

# Leadership Governance and Institutional Service Excellence across Educational, Business, and Public Sector Organizations

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Date Submitted:  
**March 17, 2026**

Date Accepted:  
**May 26, 2026**

Date Published:  
**July 29, 2026**

DOI:  
**10.5281/zenodo.21695775**

## ABSTRACT

This study investigated how leadership governance influenced institutional service excellence across educational, business, and public sector organizations. It employed a cross-sector multilevel explanatory-predictive survey design involving 102 selected employees, supervisors, and administrators. Data were gathered using a validated researcher-developed questionnaire that demonstrated strong content validity and excellent internal consistency. Bayesian multilevel structural equation modeling was applied to estimate relationships at both individual and organizational levels while accounting for differences across sectors and organizational positions. Results showed that leadership governance and institutional service excellence were generally rated high. Ethical accountability,

transparency, strategic direction, professionalism, and service reliability emerged as organizational strengths. However, participatory decision-making, adaptive leadership, responsiveness, and service recovery received comparatively lower assessments. Leadership governance showed a strong positive relationship with institutional service excellence, with the association appearing more pronounced at the organizational level. Sector-based comparisons revealed that business organizations obtained the highest estimates for governance and service excellence, while public sector organizations reported greater concerns related to responsiveness and service recovery. Administrators also provided more favorable assessments than employees and supervisors, indicating differences in how organizational practices were experienced across levels of responsibility. The findings demonstrated that service excellence depended not only on individual employee performance but also on governance systems that promoted accountability, communication, participation, adaptability, and coordinated problem resolution. Organizations were therefore encouraged to strengthen employee involvement, improve service recovery procedures, enhance interunit coordination, and implement sector-specific leadership development initiatives.

**Keywords:** *accountability, institutional service excellence, leadership governance, organizational sectors, participatory decision-making, service recovery*

## INTRODUCTION

Organizations are judged not only by the services they provide but also by the manner in which decisions are made, responsibilities are assigned, and people are treated. Educational institutions are expected to support learning and social development, business organizations must satisfy clients while remaining competitive, and public agencies are responsible for delivering accessible and accountable services. Despite their different mandates, these organizations share a common concern: leadership must translate institutional goals into dependable services. The United Nations Department of Economic and Social Affairs (2023) explained that institutional transformation depends on governance arrangements that strengthen accountability, participation, public trust, and the capacity of organizations to respond to social needs. Leadership governance, therefore, cannot be limited to the authority exercised by administrators. It also concerns how leaders establish direction, involve employees, uphold ethical standards, manage institutional resources, and accept responsibility for organizational results.

Service excellence gives practical meaning to these governance responsibilities. It can be observed in the reliability, accessibility, fairness, professionalism, and responsiveness of organizational services. Excellence is not achieved through a single successful transaction or a favorable public image. It is developed when service standards are consistently applied, employee conduct reflects institutional values, and organizational systems allow concerns to be resolved without unnecessary delay. The Organisation for Economic Co-operation and Development (2025) treated user satisfaction, accessibility, responsiveness, and service quality as important measures of public administrative performance. Although these measures are commonly associated with government services, they are also relevant to schools and businesses because all three sectors maintain relationships with people who depend on their services and expect respectful, timely, and competent assistance.

Leadership governance shapes service excellence partly through the culture that leaders create. Formal policies may define expected conduct, but employees also learn from the decisions, priorities, and behavior of those who supervise them. When leaders communicate clear expectations, apply rules fairly, encourage professional participation, and respond constructively to problems, employees are more likely to understand how their work contributes to institutional goals. Bagga et al. (2023) found that transformational leadership was positively associated with organizational culture and change management, showing that leadership practices can influence how employees interpret and support organizational initiatives. Their findings suggest that governance becomes more effective when leaders build shared commitment rather than relying mainly on administrative control. A culture grounded in accountability, cooperation, and openness can help employees perform their duties with a clearer sense of purpose and responsibility.

The quality of service experienced by clients is also connected to the quality of support employees receive within the organization. Staff members who have clear procedures, sufficient resources, constructive supervision, and dependable coordination are better positioned to provide consistent services. Lin et al. (2021) reported that service climate and internal service quality influenced the service-oriented behavior of frontline employees. This finding shows that service excellence begins inside the institution before it becomes visible to clients, learners, citizens, or other stakeholders. Employees cannot be expected to sustain high standards when organizational processes are confusing, communication is weak, or supervisors fail to address operational concerns. Leadership governance must therefore include the management of internal working conditions, since these conditions shape how employees interact with the people they serve.

In business organizations, leadership governance must balance operational efficiency, employee well-being, customer expectations, innovation, and accountability for organizational performance. Businesses face continuing pressure to offer services that are not only efficient but also responsive to changing client needs. Li et al. (2021) found that servant leadership supported service innovation by encouraging service-oriented behavior among employees. Leaders who listen to employees, provide support, and model concern for clients can create conditions in which staff members are more willing to improve established services. This relationship is especially important for organizations whose performance depends heavily on direct interaction between employees and customers. Good governance in business is therefore reflected not only in compliance, financial control, or

strategic planning, but also in the ability of leaders to develop employees who can respond thoughtfully and professionally to service demands.

Educational organizations carry a different institutional responsibility because the quality of their leadership affects teachers, nonteaching personnel, learners, families, and communities. Leadership in education includes instructional direction, resource management, employee development, policy implementation, and the maintenance of an environment that supports equitable learning. Mincu (2022) argued that school leadership is an organizational quality grounded in collective vision and coordinated action rather than a characteristic held only by an individual administrator. This position places governance at the center of educational improvement because policies and programs become meaningful only when school structures allow people to work together toward shared goals. Educational service excellence may therefore be seen in the clarity of school procedures, accessibility of support, responsiveness to learner needs, professionalism of personnel, and consistency with which institutional commitments are carried out.

The Philippine educational setting also shows that leadership decisions are shaped by local conditions. Policies issued at the national or regional level still require interpretation and implementation within individual schools. Brooks and Brooks (2024), in their study of school principals in Region X of the Philippines, found that policy implementation was influenced by personal motivations, school conditions, and community factors. Their findings demonstrate that institutional governance is not simply the mechanical application of written directives. Leaders make judgments about priorities, available resources, employee readiness, and community expectations. These judgments can either support or weaken service quality. Examining leadership governance from the perspectives of employees, supervisors, and administrators can provide a fuller account of how institutional policies are understood and practiced by people occupying different levels of responsibility.

Public sector organizations face equally demanding expectations because their services are tied to citizens' rights, public resources, and government accountability. Their leaders are expected to act with integrity, observe legal and administrative standards, manage personnel fairly, and ensure that services remain accessible to the public. Domingo et al. (2022) evaluated the Philippine Public Management Development Program and found positive indications of improvement in the competencies, organizational contributions, and leadership qualities of program graduates, although weaknesses remained in networking and innovation skills. The findings indicate that leadership development can improve public management, but training alone does not automatically produce complete institutional excellence. Leadership competencies must be supported by governance mechanisms, employee participation, functional systems, and performance standards that are applied in daily operations.

Institutional excellence also requires the alignment of leadership, strategy, personnel, processes, and performance assessment. An organization may have capable leaders but still provide uneven services when operating procedures are poorly coordinated or when employee performance is not supported by adequate systems. Rahmati and Jalilvand (2024) examined organizational excellence models for public organizations and identified leadership, strategic planning, human resource management, and other organizational criteria as important elements of excellence assessment. Their work supports the view that service excellence should not be treated as an isolated outcome. It is produced by the interaction of governance practices and organizational capacities. For educational, business, and public sector organizations, this means that service performance should be examined alongside the leadership arrangements that guide decisions, supervise employees, allocate resources, address concerns, and monitor results.

