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Original Article

The Role of Organizational Communication and Control Systems on Hospital Organizational Performance: A Service Behavior approach as a Mediating Variable

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Abstract: *This study explores the indirect influence of organizational communication and control systems on hospital organizational performance, with service behavior serving as a mediating variable. Drawing on data from healthcare professionals across multiple Central Halmahera hospital units, the findings reveal that Communication alone does not directly improve performance outcomes. Instead, Communication impacts performance when it successfully cultivates empathetic, responsive, and patient-oriented service behaviors. The study also highlights that control systems enhance their effectiveness when designed to reinforce such positive behaviors, suggesting that Communication and control must be strategically aligned with behavioral transformation to yield measurable organizational benefits. These findings contribute to a more behaviorally grounded understanding of performance management in healthcare and underscore the need for integrative Communication, control systems, and service behavior strategies in hospital settings.*

Keywords: *Organizational Communication; Service Behavior; Hospital Organizational Performance; Control Systems; Healthcare Management.*

I. INTRODUCTION

Advancements in science and technological innovation have significantly influenced human resource management practices, particularly within public sector organizations such as hospitals. Amid growing competition and increasingly complex societal demands, organizational efficiency and productivity have become non-negotiable priorities. One of the key determinants of organizational success is performance, which reflects the extent to which strategic objectives are achieved effectively and sustainably.

Hospitals, as healthcare service organizations, face high levels of complexity in managing diverse resources, including human capital, technology, and clinical procedures. In this context, efforts to enhance organizational performance rely not only on clinical competence but also on how effectively managerial functions such as communication and control systems are implemented. Hospital performance today is shaped by the speed and accuracy of decision-making, the efficiency of cross-departmental coordination, and the extent to which a culture of service drives behavior aligned with high-quality care.

Organizational Communication serves as a vital component of hospital managerial structure, linking individuals and departments. Effective Communication accelerates the flow of information, fosters team cohesion, enhances transparency, and creates a work culture that is conducive to patient safety. Numerous studies have identified communication breakdowns as a significant cause of medical incidents in hospitals (Abukari & Petrucka, 2021). Conversely, strong interpersonal Communication between healthcare workers and patients has been shown to improve service satisfaction and foster a culture of safety (Edmondson, 2019).

Meanwhile, Management Control Systems (MCS) play a central role in establishing evaluation and monitoring mechanisms that ensure organizational activities remain aligned with strategic objectives. An effective MCS enables leadership to measure goal attainment, provide feedback, and correct deviations from the goal. Simons (1995) emphasizes that control systems, developed through formal tools such as performance indicators and internal audits, can promote strategic and accountable organizational behavior.

Clear and open Communication serves as a bridge between management and staff, facilitating a shared understanding of responsibilities, expectations, and workflows. At the same time, control systems are essential in ensuring consistency, accountability, and compliance with established service standards (Laoli & Ndraha, 2022). However, the relationship between communication and control systems with organizational performance is not always direct; it is often mediated by behavioral factors. In this regard, service behavior serves as a key mechanism that connects managerial structures with real-world

performance outcomes. Service behavior reflects individual attitudes, motivation, and commitment to proactively addressing patient needs. Suwarno et al. (2018), in the context of Indonesian hospitals, found that communication and control systems significantly influence service behavior, which in turn positively impacts employee performance.

Although communication and control systems have been extensively studied as independent variables, empirical studies that examine their combined influence on hospital performance, particularly through the mediating role of service behavior, remain limited. Yet in complex, high-risk healthcare organizations, a comprehensive understanding of how these variables interact is essential for designing evidence-based managerial strategies and policies.

In the healthcare context, particularly within hospitals, these factors are increasingly critical. The Central Halmahera District General Hospital (RSUHT), as the region's only secondary referral facility, faces considerable challenges in maintaining service quality. Public reports and complaints highlight a gap between managerial vision and service realities, from prolonged patient waiting times to ineffective Communication and lack of empathy from medical personnel.

This phenomenon reveals that the integration of communication and control systems has not yet been fully optimized. The misalignment between leadership vision and frontline service behavior indicates a gap in managerial practice. In some cases, overly bureaucratic control systems can hinder service flexibility, resulting in diminished patient satisfaction and reputational decline.

