World Journal of Pharmaceutical and Life Sciences

www.wjpls.org

Impact Factor: 7.409 Coden USA: WJPLA7

COMPARING LEADERSHIP CONCEPTIONS BETWEEN NURSES AND PHYSICIANS IN EMERGENCY CARE SETTINGS

Samih M. Alqadi[1*], Maazi Alenazi[2], Latifah H. Alshammari[3], Abdulrahman A. Alharbi[4], Hanif Alotaibi[5], Abdulaziz Almutairi[6], Khalid S. Alanazi[7], Lana S. Alanazi[8], Elmuaiz Widatalla[9], Yasmin Y. Alhazime[10], Dania Raffa[11], Dr. Ashraf Baboor[12], Omar I. Al Otaibi[13], Maymunah A. Alshammari[14], Jehan A. Almurab[15], Amani N. Almufyid[16], Salma M. Alshammari[17]

[1]King Abdulaziz Hospital – Jeddah, Kingdom of Saudi Arabia.
[2]Medical Secretary Technicia, Imam Muhammad ibn Saud Islamic University - Riyadh, Kingdom of Saudi Arabia.
[3]Nurse, King Salman Specials Hospital, Kingdom of Saudi Arabia.
[4]Medical Secretary Technician, Taibah University, Kingdom of Saudi Arabia.
[5]Health Informtaics, Imam Muhammad ibn Saud Islamic University, Kingdom of Saudi Arabia.
[6]Nurse, Ministry of Health, Kingdom of Saudi Arabia.
[7]Specialist of Health Administration, King Saud Medical City, Kingdom of Saudi Arabia.
[8]Nursing Student, College of Nursing, Kingdom of Saudi Arabia.
[9]Emergency Medicine Specialist Hamad Medical Corporation, Kingdom of Saudi Arabia.
[10]Head of Nursing Education and Training Department in Cluster, Northern Border Health Cluster, Kingdom of Saudi. Arabia.
[11]Medical Intern, Ibn Sina National College, Kingdom of Saudi Arabia.
[12]Periodontic Consultant, Alnoor Specialized Hospital Kingdom of Saudi Arabia.
[13]Specialist of Health Administration, Imam Mohammad Ibn Saud Islamic University, Kingdom of Saudi Arabia.
[14]Nurse, King Salman Specialist Hospital, Kingdom of Saudi Arabia.
[15]Emergency Department, King Salman Specialist Hospital, Hail Health Cluster, Kingdom of Saudi Arabia.
[16]Nurse, King Salman Specialist Hospital, Kingdom of Saudi Arabia.
[17]Nurse, King Salman Specialist Hospital, Kingdom of Saudi Arabia.

***Corresponding Author: Samih M. Alqadi**

King Abdulaziz Hospital – Jeddah, Kingdom of Saudi Arabia.

DOI: https://doi.org/10.5281/zenodo.18357804

How to cite this Article: Samih M. Alqadi[1*], Maazi Alenazi[2], Latifah H. Alshammari[3], Abdulrahman A. Alharbi[4], Hanif Alotaibi[5], Abdulaziz Almutairi[6], Khalid S. Alanazi[7], Lana S. Alanazi[8], Elmuaiz Widatalla[9], Yasmin Y. Alhazime[10], Dania Raffa[11], Dr. Ashraf Baboor[12], Omar I. AlOtaibi[13], Maymunah A. Alshammari[14], Jehan A. Almurab[15], Amani N. Almufyid[16], Salma M. Alshammari[17] (2026). Comparing Leadership Conceptions Between Nurses And Physicians In Emergency Care Settings. World Journal of Pharmaceutical and Life Science, 12(1), 239–254.

Article Received on 21/11/2025 Article Revised on 11/12/2025 Article Published on 01/01/2026

ABSTRACT

Effective leadership in emergency care settings is critical for ensuring timely decision-making, interdisciplinary collaboration, and optimal patient outcomes. This study aimed to compare nurses' and physicians' perceptions of leadership, preferred leadership styles, and the impact of experience and training on leadership effectiveness within emergency departments. A cross-sectional quantitative survey was conducted with 400 healthcare professionals, evenly split between nurses and physicians, across multiple hospitals. Data were collected using a structured questionnaire assessing demographic variables, leadership styles, self- and peer-rated leadership effectiveness, decision-making authority, communication, and conflict resolution. Statistical analyses included t-tests, chi-square tests, and correlation analyses. Results revealed significant differences between professions: physicians rated their leadership effectiveness and decision-making authority higher, whereas nurses favored transformational leadership styles and reported greater role ambiguity. Experience and prior leadership training were positively associated with leadership confidence, communication, and conflict management skills.

These findings highlight the distinct yet complementary leadership conceptions between nurses and physicians, underscoring the need for tailored leadership development programs and clearer role definitions. Enhancing leadership skills across professional groups can promote better teamwork, reduce ambiguity, and ultimately improve emergency care delivery.

KEYWORDS: Emergency care, Leadership styles, Nurses, Physicians, Leadership effectiveness, Healthcare teamwork.

I. INTRODUCTION

Background

In the complex and fast-paced environment of emergency care, the importance of effective leadership cannot be overstated. Emergency departments (EDs) are high-pressure, high-stakes settings where rapid decision-making, precise communication, and efficient coordination between interdisciplinary professionals are critical to patient survival and system performance.[1,2] Among the key players in these settings are nurses and physicians, each bringing unique skill sets, perspectives, and responsibilities.[3,4,5] However, optimal outcomes in emergency care depend not only on clinical expertise but also on how leadership is perceived, exercised, and received within these teams.[6,7]

Leadership in healthcare has traditionally been associated with hierarchical authority, often favoring physicians in decision-making roles. However, contemporary models of healthcare delivery emphasize a more collaborative and interprofessional approach, recognizing that both nurses and physicians play vital leadership roles in managing patient care and team dynamics.[8,9] Leadership is no longer viewed as a role reserved for those in formal positions of power but rather as a competency that can be exhibited at all levels of care.[10,11] In the emergency care context, leadership extends to managing crises, delegating responsibilities, resolving conflicts, fostering team cohesion, and ensuring quality care under time-sensitive conditions.[12]

Nurses and physicians often function together in interdependent roles, yet their training, professional cultures, and scopes of practice differ significantly.[13,14,15] These differences may contribute to divergent conceptions of leadership—how it is defined, valued, and practiced. For example, while physicians may prioritize decisiveness and authority as central leadership traits, nurses may emphasize relational leadership attributes such as communication, empathy, and team support. These variations can influence team effectiveness, leadership development initiatives, and overall patient care quality.[16,17]

Furthermore, leadership in emergency care is not merely about command and control; it is a multidimensional construct involving self-awareness, decision-making, emotional intelligence, adaptability, and collaborative engagement. Understanding how nurses and physicians conceptualize leadership is essential for designing effective interprofessional education (IPE) programs, reducing workplace tensions, and promoting integrated care delivery.[18,19] As healthcare systems evolve towards team-based models, the demand for shared leadership, role clarity, and mutual respect among professionals becomes even more pronounced.[20,21]

Recent healthcare reforms and global health emergencies, such as the COVID-19 pandemic, have further exposed the critical role of distributed leadership in emergency settings.[22,23] These events demonstrated that leadership is not static and must adapt to changing clinical, organizational, and emotional environments. Nurses often had to take charge during physician shortages or step into decision-making roles amid resource constraints.[24,25] Likewise, physicians had to rely more heavily on nursing staff for real-time updates, risk assessments, and collaborative planning. These experiences underscore the need to investigate how both groups perceive leadership responsibilities, effectiveness, and training needs.[26,27]

Problem Statement

Despite the growing recognition of interprofessional collaboration and shared leadership in emergency care, there remains a lack of comprehensive understanding regarding the differences in leadership conceptions between nurses and physicians. While both professions acknowledge the significance of leadership, their interpretations and expectations may vary based on professional identity, educational background, clinical exposure, and cultural norms within healthcare institutions.