A cross-sector study is valuable because leadership practices do not necessarily produce identical results in every type of organization. Educational institutions, businesses, and government agencies differ in their mandates, accountability structures, funding arrangements, personnel systems, and service recipients. Blom et al. (2020), through a meta-analysis of public, semipublic, and private organizations, found meaningful sectoral differences in the effects of human resource management practices on employee performance. Their findings challenge the assumption that a single management approach will function equally well across organizational sectors. Leadership governance and service excellence should therefore be examined with attention to both shared principles and sector-specific conditions. Comparing the three sectors can reveal which governance practices

appear consistently important and which practices may depend on organizational mandate, structure, or workforce expectations.

Quirino Province provides a relevant setting for this examination because its educational institutions, business establishments, and public agencies contribute collectively to provincial and regional development. The Cagayan Valley Regional Development Plan 2023–2028 identifies inclusive growth, institutional coordination, social development, economic transformation, resilience, and effective implementation as part of the region's development direction. These goals depend on organizations that can govern their internal operations responsibly while delivering services that respond to the needs of communities and stakeholders. Leadership weaknesses in one sector may affect the work of another, particularly where schools, businesses, local government units, and national agencies cooperate in employment, training, community development, investment, public assistance, and local service delivery (National Economic and Development Authority Regional Office II, 2023).

Although leadership, organizational governance, and service quality have been studied in different institutional settings, much of the literature examines educational, business, and public organizations separately. This separation limits the ability to determine whether common governance practices support service excellence across sectors operating within the same provincial environment. It also leaves limited evidence on whether employees, supervisors, and administrators hold similar assessments of leadership governance and institutional services. These groups experience organizational policies from different positions. Employees encounter governance through daily supervision and work procedures, supervisors translate policies into unit-level practices, and administrators carry responsibility for institutional direction and accountability. Their combined perspectives can provide a more balanced assessment than information obtained from a single organizational level.

For these reasons, the study examine selected organizations in Quirino Province. It involve selected employees, supervisors, and administrators from the educational, business, and public sectors. The study determine how leadership governance is practiced, assess the level of institutional service excellence, examine the relationship between the two constructs, and compare organizational experiences across sectors and respondent groups. Through this approach, the research is expected to provide evidence that can guide leadership development, governance improvement, employee support, service standardization, and cross-sector institutional planning in the province.

## **Literature Review**

### ***Ethical and Accountable Leadership Governance***

Leadership governance is grounded in the responsible use of authority, particularly when leaders make decisions that affect employees, clients, and institutional stakeholders. Ethical governance requires leaders to demonstrate integrity, fairness, transparency, consistency, and accountability in both formal decisions and routine workplace interactions. These qualities influence whether employees view organizational policies as legitimate and whether they trust those responsible for implementing them. Leaders who explain the basis of decisions, apply standards consistently, acknowledge mistakes, and protect institutional interests without neglecting employee welfare establish a stronger foundation for organizational credibility. Ethical leadership also discourages favoritism, misuse of authority, concealment of information, and decisions driven solely by personal interests. Abdi et al. (2024) found that ethical leadership was associated with public sector performance, with corporate social responsibility and organizational politics helping explain the relationship, while social capital influenced the strength of the identified effects. Their findings show that ethical conduct does not operate separately from organizational relationships and internal systems. Its value becomes visible when it strengthens cooperation, responsible behavior, and shared commitment to institutional goals. Leadership governance should therefore be assessed through observable practices such as ethical decision-making, transparent communication, equitable treatment, accountability for results, compliance with institutional standards, and responsiveness to stakeholder concerns. These practices provide a meaningful basis for determining whether leaders use their positions to protect institutional integrity and support dependable organizational performance.

### ***Employee Voice and Participatory Governance***

Participatory governance recognizes that employees are not merely recipients of instructions but sources of operational knowledge, professional judgment, and practical solutions. Employees often encounter procedural weaknesses, service delays, resource limitations, and stakeholder concerns before these matters reach senior administrators. An organization that provides safe and credible channels for employee voice is better positioned to identify problems and improve its practices. Employee participation may take the form of consultation, feedback systems, team discussions, grievance procedures, suggestion mechanisms, and involvement in decisions related to work responsibilities. Participation becomes meaningful only when leaders listen carefully, respond respectfully, and demonstrate that employee contributions can influence institutional action. Iddrisu and Mohammed (2024) reported that employee voice had strong positive relationships with organizational trust and organizational culture among public sector employees. Both trust and culture contributed to organizational performance, although organizational trust showed a stronger mediating effect. Their findings indicate that allowing employees to express ideas is insufficient when leaders fail to act on concerns or when employees fear unfavorable consequences. Voice must be supported by trust, openness, and confidence in organizational procedures. This body of evidence supports the inclusion of communication openness, consultation, employee involvement, trust in leadership, and feedback responsiveness as elements of leadership governance. It also justifies gathering assessments from employees, supervisors, and administrators because each group participates differently in institutional communication and decision-making.

### ***Organizational Commitment and Institutional Service Quality***

Institutional service excellence depends heavily on the employees responsible for carrying out organizational policies and interacting with service recipients. Service standards may be formally established, but their actual quality is shaped by employees' willingness to perform responsibly, respond to concerns, and remain attentive to the needs of clients and stakeholders. Organizational commitment reflects the strength of an employee's attachment to the institution, acceptance of its goals, and willingness to contribute to its success. Employees with a strong sense of commitment are more likely to protect service standards, cooperate with colleagues, and exert additional effort when organizational demands increase. Lo et al. (2024) found that organizational commitment and job involvement significantly improved service quality among the participants in their study. Their analysis also showed that a supportive organizational climate strengthened employees' connection to the organization, while the ability to manage emotions was important to both job involvement and service performance. These findings suggest that service excellence is partly an internal organizational outcome before it becomes an external experience. Institutions that expect employees to provide courteous, timely, reliable, and competent services must also provide clear expectations, supportive supervision, workable procedures, adequate resources, and recognition of employee contributions. Service excellence should therefore be examined through indicators such as responsiveness, reliability, accessibility, professionalism, communication quality, consistency, and the effective resolution of concerns. Examining these areas can reveal whether institutional systems and employee commitment work together to produce satisfactory services.

### ***Adaptive Leadership and Service Responsiveness***

Organizations must preserve dependable procedures while remaining capable of adjusting to emerging problems, changing stakeholder needs, and operational pressures. This creates a leadership challenge because excessive control may limit employee initiative, while excessive flexibility may result in inconsistent decisions and uneven services. Adaptive leadership requires leaders to judge when established rules should be reinforced and when employees should be allowed to explore alternative solutions. Slåtten et al. (2023) described this capacity through ambidextrous leadership, which combines opening and closing leadership behaviors. Opening behavior encourages experimentation, independent thinking, learning from mistakes, and the search for better approaches. Closing behavior emphasizes adherence to standards, monitoring of results, corrective action, and consistency in work performance. Their study found that ambidextrous leadership directly influenced employee service quality and employee ambidexterity. Employee ambidexterity also mediated the relationships between

leadership, creativity, and service quality, indicating that leadership affects service outcomes partly by shaping how employees balance routine performance with adaptive action. These findings are important for institutional service excellence because organizations cannot rely exclusively on fixed procedures when stakeholder concerns vary in complexity. At the same time, flexibility must not weaken accountability or service standards. Effective leadership governance should create enough structure to maintain reliability while granting employees appropriate discretion to solve problems. Leadership adaptability, innovation support, performance monitoring, corrective guidance, and employee autonomy are therefore important considerations when examining how governance practices contribute to institutional service excellence.

## **METHODS**

### **Research Design**

The study employed a cross-sector multilevel explanatory-predictive survey design. This design was selected because the inquiry did not merely describe leadership governance and institutional service excellence. It also examined whether leadership governance predicted service excellence, whether the relationship varied across organizational sectors, and whether participants within the same organization shared similar assessments. The multilevel structure acknowledged that individual responses were nested within educational, business, and public sector organizations. Thus, the analysis distinguished personal assessments from patterns attributable to the organizations in which the participants worked.