In response to these issues, this study aims to empirically examine the impact of communication and control systems on hospital organizational performance, with service behavior as a mediating variable. The findings are expected to contribute theoretically to the development of organizational management models in healthcare services and provide practical guidance for hospital administrators seeking to enhance the quality and effectiveness of service delivery.

II. LITERATURE REVIEW

A) Organizational Communication and Organizational Performance

Organizational Communication refers to the process of transmitting information, ideas, and emotions among individuals within a work environment to achieve shared goals. In the hospital context, Communication plays a crucial role in facilitating coordination among medical professionals, informing clinical decision-making, and enhancing service interactions with patients. Open and effective Communication can strengthen accountability, reduce medical errors, and enhance staff job satisfaction. A study by Abukari and Petrucka (2021) demonstrated that communication barriers among healthcare personnel negatively impact patient safety and service effectiveness. Therefore, it is posited that functional Communication has a positive influence on hospital performance.

H1: Organizational Communication has a positive effect on hospital performance.

B) Control Systems and Organizational Performance

Management Control Systems (MCS) refer to a set of procedures, tools, and policies designed to guide and regulate organizational activities in alignment with strategic objectives. According to Simons (1995), control systems can stimulate desired behaviors and provide essential feedback for improving performance. In hospitals, control mechanisms such as clinical audits, performance evaluations, and incident reporting play a critical role in ensuring service quality and efficiency. Effective control enhances service consistency and staff accountability, ultimately strengthening organizational performance.

H2: Management control systems have a positive effect on hospital performance.

C) Communication and Control Systems on Service Behavior

Service behavior reflects employees' orientation and responses to patient needs proactively and professionally. Transparent communication fosters shared understanding and reinforces service commitment, while well-structured control systems offer clear guidance and performance expectations. Suwarno (2018) found that communication and organizational control significantly influence the service behavior of hospital staff, particularly in areas such as engagement, response timeliness, and interpersonal interaction quality.

H3: Organizational Communication has a positive effect on service behavior.

H4: Control systems have a positive effect on service behavior.

D) Service Behavior and Organizational Performance

Service behavior functions as a micro-organizational construct linking managerial policies to service outcomes. Employees who demonstrate high service behavior tend to be more initiative-driven, empathetic, and accountable for their work results, which in turn enhances service quality and patient satisfaction. Edmondson (2019) emphasized the importance of safe and communicative behaviors in building resilient service organizations. Thus, service behavior is expected to contribute directly to hospital performance.

H5: Service behavior has a positive effect on hospital performance.

E) The Mediating Role of Service Behavior

Existing literature suggests that service behavior may act as a mediating variable between managerial structures (Communication and control) and organizational performance. This implies that managerial interventions affect performance not directly, but through shaping employee attitudes and behaviors. Suwarno's (2018) findings indicate that communication and control systems significantly enhance organizational performance by improving service behavior.

H6: Service behavior mediates the effect of organizational Communication on hospital performance.

H7: Service behavior mediates the effect of management control systems on hospital performance.

III. METHODS

This study employs a quantitative explanatory research design aimed at examining the influence of organizational communication and management control systems on hospital organizational performance, with service behavior serving as a mediating variable. This approach was selected to empirically test the causal relationships among variables through field data collection and multivariate statistical analysis.

The study population comprises all healthcare professionals and non-medical staff in type-C hospitals who are directly involved in patient care services. A purposive sampling technique was employed, with inclusion criteria requiring respondents to have worked for at least one year and to be directly involved in patient service processes. The minimum sample size was determined based on the guideline provided by Hair et al. (2014) for Structural Equation Modeling (SEM), which recommends a ratio of 5–10 times the number of indicators. Given a total of 20 items, the minimum sample size ranges from 100 to 200 respondents, with an ideal target of 160 respondents.