Previous research has tended to treat leadership as a monolithic construct, often focusing on leadership outcomes or performance without examining how different professionals internalize and conceptualize leadership itself. This oversight can result in misaligned leadership development programs, insufficient role clarity, and friction among team members, ultimately affecting team performance and patient outcomes. For instance, when leadership responsibilities are unclear or contested, critical decisions may be delayed, communication may break down, and accountability may be compromised.

In many emergency departments, nurses express frustration about the lack of recognition for their leadership contributions, particularly in areas such as patient advocacy, care coordination, and crisis response. On the other hand, physicians may feel burdened by the expectation to lead without adequate support or acknowledgment of the shared nature of leadership in team-based care. These conflicting perceptions can hinder effective collaboration and contribute to role ambiguity, professional dissatisfaction, and reduced team cohesion.

Given the high demands of emergency care and the reliance on coordinated teamwork, it is imperative to investigate the leadership conceptions held by nurses and physicians. By identifying and comparing their perspectives, healthcare institutions can bridge the gap between leadership theory and practice, foster mutual understanding, and design more inclusive and effective leadership development initiatives.

OBJECTIVE AND AIM

The primary objective of this study is to compare leadership conceptions between nurses and physicians in emergency care settings. Specifically, the study seeks to examine how these two professional groups perceive leadership in terms of style preference, self-efficacy, decision-making authority, communication, stress management, and role clarity.

Through statistical analysis of survey data, the study aims to test six hypotheses addressing differences in leadership ratings, preferred styles, decision-making roles, the impact of experience and training, and perceptions of authority clarity. These hypotheses are grounded in the premise that meaningful differences exist between the two groups, which could inform targeted interventions and support more cohesive emergency teams.

Significance of the Study

This study is significant for several reasons. First, it contributes to the growing body of research on interprofessional collaboration in emergency care by shedding light on a relatively underexplored area: the cognitive and cultural dimensions of leadership perception among frontline healthcare providers. Understanding these conceptions can lead to more effective team dynamics, especially in environments where time-sensitive and life-critical decisions are the norm.

Second, the study supports the development of tailored leadership training programs that reflect the real-world experiences and expectations of both nurses and physicians. Rather than adopting a one-size-fits-all approach, training can be customized to address the unique challenges and strengths of each group, thereby enhancing leadership efficacy and satisfaction.

Third, by highlighting differences in how leadership is perceived, the study underscores the importance of role clarity in emergency teams. Role ambiguity is a well-documented barrier to effective teamwork and is associated with increased stress, reduced productivity, and compromised patient safety. Identifying areas where perceptions diverge can inform policies and protocols that foster clearer communication, better role delineation, and enhanced mutual respect.

Fourth, the findings have implications for healthcare management and policy. As hospitals seek to build resilient, adaptive teams, leadership must be understood not only as a set of competencies but also as a relational and contextual construct. Administrators and educators can use the results to promote inclusive leadership cultures, encourage shared governance models, and ensure that leadership development is embedded into professional pathways for both nurses and physicians.

Finally, this research aligns with broader healthcare quality and safety initiatives. Effective leadership is a critical component of high-reliability organizations and is essential for preventing medical errors, ensuring continuity of care, and responding to crises. By aligning leadership perceptions and expectations across professional lines, healthcare institutions can improve system performance and patient outcomes.

Outline of the Paper

This paper is organized into several key sections. Following this introduction, the **Literature Review** will provide a comprehensive overview of existing research on leadership in healthcare, with a focus on emergency care settings and interprofessional dynamics. It will examine relevant theories, previous findings on leadership styles and effectiveness, and the importance of collaboration between nurses and physicians.

The **Methodology** section will describe the study design, including participant recruitment, data collection procedures, survey instruments, and statistical methods used for analysis. It will also address ethical considerations and limitations.

The **Results** section will present the findings from descriptive and inferential statistical analysis, organized by the six research hypotheses. Tables and figures will be used to illustrate differences between nurses and physicians in terms of leadership perceptions and behaviors.

In the **Discussion**, the results will be interpreted in the context of existing literature, highlighting consistencies and divergences. The implications of these findings for practice, policy, and future research will be explored, along with a critical reflection on study limitations.

Finally, the **Conclusion** will summarize the key insights, restate the importance of understanding leadership conceptions in emergency care, and offer recommendations for education, practice, and research.

II. LITERATURE REVIEW

Leadership in emergency healthcare settings has garnered increasing attention due to the critical nature of timely decision-making, interdisciplinary collaboration, and optimal patient care delivery. Rixon et al. (2024)[28] conducted a scoping review to explore leadership conceptions among emergency department (ED) nurses and physicians, revealing a fragmented understanding of leadership, characterized by traditional discourse and

discipline-specific expectations. This aligns with Zaidi's (2025)[29] phenomenological study, which emphasized that emotional intelligence (EI)-based leadership among emergency medicine physicians significantly enhances team dynamics, communication, and innovation, positioning self-awareness and inspiration as core leadership competencies.

Building on this, Alotaibi et al. (2024)[30] investigated the interplay between leadership styles and communication among specialized and maternal-child nurses, highlighting that transformational and collaborative leadership styles improve patient outcomes and reduce medical errors. Similarly, Ghazi et al. (2024)[31] found that collaborative frameworks between ED staff and nursing teams, such as shared decision-making and cross-training, lead to improved care efficiency and staff satisfaction.

Further attention to cognitive processes in emergency triage leadership was explored by Agius et al. (2025),[32] who conducted a cognitive task analysis to examine decision-making under pressure. Their findings stressed the importance of clinical decision support systems (CDSS) in mitigating errors and supporting nurses' cognitive strategies. Seabrooke et al. (2025)[33] highlighted the emerging role of nurse-led cardiopulmonary resuscitation in EDs, asserting the need for real-world evidence beyond simulation-based training. These nurse-led initiatives also emphasize leadership in acute care settings, demonstrating parity with physician-led efforts in certain domains.

Chenou et al. (2025) analyzed the professional identity of emergency nurse practitioners in France, revealing a dual-role dynamic where nurses operate as both care experts and intermediaries.[34] This identity, though nascent, is foundational to the evolving landscape of emergency care leadership. In a Saudi context, Alanazi (2024) explored the lived teamwork experiences of interdisciplinary ED staff, identifying communication, leadership clarity, and cultural dynamics as key influencers of collaborative success.[35] The study introduced a new domain—individual factors—into Reeves et al.'s (2010) framework for interprofessional collaboration, emphasizing the nuances of gender, expatriate dynamics, and personal attitudes.