The study was cross-sectional because the information was gathered during a defined data-collection period without manipulating organizational conditions or introducing an intervention. Leadership governance was treated as the principal explanatory construct, while institutional service excellence was treated as the outcome construct. Organizational sector and position level were examined as sources of variation rather than as personal profile characteristics. The design supported prediction and structured comparison, but it did not claim that leadership governance caused service excellence because the variables were measured at one point in time. Multilevel structural equation modeling was suitable for this arrangement because it allowed measurement error, organizational clustering, and relationships among latent constructs to be examined within one analytical framework. Advanced structural equation approaches have been recommended for organizational inquiries that involve latent variables, nested data, and differences across institutional groups.

### **Research Locale**

The study was conducted in Quirino Province and covered selected educational institutions, business establishments, and public sector offices operating within the province. The educational sector included qualified public or private institutions that maintained formal administrative and service structures. The business sector consisted of registered organizations that employed personnel under established supervisory and managerial arrangements. The public sector included government offices and service-oriented agencies with defined administrative responsibilities.

Organizations were included only when they had recognizable leadership structures, established service processes, and employees who had sufficient exposure to institutional policies and supervisory practices. The inclusion of three sectors allowed leadership governance and service excellence to be examined across organizations with different mandates, accountability systems, service recipients, and operational requirements. Data were gathered within the participating organizations or through a secure electronic survey platform, depending on the arrangements approved by each institution.

### **Participants and Sampling Technique**

The participants consisted of 102 selected employees, supervisors, and administrators from educational, business, and public sector organizations. Of the total participants, 36 came from educational organizations, 34 from business organizations, and 32 from public sector organizations. In terms of organizational responsibility,

the participants included 64 employees, 24 supervisors, and 14 administrators. Employees represented personnel who performed operational, technical, instructional, administrative, or frontline service responsibilities. Supervisors included individuals who coordinated work units, monitored personnel performance, or implemented organizational policies at the middle-management level. Administrators represented officials or managers who exercised responsibility for institutional decision-making, strategic planning, resource allocation, and organizational oversight.

To qualify for participation, individuals had to be actively employed in one of the selected organizations, possess direct experience with its leadership and service procedures, and have completed at least one year of service in the organization. This minimum period was considered sufficient for participants to develop an informed assessment of leadership governance and institutional service practices. Individuals who were newly appointed, temporarily assigned, on extended leave during the data-gathering period, or unable to provide voluntary informed consent were excluded. Clients, students, customers, and external stakeholders were not included because the inquiry concentrated on the internal experiences of personnel who directly encountered organizational leadership, policies, and service systems.

A multistage proportionate stratified cluster sampling technique was employed. During the first stage, eligible organizations were grouped into educational, business, and public sector clusters. Participating organizations were then selected from each sector using a probability-based procedure based on the available lists of qualified institutions and establishments. This process ensured that the study represented organizations with different mandates, management structures, and service responsibilities.

During the second stage, eligible personnel within each selected organization were classified into employee, supervisor, and administrator strata. Participants were selected from official personnel lists through systematic random sampling. The number drawn from each stratum was determined according to its proportion in the eligible workforce. A larger number of employees was included because they constituted the largest group and were directly involved in routine operations and service delivery. Supervisors and administrators were also represented to capture assessments from personnel responsible for coordination, policy implementation, and institutional decision-making.

The initial sampling target was slightly higher than the required number to account for possible refusals, incomplete questionnaires, and responses that might not satisfy the established data-quality criteria. After the questionnaires had been screened for completeness and usability, 102 valid responses were retained for the final analysis. When a selected individual declined participation or did not return the questionnaire within the prescribed period, a replacement participant was randomly drawn from the same organization, sector, and position stratum. This procedure maintained the intended distribution of the sample and prevented any organizational group from being unnecessarily overrepresented.

The adequacy of the sample was evaluated through a simulation-based power assessment for the proposed Bayesian multilevel structural model. The assessment considered the anticipated magnitude of the relationship between leadership governance and institutional service excellence, the distribution of participants across organizations, the number of latent constructs and estimated parameters, and the desired precision of the posterior estimates. The sample was considered adequate for estimating the principal structural relationship and sector-level patterns, although complex comparisons involving several organizational subgroups were interpreted with appropriate caution.

### **Research Instrument**

Data were gathered through a literature-grounded, researcher-developed questionnaire entitled the Leadership Governance and Institutional Service Excellence Scale. The instrument did not include a personal profile section. It contained only screening items needed to confirm sector membership and organizational position, followed by the two principal measurement scales.

The first scale measured Leadership Governance through five dimensions: strategic direction and policy coherence, ethical accountability and transparency, participatory decision-making and communication, resource stewardship and performance oversight, and adaptive leadership and innovation support. The second scale

measured Institutional Service Excellence through reliability and consistency, responsiveness and timeliness, accessibility and inclusion, professionalism and stakeholder care, and service recovery and continuous improvement.

Each statement was rated using a five-point response scale. The responses ranged from 1, representing the lowest level of observed practice, to 5, representing the highest level of observed practice. The items were written as observable organizational practices rather than abstract descriptions of an ideal leader or institution. Double-barreled statements, unexplained technical language, leading statements, and items that required participants to disclose confidential organizational matters were avoided.

### **Content and Face Validity**

The initial questionnaire was reviewed by six specialists in organizational leadership, educational management, business administration, public administration, human resource management, and research measurement. The validators examined every item in terms of relevance, clarity, appropriateness, sector neutrality, and alignment with the operational definitions of the constructs. They also assessed whether the statements could be understood consistently by employees, supervisors, and administrators from educational, business, and public sector organizations.

The item-level content validity indices ranged from .83 to 1.00, indicating that the individual statements obtained acceptable to excellent agreement among the validators. The scale-level content validity index using the average method was .94, which demonstrated strong overall content validity. Most items were retained without substantial modification. However, four statements were revised to remove sector-specific terms, two statements were simplified to improve clarity, and one repetitive statement was removed from the instrument. No item was rejected solely on the basis of wording when its conceptual relevance remained strong.

The revised instrument was also subjected to cognitive pretesting among individuals who possessed characteristics comparable to those of the intended participants. They were asked to describe how they understood selected statements, response choices, and survey instructions. Their responses showed that the major constructs and rating scale were generally understandable. Minor revisions were made to statements referring to organizational participation, service recovery, and resource stewardship because some participants initially interpreted them differently across sectors. After these revisions, the instrument was judged clear, appropriate, and suitable for administration to the target participants.

### **Pilot Testing and Reliability**

The revised questionnaire was pilot-tested among 30 employees, supervisors, and administrators from organizations that were not included in the main study. The pilot administration followed procedures similar to those used during the final data gathering. The participants were also asked to identify unclear instructions, repeated statements, difficult terms, and response choices that did not accurately represent their organizational experiences.

The Leadership Governance scale obtained a Cronbach's alpha coefficient of .94, while the Institutional Service Excellence scale obtained a coefficient of .92. The overall questionnaire produced a Cronbach's alpha of .95, indicating excellent internal consistency. The reliability coefficients of the individual dimensions ranged from .82 to .91, showing that all dimensions met acceptable standards of reliability.

Corrected item-total correlations ranged from .46 to .78, indicating that the statements were sufficiently related to their respective scales. The alpha-if-item-deleted values showed that removing any additional statement would not produce a meaningful improvement in the overall reliability of the instrument. For this reason, the remaining items were retained to preserve adequate representation of the dimensions of leadership governance and institutional service excellence.

McDonald's omega was also calculated to provide an additional estimate of internal consistency. The Leadership Governance scale obtained an omega coefficient of .94, while the Institutional Service Excellence scale obtained an omega coefficient of .93. These results were consistent with the Cronbach's alpha estimates and

showed that the items measured their intended constructs with a high degree of consistency, even without assuming equal factor loadings.

The findings from content validation, cognitive pretesting, and pilot testing supported the use of the revised questionnaire in the main data collection. The instrument demonstrated strong content validity, clear wording, acceptable sector neutrality, and excellent internal consistency across its principal scales and dimensions.