Data were collected using a structured questionnaire based on a 5-point Likert scale, distributed both in printed form and via Google Forms. Content validity was assessed through expert judgment, while construct validity and reliability were evaluated during the SEM analysis stage. The research instrument consists of four primary constructs:

1. **Organizational Communication** – defined as the process of exchanging information, ideas, and emotions among individuals within the hospital, aiming to facilitate coordination and decision-making. This construct includes five indicators: clarity of information among staff, frequency of interdepartmental Communication, transparency from leadership, responsiveness to feedback, and effectiveness of cross-professional Communication. These indicators were adapted from Abukari & Petrucka (2021) and Suwarno (2018).
2. **Management Control Systems** – refer to formal organizational mechanisms used to direct, monitor, and evaluate activities in pursuit of strategic objectives. This construct includes five indicators: clarity of performance targets, periodic evaluation mechanisms, follow-up on target achievements, operational supervision, and reporting and accountability systems. These were adapted from Simons (1995) and Suwarno (2018).
3. **Service Behavior** – encompasses the attitudes and actions of hospital staff in delivering proactive, empathetic, and high-quality services to patients and colleagues. It includes five indicators: proactiveness in assisting patients, responsiveness to patient needs, Communication in service delivery, courtesy and empathy, and accountability for service outcomes. These were adapted from Suwarno (2018) and Edmondson (2019).
4. **Organizational Performance** – defined as the extent to which a hospital achieves its strategic goals in terms of service quality, efficiency, and patient satisfaction. This construct includes five indicators: patient satisfaction, operational efficiency, patient safety, service error rates, and workforce productivity. These were adapted from the Balanced Scorecard for Healthcare and the WHO Quality Framework.

All indicators were measured using a 5-point Likert scale. Data analysis was conducted using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS-SEM) approach via SmartPLS software. PLS-SEM is particularly suitable for exploratory and predictive research, especially when multivariate normality cannot be assumed.

IV. RESULTS AND DISCUSSION

A) Measurement Model Test (Outer Model)

a. Convergent Validity

Convergent Validity is a measure of the validity of a reflective indicator as a variable measure, as seen from the outer loading of each variable indicator. An indicator value is considered valid if it explains its construct variable with a value > 0.7, commonly referred to as the rule of thumb (Ghozali and Latan, 2015). Meanwhile, values below 0.7 should be removed from the indicator. Validity testing occurs when the scores obtained from two different instruments measuring the same construct have a high correlation. The following outer loading output results are in Table 1.

The results of the first-stage validity test are presented in Table 1. They can be described as follows:

1. Convergent validity in this study aims to determine whether an indicator is valid in measuring a variable, based on its loading factor value. An indicator is considered valid if its loading factor is positive and greater than 0.60 (Ghozali and Latan, 2015). The indicators described have a loading factor greater than 0.60; thus, they are considered valid.
2. Discriminant validity aims to determine whether the dimensions are valid in measuring the variables, based on an Average Variance Extracted (AVE) value greater than 0.5. AVE is the average percentage of variance scores extracted from a set of latent variables estimated through the standardized loadings of their dimensions in the iterative process of the PLS algorithm (Hair et al., 2014). The variables studied yielded AVE values greater than 0.50; thus, these dimensions are considered valid in measuring the variables. This indicates that the model meets the requirements for convergent and discriminant validity.

Table 1. Construct validity testing (*outer loading*)

Variable	Indicators are marked with the symbol	Outer Loading	information
Organizational Performance (Y)	Y1	0.726	Valid
	Y2	0.789	Valid
	Y3	0.836	Valid
	Y4	0.897	Valid
	Y5	0.880	Valid
Organizational Communication (X1)	X1.1	0.867	Valid
	X1.2	0.821	Valid
	X1.3	0.767	Valid
	X1.4	0.891	Valid
	X1.5	0.834	Valid
Control Systems (X3)	X2.1	0.766	Valid
	X2.2	0.713	Valid
	X2.3	0.834	Valid
	X2.4	0.778	Valid
	X2.5	0.845	Valid
Service Behavior (Z)	Z1	0.779	Valid
	Z2	0.888	Valid
	Z3	0.728	Valid
	Z4	0.918	Valid
	Z5	0.827	Valid

Source: *Primary data processed in 2025*

b. Construct Reliability Testing

Construct reliability testing is conducted to demonstrate the accuracy, consistency, and precision of the instrument in measuring the construct in question. To measure the reliability of a construct with a reflective dimension, Cronbach's alpha and composite reliability (also known as discriminant reliability) are used. The test criteria are considered reliable if the composite reliability value is greater than 0.70 or the Cronbach's alpha value is greater than 0.60 (Ghozali and Latan, 2015; Hair et al., 2014). The results of the reliability testing are presented in the Table below. Table 2 shows that all dimensions have composite reliability values and Cronbach's alpha values greater than 0.7. Therefore, all indicators measuring these variables are considered reliable for explaining the variables studied.

