

THE EFFECT OF INFRASTRUCTURE, WORK MOTIVATION, NON-PHYSICAL WORK ENVIRONMENT ON EMPLOYEE PERFORMANCE AT PERUMDA AIR UMUM TIRTA BANGKA SUNGAILIAT AREA, BANGKA REGENCY

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Abstract: This research is motivated by the performance of employees that have not been maximized, which is caused by factors that affect employees in an effort to achieve performance. This study aims to find out and analyze the Infrastructure, Work Motivation, Non-physical Work Environment on Employee Performance in PERUMDA Tirta Bangka Drinking Water Area, Sungailiat Area, Bangka Regency. This research is a quantitative descriptive research. The number of respondents in this study was 98 people, which was determined using the saturated sample method. The analysis model used is the multiple linear regression analysis model. The results of the study show that infrastructure, work motivation, and non-physical work environment partially have a positive and significant effect on the performance of employees at PERUMDA Tirta Bangka Drinking Water in the Sungailiat Area, Bangka Regency. The results of simultaneous tests of infrastructure, work motivation, and non-physical work environment together had a positive and significant effect on employee performance at PERUMDA Tirta Bangka Drinking Water in the Sungailiat Area, Bangka Regency.

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Introduction

Human resources are a very important factor in an agency or company because it is the driving force of all activities to achieve the success of the agency's or company's goals. Human Resource Management (HRDM) is a science and art that regulates the relationship and role of the workforce to be effective and efficient in helping the realization of the goals of the company, employees, and society (Hasibuan, 2017). Continuous and continuous efforts to improve the performance of Human Resources (HR) are very important in improving services to the community. Performance is not only limited to what has been done or achievements, including involving activities in the work itself (Wibowo, 2016).

PERUMDA Tirta Bangka Drinking Water Sungailiat Area, Bangka Regency is a Regional Public Company (PERUMDA) which is a Regionally Owned Enterprise engaged in the clean water management business whose entire capital is owned by the Bangka Regency Government. The company manages water resources, distribution networks, water treatment infrastructure, and customer service related to drinking water. The main goal of PERUMDA Drinking Water is to meet the basic needs of the community, namely clean water in an efficient way.

One of the efforts of PERUMDA Tirta Bangka Drinking Water in improving performance is by ensuring that the community served achieves the community targets that have been recorded by PERUMDA Air Tirta Bangka Sungailiat Region.

Table 1.1 Recapitulation of the Number of Recorded Residents of Bangka Regency and the Number of Residents of the Sungailiat Region Served at the Tirta Bangka Drinking Water Reservoir in the Sungailiat Region, Bangka Regency 2020 – 2023

No.	Year	Population	Population Served
1	2020	320.552	36.185
2	2021	323.107	36.376
3	2022	324.232	44.409
4	2023	332.964	39.164

Source: PERUMDA Tirta Bangka Drinking Water Sungailiat Area, Bangka Regency 2020 to 2023

Table 1.1 can be seen that the number of people served at PERUMDA Tirta Bangka Drinking Water has increased every year. The increase in the population served from 2020 to 2022 continues to increase with the number of recorded population continuing to grow, but in 2023 the population served is recorded to decrease.

As a result of interviews with several employees, this is due to inadequate infrastructure facilities at PERUMDA Tirta Bangka Drinking Water in the Sungailiat Region, such as supporting equipment in the office, for example laptops or computers, printers, and machines used to distribute clean water to residents' homes. Infrastructure is one of the factors that support the success of an institution in achieving the goals of an agency or organization. Bohari, et al. (2019) The existence of good work facilities can have a positive impact on employee performance.

Therefore, if the facilities do not work well, employee performance has the potential to be affected and does not reach the maximum level. This statement is strengthened by the following data on the infrastructure of the 2023 Tirta Bangka Drinking Water PERUMDA:

Table 1.2 Data on PERUMDA Irrigation Infrastructure for Tirta Bangka Drinking Water in the Sungailiat Region, Bangka Regency 2023

NO.	Sarana Prasarana	Sum	Informat ion
1.	Office Building	1	Good
2.	Parking	3	Good
3.	Laptop/Computer	33	31 Good, 2 Broken
4.	Table	29	Good
5.	Chair	32	Good
6.	Official Car	9	7 Good, 2 Broken
7.	Motorcycle Service	9	4 Good, 4 Damaged, 1 Missing
8.	Air conditioning	16	Good

9.	Water Pump Machine	3	2 Good, 1 Poor
10.	Printer	8	6 Good, 2 Broken
11.	Wall Fan	10	Good
12.	Cabinets/ Shelves	11	Good
13.	Agency Nameplate	6	Good

Source : PERUMDA Tirta Bangka Drinking Water Sungailiat Area, Bangka Regency in 2023

Based on table 1.2, inadequate infrastructure is the trigger of a problem in the Tirta Bangka Drinking Water PERUMDA, Sungailiat Region. The researcher also conducted an interview with the asset staff, he said that the infrastructure facilities contained in the Tirta Bangka Drinking Water Laboratory are not so adequate, in terms of the machines or equipment used to distribute clean water are quite old and some have been damaged that have not been replaced due to the need for considerable funds, as well as supporting equipment in the office such as laptops, printers, and vehicles that are not in good condition or damaged.