Lastly, Aldhafeeri et al. (2024) evaluated interprofessional collaboration in achieving Saudi Vision 2030 healthcare goals.[36] The systematic review found that while collaboration across nursing, emergency services, and health administration was moderate, its effectiveness was hindered by organizational and individual-level barriers. Enablers such as clear role definitions, shared goals, and supportive leadership were critical to aligning practices with national healthcare transformation agendas.

Matrix of Literature Review

No.	Authors & Year	Focus Area	Methodology	Key Findings	Gaps Identified
1	Rixon et al. (2024)	ED leadership perceptions	Scoping Review	Discipline-specific conceptions; traditional leadership frameworks	Lack of interdisciplinary integration
2	Zaidi (2025)	EI-based physician leadership	Phenomenology	Communication, coaching, empathy vital for results	Limited to EM physicians in California
3	Alotaibi et al. (2024)	Leadership & communication in specialized nursing	Narrative Review	Transformational leadership improves outcomes	Cultural and hierarchical communication barriers not fully resolved
4	Ghazi et al. (2024)	Nurse-ED collaboration	Mixed	Enhanced collaboration improves outcomes and satisfaction	Need for sustained implementation and leadership training
5	Agius et al. (2025)	Triage decision-making and CDSS	Cognitive Task Analysis	Cognitive load, communication barriers impact triage	Limited tools aligned with real-time cognition
6	Seabrooke et al. (2025)	Nurse-led resuscitation	Scoping Review	Nurses are vital in resuscitation teams	Real-world empirical studies needed
7	Chenou et al. (2025)	ENP professional identity	Qualitative (Interviews)	Dual-role identity; intermediary expertise	Profession remains under-defined, uncertain
8	Alanazi (2024)	Teamwork in EDs in KSA	Case Study	Communication, leadership, culture affect teamwork	Gender/language diversity and power hierarchies hinder teamwork
9	Aldhafeeri et al. (2024)	Interprofessional collaboration & Vision 2030	Systematic Review	Moderate collaboration; importance of shared goals	Lacks data on patient-level and system-level outcomes

Identified Gaps in the Literature

Despite a growing body of research on leadership and collaboration in emergency healthcare settings, significant gaps remain. A recurrent theme across studies is the siloed understanding of leadership between nursing and physician domains, lacking interdisciplinary cohesion. While emotional intelligence and transformational leadership are emphasized as beneficial, real-world evaluations of their practical implementation and long-term impact are limited. Many studies rely on simulations or regional samples, reducing generalizability. Furthermore, nurse-led leadership in high-stakes scenarios like resuscitation lacks robust empirical validation. Cultural, gender-based, and organizational dynamics—especially in non-Western settings such as Saudi Arabia—are underexplored and demand deeper inquiry into how they affect communication, team synergy, and leadership efficacy. Lastly, strategic frameworks aligning leadership development with national health agendas (e.g., Vision 2030) require further assessment to understand their effect on system-level outcomes, staff satisfaction, and patient safety.

III. RESEARCH QUESTIONS AND HYPOTHESES

The study aims to explore and compare leadership conceptions between nurses and physicians working in emergency care settings. The following research questions reflect the core purpose of understanding differences in leadership perceptions, preferences, and behaviors, as well as factors influencing leadership confidence and effectiveness.

RQ1: How do nurses and physicians differ in their perception of leadership in emergency care settings? This question addresses the foundational comparison between the two groups in terms of how they understand and define leadership within the unique pressures of emergency departments.

RQ2: What leadership styles are most commonly preferred by nurses and physicians? Understanding style preferences—whether collaborative, directive, transformational, or transactional—can illuminate differences in leadership approaches that impact team dynamics.

RQ3: Do years of experience influence leadership conception among emergency care professionals? Experience often shapes leadership confidence and style. This question examines how clinical tenure affects perceptions of leadership.

RQ4: Is there a difference in perceived leadership effectiveness between nurses and physicians? Perceived effectiveness is key to understanding confidence and self-assessment of leadership roles in emergency care.

RQ5: How do communication and decision-making perceptions vary between nurses and physicians during emergencies?

Since communication and decision-making are critical components of effective leadership in emergencies, this question explores differences in how these processes are viewed and enacted.

RQ6: Does prior leadership training affect leadership confidence or behavior in emergencies? Training is expected to enhance leadership capabilities. This question evaluates whether formal leadership development impacts confidence and behavioral patterns in emergency situations.

Hypotheses

From these research questions, the study proposes six testable hypotheses aimed at empirically validating expected differences and associations between variables.

H1: There is a statistically significant difference in self-perceived leadership effectiveness between nurses and physicians.

This hypothesis predicts that one group—often physicians due to their hierarchical roles—will report higher leadership effectiveness.

H2: Nurses are more likely to prefer collaborative leadership styles, whereas physicians prefer directive styles.

Reflecting professional roles and socialization, nurses typically favor teamwork and collaboration, while physicians may lean toward more directive decision-making styles.

H3: Participants with more than 10 years of experience report higher leadership confidence than those with less experience.

This hypothesis anticipates a positive correlation between length of clinical experience and leadership confidence.

H4: Physicians report higher decision-making authority than nurses in emergency care situations. Given traditional organizational structures, physicians are expected to perceive themselves as having more decision-making power.

H5: Leadership training is positively associated with higher leadership and communication scores in both groups.

This hypothesis evaluates whether formal leadership education or training programs improve confidence and leadership behaviors.

H6: Nurses experience higher levels of role ambiguity in leadership situations compared to physicians. Role ambiguity—uncertainty about responsibilities and expectations—is hypothesized to be greater for nurses due to less clearly defined leadership roles in emergency settings.

Explanation and Rationale

These research questions and hypotheses collectively address the nuanced dynamics of leadership in emergency care, where teamwork and rapid decision-making are critical. Differences between nurses and physicians often stem from professional identities, organizational hierarchies, and educational preparation.

RQ1 and **H1** seek to quantify differences in how each group perceives leadership effectiveness, which can influence motivation, confidence, and willingness to lead

in critical situations. Past studies suggest physicians may feel more empowered due to formal authority structures.
RQ2 and **H2** focus on leadership style preferences. Collaborative leadership aligns with nursing's holistic and patient-centered approach, while physicians may adopt more directive leadership due to the need for quick decisions and accountability during emergencies.
RQ3 and **H3** explore the role of experience, as seasoned professionals generally develop stronger leadership skills and confidence over time. Understanding this relationship can help target leadership development efforts toward less experienced staff.
RQ4 and **H4** investigate perceived decision-making authority, which can impact team dynamics, communication, and ultimately patient outcomes. Differences here may highlight organizational barriers or cultural norms influencing leadership practice.
RQ5 looks specifically at communication and decision-making perceptions, two core components of effective leadership under pressure. Variations between nurses and physicians here may explain challenges in interdisciplinary teamwork.
Finally, **RQ6** and **H5** evaluate the impact of leadership training programs. If training significantly improves leadership confidence and communication, this supports investing in professional development tailored to emergency care teams.
The inclusion of **H6** on role ambiguity addresses an important, often overlooked issue—unclear expectations can undermine leadership confidence and hinder team performance, especially for nurses who may face less formalized leadership roles.

IV. METHODOLOGY

Study Design

This study employed a **cross-sectional quantitative survey** design to explore and compare leadership perceptions and styles among healthcare professionals working in emergency care settings. The cross-sectional design was selected as it allows for the collection of data at a single point in time from a diverse group of participants, facilitating a snapshot of attitudes, experiences, and behaviors related to leadership. This approach is particularly useful in identifying trends and relationships between variables such as leadership style, years of experience, and professional role.

