

**JAM**

Jurnal Aplikasi Manajemen  
Journal of Applied Management  
Volume 21 Issue 4  
December 2023

21 | 4 | 2023

Received April '23  
Revised April '23  
Accepted July '23

**INDEXED IN**

DOAJ - Directory of Open  
Access Journals  
SINTA - Science and Technology  
Index  
Dimensions  
Google Scholar  
ResearchGate  
Garuda  
IPI - Indonesian Publication  
Index  
Indonesian ONESearch

**CORRESPONDING AUTHOR**

Fivi Kurniawati  
Faculty of Management,  
Adhirajasa Reswara Sanjaya  
University,  
Indonesia

**EMAIL**

fvkrnwt@gmail.com

**OPEN ACCESS**

e ISSN 2302-6332  
p ISSN 1693-5241



Copyright (c) 2023 Jurnal Aplikasi Manajemen

## THE EFFECT OF WORKLOAD, BURNOUT, AND WORK MOTIVATION ON NURSE PERFORMANCE

**Fivi Kurniawati**

Postgraduate Program of Management, Faculty of Management,  
Adhirajasa Reswara Sanjaya University, Indonesia

**Muhammad Fiarry Fikaris**

Graduate School of Medical Sciences, University of Groningen,  
Netherlands

**Ika Septiana Eryani**

Graduate School of Health Policy & Management,  
Erasmus University Rotterdam, Netherlands

**A. Rohendi****Bayu Wahyudi**

Faculty of Management, Adhirajasa Reswara Sanjaya University,  
Indonesia

**Abstract:** Nurse Performance plays a crucial role in ensuring the quality of service delivery within hospitals. However, nurses often face significant stress due to heavy workloads and the demanding nature of patient care, leading to burnout. In order to support optimal performance, it is imperative for nurses to possess strong work motivation. This study aimed to investigate the impact of workload, burnout, and work motivation on nurse performance within a specified public hospital in Batam. An observational analytic approach with non-probability sampling was employed, and the study included 111 participants. Data analysis and processing were conducted using a statistical software program. The findings revealed that workload and burnout exerted a negative influence on nurse performance, while work motivation had a positive effect. Workload, burnout, and work motivation collectively and partially impacted nurse performance. Consequently, it is vital for hospital management to prioritize factors that affect nurse performance. Through effective management and the mitigation of stressors in the hospital work environment, the overall well-being of healthcare workers can be improved, resulting in elevated levels of health. Notably, this study utilized the latest literature references and research instruments to ensure robust findings.

**Keywords:** Workload, Burnout, Work Motivation, Nurse Performance

**CITATION**

Kurniawati, F., Fikaris, M. F., Eryani, I. S., Rohendi, A., and Wahyudi, B. 2023. The Effect of Workload, Burnout, and Work Motivation on Nurse Performance.. *Jurnal Aplikasi Manajemen*, Volume 21, Issue 4, Pages 915-927. Malang: Universitas Brawijaya. DOI: <http://dx.doi.org/10.21776/ub.jam.2023.021.04.05>.

## INTRODUCTION

In Indonesia, the current demographic landscape reveals that 5.6% comprises individuals aged 65 and above, with 0.8% representing those aged 80 and above. However, projections indicate a significant shift in these figures by 2050, with an anticipated increase to 15% for the 65 and above age group and 2.8% for individuals aged 80 and above (OECD, 2019). The demand for healthcare is projected to increase due to these demographic changes. Healthcare providers encounter substantial challenges in maintaining the accessibility and affordability of healthcare services. Consequently, it becomes imperative for these organizations to adapt and enhance their operational effectiveness. In pursuit of this objective, organizations must exert control over employees' job performance to ensure the optimal outcomes (Krijgsheld et al., 2022; Musau et al., 2008). The World Health Organization (WHO) has devised a framework consisting of six building blocks (WHO, 2010, 2023c) to fortify national health systems and progress towards achieving universal health coverage. These building blocks underscore the fundamental components of a robust health system, encompassing the health workforce, leadership and governance, service delivery, health system financing, medical products, vaccines and technology, and health information systems (UN, 1966; WHO, 2023b). The health workforce encounters substantial challenges, with projections indicating that it will become one of the most financially burdensome sectors. By 2030, there is an expected shortage of 10 million health workers, primarily affecting low- and middle-income countries (LMICs) (WHO, 2023b; WHO and WB, 2017). Based on a recent report, the density of nurses and midwives per 10,000 individuals in the Southeast Asia between 2014 and 2021 was recorded at a mere 20.4, significantly below the average observed in European nations (WHO, 2023a). The pandemic has profoundly impacted the mental health of medical professionals, particularly nurses, leading to a range of mental health issues. Throughout the pandemic, estimates reveal anxiety among health professionals ranging from 23% to 46%, while burnout rates have been reported between 41% and 52% (Rahim et al., 2022). Hence, making strategic investments in the health professionals can significantly enhance the quality of a nation's health system. It is imperative

to prioritize and ensure that the health and well-being of these professionals are adequately addressed and supported. By doing so, their individual health can be safeguarded, and their ability to deliver high-quality healthcare services can also be sustained and optimized (Søvold et al., 2021; WHO, 2016).

A hospital, defined as a comprehensive healthcare institution encompassing inpatient, outpatient, and emergency services, is responsible for developing, implementing, and maintaining the utmost quality of health services, serving as a critical benchmark for patient care. This intricate process of service delivery significantly impacts the overall caliber of the healthcare services provided within hospital settings (MoH, 2018). Hence, it is imperative to allocate adequate resources and foster a culture of professionalism among healthcare professionals to enhance the future quality of healthcare services. This approach will have a positive influence on consumer loyalty and satisfaction (Hastuti et al., 2021). As an indispensable element in achieving optimal health outcomes in Indonesia, effective management of human resources in the healthcare sector is paramount. It entails aligning the planning process with the ever-evolving dynamics and needs of the community (RI, 2014). Nursing stands as the largest healthcare specialty in terms of workforce size (Wakefield et al., 2021). As of 2018, Indonesia had over 600,000 registered nurses, with a rising trend in density (MoH, 2020). However, with the increasing population and prevalence of diseases in Indonesia, the challenges faced by the nursing workforce also grow. The unequal distribution of the nurses across the country, along with the emerging mental health issue, particularly after the pandemic, has garnered attention (Asa et al., 2022; MoH, 2020). According to a study, the health workforce endured moderate anxiety, stress, and depression during the pandemic. It is worth noting that even minor fluctuations in their anxiety and stress levels can considerably impact their overall performance (Muliantino et al., 2021).

