
FACTORS RELATED TO THE PERFORMANCE OF PHARMACEUTICAL EMPLOYEES AT THE SOUTHEAST SULAWESI PROVINCIAL HEALTH OFFICE YEAR 2025

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Abstract. Employee performance in the field of health and pharmaceutical services plays a crucial role in determining the quality of services provided to the community. In the Southeast Sulawesi Provincial Health Office, various internal and external factors are believed to influence employee performance, but there has not been much research that comprehensively examines these factors. This study aims to identify and analyze factors related to employee performance in the health and pharmaceutical services sector at the Southeast Sulawesi Provincial Health Office. This study uses a quantitative design with a cross-sectional approach. This study was conducted from July 23 to August 14, 2025, at the Southeast Sulawesi Provincial Health Office. The sample consisted of 34 respondents selected through total sampling. Data analysis was performed using the chi-square test. The results of the study show that there is a relationship between educational characteristics (p value = 0.007), length of service (p value = 0.007), and motivation (p value = 0.000) with the performance of employees in the health and pharmaceutical services sector of the Southeast Sulawesi Provincial Health Office in 2024. There was no relationship between age (p value = 0.427) and gender (p value = 0.363) characteristics and the performance of employees in the health and pharmaceutical services sector of the Southeast Sulawesi Provincial Health Office. Factors such as motivation, training, and work environment play an important role in determining the performance of employees in the health and pharmaceutical services sector at the Southeast Sulawesi Provincial Health Office. Therefore, improving training programs and efforts to increase employee motivation are recommended to improve overall performance.

Keywords: employee performance, health services, pharmacy, motivation, training

1. INTRODUCTION

Employee performance is one of the determining factors in achieving organizational goals, especially in the public service sector such as the Health Office. The Health Office has a very strategic role in providing quality health services to the community, one of which is through good pharmaceutical management. Pharmaceutical employees, including pharmacists, pharmacy assistants, and other pharmaceutical personnel, play an important role in ensuring that the medicines provided to the community are safe, effective, and in accordance with clinical needs. Therefore, the performance of pharmaceutical employees in the Health Office greatly affects the success of the health system as a whole (Yuliana *et al.*, 2022).

At the national level, the number of pharmaceutical personnel in Indonesia shows an imbalance between the number of pharmacists and the needs of the population. Data from the Indonesian Ministry of Health (Kemenkes) in 2023 recorded that there were around 130,643 pharmacists throughout Indonesia. Based on this figure, roughly one pharmacist serves an average of around 2,134 residents. In fact, according to the ideal standard of the Indonesian Pharmacists Association (IAI), the ideal ratio of pharmacists is around 0.8 to 1 pharmacist per 1,000 residents, meaning that the current ratio is far from the ideal target (Handayani, Pertiwi and Atikah, 2019).

The performance of pharmacy staff is not only influenced by their technical competence and knowledge, but also by various external and internal factors that can support or hinder their effectiveness at work. Several factors that have often been identified in previous studies are motivation, work environment, managerial support, and personal factors such as education, work experience, and job satisfaction. However, the relationship between these factors and the performance of pharmaceutical employees in the Health Office still needs to be further studied, especially in the context of certain regions such as Southeast Sulawesi Province (Uneputty, 2017).

According to research conducted by Sutisna (2008), there is a significant relationship between work motivation and the performance of health workers, as evidenced by a test probability value (sig.) of 0.003, which is less than the threshold of 0.05. These findings indicate that increased work motivation among health workers is associated with improved performance outcomes. In addition, health workers who have strong individual characteristics, enjoyable job characteristics, and conducive work situation characteristics are likely to demonstrate high performance levels, characterized by perseverance, intelligence in the work process, and sincerity in their efforts (Amrullah, Satibi and Fudholi, 2020).

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by perseverance, intelligence in the work process, and sincerity in their efforts (Herlina, Atikah and Hardani, 2019).

Notoatmodjo (2010), as cited by Gunawan and R. Ade Sukma in 2016, stated that how much a person learns in school can influence what they know. What a person knows is important because it can help them do their job better and faster. Another factor that can make a person work differently is how long they have been doing their job and how healthy they are.

It is very important for workers in health organizations to work well so that the community can get the best health services. The Ministry of Health in Indonesia wants everyone to be able to work well together, and they need happy and hard-working health workers to ensure that everything runs smoothly (Agoes, Nasution and Zulfendri, 2024).