Table 2. Composite Reliability, Cronbach's Alpha, and AVE

Variable	*Composite Reliability*	*Cronbach's Alpha*	Average Variance Extracted (AVE)	Information
Organizational Performance	0.952	0.959	0.682	Valid and Reliable
Organizational Communication	0.948	0.955	0.659	Valid and Reliable
Control Systems	0.941	0.949	0.630	Valid and Reliable
Service Behavior	0.923	0.937	0.653	Valid and Reliable

Source: output smartpls, 2025

The measure to determine discriminant validity can also use the AVE root criterion, namely, the values of the measured variables are greater than the other variables specified in the model, which can be seen in the following table:

Table 3 Forner Lacker Criteria

	Organizational Performance	Organizational Communication	Control Systems	Service Behavior
Organizational Performance	0.826			
Organizational Communication	0.543	0.812		
Control Systems	0.793	0.718	0.808	
Service Behavior	0.740	0.737	0.774	0.894

Source: *output smartpls, 2025*

Table 3 shows that the discriminant validity has fulfilled the rule of thumb, namely, the cells in the columns and rows of the measured variables are more than the variables specified in the model.

c. Structural Model (Inner Model)

1. Goodness of Fit Model

The goodness of fit (GoF) model is used to determine the extent to which endogenous variables can explain the contribution of exogenous variables to the endogenous variables. The GoF value of the model can be determined by calculating the GoF index value from the average R-squared (R^2) for all endogenous constructs (Tenenhaus et al., 2005). A GoF value close to 1 indicates a good path model estimate (Akter et al., 2011). The GoF model in PLS analysis is carried out using Q-Square (Q^2) predictive relevance, which measures how well the observation values generated by the model and its parameter estimates (Ghozali, 2011:26). A Q^2 value greater than zero indicates that the inner model has good predictive relevance. Q^2 is calculated using the formula:

$$Q^2 = 1 - [(1 - R_1^2)\ldots(1 - R_n^2)]$$

Table 4: Goodness of Fit Model

Variable	R^2
Organizational Performance	0.408
Service Behavior	0.573
$Q^2 = 1 - [(1 - R_1^2)(1 - R_2^2)]$ $Q^2 = 1 - [(1 - 0.408)(1 - 0.573)]$ $Q^2 = 1 - [(0.592)(0.427)]$ $Q^2 = 0.747$	

Source: *output smartpls, 2025*

R-square service behavior variable has a value of 0.573, meaning that communication and control systems can explain or contribute 57.3% to the diversity of service behavior variables. The remaining 42.7% is contributed by other variables not discussed in this research model. Furthermore, the R-square for the organizational performance variable has a value of 0.408, meaning that the Communication, control system, and service behavior variables contribute 40.8% to the diversity of organizational performance variables.

Q-*Square predictive relevance* organizational performance variable has a value of 0.747, meaning that the diversity of organizational performance variables can be explained by the model as a whole by 74.7% or the contribution of communication variables, control systems, and service behavior as a whole to organizational performance. The test results show a Q^2 value for the inner model of 0.747, indicating that this research model has high predictive relevance and is suitable for testing hypotheses.

2. Hypothesis Testing

The hypothesis proposed in this study is that there is one mediating variable, namely service behavior. Hypothesis testing is conducted to determine whether there is a direct influence of exogenous variables on endogenous variables and an indirect influence of exogenous variables on endogenous variables through mediating variables. If the t-statistic is >1.96 and the p-value is <0.05 level of significance (alpha = 5%), a significant influence is declared.

