

WORK ENGAGEMENT AS A MECHANISM LINKING WORK COMPETENCE TO NURSES' PERFORMANCE

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Abstract

This study examines the effects of organizational culture and work competence on nurses' performance through work engagement at Bogor City Regional General Hospital, Indonesia. A quantitative, explanatory, and cross-sectional survey involved 215 nurses selected from a population of 466 by considering service-unit representation, eligibility, and respondent availability. Data were collected using structured self-report questionnaires and analyzed with Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 4 and 5,000 bootstrap subsamples. The results show that organizational culture and work competence significantly increase work engagement, with work competence exerting the stronger effect. Neither organizational culture nor work competence has a significant direct effect on nurses' performance, while work engagement significantly improves performance. Work engagement does not mediate the relationship between organizational culture and performance but fully mediates the relationship between work competence and performance. The model explains 77.6% of work engagement and 23.6% of nurses' performance. These findings indicate that professional competence improves performance primarily when it is activated through nurses' psychological engagement and dedication to their work.

Keywords: nurses' performance; organizational culture; PLS-SEM; work competence; work engagement

1. INTRODUCTION

Nurses play a central role in hospital performance because they continuously deliver clinical care, coordinate information, ensure patient safety, and respond to changing service demands. Their performance therefore depends not only on technical capability but also on the extent to which they invest psychological energy in performing their responsibilities. In public hospitals, this issue is particularly important because nursing performance affects service quality, patient safety, operational effectiveness, and institutional accountability. The present study conceptualizes nurses' performance through effectiveness, efficiency, quality, quantity, and contribution to organizational objectives.

The Ability-Motivation-Opportunity (AMO) framework provides an appropriate explanation for these relationships. Contemporary AMO research proposes that performance emerges through the interaction of employees' ability, motivation, and opportunities to perform. Ability includes knowledge, skills, and competencies; motivation represents

employees' willingness and psychological energy to use those capabilities; and opportunity reflects contextual conditions that enable or constrain performance. Importantly, recent AMO scholarship emphasizes the need to examine the processes through which these components are converted into performance rather than assuming that ability or opportunity automatically produces superior outcomes (Bos-Nehles et al., 2023).

Within the present model, work competence represents ability, work engagement represents motivation, and organizational culture represents an opportunity-related organizational context. Work competence comprises knowledge, skills, problem solving, self-development, and professionalism, while organizational culture includes involvement, consistency, adaptability, and mission. Work engagement is reflected through vigor, dedication, and absorption. This configuration enables the study to examine whether organizational and individual resources directly generate performance or whether those resources must first be psychologically activated through engagement.

The relationship is also consistent with Job Demands-Resources (JD-R) theory. Contemporary JD-R research explains that personal and job resources can stimulate work engagement, while engagement subsequently supports positive work behavior and performance (Bakker et al., 2023; Bakker & Demerouti, 2024). For nurses, this mechanism is particularly relevant because clinical work combines cognitive, emotional, and physical demands that require sustained energy and attention. Thus, professional capability may remain underutilized when nurses lack the vigor, dedication, or psychological involvement required to apply it consistently.

Organizational culture can provide important contextual resources for engagement. A culture characterized by involvement, consistency, adaptability, and mission clarity can help nurses understand expectations, participate in decisions, coordinate across units, and identify meaningful organizational priorities. Contemporary evidence indicates that organizational culture and collaborative climate are positively associated with work engagement among nursing professionals (Slåtten et al., 2022). Research on hospital organizational culture also shows that positive nursing cultures can contribute to organizational health and quality of nursing care, although their effects may operate through intervening organizational mechanisms rather than directly (Ku & Yu, 2024). This suggests that culture may provide a supportive opportunity structure without automatically determining individual performance.

Work competence, by contrast, represents a task-relevant personal resource. Nurses with stronger knowledge, technical skills, problem-solving capacity, professionalism, and commitment to self-development are better equipped to interpret clinical situations and respond effectively. However, AMO and JD-R perspectives imply that competence represents potential capability rather than guaranteed performance. Professional ability must be actively invested in work. Accordingly, nurses who perceive themselves as competent may demonstrate greater work engagement because mastery and confidence strengthen their willingness to devote energy and meaning to their professional roles.

