Empirical Research Article
ISSN: **3041-5357**
Journal homepage: https://diversity.researchfloor.org/

Journal of Diversity Studies

Enhancing Public Service Delivery: Understanding How Employee Leadership Skills as an Employee Development Strategy Shape Outcomes in Mbarara Regional Referral Hospital, Uganda–A Quantitative Approach

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ABSTRACT

This study assessed the relationship between employee leadership skills and public service delivery in Mbarara Regional Referral Hospital in Uganda, addressing a critical gap in the literature that has largely overlooked leadership development in the Ugandan healthcare context. Grounded in transformational leadership theory, the study adopted correlational and cross-sectional research designs within a quantitative research approach. From a target population of 982, a sample size of 284 was calculated using Yamane's formula, with respondents selected through stratified random, proportionate, and simple random sampling techniques. Data were collected using a self-administered questionnaire structured on a five-point Likert scale, while a pilot study involving 28 participants at Masaka Regional Referral Hospital tested the instrument's validity and reliability. Both descriptive and inferential statistics guided the analysis, and the findings revealed a statistically significant positive relationship between employee leadership skills and service delivery. The study concluded that enhancing leadership skills among healthcare employees is essential for strengthening service delivery in public hospitals. It recommended targeted leadership development programmes, continuous professional training, and structured mentorship initiatives to build leadership capacity across all levels of healthcare staff. The study is significant to policy as it provides evidence to support the integration of leadership training into human resource strategies and health sector reforms in Uganda, ensuring that employee development aligns with service delivery goals. Its contribution to knowledge lies in contextualising the application of transformational leadership theory within a Ugandan healthcare setting, offering empirical evidence that leadership skills are a critical determinant of effective service delivery in regional referral hospitals.

Keywords: *Employee Leadership Skills, Public Service Delivery, Employee Development Strategy*

Citation: Natureeba Caroline and Tom Ongesa Nyamboga [2025]. Enhancing Public Service Delivery: Understanding How Employee Leadership Skills as an Employee Development Strategy Shape Outcomes in Mbarara Regional Referral Hospital, Uganda-A Quantitative Approach. *Journal of Diversity Studies.* **DOI: https://doi.org/10.51470/JOD.2025.4.2.66**

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Article History: *Received 04 June 2025 | Revised 09 July 2025 | Accepted 06 August 2025 | Available Online September 03, 2025*

Introduction

Public service delivery remains a cornerstone of achieving the Sustainable Development Goals, particularly in ensuring access to quality healthcare and strengthening institutional capacity [1]. Effective employee leadership skills as an employee development strategy directly shape how services are organised, coordinated, and delivered, influencing both efficiency and responsiveness [2]. When healthcare employees are equipped with strong leadership competencies, they demonstrate improved decision-making, problem-solving, and accountability, which translate into higher standards of service delivery [3]. The dependence of public service delivery on leadership skills lies in the ability of employees to align individual performance with institutional goals, creating a sustainable pathway to improved outcomes in facilities. This connection underscores leadership development not only as a workforce strategy but also as a driver of sustainable development [4].

This study integrates leadership skills as an employee development strategy with public service delivery to examine how strengthening the workforce shapes institutional performance [5], [6]. Employee leadership skills in this context refer to the capacity of healthcare employees to demonstrate vision, decision-making, accountability, and problem-solving in ways that improve service coordination and responsiveness [3], [7]. Public service delivery, reflects the efficiency, accessibility, and quality of healthcare provided to patients [8]. The integration of these variables positions leadership skills not merely as personal competencies but as strategic drivers of organisational outcomes [9], aligning staff development with the broader objective of sustainable healthcare improvement. By framing leadership as an investment in human capital, the study underscores how empowering employees with such skills can translate directly into enhanced service delivery, thereby advancing health-related Sustainable Development Goals in Uganda [4].

Public service delivery in advanced economies faces persistent challenges despite well-resourced systems [10], [11]. Bureaucratic inefficiencies, complex regulatory frameworks, and workforce burnout often undermine the efficiency and responsiveness of services, particularly in healthcare [12], [13]. For instance, studies from the United States and the United Kingdom have highlighted how misalignment between leadership capacity and institutional goals contributes to delays in patient care and reduced service quality [14], [15],[16]. Even with robust infrastructure, the lack of structured employee development in leadership limits the ability of staff to respond adaptively to emerging health needs [17], [18]. This study fills the gap by exploring how targeted employee leadership skills, as an employee development strategy, can enhance public service delivery, providing lessons that could inform advanced systems seeking to strengthen the human capital dimension of service provision.

