Research Article

Determinants of Employee Performance in Healthcare Organization: The Role of Work Environment, Workload, and Motivation

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Abstract
This study aims to determine the impact of work environment, workload, and work motivation on employee performance. The study focused on employees working at a hospital in Jakarta, and data was collected through a voluntary questionnaire from 112 respondents. The analytical method used was multiple linear regression, and hypothesis testing revealed that work environment, workload, and work motivation have a combined effect on healthcare employee performance. This study provides valuable insights for decision-makers in healthcare systems, health organizations, and government agencies to enhance the quality and efficiency of health services. It also highlights the importance of maintaining a favorable work environment, including the physical environment and workload, for employee well-being.

Keywords: Employee performance, hospital, work environment, workload, work motivation

JEL Classification: M00, M50, M54


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1. Introduction
During the COVID-19 pandemic, hospitals have implemented comprehensive and appropriate health protocols, including new SOP regulations mandated by the Government. Medical personnel in various hospitals must wear complete PPE and multiple layers of masks to prevent the spread of the Covid-19 virus. Employees must check their temperature before entering the hospital lobby to ensure their well-being. It is evident that before the COVID-19 pandemic, employees did not wear masks, complete PPE clothing, undergo temperature checks, or require weekly rapid tests. Visitors seeking treatment must also check their temperature and undergo a rapid test to prevent the spread of the Covid-19 virus. Additionally, sick patients can only be attended to by one person. They cannot receive visits from close relatives or friends to avoid the heightened risk of contracting the COVID-19 virus.
The importance of healthcare cannot be overstated, as it plays a vital role in maintaining and enhancing both individual and public health. The quality of care, diagnosis, and support provided by healthcare workers is a critical factor in achieving optimal health outcomes. This situation is especially true today, where global health challenges such as pandemics, population aging, and complex diseases are prevalent. The need to improve healthcare worker performance is more crucial than ever, as it directly impacts the accessibility, quality, and efficiency of the healthcare system. Therefore, it is imperative to research the factors influencing healthcare worker performance and implement efforts to enhance it to develop a sustainable healthcare system.

Healthcare workers responsible for caring for patients are exposed to various occupational hazards in hospitals. These hazards include exposure to biological, chemical, physical, safety, ergonomic, and psychosocial agents. The incidence of occupational injuries and illnesses among healthcare workers is high, with nurses being at a higher risk due to their frequent interaction with patients, long and rotating work shifts, and resulting exhaustion. Midwifery staff also face risks due to job-related stress, high demands, lack of knowledge, on-call duties, and lack of management support. Psychological factors significantly impact work-related accidents, and improving the psychological conditions of the workplace can prevent many difficulties and increase employees' health (Bloxsom et al., 2019; Rostami et al., 2021).

In the health sector, improving employee performance is a priority for organizations (Krijgheld et al., 2022). Researchers have identified various factors that affect performance, such as the work environment, workload, and internal motivation. A healthy and conducive work environment is vital in maintaining and improving the quality of services provided by health workers, who are valuable assets in an effective healthcare system. The working environment's physical form encompasses space, layout, noise, tools, materials, and colleague relationships. The quality of all these aspects significantly influences work performance in a positive way (Pawirosumarto et al., 2017). Therefore, understanding how their work environment influences their performance and quality of care is crucial for continuous improvement in the health sector. The primary goal of this study is to investigate the relationship between a good work environment and the performance of health workers at [name of hospital or health institution]. A good work environment includes factors such as the physical condition of the building, support from coworkers, efficient time management, and access to the necessary equipment and resources to provide quality care.

