

Original Article

Analysis of factors affecting employee performance at Tugu Mulyo Community Health Center: A cross-sectional study

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Keyword:

Community Health Centers,
Employee Performance,
Health Personnel,
Workload,

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DOI:

<https://doi.org/10.52235/lp.v6i3.486>

Article Info:

Received : May 17, 2025
Revised : July 11, 2025
Accepted : July 26, 2025

Lentera Perawat

e-ISSN : 2830-1846
p-ISSN : 2722-2837



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Abstract

Background

Employee performance at primary healthcare facilities is crucial for meeting the Minimum Service Standards. At Tugu Mulyo Health Center, several programs failed to meet national targets, allegedly due to poor staff performance.

Objective

This study aimed to analyze the factors influencing employee performance at Tugu Mulyo Health Center, Ogan Komering Ilir Regency.

Methods

A quantitative analytic study with a cross-sectional design was conducted involving all 74 health workers using total sampling. Data were collected via validated structured questionnaires covering variables such as competence, motivation, work experience, compensation, workload, and performance. Bivariate analysis was performed using Chi-square tests, and multivariate analysis applied logistic regression to identify dominant factors.

Results

Bivariate analysis found that only the competency variable had a statistically significant relationship with performance ($p = 0.030$). Multivariate logistic regression confirmed competency as the dominant factor (OR = 0.311; 95% CI: 0.118–0.819; $p = 0.018$), explaining 10.2% of the variance in employee performance (pseudo $R^2 = 0.102$). Other variables such as motivation, compensation, work experience, and workload were not significantly associated with performance.

Conclusion

Competency is the dominant factor affecting health worker performance at Tugu Mulyo Health Center. Improving employee competency is critical for achieving optimal performance.

Background

The performance of health workers is a fundamental element in ensuring the quality of healthcare services, particularly at the primary care level such as community health centers (Puskesmas) (Suzanna, Suryani, Zaman, & Rawallah, 2025). As the frontline of health services, Puskesmas play a central role in delivering promotive, preventive, curative, and rehabilitative efforts tailored to community needs (Marlioka, Randana, & Murni, 2025). In this context, optimal employee performance is essential to achieve national priority indicators, including compliance with the Minimum Service Standards (SPM) in health. When employee performance falls short of expectations, it can directly affect program achievements, service quality, and community satisfaction (Krijgsheld, Tummers, & Scheepers, 2022).

Local governments are required to meet various indicators through primary healthcare facilities (Costinot & Bahmani-Oskooee, 2023). However, in practice, not all indicators are achieved

according to national targets (Thirunavukarasu et al., 2023). This shortfall may be attributed to various factors, ranging from managerial to individual aspects, one of which is the inadequate performance of health workers at the community health center. Therefore, a comprehensive analysis is needed to identify the factors influencing employee performance at the primary healthcare level (Papanicolas, Rajan, Karanikolos, Soucat, & Marimont, 2022).

Employee performance can be influenced by both internal and external factors. Internal factors include competence, motivation, and work experience, while external factors may consist of compensation systems, workload, work environment, and organizational support (Casalino, 2023). Numerous previous studies have identified competence as a key factor that positively correlates with employee performance (Mulang, 2021). Competence, which encompasses knowledge, skills, and attitudes, significantly determines the ability of employees to carry out their duties and

responsibilities professionally and with quality (Islam et al., 2023).

Additionally, work motivation is often considered a primary driver that can boost productivity and performance (Wang, Tan, Liu, & Zhao, 2023). Herzberg's motivation theory, for instance, highlights the importance of intrinsic motivators such as achievement, recognition, and self-development in shaping superior performance (Li, Yu, Hei, & Yuan, 2023). However, some studies suggest that motivation alone is insufficient if not supported by a fair and proportional compensation system. Inadequate compensation may lower job satisfaction and negatively impact performance (Bernales-Turpo et al., 2022).