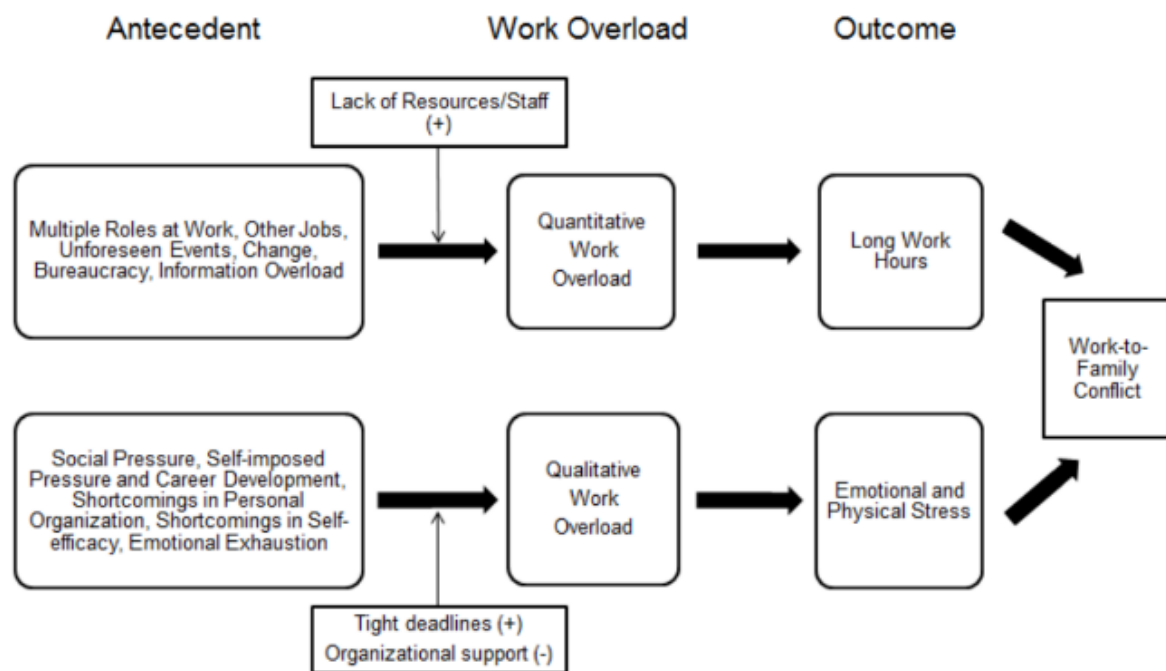
Performance in every occupation is primarily determined by each employee's unique abilities and capabilities to fulfill the required tasks. Each employee possesses their own skills, knowledge, and competencies that contribute to their performance and productivity in the workplace (Guna-

wan and Sondakh, 2019). Hospital occupations are characterized by significant mental demands stemming from many factors, including high workloads and diverse job requirements. These demands are often attributed to various factors, such as a sizable patient population, heavy workloads, shift work, and insufficient staffing levels among healthcare professionals (Rostami et al., 2021). Nurses play a vital role in hospital settings and are exposed to higher risks than other healthcare practitioners. It heightened risk stems from their extensive engagement with patients, long and rotating work shifts, and fatigue.

Furthermore, nurses experience an increased workload due to factors such as high work pressure, tight deadlines, long working hours, and exacerbated by the physical demands of the work environment. Insufficient provision of resources and facilities, varying family requirements, and inadequate team communication further contribute to the workload burden nurses face (Hafeez, 2018). Moreover, the combination of working long hours in a highly stressful and demanding environment can expedite the development of burnout among nurses. This in turn, increases the risk of medical errors, depression, and a decline in the quality of service delivery. Consequently, the incidence of occupational hazards among nurses has been reported to be four times higher than the other professions (Dimitriu et al., 2020; Drennan and Ross, 2019). Hence, nurses require robust motivation to effectively cope with the demanding nature of their hospital work, which significantly impacts their performance. Motivation serves as a driving force, encouraging nurses to work diligently and enthusiastically, ultimately leading to increased work productivity (Umpung et al., 2020). Enhancing the psychological conditions within the workplace and addressing these factors can help prevent various challenges and promote the well-being of employees (Eskandari et al., 2017). Further research is needed in Indonesia to examine the impact of factors such as workload, burnout, and motivation on the performance of healthcare professionals. These studies will enable the development of appropriate policies and interventions to support the healthcare providers in delivering quality healthcare ser-

vices (Wakefield et al., 2021).

This study was conducted at a specific public hospital in Batam following Government Regulation No. 47 of 2021, which mandates that hospitals provide safe, high-quality, non-discriminatory, and effective healthcare services with a focus on patient well-being and adherence to service standards. Nurses were selected as respondents for this study due to their direct patient interaction and comprehensive understanding of the daily healthcare developments. The World Health Organization (WHO) recommends a nurse-to-population ratio of at least 1.5 per 1000 population. However, the Ministry of Health (2016) data revealed that the nurse-to-population ratio in Kepulauan Riau was 0.5, significantly below the WHO recommendation. In order to meet patient expectations and enhance patient safety, nurses must maintain professionalism in their work despite the additional pressures of non-nursing responsibilities. It is particularly relevant, as a study has shown that nurses in the Southeast Asian hospitals often experience overwork due to the demands of these non-nursing tasks (Pamungkas and Sridadi, 2020). Identifying the impact of workload, burnout, and work motivation on nurses' performance serves as valid evidence to improve the quality of health services. Based on the rationale mentioned above, this study investigated the effects of workload, burnout, and work motivation on nurses' performance within Batam Public Hospital. By examining these factors, the study aims to contribute valuable insights and empirical evidence to inform strategies and interventions for enhancing nursing performance and ultimately elevating the overall quality of healthcare services. Efficient management and mitigation of the stressors in hospital work environments have been shown to positively impact the well-being of healthcare workers, resulting in improved levels of health (Rostami et al., 2021). Consequently, their efficiency and effectiveness in delivering healthcare services are correspondingly enhanced. Notably, nurse performance plays a significant role in influencing patient satisfaction and service quality. Moreover, the provision of excellent service quality has the potential to increase the financial revenue of the hospital (Hee et al., 2016).