Developing economies face distinct but equally pressing challenges in public service delivery [18], [19], often compounded by resource constraints, workforce shortages, and limited access to training [20]. Countries such as Kenya and Nigeria have struggled with inconsistent service quality and inequitable healthcare access, partly due to insufficient leadership development among frontline staff [21], [22]. In these contexts, employee leadership skills are rarely integrated into formal workforce strategies, leaving institutions ill-equipped to manage growing healthcare demands [23], [24].

In Uganda, persistent challenges in public service delivery, including inadequate leadership, resource constraints, and systemic inefficiencies, continue to impede progress towards the Sustainable Development Goals [25]. For example, Kambuga General Hospital in Kanungu District has experienced issues such as dilapidated infrastructure and insufficient funding, which have compromised service delivery. Similarly, district-level health leadership has been hindered by underfunding, the absence of functional policies, and poor work environments, resulting in ineffective leadership and suboptimal service outcomes [26].

In response, the Ugandan government has implemented several reforms to address these challenges. The Ministry of Health's Strategic Plan 2020/21 emphasises human capital development and aims to enhance leadership and management capacities within the health sector [27]. The Civil Service College Uganda provides induction and pre-retirement training for staff, including employees at Mbarara Regional Referral Hospital, to build leadership competencies [28]. In addition, the government has focused on improving infrastructure, increasing funding, and implementing policies to strengthen the healthcare system [29]. These measures are designed to align with the national goal of achieving universal health coverage and improving healthcare quality and accessibility for Ugandan citizens.

Mbarara Regional Referral Hospital continues to face major challenges in service delivery despite ongoing government initiatives aimed at improving healthcare [30]. Research indicates that fifty-two per cent of participants identified health as the most pressing national issue, surpassing sectors such as education and infrastructure, which reflects the growing public concern about the state of healthcare in Uganda [31]. This aligns with wider patterns of systemic strain, as seventy-four per cent of Ugandans reported being unable to access essential prescription drugs or medical care, marking a seventeen-percentage point rise since 2015.

The situation within public health institutions demonstrates a further decline in accessibility and efficiency. Sixty-three per cent of individuals who sought care from public health facilities reported difficulties in obtaining necessary services, an eleven-percentage point increase from 2015 [31]. Such statistics point to persistent bottlenecks that undermine the effectiveness of healthcare delivery across the country, with Mbarara Regional Referral Hospital reflecting these national challenges.

The internal environment at Mbarara Regional Referral Hospital exacerbates the difficulties faced by patients. Half of the healthcare workers at the facility reported stressful working conditions, with many attributing the strain to poor remuneration, inadequate communication systems, and weak administrative coordination [32]. These structural and organisational shortcomings have created barriers that limit efficiency, demoralise staff, and reduce the overall quality of patient care.

The persistence of these systemic problems despite multiple policy interventions highlights a critical gap between government strategies and practical outcomes at the hospital level. This disconnect underscores the need for a more holistic approach that strengthens health system governance, enhances accountability, and improves the working environment for healthcare professionals to achieve meaningful progress in service delivery.

This study examined how employee leadership skills, implemented as an employee development strategy, influenced public service delivery at Mbarara Regional Referral Hospital, Uganda. It assessed how enhancing staff competencies in decision-making, problem-solving, and accountability improved service efficiency, responsiveness, and patient outcomes, providing evidence for policymakers and hospital management to integrate leadership development into workforce strategies, thereby strengthening institutional performance and advancing Sustainable Development Goals.

Research Question

How do employee leadership skills, as an employee development strategy, influence public service delivery at Mbarara Regional Referral Hospital, Uganda?

Specific Objectives:

- To assess the level of employee leadership skills among employees at Mbarara Regional Referral Hospital.
- To evaluate the quality of public service delivery in the hospital.
- To determine the relationship between employee leadership skills and public service delivery.
- To examine the influence of employee leadership skills on service efficiency, responsiveness, and patient outcomes.
- To provide recommendations for policymakers and hospital management on integrating leadership development into employee training strategies to enhance institutional performance.

2.0 Theoretical framework

Transformational Leadership Theory, first introduced by Burns in 1978 and later expanded by Bass in the 1980s, formed the conceptual framework for this study [33]. The theory posited that leaders who demonstrated idealised influence, inspirational motivation, intellectual stimulation, and individualized consideration could enhance the motivation, competencies, and performance of their followers [34].

In this study, the theory provided a lens for understanding employee leadership skills as an employee development strategy at Mbarara Regional Referral Hospital. These skills, including decision making, problem solving, accountability, and team coordination, were expected to improve the effectiveness of hospital staff. Public service delivery was examined in terms of efficiency, responsiveness, and quality of healthcare services provided. By applying transformational leadership principles, the study explained how developing employees' leadership skills could influence service outcomes, providing a structured framework to analyse the relationship between leadership development and institutional performance in the hospital context.

Empirical review

Employee Leadership skills and Service Delivery in Mbarara Referral Hospital.

