

## An Effect of Individual Characteristics and Work Environment on Employee Motivation and Performance

Prasetyo Rizky Putra<sup>1</sup>, Rindi Andika<sup>2</sup>, Hasrul Azwar Hasibuan<sup>3</sup>

<sup>1,2,3</sup>Faculty Social and Science, Universitas Pembangunan Panca Budi, Indonesia

[prasetyorizkyputra@gmail.com](mailto:prasetyorizkyputra@gmail.com)

### Abstract

*The role of HR is increasing is important when viewed from the supply and demand side of the labor market, where human capital is the level of compatibility between demand and supply of labor with the quality and quantity of HR itself. Therefore, this study aims to determine the effect of individual characteristics and work environment on employee motivation and performance, and to determine the effect of employee motivation intervening on individual characteristics and work environment on performance. This study uses quantitative methods with the aim of testing hypotheses with the object of this research being all employees of PT. Merapi Utama Pharma Medan Branch, which is located at Jalan Tapan Nauli Pasar 1 No. 5 districts. Sunggal, Kel. Medan Sunggal, Medan 20138 with 76 employees consisting of marketing staff and administrative staff. This company is engaged in pharmaceutical wholesalers whose products are in the form of services in the distribution of medical devices, medicines, infusion fluids and equipment, as well as health food. PT. Merapi Utama Pharma distributes goods from the company or commonly called Principal to hospitals, pharmacies, outlets, supermarkets and mini markets. The data collection technique used a census because the total population was only 76 people. Hypothesis testing using path analysis. The results showed that individual characteristics had a significant effect on employee motivation and performance, the work environment had a significant effect on employee motivation but had no significant effect on performance. The test results show that employee motivation variables mediate the effect of individual characteristics and work environment on performance. This study updates the motivation variable as an intervening variable between individual characteristics variables, performance variables, research locations, and variable relationship models. The limitations of this study include the number of samples which are only 76 subjectivities. In addition, the re-examination should be conducted again in a different place with a larger sample.*

### Keywords

individual characteristics;  
work environment;  
motivation; performance



## I. Introduction

Management of Human Resources (HR) in companies in the 21st century era is getting great attention. This is inseparable from the emergence of management awareness about the role of HR as one of the determining factors in achieving company goals. From a macro perspective, Economic Growth Theory states that the accumulation of human capital contributes primarily to macroeconomic growth; while from the micro side, Human Resource Theory considers human capital as the main resource for a sustainable competitive advantage for the company (Lucas, 1988; Oetomo, 2016). Human Resources (HR) is the most important component in a company or organization to run the business it

does. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired (Shah et al, 2020). The development of human resources is a process of changing the human resources who belong to an organization, from one situation to another, which is better to prepare a future responsibility in achieving organizational goals (Werdhiastutie et al, 2020).

The role of human resources is increasingly important when viewed from the supply and demand side of the labor market, where human capital is the level of conformity between demand and supply of labor with the quality and quantity of human resources themselves. Companies in today's modern economic era are constantly being challenged to meet the demand for qualified workforce, marked by the inability of the labor market to meet these needs. (Hamalik, 2007; Jain & Bhatt, 2015; Luthans, 2015; Myszkowski, et al., 2015; Robbins, 1990; Sabella & Analoui, 2015; Silahtaroglu & Vardarlier, 2016; Tong & Arvey, 2015; Yusof, et al. , 2017).

Some important aspects of the role of HR for organizations or companies to further improve HR management competence in achieving the influence and efficiency of organizational goals.

Role recognition Human capital has led to increased research in the field of human resource management, generally on the management of manpower within a company. Manpower management starts from recruitment, selection, placement, and compensation. The workforce should further be organized into duties and responsibilities.

Some of the results of previous studies are used as study material by researchers to obtain an overview of research results and discussions that are devoted to research using variables that are similar to research variables. Some of the results of previous research are as follows: (1) Rismayadi & Maemunah (2016), The effect of employee motivation, leadership and organizational culture on employee satisfaction and its impact on company performance (case study at PT Pei Hai International Wiratama Indonesia). (2) Locke, Latham, & Erez (1988), Determination of commitment goals. (3) Musriha (2011), The Effect of Work Behavior, Work Environment and Motivation on Clove Cigarette Factory in Kudus Indonesia. (4) (Moulana, et al., 2015), The effect of work relations on performance through the mediator variable of work motivation (study on employees of PT Telkom Indonesia).