Table 5. Direct Influence

Influence	Path Coefficient	T Statistics	P Values
Organizational Communication -> Organizational Performance	-0.005	0.036	0.971
Organizational Communication -> Service Behavior	0.236	2.727	0.007
Service Behavior -> Organizational Performance	0.490	2.547	0.011
Control Systems -> Organizational Performance	0.342	1.287	0.199
Control Systems -> Service Behavior	0.595	5.780	0.000

Source: *output smartpls, 2025*

Table 5 shows that not all exogenous variables have a significant direct effect on the endogenous variables. The effect of each exogenous variable on the endogenous variables indicates that:

a. The organizational communication variable has no direct positive and insignificant effect on organizational performance, meaning Hypothesis 1 is rejected.
b. The organizational communication variable has a significant positive effect on service behavior, meaning Hypothesis 2 is accepted.
c. The service behavior variable has a significant positive effect on organizational performance, meaning Hypothesis 3 is accepted.
d. The control systems variable has no direct significant effect on organizational performance, meaning Hypothesis 4 is rejected.
e. The control systems have a significant positive effect on service behavior, meaning Hypothesis 5 is accepted.

The direct effect of the exogenous variables on the endogenous variables described above can be illustrated in the following path diagram:

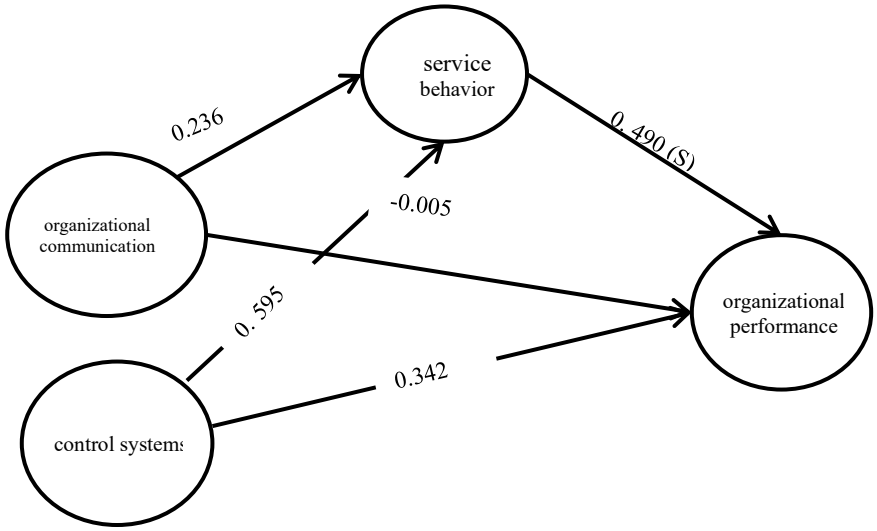

Figure 2. Diagram of direct influence paths

Information: (S) = Significant
(NS) = Not Significant

Table 6. Indirect Influence

Influence	*Path Coefficient*	t-stat	p-value
Organizational Communication -> Service Behavior -> Organizational Performance	0.116	2.043	0.042
Control Systems -> Service Behavior -> Organizational Performance	0.291	2.192	0.029

Source: *output smartpls, 2025*

The indirect effect of Communication on organizational performance through service behavior produces a t-statistic of 2.043 with a p-value of 0.042. This indicates a significant effect, meaning that service behaviour acts as a full mediator (Hypothesis 6 is accepted). The indirect effect of the control system on organizational performance through service behavior produces a t-statistic of 2.192 with a p-value of 0.029. This indicates that there is a significant effect, meaning that service behavior acts as a full mediator (hypothesis 7 is accepted).

Contrary to prevailing assumptions in organizational management literature, this study found that Communication exerts a negative and statistically insignificant effect on organizational performance. This result challenges the long-held belief that Communication is invariably a cornerstone for enhancing coordination and productivity (Clampitt, 2010). Ineffective Communication—manifested in excessive, ambiguous, or misdirected messages—may confuse, slow decision-making processes, or even trigger interdepartmental conflicts, ultimately impairing overall performance (Daft, 2015).

Furthermore, the ineffectiveness of Communication may stem from the poor quality of messages and the inappropriate use of communication media. In the digital era, reliance on communication technologies without adequate organizational communication literacy can lead to miscommunication, emotional disconnection among employees, and misalignment in understanding the organization's vision (Kreps, 2011). These issues are compounded in bureaucratic structures, where rigid, top-down communication patterns inhibit constructive dialogue and bottom-up innovation, reducing organizational responsiveness to change (Hofstede, 2001).