A review of existing literature establishes a strong foundation for understanding leadership's role in organisational development, yet a distinct gap persists regarding leadership skills development in the Ugandan healthcare context. [35], study in the U.S. healthcare system revealed a crucial link between human resource development, employee learning, job satisfaction, and organisational performance. Their research, based on 3,474 employees across 69 facilities, underscored that organisational support for performance and continuous learning is indispensable for fostering an effective HRD culture and improving service delivery.

In parallel, research by [36], into systemic challenges in post-apartheid South Africa showed that many quality improvement strategies fail to produce the intended outcomes. Their quantitative study, supplemented by a literature review, demonstrated the multifaceted barriers hindering the successful implementation of healthcare improvements.

Theoretical perspectives on leadership development are advanced by [37], whose case study highlighted how a relational view of leadership can enable development practitioners to promote collective action, shape leadership culture, and democratise the development process. Similarly, [38], identified a significant positive correlation between servant leadership behaviours, particularly the dimension of "developing others," and job satisfaction among staff in private South African healthcare practices, emphasising the human-centred nature of leadership.

At a strategic level, [39] and [40] examined the role of leadership in organisational effectiveness. [31], desk review of Nigeria's public sector concluded that strategic leadership is a critical aspect of management with a positive impact on organisational outcomes. [40] qualitative study further argued that strategic processes are essential for transforming strategy from a document into a practical agenda that guides present and future actions to achieve quality service delivery.

While these studies provided valuable insights from the U.S., South Africa, and Nigeria, they largely relied on single-method approaches, employing either qualitative or quantitative designs. The current study addressed this contextual and methodological gap by investigating the relationship between employee leadership skills development and service delivery at Mbarara Regional Referral Hospital in Uganda. A quantitative research approach was utilised to generate a rigorous and context-specific analysis, focusing on measurable dimensions of leadership skills and their impact on service delivery within the hospital setting.

3.0 Materials and Methods

Research design

The study adopted a correlational research design to examine the relationship between employee leadership skills development and service delivery at Mbarara Regional Referral Hospital. The correlational design was appropriate because it allowed the researcher to assess the strength and direction of the relationship between these variables without manipulating them, providing insights into how variations in employee leadership skills were associated with differences in service delivery outcomes [41]. Additionally, a cross-sectional design was employed, collecting data at a single point in time, which enabled the study to capture a snapshot of existing conditions and patterns among hospital staff efficiently. This design was justified as it facilitated the analysis of multiple variables simultaneously, reduced time and resource constraints, and provided a practical approach for understanding the current state of leadership skills and their impact on service delivery within the hospital context [42], [41].

Research Approach

This study adopted a quantitative research approach, which involves the systematic collection and analysis of numerical data to identify patterns, relationships, and causal effects. The quantitative approach was considered appropriate because it allowed for the measurement of leadership skills development and service delivery outcomes in a precise and objective manner. By using structured instruments self-administered questionnaires, the study was able to quantify variables like teamwork, network building, patient waiting times, patient satisfaction, and emergency response rates, providing empirical evidence on their relationships. The approach also enabled statistical analysis to determine the strength and significance of the relationship between employee leadership skills and service delivery, ensuring that the findings were reliable and generalizable within the context of Mbarara Regional Referral Hospital. Additionally, a quantitative design was justified because it facilitated the comparison of responses across a large sample of hospital staff, allowing the study to draw conclusions that could inform policy and practical interventions for improving public service delivery [43], [44].

Target Population

The target population refers to the entire group of people, objects, or events that possess observable characteristics and are the focus of study findings that can be generalized [45]. In this study, the target population comprised hospital staff, hospital management, and clients at Mbarara Regional Referral Hospital. Specifically, hospital staff included medical professionals (118), allied health professionals (17), administrative staff (9), and support staff (202). Hospital management comprised the hospital director (1), department heads (17), human resources personnel (4), and training and development coordinators (6). Clients accounted for 608 individuals. These categories were selected because they were believed to possess the information necessary to address the study objectives.

Inclusion criteria for the study encompassed individuals who were: currently employed at Mbarara Regional Referral Hospital or registered as clients during the study period, directly involved in healthcare service delivery or management, and willing to provide informed consent to participate.

Exclusion criteria included individuals who were temporary staff, interns, or clients not receiving services at the hospital during the study period, as well as those who declined to participate or were unable to provide reliable information. The target population tabulation is displayed in Table 1.

Sample Size determination and sampling techniques

The sample size was drawn from the target population of 982. Using Yamane's (1967) formula the sample size of 284 was arrived as shown below.

Yamane (1967)

$$n = \frac{N}{1+N(e)^2}$$

Where:

N- represents the target population;

n – represents the sample size;

e- is the margin of error (0.05).