**Figure 1. The Framework of Workload Concept**

## LITERATURE REVIEW

### Workload

The workload is divided into quantitative and qualitative. The quantitative workload relates to the large amount of work, working too fast or too hard, too many things to do, and excessive pressure to get the job done. While qualitative workload is related to the quality or results of work that is not following what is expected or do not feel that they have enough time to give their best (Kuschel, 2015).

### Burnout

Over the past decade, burnout has emerged as a significant psychosocial issue resulting from prolonged and unmanageable work-related stress. Burnout is characterized by excessive physical and mental exhaustion caused by the work demands, heavy workloads, negative responses to work, withdrawal from work, decreased productivity, and feelings of incompetence (Dewa et al., 2017). This syndrome can lead to reduced vigilance among healthcare workers, neglect of self-protection, and an increased risk of infections. Unaddressed can result in depression, suicidal tendencies, and various medical conditions (Shanafelt et al., 2010).

Burnout comprises three dimensions: Emo-

tional Exhaustion (EE), Depersonalization (DP), and Low Personal Accomplishment (PA). Emotional exhaustion refers to excessive fatigue and depletion of physical and mental energy due to work demands or heavy workloads. Depersonalization, also known as cynicism, involves negative responses to work, withdrawal from work, reduced enthusiasm, and decreased patient engagement. Low personal accomplishment reflects diminished feelings of achievement, often stemming from decreased productivity, self-perceived incompetence, and a sense of failure in work efforts (Maslach and Jackson, 1981). Burnout is a tangible phenomenon that can manifest in various ways. Effective stress management strategies can help prevent burnout and foster a more productive work environment (Dimitriu et al., 2020).

### Work Motivation

Motivation plays a crucial role in driving individuals to engage in activities aimed at achieving specific goals. It significantly influences the quality of work produced by individuals. Motivation can be defined as a factor that stimulates or supports human behavior, leading individuals to strive hard and attain optimal outcomes (Mangkunegara, 2009). According to Hee et al. (2016), mo-

tivation encompasses two dimensions: intrinsic and extrinsic motivation. Intrinsic motivation arises from internal factors and propels individuals to pursue personal and organizational goals based on their perception of a job or task as interesting, challenging, and enjoyable. On the other hand, extrinsic motivation stems from external factors. It guides individuals to fulfill personal and organizational goals through instructions or coercion, driven by the expectation of receiving rewards in return. Extrinsic motivation can include monetary compensation, awards, benefits, bonuses, and favorable working conditions.

### Performance

According to Gibson (1997 in Pamungkas and Sridadi, 2020), performance is influenced by three factors: individual factors, psychological factors, and organizational factors. Individual factors encompass workload-related aspects such as abilities, skills, and work experience. Psychological factors include elements such as perception, role, attitude, and motivation, with fatigue being a significant component. Organizational variables, such as leadership and work systems, also play a crucial role. Notably, the healthcare professionals, particularly nurses, are recognized for experiencing elevated stress levels due to the fatigue associated with delivering the patient care (Odonkor and Frimpong, 2020).

## HYPOTHESIS DEVELOPMENT

### Workload and Nurse Performance

The workload is essential, and it is the main trigger of work stress and the main cause of mental health disorders (ILO, 2016). The factors that determine the workload are organizational elements, cultural norms, excessive development of information technology, and commitments outside work, such as family commitments (Kuschel, 2015). A study by Pamungkas and Sridadi (2020) on 40 low-care inpatient service nurses in X Hospital Surabaya showed that there was a significant negative effect between work overload and nurse performance directly or indirectly. Additionally, the results of a study by Van Bogaert et al. (2013) showed a significant relation between workload and quality of care.

**H1:** Workload has a significant negative effect on the performance of nurses.

### Burnout and Nurse Performance

The causes of burnout that were already identified are administrative work, being confronted with suffering, individual decision-making, relationships with colleagues, relationships with patients, relationships with relatives of patients, and time pressure (Odonkor and Frimpong, 2020). Burnout can occur in all professions (de Hert, 2020). According to a study by Ruga et al. (2022) on 84 inpatient service nurses in Bhakti Asih General Hospital Tangerang show that there is a relationship between physical and mental workload on nurse performance. Similar findings were found in a study by Pamungkas and Sridadi (2020), which concluded that burnout had a significant impact on nurse performance.

**H2:** Burnout has a significant negative effect on the performance of nurses.

### Work Motivation and Nurse Performance

According to research by (Suharno and Despinur, 2017) on the administrative staff of Jakarta State University, employee performance is positively impacted by work motivation. In addition, research by Hastuti et al. (2021) in Mamuju District demonstrates the same results that work motivation has a positive and statistically significant effect on employee performance.

**H3:** Work motivation has a significant positive effect on the performance of nurses.

**H4:** Workload, burnout, and work motivation affect the performance of nurses.

## METHOD

This quantitative study utilized an observational analytic approach employing a cross-sectional method. The research was conducted in November 2022 at a specific public hospital in Batam. The study focused on registered nurses as participants and employed non-probability sampling with an accidental sampling technique. Inclusion criteria required permanent nurses with a minimum work experience of six months. Data was collected using a questionnaire distributed to 120 eligible nurses, resulting in 111 fully completed responses, representing a response rate of 92.5%.

The first section of the questionnaire gathers respondents' demographic information, encompassing age, gender, marital status, recent education, and years of service. The second section of the



questionnaire is adapted from the NASA Task Load Index (NASA-TLX) by (Hart and Staveland (1988) to assess workload data. This section comprises six questions, each corresponding to a distinct workload dimension: Mental Demand (MD), Physical Demand (PD), Temporal Demand (TD), Performance (OP), Effort (EF), and Frustration (FR). Each respondent was asked to rate each dimension on a scale ranging from 0 to 100. The third section adopted the Maslach Burnout Inventory – Human Services Survey (MBI-HSS) to obtain data on mental stress (Maslach and Jackson, 1981). There are 22 items divided into three dimensions. There are nine items on Emotional Exhaustion (EE) dimension, five items on Depersonalization (DP) dimension, and eight items on the Personal Accomplishment (PA) dimension. Each respondent was asked to provide an assessment with a 7-point Likert scale (0-6) as follows: never (0), several times a year (1), less than or once a month (2), several times a month (3), once a week (4), several times a week (5), and every day (6).