Work engagement therefore occupies a critical position in the proposed model. An updated systematic review of hospital nurses identified individual, organizational, job-related, work-environment, and work-life factors as important antecedents of engagement, demonstrating that engagement emerges from multiple personal and contextual resources (Aungsuroch et al., 2024). Engagement is also associated with desirable nursing outcomes. A national study involving nurses in the United States found positive associations between work engagement, job satisfaction, and perceived quality of care (Wei et al., 2023). Similarly, Ni et al. (2024) found that work engagement mediated the relationship between job demands and nurses' job performance, reinforcing the proposition that engagement can function as a psychological mechanism through which workplace conditions are translated into performance.

Despite these developments, an important research gap remains. Previous nursing studies often examine organizational culture, competence, work engagement, or performance through separate relationships. Less attention has been given to whether organizational opportunity and individual ability follow the same motivational pathway toward performance. Contemporary AMO research specifically highlights insufficient understanding of how ability, motivation, and opportunity interact and how mediating mechanisms generate performance outcomes (Bos-Nehles et al., 2023). This gap is important because an organization may develop a supportive culture and professionally competent nurses while still failing to achieve proportional performance improvements if these resources are not converted into active engagement.

The present study addresses this issue among nurses at Bogor City Regional General Hospital, Indonesia. It integrates organizational culture, work competence, work engagement, and nurses' performance within one structural model. The study tests whether culture and competence influence engagement and performance, whether engagement influences performance, and whether engagement mediates the two antecedent-performance relationships. Its principal theoretical contribution is to compare two possible AMO conversion pathways: an opportunity-motivation-performance pathway derived from organizational culture and an ability-motivation-performance pathway derived from work competence.

From a managerial perspective, this distinction is important. If competence affects performance only after generating engagement, hospitals should not assume that training and competency development automatically improve service outcomes. Likewise, if culture increases engagement but does not ultimately generate performance, participation, shared values, and mission clarity may require stronger work-design, leadership, staffing, and resource support. Understanding these different pathways can help hospital management allocate interventions more precisely.

Hypotheses Development

Organizational culture can provide meaningful job resources through employee involvement, coordinated standards, adaptability, and clear organizational direction. Evidence among nursing professionals indicates that organizational culture and collaborative climate contribute positively to work engagement (Slåtten et al., 2022). Therefore:

H1: Organizational culture has a positive effect on work engagement.

Professional competence enhances nurses' confidence and ability to solve clinical problems, which can strengthen dedication and psychological investment in their work. Consistent with AMO and JD-R perspectives, personal resources can stimulate engagement (Aungsuroch et al., 2024; Bakker et al., 2023). Therefore:

H2: Work competence has a positive effect on work engagement.

A supportive organizational culture can coordinate behavior, clarify expectations, and facilitate effective work processes. Positive nursing culture has been associated with organizational and care-related outcomes (Ku & Yu, 2024). Therefore:

H3: Organizational culture has a positive effect on nurses' performance.

Work competence provides nurses with the knowledge, skills, problem-solving capability, and professionalism necessary to perform effectively. Therefore:

H4: Work competence has a positive effect on nurses' performance.

Work engagement reflects the vigor, dedication, and absorption employees invest in their roles. Contemporary nursing evidence links engagement with job performance and quality-related outcomes (Ni et al., 2024; Wei et al., 2023). Therefore:

H5: Work engagement has a positive effect on nurses' performance.

Organizational culture may influence performance indirectly when supportive organizational conditions first strengthen nurses' psychological engagement. Therefore:

H6: Work engagement mediates the relationship between organizational culture and nurses' performance.

Finally, professional competence may require motivational activation before it becomes observable performance. Nurses who possess greater capability may perform more effectively when that capability is accompanied by strong dedication and psychological involvement. Therefore:

H7: Work engagement mediates the relationship between work competence and nurses' performance.

2. RESEARCH METHOD

This study employed a quantitative, explanatory, and cross-sectional survey design to examine the relationships among organizational culture, work competence, work engagement, and nurses' performance. The research was conducted at Bogor City Regional General Hospital, Indonesia, with the individual nurse as the unit of analysis. The population

consisted of 466 nurses, from whom 215 respondents were recruited by considering service-unit representation, eligibility criteria, and respondent availability. Eligible participants were active nurses involved in service delivery and willing to complete the questionnaire. Because respondent availability formed part of the recruitment process, the sample should be interpreted as non-probability based and the findings generalized cautiously beyond the investigated hospital context.