Based on the 2022 Performance Indicator Measurement of the Southeast Sulawesi Provincial Health Office, there are still several that have not achieved their interim targets, such as the number of hospitals implementing integrated electronic medical records, which has a target of 100% achievement (45%), the number of districts/cities with health facilities implementing an integrated referral system (SISRUTE) with a target of 100% achievement at 75%, the number of health facilities implementing telemedicine with a target of 100% achievement at 25%, and the number of hospitals performing emergency cesarean section operations within <30 minutes with a target of 75% achievement at 50%. Referral hospitals and vertical hospitals with services meeting standards: target 100%, achievement 75%; number of districts/cities implementing PSC 119: target 100%, achievement 75%. In some villages, 28.67% are in good condition, and in other villages, 43.87% are in better condition. There are approximately 57 dentists per 100,000 people. Most babies who experience problems at birth receive assistance (63.75%). Unfortunately, 67 mothers died, which is very sad. We also want to ensure that at least 85% of mothers have their pregnancies checked, but currently only 56% do so.

Based on the background description above, the author is interested in conducting research with the title "Factors Related to the Performance of Health and Pharmaceutical Service Employees of the Southeast Sulawesi Provincial Health Office in 2024."

2. RESEARCH METHOD

This study is a quantitative study with a correlational descriptive design. This approach was chosen to identify and analyze the relationship between various factors and employee performance in the health and pharmaceutical services sector. This design allows researchers to measure the extent to which certain factors contribute to variations in employee performance. This study was conducted at the Southeast Sulawesi Provincial Health Office, which has various work units in the health and pharmaceutical services sector. Data collection was carried out over a three-month period, from July to August 2025.

The population in this study was all employees working in the health and pharmaceutical services sector at the Southeast Sulawesi Provincial Health Office. This population included 34 employees with various educational backgrounds, work experience, and job positions. The research sample also consisted of 34 people, which was taken using total sampling technique.

This study involved two types of variables, namely independent variables, which are factors related to employee performance, in this case individual characteristics and motivation. Meanwhile, the dependent variable is employee performance in the field of health and pharmaceutical services.

The instruments used in this study were questionnaires to measure knowledge and interviews related to macro nutritional intake. The data processing procedures for this study included editing, coding, cleaning, and tabulation. In addition, data analysis used two main analysis techniques, namely univariate and bivariate analysis, using *the chi-square test*, with the interpretation of the test results carried out at a 95% confidence level.

3. RESEARCH RESULTS AND DISCUSSION

Respondent Characteristics

Table 1. Characteristics of Respondents at Bahteramas General Hospital, Southeast Sulawesi Province, 2024

No	Respondent Characteristics	n	%
1	Gender		
	Female	23	67.6
	Male	11	32.4
2	Age (years)		
	26-35	3	8.8

	36-45	15	44.1
	46-55	14	41.2
	56	2	5.9
3	Education		
	D1	3	8.8
	D3	2	5.9
	Bachelor	18	52.9
	Master's Degree	11	32.4
4	Occupation		
	Housewife	4	20.0
	Fisherman	1	5.0
	Farmer	7	35.0
	Civil servant	1	5
	Entrepreneur	5	25

The table above shows the characteristics of respondents based on gender, age, education, and occupation.

In terms of gender, most respondents were female, with 23 respondents (67.6%), while 11 respondents (32.4%) were male. In terms of age, respondents were divided into four age groups. The 36-45 age group dominated with 15 people (44.1%), followed by the 46-55 age group with 14 people (41.2%). The 26-35 age group consisted of 3 people (8.8%), while only 2 respondents (5.9%) were in the 56-65 age group.

Regarding education, the majority of respondents had a bachelor's degree, with 18 people (52.9%). Eleven people (32.4%) had a master's degree, while 3 people (8.8%) had a diploma 1 and 2 people (5.9%) had a diploma 3.

In terms of occupation, most respondents were farmers, with a total of 7 people (35.0%). Four respondents (20.0%) were housewives, while 2 people (25.0%) worked as entrepreneurs. Occupations as fishermen and civil servants were each represented by 1 respondent (5.0%).

Relationship between age characteristics and the performance of employees in the health service and pharmaceutical health sector of the Southeast Sulawesi Provincial Health Office in 2024

Table 2. Relationship between age characteristics and the performance of health service and pharmaceutical health employees at the Southeast Sulawesi Provincial Health Office in 2024

Age	Performance				Number		<i>P-value</i>
	Good		Poor				
	n	%	n	%	√	%	
26-35	2	66.7	1	33.3	3	100.0	0.052
36-45	10	66.7	5	33.3	15	100	
46-55	8	57.1	6	42.9	14	100.0	
56-65	1	50	1	50	2		
Total	21	61.8	13	38.2	39	100	

Based on the results of the study showing the relationship between age and the performance of pharmaceutical employees at the Southeast Sulawesi Provincial Health Office, it can be seen that although there are differences in performance between different age groups, the relationship between age and employee performance is not significant enough. The data obtained shows that employees in the 26-35 and 36-45 age groups have almost the same proportion of good performance, at 66.7% and , respectively, while in the 46-55 and 56-65 age groups, the proportion of good performance tends to decline, although not significantly. In the 46-55 age group, around 57.1% showed good performance, while in the 56-65 age group, only 50% of employees had good performance.

