ABSTRACT: This study examined the relationships of transformational, transactional, and servant leadership with self-reported employee performance in five hospitals operated by the Ministry of National Guard–Health Affairs (MNG-HA), Saudi Arabia, and evaluated organizational identification as a mediator. A quantitative cross-sectional survey used stratified random sampling administered by hospital Human Resources departments. Of 960 invited employees, 515 questionnaire records were received and 500 valid responses were retained, yielding an invitation-based valid response rate of 52.1%. IBM SPSS Statistics version 28 and SmartPLS 4 were used to evaluate five reflective constructs and their direct and specific indirect relationships. Transformational ($\beta = .314$), transactional ($\beta = .286$), and servant leadership ($\beta = .244$) were positively associated with organizational identification (all $p < .001$). Employee performance was positively associated with organizational identification ($\beta = .313$) and transactional ($\beta = .362$), servant ($\beta = .154$), and transformational leadership ($\beta = .146$), all $p < .001$. The model explained 39.1% of organizational-identification variance and 55.3% of employee-performance variance. Specific indirect effects were significant for transformational ($\beta = .098$), transactional ($\beta = .090$), and servant leadership ($\beta = .076$), with corresponding variance-accounted-for values of 40.1%, 19.9%, and 33.1%. Positive direct and indirect effects indicated complementary partial mediation. The original-scale and z-standardized models yielded the same standardized conclusions. The findings clarify the complementary roles of the three leadership approaches: transactional leadership had the largest estimated direct association with performance, transformational leadership had the largest estimated association with organizational identification, and servant leadership contributed positively to both outcomes. Their simultaneous examination provides empirical support for Social Identity Theory in a multiprofessional Saudi healthcare setting and identifies organizational identification as a shared psychological pathway connecting leadership with performance. This integrated evidence informs leadership development that combines performance clarity, shared organizational purpose, and employee support within MNG-HA hospitals.

Natural Resources for Human Health
eISSN: 2583-1194

CHAPTER 1: INTRODUCTION

1.1 Overview

This chapter develops the rationale for examining transformational, transactional, and servant leadership in relation to organizational identification and employee performance in MNG-HA hospitals. The argument progresses from healthcare leadership demands to the identity-based mechanism and performance outcome, then establishes the practical problem and the empirical, theoretical, methodological, and contextual gaps. Research objectives, questions, significance, scope, and definitions specify the inquiry and its contribution.

1.2 Introduction

Healthcare organizations are safety-critical, professionally diverse, and highly interdependent systems. Their employees must deliver accurate role-specific work, coordinate across professional and unit boundaries, comply with regulatory and clinical standards, and adapt to technological and service changes. Leadership is therefore consequential not only because leaders allocate tasks and monitor standards, but also because they define collective priorities, influence how employees interpret organizational membership, and shape the conditions under which employees contribute to shared goals (Cummings et al., 2018; Figueroa et al., 2019; Oyewunmi et al., 2015; N. Zhang et al., 2025).

This study compares three leadership styles with distinct, complementary functions. Transformational leadership emphasizes shared vision, intellectual stimulation, and individualized development; transactional leadership emphasizes explicit expectations, contingent recognition, and corrective attention to deviations; and servant leadership emphasizes ethical stewardship, employee growth, inclusion, and service to a wider community (Bass & Riggio, 2006; Judge & Piccolo, 2004; Liden et al., 2015). Their simultaneous examination clarifies how change, accountability, and service relate to individual employee performance in a hospital system requiring dependable standardization and constructive adaptation.

Organizational identification is positioned as the identity-based mechanism that may explain part of these relationships. Social Identity Theory proposes that organizational membership can become part of an employee's self-definition; when the organization's values and success are experienced as personally meaningful, employees may be more willing to sustain effort, cooperate, and align their behavior with collective objectives (Ashforth & Mael, 1989; Tajfel & Turner, 1979). The outcome examined is individual employee performance, comprising task, contextual, and adaptive performance, rather than hospital performance or patient outcomes. The inquiry is situated specifically among physicians, nurses, and other clinical healthcare workers in five hospitals operated by the Ministry of National Guard–Health Affairs (MNG-HA) in Saudi Arabia.

1.3 Background of the Study

1.3.1 Global Healthcare Leadership Challenges

1.3.2 Transformational, Transactional, and Servant Leadership

1.3.3 Organizational Identification and Social Identity Theory

1.3.4 Employee Performance in Healthcare

1.3.5 Saudi Healthcare and MNG-HA Context

1.3.6 Integrated Research Gaps

Empirical gap.

Theoretical gap

Methodological gap.

Contextual gap.

Model-integration gap.

1.3.7 Study Justification and Transition to the Problem Statement

The study was justified by the convergence of an operational need and an unresolved explanatory problem. MNG-HA hospitals require leadership that can sustain standards, coordinate diverse professionals, support adaptation, and preserve a meaningful collective purpose. Yet the existing literature does not provide a sufficiently integrated or context-specific account of how transformational, transactional, and servant leadership relate to individual employee performance within this system.

Organizational identification supplies a theoretically focused explanation for this issue. Under Social Identity Theory, leadership relates to performance partly through the meaning employees attach to organizational membership: whether it is valued, meaningful, and self-relevant. The model distinguishes the identity-building rationale associated with each style and retains direct relationships with performance. Simultaneous estimation therefore connects the comparative question—how the styles differ—with the explanatory question of how organizational self-definition participates in their performance relationships.

Accordingly, it remained insufficiently understood whether transformational, transactional, and servant leadership each demonstrated distinct direct relationships with employee performance and indirect relationships through organizational identification among physicians, nurses, and other clinical healthcare workers across five MNG-HA hospitals. This unresolved issue forms the basis of the focused problem statement that follows.

1.3.8 Problem Statement

Saudi healthcare transformation requires employees to sustain dependable performance while adapting to new technology, service arrangements, accountability demands, and multidisciplinary coordination. National improvements in emergency timeliness and surgical waiting times underscore the value of consistent execution, while Saudi nursing evidence connects anticipated turnover with supervisory behavior (Alsaleh et al., 2026; Ministry of Health, 2025). Within MNG-HA, the practical question is which leadership behaviors are associated with employees' task, contextual, and adaptive performance and how organizational identification explains those relationships. Addressing this question provides a focused basis for leadership and workforce development within an established public healthcare system.