Primary data were collected using a structured self-report questionnaire. Organizational culture was operationalized through involvement, consistency, adaptability, and mission. Work competence consisted of knowledge, skill, problem solving, self-development, and professionalism. Work engagement was measured through vigor, dedication, and absorption, while nurses' performance was represented by effectiveness, efficiency, quality, quantity, and contribution. Each variable was specified as a hierarchical component model, in which first-order dimensions represented their corresponding higher-order constructs. Higher-order modeling is appropriate when multidimensional constructs are represented by conceptually related lower-order dimensions and requires systematic assessment of measurement quality at the relevant levels (Sarstedt et al., 2019).

Table 1. Construct Operationalization

Construct	Dimensions
Organizational culture	Involvement; consistency; adaptability; mission
Work competence	Knowledge; skill; problem solving; self-development; professionalism
Work engagement	Vigor; dedication; absorption
Nurses' performance	Effectiveness; efficiency; quality; quantity; contribution

Source: Processed Data, 2026.

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. PLS-SEM was used because the research model simultaneously examines multiple latent constructs, higher-order measurement structures, direct effects, and mediating relationships. Contemporary methodological guidance emphasizes that PLS-SEM evaluation should distinguish clearly between measurement-model quality and structural-model interpretation (Hair et al., 2019; Sarstedt et al., 2022).

The measurement model was assessed using outer loadings, average variance extracted (AVE), Cronbach's alpha, rho_A, composite reliability, Fornell-Larcker comparisons, heterotrait-monotrait ratios (HTMT), and cross-loadings. These criteria were used to evaluate indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Particular attention was given to the hierarchical nature of the constructs because high associations between higher-order constructs and their own

dimensions are theoretically expected and should not be interpreted in the same manner as associations between conceptually distinct constructs (Sarstedt et al., 2019).

The structural model was evaluated using collinearity diagnostics, coefficients of determination (R^2), effect sizes (f^2), model-fit information, path coefficients, and specific indirect effects. Hypothesis testing was conducted using bootstrapping with 5,000 subsamples, two-tailed significance testing, and $\alpha = .05$. Direct and indirect effects were interpreted jointly to determine whether work engagement functioned as a mediating mechanism between organizational culture and nurses' performance and between work competence and nurses' performance.

Because all principal variables were measured through self-reported responses from the same respondents at one point in time, common method bias remains a methodological consideration. Recent methodological literature emphasizes that common-source measurement can influence observed associations among constructs and should therefore be acknowledged rather than assumed to be absent based solely on statistical diagnostics (Podsakoff et al., 2024). Accordingly, the structural results are interpreted as explanatory associations within the study context rather than definitive causal effects. No mathematical equations were required because all measurement, structural, and mediation estimates were produced directly using SmartPLS 4. Therefore, the template requirement concerning equation numbering is not applicable to this study.

3. RESULTS AND DISCUSSION

3.1 Results

Descriptive Results

The descriptive results indicated generally favorable evaluations across the study variables. Nurses' performance recorded an overall mean of 3.583. Among its dimensions, quality had the highest mean (3.690), whereas quantity had the lowest mean (3.493). At the indicator level, patient safety obtained the highest mean (3.744), while maintaining productivity under increased workload recorded the lowest value (3.465).

This pattern suggests that nurses perceived themselves as relatively strong in maintaining quality and safety but comparatively less capable of sustaining output when workload intensified. This distinction is important because high workload can consume cognitive and emotional resources even when professional competence remains adequate. Previous evidence demonstrates that role overload can reduce nurses' engagement and subsequently affect task performance and job dedication (Zhang et al., 2022). Similarly, workplace conditions related to workload management and psychological protection are important predictors of nurses' perceptions of safe and high-quality care (Havaei et al., 2022).