The research problem is there are still differences in research results between the variables of individual characteristics, work environment, and motivation to performance.

## **II. Review of Literature**

### **2.1 Individual Characteristics**

Stoner (1989) individual characteristics i.e., the interests, attitudes and needs of a person brought into the work situation. Mathis & Jackson (2006) are four individual characteristics that influence how people can be achieved including interests, identity, personality and social background. Robbins & Judge, (2015) individual characteristics are indicators of attitudes are evaluative statements either desirable or undesirable objects, people or events. Personality is a set of characters that underlie relatively stable behavior patterns in response to an idea, object, or person in their environment.

## 2.2 Work Environment

The work environment can be divided into two components: physical and behavioral. Physical environment consists of elements that relate to the ability of office occupants to physically connect with their office environment. Whereas the behavioral environment consists of components that relate to how well office occupants connect with one another, and the impact the office environment can have on individual behavior.

According to Haynes (2008), the physical environment with the productivity of its occupants is divided into two main categories: office layout (open office versus mobile office) and office comfort (adjusting office environment). These components can then be further divided into main attributes and operationalized in the form of independent variables. These variables will be used to analyze their effect on the dependent variable. It is generally understood that the physical design of the office and the environmental conditions in the workplace are important factors in organizational performance.

Studies have examined the effect of the physical work environment on job satisfaction, performance, and worker health. Scott, Bishop, & Chen (2003) reported that working conditions were related to employee job involvement and job satisfaction. Michie & West (2004) in one study observed that social, organizational and physical contexts serve as impetus for tasks and activities, and strongly influence worker performance. Studies on the quality of work life have also established the importance of safe and healthy working conditions in determining employee performance.

The influence of the work environment, which consists mostly of physical, social and psychological factors, has been studied extensively in the last two decades. In a number of studies, employee motivation, job satisfaction, job involvement, job performance, and health have been found to be strongly influenced by the psycho-social environment of work organizations.

Work environment, according to Opperman (2002), is a combination of three main sub-environments through: technical environment, human environment and organizational environment. Technical environment refers to tools, equipment, technological infrastructure and other physical or technical elements. This is the basis for achieving maximum productivity. The organizational environment includes systems, procedures, practices, values, and philosophies.

Kyko (2005) argues that there are two types of work environment. These were identified as a conducive work environment and a toxic work environment. A conducive work environment provides a pleasant experience for employees and allows them to actualize their abilities and potential. It also reinforces self-actualizing behavior. For example, irresponsible employees turn into responsible employees in a conducive work environment. According to him, a toxic environment brings unpleasant experiences as well as de-actualization of employee behavior. This reinforces low self-actualization behavior and leads to the development of negative traits of employees.

A number of previous research has found that the work environment affects employee performance. (Hamid & Hassan, 2015; Jayaweera, 2015; Narasuci, Setiawan, & Noermijati, 2018; Samson, et al., 2015). In particular, both the physical and non-physical work environment has a significant effect on performance (Rahmawanti, Swasto, & Prasetya, 2014). Augustsson, et al., (2017) think that work is positive. Environmental conditions can be the basis for healthier employees to have a positive impact on organizational productivity. This corresponds to Agbozo, et al., (2017) and Daniels, et al., (2017), who argues that the psychosocial work environment affects performance, so that need to be understood in terms of the physical, organizational and social interactions of the environment. Consequently, the combination of the physical environment and the social

environment appears to have socio-cultural significance for work.(Naharuddin & Sadegi, 2013).

### **2.3 Work Motivation**

Robbins (2008) work motivation is outside the process that gives rise to an individual's intensity, direction and persistence in trying to achieve a goal. Herzberg (1966) motive is work motivation that encourages employees to do work according to the main tasks and office functions which are assessed or measured based on the dimensions of motivators and hygiene factors. Without the motivation of employees to work together in the interests of the company, the goals that have been set will not be achieved. According to McClelland's theory of motivation as expressed by Robbin (2011: 207) the indicators of work motivation consist of several aspects of needs, namely the need for achievement, the need for affiliation, and the need for power.