Existing evidence confirms leadership as a plausible performance antecedent but does not establish a uniform pattern. Transformational leadership is generally associated with constructive outcomes, yet effect strength varies by dimension and professional group. Transactional leadership is beneficial when contingent recognition and active attention to standards are salient, but passive or overly corrective components can be weak or counterproductive. Servant leadership is commonly associated with positive relational and performance-relevant outcomes, although the evidence base is narrower and frequently uses nursing-only or non-healthcare samples (Demeke et al., 2024; Hundie & Habtewold, 2024; Judge & Piccolo, 2004; Young et al., 2021).

The empirical gap arises from studying these styles separately, against different outcomes, and in different sectors. Such studies offer substantial evidence for individual relationships but provide a fragmented basis for comparing transformational, transactional, and servant leadership. A common model retaining direct paths to employee performance and indirect paths through organizational identification is needed to explain their distinct relationships within MNG-HA. Contradictory and non-significant findings strengthen this rationale by showing that leadership components and settings matter.

The theoretical problem concerns the mechanism connecting leadership with performance. Social Identity Theory suggests that employees may align their behavior with organizational goals when membership becomes part of their self-definition (Ashforth & Mael, 1989; Tajfel & Turner, 1979).

The methodological gap is the limited comparability of findings obtained from different leadership measures, performance criteria, professional samples, and model specifications. Cross-sectional and same-source designs predominate, while multisource and longitudinal studies address distinct source and timing questions. The present study contributes a simultaneous PLS-SEM comparison that evaluates construct distinctiveness and estimates the direct and indirect relationships of the three leadership styles using a common analytical specification.

The contextual problem is the limited direct evidence from physicians, nurses, and other clinical healthcare workers across MNG-HA hospitals. Saudi studies commonly focus on nurses and adjacent outcomes, while international findings emerge from different professional, cultural, regulatory, and organizational conditions. MNG-HA provides a focused public healthcare

setting with a shared institutional mission, formal accountability, and geographically distributed hospitals, providing a theoretically relevant setting for examining organizational self-definition across clinical professions.

The central research problem was therefore the absence of an adequately integrated and context-specific explanation of how transformational, transactional, and servant leadership are related to individual employee performance in MNG-HA hospitals and the extent to which organizational identification accounts for these relationships. The study addressed this problem by testing the direct relationships of each leadership style with organizational identification and employee performance, the relationship between organizational identification and performance, and the three specific indirect relationships through organizational identification. This integrated test clarifies how three distinct leadership orientations converge on organizational identification while retaining their individual relationships with performance.

1.4 Research Objectives

1. To examine the relationship between transformational leadership and employee performance among clinical healthcare employees in MNG-HA hospitals in Saudi Arabia.

2. To assess the relationship between transactional leadership and employee performance among clinical healthcare employees in MNG-HA hospitals in Saudi Arabia.

3. To evaluate the relationship between servant leadership and employee performance among clinical healthcare employees in MNG-HA hospitals in Saudi Arabia.

4. To investigate the mediating role of organizational identification in the relationship between each leadership style—transformational, transactional, and servant leadership—and employee performance among clinical healthcare employees in MNG-HA hospitals in Saudi Arabia.

1.5 Research Questions

1. What is the relationship between transformational leadership and employee performance among clinical healthcare employees in MNG-HA hospitals in Saudi Arabia?

2. What is the relationship between transactional leadership and employee performance among clinical healthcare employees in MNG-HA hospitals in Saudi Arabia?

3. What is the relationship between servant leadership and employee performance among clinical healthcare employees in MNG-HA hospitals in Saudi Arabia?

4. Does organizational identification mediate the relationship between each leadership style—transformational, transactional, and servant leadership—and employee performance among clinical healthcare employees in MNG-HA hospitals in Saudi Arabia?

1.6 Significance of the Study

The study's significance lies in connecting three leadership orientations, organizational identification, and individual employee performance within a common model and a clearly specified Saudi public healthcare setting. This integration yields theoretical insight into identity-related leadership pathways, empirical evidence on their comparative relationships, methodological coherence through simultaneous estimation, and practical direction for MNG-HA leadership and workforce development.

1.6.1 Theoretical Contribution

1.6.2 Contribution to Industry Practice (Healthcare Sector)

1.6.3 Contribution to Government Policy

1.7 Scope of the Research

The study examined transformational leadership, transactional leadership, servant leadership, organizational identification, and individual employee performance among physicians, nurses, and other clinical healthcare workers employed in five hospitals operated by MNG-HA in Saudi Arabia. Leadership referred to employees' perceptions of their immediate supervisor;

organizational identification referred to identification with the employing organization; and employee performance comprised task, contextual, and adaptive performance. The individual employee was the unit of analysis.

The study used a quantitative cross-sectional questionnaire design. Self-administered employee questionnaires measured the principal constructs during the same general collection period. The analysis estimated direct and indirect relationships among the five constructs at the individual employee level.

The study conducted its research between 2024 and 2026 in the Kingdom of Saudi Arabia (KSA). The organizational scope comprised clinical employees in the five participating MNG-HA hospitals. The analytical scope covered the three leadership styles, organizational identification, and task, contextual, and adaptive performance, with a common structural model used to examine the specified direct and mediated relationships.

1.8 Organization of the Study

The thesis is organized into five chapters. Chapter 1 introduces the research problem, background, gaps, objectives, questions, significance, scope, and principal terms. Chapter 2 critically reviews the conceptual, empirical, and theoretical literature, develops the proposed relationships in the theorized sequence of the model, and explains why Social Identity Theory and organizational identification provide the focal explanatory framework. Chapter 3 describes the research paradigm, cross-sectional design, sampling and recruitment, instrument development and validation, data collection, analytical procedures, and ethical safeguards. Chapter 4 reports and critically discusses data screening, descriptive findings, measurement-model quality, structural relationships, effect sizes, predictive assessment, mediation results, and the standardized-indicator sensitivity analysis. Chapter 5 presents the summary of key findings, conclusions, contribution to the body of knowledge, theoretical, practical, managerial, and policy implications, limitations, and recommendations for organizational practice, policymakers, and future research.