Measurement Model

All second-order dimensions produced loadings above .70. Organizational culture loadings ranged from .898 to .958, work competence from .919 to .972, work engagement from .941 to .964, and nurses' performance from .771 to .931. AVE values ranged from .672 to .789, supporting convergent validity. Internal consistency was also high, with Cronbach's alpha and composite reliability values exceeding .95 for all constructs.

Table 2. Measurement Model Summary

Construct	Loading Range	Cronbach's Alpha	CR	AVE
Organizational culture	.898-.958	.967	.971	.690
Work competence	.919-.972	.981	.982	.789
Work engagement	.941-.964	.963	.967	.761
Nurses' performance	.771-.931	.955	.961	.672

Note. CR = composite reliability; AVE = average variance extracted.

Source: Processed Data, 2026.

Although the results demonstrate high internal consistency, coefficients consistently exceeding .95 should not automatically be interpreted as stronger measurement quality. Such values may indicate that some indicators capture highly similar content. Future scale refinement should therefore examine whether a more parsimonious instrument can maintain conceptual coverage while reducing potential item redundancy. The hierarchical measurement structure also produced high relationships between higher-order constructs and their own components, which is theoretically understandable. Nevertheless, the strong reliability coefficients reinforce the need for future studies to examine whether dimensions such as knowledge, skill, problem solving, self-development, professionalism, vigor, dedication, and absorption retain sufficient empirical distinctiveness when modeled at higher-order levels.

Structural Model

Structural variance inflation factors ranged from 4.070 to 4.467. These values remained below the threshold of 5 adopted in the source study but are sufficiently high to indicate substantial overlap among predictors. Consequently, individual direct coefficients should be interpreted cautiously rather than treated as independent effects operating in isolation. Organizational culture and work competence jointly explained 77.6% of the variance in work engagement ($R^2 = .776$), indicating substantial explanatory power. In contrast, organizational culture, work competence, and work engagement explained only 23.6% of nurses' performance ($R^2 = .236$). The SRMR was .070, while NFI was .80.

Table 3. Structural Model Summary

Endogenous Construct	R²	Interpretation
Work engagement	.776	Substantial
Nurses' performance	.236	Weak

Source: Processed Data, 2026.

The contrast between the two R² values is theoretically meaningful. Culture and competence strongly explain why nurses become engaged, but engagement and these antecedents explain substantially less of actual performance variation. Nursing performance is likely to depend on additional contextual factors such as workload, staffing, infrastructure, leadership, organizational support, patient acuity, resource availability, and team functioning. Research using multilevel hospital data similarly demonstrates that organizational culture and leadership do not always translate uniformly into individual productivity outcomes (Lui et al., 2024).

Hypothesis Testing

Table 4. Direct and Indirect Effects

Hypothesis and Path	β	<i>t</i>	<i>p</i>	Decision
H1: Organizational culture → Work engagement	.230	2.406	.016	Supported
H2: Work competence → Work engagement	.674	7.052	<.001	Supported
H3: Organizational culture → Nurses' performance	.107	1.225	.221	Not supported
H4: Work competence → Nurses' performance	.184	1.687	.092	Not supported
H5: Work engagement → Nurses' performance	.218	2.271	.023	Supported
H6: Organizational culture → Work engagement → Nurses' performance	.050	1.594	.111	Not supported
H7: Work competence → Work engagement → Nurses' performance	.147	2.065	.039	Supported

Note. Two-tailed bootstrapping with 5,000 subsamples; $\alpha = .05$.

Source: Processed Data, 2026.

Four of the seven proposed hypotheses were supported. Organizational culture and work competence significantly improved work engagement, and work engagement significantly improved nurses' performance. However, neither organizational culture nor competence had a statistically significant direct effect on performance. More importantly, work engagement mediated the competence-performance relationship but did not mediate the culture-performance relationship.

3.2 Discussion

Organizational Culture and Work Engagement

Organizational culture had a positive effect on work engagement ($\beta = .230$, $p = .016$), supporting H1. Involvement was the strongest cultural dimension (.958), suggesting that nurses are more psychologically engaged when they are able to participate in decisions, clinical discussions, service improvement, and organizational activities.