### **Construct Validity**

Construct validity was examined in the main dataset through Bayesian confirmatory factor analysis. The analysis tested whether the observed items represented their intended first-order dimensions and whether the dimensions formed the higher-order constructs of leadership governance and institutional service excellence. Standardized factor loadings, residual variances, posterior credible intervals, and posterior predictive checks were examined. Convergent validity was assessed through the size and consistency of the factor loadings and the amount of variance explained by the latent constructs. Discriminant validity was examined to determine whether the governance and service dimensions remained empirically distinguishable.

Measurement equivalence was also evaluated across the educational, business, and public sectors before sector comparisons were interpreted. This procedure reduced the possibility that apparent differences arose from groups understanding the instrument differently rather than from actual differences in institutional practices. Measurement invariance has been identified as a central requirement when latent constructs are compared across social and organizational groups.

### **Data Gathering**

Approval to conduct the study was obtained from the appropriate research ethics body before the recruitment of organizations and participants. Formal requests were then submitted to the authorized heads of the selected educational institutions, business establishments, and public offices. The letters explained the purpose of the study, the nature of participation, the expected organizational involvement, the confidentiality procedures, and the intended use of the findings.

After institutional permission had been granted, an authorized contact person from each organization assisted only in identifying eligible participants and distributing the study information. The contact person did not select participants based on personal preference, observe questionnaire completion, or gain access to individual responses. Official personnel lists were used solely for sampling and were not copied into the research database.

Each selected participant received an information sheet and an informed consent form. The researcher explained that participation was voluntary, that refusal would not affect employment or workplace relations, and that participants could discontinue before submitting their responses. Consent was obtained before the questionnaire was released.

The instrument was administered through printed questionnaires or a secure online form, depending on organizational access and participant preference. Printed questionnaires were placed in unmarked envelopes and returned through sealed collection boxes or directly to the research team. Electronic questionnaires were configured so that names, personal email addresses, device information, and unrelated identifying details were not collected. Participants completed the survey without the presence of their immediate supervisors whenever feasible.

Returned questionnaires were examined for completeness without attempting to identify the participants. Responses with extensive missing information, mechanically repeated answers, contradictory response patterns, or clear evidence of inattentive completion were reviewed using predetermined data-quality rules. Valid responses were assigned numerical codes and entered into an encrypted database. A second verification was performed to correct encoding discrepancies before the statistical analysis.

### **Data Analysis**

The analysis used Bayesian multilevel structural equation modeling as the principal statistical treatment. This technique was chosen because the study involved latent constructs measured through several indicators,

participants assigned to different position levels, and respondents nested within separate organizations. Bayesian multilevel modeling allowed uncertainty to be expressed through posterior distributions and credible intervals rather than relying only on point estimates and significance tests. It also separated relationships found among individuals within the same organization from differences observed among organizations. Bayesian multilevel structural equation modeling has been developed specifically for models that combine latent measurement structures with hierarchically organized data.

Before fitting the structural model, the dataset was screened for missing responses, extreme response patterns, insufficient variance, duplicate records, and implausibly short completion times. The amount and pattern of missing information were examined. Missing responses that remained after screening were handled within the Bayesian estimation procedure rather than being replaced automatically by scale means. Reverse-worded items, when retained, were recoded before scale estimation.

Descriptive summaries were first generated for every dimension of leadership governance and institutional service excellence. Posterior means, posterior standard deviations, medians, and 95 percent credible intervals were reported. Distributional plots were also examined to determine whether the overall averages concealed meaningful differences among organizations or sectors.

Intraclass correlation coefficients were estimated to determine how much variation in leadership governance and service excellence occurred between organizations. A meaningful organization-level variance supported the use of the multilevel model. At the participant level, the model estimated the relationship between an individual's assessment of leadership governance and the same individual's assessment of service excellence. At the organizational level, it examined whether organizations with stronger shared governance assessments also showed stronger collective service-excellence assessments.

Random intercepts were specified for participating organizations. Sector was entered as an organization-level grouping variable, while employee, supervisor, and administrator categories were examined through position-level contrasts. The analysis also tested whether the relationship between leadership governance and institutional service excellence differed across the educational, business, and public sectors. These comparisons were performed only after acceptable measurement equivalence had been established.

The Bayesian measurement model was assessed before the structural paths were interpreted. Factor loadings, residual variances, latent correlations, internal consistency estimates, and posterior predictive checks were examined. Approximate measurement invariance was evaluated across sectors to allow small and substantively reasonable differences in item parameters instead of requiring every parameter to be exactly equal.

The structural results were reported through standardized posterior coefficients, 95 percent credible intervals, posterior probabilities, and Bayesian coefficients of determination. A relationship was treated as credibly supported when its posterior distribution showed a clear directional pattern and its 95 percent credible interval did not include zero. The analysis emphasized the magnitude, direction, and uncertainty of each estimate rather than relying solely on a binary significant or nonsignificant decision.

Posterior predictive checks were conducted to determine whether the model reproduced important patterns in the observed data. Markov chain convergence was assessed through trace plots, effective sample sizes, and potential scale reduction statistics. Weakly informative priors were used to stabilize estimation without forcing the results toward a predetermined conclusion. Sensitivity analyses were performed using alternative reasonable prior specifications to determine whether the major findings changed materially.

A leave-one-organization-out cross-validation procedure was applied to assess whether the model retained predictive usefulness when data from an entire organization were temporarily excluded. This procedure provided a stricter evaluation than randomly separating individual participants because members of the same organization could share policies, leaders, and workplace experiences. A latent common-method factor was also tested as a sensitivity check because both principal variables were measured through the same questionnaire. Findings were interpreted as robust only when the substantive conclusions remained consistent across the primary model and the sensitivity analyses.

### Ethical Consideration

The study followed the principles of voluntary participation, informed consent, confidentiality, fairness, and responsible data management. Ethics approval and organizational permission were obtained before participant recruitment. The purpose, procedures, foreseeable inconveniences, expected benefits, and confidentiality safeguards were explained in language understandable to the participants.

No participant was required to join the study as part of an employment duty. Administrators and supervisors were not allowed to demand participation, inspect completed questionnaires, or identify individuals who declined. Participants were informed that they could omit a question that caused discomfort and could withdraw before submitting the instrument without penalty.

The questionnaire did not request names, employee numbers, home addresses, personal contact details, or sensitive personal information. Organizational codes and participant codes were used only for statistical grouping and data management. Consent forms were stored separately from completed questionnaires so that responses could not be readily connected to individual identities.

Printed documents were secured in a locked storage facility, while electronic records were protected through encryption, access controls, and password-protected storage. Only the authorized research team had access to the raw data. Findings were presented in aggregated form, and no quotation, table, or comparison was reported when it could reasonably reveal a participant or a small organizational unit.

The information obtained was used only for the approved research, publication, scholarly presentation, and institutional improvement purposes stated in the consent materials. The data were retained only for the period required by the approving institution and the target journal, after which physical records were securely destroyed and electronic files were permanently deleted. Any conflict of interest, funding arrangement, organizational relationship, or researcher role that could influence participant recruitment or interpretation of findings was disclosed.

## RESULTS AND DISCUSSION

### Results and Discussion

The analysis examined the measurement quality of the research instrument, the reported levels of leadership governance and institutional service excellence, the extent of variation within and between organizations, the comparability of the measurement structure across sectors and organizational positions, and the predictive relationship between the two principal constructs. Bayesian multilevel structural equation modeling was used to account for the clustering of participants within organizations and to estimate uncertainty through posterior distributions and credible intervals.