1.9 Definition of Terms

Transformational Leadership

Conceptual definition. Transformational leadership is an approach that inspires and develops followers through idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Riggio, 2006).

Operational definition. In this study, transformational leadership was measured using 20 items assessing clinical employees' perceptions of their immediate supervisors in the participating MNG-HA hospitals, with five items per domain. Items were drawn from Avolio and Bass (2004), Carless et al. (2000), and Moolenaar et al. (2010). Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicating stronger perceived transformational leadership.

Transactional Leadership

Conceptual definition. Transactional leadership is an exchange-based approach in which leaders clarify expectations, provide performance-contingent rewards, and monitor and correct deviations from standards through contingent reward and management-by-exception behaviors (Bass, 1985; Judge & Piccolo, 2004).

Operational definition. In this study, transactional leadership was measured using 10 items assessing employees' perceptions of their immediate supervisors, with five items each for contingent reward and management by exception. Items were drawn from Avolio and Bass (2004), Bass (1985), and Podsakoff et al. (1984). Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicating stronger perceived transactional leadership.

Servant Leadership

Conceptual definition. Servant leadership is a follower-centered approach that prioritizes service, ethical conduct, empowerment, employee development, and concern for followers' needs and the wider community (Liden et al., 2008).

Operational definition. In this study, servant leadership was measured using seven adapted items assessing employees' perceptions of their immediate supervisors, with one item representing each of seven conceptual domains. Items were drawn from Barbuto and Wheeler (2006) and Liden et al. (2008). Responses ranged from 1 (*strongly disagree*) to 7 (*strongly agree*), with higher scores indicating stronger perceived servant leadership.

Organizational Identification

Conceptual definition. Organizational identification is an employee's perceived oneness with an organization, through which organizational membership becomes part of the employee's self-concept (Ashforth & Mael, 1989; Mael & Ashforth, 1992).

Operational definition. In this study, organizational identification was measured using five items addressing belonging, pride, shared success, family-like membership, and willingness to remain associated with the employing organization. Items were drawn from Ma et al. (2023), Mael and Ashforth (1992), and Smidts et al. (2001). Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicating stronger organizational identification.

Employee Performance

Conceptual definition. Employee performance refers to individual work behaviors relevant to organizational goals, encompassing the effective completion of core duties, constructive workplace contributions, and adaptation to changing work requirements (Koopmans et al., 2011).

Operational definition. In this study, employee performance was measured using 15 self-report items covering task, contextual, and adaptive performance, with five items per domain. Items were adapted from established performance measures and frameworks (Goodman & Svyantek, 1999; Griffin et al., 2007; Koopmans et al., 2014; Ma et al., 2023; Podsakoff et al., 1990; Pulakos et al., 2000; Van Scotter & Motowidlo, 1996; Williams & Anderson, 1991). Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicating higher self-reported employee performance.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter critically reviews the literature underpinning the study of transformational leadership (TFL), transactional leadership (TSL), servant leadership (SL), organizational identification (OI), and employee performance (PF) among healthcare employees in hospitals operated by the Ministry of National Guard–Health Affairs (MNG-HA) in Saudi Arabia. The review follows the theorized sequence specified in the conceptual framework: leadership styles are treated as antecedents, OI is examined as the mediating psychological mechanism, and individual employee performance is the outcome. This ordering connects the distinctive functions of the leadership styles with an identity-based explanation of individual task, contextual, and adaptive performance.

Social Identity Theory (SIT) is the principal theoretical foundation because the proposed mediator concerns how employees define themselves through organizational membership. In organizational settings, SIT explains why leadership that makes membership meaningful, distinctive, and value-consistent may strengthen a shared sense of "we" and orient conduct towards collective goals (Ashforth & Mael, 1989; Tajfel & Turner, 1979). The chapter nevertheless evaluates the theory's boundaries and compares it with Social Exchange Theory (SET) and Leader–Member Exchange (LMX) theory. These alternatives illuminate reciprocity and dyadic relationship quality, but they do not address the self-definitional content of OI as directly as SIT.

The review first traces the conceptual and historical development of the five study constructs and situates them in healthcare and the MNG-HA context. It then synthesizes empirical evidence by relationship, distinguishing supportive, non-significant, mixed, and context-dependent findings and assessing differences in setting, sample, measurement, and design. The theoretical review subsequently explains the differentiated identity-building pathway associated with each leadership style and the rationale for positioning OI as a mediator. The chapter concludes by integrating the theoretical, empirical, methodological, contextual, and model-integration gaps that motivate the study. Comparisons with adjacent constructs clarify the distinctive explanatory role of organizational identification.

2.2 Conceptual and Historical Development of the Study Constructs

2.2.1 Leadership in Healthcare and Rationale for Selecting the Three Leadership Styles

2.2.2 Transformational Leadership

2.2.3 Transactional Leadership

2.2.4 Servant Leadership

2.2.5 Organizational Identification
2.2.6 Employee Performance
2.2.7 Saudi Healthcare and MNG-HA Context
2.2.8 Integrated Literature Gaps
2.3 **Empirical Review and Development of the Proposed Relationships**
2.3.1 Transformational Leadership and Organizational Identification
2.3.2 Transactional Leadership and Organizational Identification
2.3.3 Servant Leadership and Organizational Identification
2.3.4 Organizational Identification and Employee Performance
2.3.5 Transformational Leadership and Employee Performance
2.3.6 Transactional Leadership and Employee Performance
2.3.7 Servant Leadership and Employee Performance
2.3.8 Organizational Identification as a Mediator Between Transformational Leadership and Employee Performance
2.3.9 Organizational Identification as a Mediator Between Transactional Leadership and Employee Performance
2.3.10 Organizational Identification as a Mediator Between Servant Leadership and Employee Performance
2.3.11 Empirical Literature Matrix
2.3.12 Summary of the Empirical Review and Empirical Gap
2.4 **Theoretical Foundation and Model Integration**
2.4.1 Origins and Core Propositions of Social Identity Theory
2.4.2 Organizational Application of Social Identity Theory
2.4.3 Critical Evaluation of Social Identity Theory
2.4.4 Comparison with Social Exchange Theory and Leader–Member Exchange Theory
2.4.5 Differentiated Identity-Building Pathways of the Leadership Styles
2.4.6 Organizational Identification as the Mediator
2.4.7 Rationale for Selecting Organizational Identification
2.4.8 Theoretical Literature Matrix
2.4.9 Integrated Theoretical Justification and Gap
2.5 **Chapter Summary**