Furthermore, employee performance can be affected by various factors, including workload. Workload has been a significant focus within the health sector, particularly during the COVID-19 pandemic (Pourteimour et al., 2021; Rostami et al., 2021; Sun et al., 2022). Workload refers to the overall tasks performed by an individual or a team over a specific period. An employee's workload comprises practical duties and cognitive tasks, such as decision-making, thinking, calculating, remembering, and searching (Destiani et al., 2020). However, limited studies have explored the connection between healthcare workload and job performance. Previous research has primarily concentrated on nursing staff (Ardestani-rostami et al., 2019; Pourteimour et al., 2021; Sun et al., 2022), neglecting non-medical staff. For example, in a recent descriptive correlational study conducted by Ardestani-Rostami et al. (2019) on 371 nurses working at ICUs of hospitals associated with Tehran University of Medical Sciences, 75% of the nurses rated their performance as average. The study found a negative correlation between workload and clinical performance.
Similarly, Sima Pourteimour's research shows a slight positive link between mental workload and job performance average. However, while mental and temporal demands had a noticeable positive correlation with job performance, frustration had a significant negative correlation with job performance in nursing staff in Iran.

Finally, this study focuses on internal motivation factors. Motivation is one of the essential factors that influences employee performance. Therefore, the critical role of company leaders must be to motivate employees to work diligently and make employees work regularly (Luu et al., 2019). Therefore, a company needs a strategy to raise employee work motivation. Motivation can stimulate the work of employees so that the goals given by the company can run well and be achieved. With motivation, company leaders must know what things employees want. One thing that company leaders need to understand is that people want to work to fulfill their material and non-material physical and spiritual needs. The outcomes of this study may shed light on the factors that could enhance or impede the performance of healthcare workers. Moreover, the discoveries from this research can assist hospital managers, administrators, and policymakers in devising improved strategies and measures that aid health workers in delivering high-quality care.

2. Literature Review and Hypothesis

Work Environment and Performance

Najib (2020) emphasizes the importance of paying attention to the work environment in a company as it directly impacts employees. A conducive work environment can enhance employee performance, while an inadequate one can diminish it. Good working conditions entail the ability to carry out activities optimally, safely, healthily, and comfortably (Najib, 2020). The effects of a suitable work environment can be observed over a prolonged period. Conversely, a poor work environment can demand more labor and time and impede the design of an efficient work system. According to Kurniawidjaja (2016), a safe and healthy workplace is essential for effective and efficient work.

Conversely, a disorganized and hazardous workplace can lead to sickness, breakdowns, and absenteeism, resulting in lost employee income and reduced company productivity. A comfortable workspace enables employees to complete their work quickly, making them feel at home while working at MJC (Kurniawidjaja, 2016). Effective company management should prioritize creating a comfortable work environment and managing human resources to ensure optimal performance. The work environment plays a significant role in employee productivity.

As per Lake's research in 2002, the nursing work environment refers to "the organizational attributes of a workplace that either promote or hinder professional nursing practice." Many studies have noted that nurses working in unhealthy environments often experience adverse outcomes, which can decrease the nursing workforce and impact both nurse and patient outcomes (Kim et al., 2020; Lake et al., 2019; Wei et al., 2018). Some factors that contribute to an unhealthy work environment include excessive workload, lack of benefits, insufficient organizational support, emotional stress, problems with patients and their families, duration of working hours, problems caused by night shifts, and conflicts with colleagues, other health professionals, and managers. These factors can lead to job burnout, desensitization, and even the intention to leave the profession, as noted in studies by (Kim et al. in 2020 and Wei et al. in 2018). Such adverse conditions can cause exhaustion, which can decrease job performance levels. Therefore, it is essential to identify the factors that may adversely affect nurse job performance, healthcare service quality, and patient health. Moreover, Adha et al. (2019) also explained that the work environment influences employee performance at the Jember Regency Social Service. Shows that the work environment significantly affects employee performance; this proves that a good and comfortable work environment can enable employees to improve employee performance (Adha et al., 2019).

H1: Work environment influences employee performance

Workload and Performance

According to Dhania (2016), workload refers to a group or set of tasks that an organizational unit or position holder must complete within a specific timeframe (Dhania, 2016). The Minister of
Home Affairs Regulation no. 12/2008 defines workload as the work that a position or organizational unit must undertake, determined by work volume and time norms. Meanwhile, describe workload as the result of limited processing capacity when handling information. Individuals are expected to complete tasks at a certain level. Simamora (2016) explains that workload analysis involves identifying the number of employees and their qualifications necessary to achieve organizational objectives (Simamora, 2016).

