

The Influence Of Individual Characteristics And Work Environment On Employee Performance In Pdam Tirta Bukae Utara Luwu District

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Abstract

The most unique resource in a company is people, who have different thoughts, feelings and characters. The aim of this research is to determine the influence of individual characteristics and the work environment on employee performance at PDAM Tirta Bukae, North Luwu Regency. The type of research applied in this research is quantitative research. The population of this research is all employees who work at PDAM Tirta Bukae, North Luwu district. Where in this research, samples were collected using full sampling techniques. The total sample in this study was 78 respondents. The data collection technique in this research is to use primary data obtained from questionnaires according to the Likert scale model. This is done by providing a set of questions or also written statements in the form of questionnaires which are distributed directly to respondents. The independent variables in this research are Individual Characteristics (X1), Work Environment (X2) and the dependent variable is Employee Performance (Y). The data analysis techniques used in this research are validity testing, reliability testing and multiple linear regression analysis. Based on the results of the research that has been carried out, the researcher can conclude that there is a positive and significant influence between individual characteristics on employee performance, the work environment has a positive and significant influence on employee performance. Furthermore, individual characteristics and the work environment simultaneously or together have a significant effect on employee performance.

Keywords : Individual Characteristics ; Work Environment ; Employee Performance

1. Introduction

The most unique resource in a company is people, who have different thoughts, feelings and characters. Each person has unique characteristics because of their different personalities. Whether a person's character is good or bad depends on how they use it [13]. The definition of individual characteristics is how a person differs from other people. Each worker in the company has individual characteristics. Human resources or employees are people who provide their energy, talent, creativity and effort to keep the company running. According to Robbins, characteristics such as age, gender, number of dependents, and years of service spent at the company are accessible and easily defined information found in an employee's personnel file [16].

The work environment is the place where employees carry out their daily routines, as well as everything that influences how they carry out their duties and responsibilities. It is very important to pay attention to the work environment because a good work environment will motivate employees to do more work and improve their performance. On the other hand, a bad environment will hinder employees in carrying out their activities and work [17]. According to Budianto et al. The factors that influence an organization or company directly or indirectly are known as the work environment. Everything around an employee that can affect

his work is called the work environment. The work environment includes all work facilities and infrastructure around employees, such as the work place, facilities, cleanliness, lighting and quietness, as well as work relationships between individuals who work in that place (Nasrul et al., 2021).

Employee performance in a business environment is very important because it influences what the company can achieve. According to Faustino Gomes, job performance is a record of results or outputs resulting from certain work functions or activities within a certain period of time. Employee performance can be defined as the extent to which a person carries out his work responsibilities and duties (Singh et al). Performance depends on your motivation and your ability to complete tasks. A person must have a certain level of willingness and ability. A person's skills and willingness are not enough to complete a task if they do not understand what is to be done and how to do it. Successful companies definitely have the ability to assess the performance of their employees. This is done to find out whether the company's goals have been achieved or not. Several factors can influence employee performance which does not always match the expectations of the company or their superiors. A superior must know all the components that influence employee performance [9].

In previous research that is relevant to the research being carried out, namely research (Syafitri et al., 2023) [21] shows that the Individual Characteristics variable (X1) and the Work Environment variable (X2) have a significant effect on employee performance (Y). In subsequent research (Hutapea, 2023) it shows that the influence of individual characteristics, leadership and work environment has a significant effect on the performance of industry and trade service employees.

From the research above there are similarities with this research, however there is an update in this research, namely that it is located in a different location in PDAM Tirta Bukae, North Luwu Regency. The aim of this research is to determine the influence of individual characteristics and the work environment on employee performance at PDAM Tirta Bukae, North Luwu Regency.

2. Methodology

The type of research applied in this research is quantitative research. The population of this research is all employees who work at PDAM Tirta Bukae, North Luwu district. Where in this research, samples were collected using full sampling techniques. The total sample in this study was 78 respondents. Data processing was carried out using IBM SPSS 25. The data collection technique in this research was to use primary data obtained from questionnaires according to the Likert scale model. This was done by asking questions or also written statements in the form of questionnaires which were distributed directly to respondents. The independent variables in this research are Individual Characteristics (X1), Work Environment (X2) and the dependent variable is Employee Performance (Y). The data analysis techniques used in this research are validity testing, reliability testing and multiple linear regression analysis.