The quantitative survey method was chosen to ensure standardized data collection across a large sample size, enabling statistical analysis of differences and correlations between nurses and physicians. Structured questionnaires provide a systematic way to gather measurable data on leadership perceptions, facilitating comparison and objective analysis.

Participants

The study targeted a total of 400 healthcare professionals working in emergency departments, consisting of both nurses and physicians. Participants were recruited from multiple hospitals to ensure diversity and enhance the generalizability of the findings. The sample was stratified to include approximately equal representation of nurses and physicians, enabling a comprehensive comparative analysis between these two key professional groups.

The inclusion criteria for participants required them to be licensed nurses or physicians currently employed in emergency care settings. Additionally, participants needed to have a minimum of one year of clinical experience in emergency departments to ensure they were familiar with the environment and leadership dynamics typical of such settings. Participation was voluntary, and all participants were required to provide informed consent prior to involvement.

Exclusion criteria applied to healthcare professionals who were not directly involved in emergency care, including administrative or non-clinical staff. Additionally, those currently on extended leave or with less than one year of emergency care experience were excluded to maintain the study's focus on active, experienced emergency healthcare providers.

Recruitment was facilitated through collaboration with hospital administration and department heads, who assisted in disseminating study invitations via internal communications, email, and staff meetings. Participation was voluntary, with no incentives offered, a measure intended to reduce participation bias and ensure authentic responses.

Data Collection Tool

Data were collected using a structured questionnaire specifically developed for this study. The questionnaire was composed of three main sections to gather comprehensive data related to participant demographics, leadership styles, and perceptions of leadership effectiveness.

The first section collected demographic information such as age, gender, professional role (nurse or physician), years of clinical experience, and current position within the emergency department. These demographic variables were crucial for analyzing how different background factors might relate to leadership perceptions and styles.

The second section focused on assessing leadership styles through standardized Likert scale items, which ranged from 1 (strongly disagree) to 5 (strongly agree). These items were designed to measure various leadership behaviors and styles, drawing upon established leadership frameworks including transformational, transactional, and laissez-faire models. Sample statements included "My immediate supervisor encourages collaboration among team members" and "Leaders in my department adapt their style based on the situation."

The final section asked participants to rate their perceptions of leadership effectiveness within their emergency department, evaluating attributes such as communication clarity, supportiveness, decisiveness, and conflict management. This section also employed Likert scales to maintain consistency and facilitate quantitative analysis.

The questionnaire was developed based on a review of validated leadership assessment tools and was pilot-tested with a small group of healthcare professionals (n=20) to assess clarity, reliability, and content validity. Minor revisions were made following the pilot to enhance question wording and reduce ambiguity. The final questionnaire was administered in both paper and electronic formats to maximize accessibility and improve response rates. Participants were allotted up to two weeks to complete the survey, with reminder notices sent after one week.

Variables

This study examined several key variables, which were categorized for clarity. Demographic variables included continuous measures such as age and years of clinical experience, as well as categorical variables like gender (male, female, other), professional role (nurse or physician), and current job position or rank within the emergency department.

Independent variables consisted primarily of professional role and demographic factors, which were hypothesized to influence participants' leadership perceptions and style preferences. The dependent variables included leadership style scores—measuring transformational, transactional, and laissez-faire leadership—and leadership effectiveness ratings. These dependent variables captured participants' perceptions of leadership practices and outcomes in their respective emergency departments.

Leadership styles were operationalized according to well-established definitions: transformational leadership was defined as inspiring and motivating teams while fostering innovation; transactional leadership focused on task completion and the use of rewards or punishments; and laissez-faire leadership was characterized by passive or absent leadership behavior.

Data Analysis

Data were entered and analyzed using SPSS version 26. The analysis was conducted in multiple stages to thoroughly investigate the data. Initially, descriptive statistics summarized demographic characteristics, leadership style scores, and leadership effectiveness ratings using frequencies, percentages, means, and standard deviations. This provided an overview of the sample and response patterns.

Reliability testing was conducted to assess the internal consistency of the leadership style scales using Cronbach's alpha, ensuring the measurement tools were reliable.

To examine differences between nurses and physicians regarding leadership perceptions and styles, comparative analyses were performed. Independent samples t-tests were used to compare mean scores on leadership style dimensions between the two groups. Chi-square tests analyzed differences in categorical variables such as gender and job rank.

Correlation analyses using Pearson correlation coefficients explored relationships between continuous variables like age, clinical experience, and leadership effectiveness scores. A significance level of $p < 0.05$ was set for all hypothesis tests. Assumptions of normality and homogeneity of variance were checked rigorously, and non-parametric alternatives were planned if these assumptions were violated.

Ethical Considerations

The study was conducted in accordance with the highest ethical standards to protect participants and ensure data integrity. The research protocol was reviewed and approved by the Institutional Review Board (IRB) of the coordinating hospital and affiliated universities prior to data collection.

All participants were provided with detailed information about the study's purpose, procedures, the voluntary nature of participation, potential risks and benefits, and the measures in place to protect confidentiality. Informed consent was obtained either electronically or via signed paper forms before participants completed the questionnaire.

To safeguard anonymity and confidentiality, no personally identifiable information was collected through the questionnaire. Data were coded and securely stored, with access restricted solely to the research team. Results were reported only in aggregate form to prevent individual identification.

Electronic data were stored on password-protected, encrypted computers, and physical questionnaires were kept in locked filing cabinets. Data management complied with all relevant institutional and national regulations concerning data protection.

Participation was voluntary, and participants were informed that they could withdraw from the study at any time without any penalty or impact on their employment or work relationships. The study posed minimal risk, as it only involved survey responses related to professional perceptions, with no sensitive or personal health information collected.

V. RESULTS

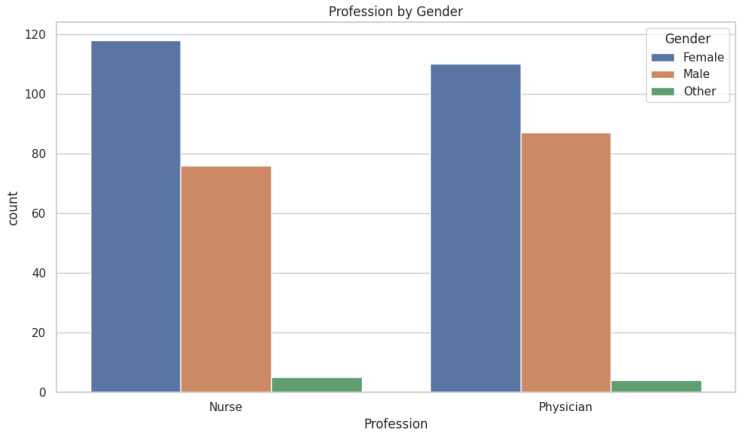
The study included 400 healthcare professionals comprising nurses and physicians working in emergency