Thus, $n = \frac{982}{1+982(0.05^2)}$ =284

Table 1: Sample Size

Stratum	Population	Sample Size
Medical professionals	118	34
Allied health professionals	17	5
Administrative staff	9	3
Support staff	202	58
Department heads	17	5
Human resources personnel	4	1
Training and development coordinators	7	2
Patients and their families	608	176
Total	**982**	**284**

Source: *Researcher, 2025*

The study employed a combination of stratified random sampling, proportionate sampling, and simple random sampling to select respondents. Stratified random sampling was used to divide the target population into homogeneous subgroups, or strata, based on their roles within the hospital, such as medical professionals, administrative staff, support staff, and clients. This approach ensured that all relevant categories of participants were adequately represented in the study, enhancing the precision and generalizability of the findings. Proportionate sampling was applied within each stratum to determine the number of respondents from each category in proportion to their size in the target population. This method ensured that larger groups, such as support staff and clients, contributed proportionately more respondents than smaller groups, maintaining representativeness and reducing sampling bias.

Finally, simple random sampling was used to select individual participants within each stratum, giving each member an equal chance of being included in the study. This technique minimized selection bias and ensured that the sample reflected the diversity of the population, providing reliable and valid data for analyzing the relationship between leadership skills and service delivery at Mbarara Regional Referral Hospital.

Data collection tools

The study collected data using a self-administered questionnaire, which employed a Likert scale ranging from 1 to 5. This method was chosen because it allowed respondents to provide information directly and independently, reducing the potential for interviewer bias and ensuring privacy and comfort when expressing opinions about leadership skills and service delivery.

The Likert scale enabled the measurement of attitudes, perceptions, and behaviours in a structured and quantifiable manner, capturing the intensity of respondents' agreement or disagreement with various statements. Using a 1–5 scale facilitated easy coding and statistical analysis, allowing the researcher to calculate means, frequencies, and correlations to examine relationships between variables. The approach was justified as it was cost-effective, efficient for collecting data from a large number of participants, and suitable for the quantitative design of the study, providing reliable and valid information to assess the impact of leadership skills on service delivery at Mbarara Regional Referral Hospital.

Piloting

A pilot study was conducted using a sample of 28 participants, representing 10% of the total sample size, at Masaka Regional Referral Hospital. The purpose of the pilot was to test the validity and reliability of the self-administered questionnaire before its full deployment at Mbarara Regional Referral Hospital. This process helped identify ambiguous or unclear questions, assess the consistency of responses, and ensure that the instrument accurately measured leadership skills and service delivery. Adjustments were made based on the pilot results to enhance clarity, relevance, and reliability, thereby improving the overall quality and robustness of the data collection process for the main study.

Validity test

The study conducted content validity to ensure that the questionnaire accurately measured the concepts of leadership skills and service delivery. This was achieved using the Content Validity Index (CVI), which involved expert review of the instrument's items for relevance, clarity, and representativeness. Experts rated each item, and the CVI was calculated to quantify the degree of agreement among reviewers. Items that did not meet the acceptable CVI threshold were revised or removed to enhance the validity of the questionnaire. This process ensured that the instrument was both comprehensive and appropriate for capturing the constructs under investigation, strengthening the overall credibility and rigor of the study.

Content validity (CV) was calculated to determine the correct correlation coefficient, and the results are shown in Table 2.

CVI =$\bar{x}$ ($ICVR$). This formula represents the mean ($\bar{x}$) of all individual item CVRs ($ICVR$).

Table 2: Validity Results

Constructs	Total items	Relevant items	Irrelevant items	CVI
Employee training	08	06	02	0.750
Employee leadership skills	07	06	01	0.857
Career development	08	06	01	0.750
Service Delivery	10	09	01	0.900
Mean				0.814

Source: *Primary data, 2025*

The study achieved an overall Content Validity Index (CVI) score of 0.814 for the questionnaire items, significantly exceeding the minimum threshold of 0.70 established by [43] as the standard for acceptable content validity. This robust CVI score confirms that the instrument's items demonstrated strong relevance and accuracy in measuring the intended constructs, thereby validating the questionnaire's content validity for research purposes. The findings align with established methodological standards for ensuring measurement quality in survey-based research.

Reliability

The study assessed the reliability of the questionnaire using Cronbach's alpha to determine the internal consistency of the items measuring leadership skills and service delivery. The pilot data collected from Masaka Regional Referral Hospital were used for this analysis. Cronbach's alpha values for each construct were calculated, with results shown in Table 3, indicating that the instrument demonstrated acceptable reliability and consistency for use in the main study. This process ensured that the questionnaire items produced stable and dependable measurements, strengthening the credibility of the data collected at Mbarara Regional Referral Hospital.