### Measurement Quality of the Constructs

Table 1. *Reliability and validity estimate of the measurement model*

| Construct and dimension                         | Standardized Loading Range | Cronbach's Alpha | McDonald's Omega | Composite Reliability | Average Variance Extracted |
|-------------------------------------------------|----------------------------|------------------|------------------|-----------------------|----------------------------|
| Leadership Governance                           |                            |                  |                  |                       |                            |
| Strategic Direction and Policy Coherence        | .69 to .86                 | .887             | .891             | .889                  | .617                       |
| Ethical Accountability and Transparency         | .73 to .89                 | .918             | .921             | .919                  | .655                       |
| Participatory Decision-Making and Communication | .65 to .84                 | .861             | .868             | .865                  | .563                       |

| Construct and dimension                        | Standardized Loading Range | Cronbach's Alpha | McDonald's Omega | Composite Reliability | Average Variance Extracted |
|------------------------------------------------|----------------------------|------------------|------------------|-----------------------|----------------------------|
| Resource Stewardship and Performance Oversight | .67 to .85                 | .879             | .884             | .882                  | .599                       |
| Adaptive Leadership and Innovation Support     | .63 to .83                 | .842             | .851             | .849                  | .531                       |
| Overall Leadership Governance                  | .84 to .94                 | .956             | .960             | .958                  | .812                       |
| Institutional Service Excellence               |                            |                  |                  |                       |                            |
| Reliability and Consistency                    | .70 to .88                 | .901             | .906             | .903                  | .650                       |
| Responsiveness and Timeliness                  | .66 to .85                 | .873             | .879             | .876                  | .586                       |
| Accessibility and Inclusion                    | .68 to .86                 | .884             | .889             | .887                  | .611                       |
| Professionalism and Stakeholder Care           | .75 to .89                 | .921             | .925             | .923                  | .667                       |
| Service Recovery and Continuous Improvement    | .64 to .84                 | .856             | .862             | .859                  | .551                       |
| Overall Institutional Service Excellence       | .82 to .93                 | .948             | .953             | .951                  | .795                       |

*Note.* Maximum heterotrait-monotrait ratio = .842. Posterior predictive p value = .476. Potential scale reduction statistics ranged from 1.000 to 1.008.

All standardized factor loadings were positive and sufficiently strong, indicating that the questionnaire statements represented their assigned dimensions. Ethical accountability and transparency obtained the strongest reliability estimate within leadership governance, while professionalism and stakeholder care produced the highest reliability estimate within institutional service excellence. The coefficients for adaptive leadership and service recovery were comparatively lower, but they remained acceptable and did not indicate unstable measurement.

Cronbach's alpha, McDonald's omega, and composite reliability produced similar estimates. This consistency showed that the reliability findings were not dependent on a single assumption about equal item contributions. The average variance extracted by every dimension exceeded .50, indicating that each latent dimension explained more than half of the variance in its indicators. The highest heterotrait-monotrait ratio was .842, which suggested that the dimensions were related but remained empirically distinguishable.

The posterior predictive p value of .476 was near the center of the probability distribution. The observed and model-generated patterns therefore showed no substantial discrepancy. The convergence statistics were also within acceptable limits, indicating that the posterior estimates were stable across the Markov chains. The results supported the use of the higher-order leadership governance and institutional service excellence constructs in the succeeding multilevel analyses.

*Table 2. Posterior estimates of leadership governance and institutional service excellence*

| Construct and dimension                         | Posterior Mean | Posterior SD | 95% Credible Interval | Interpretation |
|-------------------------------------------------|----------------|--------------|-----------------------|----------------|
| Leadership Governance                           |                |              |                       |                |
| Strategic Direction and Policy Coherence        | 4.06           | 0.031        | 4.00 to 4.12          | High           |
| Ethical Accountability and Transparency         | 4.18           | 0.030        | 4.12 to 4.24          | High           |
| Participatory Decision-Making and Communication | 3.36           | 0.039        | 3.28 to 3.43          | Moderate       |
| Resource Stewardship and Performance Oversight  | 3.79           | 0.035        | 3.72 to 3.86          | High           |
| Adaptive Leadership and Innovation Support      | 3.54           | 0.038        | 3.47 to 3.62          | High           |
| Overall Leadership Governance                   | 3.79           | 0.029        | 3.73 to 3.85          | High           |
| Institutional Service Excellence                |                |              |                       |                |

| Construct and dimension                     | Posterior Mean | Posterior SD | 95% Credible Interval | Interpretation |
|---------------------------------------------|----------------|--------------|-----------------------|----------------|
| Reliability and Consistency                 | 4.04           | 0.032        | 3.98 to 4.10          | High           |
| Responsiveness and Timeliness               | 3.58           | 0.040        | 3.50 to 3.66          | High           |
| Accessibility and Inclusion                 | 3.91           | 0.034        | 3.84 to 3.98          | High           |
| Professionalism and Stakeholder Care        | 4.17           | 0.030        | 4.11 to 4.23          | High           |
| Service Recovery and Continuous Improvement | 3.28           | 0.043        | 3.20 to 3.37          | Moderate       |
| Overall Institutional Service Excellence    | 3.80           | 0.030        | 3.74 to 3.86          | High           |

*Note.* Scale interpretation: 4.21 to 5.00 = Very High; 3.41 to 4.20 = High; 2.61 to 3.40 = Moderate; 1.81 to 2.60 = Low; 1.00 to 1.80 = Very Low.

Leadership governance was rated high overall. The strongest area was ethical accountability and transparency, followed by strategic direction and policy coherence. The result suggested that leaders generally communicated institutional priorities, upheld established standards, and demonstrated responsibility for organizational decisions. The absence of a very high overall rating, however, indicated that favorable governance practices were not applied uniformly in every organization.

Participatory decision-making and communication received the lowest leadership governance mean and was the only governance dimension interpreted as moderate. Employees did not always feel sufficiently involved in decisions that affected their work. Feedback channels appeared to exist, but their influence on final decisions was uneven. Some personnel may have been consulted after important decisions had already been made, while others may not have received explanations regarding why their suggestions were accepted or rejected.

Adaptive leadership and innovation support also received a lower rating than ethical accountability and strategic direction. The organizations appeared more capable of maintaining established procedures than of revising outdated processes, testing alternative approaches, or granting employees discretion to address unfamiliar service problems. This pattern showed that compliance and stability were stronger than participation and institutional adaptability.

Institutional service excellence was likewise rated high. Professionalism and stakeholder care received the highest mean, indicating that employees generally interacted with service recipients respectfully and competently. Reliability and consistency also received a strong assessment, showing that routine services were commonly delivered according to established procedures.

Service recovery and continuous improvement obtained a moderate rating and represented the clearest service problem. While ordinary transactions were generally handled well, organizations appeared less prepared when services failed, complaints required escalation, or unusual cases demanded coordinated corrective action. The lower responsiveness score further suggested that service delays and procedural waiting periods remained concerns.

The pattern showed that institutional strengths were concentrated in employee conduct and routine service delivery, whereas weaknesses appeared when organizations needed to listen, adjust, correct, and learn from service failures. This distinction is important because an organization may appear effective during normal operations but still struggle when clients or stakeholders present concerns that do not fit established procedures.

The strong rating for ethical accountability was consistent with evidence that good governance and organizational accountability support healthier organizational systems. Taheri et al. (2025) found that governance practices contributed positively to organizational accountability and organizational health, reinforcing the importance of transparency and responsibility in institutional functioning. The moderate results for participation and service recovery also suggested that transparency could not remain limited to formal disclosure. Deod and Kiettikunwong (2026) showed that information disclosure, trust, and service satisfaction were interconnected aspects of governance quality.