Furthermore, the Multidimensional Work Motivation Scale (MWMS) is adopted in fourth part to assess work motivation (Gagné et al., 2015). There are a total of 19 items, and respondents were asked to provide an assessment with a 7-point Likert scale (1-7), namely: not for this reason (1), very little (2), a little (3), enough/moderate (4), strong (5), very strong (6), and really for this reason (7). The last section, designed to measure performance, is adapted from the Individual Work Performance Questionnaire (IW PQ) developed by Koopmans et al. (2014) and translated into Indonesian by Widyastuti and Hidayat (2018). It consists of 18 items, which are categorized into three dimensions: task performance, contextual performance, and counterproductive work behavior. Respondents were asked to rate each item on a 5-point Likert scale ranging from 0 to 4, with the following options: rarely (0), occasionally (1), occasional (2), very often (3), and always (4).

### Validity and Reliability Test

The validity test is employed to assess the credibility and legitimacy of questionnaire questions. It involves comparing the Pearson correlation coefficient for each item with the critical value, denoted as  $r_{table}$ . The item is deemed valid if the computed correlation coefficient ( $r_{count}$ ) is greater

than the critical value ( $r_{table}$ ). In this study, the validity test was conducted with a significance level ( $\alpha$ ) of 5%, and the  $r_{table}$  value was found to be 0.1848. Consequently, an item is considered valid if  $r_{i} > 0.1848$ .

On the other hand, as per Ghazali (2018), the reliability test is employed to assess whether the research instrument, in this case, the questionnaire, can be consistently used multiple times or by the same respondent. The reliability is calculated using the Alpha-Cronbach formula. A reliable indicator is expected to have a correlated item-total correlation value of at least 0.60. Based on the results of the validity test of the correlation coefficient, it is determined that for each variable,  $r_{count} > r_{table}$  for all question items. The result showed that each question item was valid, and then the reliability test was performed.

## RESULTS

### Respondent Characteristics

This study involved 111 respondents, who were distributed across various work units within the hospital. Based on the questionnaire results, the respondents' profiles were analyzed and divided into different characteristics. As shown in Table 1, most of the respondents were female (86.49%), while the remaining (13.51%) were male. Regarding age distribution, the highest percentage of respondents fell within the 30-50 age group (63.96%), and only 3.60% were aged above 50 years. Regarding educational qualifications, most respondents held diplomas, making up 70.27% of the sample. Furthermore, a significant portion of the respondents (65.77%) had work experience exceeding five years.

The Classic Assumption Test serves the purpose of obtaining estimates and initial conditions to facilitate the conduction of linear regression tests. This test is performed in the early stages after data collection. The traditional assumption test comprises assessments for normality, multicollinearity, and heteroscedasticity. This study conducted the normality test to determine whether the residual data follows a normal distribution (Ghozali, 2018). The Kolmogorov-Smirnov test was employed for the normality test since the sample size exceeded 30. The conclusion from the Kolmogorov-Smirnov normality test is derived by comparing the probability value (p-value) with the significant

ce level ( $\alpha$ ) set at 0.05. The Asymp. Sig. (2-tailed) value is greater than 0.05 (0.051) for the Kolmogorov-Smirnov test, indicating that the normality assumption is met.

**Table 1. Characteristics of Respondents**

Data Demographic	n	%
<b>Gender</b>		
Male	15	13,51
Female	96	86,49
<b>Age</b>		
< 30 years old	36	32,44
30 – 50 years old	71	63,96
> 50 years old	4	3,60
<b>Educational Level</b>		
Diploma	78	70,27
Bachelor	28	25,23
Ners	5	4,50
<b>Working Period</b>		
< 1 year	17	15,31
1 – 5 years	21	18,92
> 5 years	73	65,77

Source: Primary Data (2022)

The multicollinearity test is employed to examine whether a correlation exists between independent variables within a regression model (Ghozali, 2018). Multicollinearity is deemed to be present when such correlation occurs. The Variance Inflation Factor (VIF) and Tolerance values are used to assess the occurrence of multicollinearity. In a good regression model, the Tolerance value should be greater than 0.10, and the VIF should be less than 10. In the Multicollinearity test conducted in this study, the VIF values ranged from 1.002 to 1.007, and the Tolerance values were between 0.993 and 0.998, signifying the absence of multicollinearity symptoms.

On the other hand, the heteroscedasticity test aims to determine whether the residual observations of a regression model exhibit unequal variances (Ghozali, 2018). The Glejser test was utilized for the heteroscedasticity test in this study. If the probability value (p-value) exceeds 0.05 or 5% (Sig. > 0.05), it indicates that the assumption of homoscedasticity is met, signifying the absence of

heteroscedasticity symptoms. The Heteroscedasticity test using the Glejser method resulted in a Sig. Value greater than 0.05, indicating no evidence of heteroscedasticity.

**Multiple Linear Regression Analysis**

Multiple linear regression analysis measures the strength of the relationship between two or more variables and reveals the direction of the relationship between independent and dependent variables (Ghozali, 2018).

**Table 2. Multiple Linear Regression Analysis Result**

Variable	Unstandardized Coefficients $\beta$	Sig.
(Constant)	38.789	
Workload	- 0.031	0.036
Burnout	- 0.222	0.011
Work Motivation	0.217	0.012

Source: Processed Data (2022)

The regression analysis results reveal the following coefficients for the respective variables: Workload (X1): The regression coefficient for the workload is negative, indicating that for every 1-point increase in workload while keeping other variables constant, performance is expected to decrease by 0.031, and vice versa. Burnout (X2): The regression coefficient for burnout is also negative, suggesting that for every 1-point increase in burnout while keeping other variables constant, performance is projected to decrease by 0.222, and vice versa. Work motivation (X3): The regression coefficient for work motivation is positive, signifying that for every 1-point increase in work motivation while keeping other variables constant, performance is anticipated to increase by 0.217, and vice versa.

**Hypothesis Testing**

The primary objective of hypothesis testing is to determine whether the independent variables have a partial or simultaneous effect on the dependent variable (Ghozali, 2018). In this study, multiple linear regression analysis was employed to predict the degree of relationship between workload, burnout, and work motivation.

