

## THE INFLUENCE OF WORKLOAD, MOTIVATION AND WORK ENVIRONMENT ON THE PERFORMANCE OF EMPLOYEES

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### ABSTRACT

*This research aims to determine the influence of Workload, Motivation, and Work Environment on Employee Performance. The type of research used is quantitative. The population in this study was all 35 technical employees of PERUMDA Air Minum Tirta Baluran Situbondo. The sampling technique uses saturated sampling, all members of the population are sampled. The main research data was obtained from the results of a questionnaire which was analyzed using multiple linear regression and processed using SPSS 25. The results of this research show that Workload has significant negative effect on Employee Performance, while Motivation and Work Environment have a significant positive effect on Employee Performance, and Workload, Motivation, and Work Environment together have a significant positive effect on Employee Performance.*

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### 1. INTRODUCTION

Human resources are important in a company, because they can drive the company's success. The Tirta Baluran Regional Public Drinking Water Company (PDAM) as a Regional Owned Enterprise (BUMD) is tasked with meeting the needs of clean and quality water for the people of Situbondo. This company has 35 technical employees divided into 9 positions, tasked with going directly to the community to serve customers.

Employee performance is an important aspect in a company because it can be a benchmark for the company's success (Diyahanip et al., 2022). Employee performance is the quality and quantity of work achieved by employees when doing their work (Surya, 2023). The performance of employees in PDAM Tirta Baluran Situbondo increases every year, but from the results of interviews and observations there is one area that is decreasing because several phenomena are found.

The first phenomenon is related to workload, namely that there are employees who feel stressed because the work of repairing leaky pipes requires overtime work until late at night. However, employees receive leakage wages for this work. Then there is the company's target which has not been met, namely the target of installing 1,000 SR pipes each year, but in 2022 only 753 SR will be realized. Workload is something that is considered to exceed an employee's ability when carrying out their work (Budiasa, 2021). Excessive workload can result in physical and mental fatigue as well as emotional reactions (Fitriyani, 2024). This is in accordance with the results of research conducted by Rahmat and Cahya (2020) which states that workload has a significant negative effect on employee performance.

The second phenomenon is related to motivation, a lack of appreciation from fellow colleagues makes employees less enthusiastic about doing their work. There is a decline in the service sector, this is because there are employees who are negligent in their work

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responsibilities, because there are job descriptions that do not match the employee's interests. Motivation is encouragement or stimulation that is used as a strategy to improve employee performance (Fahriana, 2022). Employees who have high motivation will work hard when doing their work, and vice versa (Supriatna, 2024). This is in accordance with the results of research conducted by Laelana (2023) which states that the higher employee motivation, the more employee performance will increase.

Another phenomenon is related to the work environment around employees while working. Lack of work equipment, namely lighting when engineering employees repair leaking pipes at night. Then the lack of harmonious relationships between employees is due to a lack of appreciation from fellow employees. The work environment is all the things around employees when doing work, both physical and non-physical, which can improve employee performance (Silitonga, 2021). A good and conducive work environment will make employees feel at home around their work and feel happy and enthusiastic about carrying out their work. This is in accordance with the results of research conducted by Wahyuningsih and Kirono (2023) which states that the better the work environment, the more employee performance will increase. This research aims to test and analyze the influence of workload, motivation and work environment partially and simultaneously on the performance of PDAM Tirta Baluran Situbondo technical employees.

## **2. LITERATURE REVIEW**

### **2.1 Variables**

#### **2.1.1 Workload**

Workload is a series of processes or tasks that employees must complete within a certain period of time. If employees are able to complete and adapt to many tasks, this is not considered workload (Vanchapo, 2020). According to Budiasa (2021), the workload indicators in this research are:

1. Job conditions, namely how employees understand and are able to do the job well.
2. Use of time, is the use of working time when carrying out tasks assigned by the company, both during working hours and outside working hours.
3. Targets that must be achieved are company targets that must be achieved by employees.