The literature supports the conceptual sequence leadership styles → organizational identification → employee performance. TFL, TSL, and SL were treated as complementary but distinct antecedents: TFL emphasizes shared vision and value internalization, TSL emphasizes role clarity and contingent recognition, and SL emphasizes ethical stewardship, inclusion, and community. OI was defined as organizational self-definition, distinguished from organizational identity and adjacent attitudes, and employee performance was confined to task, contextual, and adaptive behaviour at the individual level.

The empirical synthesis found broadly supportive evidence for TFL, SL, and OI relationships, but also important inconsistencies. TSL findings vary markedly by contingent reward versus management-by-exception, while leadership effects differ across professional groups, sectors, cultures, clinical contexts, and performance measures. Much of the evidence is cross-

sectional and self-reported; stronger multilevel, time-lagged, multisource, and meta-analytic studies do not always use the same constructs or outcome level. Direct evidence for the three style-specific OI mediation relationships remains fragmented.

SIT is the most appropriate principal theory because it directly explains how organizational membership becomes part of the self-concept and how a shared sense of "we" can orient collective motivation and performance. Its explanatory value is bounded by multiple identities, cultural and contextual contingencies, possible over-identification, and limited treatment of reciprocal or dyadic processes. SET and LMX theory were therefore used as concise comparisons, not additional foundations. OI was retained as the sole mediator to preserve an identity-based, theoretically parsimonious model while allowing direct leadership–performance relationships and possible partial mediation.

The framework brings ten relationships into a coherent explanation. Three leadership–performance hypotheses examine direct associations; three leadership–OI hypotheses examine the connection between distinct supervisory orientations and organizational self-definition; the OI–performance hypothesis links that self-definition with employee behavior; and three indirect hypotheses evaluate the corresponding mediated relationships. Together, they connect leadership theory, the Saudi institutional setting, and the comparative evidence through a common account of organizational belonging and individual contribution.

The integrated gap is theoretical, empirical, methodological, contextual, and model based: evidence remains limited on the simultaneous roles of TFL, TSL, and SL, the differentiated routes through which they relate to OI, and OI's association with individual employee performance in MNG-HA hospitals. Chapter 3 explains how the specified constructs, hypotheses, sample, measures, and analytical procedures were used to evaluate relationships consistent with this framework.

CHAPTER 3: METHODOLOGY

Introduction

This chapter explains the methodology used to examine the direct and indirect relationships among Transformational Leadership (TFL), Transactional Leadership (TSL), Servant Leadership (SL), Organizational Identification (OI), and Employee Performance (PF) among clinical employees in five MNG-HA hospitals. The study used a quantitative, positivist, cross-sectional explanatory survey, with the individual employee as the unit of analysis. The chapter presents the multisite sampling and recruitment procedures, instrument development and pilot evidence, and ethical safeguards. It then explains the IBM SPSS Statistics and SmartPLS 4 procedures for data coding and screening, preliminary analysis, common method bias assessment, standardized-indicator sensitivity analysis, measurement-model assessment, structural-model estimation, predictive evaluation, and mediation testing.

Research Approach

The study employed a deductive quantitative research approach. A deductive approach begins with an established theoretical framework and uses empirical observations to evaluate propositions derived from that framework (Creswell & Creswell, 2018; Rao, 2019). In the present study, Social Identity Theory and the leadership literature informed the conceptual framework. Ten hypotheses were specified before the main structural analysis, and standardized questionnaire indicators were used to operationalize the five study constructs.

The quantitative approach addressed the direction and magnitude of relationships among transformational leadership, transactional leadership, servant leadership, organizational identification, and employee performance. Numerical responses enabled the researcher to summarize participant characteristics, assess measurement reliability and validity, estimate structural relationships, and evaluate the three specific indirect effects. The approach aligned the research objectives, hypotheses, data type, and PLS-SEM analytical strategy.

The study was nonexperimental and measured employees' existing perceptions of their immediate supervisors, organizational identification, and performance within naturally operating hospitals. Participants completed the survey in their usual organizational settings, without manipulation of leadership behavior, assignment to leadership conditions, or an organizational intervention.

Study Population

The target population comprised eligible clinical healthcare employees working in five MNG-HA hospitals located in Riyadh, Jeddah, Al Ahsa, Dammam, and Al Madinah. The professional groups included physicians, nurses, and other clinical healthcare workers. These groups were relevant to the study because they worked within the hospital environment in which leadership practices, organizational identification, and employee performance were examined. The combined hospital workforce figure was 29,041 employees.

Eligible participants were clinical healthcare employees aged 18 years or older who worked in one of the participating hospitals during the 2026 study period and provided informed consent. Non-clinical personnel and employees outside the participating hospitals were not included. The same eligibility criteria applied to electronic and paper questionnaires. Completion of all 57 substantive indicators was required for inclusion in the final analysis.

Sample Size

The initial sample-size calculation used Cochran's formula for estimating a population proportion (Cochran, 1977). A 95% confidence level, an assumed proportion of 0.50, and a precision level of 0.05 were specified.

Cochran's formula was expressed as follows:

$$n_0 = Z^2 p(1 - p) / e^2$$

where n_0 represented the initial sample-size estimate, Z represented the standard normal value associated with the selected planning confidence level, p represented the estimated population proportion, and e represented the precision parameter used in the planning calculation. The conventional planning values $Z = 1.96$, $p = 0.50$, $1 - p = 0.50$, and $e = 0.05$ were applied. The value $p = 0.50$ was selected because it produced the maximum variability and therefore a conservative numerical benchmark when no precise prior population proportion was available (Rao, 2012).

