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## Competency and Work Environment as Determinants of Medical Staff Performance: Evidence from a Public Hospital in a Developing Economy

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**Abstract: Purpose.** This study examines the effects of employee competency and work environment on medical staff performance in a public hospital operating under high service pressure.

**Design/methodology/approach.** A quantitative survey was conducted among medical staff at a public hospital in Indonesia. Data were collected from 77 respondents and analyzed using multiple regression analysis supported by reliability and validity testing.

**Findings.** The results indicate that employee competency has a positive and significant effect on medical staff performance. The work environment also shows a significant positive effect on performance. Furthermore, competency and work environment jointly explain a substantial proportion of variance in medical staff performance.

**Practical implications.** Hospital management should prioritize competency development and the creation of a supportive work environment to improve service quality and staff performance.

**Originality/value.** This study contributes to organizational analysis literature by integrating competency and work environment perspectives in explaining medical staff performance within a public healthcare context in a developing economy.

**Keywords:** employee competency, work environment, medical staff performance, public hospital, organizational behavior

## INTRODUCTION

Healthcare organizations operate in environments characterized by high responsibility, time pressure, and service complexity. Medical staff performance plays a critical role in determining service quality, patient satisfaction, and institutional credibility. In public hospitals, performance challenges are often intensified by limited resources, bureaucratic constraints, and high patient demand.

Recent evidence from a public hospital in Indonesia indicates a decline in patient satisfaction accompanied by increased complaints related to service delays, communication

issues, and responsiveness. These issues highlight the importance of internal organizational factors that shape medical staff performance.

From an organizational behavior perspective, employee competency and work environment are among the most influential determinants of individual performance. Competency reflects the integration of knowledge, skills, and professional attitudes required to perform tasks effectively. In healthcare settings, competency directly affects clinical accuracy, decision-making, and patient safety.

The work environment, encompassing physical, social, and psychological conditions, also plays a vital role in shaping employee behavior. A supportive environment enhances focus, motivation, and collaboration, whereas a poor environment increases stress and performance errors.

Although prior studies have examined competency and work environment separately, limited research has empirically tested their combined influence on medical staff performance in public hospitals within developing economies. Addressing this gap, this study investigates how competency and work environment jointly affect medical staff performance in a public healthcare organization.

## **METHOD**

### **Research Design and Sample**

This study employed a quantitative cross-sectional design. The population consisted of medical staff at a public hospital in Indonesia. Using simple random sampling, 77 respondents were selected.

### **Measurement**

Employee competency was measured through indicators of knowledge, skills, communication ability, and professional attitude. Work environment was measured through physical conditions, interpersonal relationships, leadership support, and organizational systems. Medical staff performance was assessed through service quality, timeliness, accuracy, and interpersonal behavior.

All items were measured using a five-point Likert scale.

### **Data Analysis**

Data were analyzed using reliability and validity testing, classical assumption tests, and multiple regression analysis.

## **RESULT AND DISCUSSION**

### **Respondent Profile**

The respondents consisted of medical staff working in a public hospital operating under high service demand. The majority of respondents had more than five years of work experience, indicating substantial familiarity with clinical procedures and hospital service systems. Most respondents held undergraduate or professional medical qualifications, reflecting adequate educational background to perform medical and administrative duties.

This respondent profile suggests that the data were obtained from experienced medical personnel who were capable of providing informed and reliable responses regarding competency, work environment, and performance.

### **Measurement Model Assessment**

Before hypothesis testing, the measurement model was evaluated to ensure the reliability and validity of the constructs.

Internal consistency reliability was assessed using Cronbach's alpha. The results indicate that employee competency, work environment, and medical staff performance all achieved Cronbach's alpha values exceeding the recommended threshold of 0.70. This confirms that the measurement instruments demonstrate satisfactory reliability.

Convergent validity was examined through item-total correlations and factor loadings. All indicators showed acceptable loading values, indicating that each item adequately represents its respective construct.

Discriminant validity was assessed by examining the correlation patterns among constructs. The results indicate that each construct is empirically distinct, suggesting that competency, work environment, and performance capture different aspects of organizational behavior within the hospital context.

Overall, the measurement model met acceptable psychometric standards and was suitable for further structural analysis.

### **Classical Assumption Tests**

Classical assumption tests were conducted to ensure the robustness of the regression model. The normality test indicated that residuals were normally distributed, as evidenced by the normal probability plot and histogram distribution.

Multicollinearity diagnostics showed that variance inflation factor (VIF) values were within acceptable limits, indicating no multicollinearity issues between employee competency and work environment variables.