Table 3. Partial and Simultaneous Tests (t and F - Test)

Variable	Result		Sig.	Description
	t-test	F-test		
Workload (X1)	-2.127		0.036	Affected
Burnout (X2)	-2.578		0.011	Affected
Work Motivation (X3)	2.559		0.012	Affected
X1, X2, X3 on Nurse Performance (Y)		5.789	0.001	Affected

Source: Primary Data (2022)

The hypothesis test results are divided into two categories: simultaneous tests using the F-test and partial tests using the t-test. Simultaneous tests were conducted to ascertain the combined effect of multiple independent variables on a single dependent variable. The criteria for determining significance are if the p-value is less than 0.05 or Fcount is greater than Ftable. For a sample size of 111, three independent variables, and a significance level of 5%, the Ftable value is 2.688.

On the other hand, the partial tests were conducted to assess the individual effect of each independent variable on the dependent variable. It was done using the t-test statistic by comparing the p-value with a significance level ( $\alpha$ ) of 0.05 and comparing the tcount with the ttable. If the p-value is less than 0.05 or if the tcount is positive and greater than ttable, or if it is negative and less than -ttable, then the independent variable has a partial effect on the dependent variable. For a sample size of 111, three independent variables, and a significance level of 5%, the ttable value is 1.982. The results of both partial and simultaneous tests (t and F tests) are presented in Table 3.

## DISCUSSION

The present study explored the relationship between workload, burnout, work motivation, and nurse performance at a public hospital in Batam. Our statistical analysis revealed significant findings for each independent variable, shedding light on their impact on nurse performance.

### Workload and Nurse Performance

Our results demonstrated a significant negative effect of workload on the nurse performance. These findings are consistent with previous research conducted by Silaban et al. (2021) and Yosia-

na et al. (2020), highlighting the adverse impact of excessive workload on nurse performance. Based on the results of the study by Andiani and Jayanagara (2022), it can be concluded that Workload has a negative and significant effect on medical performance, while Work Stress has a negative impact but is not significant. Furthermore, the study found that high workload and work stress are experienced by medical personnel, leading to difficulties in completing tasks and feelings of fatigue, depression, and confusion. On the other hand, the research by Pourteimour et al. (2021) found no significant correlation between mental workload and job performance among nurses in COVID-19 care units during the pandemic. However the study by Susiarty et al. (2019) also found that workload has a positive and significant impact on nurses' job stress, while job stress has a negative and significant effect on the performance of nurses. The job stress experienced by nurses can reduce their performance.

As workload increases, nurses may experience heightened stress and fatigue, ultimately impacting their efficiency and effectiveness in patient care (Pamungkas and Sridadi, 2020). Hospitals should implement evidence-based staffing and scheduling practices to address this issue to ensure adequate rest and recovery time for nurses between shifts. Additionally, workload distribution should consider the individual nurse capabilities and experience to ensure a balanced and manageable workload for all nurses.

### Burnout and Nurse Performance

Our study found a significant negative effect of burnout on nurse performance. It aligns with the conclusions of Lim et al. (2022) and An et al. (2020), who also observed a direct negative rela-



relationship between burnout and nurse performance. Bernales-Turpo et al. (2022) also found that work engagement mediates the relationship between job burnout, professional self-efficacy, life satisfaction, and job performance in healthcare workers. One in three U.S. nurses had symptoms of the burnout, and burnout doubled the odds of low work performance (Dyrbye et al., 2019). Burnout encompasses symptoms such as emotional exhaustion, depersonalization, and reduced personal achievement, which can substantially impact nurse performance (Ruga et al., 2022; Gong et al., 2019). To mitigate burnout, hospitals must prioritize creating a supportive and harmonious work environment that addresses the well-being of nurses. Implementing programs that provide emotional support, resilience training, and stress management techniques can help nurses cope with the challenges of their profession and improve their performance.

### **Work Motivation and Nurse Performance**

Our study revealed a significant positive effect of work motivation on the nurse performance. This finding aligns with research conducted by Parashakti et al. (2020) and Deressa and Zeru (2019), emphasizing the importance of motivated nurses in achieving higher dedication and productivity. Work motivation is a significant factor affecting nurse performance in hospitals (Gunawan et al., 2019; Stefan et al., 2020; Adriyanti et al., 2022). Hospitals can foster work motivation among nurses by recognizing their efforts, offering opportunities for skill development and career advancement, and cultivating a culture of teamwork and collaboration. Empowering nurses with autonomy and decision-making authority can also enhance their motivation and job satisfaction, ultimately leading to improved performance. Work motivation can be increased by giving rewards.

### **Workload, Burnout, and Work Motivation on Nurse Performance**

The F-test analysis revealed that workload, burnout, and work motivation significantly influence nurse performance, supporting our fourth hypothesis (H4). It emphasizes the interconnectedness of these variables in determining nurse performance. As such, hospitals must recognize the interplay of workload, burnout, and work motivation and implement comprehensive strategies to

optimize nurse performance. Addressing these factors can lead to improved healthcare service quality and overall nurse well-being.

### **IMPLICATIONS**

Based on the results of this research, hospital management should make a performance analysis of health workers because there are many public complaints about the services in the hospital. In addition, to improve the quality of hospital services, it is necessary to conduct some training and update knowledge for all health workers, especially nurses who treat patients directly. For structural nurses, it is better to attend workshops and seminars to develop knowledge and managerial strategies. Periodic audits also need to be carried out regarding the completeness of medical record filling, the completeness of the emergency equipment and medicines in each unit, and the management of emergency patients.

The workload, burnout, and work motivation also need attention. Nurses should do their job in accordance with their main duties and functions to prevent work overload. The burnout can be overcome by creating an atmosphere or work environment that is comfortable and harmonious. Meanwhile, work motivation can be increased with rewards. The authors hope this research can be useful to help management improve nurse performance to get better service quality and patient satisfaction.

### **RECOMMENDATIONS**

Future researchers are expected to be able to use more variables and hope to use more specific samples in order to reduce the confounding factors and also adopt qualitative studies needed to explain further the factors of nurse performance. The weaknesses of this study are the respondents are not evenly distributed. The respondents were from several work units, but each unit had a different number of respondents and different tasks. In addition, due to the large number of questionnaire items that needed to be filled out and the limited time, some respondents did not fill out the questionnaire's entirety.