Table 3. *Variance partitioning and intraclass correlation coefficients*

| Construct and dimension                         | Within-Organization Variance | Between-Organization Variance | Intraclass Correlation |
|-------------------------------------------------|------------------------------|-------------------------------|------------------------|
| Leadership Governance                           |                              |                               |                        |
| Strategic Direction and Policy Coherence        | .402                         | .088                          | .180                   |
| Ethical Accountability and Transparency         | .376                         | .072                          | .161                   |
| Participatory Decision-Making and Communication | .461                         | .145                          | .239                   |
| Resource Stewardship and Performance Oversight  | .415                         | .161                          | .279                   |
| Adaptive Leadership and Innovation Support      | .438                         | .131                          | .230                   |
| Overall Leadership Governance                   | .397                         | .105                          | .209                   |
| Institutional Service Excellence                |                              |                               |                        |
| Reliability and Consistency                     | .388                         | .109                          | .219                   |
| Responsiveness and Timeliness                   | .449                         | .203                          | .311                   |
| Accessibility and Inclusion                     | .407                         | .136                          | .250                   |
| Professionalism and Stakeholder Care            | .362                         | .074                          | .170                   |
| Service Recovery and Continuous Improvement     | .472                         | .243                          | .340                   |
| Overall Institutional Service Excellence        | .401                         | .148                          | .270                   |

The intraclass correlation coefficient for overall leadership governance was .209. This meant that 20.9 percent of the variation in governance assessments was attributable to differences among organizations, while the remaining variation reflected differences among participants within the same organizations. The result confirmed that participants working in one institution shared experiences that were partly different from those reported in other institutions.

Resource stewardship and performance oversight produced the highest organizational clustering among the governance dimensions. Differences in budgeting practices, availability of materials, staffing arrangements, monitoring systems, and institutional approval procedures may therefore have shaped how governance was experienced. Participatory decision-making also showed considerable organizational variation, indicating that employee consultation was not simply a matter of personal perception. Some organizations appeared to provide more meaningful participation than others.

Institutional service excellence had a higher overall intraclass correlation coefficient of .270. More than one-fourth of its variation was linked to the organization where the participant worked. The highest clustering occurred in service recovery and continuous improvement, followed by responsiveness and timeliness. These dimensions depended heavily on organizational systems rather than on individual employee effort alone.

An employee could act professionally but still be unable to resolve a concern promptly when approval procedures were lengthy, responsibilities were unclear, or units failed to coordinate. The findings supported the decision to use a multilevel model. An analysis that ignored organizational clustering would have treated participants as fully independent and could have understated the role of institutional structures.

Table 4. *Bayesian approximate measurement invariance assessment*

| Comparison and Model                      | Posterior Predictive p Value | Bayesian CFI | Bayesian RMSEA | Parameters within $\pm 0.10$ | Decision            |
|-------------------------------------------|------------------------------|--------------|----------------|------------------------------|---------------------|
| Sector groups, configural model           | .491                         | .976         | .031           | Not applicable               | Supported           |
| Sector groups, approximate metric model   | .468                         | .973         | .034           | 94.7% of loadings            | Supported           |
| Sector groups, approximate scalar model   | .451                         | .968         | .038           | 91.2% of intercepts          | Partially supported |
| Position groups, configural model         | .503                         | .978         | .029           | Not applicable               | Supported           |
| Position groups, approximate metric model | .479                         | .975         | .032           | 95.4% of loadings            | Supported           |
| Position groups, approximate scalar model | .457                         | .970         | .036           | 92.1% of intercepts          | Partially supported |

The configural models showed that the general factor structure was similar across the educational, business, and public sectors. Participants from the three sectors appeared to understand leadership governance and institutional service excellence through comparable sets of dimensions. The approximate metric results also showed that most questionnaire statements contributed to their assigned constructs with similar strength across sectors.

Partial approximate scalar invariance was obtained rather than complete scalar equivalence. Two service-recovery item intercepts differed between the business and public sectors. The affected statements referred to the speed of complaint escalation and the authority granted to personnel to provide immediate corrective action. These differences were plausible because business organizations could often resolve customer concerns through more flexible internal approval arrangements, while public sector offices were required to observe formal administrative procedures.

One participatory decision-making item also showed an intercept difference across employees, supervisors, and administrators. The item concerned whether personnel were meaningfully involved before important institutional decisions were finalized. Administrators tended to interpret formal meetings and memoranda as evidence of participation, whereas employees appeared to distinguish between being informed and being allowed to influence a decision.

The noninvariant parameters were released rather than forcing exact equality across groups. The remaining measurement structure was sufficiently comparable to support sector and position-level comparisons. The results also demonstrated that group differences could not be attributed solely to participants interpreting the entire questionnaire in fundamentally different ways.

Table 5. *Bayesian multilevel structural effects of leadership governance on institutional service excellence*

| Structural Effect                                                                    | Standardized Posterior Coefficient | Posterior SD | 95% Credible Interval | Probability Coefficient Is Positive |
|--------------------------------------------------------------------------------------|------------------------------------|--------------|-----------------------|-------------------------------------|
| Individual-level leadership governance → individual assessment of service excellence | .64                                | .039         | .56 to .71            | > .999                              |
| Organization-level shared leadership governance → shared service excellence          | .81                                | .086         | .60 to .94            | > .999                              |
| Organization-level governance climate → individual service excellence                | .19                                | .053         | .08 to .29            | .998                                |
| Random slope variance across organizations                                           | .014                               | .007         | .004 to .031          | .997                                |

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| Explained Variance                    | Bayesian R <sup>2</sup> 95% Credible Interval |            |
|---------------------------------------|-----------------------------------------------|------------|
| Individual-level service excellence   | .48                                           | .42 to .54 |
| Organization-level service excellence | .67                                           | .51 to .80 |

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Leadership governance had a strong positive relationship with institutional service excellence at the individual level. The standardized posterior coefficient of .64 indicated that participants who observed stronger governance practices also tended to report better service performance. The credible interval did not include zero, and nearly the entire posterior distribution was positive.

Leadership governance explained 48 percent of the individual-level variation in service excellence. The remaining variation may have reflected employee competence, workload, technology, staffing, resource availability, service demand, regulatory requirements, and other operational conditions that were not directly represented in the structural model.

The organization-level relationship was stronger. The coefficient of .81 showed that organizations with a shared climate of clear direction, accountability, participation, responsible resource use, and adaptability also tended to have higher collective service-excellence assessments. The model explained 67 percent of the variation in service excellence among organizations.

This difference indicated that leadership governance was not merely an individual impression of a particular supervisor. Governance became more influential when its practices were consistently experienced across units and position levels. A single leader could encourage professional conduct within one office, but institution-wide service excellence required coordinated policies, aligned decisions, adequate resources, monitoring systems, and shared accountability.

The cross-level coefficient of .19 showed that an organization's governance climate contributed to individual service assessments even after each participant's personal governance rating was considered. Personnel working in organizations with stronger collective governance tended to report better service performance than personnel with similar personal assessments working in weaker governance environments.

The random slope variance was small but credibly greater than zero. Leadership governance was positively related to service excellence across the organizations, but the strength of the relationship was not identical. Governance produced stronger service benefits in organizations where leadership decisions were supported by workable systems. In organizations with severe resource or procedural limitations, good leadership practices could improve services, but their effect was more constrained.

The results supported Schwarz et al. (2020), who found that accountability, rule-following, political loyalty, and network governance leadership were positively associated with public service motivation and employee performance. They were also consistent with the findings of Zia ud din et al. (2024), whose analysis showed that public leadership contributed to service delivery directly and through collaborative administration. The present pattern extended this relationship by showing that governance was relevant not only to individual work behavior but also to collective service conditions at the organizational level.

The findings did not establish causation. The cross-sectional structure could not determine whether stronger governance improved services over time, whether successful service organizations generated more favorable leadership assessments, or whether both constructs were influenced by other organizational factors. The strength and consistency of the posterior estimates nevertheless supported leadership governance as a meaningful predictor of service excellence.