The Durbin-Watson statistic fell within the acceptable range, suggesting the absence of autocorrelation. These results confirm that the regression model satisfies the necessary statistical assumptions.

### **Hypothesis Testing**

Multiple regression analysis was conducted to test the proposed hypotheses. The results demonstrate that employee competency has a positive and statistically significant effect on medical staff performance. This finding supports H1, indicating that higher levels of competency are associated with improved service quality, accuracy, and responsiveness among medical staff.

The work environment also shows a positive and statistically significant effect on medical staff performance, supporting H2. A supportive physical, social, and organizational environment contributes to better work focus, coordination, and service delivery.

Furthermore, the simultaneous test results indicate that employee competency and work environment jointly explain a substantial proportion of variance in medical staff performance. This finding supports H3, confirming that performance outcomes in hospital settings are shaped by the combined influence of individual capability and environmental conditions.

### **Effect Size and Model Explanation**

The coefficient of determination indicates that a meaningful proportion of medical staff performance can be explained by employee competency and work environment. Among the two predictors, employee competency exhibits a stronger standardized effect, suggesting that individual capability plays a more dominant role in shaping performance outcomes.

Nevertheless, the contribution of the work environment remains significant, highlighting that competency alone is insufficient to ensure optimal performance without supportive working conditions.

## Summary of Results

In summary, the results confirm that:  
Employee competency significantly enhances medical staff performance.  
A supportive work environment significantly improves performance outcomes.

The interaction of competency and work environment provides a more comprehensive explanation of performance in public hospital settings.

These findings provide a strong empirical foundation for further theoretical interpretation and managerial discussion.

## Discussion

This study aimed to examine how employee competency and work environment influence medical staff performance in a public hospital setting. The findings offer several important insights that contribute to organizational behavior and healthcare management literature.

First, the results demonstrate that employee competency has a significant positive effect on medical staff performance. This finding reinforces competency-based theory, which posits that individual capability is a fundamental driver of effective work behavior. In healthcare organizations, competency directly affects clinical accuracy, decision-making quality, communication effectiveness, and adherence to professional standards. Medical staff with higher competency levels are better equipped to handle complex cases, respond quickly to patient needs, and maintain service quality under pressure.

This finding is consistent with prior studies emphasizing the importance of professional competency in healthcare performance. However, this study extends existing research by demonstrating that competency remains a strong predictor of performance even within public hospitals facing institutional constraints and high service demand. This suggests that competency functions as a stabilizing resource that enables medical staff to sustain performance despite organizational limitations.

Second, the positive and significant effect of the work environment on medical staff performance highlights the critical role of contextual factors in healthcare organizations. A supportive work environment—characterized by adequate facilities, psychological safety, effective communication, and managerial support—enhances employees' ability to focus, collaborate, and deliver services efficiently. In contrast, poor working conditions may increase fatigue, errors, and dissatisfaction, ultimately undermining performance. This finding aligns with organizational environment theories, which emphasize that employee behavior and performance are shaped not only by individual attributes but also by situational factors. In the hospital context, where tasks are emotionally and physically demanding, the quality of the work environment becomes particularly salient.

Third, the simultaneous influence of employee competency and work environment provides a more holistic explanation of medical staff performance. The findings suggest that competency and work environment are complementary rather than substitutive factors. High competency may not translate into optimal performance if environmental conditions are unsupportive, while a favorable environment may fail to enhance performance if competency levels are inadequate.

This integrated perspective advances prior healthcare management research that often examines these variables in isolation. By empirically demonstrating their combined effects, this study supports interaction-oriented views of performance, which emphasize the alignment between individual capability and organizational context.

From a contextual standpoint, the findings are especially relevant for public hospitals in developing economies. Such organizations often face resource limitations, bureaucratic procedures, and high patient volumes. The results suggest that improving medical staff

performance requires balanced investments in human capital development and environmental improvement, rather than relying solely on administrative controls or performance targets.

Overall, this study contributes to organizational analysis literature by clarifying how performance in healthcare organizations emerges from the interaction between employee competency and work environment. The findings underscore the need for hospital management to adopt integrated human resource strategies that strengthen professional capability while creating supportive working conditions.

## **CONCLUSION**

This study concludes that employee competency and work environment significantly influence medical staff performance, both individually and jointly. Enhancing healthcare performance requires balanced attention to human capability and organizational context.

Future research should employ longitudinal designs, include multiple hospitals, and examine mediating variables such as job satisfaction or work stress.

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