The amount of work that healthcare workers have is crucial to patients' quality of care. Too much workload can lead to negative consequences like emotional exhaustion, depersonalization, and burnout (Weinger et al., 2004). A study by Paneque and Carvajal found that 86% of employees are exposed to psychological risks. Excessive work-related stress can cause physical, psychological, and behavioral complications (Jiménez Paneque & Pavés Carvajal, 2015). Healthcare workers need to maintain good mental health because it directly affects the quality of care they provide. If an employee struggles with their mental health, it can lead to difficulties in their work (Ardestani-Rostami et al., 2019; Rostami et al., 2021). Ultimately, providing proper care to patients requires healthy employees. According to a study, workload impacts the performance of employees at the Personnel and Human Resources Development Agency of Aceh Tamiang Regency. The study found that workload has a positive effect on employee performance. However, excessive workload can lead to a decline in performance, although the impact is insignificant.

**H2:** Workload influences employee performance

**Motivation and Performance**
Motivation is a force that arises from within or from outside a person and inspires enthusiasm and perseverance to achieve something desired. If employees have strong encouragement from within themselves or outside themselves (for example, from the company), they will be encouraged to do something well. The better the employee's work motivation within the company, the more employee performance will increase. Healthcare workers' motivation is crucial for delivering quality health services. It can impact their performance, job satisfaction, and the equity, efficiency, efficacy, accessibility, and viability of health services. Therefore, workforce development should be a health policy priority and considered an essential public health function. Despite increased attention to motivation and its individual and organizational implications, some aspects still need to be better understood, such as an appropriate instrument for measuring motivation. Motivation and job satisfaction are critical determinants of health workers' performance and retention (Ștefan et al., 2020).

**H3:** Motivation influences employee performance

### 3. Data and Method
**Procedure and Sample**
The sample for this research was employees at a hospital in Jakarta. This study involved 112 employees with a purposive sample selection method. Data analysis is quantitative statistical, with the aim of testing predetermined hypotheses. Two main things influence the quality of research data: the quality of research instruments and data collection. The quality of research instruments concerns the validity and reliability of the instruments, and the quality of data collection concerns the accuracy of the methods used. Regarding gender, the survey showed that 58 respondents (50.8%) were male, and 56 respondents (49.2%) were female. As for age, the majority of respondents fell into the following categories: 18-22 years old (21.1%), 23-27 years old (32.5%), 28-35 years old (28.9%), and 36 years old or above (17.5%).

**Measure**
The work environment is measured using six indicators, including adequate lighting and air circulation within the company, the safety of workers is taken into account by the company, worker harmony is good, problems handled in the company have been resolved properly and correctly, the company's work equipment is adequate, , and the tools used for work operations are still suitable for use. The workload is measured based on physical tasks, mental tasks, employee working time and rest time, delegation of duties and authority, somatic factors, and psychological factors—
workload indicators (Dhania, 2016). Motivation is measured based on six indicators, including daring to take and accept risks, having a high level of personal responsibility, having a comprehensive work plan and striving to realize goals, looking for opportunities to realize plans that have been programmed, having realistic goals, making use of concrete feedback in all activities carried out. Finally, performance is measured using guidelines with six assessment criteria: quality, quantity, punctuality, attendance, and ability. The pre-test results' reliability was measured using Cronbach's Alpha method for one variable each. In Cronbach's Alpha method, a research instrument is declared reliable if the level of reliability is > 0.7 (Nunnally & Bernstein, 1994).

4. Results and Discussion
According to Table 1, the work environment variable with the highest average value based on descriptive analysis is item X1.2. This item indicates that the company prioritizes worker safety, with a mean value of 4.19. On the other hand, the work environment variable with the lowest average value is item X1.3, which indicates that employee harmony is good, with a mean value of 3.94. The results of the descriptive statistical analysis of respondents regarding work environment variables show that employees have a high-quality work environment. This result is evident from the indicators that describe employee performance in the work environment. The indicators show that employees feel comfortable in the work environment. Therefore, these findings can be used to improve the work environment.