3. Results and Discussion

3.1. Results

A. Validity test

Table 1. Validity Test Results

Variable	Items	r count	r table	Information
Individual characteristics (X ₁)	X1.1	0.526	0.227	Valid
	X1.2	0.519	0.227	Valid
	X1.3	0.519	0.227	Valid
	X1.4	0.432	0.227	Valid
	X1.5	0.521	0.227	Valid
	X1.6	0.421	0.227	Valid
	X1.7	0.420	0.227	Valid
	X1.8	0.490	0.227	Valid
Work environ- ment (X ₂)	X2.1	0.509	0.227	Valid
	X2.2	0.511	0.227	Valid
	X2.3	0.330	0.227	Valid
	X2.4	0.374	0.227	Valid
	X2.5	0.433	0.227	Valid
	X2.6	0.532	0.227	Valid
	X2.7	0.540	0.227	Valid
	X2.8	0.580	0.227	Valid
Employee per- formance (Y)	Y1.1	0.648	0.227	Valid
	Y1.2	0.727	0.227	Valid
	Y1.3	0.618	0.227	Valid
	Y1.4	0.616	0.227	Valid
	Y1.5	0.658	0.227	Valid
	Y1.6	0.564	0.227	Valid
	Y1.7	0.538	0.227	Valid
	Y1.8	0.679	0.227	Valid
	Y1.9	0.431	0.227	Valid
	Y1.10	0.450	0.227	Valid

Based on the table above, an instrument is said to be valid if $r \text{ count} > r \text{ table}$ at a significance level of 5% or 0.05 and if $r \text{ count} < r \text{ table}$ then the instrument is invalid. According to the validity test results above, all items obtained $r \text{ count} > r \text{ table}$, this shows that the items in the Individual Characteristics, Work Environment and Employee Performance variables have a correlation coefficient value greater than 0.227. This shows that the calculated r is greater than the table r , so all items from this variable can be declared valid.

B. Test Reliability

Table 2 . Results Reliability

Variable	Cronbach's alpha	Standard	Information
Individual Characteristics (X ₁)	0.706	0.6	Reliable
Work Environment (X ₂)	0.606	0.6	Reliable
Employee Performance (Y)	0.839	0.6	Reliable

Based on the reliability test results table above, it shows that the Individual Characteristics (X₁) 0.706, Work Environment (X₂) 0.606 and Employee Performance (Y) 0.839 variables

are reliable because Cronbach alpha is greater than 0.6. So all instruments are said to be reliable.

C. Multiple Linear Regression Test

Multiple linear regression analysis is used to determine the magnitude of the influence between the independent (dependent) variables, namely Individual Characteristics (X_1), Work Environment (X_2) on the dependent (independent) variable, namely Employee Performance (Y).

Table 3. Results of Multiple Linear Regression Analysis

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,844	4,267		0.901	0.371
	individual characteristics (X_1)	0.752	0.133	0.523	5,648	0,000
	work environment (X_2)	0.361	0.114	0.293	3,166	0.002

a. Dependent Variable: employee performance (Y)

Based on the table above, the multiple linear regression equation can be seen as follows:

$$Y = 3.844 + 0.752X_1 + 0.361X_2 + e$$

The results of the multiple linear regression equation above can be interpreted as:

- Mark constant as big as 0.371 can interpreted if all variable free(characteristic individual, environment Work) The same with zero or constant so employee performance behavior of 0.371. A constant value of 0.371 means it has an effect positive.
- The regression coefficient value of the individual characteristic variable (X_1) is positive, namely 0.752 shows that if the individual characteristic value (X_1) increases then performance employee (Y) will increase of 0.752.
- Mark coefficient variable environment Work (X_2) worth positive that is 0.361 shows that if the work environment value (X_2) increases then performanceemployee will increase by 0.361.

Based on the t test results table above, it can be seen that the significant value of the individual characteristic variable (X_1) is $0.00 < 0.05$ and the calculated t value (5,648) $>$ t table (1.992) which means it has a positive and significant effect on employee performance. The work environment variable (X_2) is t calculated (3.166) $>$ t table (1.992), which means it has a positive and significant effect on employee performance.

The partial test is used to determine whether each or partially independent variable has a significant influence or not on the dependent variable. It is said to be significant if the significance value is < 0.05 and is said to be influential if $T_{\text{count}} > T_{\text{table}}$.

Based on the results of the t test above for the Individual Characteristics variable (X_1), the significance value of t (0.000) is smaller than $\alpha = 0.05$, namely the significant value of $t < \alpha$ value = 0.05 and t calculated 5.648 $>$ t table 1.992. So the hypothesis is accepted so it can be concluded that Individual Characteristics (X_1) can significantly influence Employee Performance (Y).

The t test for the Work Environment variable (X_2) obtained a significance value of t (0.000) smaller than $\alpha = (0.05)$, namely the significance value of $t (0.000) < \alpha$ value = 0.05 and calculated T 3.166 $>$ T table 1.992. So the hypothesis is accepted so it can be concluded that the Work Environment (X_2) can significantly influence Employee Performance (Y). From the overall results it can be concluded that the variables Individual Characteristics (X_1), and Work Environment (X_2) have a significant influence on Employee Performance (Y) partially.