### **CONCLUSIONS**

The workload, burnout, and work motivation partially and simultaneously affect nurse per-

formance. Workload and burnout had a negative and significant effect on nurse performance, while work motivation had a positive and significant impact on nurse performance. Nurses should carry out their duties according to the job desk and not be burdened by non-nursing tasks to avoid an excessive workload. Creating a comfortable and harmonious atmosphere or work environment can decrease burnout. In the meantime, rewards can be used to improve work motivation. This research can provide scientific evidence regarding the factors that can affect the performance of nurses, thereby enhancing the quality of health services.

## REFERENCES

- Adriyanti, G., Revida, E., and Fauzan, I. 2022. Effect of Ability and Motivation on Employee Performance in Complete Systematic Land Registration Services at the Pematangsiantar City Land Office. *International Journal of Research and Review*, 9(7), pp. 617–622. DOI: <https://doi.org/10.52403/ijrr.20220767>.
- An, M., Shin, E. S., Choi, M. Y., Lee, Y., Hwang, Y. Y., and Kim, M. 2020. Positive Psychological Capital Mediates the Association between Burnout and Nursing Performance Outcomes among Hospital Nurses. *International Journal of Environmental Research and Public Health*, 17(16), pp. 5988. DOI: <https://doi.org/10.3390/ijerph17165988>.
- Andiani, T. K. and Jayanagara, O. 2022. Effect of Workload, Work Stress, Technical Skills, Self-Efficacy, and Social Competence on Medical Personnel Performance. *Aptisi Transactions on Technopreneurship (ATT)*, 5 (2), pp. 120–129. DOI: <https://doi.org/10.34306/att.v5i2.301>.
- Asa, G. A., Fauk, N. K., Ratu, M., and Ward, P. R. 2022. The Impact of Working in COVID-19 Hospital on Indonesian Nurses' Mental Health and Well-being: A Qualitative Study. *BMC Nursing*, 21(1), pp. 1–11. DOI: [10.1186/s12912-022-01131-6](https://doi.org/10.1186/s12912-022-01131-6).
- Bernales-Turpo, D., Quispe-Velasquez, R., Flores-Ticona, D., Saintila, J., Ruiz Mamani, P. G., Huancahuire-Vega, S., Morales-García, M., and Morales-García, W. C. 2022. Burnout, Professional Self-Efficacy, and Life Satisfaction as Predictors of Job Performance in Health Care Workers: The Mediating Role of Work Engagement. *Journal of Primary Care and Community Health*, 13, 215013192211018. DOI: <https://doi.org/10.1177/21501319221101845>.
- De Hert, S. 2020. Burnout in Healthcare Workers: Prevalence, Impact and Preventative Strategies. In *Local and Regional Anesthesia*, Volume 13, pp. 171–183. Dove Medical Press Ltd. DOI: <https://doi.org/10.2147/LRA.S240564>.
- Deressa, A. T. and Zeru, G. 2019. Work Motivation and Its Effects on Organizational Performance: The Case of Nurses in Hawassa Public and Private Hospitals: Mixed Method Study Approach. *BMC Research Notes*, 12 (1). DOI: <https://doi.org/10.1186/s13104-019-4255-7>.
- Dewa, C. S., Loong, D., Bonato, S., and Trojanowski, L. 2017. The Relationship between Physician Burnout and Quality of Healthcare in Terms of Safety and Acceptability: A Systematic Review. *BMJ Open*, 7(6). DOI: <https://doi.org/10.1136/bmjopen-2016-015141>.
- Dimitriu, M. C. T., Pantea-Stoian, A., Smaranda, A. C., Nica, A. A., Carap, A. C., Constantin, V. D., Davitoiu, A. M., Cirstoveanu, C., Bacalbasa, N., Bratu, O. G., Jacota-Alexe, F., Badiu, C. D., Smarandache, C. G., and Socea, B. 2020. Burnout Syndrome in Romanian Medical Residents in Time of the COVID-19 Pandemic. *Medical Hypotheses*, 144(May), pp. 109972. DOI: <https://doi.org/10.1016/j.mehy.2020.109972>.
- Drennan, V. M. and Ross, F. 2019. Global Nurse Shortages - The Facts, the Impact, and Action for Change. *British Medical Bulletin*, 130(1), pp. 25–37. DOI: <https://doi.org/10.1093/bmb/ldz014>.
- Dyrbye, L. N., Shanafelt, T. D., Johnson, P. O., Johnson, L. A., Satele, D., and West, C. P. 2019. A Cross-Sectional Study Exploring the Relationship Between Burnout, Absenteeism, and Job Performance among American Nurses. *BMC Nursing*, 18(1). DOI: <https://doi.org/10.1186/s12912-019-0382-7>.
- Eskandari, D., Jafari, M. J., Mehrabi, Y., Kian, M. P., Charkhand, H., and Mirghotbi, M. 2017. A Qualitative Study on Organizational Fac-