In addition to infrastructure, work motivation also affects employee performance. From research conducted by Candana, et al (2020) stated that work motivation can also affect employee performance. For this reason, agencies/companies need to pay attention to the work motivation of employees so that they are encouraged to carry out the expected goals. According to (Bahri, S., & Nisa, 2017), motivation is a trigger from an individual person who arouses the desire to do a desire by expensing energy and ability to achieve the desired goal beforehand. Where this goal is what motivates a person to carry out an activity to realize a desire in an individual.

As a result of interviews with employees of PERUMDA Air Minum Tirta Bangka, some employees lack high responsibility for the work that has been assigned, such as relaxing during working hours, leaving duties during working hours. According to some employees who have been

interviewed, the agency does not give praise for the personal development and growth of employees such as giving praise or bonuses for performance done well. Motivation is a driver for employees to work and can also cause passion in doing a job and satisfaction in doing their job well.

Non-physical work environments also affect employee performance. The workplace environment consists of physical and non-physical work environments. One of the ways that companies can do to create a comfortable and harmonious work environment is to maintain a good relationship between employees and the company's work environment, because if the relationship is well established, then the thoughts and feelings of each individual employee will be positive, comfortable, and pleasant, on the other hand if the non-physical work environment is not good or there is a gap between employees, Then this will cause feelings of the heart and also bad thoughts and make the work environment uncomfortable and pleasant. According to Supriadi (2020), a harmonious non-physical work environment in companies can improve optimal performance. Therefore, it is very interesting to investigate the relationship between infrastructure, work motivation, and non-physical work environment and employee performance.

Literature Review

Performance

Employee performance is defined as the result of performance achieved by individuals or groups in an organization, both qualitatively and quantitatively. This performance reflects the implementation of the authority, duties, and responsibilities possessed by each individual in order to achieve organizational goals legally and in accordance with legal, moral, and ethical norms (Mocheriono, 2017). Employee performance refers to the results of work produced by each individual and assessed by the company to assess the quality of work achieved, as well as to determine whether there is an increase or decrease in that performance. According to Harsuko (2015), performance is the extent to which a person has played for him or her in implementing organizational strategies, either in achieving specific goals related to individual roles or by

displaying competencies that are stated to be relevant to the organization. The performance dimensions according to Mathis and Jackson (2018) include quality, quantity, working time, and cooperation.

Sarana Prasarana

Heavy office work requires adequate infrastructure support to achieve the goals of the company or organization. According to Sedarmayanti in Rosma (2017), stated that office furniture such as desks, chairs, cabinets, shelves, and drawers have a crucial role in every office, especially in supporting the optimal implementation of administrative work. All of this furniture serves as a necessary tool or medium to achieve the goals and objectives of a company or organization. Suheilayanti (2020) stated that infrastructure 10 functions as a tool, either directly or indirectly to achieve organizational or company goals. Limitations in infrastructure are expected to negatively affect the level of performance of employees in completing their duties and responsibilities. There are three dimensions of infrastructure facilities according to Hall and Nugraha (2020), namely completeness, use of infrastructure facilities, and conditions.

Work Motivation

Afandi (2018) said that motivation is a force that arises from drives, pressures, needs, and psychological mechanisms as a result of the accumulation of internal and external factors. Then according to Makmum (2017), it is said that motivation functions as a strength, energy, or complex state that reflects the readiness of individuals to move towards a certain goal, either consciously or unconsciously. According to Shin (2018), motivation can be interpreted as a process that encourages individuals to initiate and maintain activities directed at achieving certain goals. According to Mc Clelland in Hasibuan (2016), there are dimensions used to measure work motivation, including the need to represent, the need to be affiliated, and the need to be in power.

Non-Physical Work Environment

A non-physical work environment is a situation related to work relationships, both the relationship between employees and the relationship between employees and their superiors (Aslami and Absah, 2018). In addition, according to Setyadi (2015), the non-physical work environment also affects

the achievement of company goals, because it includes aspects of communication between superiors and subordinates. According to Azharuddin (2019), the non-physical work environment includes all conditions arising from work interactions, including relationships with superiors, colleagues, and subordinates. This factor is an important component in creating a harmonious and mutually supportive work climate, which in turn can improve employee productivity and overall well-being. Thus, it is concluded that the non-physical work environment involves aspects related to the work relationship between employees and 11 superiors, as well as the interaction of colleagues. Siagian (2014) stated that the dimension of the non-physical work environment is assessed from factors such as relationships between colleagues at the same level, relationships between superiors and employees, and cooperation between employees.