It is also plausible that organizational performance in this study was more strongly influenced by other determinants—such as leadership, business strategy, or individual competence—rendering Communication a secondary, non-significant factor (Robbins & Judge, 2017). When Communication does not operate synergistically with these elements, its impact may be limited or even detrimental. Additionally, the prevalence of information overload, where employees are inundated with nonessential Communication, may impede efficiency and focus, contributing to cognitive fatigue and reduced prioritization in high-paced environments (Eppler & Mengis, 2004). These findings underscore the need for more strategic, streamlined, and context-sensitive communication practices in organizational settings.

Although control systems are generally regarded as crucial for ensuring accountability, efficiency, and regulatory compliance in public service organizations, this study finds that their positive impact on organizational performance is statistically insignificant. This result prompts a critical reflection, as internal control systems are expected to reduce deviations, enhance transparency, and support goal attainment (Mio et al., 2016). The weak significance may reflect suboptimal implementation, where rigid, formal control structures hinder organizational agility and responsiveness to citizens' evolving needs (Grossi et al., 2020). Overemphasis on procedural compliance can restrict room for innovation, thereby limiting the transformative potential of control systems.

Moreover, this finding may suggest a disconnect between the design of control systems and actual practice. While many public organizations have adopted performance-based control frameworks, their application often remains administrative and insufficiently embedded in everyday work culture (Manes-Rossi et al., 2020). When control mechanisms are perceived as bureaucratic formalities rather than tools for managerial improvement, their impact on performance naturally diminishes. The symbolic adoption of such systems, devoid of practical integration, undermines their role in driving accountability and performance enhancement.

Further compounding this issue are contextual challenges typical of public service environments, such as political interference, limited human resources, and resistance to change. Employees may view control systems as instruments of excessive surveillance rather than as support for improving their work, thereby weakening buy-in and reducing system effectiveness (Van Helden et al., 2021). Still, the observed positive direction, albeit weak, suggests latent potential. More nuanced, hybrid approaches—combining formal controls with informal mechanisms like participatory leadership and organizational culture—may enable control systems to function not merely as evaluative tools but as facilitators of continuous improvement (Nabatchi & Sancino, 2017). Contextualized design, considering service type, geographic scope, structure, and stakeholder characteristics, is essential to ensure alignment with the complex realities of the public sector (Agostino & Arnaboldi, 2017).

High-quality service behavior is critical to hospital organizational success, particularly as it directly influences patient experience and satisfaction. This study confirms that Communication has a significant positive effect on service behavior, underscoring the role of effective Communication in fostering quality healthcare delivery (Ali & Anwar, 2021). In the complex and high-stakes environment of hospitals, open, clear, and empathetic Communication fosters understanding, cooperation, and care among health workers, which in turn enhances the overall service provided.

The findings further support the view that Communication serves not only as an information channel but also as a psychological resource. Effective Communication reduces the likelihood of medical errors, strengthens inter-unit coordination, and accelerates responsiveness to patient needs (Rosen et al., 2018). When medical staff feel respected through open dialogue and reciprocal Communication with colleagues and superiors, they are more likely to demonstrate proactive and empathetic service behaviors. This aligns with previous research showing that internal Communication enhances emotional engagement and prosocial workplace behavior (Lee et al., 2020).

In high-pressure hospital settings, Communication also contributes to psychological stability and intrinsic motivation. Emotionally supportive Communication can reduce work-related stress and improve staff morale (Tzeng et al., 2021). Hence, strengthening internal communication systems should be considered a strategic investment in cultivating exceptional service behavior. Moreover, the significant impact of Communication highlights the need for systematic organizational communication management. Interprofessional communication training, transparent communication channels, and supportive information

technology platforms are essential to reinforcing service behavior and establishing a patient-centred organizational culture (Koivunen et al., 2019).

This study affirms the strategic role of control systems in shaping high-quality service behavior within hospital organizations. The findings indicate that control systems exert a significant positive effect on service behavior, positioning them as vital mechanisms not only for procedural compliance but also for cultivating professionalism, accountability, and consistency in healthcare delivery (Al-Kahtani et al., 2021). This demonstrates that control systems can foster a disciplined, responsive, and service-oriented workforce, thereby enhancing the reliability and quality of healthcare services.