Previous research has shown that work motivation affects employee performance.(Dewi, et al., 2019; Kuswati, 2020). Motivation is a collection of energy that comes from within and outside, which drives a person to achieve his goals. Research by Mohammed (2017) found that rewards in the form of compensation and training had a positive effect on motivating workers to improve their performance. The relationship between motivation and ability can produce a person's performance(Papilaya, Tuakora, & Rijal, 2019).So, even though he has high motivation, someone with low ability cannot perform well. And vice versa, someone who has high ability but low motivation will eventually show a low attitude and performance.

### **2.4 Employee performance**

Gibson (2004) employee performance is the result of the behavior of a person or group related to the way it works. Stating that performance is basically what employees do or don't do. Operational performance is measured using indicators (Anoraga (2005:178-179), namely motivation, education, discipline, skills, work ethic, nutrition and health, income level, work environment, physical technology, production facilities, needs for production factors, guarantees social, management and achievement opportunities.

Performance is defined as employee behavior in the workplace. The performance of an employee is individual because each employee has a different level of ability to perform their duties. Individual performance can be seen and measured if a person or group of employees can meet the success standards set by the company (Fogaça, Rego, Melo, Armond, & Coelho, 2018).

Based on the conceptual framework, the hypotheses proposed in this study are:

- H1. Individual characteristics have a significant effect on work motivation
- H2. The work environment has a significant effect on work motivation
- H3. Individual characteristics have a significant effect on performance
- H4. The work environment has a significant effect on performance
- H5. Employee motivation has a significant influence on performance.
- H6. Employee motivation mediates the effect of individual characteristics on performance.
- H7. Employee motivation mediates the effect of the work environment on performance.

## **III. Research Method**

This study uses quantitative methods with the aim of testing hypotheses (Ferdinand, 2006). The object of this research is all employees of PT. Merapi Utama Pharma Medan Branch, which is located at Jalan Tapian Nauli Pasar 1 No. 5 district. Sunggal, Kel. Medan

Sunggal, Medan 20138 with 76 employees consisting of marketing staff and administrative staff. This company is engaged in the field of pharmaceutical wholesalers whose products are in the form of services in the distribution of medical devices, medicines, infusion fluids and equipment, as well as health food. PT. Merapi Utama Pharma distributes goods from the company or commonly called Principal to hospitals, pharmacies, outlets, supermarkets and mini markets. Because the population is only 76 people, all populations are included in the study or by using the census method (Sugiyono, 2013).

Hypothesis testing using path analysis. Path analysis is an extension of multiple regression analysis to estimate the quality of the relationship between variables that have been determined based on theory. Path analysis is used to determine the pattern of relationships between three or more variables and cannot be used to confirm or reject the hypothesis of imaginary causes (Ghozali, 2006).

## IV. Discussion

### 4.1 Research Description

The description of the research results is a description of the respondents' answers which are the results of respondents' answers to each research variable. The description of the answers will be explained based on the frequency and average calculation results of each categorized variable.

**Table 1.** Rating Category

interval	Category
1 – 2	Low
2.1 – 3	Currently
3.1 – 4	Tall
from 4.1 – 5	Very high

### 4.2 Individual Characteristics

Individual Characteristics Variables consist of 8 (eight) questions or statements. The following is a description of respondents' answers to the Individual Characteristics variable.

**Table 2.** Description of Respondents' Responses to Individual Characteristics

No	Indicator	Answer Score Percentage					Total	%	mean	Category
		1	2	3	4	5				
1	X1.1	8	26	18	20	4	76	100	2.82	Currently
2	X1.2	8	32	12	22	2	76	100	2.71	Currently
3	X1.3	12	46	6	10	2	76	100	2.26	Currently
4	X1.4	14	40	16	4	2	76	100	2.21	Currently
5	X1.5	24	24	14	14	0	76	100	2.24	Currently
6	X1.6	12	34	24	6	0	76	100	2.32	Currently
7	X1.7	26	24	21	4	0	76	100	2.06	Currently
8	X1.8	14	28	22	12	0	76	100	2.47	Currently
Average									2.37	Currently



### 4.3 Work environment

The work environment variable consists of 8 (eight) questions or statements. The following is a description of the respondents' answers to the variables of the employee's work environment.