Work experience is often assumed to have a positive effect on performance, as longer tenure typically enhances one's skills and work insights (Mediani, Hendrawati, Pahria, Mediawati, & Suryani, 2022). Nevertheless, empirical findings indicate that not all long-serving employees demonstrate high performance. This suggests that work experience does not always linearly correlate with improved performance, but rather depends on continuous learning and adaptation to technological and service developments (Ramzan et al., 2022).

Another important factor is workload. Imbalanced workloads can lead to job stress and fatigue, ultimately impeding optimal performance (Astale, Abebe, & Mitike, 2023). In Puskesmas, task distribution is often disproportionate due to limited human resources and heavy administrative burdens (Al-Dabbagh, Sulaiman, & Abdulkarim, 2022). Therefore, workload management must be addressed to ensure effective and efficient task implementation in support of SPM programs (Hidayati, Suryani, Wahyudi, & Harokan, 2024).

Given the complexity of factors affecting employee performance, data-driven research is needed to identify the most dominant variables. Understanding which factors significantly influence performance can help target improvement interventions more strategically and efficiently. Thus, this study aims to analyze the factors associated with employee performance at Tugu Mulyo Community Health Center, Lempuing District, Ogan Komering Ilir Regency in 2025.

Methods

Study Design

This study employed a quantitative approach with an analytical cross-sectional design. The design aimed to identify relationships between variables measured simultaneously at a single point in time within a defined population. A cross-sectional design was selected due to its efficiency in assessing associations between variables such as competence, work experience, motivation, compensation, and workload with employee performance without requiring long-term observation. This approach is well-suited for research in primary healthcare settings like community health centers, where time efficiency and broad data coverage are critical.

Sampling

The study population consisted of all 74 health workers at Tugu Mulyo Community Health Center, located in Lempuing District, Ogan Komering Ilir Regency. A total sampling technique was applied, whereby all members of the population were included as research respondents. Total sampling was chosen because of the relatively small population size, allowing for comprehensive data collection. Inclusion criteria included health workers who had been employed for at least six months and were willing to participate in the study. Exclusion criteria were health workers currently on leave (maternity, sick, or annual leave) and respondents who failed to complete the questionnaire.

Instruments

Data were collected using a validated closed-ended questionnaire. The questionnaire assessed the dependent variable (employee performance) and the independent variables (competence, work experience, motivation, compensation, and workload). All instruments were tested for validity and reliability, with Cronbach's alpha values exceeding 0.6, indicating acceptable internal consistency. The instruments used ordinal scales, and variable categories were determined based on the median or mean scores of each variable.

Data Collection

Data collection was conducted directly at Tugu Mulyo Community Health Center in March 2025. Each respondent filled out the questionnaire

independently, with assistance from the researcher when necessary. The data collection procedure involved several steps, including coding to convert qualitative responses into numerical form, editing to ensure completeness, processing through SPSS version 25, cleaning to eliminate duplicate or missing data, and tabulating the results into frequency distribution tables.

Data Analysis

Data analysis was performed in three stages: univariate, bivariate, and multivariate. Univariate analysis described respondent characteristics and each variable. Bivariate analysis used the Chi-square test to examine associations between independent and dependent variables at a 5% significance level ($p < 0.05$). Subsequently, multivariate analysis employed multiple logistic regression to determine the most influential variables affecting employee performance while controlling for potential confounding factors.

Ethical Consideration

This study received ethical and administrative approval from the relevant institutional authorities prior to field implementation. All participants were informed about the research objectives, their rights as participants, and the confidentiality of their personal data. Participation was voluntary, and informed consent was obtained from each respondent. There was no coercion in completing the questionnaire, and participants were free to withdraw at any time without any consequences.

Results

The data analysis was conducted to obtain the frequency distribution of respondents' demographic characteristics (age, gender, education level, employment status, and years of service), as well as competence, work experience, work motivation, compensation, workload, and employee performance. The results are presented in descriptive text and in tabular form as shown below.