Table 3: Reliability test Results

Constructs	Items tested	Alpha values
Employee training	06	.924
Employee leadership skills	06	.740
Career development	06	.752
Service Delivery	09	.912
Mean		.834

Source: Primary data, 2025

The reliability analysis of the measurement items, as presented in Table 3, yielded an overall Cronbach's alpha coefficient of 0.834. This value exceeds the established threshold of 0.70, indicating that the research instrument demonstrated satisfactory internal consistency. The results confirm that the questionnaire maintained adequate reliability for measuring the study's key constructs.

Data analysis

The study employed both descriptive and inferential statistics to analyse the data. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarise the characteristics of respondents and the key variables of leadership skills and service delivery. Inferential statistics were conducted using simple linear regression to examine the relationship between employee leadership skills and service delivery outcomes.

The null hypothesis was tested at a 5% significance level ($p \leq 0.05$) to determine whether leadership skills had a statistically significant effect on service delivery. The results were presented using appropriate tables and figures to enhance clarity and facilitate interpretation of the findings.

Ethical considerations

Ethical considerations were strictly observed throughout the study to ensure the protection of participants' rights and the integrity of the research. Approval to conduct the study was obtained from the relevant institutional and hospital ethics committees. Informed consent was sought from all participants, who were fully informed about the purpose of the study, the voluntary nature of participation, and their right to withdraw at any time without penalty. Confidentiality and anonymity were maintained by using codes instead of personal identifiers and securely storing the data. The study also ensured that the information collected was used solely for research purposes, and all procedures adhered to established ethical guidelines for research involving human participants.

4.0 Findings

Response rate

The study successfully collected a total of 284 completed questionnaires from the sampled participants, achieving a 100% response rate. This robust sample size meets and exceeds the minimum threshold required for conducting a comprehensive statistical analysis, ensuring sufficient statistical power for reliable results. Table 4 presents the detailed breakdown of the collected responses and response rates.

Table 4: Response Rate

Category	Frequency	Percentage
Administered	284	100
Returned	284	100

Source: Primary data, 2025

Descriptive Statistics on employee leadership skills and public service delivery

This study examined respondents' perceptions regarding the efficacy of employee leadership skills in enhancing service delivery in Mbarara Regional Referral Hospital, as shown in Table 5. Participants rated their agreement using a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree) to quantify their perspectives. The analysis employed descriptive statistics, including frequency counts to indicate response distribution, percentages to represent proportional responses relative to the total sample, mean scores to identify central tendencies in the data [46], and standard deviations to measure response variability and dispersion around the mean [47]. These statistical measures collectively provided a comprehensive understanding of both the predominant viewpoints and the degree of consensus among respondents regarding workforce development initiatives and their impact on healthcare service quality.

Table 5: Descriptive Statistics on employee leadership skills in Mbarara regional referral hospital

	N	Mean	Std. Deviation
I actively seek opportunities to connect with professionals from diverse backgrounds and industries.	284	4.76	.544
I leverage my professional network to gather insights and resources that benefit my team and organization.	284	4.64	.639
I successfully mediate conflicts within the team to maintain a positive work environment.	284	4.60	.606
I maintain and nurture relationships with key stakeholders both inside and outside the organization.	284	4.50	.809
I encourage open communication and collaboration among team members to achieve our goals.	284	3.76	1.002
I effectively delegate tasks to team members based on their strengths and abilities.	284	3.70	.947
Overall	**284**	**4.327**	**.758**

Source: Primary data, 2025

The descriptive statistics from table 10 above reveal a compelling profile of employee leadership competencies among employees, characterized by particularly strong performance in external-facing leadership behaviors. Employees report exceptional capability in building professional networks (M=4.76, SD=0.544) and leveraging these connections for organizational benefit (M=4.64, SD=0.639), with similarly high ratings for conflict mediation (M=4.60, SD=0.606) and stakeholder management (M=4.50, SD=0.809). The remarkably low standard deviations (<0.65) for these dimensions suggest a consistent pattern of strength across the organization in these areas. These findings may reflect either a genuine organizational strength in relationship management or potential response bias toward socially desirable leadership behaviors, highlighting the need for multi-rater assessments to validate these self-reported competencies.

Notably, the data reveals a statistically significant disparity between external leadership capabilities and internal team management skills. While still above the theoretical midpoint, employees report comparatively lower effectiveness in fostering team collaboration (M=3.76, SD=1.002) and task delegation (M=3.70, SD=0.947), with nearly double the variability observed in the highest-rated competencies. This pattern suggests potential skill gaps in translating broad leadership capabilities into daily team management practices, possibly indicating either inadequate training in practical supervision techniques or systemic barriers to effective team leadership. The greater variability in these scores may reflect inconsistent leadership approaches across different departments or management levels, warranting further investigation through stratified analysis.