**Table 3.** Description of Respondents' Responses in the Work Environment

No	Indicator	Answer Score Percentage					Total	%	mean	Category
		1	2	3	4	5				
1	X2.1	18	38	12	8	0	76	100	2.13	Currently
2	X2.2	18	38	12	8	0	76	100	2.13	Currently
3	X2.3	17	32	14	8	5	76	100	2.63	Currently
4	X2.4	18	22	24	12	0	76	100	2.39	Currently
5	X2.5	18	34	12	8	4	76	100	2.29	Currently
6	X2.6	18	36	14	8	0	76	100	2.16	Currently
7	X2.7	12	30	20	14	0	76	100	2.47	Currently
8	X2.8	24	20	20	12	0	76	100	2.26	Currently
Average									2.31	Currently

### 4.4 Motivation

The motivation variable consists of 7 (seven) questions or statements. The following is a description of respondents' answers to the employee motivation variable.

**Table 4.** Description of Respondents' Responses to Motivation

No	Indicator	Answer Score Percentage					Total	%	mean	Category
		1	2	3	4	5				
1	Z1	8	48	16	2	2	76	100	2.24	Currently
2	Z2	24	16	24	10	2	76	100	2.34	Currently
3	Z3	22	26	14	12	2	76	100	2.29	Currently
4	Z4	14	32	16	14	0	76	100	2.39	Currently
5	Z5	14	36	12	12	2	76	100	2.37	Currently
6	Z6	6	26	24	24	0	76	100	2.92	Currently
7	Z7	8	28	10	10	12	76	100	2.87	Currently
Average									2.49	Currently

### 4.5 Performance (Y)

The performance variable consists of twelve (12) questions or statements. The following is a description of the respondents' answers to the performance variable.

**Table 5.** Description of Respondents' Responses to Performance

No	Indicator	Answer Score Percentage					Total	%	mean	Category
		1	2	3	4	5				
1	Y1	22	40	8	6	0	76	100	1.87	Currently
2	Y2	10	42	18	4	2	76	100	2.23	Currently
3	Y3	18	34	16	6	2	76	100	2.21	Currently
4	Y4	20	38	12	2	4	76	100	2.11	Currently
5	Y5	16	30	22	6	2	76	100	2.23	Currently
6	Y6	12	28	14	16	6	76	100	2.68	Currently
7	Y7	6	40	10	8	12	76	100	2.74	Currently

8	Y8	6	44	22	4	0	76	100	2.37	Currently
9	Y9	14	42	10	10	0	76	100	2.21	Currently
10	Y10	14	32	12	12	6	76	100	2.53	Currently
11	Y11	16	32	6	20	2	76	100	2.47	Currently
12	Y12	14	26	16	14	6	76	100	2.63	Currently
Average									2.38	Currently

#### 4.6 Instrument Validity Test

This study uses a questionnaire to collect research data, if the Pearson correlation value (r-count) between two variables is latent (measured) and indicator variable (measured) with a significance value (2-tailed) 0.000 at a significance level of 0.05 correlation. The results of the analysis in the table above show that all indicators for the Performance variable are greater than 0.05 so that all indicators are declared valid or able to measure all variables.

#### 4.7 Instrument Validity

**Table 6.** Instrument Validity

Variable	Indicator	r-count	Information
Individual Characteristics	Item 1	0.499	valid
	Item 2	0.585	valid
	Item 3	0.673	valid
Work environment	Item 1	0.429	valid
	Item 2	0.819	valid
	Item 3	0.709	valid
Employee motivation	Item 1	0.510	valid
	Item 2	0.735	valid
	Item 3	0.735	valid
Employee performance	Item 1	0.654	valid
	Item 2	0.441	valid
	Item 3	0.601	valid

#### 4.8 Instrument Reliability Test

Questionnaire reliability means the ability of measuring instruments to measure consistently. This test is used to ensure the consistency is alpha or alpha Cronbach coefficient. The measurement item is said to be reliable if it has a Cronbach alpha coefficient of 0.6. (Moulana, 2017).