This result is consistent with evidence that organizational culture contributes to engagement by creating shared meaning and an environment in which employees perceive their contribution as relevant. Zhai et al. (2023) found that nursing organizational culture was associated with work engagement and affective commitment, while Srimulyani and Hermanto (2022) demonstrated that organizational culture significantly enhanced work engagement among hospital personnel. Goyal and Kaur (2023) likewise identified organizational culture as an important element in engagement-related nursing outcomes.

Recent evidence also emphasizes the importance of leadership in converting organizational values into engagement. Assi et al. (2024) found that authentic leadership was positively associated with nurses' work engagement, while Grande (2026) showed that organizational culture, authentic leadership, self-efficacy, and engagement form interconnected organizational and psychological mechanisms.

Thus, culture matters when nurses experience involvement rather than merely hear about it. Participation in quality-improvement forums, unit planning, clinical policy discussions, and problem-solving initiatives can give organizational values behavioral meaning.

Work Competence and Work Engagement

Work competence was the strongest predictor of work engagement ($\beta = .674, p < .001$), supporting H2. Its substantially larger coefficient compared with organizational culture indicates that professional ability was the dominant resource associated with nurses' psychological investment in work.

Problem solving was the strongest competence dimension (.972), whereas dedication was the strongest engagement dimension (.964). This relationship suggests that nurses who feel capable of understanding clinical situations and solving work-related problems are more likely to experience meaning, pride, persistence, and commitment to their roles.

The result is consistent with research showing that personal resources such as self-efficacy and professional confidence are positively associated with work engagement. Al-Hamdan and Bani Issa (2022) found that self-efficacy and organizational support were relevant predictors of engagement among registered nurses. Zarrin et al. (2023) similarly reported positive relationships among reflection, self-efficacy, and engagement. Gao et al. (2024) found that organizational support and emotional intelligence were positively associated with engagement, reinforcing the broader role of personal and organizational resources in psychological investment at work.

Competence should therefore be understood not only as technical capability but also as a source of professional confidence and meaningful involvement. Tschannen et al. (2021), for example, showed that competence and engagement are both important to nurses' participation in quality improvement.

Organizational Culture and Nurses' Performance

Organizational culture did not significantly affect nurses' performance ($\beta = .107$, $p = .221$), so H3 was not supported. This finding indicates that organizational involvement, consistency, adaptability, and mission do not automatically translate into effectiveness, efficiency, quality, quantity, or contribution.

The result is not equivalent to saying that culture is irrelevant. Instead, culture appears to function primarily as a contextual resource. It can support involvement and motivation, but actual performance may depend on whether employees have adequate staffing, work design, leadership support, authority, and resources. Recent multilevel evidence supports this contextual interpretation. Lui et al. (2024) found that not all forms of organizational culture and leadership directly predicted nurse productivity; only specific cultural configurations showed direct productivity effects. Similarly, systematic evidence indicates that positive organizational cultures tend to reduce stress and strengthen healthier nursing environments, but their downstream performance consequences depend on other organizational conditions (Kiptulon et al., 2024). The present nonsignificant coefficient therefore highlights an important distinction between supportive organizational context and enacted individual output.

Work Competence and Nurses' Performance

Work competence also failed to produce a statistically significant direct effect on nurses' performance ($\beta = .184$, $p = .092$), resulting in rejection of H4. At first glance, this finding appears counterintuitive because professional competence is generally assumed to enable performance. However, competence represents capacity, whereas performance represents the actual application of that capacity under real workplace conditions. Knowledge and problem-solving skills may remain latent when nurses lack psychological involvement, adequate resources, manageable workload, or organizational support.

Tschannen et al. (2021) similarly demonstrate that competence alone does not guarantee engagement in improvement behavior; competence must be accompanied by active participation. Alexander et al. (2022) identified leadership, education, resources, culture, data availability, and time as important facilitators and barriers to nurses' engagement in quality improvement. This interpretation is also compatible with the AMO logic underpinning the study: ability creates the potential to perform, but motivation and opportunity influence whether that potential is enacted.

Work Engagement and Nurses' Performance

Work engagement significantly improved nurses' performance ($\beta = .218$, $p = .023$), supporting H5. The finding confirms that psychological investment provides an important behavioral bridge between professional resources and observable performance. Dedication was the strongest engagement dimension, while effectiveness (.931) was the strongest nurses' performance dimension. Nurses who perceive their work as meaningful and are

willing to invest sustained psychological energy may be more likely to maintain concentration, coordinate care, respond to patient needs, and complete responsibilities effectively.