Table 1. Frequency Distribution of Respondents' Demographic Characteristics at Tugu Mulyo Community Health Center

Variables	Frequency (n)	Percentage (%)
Age Group		
22–30 years	16	21,6
31–39 years	25	33,8
40–48 years	15	20,3
49–57 years	18	24,3
Gender		
Male	11	14,9
Female	63	85,1
Education		
Diploma III (D3)	47	63,5
Diploma IV (D4)	8	10,8
Bachelor/Professional Degree	17	23,0
Master's Degree	2	2,7
Employment Status		
Civil Servant (PNS)	38	51,4
Government Contract Employee (PPPK)	3	4,1
Non-Permanent Employee (TKS)	33	44,6
Years of Service		
≥10 years	35	47,3
7–9 years	9	12,2
4–6 years	14	18,9
1–3 years	16	21,6
Total	74	100

Table 1 shows that the majority of respondents were in the 31–39 years age group (33.8%), followed by the 49–57 years age group (24.3%).

Most respondents were female (85.1%). The majority held a Diploma III as their highest educational attainment (63.5%). In terms of

employment status, more than half were Civil Servants (51.4%). Additionally, most

respondents had more than 10 years of work experience (47.3%).

Table 2. Distribution of Respondents by Performance-Related Variables at Tugu Mulyo Community Health Center

Variables	Frequency (n)	Percentage (%)
Performance		
Good	44	59,5
Poor	30	40,5
Competence		
Competent	42	56,8
Not Competent	32	43,2
Work Experience		
Skilled	45	60,8
Less Skilled	29	39,2
Work Motivation		
High	31	41,9
Low	43	58,1
Compensation		
High	41	55,4
Low	33	44,6
Workload		
Low	32	43,2
High	42	56,8
Total	74	100

Based on Table 2, out of a total of 74 respondents, the majority demonstrated good performance (44 respondents or 59.5%), and most were classified as having high competence (42 respondents or 56.8%). A total of 45 respondents (60.8%) were categorized as

having skilled work experience. However, 43 respondents (58.1%) reported low work motivation. In terms of compensation, the majority received high compensation (41 respondents or 55.4%), and 42 respondents (56.8%) were found to have a high workload.

Table 3. Analysis of Factors Influencing Employee Performance at Tugu Mulyo Community Health Center

Variables	Performance				Total		Pvalue	PR (95% CI)
	Good		Poor					
	n	%	n	%	n	%		
Competence								
Competent	30	71,4	12	28,6	42	100	0,030	1,633 (1,055-2,527)
Not Competent	14	43,8	18	56,3	32	100		
Work Experience								
Skilled	28	62,2	17	37,8	45	100	0,718	-
Less Skilled	16	55,2	13	44,8	29	100		
Work Motivation								
High	20	64,5	11	35,5	31	100	0,608	-
Low	24	55,8	19	44,2	43	100		
Compensation								
High	28	68,3	13	31,7	41	100	0,137	-
Low	16	48,5	17	51,5	33	100		
Workload								
Low	21	65,6	11	34,4	32	100	0,481	-
High	23	54,8	19	45,2	42	100		

Table 3 presents the results of the analysis of the relationship between independent variables and employee performance at Tugu Mulyo Community Health Center. Among the 42 respondents who were classified as competent, 30 individuals (71.4%) demonstrated good performance. In contrast, only 14 out of 32 respondents who were not competent (43.8%) exhibited good performance. The Chi-square test yielded a p-value of 0.030, which is below the 0.05 significance threshold, indicating a statistically significant association between competence and employee performance. Furthermore, the prevalence ratio analysis showed that competent employees were 1.633 times more likely to exhibit good performance compared to those who were not competent (PR = 1.633; 95% CI: 1.055–2.527), confirming competence as a significant factor.

Meanwhile, work experience did not show a significant relationship with performance. Among the 45 respondents with skilled experience, 28 (62.2%) demonstrated good performance, while among the 29 with less experience, 16 (55.2%) performed well. The p-value of 0.718 indicates no statistical significance. Similarly, for work motivation, 20

out of 31 respondents with high motivation (64.5%) exhibited good performance, compared to 24 out of 43 respondents with low motivation (55.8%), with a p-value of 0.608, also indicating no significant association.