- tors Affecting Occupational Accidents. *Ira-  
nian Journal of Public Health*, 46(3), pp.  
380–388.
- Gagné, M., Forest, J., Vansteenkiste, M., Crevier-  
Braud, L., van den Broeck, A., Aspel, A.  
K., Bellerose, J., Benabou, C., Chemolli, E.,  
Güntert, S. T., Halvari, H., Indiyastuti, D.  
L., Johnson, P. A., Molstad, M. H., Naudin,  
M., Ndao, A., Olafsen, A. H., Roussel, P.,  
Wang, Z., and Westbye, C. 2015. The Mul-  
tidimensional Work Motivation Scale: Val-  
idation Evidence in Seven Languages and  
Nine Countries. *European Journal of Work  
and Organizational Psychology*, 24(2), pp.  
178-196. DOI: <https://doi.org/10.1080/1359432X.2013.877892>.
- Ghozali, I. 2018. *Aplikasi Analisis Multivariate  
dengan Program IBM SPSS*. Semarang: Ba-  
dan Penerbit Universitas Diponegoro.
- Gong, Z., Chen, Y., and Wang, Y. 2019. The In-  
fluence of Emotional Intelligence on Job  
Burnout and Job Performance: Mediating  
Effect of Psychological Capital. *Frontiers  
in Psychology*, 10. DOI: <https://doi.org/10.3389/fpsyg.2019.02707>.
- Gunawan, N. P., Hariyati, R. T., and Gayatri, D.  
2019. Motivation as a Factor Affecting Nur-  
se Performance in Regional General Hospi-  
tals: A Factors Analysis. *Enfermería Clíni-  
ca*, 29, pp. 515–520. DOI: <https://doi.org/10.1016/j.enfcli.2019.04.078>.
- Gunawan, Hananiel M. and Sondakh, Oliandes.  
2019. The Impact of Work Motivation, Wo-  
rk Engagement, and Job Satisfaction Toward  
Job Performance in PT. XYZ Surabaya. *European Journal of Business and Manage-  
ment*, 11(20), pp. 48–56. DOI: 10.7176/EJB  
M/11-20-07.
- Hafeez, S. 2018. The Impact of Job Stress on Per-  
formance of Employees: A Study of Social  
Security Hospital of District Okara and Sa-  
hiwal. In *Journal of Neuropsychology and  
Stress Management*, Vol. 3.
- Hart, S. G. and Staveland, L. E. 1988. Developm-  
ent of NASA-TLX (Task Load Index): Re-  
sults of Empirical and Theoretical Research.  
In P. A. Hancock and N. Meshkati (Eds.),  
*Human Mental Workload*, pp. 139-183. No-  
rth-Holland. DOI: [https://doi.org/10.1016/S0166-4115\(08\)62386-9](https://doi.org/10.1016/S0166-4115(08)62386-9).
- Hastuti, Haliah, and Munir, A. R. 2021. The Effect  
of Motivation and Work Environment on  
Performance Through Work Satisfaction as  
Intervening Variable on Public Health Cen-  
ter Employees in Mamuju District. *Quest  
Journals*, 9(8), pp. 44–55.
- Hee, O. C., Kamaludin, N. H., and Ping, L. L.  
2016. Motivation and Job Performance am-  
ong Nurses in the Health Tourism Hospital  
in Malaysia. *International Review of Mana-  
gement and Marketing*, 6(4), pp. 668–672.  
[www.econjournals.com](http://www.econjournals.com).
- International Labor Organization (ILO). 2016.  
*Workplace Stress: A Collective Challenge –  
World Day for Safety and Health at Work*.  
Turin-Italy: International Labor Organiza-  
tion (ILO).
- Koopmans, L., Bernaards, C. M., Hildebrandt, V.  
H., de Vet, H. C. W., and van der Beek, A.  
J. 2014. Measuring Individual Work Perfor-  
mance: Identifying and Selecting Indica-  
tors. *Work*, 48(2), pp. 229–238. DOI: <https://doi.org/10.3233/WOR-131659>.
- Krijgsheld, M., Tummers, L. G., and Scheepers, F.  
E. 2022. Job Performance in Healthcare: A  
Systematic Review. *BMC Health Services  
Research*, 22(1). DOI: <https://doi.org/10.1186/s12913-021-07357-5>.
- Kuschel, K. 2015. *Quantitative and Qualitative  
Work Overload and Its Double Effect on the  
Work-Family Interface*. No 27, Serie Work-  
ing Papers. Universidad del Desarrollo, School of Business and Economics, Santiago,  
Chile.
- Lim, S., Song, Y., Nam, Y., Lee, Y., and Kim, D.  
2022. Moderating Effect of Burnout on the  
Relationship between Self-Efficacy and Job  
Performance among Psychiatric Nurses for  
Covid-19 in National Hospitals. *Medicina*,  
58(2), pp. 171. DOI: <https://doi.org/10.3390/medicina58020171>.
- Mangkunegara, A. P. 2009. *Manajemen Sumber  
Daya Manusia*. Bandung: PT. Remaja Ros-  
dakarya.
- Maslach, C. and Jackson, S. 1981. Le MBI: Mas-  
lach Burnout Inventory. *Palo Alto*, 2, pp. 49  
–78.
- Minister of Health. 2018. *Human Resources for  
Health Country Profiles Indonesia*. Jakarta.  
Minister of Health. 2020. *Human Resources for*

- Health Country Profiles Indonesia*. Jakarta. Muliantino, M. R., Huriani, E., Krisdianto, B. F., Sarfika, R., Yesni, M., Sulistyowati, E., Wahyuningtyas, K., Sucipto, U., Sukarna, R. A., Prasetyo, E., and Abdullah, K. B. 2021. Psychological Responses among Indonesian Nurses in the Outbreak of Covid-19 Pandemic. *Journal of Nursing Care*, 4(2). DOI: 10.24198/jnc.v4i2.31195.
- Musau, P., Nyongesa, P., Shikhule, A., Birech, E., Kirui, D., Njenga, M., Mbiti, D., Bett, A., Lagat, L., and Kiilu, K. 2008. Workload Indicators of Staffing Need Method in Determining Optimal Staffing Levels at MOI Teaching and Referral Hospital. *East African Medical Journal*, 85(5). DOI: <https://doi.org/10.4314/eamj.v85i5.9617>.
- OECD. 2019. *Health at a Glance 2019 [Internet]*. OECD iLibrary. Available from: <https://edu.nl/evgen>.
- Odonkor, S. T. and Frimpong, K. 2020. Burnout among Healthcare Professionals in Ghana: A Critical Assessment. *BioMed Research International*, 2020. DOI: <https://doi.org/10.1155/2020/1614968>.
- Pamungkas, A. P. and Sridadi, A. R. 2020. Pengaruh Work Overload terhadap Nurse Performance dengan Burnout sebagai Variabel Intervening di Rumah Sakit X Surabaya. *Business and Finance Journal*, 5(2), pp. 85–94. DOI: <https://doi.org/10.33086/bfj.v5i2.1788>.
- Parashakti, R. D., Fahlevi, M., Ekhsan, M., and Hadinata, A. 2020. The Influence of Work Environment and Competence on Motivation and Its Impact on Employee Performance in Health Sector. *Proceedings of the 3rd Asia Pacific International Conference of Management and Business Science (AICMBS 2019)*. DOI: <https://doi.org/10.2991/aebmr.k.200410.040>.
- Pemerintah Indonesia. 2009. *Undang-Undang No. 44 Tahun 2009 tentang Rumah Sakit*. Lembaran Negara RI Tahun 2009, No. 44. Sekretariat Negara. Jakarta.
- Pemerintah Indonesia. 2018. *Peraturan Menteri Kesehatan Republik Indonesia Nomor 4 Tahun 2018 tentang Kewajiban Rumah Sakit dan Kewajiban Pasien*. Lembaran Negara RI Tahun 2018, No. 4. Sekretariat Negara. Jakarta.
- Pemerintah Indonesia. 2021. *Peraturan Pemerintah Republik Indonesia Nomor 47 Tahun 2021 tentang Penyelenggaraan Bidang Perumahsakit*. Lembaran Negara RI Tahun 2021, No. 47. Sekretariat Negara. Jakarta.
- Pourteimour, S., Yaghmaei, S., and Babamohamadi, H. 2021. The Relationship between Mental Workload and Job Performance among Iranian Nurses Providing Care to Covid-19 Patients: A Cross-Sectional Study. *Journal of Nursing Management*, 29(6), pp. 1723–1732. DOI: <https://doi.org/10.1111/jonm.13305>.
- Rahim, H. F. A., Fendt-Newlin, M., Al-Harashseh, S. T., and Campbell, J. T. 2022. Our Duty of Care: A Global Call to Action to Protect the Mental Health of Health and Care Workers. *Doha*.
- Republik Indonesia. 2014. *Undang-Undang No. 36 Tahun 2014 tentang Tenaga Kesehatan*. Lembaran Negara RI Tahun 2009, No. 36. Sekretariat Negara. Jakarta.
- Rostami, F., Babaei-Pouya, A., Teimori-Boghsani, G., Jahangirimehr, A., Mehri, Z., and Feiz-Arefi, M. 2021. Mental Workload and Job Satisfaction in Healthcare Workers: The Moderating Role of Job Control. *Frontiers in Public Health*, 9. DOI: <https://doi.org/10.3389/fpubh.2021.683388>.
- Ruga, F. B. P., Kusumapradja, R., and Pamungkas, R. A. 2022. Impact of Physical Workload and Mental Workload on Nurse Performance: A Path Analysis. *International Journal of Nursing and Health Services (IJNHS)*, 5(2), pp. 219–225. DOI: <https://doi.org/10.35654/ijnhs.v5i2.604>.
- Shanafelt, T. D., Balch, C. M., Bechamps, G., Russell, T., Dyrbye, L., Satele, D., Collicott, P., Novotny, P. J., Sloan, J., and Freischlag, J. 2010. Burnout and Medical Errors among American Surgeons. *Annals of Surgery*, 251(6), pp. 995–1000. DOI: <https://doi.org/10.1097/SLA.0b013e3181bfdab3>.
- Silaban, R. L., Handaru, A. W., and Saptono, A. 2021. Effect of Workload, Competency, and Career Development on Employee Performance with Organizational Commitment Intervening Variables. *The International Journal of Social Sciences World*, 3(1), pp. 294–