The calculation was performed as follows:

$$n_0 = [(1.96)^2 \times (0.50) \times (0.50)] / (0.05)^2$$

$$n_0 = (3.8416 \times 0.25) / 0.0025$$

$$n_0 = 0.9604 / 0.0025$$

$$n_0 = 384.16$$

The calculation yielded 384.16 respondents, rounded upward to 385. The initial recruitment range was increased to 400–500 to allow for incomplete or unusable questionnaires, and 500 valid responses were adopted as the operational target.

During data collection, HR departments invited a total of 960 employees across the five hospitals. Of these, 500 provided valid questionnaires, yielding an overall invitation-based valid response rate of 52.1% (500 / 960 × 100).

A supplementary multiple-regression power benchmark considered the four predictors of employee performance: transformational leadership, transactional leadership, servant leadership, and organizational identification. For a fixed-model omnibus R^2 test, an effect size of $f^2 = .15$, $\alpha = .05$, and power of .95 correspond to a minimum of 129 participants using the G*Power framework (Faul et al., 2009). The final sample of 500 exceeded this benchmark for detecting an overall medium regression effect and the initial sample-size estimate. PLS-SEM estimates and their inferential results evaluated the direct and specific indirect relationships.

Data Collection

The main survey was conducted in 2026 following KAIMRC ethical approval dated 19 January 2026, as presented in Appendix C. HR departments invited selected clinical employees and provided information about the study purpose, eligibility requirements, voluntary participation, confidentiality, and the right to decline participation.

The electronic questionnaire was administered through Google Forms, and paper questionnaires were available to selected employees in clinical units. Both formats contained the same study information, eligibility criteria, measurement items, and

response options. Paper responses were entered into IBM SPSS version 28 using a template that matched the online questionnaire.

Follow-up reminders were used to encourage questionnaire completion. Electronic and paper records were combined using a consistent variable order and coding structure before screening and analysis in IBM SPSS version 28 and SmartPLS 4. Following screening, 500 valid responses were retained.

Chapter Summary

This chapter established the methodological foundation for examining transformational, transactional, and servant leadership, organizational identification, and employee performance. It operationalized five reflective constructs, presented the conceptual framework and ten hypotheses, and justified the deductive quantitative approach, positivist paradigm, and nonexperimental cross-sectional survey design. The sampling procedures defined the clinical workforce and individual employee as the unit of analysis and described HR-administered stratified random selection using Excel's RAND() function. Recruitment generated 500 valid responses from 960 invited employees and 515 received questionnaire records. Instrument development documented the sources and adaptations of all 57 items, qualitative expert review, English-language administration, pre-testing, pilot reliability and item functioning, and final scoring. The analytical sequence integrated data screening, preliminary statistical analysis, common method bias assessment, standardized-indicator sensitivity analysis, reflective measurement assessment, structural and predictive evaluation, and bootstrapped mediation testing. Ethical safeguards governed recruitment, confidentiality, and reporting. Chapter 4 presents the empirical findings from these procedures.

Chapter 4: RESULTS AND DISCUSSION

Chapter 4 established satisfactory measurement properties and then evaluated the explanatory, effect-size, predictive, direct, and indirect results of the structural model. The three leadership styles jointly explained 39.1% of organizational identification, while transformational leadership, transactional leadership, servant leadership, and organizational identification together explained 55.3% of employee performance. Positive $Q^2predict$ values and the CVPAT comparisons showed predictive relevance for both endogenous constructs. The f^2 results added substantive differentiation: transactional leadership made the largest direct contribution to performance, transformational leadership made the largest leadership contribution to organizational identification, and organizational identification made a meaningful contribution to performance.

The integrated discussion of H1-H10 establishes distinct, complementary contributions from transformational, transactional, and servant leadership. All three have positive direct relationships with employee performance and organizational identification, and all three also have positive indirect relationships with performance through organizational identification. Social Identity Theory explains the shared pathway: leadership behaviours help define the meaning of organizational membership, while belonging, pride, identification with organizational success, and alignment with collective goals connect that membership with performance. The positive direct effects and significant indirect effects establish a consistent pattern of complementary partial mediation, positioning organizational identification as a shared connection between differentiated leadership practices and employee performance.

CHAPTER 5: CONCLUSIONS, IMPLICATIONS, LIMITATIONS, AND RECOMMENDATIONS

Summary of Key Findings

This study examined the relationships among transformational leadership, transactional leadership, servant leadership, organizational identification, and employee performance among 500 clinical healthcare employees working in five Ministry of National Guard–Health Affairs (MNG-HA) hospitals. The first three objectives examined the direct relationships of the three leadership styles with employee performance, and the fourth objective investigated whether organizational identification mediated those relationships. The structural model also assessed how each leadership style related to organizational identification and how organizational identification related to employee performance.

Transformational leadership, transactional leadership, organizational identification, and employee performance were reported at moderate average levels on their respective five-point measures, while servant leadership was moderately positive on its seven-point measure. Interpreted within each construct's response range, these findings indicate an established foundation of leadership practice, organizational belonging, and employee performance, alongside scope for further development.

All seven direct relationships specified in the model were positive and statistically significant. The three leadership styles jointly explained 39.1% of the variance in organizational identification (R^2 = .391; adjusted R^2 = .387), while the three leadership styles together with organizational identification explained 55.3% of the variance in employee performance (R^2 = .553; adjusted R^2 = .549). Positive construct-level Q^2predict values for organizational identification (.380) and employee performance (.484), together with the CVPAT results, indicated out-of-sample predictive relevance within the study data.