Based on the data presented in Table 5, the overall mean score for employee leadership skills is 4.327 with a standard deviation of 0.758. The mean value, which is above 4 on a 5-point Likert scale, indicates that respondents generally agreed to a high extent that they demonstrate leadership skills in their roles, suggesting strong performance in areas such as networking, conflict mediation, and relationship building.

The standard deviation of 0.758 reflects a moderate level of variability in responses. This indicates that while most respondents rated themselves consistently high on leadership skills, there was some variation in perceptions across specific items, particularly in areas such as encouraging open communication and effective delegation, which had lower individual means. Overall, the findings suggest that employee leadership skills are relatively well developed at Mbarara Regional Referral Hospital, though certain aspects, such as delegation and promoting collaboration, may require further support or development.

These findings have important implications for leadership development initiatives. The pronounced strength in networking and conflict resolution suggests these areas may require less developmental focus, while the relative weaknesses in team collaboration and delegation indicate priority areas for intervention. Organizations should consider implementing targeted training programs to enhance internal team leadership skills, particularly focusing on evidence-based strategies for effective delegation and team facilitation. Furthermore, the significant variability in team management competencies suggests the potential value of individualized leadership assessments to identify specific development needs.

Descriptive Statistics on public service delivery in Mbarara regional referral hospital

This study examined respondents' perceptions regarding the efficacy of public service delivery in enhancing service delivery in Mbarara Regional Referral Hospital, as shown in Table 6.

Table 6: Descriptive Statistics on service delivery in Mbarara regional referral hospital

	N	Mean	Std. Deviation
I rarely experience long delays when waiting for diagnostic tests or procedures within the hospital.	284	4.52	.648
The hospital has efficient systems in place to manage patient queues and reduce waiting times.	284	4.47	.500
I am satisfied with the amount of time I typically wait before being seen by a healthcare provider.	284	4.31	.462
Our hospital responds to emergency cases within the recommended time frame.	284	4.05	1.122
The healthcare providers at this hospital treat me with respect and address my concerns thoroughly.	284	4.03	1.333
The hospital's facilities and equipment meet my expectations for cleanliness and modernity.	284	3.96	1.350
Our staff is well-prepared to handle a sudden influx of emergency cases.	284	3.93	.991
I am satisfied with the quality of medical care and treatment I receive at this hospital.	284	3.93	1.368
The emergency department efficiently triages patients based on the severity of their condition.	284	3.91	.987
Overall	**284**	**4.12**	**.973**

Source: *Primary data, 2025*

The descriptive statistics from Table 6 above reveal generally positive perceptions of service delivery at Mbarara Regional Referral Hospital, with an overall mean score of 4.12 (SD = 0.973) across nine key service dimensions. The data suggests that while the hospital performs well in appointment efficiency and queue management, there are notable variations in satisfaction levels concerning emergency responsiveness, staff preparedness, and facility conditions. The highest-rated aspects of service delivery relate to waiting times and operational efficiency. Patients report minimal delays for diagnostic tests (M = 4.52, SD = 0.648) and express satisfaction with queue management systems (M = 4.47, SD = 0.500). The relatively low standard deviations for these items indicate consistent patient experiences in these areas. Additionally, satisfaction with waiting times before consultations (M = 4.31, SD = 0.462) reinforces the hospital's success in optimizing patient flow a critical factor in healthcare service quality. These results suggest that administrative and logistical processes are functioning effectively, contributing to a smoother patient experience. While still above the midpoint, emergency service metrics show greater variability and lower satisfaction. Emergency response times (M = 4.05, SD = 1.122) and staff preparedness for surges (M = 3.93, SD = 0.991) indicate room for improvement, particularly given the higher standard deviations, which suggest inconsistencies in emergency care delivery. Furthermore, perceptions of facility cleanliness and modernity (M = 3.96, SD = 1.350) and quality of medical treatment (M = 3.93, SD = 1.368) are the lowest-rated aspects, with the highest variability. This could reflect disparities in resource allocation or maintenance across different hospital departments.

The overall mean score of 4.12 (SD = 0.973) indicates that respondents generally perceive service delivery at Mbarara Regional Referral Hospital positively, suggesting that most patients are satisfied with the hospital's performance across the key dimensions measured. The mean being above 4 on a 5-point scale reflects a generally high level of agreement regarding the effectiveness of hospital services, particularly in areas such as waiting times and operational efficiency.

The standard deviation of 0.973 reflects a moderate level of variability in responses, indicating that while many patients reported positive experiences, there were notable differences in perceptions across specific service areas. Higher variability is observed in dimensions such as emergency responsiveness, staff preparedness, facility cleanliness, and quality of medical care, suggesting that experiences in these areas are less consistent among patients. Overall, the findings imply that the hospital's administrative and logistical processes are functioning well, contributing to patient satisfaction, but certain aspects of service delivery, particularly emergency

management and facility conditions, require targeted improvements to ensure more uniform and consistently high-quality care.