Well-structured control systems serve not merely as monitoring tools but also as catalysts for behavioral improvement. Instruments such as service audits, performance reporting, and standardized relational procedures encourage healthcare personnel to provide measurable and consistent service (Bahadori et al., 2020). Transparent and participatory control mechanisms foster a sense of ownership and responsibility among staff, while regular feedback from audits and performance evaluations promotes a culture of continuous service improvement. Evidence also supports that performance-based control systems motivate proactive behavior in response to the dynamic nature of healthcare demands (Liang et al., 2019).

The statistically significant impact of control systems on service behavior underscores their dual role as both supervisory mechanisms and platforms for organizational learning. When integrated into quality management cycles, control systems enhance staff competencies and reinforce work ethics, thereby directly translating into improved service delivery (Zehir et al., 2020). However, the success of these systems depends on their implementation. Control approaches that are overly punitive or rigid can lead to demotivation and resistance, whereas data-driven, developmental, and facilitative systems are more likely to nurture empathetic and human-centered service behavior (Aij & Teunissen, 2017). Therefore, it is crucial to design control systems that strike a balance between supervision and empowerment to sustain excellence in healthcare service delivery.

This study confirms that service behavior among healthcare personnel significantly influences hospital organizational performance, reinforcing its role as a strategic cornerstone in delivering patient-centered care. As hospitals increasingly adopt value-based service models, empathetic, responsive, informative, and patient-focused behaviors become key indicators of healthcare quality (Al-Khatib et al., 2022). A strong service orientation not only enhances patient satisfaction but also builds public trust and contributes to long-term performance outcomes such as patient retention, staff engagement, and operational efficiency (Munir et al., 2021).

Service behavior is not merely an individual trait but an integrated element of organizational culture and systems. Hospitals that embed service-oriented values into their work practices foster environments where healthcare providers deliver consistent, high-quality care—even under pressure (Kim et al., 2020). This internalization of service values cultivates sustainable organizational performance. Furthermore, the influence of service behavior is amplified when supported by effective internal Communication, interdepartmental coordination, and strong leadership. A system that empowers staff to act humanely and responsively positions service behavior as a strategic tool for enhancing both institutional reputation and workplace harmony (Lee et al., 2020).

Beyond operational outcomes, service behavior is also closely tied to employee engagement and job satisfaction. When healthcare workers feel valued and autonomous, they are more likely to exhibit initiative and engage in proactive problem-solving, especially during patient interactions (Suharti & Suliyanto, 2022). This creates a positive feedback loop that enhances hospital efficiency, improves patient safety, and fosters accreditation achievements. In a competitive healthcare landscape, exceptional service behavior acts as a differentiating asset—transforming healthcare experiences and reinforcing organizational competitiveness (Setiawan et al., 2023). As such, embedding service behavior into hospital strategy is vital for achieving sustainable and superior healthcare delivery.

The findings of this study highlight that the impact of internal Communication on hospital organizational performance is not direct, but rather mediated by healthcare workers' service behavior. While effective Communication is foundational to cross-professional collaboration and decision-making in hospitals, its true influence becomes evident only when it successfully drives frontline service behaviors that reflect organizational values (Lee et al., 2020). This supports the notion that Communication must be transformative—shaping attitudes and actions—to ultimately enhance organizational outcomes. Service behavior thus emerges as the operational bridge that translates internal messages into patient-centered care.

In hospital settings, service behavior functions as the behavioral manifestation of internal Communication. When health personnel clearly understand and emotionally connect with organizational messaging, they are more likely to deliver timely, empathetic, and professional service (Kim et al., 2020; Al-Khatib et al., 2022). Such behavior becomes instrumental in achieving performance indicators such as patient satisfaction, reduced errors, and faster service delivery. However, the effectiveness of Communication relies heavily on contextual reinforcements. Without a supportive organizational culture, including incentives,

leadership backing, and behavioral norms, internal communication risks remaining rhetorical rather than impactful (Munir et al., 2021).