**Table 7.** Reliability Test

Variable	Cronbach alpha	Reliability standard	Information
Individual Characteristics	0.717	0.60	Reliable
Work environment	0.693	0.60	Reliable
Employee motivation	0.620	0.60	Reliable
Employee performance	0.773	0.60	Reliable

*Source: processed data (2022)*

The internal consistency reliability value is shown in the table above, for the alpha coefficient is reliable because it is greater than 0.6. Thus the measurement of items on each indicator in the research variables is declared reliable and can then be used in research.

#### 4.9 Hypothesis test

This study formulates 7 hypotheses consisting of 2 regression equations as follows:

$$EM = + 1IC + 2WE + e \quad (1)$$

$$P = + 1IC + 2WE + 3EM + e \quad (2)$$

Where:

- EM = Employee motivation
- IC = individual characteristics
- WE = work environment
- P = Employee performance
- e = Residual value
- 1... 3 = Regression coefficient

The test is carried out with 2 multiple regression tests, namely equation 1 and equation 2. Equation 1 is used to answer hypotheses 1 and 2. Equation 2 is used to answer hypothesis 3, hypothesis 4, hypothesis 5, hypothesis 6 and hypothesis 7 are answered by interpreting the effect direct and indirect results from equation 1 and equation 2. Here are the results from equation 1.

**Table 7.** Statistical test results for equation 1  
Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,765a	,585	,574	,54086

a. Predictors: (Constant), Work environment, Individual characteristics

b. Dependent Variable: Employee motivation

ANOVA<sup>b</sup>

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	20.951	2	10,475	51.534	,000a
	Residual	14,839	73	0.203		
	Total	35,789	75			

a. Dependent variable: Employee motivation

b. Predictors: (Constant), Work environment, Individual characteristics

Coefficient<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	,442	,177		2,494	0.015
Individual characteristics	,290	0.079	,288	3,671	,000
Work environment	,567	0.070	,634	8,083	,000

a. Dependent variable: Employee motivation



The test results consist of 3 test results and can be implemented as follows:

1. The Model Summary table shows the ability of the independent variables (individual characteristics and work environment) in explaining the dependent variable in equation 1 test (employee motivation). The value of R-Square = 0.585 is considered as the coefficient of determination. This means that individual characteristics and environmental variables in the tested model are able to explain the work motivation variable of 58.5%. While 41.5% (100% - 58.5%) the determinant of work motivation is another variable outside the model tested in equation 1.
2. Table ANOVA is the result of the F test. The results of the F test are useful to determine whether the model being tested is good or not. The model is said to be good if the F test results show prob. prob. significance value < 0.05. The results of the F test show a value of 0.000. This figure is far below 0.05, so the model tested with equation 1 is good.
3. Coefficient table shows the results of t. T test to analyze the effect of each independent variable, namely individual characteristics and work environment on the dependent variable (employee motivation). The test results are used to answer hypothesis 1 and hypothesis 2. Based on the test results, it can be seen that individual characteristics and work environment have a significant effect on employee motivation. This can be seen from:
  - a. The effect of significant individual characteristics on employee motivation is 0.000 (<0.05).
  - b. The effect of the work environment is significant on employee motivation of 0.000 (< 0.05).

The results of testing equation 2 are as follows:

**Table 8.** Statistical test results for equation 2  
Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,707 <sup>a</sup>	,500	,479	,45296

a. Predictors: (Constant), Employee motivation, Work environment, Individual characteristics

b. Dependent Variable: Employee performance

ANOVA<sup>b</sup>

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	14,754	3	4,918	23,970	,000 <sup>a</sup>
	Residual	14,772	72	,205		
	Total	29.526	75			

a. Dependent variable: Employee motivation

b. Predictors: (Constant), Employee motivation, Work environment, Individual characteristics