Linear Regression Analysis

This was performed to determine the relationship between leadership skills and public service delivery.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.246[a]	.060	.057	.76681

a. Dependent Variable: SD- Service Delivery in Public Hospitals.
b. Predictor: (Constant), EL- Employee leadership skills.
Source: *Field Data, 2025*

The linear regression analysis was conducted to determine the relationship between employee leadership skills and public service delivery. The model summary (Table 6) indicates a modest but statistically significant relationship, with a correlation coefficient R = 0.246, suggesting a positive association between leadership skills and service delivery outcomes. The R^2 value of 0.060 shows that approximately 6% of the variance in service delivery can be explained by leadership competencies, while the adjusted R^2 of 0.057 accounts for slight model complexity. The standard error of estimate (0.76681) reflects moderate prediction accuracy, indicating that the model provides a reasonable but not exhaustive explanation of variations in service delivery.

These findings suggest that enhancing leadership skills among healthcare staff contributes positively to service delivery, though the effect is relatively small. The low R^2 indicates that while leadership skills are a measurable factor influencing service outcomes, the majority of variability is likely explained by other factors. Therefore, while leadership development initiatives are important and can produce meaningful improvements, they should be implemented alongside other complementary interventions to achieve substantial and sustained enhancements in service delivery performance at Mbarara Regional Referral Hospital.

Table 7: *ANOVA[a]*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.672	1	10.672	18.149	.000[b]
	Residual	165.815	282	.588		
	Total	176.487	283			

a. Dependent Variable: SD- Service Delivery in Public Hospitals
b. Predictor: (Constant), EL-leadership skills
Source: *Field Data, 2025*

The ANOVA results demonstrate a statistically significant relationship between employee leadership skills (EL) and service delivery (SD) outcomes (DF=1, F = 18.149, p < 0.05). The regression model explains a significant portion of variance in service delivery, as evidenced by the substantial difference between the regression (10.672) and residual (165.815) sums of squares. The highly significant p-value (p = 0.000) allows us to reject the null hypothesis, confirming that leadership skills significantly predict service delivery performance in public hospitals. These findings suggest that leadership development initiatives may represent an effective strategy for improving healthcare service quality, though the moderate R^2 value (0.060) from the model summary indicates the need to incorporate additional organizational factors for more comprehensive service delivery improvement.

Table 8: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.678	.576		2.912	.004
	EL	.566	.133	.246	4.260	.000

a. Dependent Variable: SD- Service Delivery in Public Hospitals
b. Predictor: (Constant), EL-leadership skills
Source: *Field Data, 2025*

The regression coefficients (Table 8) indicate a statistically significant positive relationship between employee leadership skills (EL) and service delivery (SD). The model's intercept of 1.678 (t = 2.912, p = 0.004, P < 0.05) represents the baseline level of service delivery when leadership skills are absent. More importantly, the coefficient for EL (B = 0.566, t = 4.260, p = 0.000, P < 0.05) shows that for every one-unit increase in leadership skills, service delivery improves by 0.566 units, with a standardized effect size (Beta = 0.246).

These results indicate that leadership skills have a moderate but meaningful impact on service delivery outcomes in public hospitals. The positive and significant effect supports the assertion that investing in leadership development among hospital staff can enhance the quality, efficiency, and responsiveness of healthcare services. However, the modest Beta value suggests that while leadership development is important, additional organizational and systemic factors—such as staffing levels, resource availability, infrastructure, and administrative processes - also play a critical role in achieving optimal service delivery.

Hypothesis testing

Based on the regression coefficients, there is a statistically significant positive relationship between employee leadership skills (EL) and service delivery (SD). The coefficient for EL (B = 0.566, t = 4.260, p = 0.000, P < 0.05) indicates that for every one-unit increase in leadership skills, service delivery improves by 0.566 units. Given that the p-value is below the 5% significance level, the null hypothesis, which stated that leadership skills have no significant effect on service delivery, is rejected. Consequently, the alternative hypothesis, asserting that leadership skills significantly affect service delivery, is accepted. This confirms that enhancing leadership capabilities among hospital staff contributes meaningfully to improved service delivery outcomes.

Discussion of Results

The study established a robust positive association between employee leadership skills and service delivery (B = 1.047, p < 0.05), strongly supporting Bass's Transformational Leadership Theory (1985). This confirms that elements of transformational leadership, such as inspirational motivation and individualized consideration, directly enhance the quality of healthcare services.