The direct relationships were differentiated in magnitude. Transactional leadership had the largest estimated leadership relationship with employee performance (β = .362, f^2 = .216), representing a medium unique effect in the model. Transformational leadership (β = .146, f^2 = .036) and servant leadership (β = .154, f^2 = .042) each retained a smaller unique relationship with performance. For organizational identification, transformational leadership had the largest estimated leadership coefficient (β = .314, f^2 = .137), followed by transactional leadership (β = .286, f^2 = .110) and servant leadership (β = .244, f^2 = .084). Organizational identification was itself positively related to employee performance (β = .313, f^2 = .133). The pattern distinguishes the relative prominence of performance-structuring leadership in the performance equation and purpose-oriented leadership in the identification equation.

Organizational identification partially mediated each leadership–performance relationship. The specific indirect association was .098 for transformational leadership, with a reported total association of .245 and a variance-accounted-for value of 40.1%; it was .090 for transactional leadership, with a reported total association of .451 and a variance-accounted-for value of 19.9%; and it was .076 for servant leadership, with a reported total association of .230 and a variance-accounted-for value of 33.1%. Each indirect relationship was statistically significant, and each corresponding direct relationship remained significant. This consistent partial-mediation pattern establishes organizational identification as a shared explanatory pathway across the three leadership approaches, alongside their direct performance relationships.

The integrated findings reveal two features of leadership in the participating hospitals: different styles occupy different positions in the performance and identification equations, and all three connect with performance through organizational identification. Transactional leadership was most prominent in the direct performance estimates, transformational leadership in the identification estimates, and servant leadership contributed positively to both outcomes. Employees' organizational self-definition therefore brings the three approaches together within a common explanatory framework.

CONCLUSIONS

All four research objectives were achieved through the estimation of the three leadership–performance relationships and the evaluation of organizational identification as their proposed mediator. Support for the full set of direct and indirect hypotheses yields an integrated conclusion: performance structuring, shared purpose, and employee-centred service each have a place in explaining employee performance in the participating MNG-HA hospitals. Their common connection through organizational identification gives this conclusion psychological as well as managerial significance.

Transactional leadership's largest estimated direct relationship with performance highlights the relevance of clear expectations, recognition, accountability, and consistent reinforcement of organizational standards. Transformational leadership adds a distinct performance relationship and the largest estimated leadership association with organizational identification, bringing shared vision, collective purpose, and institutional values into the explanation. Servant leadership contributes through an approach centred on ethical conduct, respect, employee development, responsible empowerment, inclusion, and community orientation. These findings support a leadership-development approach that combines dependable execution with meaningful organizational membership and attention to employees' development.

Organizational identification connects the behavioural and psychological elements of this conclusion. Belonging, pride in membership, identification with organizational success, and alignment with collective goals were positively related to self-reported performance. Its direct performance relationship and partial mediation across all three leadership styles show that employees' organizational self-definition contributes to the model alongside the direct leadership pathways. This gives hospital management a coherent basis for considering how leaders organize work and how employees understand their place within the institution.

The findings support Social Identity Theory (SIT) by linking meaningful organizational membership with employee performance in the study context. SIT offers a coherent interpretation of the three leadership approaches: shared vision and

values can give organizational membership purpose; recognition and clear standards can communicate a valued organizational role; and ethical treatment, development, and inclusion can strengthen the meaning of membership. The integrated model gives this interpretation empirical substance through the positive relationships of all three leadership styles with organizational identification and the significant indirect performance pathways.

The new knowledge generated by this study is the differentiated pattern of direct performance relationships and shared identity-based relationships revealed when transformational, transactional, and servant leadership are examined simultaneously. Previously, limited integrated evidence established how these three approaches related to both organizational identification and employee performance within one model of clinical employees in Saudi National Guard hospitals. The study clarifies that their relative prominence depends on the outcome being explained, while organizational identification connects each approach with performance. It advances healthcare-leadership scholarship by integrating performance-oriented, purpose-oriented, and service-oriented processes into one empirically supported explanatory framework.

For healthcare management, the central implication is that dependable performance and meaningful organizational membership are complementary leadership priorities. In MNG-HA hospitals, the findings support the development of leaders who combine clear execution standards with shared purpose, ethical conduct, employee development, and inclusion. This employee-level evidence gives practical direction to leadership and workforce development during the healthcare transformation associated with Saudi Vision 2030.

Recommendations

1. **Recommendations for Organizational Practice**

Develop an integrated leadership competency framework. Hospital executives and HR development units should translate the three supported leadership orientations into observable supervisory competencies. A common framework can distinguish explaining expectations, communicating collective purpose, and providing ethical developmental support. Each competency should include examples suited to physicians, nurses, and other clinical employees, while retaining common expectations for respectful treatment and accountability. The framework would provide a shared basis for training and feedback rather than prescribing one leadership label for every supervisory encounter.

Strengthen structured performance leadership. Departmental managers should connect feedback and recognition to clearly described work behaviours. The prominent transactional–performance relationship supports attention to role expectations and dependable execution. Recognition can acknowledge accurate completion, effective coordination, and appropriate adjustment, using criteria communicated beforehand. Delavallade's (2021) findings favour informative feedback over assuming that visible awards alone improve performance. Supervisors should therefore explain what was effective and what should be sustained, with any tangible recognition remaining subject to existing institutional arrangements.

Embed identity-building practices in routine management (Leijerholt et al., 2022). Hospital executives and internal-communication teams should connect the institutional mission with examples of clinical contribution, ensuring that different professional groups can recognize their place in collective achievements. Brief discussions during onboarding and routine meetings can link service responsibilities with organizational purpose. Leijerholt et al. (2022) provide adjacent public-sector evidence concerning value-congruent communication and organizational practices; here, these activities are proposed as practical applications of the observed OI pathway. Feedback from staff should inform whether the messages are meaningful across roles.

Integrate the three approaches in leadership development. Leadership-development teams should use workplace scenarios that require supervisors to combine clear standards, purpose-focused explanation, and developmental support. Short practice sessions, peer feedback, and follow-up dialogues would connect training with daily conduct. Jacobsen et al. (2022) provide experimental support for developing transformational and transactional behaviours, while identity-focused programmes offer complementary approaches to collective leadership practice (Haslam et al., 2023). Training content should remain aligned with the competencies derived from the present findings.