Coefficients<sup>a</sup>

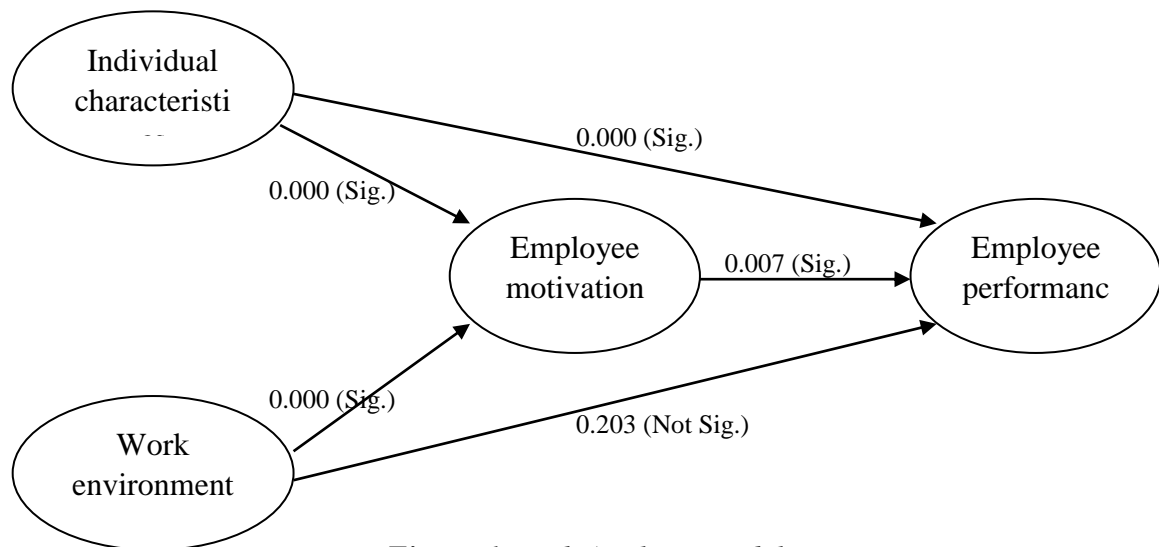
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	,545	,186		2,933	,005
Individual characteristics	,493	,087	,538	5,697	,000
Work environment	-,125	,097	-,154	-1,286	,203
Motivation	,329	,118	,362	2,800	,007

a. Dependent variable: Employee performance

The results of testing equation 2 can be interpreted as follows:

1. The Model Summary table shows the ability of the independent variables (individual characteristics, work environment, and employee motivation) in explaining the dependent variable in the test of equation 2 (performance). R-Square value = 0.500.
2. The ANOVA table is the result of the F test. The model is said to be good if the result of F shows the prob value. significance < 0.05. F test results This figure is far below 0.05, so the model being tested is good.
3. The Coefficient table shows the results of the t-test. The t-test aims to analyze the effect of each independent variable, namely individual characteristics, work environment, and employee motivation on the dependent variable (performance). The results of this test are used to answer hypotheses 3, 4, and 5 respectively. Based on the test results, it appears that:
  - a. Individual characteristics have a significant influence on performance. This can be seen from the prob. The significance value of the influence of individual characteristics on employee performance is 0.000 (<0.05).
  - b. The work environment does not have a significant effect on performance. This can be seen from the prob value. the significance of the work environment on the performance of 0.203 (> 0.05).
  - c. Work motivation has a significant effect on performance. This can be seen from the prob value. significance of 0.007 (< 0.05).

Based on these tests, the description of the results of the research model and its effects can be described as follows:



*Figure 1. Path Analysis Model*

Based on the test results, we found evidence that individual characteristics and work environment have a significant influence on employee motivation and also individual characteristics significantly affect performance, while the work environment has a significant influence on employee motivation and there is no significant effect on performance.

Hypotheses 6 and 7 are determined by the results of the combined test of equation 1 and equation 2 where:

1. Hypothesis 6 was formulated to examine the mediating role of employee motivation in the influence of individual characteristics on performance. This hypothesis is proven if:
  - a. Individual characteristics have a significant influence on performance.

- b. Individual characteristics have a significant effect on employee work motivation.
  - c. Employee motivation has a significant effect on performance.
  - d. The magnitude of the indirect influence is greater than the direct influence.
- Based on these criteria, hypothesis 6 is proven, so that employee motivation can mediate the effect of individual characteristics on performance.
2. Hypothesis 7 was formulated to examine the mediating role of employee motivation in the effect of the work environment on performance. This hypothesis is proven if:
    - a. The work environment has a significant influence on performance.
    - b. The work environment has a significant influence on employee work motivation.
    - c. Employee motivation has a significant effect on performance.
    - d. The magnitude of the indirect influence is greater than the direct influence.

