

# The Relationship between Job Stress, Burnout, Motivation and Employee Performance: An Investigation in PUDAM Tirta Lawu Karanganyar

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## Abstract

This study's objective was to ascertain how motivation, burnout, and stress at work affected employee performance. Quantitative methodologies are used in this kind of study. There are 217 PUDAM Tirta Lawu Karanganyar personnel in the research population. Purposive sampling was employed in the study sample, which consisted of 68 individuals. Questionnaires and literature reviews were used as data gathering methods. Coefficient of determination, F-test, t-test, and multiple linear regression are used in data analysis. According to the findings, occupational stress significantly impairs employee performance; the more stressed out an individual is, the worse their performance is. person performance is significantly impacted by burnout; the more burned out a person is, the worse their performance will be. Employee performance is positively impacted by motivation; An employee will perform better if they are more motivated.

**Keywords:** Job Stress; Burnout; Motivation; Performance

## 1. Introduction

The Government of Indonesia guarantees the provision of clean water based on the Republic of Indonesia's Health Law No. 36 of 2009. The Government of Indonesia's policy on clean water issues is to provide clean water services through various units of Regional Drinking Water Companies, which are part of Regional Owned Enterprises. Clean water management in Karanganyar Regency is the main responsibility of PUDAM Tirta Lawu Karanganyar Regency. PUDAM Tirta Lawu Karanganyar proved its good performance by achieving a total revenue of Rp 70,065,135,911 in 2024, while the net profit was Rp 5,997,450,656, contributing Rp 3.27 billion to the Karanganyar Regency government treasury. The new customer service programs increased by 2086 new customer. The PUDAM Tirta Lawu programme for 2025 includes the construction of the PUDAM Tirta Lawu office and the replacement of existing pipes in Jatiyoso from Jlantah Reservoir to Jatipuro, and the replacement of the main pipe from Ngemplak Reservoir to Ngumpeng Karangpandan (solotrust.com, 2024).

PUDAM Tirta Lawu in implementing work programs to increase company value. The basic aspect that needs to be improved is the performance of its employees (Pusparani, 2021). Employees are the most important capital in increasing competitiveness both now and in the future, optimizing employee performance can be obtained if the company can understand employee conditions, so that the company can maintain and obtain quality performance from human resources (Pangestu et al., 2022). Changes in the implementation of work programs cannot be separated from technological and scientific developments, thus the rising expectations on individual performance are impacted by these developments (Mubarak et al., 2021). These conditions trigger various pressures that employees have to face (Kelly et al., 2022). Pressures in the organization include excessive workload, high work demands and the emergence of conflicts, which can lead to stress and burnout in employees and cause employees to experience decreased work motivation (Parashakti and Ekhsan, 2022).

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Job stress has become a common problem in organizations that can affect employee performance (Shah et al., 2023). Stress at work is a psychological reaction that happens when someone feels that there are demands where the desire with the results obtained do not match the expectations (Robbins, 2018). Hasibuan (2018) revealed that job stress can cause a drop in worker performance. In contrast to the findings of Khairullah et al. (2023), who found that work stress significantly improves performance, and Rahayu et al. (2023), who found no effect on employee performance, (Prihastuty and Yustini, 2024) found that work stress significantly impairs employee performance.

Good quality work requires high employee performance. Any work done by employees is certainly inextricably linked to influences, both internal and external, that reduce their performance and lead to burnout (Aghniya and Aulia, 2022). weariness on all levels physical, mental, behavioral, and attitude feelings of discontent and disbelief in one's own abilities, as well as a lack of drive for personal growth are all signs of burnout accomplishment resulting from work-related stress (Hayati and Fitria, 2018). Job burnout is a common occurrence that is prevalent in corporate work environments (Madigan and Kim, 2021). Job burnout not only has a detrimental effect on workers' mental and physical health; However, it also immediately diminishes performance. Lemonaki et al. (2021). Wijaya (2024) asserts that burnout adversely impacts employee performance; however, Rahmadani et al. (2023) demonstrate that burnout has no significant influence on employee performance.