Table 6. *Sector-specific latent means and structural relationships*

| Sector                      | Leadership Governance<br>Latent Mean | Institutional Service<br>Excellence Latent Mean | Governance →<br>Service Excellence | 95% Credible Interval of<br>Structural Effect |
|-----------------------------|--------------------------------------|-------------------------------------------------|------------------------------------|-----------------------------------------------|
| Educational organizations   | .02                                  | .01                                             | .61                                | .50 to .71                                    |
| Business organizations      | .11                                  | .18                                             | .72                                | .61 to .81                                    |
| Public sector organizations | -.13                                 | -.19                                            | .55                                | .43 to .66                                    |

*Note.* Latent means were standardized around the overall sample mean.

| Credible Sector Contrast                             | Posterior<br>Difference | 95% Credible<br>Interval | Interpretation                    |
|------------------------------------------------------|-------------------------|--------------------------|-----------------------------------|
| Business versus public sector, leadership governance | .24                     | .11 to .37               | Business higher                   |
| Business versus public sector, service excellence    | .37                     | .23 to .51               | Business higher                   |
| Business versus education, service excellence        | .17                     | .05 to .29               | Business higher                   |
| Education versus public sector, service excellence   | .20                     | .07 to .33               | Education higher                  |
| Business versus public sector, structural effect     | .17                     | .04 to .29               | Relationship stronger in business |

Business organizations obtained the highest latent means for leadership governance and institutional service excellence. Their strongest service dimensions were responsiveness and service recovery. Many business organizations appeared to allow frontline personnel to address ordinary customer concerns without seeking approval from several administrative levels. Customer feedback also had a more direct influence on operational decisions because unresolved concerns could affect client retention and organizational revenue.

The positive business-sector result did not mean that all business organizations demonstrated uniformly excellent governance. Participatory decision-making remained lower than strategic direction and ethical accountability. Employees were commonly encouraged to provide operational suggestions, but decisions involving finances, staffing, or institutional policy remained concentrated at the managerial level.

Educational organizations were close to the overall mean in both constructs. They received strong assessments for ethical accountability, professionalism, accessibility, and reliability. Their main weakness appeared in adaptive leadership and innovation support. Institutional decisions were sometimes constrained by prescribed policies, fixed program requirements, limited discretionary resources, and approval structures that reduced the speed of procedural adjustments.

Public sector organizations obtained lower latent means for both leadership governance and institutional service excellence. The largest service gaps appeared in responsiveness, timeliness, and service recovery. Participants generally recognized that public institutions followed formal rules, but they also reported that complex approval processes, documentation requirements, coordination difficulties, and limited authority at the frontline level delayed the resolution of nonroutine concerns.

The lower public-sector ratings should not be interpreted as evidence that public employees were less committed or less professional. Professionalism remained highly rated across all three sectors. The difficulty appeared to be structural. Employees could provide respectful assistance while still operating within procedures that required several endorsements or referrals before a concern could be resolved.

The governance-service relationship was positive in every sector. It was strongest in business organizations and weakest, although still substantial, in public sector organizations. A plausible explanation was

that business leaders had greater discretion to translate governance decisions into operational changes. Public sector leaders could communicate priorities and promote accountability, but their ability to change procedures, staffing patterns, or resource allocations was often influenced by statutory and administrative controls.

The differences supported the need for sector-sensitive governance improvement. A single intervention would not address the same problem in all organizations. Business organizations needed to preserve speed while strengthening employee participation and procedural fairness. Educational organizations required greater support for innovation and local problem-solving. Public institutions required clearer service ownership, improved coordination, and delegated authority for concerns that could be resolved without compromising legal accountability.

Jalilvand et al. (2024) emphasized that accountable governance depends on identifiable structures and clearly assigned responsibilities rather than leadership statements alone. This was reflected in the lower public-sector service-recovery result, where the problem was less about the absence of rules and more about whether procedures allowed concerns to reach a responsible decision-maker efficiently.

Table 7. *Position-level contrasts in leadership governance and institutional service excellence*

| Position Contrast                                                    | Leadership Governance Difference | 95% Credible Interval | Service Excellence Difference | 95% Credible Interval |
|----------------------------------------------------------------------|----------------------------------|-----------------------|-------------------------------|-----------------------|
| Supervisors versus employees                                         | .14                              | .05 to .23            | .08                           | -.01 to .17           |
| Administrators versus employees                                      | .31                              | .20 to .42            | .19                           | .08 to .30            |
| Administrators versus supervisors                                    | .17                              | .07 to .27            | .11                           | .01 to .21            |
| Position Group Governance → Service Excellence 95% Credible Interval |                                  |                       |                               |                       |
| Employees                                                            | .68                              | .59 to .76            |                               |                       |
| Supervisors                                                          | .62                              | .51 to .72            |                               |                       |
| Administrators                                                       | .49                              | .34 to .63            |                               |                       |

Administrators reported more favorable leadership governance than employees and supervisors. The largest administrator-employee differences involved participatory decision-making, communication openness, and adaptive leadership. Administrators appeared to view the existence of committees, meetings, consultations, and written communication as evidence that personnel were involved. Employees placed greater emphasis on whether their contributions affected the final decision.

Supervisors occupied an intermediate position. They were close enough to administration to understand institutional restrictions but also close enough to daily operations to encounter employee concerns and service difficulties. Their governance ratings were higher than those of employees but lower than those of administrators.

The administrator-employee difference in service excellence was smaller than the corresponding difference in leadership governance. This indicated that administrators were especially optimistic about leadership practices rather than simply assigning higher ratings to every organizational condition. Administrators may have evaluated services based on compliance reports, completion records, and institutional targets. Employees were more likely to judge services through direct encounters with delays, complaints, and operational disruptions.

The governance-service relationship was strongest among employees. Frontline personnel appeared particularly sensitive to the practical effects of leadership decisions. When employees experienced clear communication, fair supervision, adequate support, and meaningful involvement, their assessment of service excellence improved considerably. When governance was weak, employees directly encountered its consequences through unclear responsibilities, repetitive procedures, unresolved complaints, and inadequate resources.

The weaker coefficient among administrators did not mean that governance was unimportant to them. Administrators may have had more control over their work and greater access to institutional information, which reduced the degree to which their service assessments depended on governance perceptions. Employees had less decision authority and relied more heavily on organizational systems established by leaders.

The position-level findings revealed an internal perception gap that could be hidden by the favorable overall means. An organization could receive a high general rating while employees remained less convinced that consultation, communication, and service-recovery systems were effective. Governance assessments should therefore not rely exclusively on administrative reports or senior management evaluations.

Table 8. *Predictive and sensitivity analyses*

| Diagnostic or Sensitivity Test              | Primary Model Result | Comparison Result            | Interpretation                 |
|---------------------------------------------|----------------------|------------------------------|--------------------------------|
| Leave-one-organization-out RMSE             | .43                  | .62 for intercept-only model | 30.6% lower prediction error   |
| Leave-one-organization-out MAE              | .34                  | .49 for intercept-only model | 30.6% lower absolute error     |
| Expected log predictive density difference  | 126.4                | SE = 28.7                    | Primary model predicted better |
| Predictive interval coverage                | 94.1%                | Target = 95%                 | Well calibrated                |
| Common-method-adjusted governance effect    | .59                  | Primary effect = .64         | Effect remained substantial    |
| Alternative prior specifications            | .62 to .66           | Primary effect = .64         | Stable across priors           |
| Maximum potential scale reduction statistic | 1.008                | Criterion $\leq 1.010$       | Convergence supported          |
| Minimum effective sample size               | 1,846                | Criterion $> 1,000$          | Adequate posterior sampling    |

The leave-one-organization-out analysis showed that the model predicted service excellence more accurately than a model based only on the overall service mean. Root mean square error decreased from .62 to .43, while mean absolute error decreased from .49 to .34. These improvements indicated that leadership governance contributed useful information when estimating service excellence in an organization excluded from model estimation.

The positive expected log predictive density difference further favored the proposed model. Predictive interval coverage was 94.1 percent, which was close to the intended 95 percent level. The model did not produce intervals that were consistently too narrow or overly certain.

A latent common-method factor was added because leadership governance and service excellence were measured using the same questionnaire. After adjustment, the governance effect decreased from .64 to .59. The reduction showed that shared response tendencies contributed to a small portion of the observed association. The remaining effect was still strong, positive, and credibly different from zero, indicating that common measurement alone did not explain the relationship.

The leadership governance coefficient ranged from .62 to .66 under alternative weakly informative prior specifications. This narrow range showed that the main conclusion was not created by one particular prior distribution. The potential scale reduction statistics and effective sample sizes also supported convergence and adequate posterior sampling.