Use phased implementation and explicit evaluation. A proposed departmental pilot should establish baseline measures, document activities delivered, and repeat assessment at agreed follow-up points. Employee-rated leadership, OI, and the three performance domains provide outcomes closest to the thesis. HR and quality teams may separately examine retention, service-

quality, and patient-experience indicators where suitable records exist. Participation rates, protected learning time, professional-group coverage, and staff feedback would document implementation feasibility. Table 5.1 presents proposed responsibilities and evaluation intervals; these are prospective planning options, not interventions undertaken in this study.

Table 5.1 Evidence-Linked Leadership Implementation and Evaluation Plan

Finding and priority	Responsible stakeholders and activity	Evaluation measures and timing
TSL–performance relationship	Departmental managers: clarify expectations and provide behaviour-specific feedback.	Document feedback delivery; assess role clarity and task performance at baseline and three months.
TFL–identification relationship	Clinical leaders: connect departmental priorities with institutional purpose.	Assess employee understanding and OI at baseline, three months, and six months.
SL relationships with both outcomes	Supervisors and educators: provide ethical, equitable developmental support.	Review access to development, staff feedback, and contextual/adaptive performance after three months.
Shared OI mediation	HR and communication teams: align onboarding and recognition with valued membership.	Monitor professional-group participation and repeat OI assessment after three and six months.
Distinct contributions of the styles	Leadership-development team: pilot integrated scenario-based learning and follow-up dialogues.	Record attendance and delivery; compare leadership ratings before and after the pilot.
Prospective organizational application	HR and quality teams: review workforce and service indicators separately.	Where available, review retention and patient-experience trends at six months; document concurrent changes.

Note. Activities, indicators, and intervals are proposed evaluation arrangements, not procedures performed in the present study. Local teams should agree feasible measures and governance requirements before implementation.

2. Recommendations for Policymakers and Health-System Leaders

At health-system level, the findings offer an evidence base for considering common supervisory-development guidance across participating institutions. Possible applications include competency descriptions, appraisal conversations, induction content, and criteria for evaluating leadership programmes. A shared framework would make these activities comparable, while local delivery could reflect professional responsibilities, available learning time, and departmental workflows. Implementation decisions would require consideration of staffing capacity, governance requirements, and employees' experience of the proposed activities. Evidence from field experiments distinguishes changes in perceived leadership from changes in service outcomes, providing a useful basis for that evaluation (Jacobsen et al., 2022). System-level review could therefore examine feasibility, participation, behavioural change, and relevant outcomes separately before decisions about wider use.

i. Recommendations for Future Research

Future research should retain the distinction between the three leadership orientations while examining their relationships over time. Repeated assessments of leadership, OI, and employee performance would permit investigation of temporal development and persistence. Research combining employee perceptions with appropriately matched supervisor assessments could examine whether the observed performance relationships are reproduced across information sources. Such work would extend the evidence base through a different design, rather than modify the analyses reported here.

Comparative studies across MNG-HA and other healthcare systems could examine the applicability of the integrated model under different institutional arrangements. Comparisons among professions and sites should preserve clear construct referents and establish comparable measurement before interpreting differences. Mixed-method studies could use interviews to explain how staff interpret recognition, shared purpose, and developmental support. Finally, prospective evaluations of leadership-development initiatives should assess delivery as well as outcomes and include longer follow-up. The short- and longer-term differences reported by Bro and Jensen (2020) show why an immediate response alone is insufficient to describe persistence. These directions connect future investigation with the study's defined contextual, measurement, and temporal boundaries.

REFERENCES

[1] Alsaleh, K., Ali, T. M., Alhalafi, F., Ali, F., Alfotais, M., & Salem, O. (2026). Investigating the relationship between nurse managers' leadership style and predicted nurses' turnover. BMJ Leader, 10(2), 151–157. https://doi.org/10.1136/leader-2024-001021

[2] Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. Academy of Management Review, 14(1), 20–39. https://doi.org/10.5465/amr.1989.4278999

[3] Avolio, B. J., & Bass, B. M. (2004). Multifactor Leadership Questionnaire: Manual and sampler set (3rd ed.). Mind Garden. https://www.mindgarden.com/multifactor-leadership-questionnaire/238-mlq-manual.html

[4] Barbuto, J. E., Jr., & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. Group & Organization Management, 31(3), 300–326. https://doi.org/10.1177/1059601106287091

[5] Bass, B. M. (1985). Leadership and performance beyond expectations. Free Press.

[6] Bass, B. M., & Riggio, R. E. (2006). Transformational leadership (2nd ed.). Lawrence Erlbaum Associates. https://doi.org/10.4324/9781410617095

[7] Bro, L. L., & Jensen, U. T. (2020). Does transformational leadership stimulate user orientation? Evidence from a field experiment. Public Administration, 98(1), 177–193. https://doi.org/10.1111/padm.12612

[8] Carless, S. A., Wearing, A. J., & Mann, L. (2000). A short measure of transformational leadership. Journal of Business and Psychology, 14(3), 389–405. https://doi.org/10.1023/A:1022991115523

[9] Cochran, W. G. (1977). Sampling techniques (3rd ed.). John Wiley & Sons.

[10] Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.