This interpretation is strongly supported by contemporary evidence. Wee and Lai's (2022) meta-analysis found a positive relationship between healthcare professionals' work engagement and quality of care. Janes et al. (2021) similarly found a significant association between staff engagement and patient-safety outcomes. Falguera et al. (2023) reported that greater dedication among nurses was associated with higher perceived quality of care and more favorable work outcomes.

Work engagement also contributes to specific safety behaviors. Ma et al. (2023) demonstrated that work engagement was associated with nurses' safety behavior, while Hasan et al. (2023) found that work engagement played an important role in nurses' job-performance pathways. Accordingly, engagement should not be interpreted merely as enthusiasm. In clinical settings, it represents a resource for sustained attention, persistence, discretionary effort, and meaningful task execution.

Mediating Role of Work Engagement in the Culture–Performance Relationship

The indirect organizational culture → work engagement → performance effect was not statistically significant ($\beta = .050$, $p = .111$), so H6 was not supported. Culture significantly increased engagement, and engagement significantly increased performance, but the combined indirect path was insufficiently strong to establish mediation.

This finding is particularly important because it identifies a break in the opportunity-motivation-performance pathway. Organizational culture can encourage involvement and psychological presence, yet engagement generated by culture may not be sufficient to overcome structural constraints affecting actual performance. This differs from Zhai et al. (2023), who found that work engagement mediated relationships between nursing organizational culture and thriving at work. The difference may arise because thriving and performance are different outcomes: engagement may more readily transmit cultural influences into psychological growth than into concrete effectiveness or productivity.

Leadership research offers a related explanation. Alluhaybi et al. (2023) show that leadership influences engagement through several mediating conditions, including structural empowerment, workload, control, fairness, organizational support, and self-efficacy. Holtan et al. (2024) likewise demonstrate that nurses' performance and well-being emerge through complex motivational pathways shaped by leadership and psychological needs. Thus, cultural involvement must be accompanied by actual opportunity to perform appropriate staffing, authority, information, equipment, time, and supervisory support.

Mediating Role of Work Engagement in the Competence–Performance Relationship

In contrast, the indirect competence → work engagement → performance effect was significant ($\beta = .147$, $p = .039$), supporting H7. Because the corresponding direct effect of competence on performance was nonsignificant, the pattern represents indirect-only or full mediation. This is the central theoretical contribution of the study Professional competence becomes performance when nurses convert their capability into work engagement.

The result demonstrates that possessing knowledge, skill, professionalism, and problem-solving ability is not sufficient. Competence generates performance when nurses invest vigor, dedication, and psychological involvement in applying those resources. The finding is consistent with research demonstrating that psychological mechanisms transmit workplace and personal resources into nursing outcomes. Ni et al. (2023) showed that basic psychological needs mediate the relationship between organizational support and work engagement. Shan et al. (2023) similarly demonstrated that organizational support and affective commitment are important mechanisms for fostering nurses' engagement under demanding conditions.

Zhang et al. (2022) also found that work engagement mediated relationships between role overload and several dimensions of nurses' performance. These findings collectively demonstrate that engagement operates as an important conversion mechanism connecting available resources and demands with actual work behavior. The result also distinguishes competence development from training completion. Hospital education may improve skills, but performance gains depend on whether nurses are psychologically motivated to use those skills in daily practice.

3.3 Theoretical Implications

First, the study reveals an asymmetric AMO conversion pattern. Organizational culture, representing an opportunity-related context, and work competence, representing ability, both enhance work engagement. However, only the competence pathway successfully continues through engagement to performance. Opportunity and ability therefore do not produce equivalent motivational conversion processes.

Second, the findings position work engagement as a mechanism that activates professional capability. This extends conventional competence-performance logic by demonstrating that capability may remain latent without psychological investment. Work engagement therefore acts as the bridge between “being able to perform” and “actually performing.”