Hipotesis

H1 : Infrastructure has a positive and significant effect on Employee Performance at PERUMDA Tirta Bangka Drinking Water Area, Sungailiat Area, Bangka Regency

H2 : Work Motivation has a positive and significant effect on Employee Performance at PERUMDA Tirta Bangka Drinking Water Area, Sungailiat Area, Bangka Regency

H3 : Non-Physical Work Environment has a positive and significant effect on Employee Performance at PERUMDA Tirta Bangka Drinking Water Area, Sungailiat Area, Bangka Regency

H4 : Infrastructure, Work Motivation, and Non-Physical Work Environment simultaneously have a positive and significant effect on Employee Performance at PERUMDA Tirta Bangka Drinking Water in the Sungailiat Area, Bangka Regency.

Method

This study uses a quantitative approach and descriptive statistical analysis. This research was conducted at the Tirta Bangka Drinking Water District, Sungailiat Area, Bangka Regency. The types of data used in this study are primary data and secondary data. Primary data in this study were obtained through questionnaire interviews that had been filled out by employees of PERUMDA Tirta Bangka Drinking Water in the Sungailiat Region,

Bangka Regency and secondary data sourced from journals, the internet, and data from PERUMDA Tirta Bangka Drinking Water in the Sungailiat Region. The data that has been collected through the distribution of the questionnaire will be processed using the SPSS 27 test tool. The tests carried out were in the form of validity tests, reliability tests, normality tests, multicollinearity tests, heteroscedasticity tests, multiple linear regression analysis, hypothesis tests, and determination coefficient tests.

Results

1. Normality Test

Table 1 Normality Test Results One-Sample Kolmogorov-Smirnov Test

N	N	N
Normal Parametersa	Normal Parametersa	Normal Parametersa
,b	,b	,b
	Hours of deviation	3,54649860
Most Extreme Differences	Most Extreme Differences	Most Extreme Differences
	Positive	,039
	Negative	-,037
Test Statistic		Test Statistic
Asymp. Sig. (2-tailed) ^c	Asymp. Sig. (2-tailed) ^c	Asymp. Sig. (2-tailed) ^c

Source : primary data processed by researchers, 2024

Based on Table 1, the results of the respondent's normality test show a significant Kolmogorov Smirnov value of $0.067 > 0.05$ so that the data regression model is distributed normally.

2. Multicollinearity Test

Table 2 Multicollinearity Test Results

Variabel	Tolerance	BRIG HT	Information
Sarana Prasarana	0,697	1,434	Not Multicollinearity
Work Motivation	0,748	1,337	Not Multicollinearity

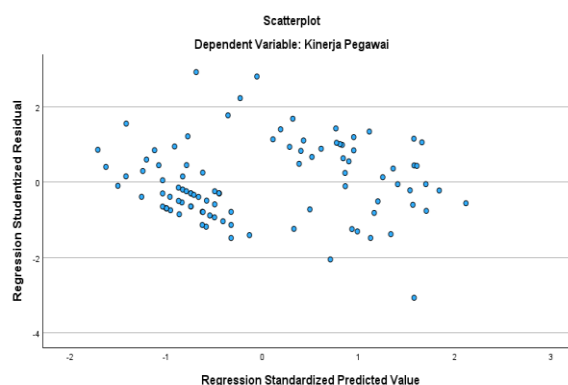
Non-Physical Work Environment	0,864	1,158	Not Multicollinearity
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Source: primary data processed by researchers, 2024

Based on Table 2, it shows that the results of the multicollinearity test through the calculation of tolerance nilia, it can be seen that all independent variables have a tolerance value of > 0.10 which means that in this study there is no multicollinearity. In addition, the VIF value of the three independent variables has a $<$ value of 10 which means that in this regression model there is no multiplicity between the independent variables

3. Heteroscedasticity Test

Figure 1 Heteroscedasticity Test Results



Source : primary data processed by researchers, 2024

Based on Figure 1, it can be seen that the dots are scattered randomly and scattered both above and below the number 0 on the Y axis.