However, despite variations in performance between age groups, statistical test results show that the P-value = 0.052, which is slightly greater than the significance threshold of 0.05, indicating that the relationship between age and the performance of pharmaceutical employees is not statistically significant. In other words, although there are differences in performance between age groups, these differences are not strong enough to be considered a factor that significantly affects performance.

This may be due to various other factors, such as work experience, motivation, and education level, which play a more significant role in influencing employee performance than age. For example, although older employees may have more experience, younger employees with good motivation and education can also demonstrate equivalent or even better performance.

Overall, the results of this study indicate that although there are differences in performance based on age groups, other factors such as work experience, motivation, and education level may have a more significant impact on the performance of pharmaceutical employees. Therefore, even though older age groups may have more

experience, organizations still need to pay attention to other factors that can improve employee performance, regardless of their age.

The Relationship Between Educational Characteristics and the Performance of Health Service and Pharmaceutical Health Employees of the Southeast Sulawesi Provincial Health Office in 2024

Table 2. Relationship between educational characteristics and the performance of health service and pharmaceutical health employees at the Southeast Sulawesi Provincial Health Office in 2024

Education	Performance				Number		<i>P-value</i>
	Good		Poor		n	%	
	n	%	n	%			
D1	0	0.0	3	100.0	11	100.0	0.007
D3	0	0.0	2	100.0	23	100.0	
S1	11	61.1	7	38.9			
S2	10	90.9	1	9.1			
Total	21	61.8	13	38.2	39	100.0	

The research results table shows that employees with D1 and D3 education levels mostly have poor performance. In detail, of the 3 employees with D1 education, all (100%) showed poor performance, while at the D3 education level, 2 out of 4 employees (50%) had poor performance. Conversely, at the S1 and S2 education levels, the proportion of employees with good performance was much higher. A total of 61.1% of employees with S1 education showed good performance, while only 38.9% had poor performance. At the S2 education level, almost all employees (90.9%) showed good performance, while only 9.1% had poor performance.

Improvements in the educational level of pharmaceutical employees can have a direct effect on the quality of their performance. Higher education, such as bachelor's and master's degrees, is usually accompanied by a deeper mastery of theory and more refined skills, which enable employees to perform their duties better. Employees with bachelor's and master's degrees tend to have a more comprehensive understanding of pharmaceutical science, which in turn improves their ability to perform technical and non-technical tasks (Bussing, Smith and Saini, 2025).

Conversely, employees with D1 and D3 degrees, most of whom have poor performance, may face limitations in terms of adequate technical knowledge and skills to perform their duties optimally. Although a D3 education provides basic knowledge of

pharmacy, the increasingly complex roles and responsibilities in the world of pharmacy require a higher level of education to handle tasks better (Wantrimin Yulianti Tuanane, Rina Waty Sirait and Masrida Sinaga, 2024).

The statistical test results show that the P-value = 0.007 (smaller than the significance level of 0.05), which indicates a significant relationship between the level of education and the performance of pharmaceutical employees. This means that the level of education has a real influence on the performance of pharmaceutical employees at the Southeast Sulawesi Provincial Health Office. In other words, the higher the level of education of employees, the more likely they are to perform well.

Relationship between Length of Service Characteristics and the Performance of Health Service and Pharmaceutical Health Employees at the Southeast Sulawesi Provincial Health Office in 2024

Table 2. Relationship between length of service and the performance of health service and pharmaceutical health employees at the Southeast Sulawesi Provincial Health Office in 2024

Length of Service	Performance				Number		<i>P-value</i>
	Good		Poor				
	n	%	n	%	n	%	
6-10 years	0	0.0	4	100.0	4	100.0	0.007
>10 years	21	70.0	9	30.0	30	100.0	
Total	21	61.8	13	38.2	39	100	

Based on the results of the study showing the relationship between length of service and the performance of pharmaceutical employees at the Southeast Sulawesi Provincial Health Office, it can be concluded that length of service has a significant effect on employee performance. From the data obtained, employees with more than 10 years of service tend to have better performance than employees with 6-10 years of service. Specifically, in the group of employees with 6-10 years of service, all (100%) had poor performance, while in the group of employees with more than 10 years of service, 70% showed good performance, while only 30% had poor performance.

These results indicate that longer work experience can improve the performance quality of pharmaceutical employees. Employees with more than 10 years of service

have certainly gone through various work situations, training, and experiences that enrich their knowledge and skills in carrying out pharmaceutical tasks. This experience enables them to face challenges at work more effectively and efficiently, thereby improving their performance (Pasaribu, Br Bangun, and Kusuma, 2024).