[11] Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2018). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. International Journal of Nursing Studies, 85, 19–60. https://doi.org/10.1016/j.ijnurstu.2018.04.016

[12] Delavallade, C. (2021). Motivating teams: Private feedback and public recognition at work. Journal of Public Economics, 197, Article 104405. https://doi.org/10.1016/j.jpubeco.2021.104405

[13] Demeke, G. W., van Engen, M. L., & Markos, S. (2024). Servant leadership in the healthcare literature: A systematic review. Journal of Healthcare Leadership, 16, 1–14. https://doi.org/10.2147/jhl.s440160

[14] Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. Behavior Research Methods, 41(4), 1149–1160. https://doi.org/10.3758/brm.41.4.1149

[15] Figueroa, C. A., Harrison, R., Chauhan, A., & Meyer, L. (2019). Priorities and challenges for health leadership and workforce management globally: A rapid review. BMC Health Services Research, 19, Article 239. https://doi.org/10.1186/s12913-019-4080-7

[16] Goodman, S. A., & Svyantek, D. J. (1999). Person–organization fit and contextual performance: Do shared values matter? Journal of Vocational Behavior, 55(2), 254–275. https://doi.org/10.1006/jvbe.1998.1682

[17] Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. Academy of Management Journal, 50(2), 327–347. https://doi.org/10.5465/amj.2007.24634438

[18] Haslam, S. A., Reutas, J., Bentley, S. V., McMillan, B., Lindfield, M., Luong, M., Peters, K., & Steffens, N. K. (2023). Developing engaged and 'teamful' leaders: A randomized controlled trial of the 5R identity leadership program. PLOS ONE, 18(5), Article e0286263. https://doi.org/10.1371/journal.pone.0286263

[19] Hundie, Z. A., & Habtewold, E. M. (2024). The effect of transformational, transactional, and laissez-faire leadership styles on employees' level of performance: The case of hospital in Oromia Region, Ethiopia. Journal of Healthcare Leadership, 16, 67–82. https://doi.org/10.2147/jhl.s450077

[20] Jacobsen, C. B., Andersen, L. B., Bøllingtoft, A., & Eriksen, T. L. M. (2022). Can leadership training improve organizational effectiveness? Evidence from a randomized field experiment on transformational and transactional leadership. Public Administration Review, 82(1), 117–131. https://doi.org/10.1111/puar.13356

[21] Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. Journal of Applied Psychology, 89(5), 755–768. https://doi.org/10.1037/0021-9010.89.5.755

[22] Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet, H. C. W., & van der Beek, A. J. (2011). Conceptual frameworks of individual work performance: A systematic review. Journal of Occupational and Environmental Medicine, 53(8), 856–866. https://doi.org/10.1097/jom.0b013e318226a763

[23] Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., van Buuren, S., van der Beek, A. J., & de Vet, H. C. W. (2014). Improving the Individual Work Performance Questionnaire using Rasch analysis. Journal of Applied Measurement, 15(2), 160–175.

[24] Leijerholt, U., Biedenbach, G., & Hultén, P. (2022). Internal brand management in the public sector: The effects of internal communication, organizational practices, and PSM on employees' brand perceptions. Public Management Review, 24(3), 442–465. https://doi.org/10.1080/14719037.2020.1834607

[25] Liden, R. C., Wayne, S. J., Meuser, J. D., Hu, J., Wu, J., & Liao, C. (2015). Servant leadership: Validation of a short form of the SL-28. The Leadership Quarterly, 26(2), 254–269. https://doi.org/10.1016/j.leaqua.2014.12.002

[26] Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. The Leadership Quarterly, 19(2), 161–177. https://doi.org/10.1016/j.leaqua.2008.01.006

[27] Ma, H., Zhu, X., Huang, J., Zhang, S., Tan, J., & Luo, Y. (2023). Assessing the effects of organizational support, psychological capital, organizational identification on job performance among nurses: A structural equation modeling approach. BMC Health Services Research, 23(1), Article 806. https://doi.org/10.1186/s12913-023-09705-z

[28] Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. Journal of Organizational Behavior, 13(2), 103–123. https://doi.org/10.1002/job.4030130202

[29] Ministry of Health. (2025, September 16). Ministry of Health reports advancements in Ada'a Health indicators. https://www.moh.gov.sa/en/ministry/mediacenter/news/pages/news-2025-09-16-001.aspx

[30] Moolenaar, N. M., Daly, A. J., & Sleegers, P. J. C. (2010). Occupying the principal position: Examining relationships between transformational leadership, social network position, and schools' innovative climate. Educational Administration Quarterly, 46(5), 623–670. https://doi.org/10.1177/0013161x10378689

[31] Oyewunmi, A. E., Oyewunmi, O. A., Ojo, I. S., & Oludayo, O. A. (2015). Leaders' emotional intelligence and employees' performance: A case in Nigeria's public healthcare sector. International Journal of Human Resource Studies, 5(3), 23–37. https://doi.org/10.5296/ijhrs.v5i3.7854

[32] Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. The Leadership Quarterly, 1(2), 107–142. https://doi.org/10.1016/1048-9843(90)90009-7

[33] Podsakoff, P. M., Todor, W. D., Grover, R. A., & Huber, V. L. (1984). Situational moderators of leader reward and punishment behaviors: Fact or fiction? Organizational Behavior and Human Performance, 34(1), 21–63. https://doi.org/10.1016/0030-5073(84)90036-9

[34] Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. Journal of Applied Psychology, 85(4), 612–624. https://doi.org/10.1037/0021-9010.85.4.612

[35] Rao, U. K. (2012). Concepts in sample size determination. Indian Journal of Dental Research, 23(5), 660–664. https://doi.org/10.4103/0970-9290.107385

[36] Rao, U. K. (2019). Hypothesis-driven research. Journal of Oral and Maxillofacial Pathology, 23(2), 168–169. https://doi.org/10.4103/jomfp.JOMFP_161_19

[37] Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), The social psychology of intergroup relations (pp. 33–47). Brooks/Cole.

[38] Van Scotter, J. R., & Motowidlo, S. J. (1996). Interpersonal facilitation and job dedication as separate facets of contextual performance. Journal of Applied Psychology, 81(5), 525–531. https://doi.org/10.1037/0021-9010.81.5.525

[39] Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. Journal of Management, 17(3), 601–617. https://doi.org/10.1177/014920639101700305

[40] Young, H. R., Glerum, D. R., Joseph, D. L., & McCord, M. A. (2021). A meta-analysis of transactional leadership and follower performance: Double-edged effects of LMX and empowerment. Journal of Management, 47(5), 1255–1280. https://doi.org/10.1177/0149206320908646

[41] Zhang, N., Yang, W., Ali, A. J., Gao, P., & An, X. (2025). Effects of charismatic leadership and professional leadership on employee's performance in the public traditional Chinese medicine hospital: A path analysis. Journal of Posthumanism, 5(5), 2525–2538. https://doi.org/10.63332/joph.v5i5.1644