Uji Hypothesis

1. Multiple Linear Regression Analysis

Table 3 Multiple Linear Regression Analysis Results

Model	Unstandardized Coefficient B	Standardized Coefficient t	Standard Error	Beta
(Constant)	1,666		2,892	
1 Sarana Prasarana	,293	,306	,076	

2	Work Motivation	,286	,081	,272
3	Non-Physical Work Environment	,708	,118	,428

Source : primary data processed by researchers, 2024

Table 3 shows the results of multiple linear regression analysis obtained from the regression equation as follows:

$$Y = 1.666 + 0.293 SP + 0.286 MK + 0.708 LKNF$$

The constant value obtained is 1.666 which means that the employee performance value (Y) will be worth 1.666 if the infrastructure (X1), work motivation (X2) and non-physical work environment (X3) are 0 (constant). So it can be stated that employee performance (Y) will be worth 1,666 if there are no infrastructure facilities (X1), work motivation (X2) and non-physical work environment (X3). The regression coefficient values of the three variables with positive values were 0.239 (X1), 0.286 (X2) and 0.708 (X3). This means that if the three variables increase, the employee performance variables will also increase. On the other hand, if these three variables decrease, the employee performance variable will also decrease.

2. F Test

Table 4 Test Results F ANOVA

	Model	Sum of Squares	df	Mean Square	F	Its elf
1	Regression	1118,805	3	372,935	44,264	0,001b
	Residual	791,971	97	8,425		
	Total	1910,776				

Source : primary data processed by researchers, 2024

Based on table 4, it can be seen that the results of the calculation of the respondent's F test show that the F calculation is 44.264. This shows that the F calculation is greater than the F of the table which is 2.701, and the significance value of 0.001 is smaller than the significance level of 0.05. It can be stated that H4 is accepted,

3. T Test

Table 5 T Test Results

	Model	tTable	tCount	Itself.
	Sarana Prasarana	1,985	7,225	0,01
	Work Motivation	1,985	6,156	0,01
	Non-Physical Work Environment	1,985	7,477	

Source : primary data processed by researchers, 2024

Based on table 5, the calculation obtained is t calculated for infrastructure facilities (X1) of 7.225 which is greater than t in table 1.985 with The significance level of 0.01 is smaller than the significance level of 0.05, so it can be concluded that H1 is accepted. Furthermore, the calculation table obtained t calculation for work motivation (X2) of 6.156 is greater than t of table 1.985 with a significance level of 0.01 smaller than the significance level of 0.05, so it can be concluded that H2 is accepted. Finally, the calculation table obtained t calculation for the non-physical work environment (X3) of 7.477 is greater than the t table 1.985 with a significance level of 0.05, so it can be concluded that H3 is accepted.

4. Analysis of Determination Coefficient (R²)

Table 6 Determination Coefficient Results

Model	Model Summary			
	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,765	,586	,572	2,90262

Source : primary data processed by researchers, 2024

Table 6 shows the Adjusted R Square figure of 0.572 or 57.2%, namely employee performance variables can be influenced by infrastructure, work motivation, and non-physical work environment, the remaining 42.8% is influenced by other variables outside this study.

Discussion

1. The Influence of Infrastructure on Employee Performance

Referring to the results of the research that has been conducted by the researcher, it can be stated that the variable of infrastructure facilities partially has a positive and significant effect on the performance of employees at PERUMDA Tirta Drinking Water Bangka, Sungailiat Region. This is in accordance with the quantitative calculation where the variable of infrastructure facilities produces a calculated t of 7.225 greater than the t table which is 1.985 with a significant level of 0.01 smaller than 0.05.

2. The Influence of Work Motivation on Employee Performance

Referring to the results of the research that has been carried out, it can be stated that the variable of partial work motivation has a positive and significant effect on the performance of employees at PERUMDA Tirta Drinking Water Bangka, Sungailiat Region. This is in accordance with the quantitative calculation where the work motivation variable produces a calculated t of 6.156 greater than the table t, which is 1.985 with a significance level of 0.01 smaller than the significance level of 0.05

3. The Influence of Non-Physical Work Environment on Employee Performance

Referring to the results of the research that has been conducted, it can be stated that the variable of the non-physical work environment partially has a positive and significant effect on the performance of

employees at PERUMDA Tirta Drinking Water Bangka, Sungailiat Region. This is in accordance with the quantitative calculation where the variable of the non-physical working environment produces a t calculation of 7.477 greater than the t table which is 1.985 with a significance level of 0.01 smaller than the significance level of 0.05.

4. The Influence of Infrastructure, Work Motivation, and Non-Physical Work Environment on Employee Performance

The results of the determination coefficient (R²) test showed that the Adjusted R Square number of 0.572 or 57.2% means that the variation of employee performance variables can be influenced by infrastructure, work motivation, non-physical work environment, the remaining 42.8% is influenced by other variables outside this study.

Conclusion

Based on the results of the analysis and discussion that has been carried out, it can be concluded that infrastructure, work motivation, and non-physical work environment partially or simultaneously have a positive and significant effect on employee performance at PERUMDA Tirta Bangka Drinking Water Region Sungailiat Regency.

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Conflict of Interest

This research has been given permission by the relevant party so that this research is allowed to be carried out. The party concerned will use this research as evaluation material in the future.

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