Based on previous research, it was found that workload has a positive and significant effect on employee performance, including research conducted by Siburian et al. (2021). Meanwhile, research conducted by Joesyiana et al. (2022) and Putri and Edalmen (2023) found that workload had a negative and significant effect on employee performance.

#### **2.1.2 Motivation**

Motivation is everything that arises from a person's encouragement, thereby giving rise to passion and desire within a person which can influence, direct and maintain behavior to achieve goals or desires in

accordance with the company (Ahmad, 2021). According to Hasibuan (2019), the motivation indicators in this research are:

1. The need for achievement, is a desire to overcome challenges in order to progress and develop.
2. The need for affiliation, is the desire to have relationships with other people.
3. The need for competency is an encouragement to do quality work.
4. The need for power, is the urge to be able to control a situation.

Based on previous research, it was found that motivation has a positive and significant effect on employee performance, including research conducted by (Amaliah et al., 2023; Hasica et al., 2023). Meanwhile, the results of research by Ramadhani et al (2023) state that motivation has a positive effect but does not have a significant effect on employee performance.

#### **2.1.3 Work Environment**

The work environment is what surrounds employees while working, so it can influence individuals when carrying out company tasks (Afandi, 2018). According to Budiasa (2021), the work environment indicators in this research are:

1. Work atmosphere, is the conditions around employees that can influence when doing work
2. Relationships with co-workers, are relationships between co-workers that are harmonious, familial and there is no feeling of putting each other down
3. Availability of work facilities, namely equipment used by employees when carrying out their work which can help employees complete their work easily.

Based on previous research, it was found that the work environment has a positive and significant effect on employee performance, including research conducted by (Amien et al., 2023; Dewi et al., 2023). Meanwhile, the results of research by Alqorrib et al (2023) state that the work environment has a positive but not significant effect on employee performance.

#### **2.1.4 Employee Performance**

Employee performance is the result of employee work and behavior in carrying out the tasks and responsibilities given over a certain period of time (Kasmir, 2019). According to Silaen (2021), employee performance indicators in this research are:

1. Work quantity, is a measure of how much work is completed by employees in accordance with the targets set by the company.
2. Work quality, is a measure of an employee's ability to produce quality work in accordance with the standards set by the company.
3. Timeliness, is the completion of work on time.
4. Ability to work together, is a measure of the ability to collaborate between employees when working.

## **2.2 Hypothesis Development**

### **2.2.1 The Influence of Workload on Employee Performance**

According to Budiasa (2021, p. 30), Workload is something that is considered to exceed an employee's

ability when carrying out their work. The results of research conducted by Rahmat & Cahya (2020), Siburian et al. (2021), Joesyiana et al. (2022), Alqorrib et al. (2023), Laelana (2023), Putri & Edalmen (2023), Qurniyati et al. (2023), Saputri et al. (2023), Steffany & Hikmah (2023), and Wahyuningsih & Kirono (2023) state that workload has a significant effect on employee performance. Based on theory and research, hypotheses can be formulated:

**H1:** Workload has a significant influence on the performance of technical employees at PDAM Tirta Baluran Situbondo

### 2.2.2 The Influence of Motivation on Employee Performance

According to Ahmad (2021), Motivation is everything that arises from a person's encouragement, giving rise to passion and desire within a person that can influence, direct and maintain behavior to achieve goals or desires that are in accordance with the company. The results of research conducted by Rahmat & Cahya (2020), Amaliah et al. (2023), Hasica et al. (2023), Laelana (2023), Putri & Edalmen (2023), Qurniyati et al. (2023), Steffany & Hikmah (2023), and Wahyuningsih & Kirono (2023) state that motivation has a significant effect on employee performance. Based on theory and research, hypotheses can be formulated:

**H2:** Motivation has a significant influence on the performance of technical employees at PDAM Tirta Baluran Situbondo

### 2.2.3 The Influence of the Work Environment on Employee Performance

According to Afandi (2018), the work environment is what surrounds employees while working, so it can influence individuals when carrying out company tasks. The results of research conducted by Rahmat & Cahya (2020), Siburian et al. (2021), Amien et al. (2023), Dewi & Marpaung (2023), Laelana (2023), Qurniyati et al. (2023), Ramadhani et al. (2023), Saputri et al. (2023), Steffany & Hikmah (2023), and Wahyuningsih & Kirono (2023) stated that the work environment has a significant effect on employee performance. Based on theory and research, hypotheses can be formulated:

**H3:** The work environment has a significant influence on the performance of technical employees at PDAM Tirta Baluran Situbondo

### 2.2.4 Simultaneous Influence of Workload, Motivation and Work Environment on Employee Performance

Based on the conceptual framework, a temporary assumption can be made that:

**H4:** Workload, motivation and work environment simultaneously have a significant influence on the performance of technical employees of PDAM Tirta Baluran Situbondo

## 3. METHODOLOGY

This research design is explanatory research which uses quantitative methods by collecting data using research

instruments. The type of data in this research is quantitative data. Data sources are primary data obtained from interviews, observations and questionnaires and secondary data obtained from documentation in the form of books and journals. The population of this research is all permanent technical employees of PDAM Tirta Baluran Situbondo, totaling 35 people. The sampling technique used is a saturated sample, where all members of the population are sampled because there are less than 100 (Table 1).

**Table 1.** Population and Research Sampling

Position	Total
Technical Executor	9
Biling Executor	5
Service Executor	4
Production Executor	3
Implementing Transmission and Distribution	6
Maintance Executor	3
Planning Executor	1
Implementing AMDK Unit	3
Manager Executor	1
Total	35

This research uses multiple linear regression data analysis methods with SPSS 25 tools.

## 4. RESULTS AND DISCUSSIONS

### 4.1 Instrument Test

#### 4.1.1 Validity test

The validity test is used to measure whether a questionnaire is valid or not. In this research, the validity test used the Pearson Product Moment method with the condition that if  $r_{count} > r_{table}$  and the significant value  $< 0.05$  then the questionnaire is declared valid.

**Table 2.** Validity Test

Variable	Item	$r_{count}$	$r_{table}$	Sig	Description
Workload ( $X_1$ )	X1.1	0.706	0.33	0.00	valid
			4	0	
	X1.2	0.820	0.33	0.00	valid
			4	0	
	X1.3	0.736	0.33	0.00	valid
			4	0	
Motivation ( $X_2$ )	X2.1	0.656	0.33	0.00	valid
			4	0	
	X2.2	0.771	0.33	0.00	valid
			4	0	
	X2.3	0.516	0.33	0.00	valid
			4	2	
	X2.4	0.644	0.33	0.00	valid
			4	0	
Work Environment ( $X_3$ )	X3.1	0.751	0.33	0.00	valid
			4	0	
	X3.2	0.826	0.33	0.00	valid
			4	0	
	X3.3	0.757	0.33	0.00	valid
			4	0	
Employee Performance (Y)	Y1.1	0.737	0.33	0.00	valid
			4	0	
	Y1.2	0.731	0.33	0.00	valid
			4	0	
	Y1.3	0.722	0.33	0.00	valid
			4	0	
	Y1.4	0.755	0.33	0.00	valid
			4	0	

Based on the table 2, it can be concluded that all data provided by respondents when filling out the questionnaire is declared valid because it meets the provisions if  $r_{count} > r_{table}$  and the significant value is  $< 0.05$ .

**4.1.2 Reliability Test**

The reliability test is used to determine the level of consistency of the questionnaire from the data provided by respondents when filling out the questionnaire. In this research, the reliability test uses the Cronbach Alpha value with the condition that if the Cronbach Alpha value is  $> 0.6$  then the questionnaire is reliable.