The F test or joint or simultaneous test is used to determine whether the independent variable has a significant or simultaneous effect on the dependent variable, it is declared significant if the significance value is < 0.05 and it is said to have a joint or simultaneous effect if $f_{\text{count}} > f_{\text{table}}$

Table 4. F Test (Simultaneous)

ANOVA ^a					
Model		Sum of Squares	df	Mean Square	F
1 Regression		451,997	2	225,999	38,788
	Residual	436,990	75	5,827	
	Total	888,987	77		
a. Dependent Variable: employee performance (Y)					
b. Predictors: (Constant), work environment (X_2), individual characteristics (X_1)					

Based on the test results above, a significance value of f (0.000) was obtained. If the significance value of f (0.000) is smaller than $\alpha = 0.05$ (significant value of $f 0.000 < \text{value of } \alpha = 0.05$) and the calculated f value is (38,788) then the calculated F is 38,788 $>$ F table 3.118 . So the hypothesis is accepted, so it can be concluded that there is a significant influence simultaneously between the independent variables Individual Characteristics (X_1) and Work Environment (X_2) on the dependent variable Employee Performance (Y).

3.2 Discussion

The Influence of Individual Characteristics on Employee Performance

Based on the results of the significance test, it is stated that individual characteristics have an influence on employee performance, namely $0.000 < 0.05$ and the calculated t value (5.648) $>$ t table (1.992), it is proven that individual characteristics have a positive and signif-

ificant effect on employee performance. This means that if an employee has good characteristics, it will also have a good impact on the employee's performance.

Positive individual characteristics such as high motivation, good personality, good competence, good communication skills, high initiative, ability to manage time well, and resistance to pressure can have a positive effect on employee performance. Employees with these characteristics tend to be more enthusiastic, productive, and able to face challenges well in carrying out their duties.

The results of this research are in line with research conducted by (Simatupang et al., 2021) [19] . Which shows that work discipline and individual characteristics influence the performance of employees of the Pematangsiantar City Social Service for Women's Empowerment and Child Protection partially and simultaneously. However, contrary to research conducted by (Hajati et al., 2018), the performance of Kotabaru Polytechnic employees is not partially and significantly influenced by individual characteristics.

The influence of the work environment on employee performance

Based on the results of the significance test, it states that the work environment has an effect on employee performance, namely $0.000 < 0.05$ and the t value $(3.166) > t \text{ table } (1.992)$ which means it has a positive and significant effect on employee performance. It is proven that the work environment has a positive and significant effect on employee performance. This means that if employees have a good work environment, it will also have a good impact on the employee's performance.

The work environment influences employee performance. A good environment can increase employee motivation and satisfaction, as well as increase their involvement in work. Therefore, it is important for companies to create a good and supportive work environment.

The results of this research are in line with research conducted by (Ferawati, 2017) [3] that the performance of PT employees. Cahaya Indo Persada is influenced by their work environment and work discipline. However, this contradicts research conducted by (Nugroho et al., 2024) which states that Employees at the Ramada By Wyndham Yogyakarta Hotel did not experience any significant influence from their work environment.

The simultaneous influence of individual characteristics and work environment on employee performance

Based on the results of the significance test, it states that Individual Characteristics (X_1) and Work Environment (X_2) obtained a calculated F value of $38,788 > F \text{ table } 3.118$ and a significant value of $0.000 < 0.05$, this shows that there is a significant influence of individual characteristics and the work environment on employee performance simultaneously or together.

The results of this research are in line with research conducted by (Nisakurohma & Sunuharyo, 2018) [14] showing that both have a simultaneous and significant positive effect on employee performance. These two variables can influence employee performance simultaneously because both can make them feel comfortable while working.

4. Conclusion

Based on the results of the research and analysis that has been carried out, the following conclusions can be drawn:

1. The Individual Characteristic Variable (X_1) has a partially significant effect on Employee Performance, this is proven by the results of the t test with a significant value of $0.000 < \alpha \text{ value} = 0.05$ and a calculated t value of $5,648 > t \text{ table value of } 1.992$, so hypothesis 1 is accepted. It can be said that increasing employee performance is influenced by individual characteristics at PDAM Tirta Bukae, North Luwu Regency.
2. The work environment variable (X_2) has a significant effect on employee performance, this is proven by the results of the t test with a significant value of $0.000 < \alpha \text{ value} = 0.05$ and t count $3.166 > t \text{ table } 1.992$, so Hypothesis 2 is accepted. So it can be said that creating a good work environment will have a good effect on employee performance at PDAM Tirta Bukae, North Luwu Regency.
3. Individual Characteristics and the Work Environment simultaneously (together) have a positive and significant effect on Employee Performance, this is proven by the results of the f test with a significant value of $f \text{ } 0.000 < \alpha \text{ value} = 0.05$ and obtained f count $38,788 > f \text{ table } 3.118$, so the Hypothesis 3 accepted. So it can be said that individual characteristics and the work environment can influence employee performance at PDAM Tirta Bukae, North Luwu Regency.

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