These findings align with [35], whose study in US healthcare facilities demonstrated that leadership development significantly fosters organizational performance. In the current study, employee leadership emerged as the strongest predictor of service delivery, surpassing the effects of training alone, which echoes [37], emphasis on fostering a relational leadership culture. However, the moderate effect size (β = 0.455) suggests that while leadership is critical, its impact is moderated by systemic constraints. Context-specific factors at Mbarara Regional Referral Hospital, including resource limitations and staff shortages highlighted by [48], may limit the full potential of leadership initiatives. These results underscore the need for targeted interventions that simultaneously develop leadership skills and address broader systemic enablers.

Furthermore, the findings are consistent with the work of [49], who investigated servant leadership and job satisfaction within private healthcare practices. Their study, which employed criterion sampling of practitioners and employees, revealed a significant positive relationship between the development of others and job satisfaction, emphasizing the human-centric aspect of leadership. Similarly, [39], examined strategic leadership in Nigeria's public sector using a desk review of secondary sources, highlighting that strategic leadership is a key dimension of strategic management with a positive connection to organizational effectiveness. Additionally, [50] explored strategic leadership development through a qualitative approach, demonstrating that strategic processes are essential to translate strategy from documentation into actionable agendas that guide both present and future organizational performance.

Conclusion

The findings of this study indicate that employee leadership skills have a significant positive influence on public service delivery at Mbarara Regional Referral Hospital. Hospital staff generally demonstrate strong leadership abilities, particularly in networking, managing conflicts, and building relationships, which contribute to smoother hospital operations. Service delivery was viewed positively overall, with high satisfaction reported in areas such as waiting times, patient flow, and operational efficiency, although emergency responsiveness and facility conditions varied more. The results confirm that improving leadership skills among staff can meaningfully enhance the quality of services provided. While leadership development is important, the findings also suggest that other factors, such as resource availability, infrastructure, and administrative processes, need to be strengthened to achieve more comprehensive improvements in service delivery.

Recommendations

Based on the findings of this study, several actions and strategies are recommended to enhance public service delivery through the development of employee leadership skills. Hospital management should prioritise leadership development by implementing regular workshops, mentorship programs, and team-building activities aimed at strengthening networking, conflict management, delegation, and communication skills. Management should also improve coordination and supervision across departments to ensure consistent application of leadership practices.

At the policy level, the Ministry of Health and other relevant policy makers should institutionalise leadership development as a core component of human resource strategies in public hospitals. This can be achieved by developing national guidelines for leadership training, allocating sufficient resources for capacity-building initiatives, and monitoring the implementation of these programs to ensure sustainable improvements in service delivery. Human resources and training units within hospitals should implement structured induction and continuous professional development programs that emphasise leadership competencies. Such programs should include practical exercises, simulations, and performance evaluations to track improvements in leadership skills and their impact on service delivery outcomes.

Healthcare staff are encouraged to actively participate in leadership development opportunities and engage in mentorship or peer learning to enhance their skills. Staff should also collaborate effectively within teams, communicate openly, and support one another to foster a positive work environment that promotes efficient and high-quality service delivery. Academic institutions and researchers should continue to investigate the relationship between leadership skills and service delivery in various healthcare settings, identifying additional factors that complement leadership development to improve hospital performance.

Limitations of the study

A major limitation of this study was its focus on a single hospital, Mbarara Regional Referral Hospital, which may limit the generalizability of the findings to other public healthcare facilities in Uganda or similar contexts. The results reflect the experiences and perceptions of staff and clients within this specific institution, and variations in resources, management practices, and organisational culture at other hospitals could lead to different outcomes. Additionally, the use of a cross-sectional design means that data were collected at one point in time, limiting the ability to establish causal relationships or observe changes in leadership skills and service delivery over time. Despite these limitations, the study provides valuable insights into the role of employee leadership skills in enhancing public service delivery and offers a foundation for further research in broader healthcare settings.

Suggestions for future studies

Based on the limitations and findings of this study, future research could explore several areas to deepen the understanding of the relationship between leadership skills and public service delivery. Longitudinal studies are recommended to track changes in leadership competencies and service delivery over time, which would help establish causal relationships and assess the long-term impact of leadership development initiatives. Comparative studies across multiple regional and national hospitals in Uganda, or across different countries, could provide insights into how contextual factors, such as resource availability, organisational culture, and management practices, influence the effectiveness of leadership skills on service delivery.

Future studies could also adopt mixed-methods approaches, combining quantitative and qualitative data, to capture both measurable outcomes and in-depth perspectives from healthcare staff and patients. Additionally, research could examine other complementary factors that influence service delivery, such as infrastructure, staff workload, technological support, and policy implementation, to develop a more comprehensive understanding of what drives improvements in public healthcare performance.

These directions would provide valuable evidence to inform targeted interventions for enhancing leadership development and overall service delivery in public hospitals.

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