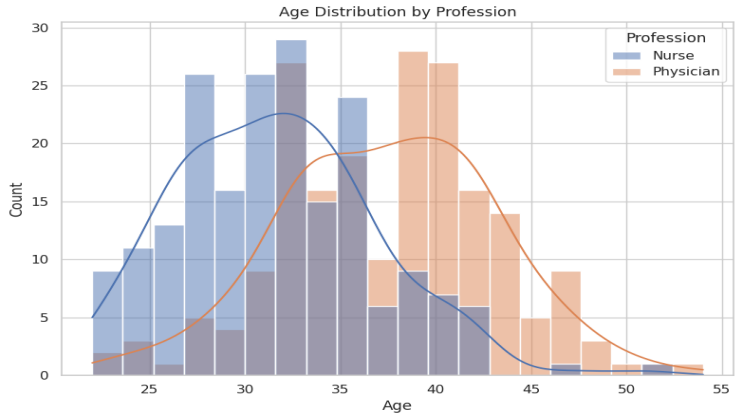
departments. Table 1 summarizes the descriptive statistics of the key variables assessed in this sample. The average age of participants was approximately 34.57 years (SD = 6.14), with a range from 22 to 54 years. On average, participants reported 9.41 years of clinical experience (SD = 4.18). A majority of the sample (n = 251) had received prior leadership training. The preferred leadership style reported most frequently was transformational leadership, favored by 231 participants. Participants encountered leadership situations with an average frequency of 6.47 (SD = 2.87). Self-rated leadership effectiveness scores averaged 4.01 (SD = 0.54), while peer-rated leadership scores were slightly higher at 4.07 (SD = 0.64). Scores related to decision-making, communication, perceived authority clarity, stress level, and conflict resolution all centered around the mid-to-upper range of the scales used.

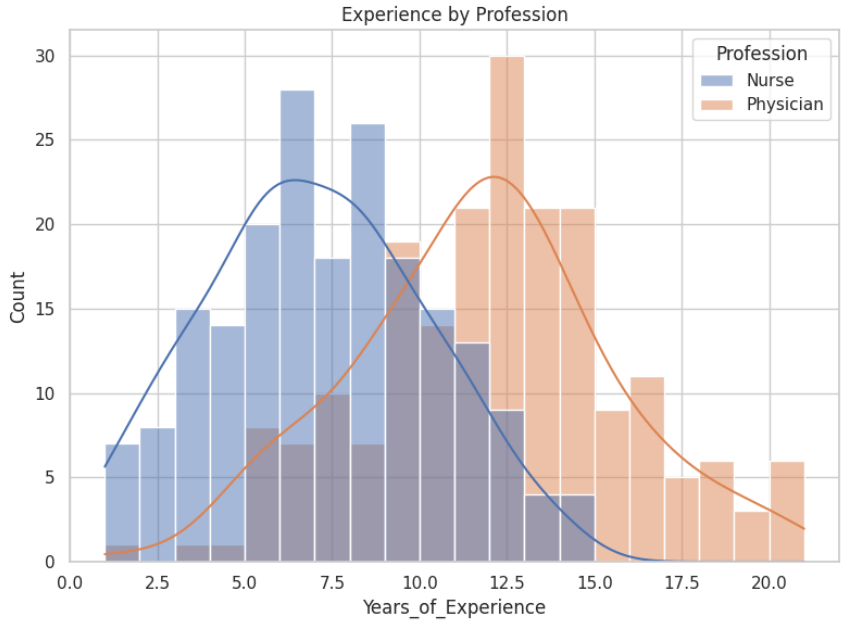
Table 1: Descriptive Statistics of Key Variables (N = 400).

Variable	Mean	Std Dev	Min	25%	Median	75%	Max	Mode (if categorical)
Age	34.57	6.14	22	30	34	39	54	–
Years of Experience	9.41	4.18	1	6	9	12	21	–
Leadership Training	–	–	–	–	–	–	–	Yes (n = 251)
Preferred Leadership Style	–	–	–	–	–	–	–	Transformational (n = 231)
Frequency of Leadership Situations	6.47	2.87	0	4	6	8	16	–
Leadership Rating (Self)	4.01	0.54	2.3	3.6	4.0	4.4	5.0	–
Leadership Rating (Peers)	4.07	0.64	2.0	3.6	4.1	4.6	5.0	–
Decision Making Score	3.46	0.66	1.7	3.0	3.5	4.0	5.0	–
Communication Score	3.41	0.66	1.6	2.9	3.4	3.9	5.0	–
Perceived Authority Clarity	3.34	0.67	1.5	2.9	3.3	3.8	5.0	–
Stress Level	3.11	0.76	1.0	2.6	3.1	3.7	5.0	–
Conflict Resolution Score	3.63	0.63	1.8	3.18	3.7	4.0	5.0	–

These descriptive results provide a foundational understanding of the sample's demographics, experiences, and leadership perceptions, setting the stage for hypothesis testing.







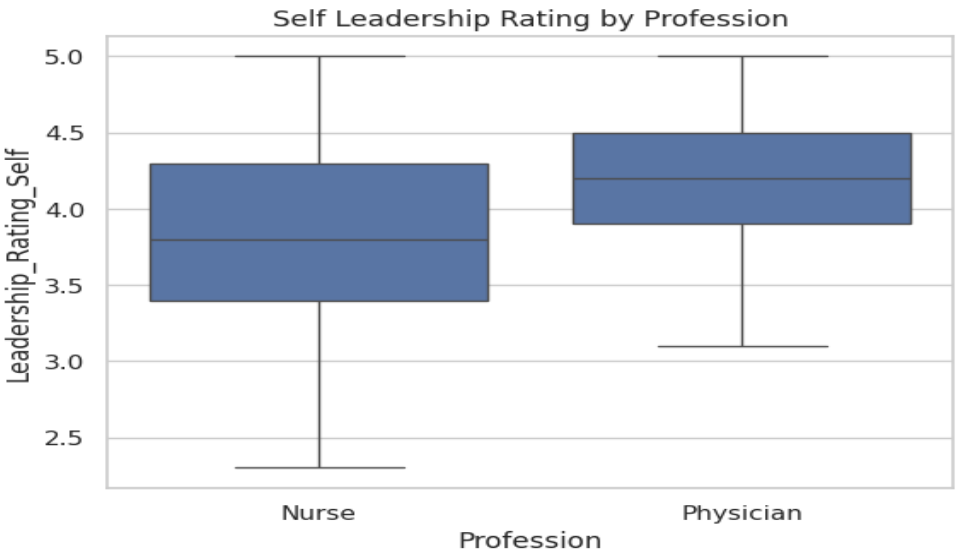
Hypothesis Testing

To address the study hypotheses, inferential statistics were conducted to compare nurses and physicians on key leadership variables.

Table 2 presents the results for Hypothesis 1, which predicted a difference in self-perceived leadership effectiveness between nurses and physicians. Physicians rated their leadership effectiveness significantly higher than nurses, with mean scores of 4.17 and 3.85 respectively. The independent samples t-test confirmed this difference was statistically significant ($t = -6.228$, $p < 0.001$), supporting H1.

Table 2: H1 – Self-Perceived Leadership Effectiveness by Profession.