Third, the relatively low R^2 of .236 for nurses' performance demonstrates that performance is substantially influenced by variables beyond culture, competence, and engagement. Longitudinal research by Luo et al. (2024) shows that organizational support and leader empowerment affect engagement and patient-safety outcomes over time, while

Zhu et al. (2023) demonstrates broader relationships between engagement, organizational support, and workforce outcomes.

Future models should therefore incorporate workload, staffing, leadership, psychological safety, job satisfaction, rewards, infrastructure, patient acuity, and organizational support.

3.4 Managerial Implications

Hospital management should first redesign competency development as an engagement-producing process rather than simply a training activity. Because problem solving strongly represented competence, clinical development should include case-based learning, emergency simulations, multidisciplinary case conferences, reflective learning, and workplace coaching.

Second, professional self-efficacy should be strengthened. Evidence indicates that self-efficacy is closely related to nurses' engagement (Al-Hamdan & Bani Issa, 2022; Zarrin et al., 2023). Competency programs should therefore give nurses opportunities to apply newly acquired abilities, receive constructive feedback, and observe their contribution to patient outcomes.

Third, leadership should reinforce engagement through support, autonomy, recognition, and meaningful communication. Assi et al. (2024) and Grande (2026) demonstrate that leadership behavior and self-efficacy are important for engagement, while Holtan et al. (2024) emphasizes autonomy-supportive leadership pathways to performance and well-being.

Fourth, management should not use engagement programs as a substitute for adequate work design and staffing. The lowest performance indicator concerned maintaining productivity as workload increased. High dedication under sustained structural pressure can become unsustainable. Zhang et al. (2022) show that role overload can undermine performance through engagement, while Havaei et al. (2022) identify workload management as a major workplace determinant of safe and quality care.

Fifth, organizational culture initiatives should be tied to real opportunity structures. Staff participation should lead to documented decisions, quality-improvement actions, appropriate authority, resources, and feedback. Otherwise, involvement may increase engagement without generating measurable performance.

Overall, the findings suggest two different pathways Organizational culture → Work engagement, but not reliably → Nurses' performance and Work competence → Work engagement → Nurses' performance. Therefore, the principal managerial priority is not merely to create competent nurses or an engaging culture, but to design working conditions that allow competence to be activated through sustained engagement and translated into effective nursing performance.

4. CONCLUSION

This study examined the effects of organizational culture and work competence on nurses' performance through work engagement at Bogor City Regional General Hospital. The findings show that organizational culture and work competence significantly increase work engagement, while work engagement significantly improves nurses' performance. In contrast, neither organizational culture nor work competence had a significant direct effect on nurses' performance. Among the antecedents of engagement, work competence produced the stronger effect, indicating that professional capability is an important resource for generating nurses' psychological involvement in their work.

The mediation results reveal an important asymmetry. Work engagement did not significantly mediate the relationship between organizational culture and nurses' performance, whereas it fully mediated the relationship between work competence and nurses' performance. Thus, competence does not automatically translate into higher performance; its contribution becomes effective when nurses convert their knowledge, skills, problem-solving capability, self-development, and professionalism into vigor, dedication, and absorption. This finding supports the view that professional ability requires motivational activation before it becomes observable work performance.

From a managerial perspective, hospital management should integrate competency development with engagement-building practices. Clinical problem-solving training, case-based learning, simulation, mentoring, coaching, certification opportunities, and individual competency development plans should be accompanied by supportive leadership, recognition, and transparent career pathways. Organizational culture should also be translated into concrete opportunities for participation, decision-making, quality improvement, and service innovation rather than relying solely on shared values or formal mission statements. Because maintaining productivity under increased workload was the weakest performance indicator, engagement initiatives should be supported by adequate staffing, workload management, and resource availability.

The study is limited by its cross-sectional, single-hospital, and self-report design, which restricts causal interpretation and generalizability. Respondent availability also formed part of the recruitment process. In addition, very high reliability coefficients suggest possible indicator redundancy, while structural VIF values above 4 indicate considerable overlap among predictors. The model explained 77.6% of work engagement but only 23.6% of nurses' performance, suggesting that important determinants of performance remain outside the model. Future research should therefore use longitudinal and multisource designs, probability or multicenter samples, refined measurement scales, and additional variables such as workload, staffing, leadership, job satisfaction, organizational support, rewards, and work environment conditions.

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