Based on these criteria, hypothesis 7 is proven, so that employee motivation mediates the effect of the work environment on performance.

**Table 9.** Summary of Hypothesis Testing Results

Hypothesis	Variable Effect	t count	Prob.	Information
H1	Individual characteristics → Motivation	3,671	0.000	Significant
H2	Work environment → Motivation	8,083	0.000	Significant
H3	Individual characteristics → Performance	5,697	0.000	Significant
H4	Work environment → Performance	-1,286	0.203	Not significant
H5	Motivation → Performance	2,800	0.007	Significant
H6	Individual characteristics → Motivation → Performance		0.000	Mediation
			0.007	
			0.000	
H7	Work Environment → Motivation → Performance		0.000	Mediation
			0.007	
			0.203	

#### 4.10 Discussion

The relationship between variables will become clear the variables proposed in the hypothesis unless the variable has a significant influence on performance and work environment.

##### 1. The Influence of Individual Characteristics on Motivation

The test results obtained t-count of 3.671 with prob. significant 0.000 ( $\leq 0.05$ ). Based on these results, there is a significant influence of individual characteristics on employee work motivation. This means that hypothesis 1 in this study is proven. The results of this study support previous research conducted by (Pujiwati & Susanty, 2017).

##### 2. The effect of employee motivation on the work environment

The test results obtained a t-count value of 8.083 with prob. significant 0.000 ( $\leq 0.05$ ). Based on these results, there is a significant influence of the work environment on employee motivation. This means that hypothesis 2 in this study is proven. These results support previous research conducted by (Setiawan, 2013; Moulana, 2017).

##### 3. The Influence of Individual Characteristics on Performance

The test results obtained a t-count value of 5.697 with prob. significant 0.000 ( $\leq 0.05$ ). Based on these results, there is a significant influence between individual characteristics on performance. This means that hypothesis 3 in this study is proven. These results

support the previous research conducted by (Pujiwati & Susanty, 2017) but contradict the research conducted by (Setiawan, 2013).

4. Influence of Work Environment on Performance

The test results obtained t-count of -1.286 with prob. Significant 0.203 ( $\geq 0.05$ ). Based on these results, the work environment does not have a significant effect on performance. This means that hypothesis 4 in this study is not proven. This result contradicts the results of previous research conducted by (Moulana, 2017; Murisha, 2011; Pujiwati & Susanty, 2017).

5. The Effect of Work Motivation on Performance

The test results obtained t-count of 2800 with prob. significant 0.007 ( $\leq 0.05$ ). Based on these results, there is a significant influence between work motivation on performance. This means that hypothesis 5 in this study is proven. These results support the results of previous research conducted by (Moulana, 2017; Murisha, 2011; Pujiwati & Susanty, 2017).

6. Employee motivation mediates individual characteristics on performance

Based on the test results, employee motivation mediates the effect of individual characteristics on performance because it meets all requirements, namely (a) Individual characteristics significantly affect performance with prob. significant 0.000 ( $\leq 0.05$ ). (b) Individual characteristics have a significant effect on employee work motivation with prob. significant 0.000 ( $\leq 0.05$ ). (c) Employee motivation has a significant effect on performance with prob. Significant 0.007 ( $\leq 0.05$ ). (d) The magnitude of the indirect influence is greater than the direct influence. This means that hypothesis number 6 in this study is proven.

7. Employee motivation mediate the effect of the work environment on employee performance.

Based on the results of testing employee motivation mediates the effect of the work environment on employee performance because it fulfills two conditions b and c, namely (b) The work environment has a significant influence on employee motivation with prob. significant 0.000 ( $\leq 0.05$ ). (c) Employee motivation has a significant effect on performance with prob. significant 0.000 ( $\leq 0.05$ ). This means that hypothesis number seven in this study is proven. These results are in line with research results (Moulana, 2017).

## V. Conclusion

Individual characteristics have a significant effect on employee motivation and performance. The work environment has a significant effect on employee work motivation but does not have a significant effect on performance directly. Employee motivation mediates the effect of individual characteristics and work environment on performance.

### Suggestion

For further researchers, it is hoped that the results of this study can be useful as a reference for similar research with the addition of variables and indicators. The small sample in this study makes the results of the study very subjective. So they need to do further research using more samples.

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