Regarding compensation, 28 out of 41 respondents with high compensation (68.3%) had good performance, while only 16 out of 33 respondents with low compensation (48.5%) performed well. However, the p-value of 0.137 indicates that this relationship is not statistically significant. The same applies to workload, where 21 out of 32 respondents with low workload (65.6%) and 23 out of 42 respondents with high workload (54.8%) showed good performance. The p-value of 0.481 suggests no significant relationship between workload and performance.

In the multivariate modeling, only variables with p-values less than 0.05 were retained in the final model. Therefore, among all variables analyzed in Table 3, only competence was statistically proven to influence employee performance and was included in the multivariate analysis.

Table 4. Final Logistic Regression Model of Predictive Factors for Employee Performance

Variable	B	pvalue	OR	95% CI for EXP (B)	
				Lower	Upper
Competency	-1,168	0,018	0,311	0,118	0,819
Constants	0,251				

Based on the results of the logistic regression modeling, the model equation obtained was: $Z = 0.251 - 1.168(\text{competence})$. If an employee is classified as competent (competence = 0), the resulting Z value is 0.251. The probability of good employee performance is then calculated using the formula $P = 1 / (1 + e^{(-Z)})$, resulting in $P = 1 / (1 + e^{(-0.251)}) = 0.562$ or 56.2%. This indicates that employees with competence have a 56.2% probability of demonstrating good performance based on the combination of variables in the model. The pseudo- R^2 value of 10.2% indicates that the regression model explains 10.2% of the variation in employee performance, while the remaining variation is

influenced by other variables not included in this study. Furthermore, the analysis confirmed competence as the dominant factor in the model, with an odds ratio (OR) of 0.311. This means that non-competent employees are 0.311 times less likely to exhibit good performance compared to competent employees. These findings emphasize the importance of improving competence as a primary strategy to enhance employee performance at Tugu Mulyo Community Health Center.

Discussion

The findings of this study indicate a significant relationship between competence and

employee performance at Tugu Mulyo Community Health Center. Employees with high levels of competence tend to exhibit better performance compared to those who are not competent. This result is consistent with previous research that identified competence as a significant predictor of employee performance (Pędziński et al., 2024). Theoretically, Gibson emphasizes that competence is a critical individual factor determining the effectiveness and quality of work outcomes (Leong, Teoh, Fun, & Lee, 2021). In this study, most respondents held a Diploma III qualification (63.5%) and had more than 10 years of work experience (47.3%), which supports the development of strong work competence. The combination of vocational education and long-term practical experience significantly contributes to achieving optimal performance (Glenton, Javadi, & Perry, 2021).

In contrast to competence, this study found no significant relationship between work experience and performance. Both skilled and less-skilled employees showed relatively balanced proportions of good performance. This finding differs from previous research by Moloi et al. (2023), which found a positive correlation between work experience and employee performance. While work experience is an individual factor that can enhance performance through contextual understanding and skill development (Teo et al., 2021), in this study, most respondents had worked for ≥ 10 years, which likely reduced variability. Moreover, learning motivation and responsibility awareness may serve as intermediary variables that enable less-experienced employees to perform well (Snyder et al., 2023).

Work motivation also showed no significant association with performance. Employees with both high and low motivation levels exhibited comparable levels of good performance. This finding aligns with research by Ndambo, Munyaneza, Aron, Nhlema, and Connolly (2022), which suggested that motivation alone is insufficient without ability and environmental support. The interaction between motivation and ability is essential in shaping job performance (Kitsios & Kamariotou, 2021). Moreover, motivation is influenced by complex factors such as physiological needs, security,

recognition, and self-actualization. Therefore, high motivation does not automatically guarantee high performance if not accompanied by competence and organizational support (Veenstra, Dabekaussen, Molleman, Heineman, & Welker, 2022).