Conversely, employees with 6-10 years of service may still be in the phase of strengthening their skills and adjusting to more complex job demands. Although they already have several years of experience, they may still face challenges in adjusting to new system or policy developments. Therefore, they tend to have lower performance compared to employees with longer service (Safitri, Yulia and Yanti, 2025).

The statistical test results show that the P-value = 0.007, which is smaller than the significance level of 0.05, indicating a significant relationship between length of service and the performance of pharmaceutical employees. This confirms that the longer the length of service of employees, the greater the likelihood that they will perform better. Thus, this study provides a deeper understanding of the importance of work experience in improving the quality of pharmaceutical employee performance. As a recommendation, human resource management at the Southeast Sulawesi Provincial Health Office should consider improving training and skills development programs, especially for employees with relatively shorter work experience, to accelerate the process of improving their performance.

How long a person has been working in a job can affect how well they do their job. If supervisors do not pay attention to this, it may cause workers to perform better or worse. To see whether a company is doing its job well or not, it is important to examine how well its employees are performing. According to research by Bedjo Siswanto in 2011, people who have been working for a long time will usually get better at their jobs. This idea is also supported by another study by Gumilar and Setiawan in 2018, which shows that working longer helps employees perform better (Kunsing, Tarigan and Abudi, no date).

A study conducted by Jayanti and Dewi in 2021 observed how long people had been working at a company called PT Saka Agung Abadi in Singaraja. They found that the longer a person worked there, the better they performed their job. They measured this and found that the correlation was very strong, with a score of 0.807. This means that if someone has worked there for some time, it usually helps them perform better in

their job. They also conducted a special test called a T-Test and found that the results showed that this was a real pattern, not just a coincidence. The figures they obtained showed that having more experience greatly helped employees perform their jobs well (Wijaya, 2018).

The Relationship Between Motivation and Employee Performance in the Health Services and Pharmaceutical Health Sector of the Southeast Sulawesi Provincial Health Office in 2024

Table 2. Relationship between length of service and performance of employees in the health and pharmaceutical services sector of the Southeast Sulawesi Provincial Health Office in 2024

Motivation	Performance				Number		<i>P-value</i>
	Good		Poor				
	n	%	n	%	n	%	
Good	19	86.4	3	13.6	22	100.0	0.000
Poor	2	16.7	10	83.3	12	100.0	
Total	21	61.8	13	38.2	39	100	

Based on the results of research showing the relationship between motivation and the performance of pharmaceutical employees at the Southeast Sulawesi Provincial Health Office, it was found that work motivation significantly affects employee performance. The data obtained shows that employees with good work motivation tend to have better performance compared to employees with low work motivation. Of the 19 employees with good motivation, 86.4% showed good performance, while only 13.6% showed poor performance. Conversely, in the group of employees with low motivation, only 16.7% had good performance, while the other 83.3% showed poor performance.

These results indicate that high work motivation plays an important role in encouraging employees to give their best in carrying out their duties. Employees with good motivation tend to be more involved in their work, have a high sense of responsibility, and strive to achieve the goals set by the organization. This high motivation encourages them to work more efficiently, overcome obstacles that arise, and produce optimal performance. Conversely, employees with low work motivation may be less motivated to give their best, which leads to a decline in their performance (Sodikin, Jusdijachlan and Avianti, 2024).

The statistical test results with a P-value = 0.000, which is less than 0.05, indicate a highly significant relationship between work motivation and the performance of pharmaceutical employees. This reinforces that motivation is a factor that greatly influences performance. Good work motivation not only increases employee enthusiasm and dedication but also contributes to improving the quality of pharmaceutical services, which in turn will affect the overall quality of health services.

Based on these findings, it is recommended that the Southeast Sulawesi Provincial Health Office pay more attention to factors that can increase the motivation of pharmaceutical employees, such as providing rewards for performance achievements, providing opportunities for career development, and creating a supportive work environment. Increasing work motivation can play a major role in improving employee performance, which will ultimately have a positive impact on improving the quality of health services in this province.

Conclusion and Recommendations

Respondent characteristics in terms of education, length of service, and motivation are factors related to employee performance, while education and age are not related to employee performance.

Future research could focus on how managerial strategies and internal hospital policies affect employee performance in the fields of healthcare and pharmacy. Aspects such as resource management, internal communication systems, and professional development could be the main focus. Research could be conducted to assess the effectiveness of existing training programs for nurses and their impact on performance improvement. This evaluation can include the type of training received, frequency, and the relevance of training material to daily tasks. Future research is recommended to conduct a more comprehensive study by integrating various factors that affect employee performance, including individual, organizational, and work environment aspects. A mixed research methodology that includes quantitative and qualitative data can provide a more in-depth view.

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