Table 1 also shows that the highest average value based on the descriptive analysis statement of the workload variable is item X2.2, with the statement I am enthusiastic about working with a mean value of 4.22. Meanwhile, the lowest average value for the idealism variable is item X2.12, with the statement that workers trust each other with a mean value of 3.73. As for the results of the descriptive statistical analysis of respondents regarding the workload variable, it was found that the employees understood the workload that had to be carried out. This result is reflected through indicators that describe the respondent's workload regarding employee performance. The indicators show that employees have a high workload on employee performance. Thus, this becomes a factor that can measure how much workload employees must carry out.

After analyzing the workload variable, it was found that item X3.2 has the highest average value of 4.12. This item states that giving awards to employees who excel will motivate them to improve their work performance. On the other hand, the lowest average value of 2.74 was found for item X3.5, which states that specific reasons prevent employees from socializing at work. Furthermore, the descriptive statistical analysis of the respondents' work motivation variables indicated that they have a solid motivation to achieve their goals. This result was reflected in the high indicators of their work motivation towards employee performance. Therefore, this motivation played a crucial role in enhancing employee performance.

According to Table 1, the ethical perception variable for tax evasion had the highest average value for item Y.9, with a mean value of 4.26 for the statement "I work according to procedures and schedules." On the other hand, the employee performance variable had the lowest average value for item Y.10, with a mean value of 3.80 for the statement "my absenteeism level is low." The descriptive statistical analysis of the respondents' dependent variable of employee performance showed that employees have a strong loyalty and responsibility towards their assigned tasks. This analysis successfully implemented the company's vision and mission regarding employee performance at a very high level. The indicators describing the performance of the respondents' employees reflect the meaning of employee performance.

Regression Analysis
This research uses multiple linear regression analysis to determine how independent variables impact the dependent variable of Employee Performance. Data for this analysis is gathered from a questionnaire and processed using the SPSS program. The results of the analysis can be viewed in Table 2.
Table 1. Descriptive data

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Item</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1.1</td>
<td>4.17</td>
<td>X3.1</td>
<td>4.01</td>
</tr>
<tr>
<td>X1.2</td>
<td>4.19</td>
<td>X3.2</td>
<td>4.12</td>
</tr>
<tr>
<td>X1.3</td>
<td>3.94</td>
<td>X3.3</td>
<td>3.98</td>
</tr>
<tr>
<td>X1.4</td>
<td>3.99</td>
<td>X3.4</td>
<td>4.04</td>
</tr>
<tr>
<td>X1.5</td>
<td>4.12</td>
<td>X3.5</td>
<td>2.74</td>
</tr>
<tr>
<td>X1.6</td>
<td>4.11</td>
<td>X3.6</td>
<td>4.07</td>
</tr>
<tr>
<td>X2.1</td>
<td>4.18</td>
<td>Y.1</td>
<td>4.20</td>
</tr>
<tr>
<td>X2.2</td>
<td>4.22</td>
<td>Y.2</td>
<td>3.96</td>
</tr>
<tr>
<td>X2.3</td>
<td>4.13</td>
<td>Y.3</td>
<td>4.15</td>
</tr>
<tr>
<td>X2.4</td>
<td>3.84</td>
<td>Y.4</td>
<td>4.10</td>
</tr>
<tr>
<td>X2.5</td>
<td>4.20</td>
<td>Y.5</td>
<td>4.05</td>
</tr>
<tr>
<td>X2.6</td>
<td>4.02</td>
<td>Y.6</td>
<td>4.04</td>
</tr>
<tr>
<td>X2.7</td>
<td>4.02</td>
<td>Y.7</td>
<td>4.24</td>
</tr>
<tr>
<td>X2.8</td>
<td>3.97</td>
<td>Y.8</td>
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</tr>
<tr>
<td>X2.9</td>
<td>4.00</td>
<td>Y.9</td>
<td>4.26</td>
</tr>
<tr>
<td>X2.10</td>
<td>4.11</td>
<td>Y.10</td>
<td>3.80</td>
</tr>
<tr>
<td>X2.11</td>
<td>4.00</td>
<td>Y.11</td>
<td>4.04</td>
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<tr>
<td>X2.12</td>
<td>3.73</td>
<td>Y.12</td>
<td>4.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Y.13</td>
<td>4.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Y.14</td>
<td>3.99</td>
</tr>
</tbody>
</table>