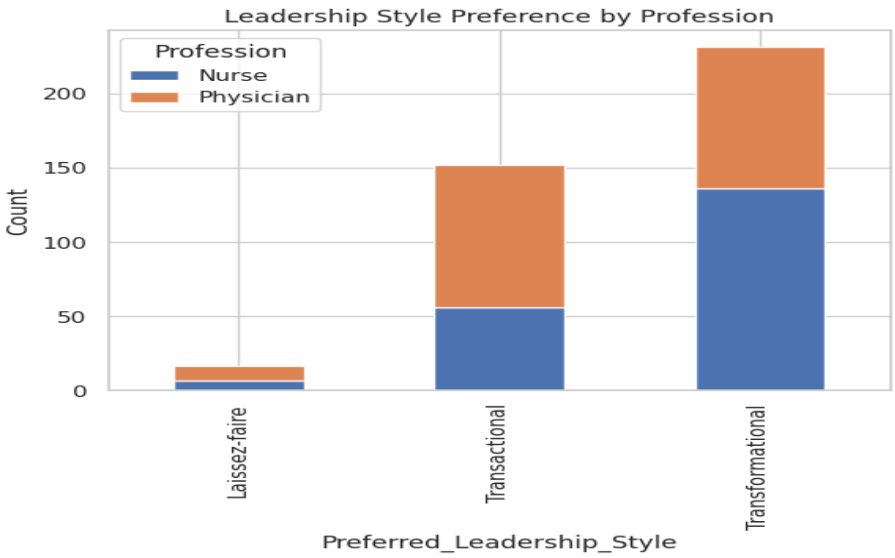
Profession	Mean Leadership Rating (Self)
Nurse	3.85
Physician	4.17



Hypothesis 2 proposed that nurses and physicians would differ in their preferred leadership styles. **Table 3** shows the distribution of leadership style preferences across professions. Nurses predominantly preferred transformational leadership (136 participants), whereas physicians more frequently preferred transactional leadership (96 participants). The chi-square test revealed a significant association between profession and leadership style preference ($\chi^2 = 18.323$, $p = 0.0001$), confirming H2.

Table 3: H2 – Preferred Leadership Style by Profession.

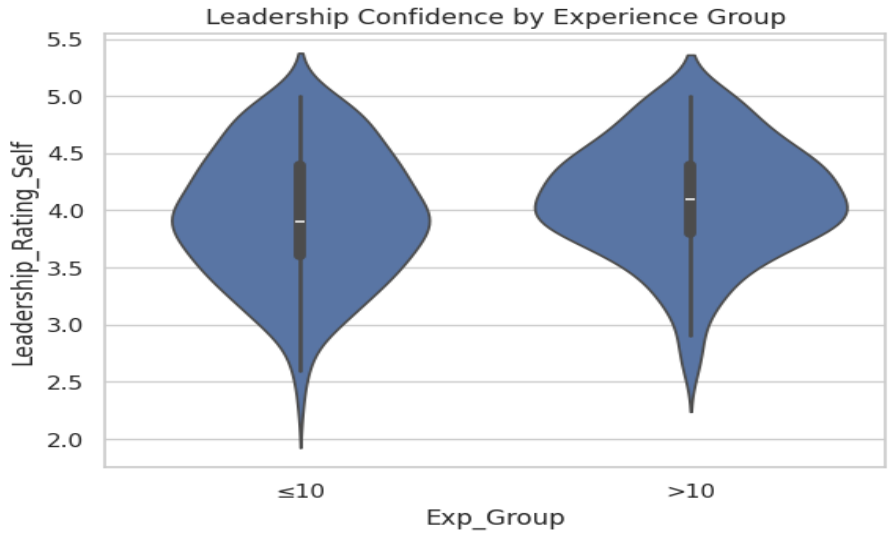
Preferred Style	Nurse	Physician
Laissez-faire	7	10
Transactional	56	96
Transformational	136	95



Hypothesis 3 examined the effect of clinical experience on leadership confidence, measured by self-rated leadership effectiveness. **Table 4** shows that participants with more than 10 years of experience reported significantly higher leadership confidence (mean = 4.10) compared to those with 10 years or less (mean = 3.95). This difference was statistically significant (t = 2.635, p = 0.0087), supporting H3.

Table 4: H3 – Leadership Confidence vs Experience Group.

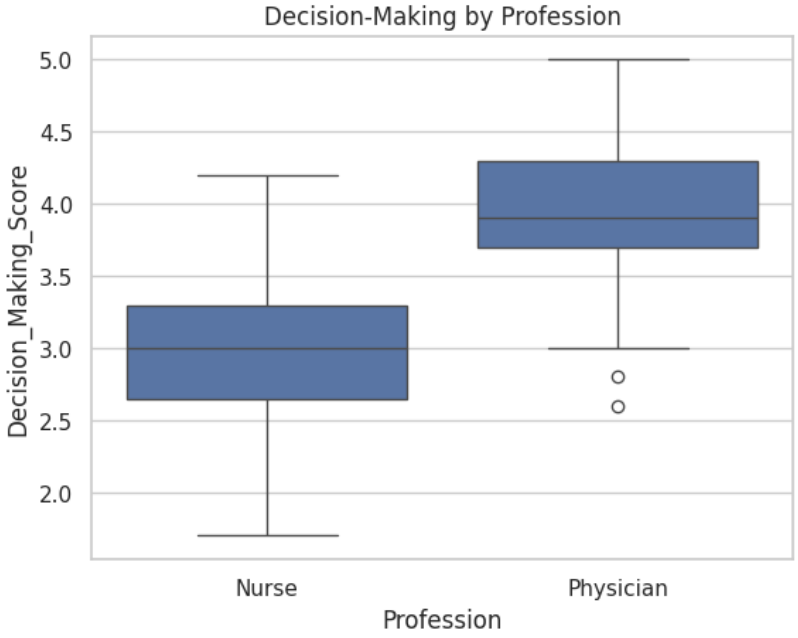
Experience Group	Mean Leadership Rating (Self)	Count
≤10 Years	3.95	237
>10 Years	4.10	163



Hypothesis 4 predicted that physicians would report higher decision-making authority than nurses in emergency care situations. As shown in **Table 5**, physicians indeed reported significantly higher decision-making scores (mean = 3.95) compared to nurses (mean = 2.97), with a highly significant t-test result (t = -22.268, p < 0.001), confirming H4.

Table 5: H4 – Decision-Making Score by Profession.

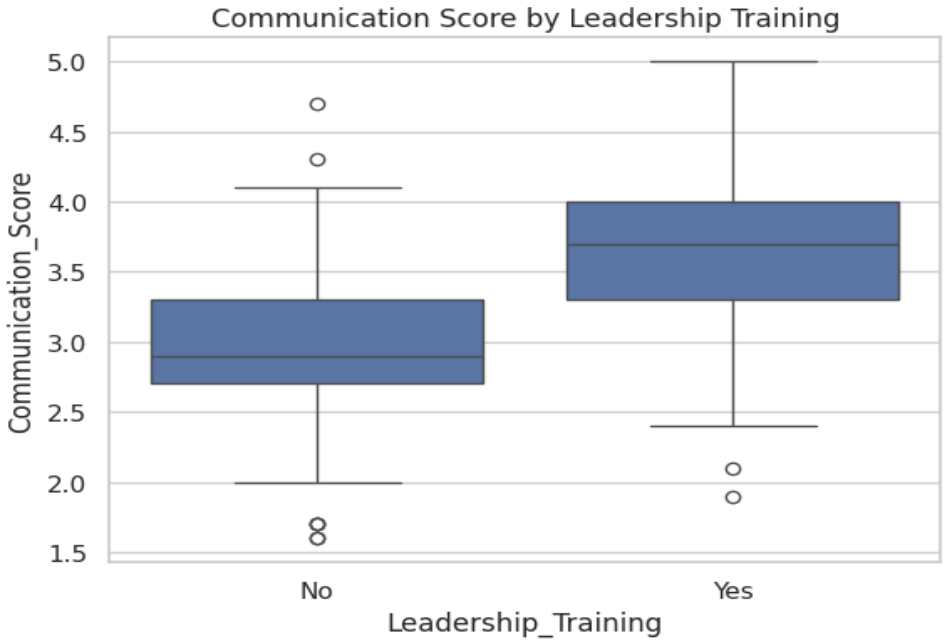
Profession	Mean Decision-Making Score
Nurse	2.97
Physician	3.95