Furthermore, compensation was not significantly related to employee performance. Both high and low compensation groups showed similar performance levels. Compensation can influence motivation and performance by providing a sense of appreciation and job satisfaction (Ahmat et al., 2022). However, as a hygiene factor, compensation primarily affects dissatisfaction when lacking but does not necessarily motivate when sufficient (Leong et al., 2021). The majority of respondents were civil servants (51.4%) with stable income and benefits, which may have contributed to a sense of security and satisfaction, making compensation a less influential factor on performance.

Workload was also found to have no significant relationship with performance. Employees with both high and low workloads managed to maintain good performance (Al-Dabbagh et al., 2022). While an optimal workload is necessary to achieve productivity, excessive workload can cause stress, and insufficient workload may lead to boredom. It is the individual's perception of workload, rather than the workload quantity itself, that affects performance (Wulandari et al., 2023). In this study, most respondents were within the productive age range, were civil servants, and had worked for more than 10 years, suggesting they possessed the adaptive capacity and managerial skills needed to handle their workloads efficiently.

In the multivariate analysis, competence emerged as the only dominant factor significantly influencing employee performance. This reinforces the notion that competence is the foundation for effective job performance (Mengistu, Khatri, Erku, & Assefa, 2023). Competence encompasses not only technical knowledge but also practical skills, decision-making ability, and a sense of professionalism. Competent employees understand work procedures, solve problems

efficiently, and deliver services according to standards. Competence is a fundamental individual characteristic closely linked to superior performance outcomes (Adelaide, Theresa, & Yennuten, 2022; Landu & Crowley, 2023). Thus, competence must be the core focus of human resource development in the primary healthcare sector.

Practically, competence enables health workers to perform tasks more effectively and efficiently. Competent health professionals can conduct accurate assessments, develop targeted service plans, and maintain effective communication with patients and communities (Akbar, Sahar, Rekawati, & Sartika, 2025). These skills are crucial in the Puskesmas setting, where health workers are expected to carry out clinical services, health education, and promotive-preventive activities. Competence also contributes to increased confidence, accountability, and adaptability in response to evolving healthcare systems. Collectively, these attributes enhance optimal employee performance. Therefore, competence improvement must be prioritized in human resource management at health facilities (Akbar, Sahar, Rekawati, Sartika, & Gupta, 2025; Nida et al., 2024).

Considering the findings of this study, efforts to enhance employee competence should be a strategic focus in performance development at community health centers. This can be achieved through continuous training programs, technical mentoring, and structured supervision. Institutions should also establish a competence-based performance appraisal system to objectively identify individual development needs. Strengthening evidence-based human resource development policies is essential to ensure capacity building translates into improved service quality. Accordingly, this study not only reinforces empirical evidence on the importance of competence but also offers practical policy direction for health center leadership and other stakeholders in fostering sustainable employee performance.

Conclusion and Recommendation

This study concludes that competence is the only factor significantly associated with employee performance at Tugu Mulyo Community Health Center. Employees with good competence tend to demonstrate better performance compared to those who are not competent. Meanwhile, work experience, work motivation, compensation, and workload were not found to have a significant effect on employee performance. These findings highlight that individual ability and skills are critical components in supporting the effectiveness of health workers in primary care services. Therefore, improving competence should be the primary focus in efforts to enhance and develop employee performance within community health centers.

Based on these findings, it is recommended that health center managers and relevant stakeholders prioritize the strengthening of health worker competence through continuous training, technical assistance, and structured supervision. Regular evaluations of staff capabilities should be conducted to identify targeted capacity-building needs. Furthermore, policies for human resource development should be reinforced to ensure that healthcare services are delivered professionally and in accordance with established standards. Future research using alternative approaches is also recommended to explore other factors that may influence employee performance more comprehensively.

Acknowledgment

The author would like to express deepest gratitude to all respondents who willingly took the time to participate in this research.

Funding Source

None

Declaration of conflict of interest

The authors declare no competing interests.

Declaration on the Use of AI

No AI tools were used in the preparation of this manuscript.

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