- 311.
- Søvdold, L. E., Naslund, J. A., Kousoulis, A. A., Saxena, S., Qoronfleh, M. W., Grobler, C., and Münter, L. 2021. Prioritizing the Mental Health and Well-Being of Healthcare Workers: An Urgent Global Public Health Priority. *Frontiers in Public Health*, 9(May), pp. 1-12. DOI: 10.3389/fpubh.2021.679397.
- Ştefan, S. C., Popa, Ştefan C., and Albu, C. F. 2020. Implications of Maslow's Hierarchy of Needs Theory on Healthcare Employees' Performance. *Transylvanian Review of Administrative Sciences*, (59E), pp. 124-143. DOI: <https://doi.org/10.24193/tras.59e.7>.
- Suharno, P. and Despinur, D. 2017. The Impact of Work Motivation and Competence on Employee Performance through Service Quality in Administrative Staff of Universitas Negeri Jakarta, Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, 1(61), pp. 160–171. DOI: <https://doi.org/10.18551/rjoas.2017-01.16>.
- Susiarty, A., Suparman, L., and Suryatni, M. 2019. The Effect of Workload and Work Environment on Job Stress and Its Impact on the Performance of Nurse Inpatient Rooms at Mataram City General Hospital. *Scientific Research Journal*, VII(VI). DOI: <https://doi.org/10.31364/scirj/v7.i6.2019.p0619661>.
- Umpung, F. D., Pertiwi, J. M., and Korompis, G. E. C. 2020. *Faktor-Faktor yang Mempengaruhi Motivasi Kerja Tenaga Kesehatan di Puskesmas Kabupaten Minahasa Tenggara pada Masa Pandemi Covid 19*, pp. 18–27.
- UN. 1966. *International Covenant on Economic, Social and Cultural Rights*. General Assembly.
- Van Bogaert, P., Kowalski, C., Weeks, S. M., Van Heusden, D., and Clarke, S. P. 2013. The Relationship between Nurse Practice Environment, Nurse Work Characteristics, Burnout and Job Outcome and Quality of Nursing Care: A Cross-Sectional Survey. *International Journal of Nursing Studies*, 50(12), pp. 1667–1677. DOI: <https://doi.org/10.1016/j.ijnurstu.2013.05.010>.
- Wakefield, M. K., Williams, D. R., Le Menestrel, S., and Flaubert, J. F. 2021. *The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity*. Washington, DC: National Academies Press.
- WHO. 2010. *Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and Their Measurement Strategies*. Geneva: WHO Press.
- WHO. 2016. *Working for Health and Growth*. Geneva: WHO Press.
- WHO. 2017. *The Republic of Indonesia Health System Review*. Health System in Transition. India.
- WHO. 2023a. *Health Workforce*. World Health Organization. Retrieved [https://www.who.int/health-topics/health-workforce#tab=tab\\_1](https://www.who.int/health-topics/health-workforce#tab=tab_1).
- WHO. 2023b. *Universal Health Coverage (UHC)*. World Health Organization. Retrieved [https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-\(uhc\)](https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)).
- WHO. 2023c. *World Health Statistics 2023*. Geneva: WHO Press.
- WHO and WB. 2017. *Tracking Universal Health Coverage: 2017 Global Monitoring Report*. Geneva: WHO Press.
- Widyastuti, T. and Hidayat, R. 2018. Adaptation of Individual Work Performance Questionnaire (IW PQ) into Bahasa Indonesia. *International Journal of Research Studies in Psychology*, 7(2). DOI: <https://doi.org/10.5861/ijrsp.2018.3020>.
- Yosiana, Y., Hermawati, A., and Mas'ud, M. H. 2020. The Analysis of Workload and Work Environment on Nurse Performance with Job Stress as Mediation Variable. *Journal of Socioeconomics and Development*, 3(1), pp. 37. DOI: <https://doi.org/10.31328/jsed.v3i1.1326>.