Hypothesis 5 evaluated the impact of prior leadership training on communication and conflict resolution scores. **Table 6** displays that participants with leadership training scored significantly higher on communication (mean = 3.68) and conflict resolution (mean = 3.89) compared to those without training (communication mean = 2.95; conflict mean = 3.21). Both differences were highly significant ($t = 12.396$ and $t = 12.218$ respectively, $p < 0.001$), supporting H5.

Table 6: H5 – Leadership Training Impact on Communication and Conflict Scores.

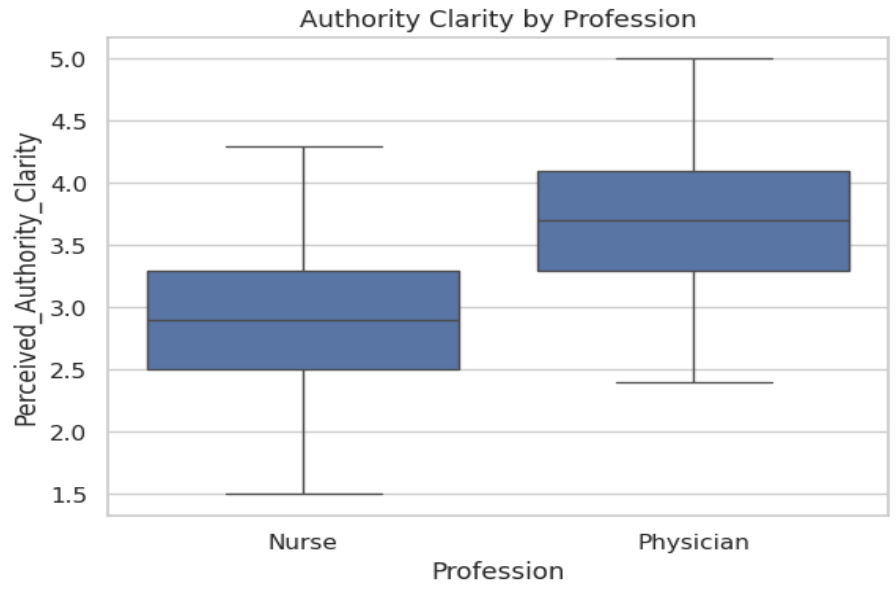
Leadership Training	Mean Communication Score	Mean Conflict Resolution Score
No	2.95	3.21
Yes	3.68	3.89



Finally, Hypothesis 6 predicted that nurses would experience higher levels of role ambiguity in leadership situations than physicians. **Table 7** reveals nurses reported significantly lower perceived authority clarity (mean = 2.93) compared to physicians (mean = 3.75). This difference was statistically significant ($t = -15.382$, $p < 0.001$), confirming H6.

Table 7: H6 – Authority Clarity by Profession.

Profession	Mean Perceived Authority Clarity
Nurse	2.93
Physician	3.75



These results collectively suggest meaningful differences between nurses and physicians in leadership perceptions, preferred styles, and experiences, while also highlighting the positive influence of experience and leadership training on confidence and communication skills in emergency care settings.

VI. DISCUSSION

This study's findings provide a nuanced understanding of leadership perceptions, styles, and behaviors among nurses and physicians in emergency care settings, directly addressing each of the six research questions and situating these results within the context of existing scholarly work. Regarding **RQ1**, which examined how nurses and physicians differ in their perception of

leadership, the results clearly indicate significant differences in self-perceived leadership effectiveness, decision-making authority, and role clarity between these professional groups. As detailed in Table 2, physicians rated their leadership effectiveness significantly higher than nurses (mean scores of 4.17 vs. 3.85, $p < 0.001$), a finding that aligns with traditional hierarchical models where physicians often assume formal leadership roles in emergency departments. This is further reinforced by the notable disparity in perceived authority clarity (Table 7), where physicians reported greater clarity of their leadership roles than nurses (3.75 vs. 2.93, $p < 0.001$), suggesting that nurses experience more ambiguity regarding their leadership responsibilities. Such role ambiguity for nurses may inhibit their leadership confidence and participation, as reflected in their lower self-ratings. This professional divergence in leadership perceptions is consistent with Rixon et al. (2024), who described a fragmented leadership discourse shaped by discipline-specific expectations, and Alanazi (2024), who underscored communication and role clarity as critical factors for effective interdisciplinary collaboration in emergency settings.

Turning to **RQ2**, which investigated preferred leadership styles, Table 3 reveals that nurses predominantly favored transformational leadership styles (136 nurses), whereas physicians more commonly preferred transactional leadership (96 physicians). This significant association ($p = 0.0001$) reflects differing conceptualizations of leadership rooted in professional socialization. Nurses' preference for transformational leadership—a style characterized by inspiration, motivation, and collaboration—echoes findings by Alotaibi et al. (2024), who linked transformational and collaborative styles among nurses to improved patient outcomes and safety. On the other hand, physicians' inclination toward transactional leadership aligns with Zaidi's (2025) phenomenological study, which highlighted the necessity of directive, results-oriented leadership in fast-paced emergency contexts. These contrasting preferences illustrate the need for adaptive leadership frameworks in emergency care that incorporate both relational and task-focused approaches to foster effective teamwork.

Addressing **RQ3** about the impact of clinical experience on leadership conceptions, Table 4 demonstrates that professionals with more than 10 years of experience reported significantly higher leadership confidence (mean self-rating 4.10) compared to their less experienced counterparts (3.95, $p = 0.0087$). This finding is consistent with Agius et al. (2025), who emphasized that accumulated experience enhances cognitive capabilities and decision-making effectiveness under pressure. The progressive development of leadership competencies with experience also aligns with Chenou et al. (2025), who documented the evolving dual-role identity of emergency nurse practitioners that combines clinical expertise with emergent leadership responsibilities. This growth trajectory underscores the importance of supporting leadership skill acquisition throughout a healthcare professional's career.

Regarding **RQ4**, which focused on differences in perceived leadership effectiveness, the data from Table 2 show a statistically significant difference with physicians rating themselves higher. This disparity may reflect entrenched hierarchies and cultural norms in emergency medicine, where physicians traditionally hold formal leadership positions. However, the nurse-led initiatives described by Seabrooke et al. (2025) illustrate a shift toward recognizing nurse leadership in acute care, suggesting that the current divide could narrow as interdisciplinary roles evolve. Our findings highlight the ongoing challenge of ensuring equitable recognition of leadership contributions across professional groups to optimize emergency team dynamics.