Among the crucial variables in an organization's success in improving employee performance is motivation. Hasibuan (2018) defines work motivation as something that supports employees to work hard and enthusiastically to achieve optimal results. Employees need to be motivated and enthusiastic at work to achieve everything they want through motivation. When work motivation is high, the work will be done more accurately and quickly. Work that is done accurately, carefully and quickly is a form of good performance to maintain the survival of a company (Goni et al., 2021). Fitrah et al., (2023), Ngasti and Bahiroh (2023); Fitrah et al. (2023), While Pramularso (2021) demonstrates that job While Ngasti and Bahiroh (2023) show that motivation while motivation significantly influences employee performance, it does not affect performance itself.

### **1.1. Job stress and performance**

Employees are prone to experiencing work stress caused by their work activities. Workplace stress may impact mental processes, physical and psychological imbalances, emotional shifts, and employee performance (Rivai, 2018). Job stress can lead to decreased employee performance. Stressed employees tend to experience tension of mind and behave strangely, angry, and like to be alone so that employee performance cannot be optimal (Hasibuan, 2018). Johan et al., (2021); Aghniya and Aulia (2022); Putri et al., (2024) demonstrate that employee performance is adversely and substantially affected by workplace stress. Consequently, the theory

H1: Job stress adversely and dramatically affects employee performance.

### **1.2. Burnout and performance**

One kind of stress at work that might negatively impact a person's mental and physical health well-being as well as the efficiency of an organization is burnout (Lemonaki et al., 2021). Reduced performance and changes in personal attitudes at work are two consequences of burnout (Rahmadani et al., 2023). Employee performance is significantly impacted negatively by burnout. Workers that suffer from burnout will usually experience decreased motivation, physical and emotional fatigue, and decreased ability to concentrate, so that performance decreases, both in terms of quantity and quality (Fhauzan and Ali, 2024). Aghniya and Aulia (2022); Kurniawati et al., (2023) that burnout has a detrimental impact on performance, therefore H2 in this study:

H2: Burnout has a negative and significant effect on employee performance

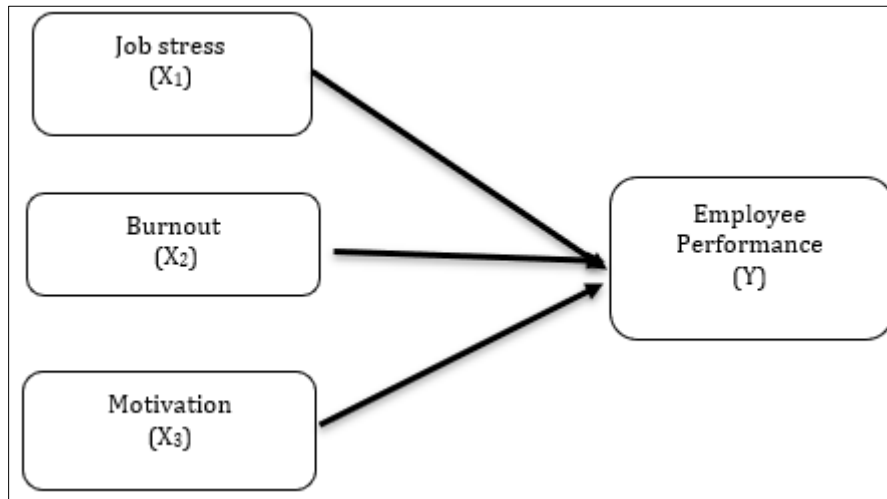
### **1.3. Motivation and performance**

According to Mardiaty (2024), motivation is the desire brought on by wants, desires, and willingness that propels a person to use both mental and physical energy in order to accomplish his objectives. An employee will be motivated to take responsibility for their job as a result of this, and the more motivated they are at work, the better they will perform (Fitrah et al., 2023). Given that research indicates that motivation has a substantial influence on employee performance. by Johan et al. (2021); Putri et al. (2024), the following hypothesis is put forth:

H3: Motivation has a major impact on worker performance

#### 1.4. Framework

The preparation of the framework in the study is as follows:



**Figure 1** Framework

## 2. Material and methods

This kind of study used quantitative techniques. The study's population consisted of all 217 workers of PUDAM Tirta Lawu Karanganyar. 68 workers were chosen as a sample used purposive sampling, taking into account the length of service of more than one year. Indicators of job stress according from Johan et al., (2021), consisting of task demands, interpersonal demands, role demands, organizational structure and leadership. Indicators of burnout variables according from Wijaya (2024), consisting of emotional exhaustion, depersonalization, decreased personal accomplishment, physical exhaustion, prolonged work stress and withdrawal from work. Motivation indicators based on Maslow in Hasibuan (2018) comprising requirements for self-actualization, esteem, safety, social interaction, and bodily needs. Tesselonika et al. (2021) identified quality, quantity, working hours, and collaboration as indicators of employee success. Questionnaires and literature reviews were used as data gathering methods. multivariate linear regression, coefficient of determination, Research instrument test, F-test, and t-test, and classical assumption test were all employed in the data analysis.

## 3. Results

By sending surveys directly to PUDAM Tirta Lawu Karanganyar workers, the purpose of This research aims to determine the impact of burnout, stress, and motivation on employee performance at work. All completed questionnaires were returned with a 100% response rate.

### 3.1. Validity Test

Considering the validity test's findings use pearson correlation product moment, it shows that value of each indicator from variable job stress, burnout, motivation and employee performance obtained p value <0.05 so that they are declared valid

**Table 1** Results of Validity Test

Variables	Ques item	$\alpha$	p value	Description
Job Stress	sk1	0.05	0.000	Valid
	sk2	0.05	0.000	Valid
	sk3	0.05	0.000	Valid
	sk4	0.05	0.000	Valid
	sk5	0.05	0.000	Valid
Burnout	bo1	0.05	0.000	Valid
	bo2	0.05	0.000	Valid
	bo3	0.05	0.000	Valid
	bo4	0.05	0.000	Valid
	bo5	0.05	0.000	Valid
Work motivation	m1	0.05	0.000	Valid
	m2	0.05	0.000	Valid
	m3	0.05	0.000	Valid
	m4	0.05	0.000	Valid
	m5	0.05	0.000	Valid
Employee performance	y1	0.05	0.000	Valid
	y2	0.05	0.000	Valid
	y3	0.05	0.000	Valid
	y4	0.05	0.000	Valid

### 3.2. Reliability Test

**Table 2** Reliability Test Results

Variables	Cronbach Alpha	Criteria	Description
Job stress	0.866	0.60	Reliable
Burnout	0.848	0.60	Reliable
Motivation	0.661	0.60	Reliable
Employee performance	0.685	0.60	Reliable

Cronbach's alpha value from the job stress variable is 0.866, burnout variable is 0.848, motivation variable is 0.661 and employee performance is 0.685. This shows that all variables in this study have a Cronbach's alpha value over 0.6, indicating dependability.

### 3.3. Classical Assumption Test

**Table 3** Classical assumption test results

Classical assumption	Result	Conclusion
Multicollinearity test	<i>Tolerance</i> (0.784; 0.641; 0.759) > 0.10 and VIF (1.276; 1.561; 1.318 < 10	There is no multicollinearity
Heteroscedasticity test	p (0.405; 0.063; 0.705) > 0,05	No heteroscedasticity
Normality test	p (0.056) > 0,05	normally distributed

### 3.4. Multiple Linear Regression

**Table 4** Multiple Linear Regression Test Results

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	14.536	2.594		5.604	0.000
Job stress	-0.129	0.039	-0.281	-3.287	0.002
Burnout	-0.206	0.047	-0.417	-4.407	0.000
Motivation	0.352	0.098	0.313	3.606	0.001

The results and their interpretation from the multiple linear regression equation are as follows:

$$Y = 14.536 - 0.129SK - 0.206BO + 0.352M$$

The constant value (a) is 14.536 and is positive, meaning that if work stress, burnout and motivation are considered constant, employee performance is 14.536 and is positive. With a negative sign and a coefficient value of 0.129, the job stress variable indicates that employee performance will decline as work stress rises. With a negative sign and a coefficient value of 0.206, the burnout variable indicates that employee performance will decline as burnout rises. Employee performance will rise in tandem with an increase in employee motivation, as shown by the motivation variable's positive sign and coefficient value of 0.352.