The predictive and sensitivity findings strengthened confidence in the principal result. Leadership governance remained an important predictor of service excellence after organizational clustering, group differences, shared-method variance, prior assumptions, and out-of-organization prediction were considered.

## CONCLUSION

Leadership governance was generally practiced at a high level across educational, business, and public sector organizations, particularly in ethical accountability, transparency, strategic direction, professionalism, and service reliability. However, participatory decision-making, adaptive leadership, responsiveness, and service recovery remained areas that required improvement. Leadership governance showed a strong and credible relationship with institutional service excellence at both the individual and organizational levels, indicating that organizations with clearer direction, stronger accountability, better communication, responsible resource management, and greater adaptability were more likely to deliver consistent and satisfactory services. Differences across sectors and organizational positions further showed that governance and service practices were not experienced uniformly, with administrators providing more favorable assessments than employees and supervisors. Based on these conclusions, organizations should strengthen employee participation in decision-making, establish clearer feedback and complaint-resolution mechanisms, improve coordination among units, delegate appropriate authority for routine service concerns, and provide leadership development programs focused on adaptability, communication, ethical responsibility, and service recovery. Sector-specific improvement measures should also be developed to address the distinct operational conditions of educational, business, and public sector organizations. Regular governance and service assessments should be conducted using feedback from employees, supervisors, and administrators to identify perception gaps and monitor institutional progress. Future researchers should validate the findings using larger samples, longitudinal designs, mixed-method approaches, and external stakeholder assessments to provide a broader understanding of how leadership governance influences institutional service excellence over time.

## References

- Abdi, A. N. M., Hashi, M. B., & Latif, K. F. (2024). Ethical leadership and public sector performance: Mediating role of corporate social responsibility and organizational politics and moderator of social capital. *Cogent Business & Management*, 11(1), Article 2386722. <https://doi.org/10.1080/23311975.2024.2386722>
- Bagga, S. K., Gera, S., & Haque, S. N. (2023). The mediating role of organizational culture: Transformational leadership and change management in virtual teams. *Asia Pacific Management Review*, 28(2), 120–131. <https://doi.org/10.1016/j.apmr.2022.07.003>
- Blom, R., Kruijen, P. M., van der Heijden, B. I. J. M., & van Thiel, S. (2020). One HRM fits all? A meta-analysis of the effects of HRM practices in the public, semipublic, and private sector. *Review of Public Personnel Administration*, 40(1), 3–35. <https://doi.org/10.1177/0734371X18773492>
- Brooks, J. S., & Brooks, M. C. (2024). Hot leadership, cool leadership: How education policies are implemented (and ignored) in schools. *Educational Policy*, 38(7), 1608–1637. <https://doi.org/10.1177/08959048241268309>
- Deed, P., & Kietkunwong, N. (2026). Information disclosure, public trust, and social satisfaction as indicators of good governance and quality of life: Evidence from local administrative organizations in rural Thailand. *Public Organization Review*, 26, 335–352. <https://doi.org/10.1007/s11115-026-00985-7>
- Domingo, S. N., Abrigo, M. R. M., Diokno-Sicat, C. J., Bernardo, P. U. S., Saquing, M. P. V., & Ocbina, J. J. S. (2022). *Outcome evaluation of the Public Management Development Program* (Discussion Paper Series No. 2022-50). Philippine Institute for Development Studies. <https://doi.org/10.62986/dp2022.50>
- Iddrisu, I., & Mohammed, B. (2024). Investigating the influence of employee voice on public sector performance: The mediating dynamics of organizational trust and culture. *Social Sciences & Humanities Open*, 10, Article 101096. <https://doi.org/10.1016/j.ssaho.2024.101096>
- Jalilvand, M. A., Raeisi, A. R., & Shaarbafchizadeh, N. (2024). Hospital governance accountability structure: A scoping review. *BMC Health Services Research*, 24, Article 47. <https://doi.org/10.1186/s12913-023-10135-0>
- Leitgöb, H., Seddig, D., Asparouhov, T., Behr, D., Davidov, E., De Roover, K., Jak, S., Meitinger, K., Menold, N., Muthén, B., Rudnev, M., Schmidt, P., & van de Schoot, R. (2023). Measurement invariance in the social sciences: Historical development, methodological challenges, state of the art, and future perspectives. *Social Science Research*, 110, Article 102805. <https://doi.org/10.1016/j.ssresearch.2022.102805>

- Li, F., Liu, B., Lin, W., Wei, X., & Xu, Z. (2021). How and when servant leadership promotes service innovation: A moderated mediation model. *Tourism Management*, 86, Article 104358. <https://doi.org/10.1016/j.tourman.2021.104358>
- Lin, M., Ling, Q., Liu, Y., & Hu, R. (2021). The effects of service climate and internal service quality on frontline hotel employees' service-oriented behaviors. *International Journal of Hospitality Management*, 97, Article 102995. <https://doi.org/10.1016/j.ijhm.2021.102995>
- Lo, Y.-C., Lu, C., Chang, Y.-P., & Wu, S.-F. (2024). Examining the influence of organizational commitment on service quality through the lens of job involvement as a mediator and emotional labor and organizational climate as moderators. *Heliyon*, 10(2), Article e24130. <https://doi.org/10.1016/j.heliyon.2024.e24130>
- Mincu, M. (2022). Why is school leadership key to transforming education? Structural and cultural assumptions for quality education in diverse contexts. *Prospects*, 52, 231–242. <https://doi.org/10.1007/s11125-022-09625-6>
- National Economic and Development Authority Regional Office II. (2023). *Cagayan Valley Regional Development Plan 2023–2028*. Regional Development Council II.
- Organisation for Economic Co-operation and Development. (2025). *Government at a glance 2025*. OECD Publishing. <https://doi.org/10.1787/0efd0bcd-en>
- Rahmati, M. H., & Jalilvand, M. R. (2024). An optimal organizational excellence model for the public sector. *International Journal of Quality & Reliability Management*, 41(3), 944–963. <https://doi.org/10.1108/IJQRM-03-2023-0098>
- Schwarz, G., Eva, N., & Newman, A. (2020). Can public leadership increase public service motivation and job performance? *Public Administration Review*, 80(4), 543–554. <https://doi.org/10.1111/puar.13182>
- Slåtten, T., Mutonyi, B. R., Nordli, A. J., & Lien, G. (2023). The role of ambidextrous leadership and employee ambidexterity in enhancing service quality of care and creativity: A study of health professionals. *BMC Health Services Research*, 23, Article 1252. <https://doi.org/10.1186/s12913-023-10275-3>
- Taheri, T., Amerzadeh, M., Alizadeh, A., & Kalhor, R. (2025). The impact of good governance on organizational health with the mediating role of organizational accountability: Considering the influence of demographic and organizational variables. *BMC Health Services Research*, 25, Article 892. <https://doi.org/10.1186/s12913-025-12921-4>
- United Nations Department of Economic and Social Affairs. (2023). *World public sector report 2023: Transforming institutions to achieve the Sustainable Development Goals after the pandemic*. United Nations.
- van Erp, S., & Browne, W. J. (2021). Bayesian multilevel structural equation modeling: An investigation into robust prior distributions for the doubly latent categorical model. *Structural Equation Modeling: A Multidisciplinary Journal*, 28(6), 875–893. <https://doi.org/10.1080/10705511.2021.1915146>
- Zia ud din, M., Yuan yuan, X., Ullah Khan, N., & Estay, C. (2024). The impact of public leadership on collaborative administration and public health delivery. *BMC Health Services Research*, 24, Article 129. <https://doi.org/10.1186/s12913-023-10537-0>
- Zyphur, M. J., Bonner, C. V., & Tay, L. (2023). Structural equation modeling in organizational research: The state of our science and some proposals for its future. *Annual Review of Organizational Psychology and Organizational Behavior*, 10, 495–517. <https://doi.org/10.1146/annurev-orgpsych-041621-031401>