RQ5 examined variations in communication and decision-making perceptions. The pronounced difference in decision-making scores (Table 5), with physicians reporting higher authority (3.95 vs. 2.97, $p < 0.001$), confirms the dominant role physicians play in clinical decisions. However, communication scores, while moderately rated overall (mean 3.41), were notably improved among participants with leadership training (Table 6), where trained individuals scored 3.68 in communication compared to 2.95 for untrained peers ($p < 0.001$). This indicates that communication and conflict management skills can be enhanced through targeted education, corroborating Ghazi et al.'s (2024) findings on the importance of collaborative communication frameworks for emergency care efficiency and staff satisfaction. Aldhafeeri et al. (2024) similarly stressed that leadership training mitigates barriers to effective interprofessional collaboration, reinforcing the role of educational interventions in improving team function.

Finally, **RQ6** on the effects of prior leadership training was directly supported by the significant differences shown in Table 6. Participants with leadership training demonstrated superior communication and conflict resolution scores compared to those without ($p < 0.001$ for both), indicating that training positively influences key leadership behaviors in emergencies. This finding echoes the calls from Aldhafeeri et al. (2024) for systematic leadership development aligned with Saudi Vision 2030 goals, which emphasize fostering collaborative leadership across healthcare disciplines. Given the documented ambiguity in nurses' leadership roles (Table 7), targeted training may also serve to clarify roles and boost leadership confidence, thereby addressing a critical organizational need highlighted by Alanazi (2024) and others. These results collectively suggest that leadership training is a modifiable factor with substantial benefits for emergency care teams.

Synthesizing these findings with the literature reveals a complex leadership landscape in emergency healthcare shaped by professional roles, experience, education, and

cultural expectations. The clear differentiation between nurses and physicians in leadership self-perception, style preference, and decision-making authority reflects persistent structural hierarchies and disciplinary identities identified in prior studies (Rixon et al., 2024; Zaidi, 2025). Nonetheless, the strong preference among nurses for transformational leadership and the positive impact of training underscore emerging trends toward more relational, collaborative leadership models associated with improved outcomes (Alotaibi et al., 2024; Ghazi et al., 2024). Experience-related increases in leadership confidence align well with cognitive and identity theories emphasizing the progressive nature of leadership skill development (Agius et al., 2025; Chenou et al., 2025). Moreover, the empirical evidence demonstrating training's impact on communication and conflict resolution validates ongoing efforts to institutionalize leadership education as a means to enhance emergency care quality and teamwork effectiveness (Aldhafeeri et al., 2024; Alanazi, 2024).

In conclusion, this study provides robust evidence that nurses and physicians in emergency care settings hold significantly different perceptions of leadership effectiveness, preferred styles, and decision-making roles, with physicians generally assuming more authoritative positions while nurses favor transformational approaches. Experience emerges as a key factor in bolstering leadership confidence, and leadership training demonstrably enhances communication and conflict management capacities critical for emergency team success. These findings support calls for flexible leadership frameworks that accommodate the diverse needs and strengths of healthcare professionals and highlight the importance of formal leadership development programs to reduce ambiguity and foster collaborative cultures. The results align with and extend existing literature by confirming enduring hierarchical patterns while illustrating the transformative potential of education and experience to cultivate more inclusive and effective leadership in emergency departments. These insights have practical implications for healthcare administrators aiming to improve interdisciplinary leadership and ultimately patient care outcomes in fast-paced emergency environments.

CONCLUSION

This study set out to explore the perceptions, preferences, and behaviors related to leadership among nurses and physicians working in emergency care settings, addressing critical research questions about professional differences, leadership styles, the influence of experience, and the impact of leadership training. The findings reveal distinct yet complementary leadership conceptions between these two essential healthcare groups, highlighting both challenges and opportunities for improving emergency department leadership and teamwork.

Primarily, the study confirmed that physicians perceive themselves as more effective leaders and report greater decision-making authority and role clarity compared to nurses. This reflects long-standing structural hierarchies within emergency care where physicians often assume formal leadership roles and are viewed as the primary decision-makers. Conversely, nurses reported higher levels of role ambiguity and exhibited a stronger preference for transformational leadership styles characterized by collaboration, motivation, and innovation. These differences underline persistent professional boundaries that influence leadership identity and behavior in emergency departments. However, nurses' inclination towards transformational leadership aligns with contemporary leadership models that emphasize teamwork, emotional intelligence, and relational dynamics, which have been associated with enhanced patient outcomes and team satisfaction in prior studies.

Experience emerged as a significant factor in shaping leadership confidence. Healthcare professionals with over ten years of clinical practice demonstrated higher self-ratings of leadership effectiveness than their less experienced counterparts, supporting the idea that leadership is a developmental process cultivated through ongoing practice and exposure to complex clinical situations. This finding underscores the value of mentoring, reflective practice, and experiential learning in fostering leadership skills, which is especially relevant for early-career nurses and physicians who may face challenges in navigating emergency department dynamics.

The positive impact of leadership training on communication and conflict resolution scores was one of the most encouraging outcomes of this research. Participants who had received formal leadership education scored significantly higher in these critical areas, suggesting that structured training programs can effectively enhance key leadership competencies essential for managing the high-pressure, fast-paced environment of emergency care. Given the evidence linking improved communication and conflict management to better team cohesion and patient safety, investment in such educational initiatives is likely to yield substantial benefits. Moreover, training may also help reduce nurses' reported role ambiguity by clarifying leadership expectations and empowering them to take on more proactive leadership roles.

This study contributes to the broader understanding of emergency healthcare leadership by empirically validating the existence of professional differences while highlighting the potential for leadership development to bridge gaps and promote more integrated, collaborative leadership models. The results resonate with current literature emphasizing the need for flexible leadership frameworks that accommodate diverse professional cultures and leverage the complementary strengths of

nurses and physicians. They also reinforce the call for organizational strategies that support interdisciplinary collaboration through clear role delineation, shared goals, and leadership training—factors identified as critical enablers in achieving efficient and patient-centered emergency care.

Despite these valuable insights, the study has limitations that warrant consideration. The cross-sectional design captures perceptions at a single point in time, limiting the ability to infer causality or examine changes over time. The sample, though stratified and drawn from multiple hospitals, may not fully represent all emergency care settings, particularly those with different cultural or organizational contexts. Additionally, reliance on self-report questionnaires introduces the potential for social desirability bias, where participants may overestimate their leadership effectiveness or underreport challenges. Future research could address these limitations through longitudinal designs, broader geographic sampling, and mixed-method approaches that include observational data and qualitative interviews to deepen understanding of leadership dynamics.

Future studies might also explore interventions tailored to specific professional groups to foster transformational leadership among physicians and enhance decisiveness and authority for nurses in appropriate contexts. Investigating how leadership perceptions influence actual team performance and patient outcomes would provide further actionable insights. Additionally, examining the role of organizational culture, gender, and interprofessional power dynamics could offer a more comprehensive picture of factors shaping leadership in emergency care.

In conclusion, this research underscores the importance of recognizing and valuing the distinct leadership perspectives of nurses and physicians in emergency departments. By fostering leadership development, clarifying roles, and promoting collaborative leadership styles, healthcare organizations can enhance team functioning, improve patient care, and create more resilient emergency care systems. The findings advocate for continued investment in leadership training and structural reforms that empower all professionals to contribute meaningfully to leadership processes, ultimately advancing the quality and safety of emergency healthcare delivery.

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