**Table 3.** Reliability Test

Variable	Cronbach's Alpha	$\alpha$	Description
Workload ( $X_1$ )	0.638	0.60	Reliabel
Motivation ( $X_2$ )	0.636	0.60	Reliabel
Work Environment ( $X_3$ )	0.653	0.60	Reliabel
Employee Performance (Y)	0.718	0.60	Reliabel

Based on the Table 3, it can be concluded that the questionnaire data is reliable because it meets the Cronbach Alpha value  $> 0.6$ .

**4.2 Data Normality Test**

The data normality test is used to determine whether the residual data is normally distributed or not. In this research, the data normality test uses the Kolmogorov Smirnov method with the condition that the significant value is  $> 0.05$ , so the residual data is normally distributed..

**Table 4.** Normality Test

Asymp. Sig. (2-tailed)	Sig	N	Description
0.200	0.05	35	Data berdistribusi normal

Based on the table 4, it can be concluded that the residual data is normally distributed because it meets the requirements for a significant value  $> 0.05$ .

**4.3 Multiple Linear Regression Analysis**

Multiple linear regression analysis is used to determine the direction and how much influence two or more independent variables have on one dependent variable. In this study, to determine the effect of the independent variables, namely workload ( $X_1$ ), motivation ( $X_2$ ), and work environment ( $X_3$ ), on the dependent variable, namely employee performance (Y).

**Table 5.** Multiple Regression Analysis

Model	B	t	Sig
1 (Constant)	20.312	5.523	0.000
$X_1$	-1.063	7.792	0.000
$X_2$	0.388	3.198	0.003
$X_3$	0.391	2.608	0.014

Based on the table 5, the results of the multiple linear regression analysis equation can be seen, namely:

$$Y = 20.312 - 1.063X_1 + 0.388X_2 + 0.391X_3$$

**4.4 Classic Assumption Test**

**4.4.1 Multicollinearity Test**

The multicollinearity test is used to determine whether in the regression model there is a correlation between the independent variables. In this research, the multicollinearity test uses tolerance values and VIF (Variance Inflation Factor) with the condition that the tolerance value is  $> 0.10$  and  $VIF < 10$ , so multicollinearity does not occur.

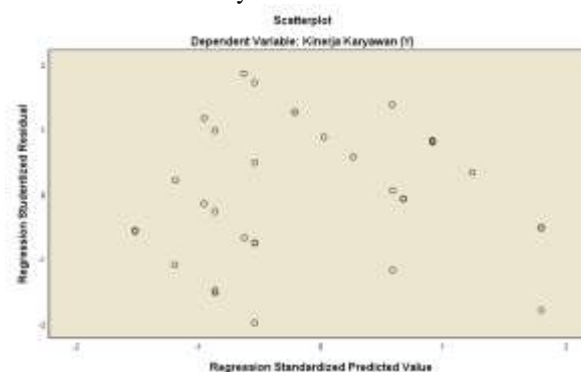
**Table 6.** Multicollinearity test

Variable	Tolerance	VIF	Description
Workload ( $X_1$ )	0.980	1.021	Multicollinearity does not occur
Motivation ( $X_2$ )	0.945	1.058	Multicollinearity does not occur
Work Environment ( $X_3$ )	0.961	1.041	Multicollinearity does not occur

Based on the table 6, it can be concluded that multicollinearity does not occur because it meets the requirements for a tolerance value  $> 0.10$  and a VIF value  $< 10$ .

**4.4.2 Heteroscedasticity Test**

The heteroscedasticity test is used to determine whether there is an inequality of variance from the residuals of one observation to another. In this research, the heteroscedasticity test uses scatterplot graphs with the stipulation that if the pattern in the scatterplot graph is not clear (widened, wavy and narrowed) and the points are spread above and below the number 0 on the Y axis then heteroscedasticity does not occur.