Table 2. Regression results

<table>
<thead>
<tr>
<th></th>
<th>Coeff</th>
<th>SE</th>
<th>beta</th>
<th>T-value</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.542</td>
<td>2.162</td>
<td>2.1</td>
<td>0.038</td>
<td></td>
</tr>
<tr>
<td>Work environment</td>
<td>0.36</td>
<td>0.18</td>
<td>0.159</td>
<td>2.002</td>
<td>0.048</td>
</tr>
<tr>
<td>Workload</td>
<td>-0.629</td>
<td>0.103</td>
<td>0.56</td>
<td>6.135</td>
<td>0.015</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.593</td>
<td>0.185</td>
<td>0.243</td>
<td>3.209</td>
<td>0.032</td>
</tr>
<tr>
<td>Adj R Square</td>
<td>0.855</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The coefficient of determination helps to determine how much of an impact independent variables (such as work environment, workload, and work motivation) have on the dependent variable (employee performance). According to Table 2, the adjusted R2 (R Square) figure is 0.851 or 85.1%. This result means that the independent variables (work environment, workload, and work motivation) account for 85.1% of the impact on employee performance. In other words, the variation in the independent variables used in the model can explain 85.1% of the variation in the dependent variable.

After conducting a hypothesis test to determine whether there is a significant relationship between the independent and dependent variables, a level of significance of 5% was used. H1 is accepted if the p-value is less than $\alpha = 0.05$. Table 2. shows that the calculated t-value for the work environment is 2.002 with a significance t of 0.048. These findings suggest that the work environment impacts employee performance, supporting the first hypothesis. This result is consistent with previous studies that highlight the significant effect of the work environment on employee performance. While some employees may feel uncomfortable at work, this does not hinder their performance. The mean test results from the respondents reflect a positive view of employee performance, and it can be concluded that employees are likely to continue improving their performance and remain loyal to the company.
Improving the work environment is a critical factor in enhancing employee performance. Companies can achieve this goal through various means. Firstly, it is essential to provide comfortable work facilities that prioritize the well-being of the employees. This program can be achieved by providing ergonomic chairs and tables that support good posture, clean restrooms, and recreation areas that can help employees relax and reduce stress. It is also necessary to ensure that the physical conditions of the work environment are conducive to productivity. This includes good lighting that helps reduce eye strain, a comfortable temperature that allows employees to work efficiently, and low noise levels that prevent distractions.

Secondly, companies should offer flexible work schedules that enable employees to balance their work and personal lives effectively. This offer can be achieved through working from home, part-time work, or an adjustable schedule. Companies should also accommodate individual needs, such as family responsibilities or medical needs, which can help boost employee morale. Training and employee development opportunities can also enhance employee skills and knowledge, leading to better job performance and increased employee satisfaction.

Thirdly, training and development programs should be implemented to ensure employees remain current with the latest industry trends and technologies. This program can include mentoring or leadership training to help employees advance their careers. Companies can also motivate and appreciate employees by providing recognition and awards for their hard work. Incentive programs such as performance bonuses or promotions can also be implemented to encourage employees to strive for excellence and achieve their goals. Finally, regular employee satisfaction surveys should be conducted to assess satisfaction levels and identify areas for improvement. Companies should listen to employee feedback and take concrete actions to address concerns or issues. By creating a positive work environment that prioritizes employee well-being and development, companies can enhance employee productivity and retention, ultimately leading to better business outcomes.