This mediating relationship also aligns with the service-profit chain theory, which asserts that positive internal environments foster superior employee behaviors, ultimately enhancing organizational performance (Setiawan et al., 2023). In hospitals, when staff feel heard, guided, and appreciated through consistent Communication, they tend to provide higher-quality care, thus boosting institutional performance. As organizational theory evolves, it becomes increasingly clear that intermediate variables such as service behavior must be accounted for when evaluating communication strategies. Research by Suharti and Suliyanto (2022) reinforces that Communication, when viewed through this mediational lens, transitions from being merely informative to being transformational, laying the foundation for a sustainable, high-performance service culture in healthcare institutions.

This study reveals that the influence of control systems on hospital organizational performance is indirect and mediated by healthcare workers' service behavior. Although internal controls are designed to ensure procedural compliance, resource efficiency, and adherence to medical protocols, they do not directly enhance performance unless they simultaneously shape positive service behaviors (Bahadori et al., 2020). This suggests that service behavior acts as a vital conduit through which control mechanisms are translated into performance outcomes.

Service behavior, in this context, reflects how healthcare personnel internalize and respond to the control system. Control systems that go beyond monitoring compliance to promote service-oriented values—such as empathy, responsibility, and effective Communication—are more likely to produce meaningful performance gains (Zehir et al., 2020). Integrating formal control with behavioral and cultural dimensions allows hospitals to embed service values into routine practice, enabling consistent and patient-centered care delivery (Liang et al., 2019). Thus, service behavior functions as a transformative mechanism that bridges administrative rules and real-world clinical operations.

Theoretically, service behavior serves as a psychological and social variable that mediates the effect of control systems on organizational outcomes. When control mechanisms are perceived not as tools of surveillance but as support systems for improving work quality, healthcare professionals are more inclined to engage in positive service conduct (Aij & Teunissen, 2017). This includes providing timely patient responses, adhering to clinical protocols, and fostering strengthened interpersonal interactions. Constructive supervision, feedback-based audits, and value-driven evaluations further reinforce this behavioral alignment (Al-Kahtani et al., 2021). As such, the mediating role of service behavior is crucial in translating control systems into enhanced hospital performance.

V. CONCLUSION

This study underscores the critical role of service behavior as a mediating mechanism linking internal communication and control systems to hospital organizational performance. While Communication alone demonstrated no direct impact on performance, its strategic and empathetic execution significantly shaped service behavior, which in turn enhanced institutional outcomes. Similarly, internal control systems exerted a meaningful influence on performance only when they successfully cultivated disciplined, responsive, and patient-centered service behaviors. These findings highlight that in complex healthcare environments, neither Communication nor control can independently drive performance without aligning with human-centered behavioral change. Therefore, hospitals must move beyond procedural compliance and informational transmission, embedding service values deeply within their cultural, communicative, and control frameworks to achieve sustainable organizational excellence.

The findings of this study provide a critical theoretical insight that Communication does not inherently produce positive outcomes for organizational performance. Its effectiveness is contingent upon the quality, context, and strategic alignment of the communication process. Therefore, hospital organizations must reevaluate their communication approaches to ensure that messages are clear, relevant, and appropriately delivered through channels that match audience needs. From a theoretical standpoint, this reinforces the need to move beyond linear models of communication effectiveness and to consider mediating mechanisms—such as service behavior—that translate Communication into tangible performance outcomes.

Practically, the study underscores the importance of integrating soft skills training, service coaching, and empathy-building into the development and management of healthcare personnel. Ongoing capacity building combined with performance-based incentive systems can cultivate and sustain high-impact service behaviors that enhance organizational performance (Alshurideh et al., 2019). Hospital management must institutionalize systems that consistently acknowledge and reward service behavior contributions, thereby embedding service excellence into the organizational fabric. This requires a shift from reactive communication fixes to proactive behavioral reinforcement strategies.

Moreover, the research highlights that the success of control systems in improving performance hinges on their ability to foster service-oriented behavior. Control mechanisms that solely emphasize oversight may fall short unless they also serve as behavioral catalysts aligned with quality, safety, and patient satisfaction (Manes-Rossi et al., 2020). Hospitals should therefore adopt holistic strategies that link internal Communication, organizational culture, and control structures to the promotion of service excellence. Positive service behavior—such as warm patient greetings, clear procedural explanations, and collaborative responses to complaints—should be nurtured as visible outcomes of effective Communication and supportive control. This integrative model positions service behavior as the critical bridge between managerial systems and organizational success.

VI. REFERENCES

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