**Figure 1.** Heteroscedasticity Test

Based on the figure 1, it can be concluded that heteroscedasticity does not occur because it has met the conditions, namely that the pattern in the scatterplot graph is not clear and the points are scattered above and below the number 0 on the Y axis.

**4.5 Hypothesis Testing**

**4.5.1 Partial Test (t)**

The partial test is used to determine the influence of the independent variable partially on the dependent variable. The condition for the partial test is that if the

sig value < 0.05 and the  $t_{count} > t_{table}$  then there is an influence of the independent variable on the dependent variable.

**Table 7.** Z partial test

Variable	$t_{count}$	$t_{table}$	Sig
Workload ( $X_1$ )	7.792	2.040	0.000
Motivation ( $X_2$ )	3.198	2.040	0.003
Work Environment ( $X_3$ )	2.608	2.040	0,014

Based on the table 7, it can be concluded that workload ( $X_1$ ), motivation ( $X_2$ ), and work environment ( $X_3$ ), have a partial effect on the dependent variable, namely employee performance (Y) because it has met the requirements for a sig value < 0.05 and  $t_{count} > t_{table}$

#### 4.5.2 Simultaneous Test (f)

The simultaneous test is used to determine the effect of independent variables simultaneously on the dependent variable. The conditions for the simultaneous test are that the sig value < 0.05 and the  $f_{count} > f_{table}$  value means there is an influence of the independent variable on the dependent variable.

**Table 8.** Simultaneous Test

Model	$f_{count}$	$F_{table}$	Sig	Description
Regression	22.849	2.90	0.000	There is influence

Based on the table 8, it can be concluded that workload ( $X_1$ ), motivation ( $X_2$ ), and work environment ( $X_3$ ) simultaneously influence the dependent variable, namely employee performance (Y) because it has met the requirements for a sig value < 0.05 and the value of  $f_{count} > f_{table}$

## 5. CONCLUSIONS

Based on the results of the analysis and discussion that have been explained, this research can be concluded:

Based on the results of the analysis and discussion that have been explained, this research can be concluded:

1. Workload has a significant effect on employee performance so that H1 is accepted. Thus, it can be concluded that workload has a significant and negative influence on employee performance
2. Motivation has a significant effect on employee performance so that H2 is accepted. Thus, it can be

concluded that motivation has a significant and positive influence on employee performance

3. The work environment has a significant effect on employee performance so that H3 is accepted. Thus, it can be concluded that the work environment has a significant and positive influence on employee performance

4. Workload, motivation and work environment simultaneously have a significant effect on employee performance so that H4 is accepted. Thus it can be concluded that simultaneously workload, motivation and work environment have a significant and positive influence on employee performance

#### Reccomendation

Based on the results of the research and discussions that have been carried out, there are several suggestions as follows:

##### For PDAM Tirta Baluran Situbondo

This research is expected to provide information for PDAM Tirta Baluran Situbondo regarding improving the performance of technical employees. It is hoped that with this research, companies can include workloads by having a working time tracking system, consulting with employees to set realistic targets and providing sufficient support and resources so that employees can achieve company targets. Then the related motivation is expected to be able to build a positive work culture, facilitate providing open feedback between colleagues, provide social skills training, place employees in positions that suit the employee's skills and interests, and provide training and development to employees. Then regarding the work environment, it is hoped that it can convey comprehensive information regarding the work equipment needed by employees, have a system for reporting problems related to work equipment, hold celebrations for the achievements of team or individual employees, and give awards to successful work groups.

##### For Academics

It is hoped that this research will be useful for the development of science, and can be used as information in the field of management related to workload, motivation, work environment and employee performance.

##### For Researchers

It is hoped that this research can add insight to researchers because it is related to the courses they have taught, especially in analyzing and knowing the influence of workload, motivation and work environment on the performance of PDAM Tirta Baluran Situbondo technical employees.

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