A hypothesis test conducted at a 5% significance level determined that when the p-value is less than $\alpha = 0.05$, H2 is accepted to indicate a significant relationship between the independent and dependent variables. The results in Table 2. show that the calculated t-workload is 6.135 with a significance t-value of 0.015, indicating that employee performance is affected by workload. This result supports the second hypothesis of the study. Previous studies also found that workload significantly impacts employee performance. However, this research suggests that workload can be beneficial if it is kept at reasonable levels set by the company. The mean test results show respondents had a high workload but still positively perceived employee performance. Therefore, it is concluded that excessive workload can lead to declining employee performance. However, it does not have a significant effect.

Upon conducting a hypothesis test to determine the existence of a significant relationship between the independent and dependent variables in the study, a 5% level of significance was utilized. If the p-value is less than 0.05, the null hypothesis H3 is accepted. As per Table 2., the calculated t-value for work motivation is 3.209, with a significance value of 0.032. This result indicates that work motivation significantly impacts employee performance, thereby leading to the acceptance of the third hypothesis of the study. Interestingly, these findings align with the previous studies, which also found that work motivation significantly affects employee performance.

The amount of work an employee has to do can significantly affect their job performance. Suppose an employee needs to be given more work or work more challenging for them. In that case, it can harm their productivity, well-being, and the quality of their work. There are several ways that an excessive workload can affect employee performance. Firstly, it can cause high stress and anxiety levels, interfering with their cognitive and physical abilities ultimately reducing their performance. Secondly, employees who are constantly overworked may experience fatigue, which can reduce their concentration and productivity. Thirdly, employees with a high workload
may rush their work, leading to mistakes and decreased quality. This condition can cause employees to lose motivation and feel overwhelmed by their workload, leading to decreased job satisfaction and, ultimately, leaving the job. Finally, an excessive workload can cause employees to feel too stressed or exhausted to come to work regularly, resulting in increased absenteeism rates. Therefore, companies need to ensure that the workload given to employees is balanced and follows their abilities and resources. By providing the proper support and a good balance between the tasks assigned, companies can help prevent the negative impact of an excessive workload on employee performance.

Based on the study results, the current level of work motivation is good and has played a crucial role in contributing to the positive outcome observed. Notably, the study utilized a 5% level of significance, indicating that the findings are statistically significant and can be generalized to the larger population. Overall, the results of this study underscore the importance of work motivation in enhancing employee performance and highlight the need for organizations to prioritize employee motivation to achieve better outcomes.

The motivation to work plays a crucial role in determining employee performance. Motivation refers to the internal or external drive that propels an individual to act or perform in their job. Intrinsically motivated employees who possess intrinsic motivation tend to be more productive. They work harder and are more efficient in completing their tasks. High work motivation enables employees to concentrate on details, carry out their work thoroughly, and attain higher-quality outcomes. Motivated employees are likelier to take the initiative and contribute with creative ideas and solutions. They feel enthusiastic about participating in process improvement and innovation. Motivated employees exhibit a higher level of resilience to pressure and challenges. They are more likely to look for solutions rather than avoid problems. High work motivation helps employees stay focused on the goals set. They feel driven to accomplish work targets and meet expectations. Therefore, companies must recognize the importance of work motivation and encourage it among employees. This can include recognition, rewards, training and development, opportunities for career growth, and creating a work environment that supports employee satisfaction and motivation. Employees who feel motivated are more likely to achieve high performance and contribute positively to the company's success.

5. Conclusion
The research results show that the work environment, workload, and motivation influence employee performance. The company now hopes to provide the best service to quickly make it easier for patients to access information about their needs. Therefore, each section or unit can optimize all the activities that will be carried out, then evaluate every time what the employees have done, primarily as the company always provides rewards and punishments to employees who have worked well and in line with the vision and mission implemented by the company. In the research conducted by researchers, there are several limitations to the research results as follows: First, this research only examines three factors that influence employee performance, namely work environment, workload, and work motivation. Meanwhile, there are still many measurements for employee performance. Researchers used accidental sampling techniques so that not all employees were respondents in this study. Thus, further research can use other factors influencing employee performance, such as loyalty and engagement. Furthermore, developing a research model involving conditional variables as moderating variables is necessary.

References


Ethics declarations

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Availability of data and materials
Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Competing interests
No potential competing interest was reported by the authors.