### 3.5. t-test

**Table 5** t-test Result

Variabel	t-result	p value	Conclusion
Job stress → performance	-3.287	0.002	Significant negative effect
Burnout → performance	-4.407	0.000	Significant negative effect
Motivation → performance	3.606	0.001	Significant positive effect

The work stress variable's t test findings showed a t value of -3.287 with a p value of 0.002 < 0.05, indicating that job stress significantly and negatively affects employee performance PUDAM. Karanganyar Tirta Lawu. The t-test findings for the burnout variable indicate that employee performance at PUDAM Tirta Lawu Karanganyar is significantly and negatively affected by burnout, with a t value of -4.407 and a p value of 0.000, which is less than 0.05. The t-test results for the motivation variable, with a p-value of 0.001 (less than 0.05) and a t-value of 3.606, demonstrate that motivation substantially and positively influences employee performance at PUDAM Tirta Lawu Karanganyar.

### 3.6. F-test

**Tabel 6** F Test Result

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	151.515	3	50.505	36.854	0.000
Residual	87.706	64	1.370		
Total	239.221	67			

The F-test findings showed a p-value of 0.000 < 0.05, indicating that job stress, burnout and motivation impact on employee performance PUDAM Tirta Lawu karanganyar simultionusly.

### 3.7. Determination Coefficient

**Table 7** Determination Coefficient

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.796 <sup>a</sup>	0.633	0.616	1.17064

According to the coefficient of determination's findings, which had an adjusted R square value of 0.634, work stress, burnout, and motivation factors have a 61.6% impact on PUDAM Tirta Lawu employees' performance, while other The effect of elements not included in the research model was 38.4%.

## 4. Discussion

The results showed that job stress significantly impacts employee performance. The negative regression coefficient indicates that employee performance diminishes as stress levels increase. Hasibuan (2018) revealed that work stress can trigger a decrease in employee performance. Stressed employees tend to experience tension of mind and behave strangely, grumpy, and like to be alone so that employee performance cannot be optimal. Fitriano et al., (2020) that stressed employees tend to experience tension of mind and behave strangely, grumpy, and like to be alone so that employee work performance cannot be optimal. These findings corroborate studies by Johan et al. (2021), Aghniya and Aulia (2022), and Putri et al. (2024) that demonstrate the detrimental and substantial impact of work-related stress on worker performance.

The results showed that work fatigue affects employee performance. Because the regression coefficient value is negative, employee performance decreases as employee burnout increases. According to Idrus et al. (2024), burnout is a condition in which workers suffer persistent exhaustion, boredom, sadness, and disengagement from their jobs as a result of work-related stress. Burnout is a problem that often occurs in companies, and is very influential if it is not resolved properly. Kurniawati et al., (2023) stated that burnout includes symptoms such as emotional exhaustion, depersonalization, and reduced personal achievement, which can substantially impact performance, so to reduce burnout, companies must prioritize creating a supportive and harmonious work environment that pays attention to employee well-being. Various program that can provide emotional support, resilience training, and stress management techniques can help employees cope with the challenges of their profession and improve performance. These results support research from Aghniya and Aulia (2022) that performance is negatively impacted by burnout.

The results show that motivation has a major influence on employee performance; the more motivated a person is at work, the higher their performance will be (Fitrah et al., 2023). Employee motivation is crucial in motivating them to engage in activities aimed at achieving certain goals. This significantly affects the quality of work produced by employees to achieve optimal results (Kurniawati et al., 2023) Motivation is one of the important variables in the success of the organization in improving employee performance. Employees need to be motivated and enthusiastic at work to achieve all they want through motivation, when work motivation is high, work will be done more accurately and quickly. Work that is done accurately, carefully and quickly is a form of good performance to maintain the survival of a company (Goni et al., 2021). These results corroborate earlier studies by Johan et al. (2021) and Putri et al. (2024), which revealed that employee performance is substantially influenced by work motivation.

## 5. Conclusion

Individual performance is adversely affected by work-related stress; increased stress levels correlate with diminished performance. An individual's performance is profoundly affected by burnout; increased levels of burnout correlate with diminished performance. Employee performance is enhanced by incentive. An employee's performance will enhance with heightened motivation.

## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed

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