PalArch's Journal of Archaeology of Egypt / Egyptology

THE INFLUENCE OF THE PHYSICAL WORK ENVIRONMENT AND LEADERSHIP STYLE ON EMPLOYEE PRODUCTIVITY

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ABSTRACT
This study aims to determine the effect of physical work environment and leadership style on the work productivity of PT. Taruma tex Bandung, with a sample size of 76 employees. The research method used in this research is descriptive and verification research methods using quantitative approaches, where in the study using the SPSS 26.0 program. The results showed that the physical work environment had a positive and significant affect on work productivity with a strong enough category and a contribution of 24.7%. While the leadership style has a positive and significant effect on work productivity with the category of strong interpretation and a contribution of 48.4%. The physical work environment and leadership style together have a positive and significant effect of 54.9% on work productivity with the strong interpretation category.

INTRODUCTION
Human resource management can be defined as the activity of planning, directing and coordinating all work involving employees, finding employees, training or organizing and serving them by achieving organizational goals efficiently and allowing employees to use all their abilities, interests and opportunities to work as well as possible (Buchari, 2016).

Human resource is the most important aspect in a company because it is an element that moves the company forward or not. Putting people in their place plays as for the main factor in Success Company because if you leave the work to someone who is not an expert, failure will likely occur.

The process of achieving company goals does not only focus on technology, funds owned, facilities and infrastructure owned, but also on human resources that must be productive. In order for the company to move forward, it needs productive employees, therefore it needs good management within the company to get the expected work productivity and the company's goals are well achieved. To create good productivity, companies are required to always increase the productivity of their employees continuously effectively and efficiently. Tohardi in Machmed Tun Ganyang (2018) reveals that Productivity is a mental attitude that is always looking for improvements to what already exists. A belief that a person can do a better job today than yesterday and tomorrow is better than today.

PT. Tarumatex as the object of this research, PT. Tarumatex was founded in 1968, which is located on Jalan Ahmad Yani Bandung, occupying a land area of 16 hectares and producing clothing in the form of woven fabrics which began in 1971. To see the state of employee productivity at PT. Tarumatex, the researchers conducted a pre-survey of employees using the Edy Sutrisno indicator quoted by Machmed Tun Ganyang (2018).

According to the pre-survey results the researcher identified a problem with the productivity of the employees of PT. Tarumatex. Many factors can affect employee work productivity, one of which is the work environment, the work environment is an environment where employees do their daily work, a good work environment has an important role in increasing employee productivity in a company, a good work environment can support employee work. more enthusiastic in carrying out their work, and vice versa if employees feel unsuitable for their work environment, they will feel bored, uncomfortable, not motivated to work until finally job dissatisfaction appears and has an impact on decreasing productivity. So the work environment is a motivation for employees to work better. It should pay attention to the conditions of the work environment so as to create comfortable conditions for employees to work. This is in accordance with what Sumarni and Soeprihanto (2013) put forward, with comfortable working conditions, employees will feel safe and productive in carrying out

LITERATURE REVIEW

Physical work environment

According to Sedarmayanti (2011), the physical work environment is as follows:
"The physical work environment is all that is located around the workplace, and which can affect employees either directly or indirectly. ""The physical

work environment is an employee workplace and includes everything contained therein which can affect either directly or indirectly."

Leadership style

Machmed Tun Ganyang (2018) reveals the following leadership styles:
"The pattern of attitudes and behavior of a person in carrying out the task of directing, influencing and controlling subordinates so that they are willing to carry out their duties voluntarily by maximizing their ability to achieve certain goals."

According to Malayu S.P. Hasibuan (2006) defines leadership style as follows:
"Leadership style is an attempt to influence people between individuals thanks to the communication process to achieve one or more goals."

Thus the definition of leadership style can be concluded as follows:
"The leadership style is a pattern of behavior from someone in an effort to influence and control others to achieve goals."

Productivity

According to Malayu S.P. Hasibuan (2011) suggests work productivity as follows:

"Work productivity is the ratio between output and input where the output must have added value and better engineering techniques."

According to Tohardi in Machmed Tun Ganyang (2018) defines productivity as follows:

"Work productivity is a mental attitude that is always looking for improvements to what already exists. A belief that someone can do a better job today than yesterday and tomorrow is better than today. "

Meanwhile, according to Edy Sustrisno in Machmed Tun Gayang (2018) suggests work productivity as follows:

"Work productivity is the quantity or volume of the main product or service produced by the organization. This can be measured through three levels, namely the individual level, the group level, and the organizational level. "

Thus the definition of work productivity can be concluded as follows:
"Work productivity is a comparison between output and input and a mental attitude that always seeks self-improvement from time to time."

Research paradigm

A good and comfortable work environment will certainly increase employee morale and have an impact on their productivity. A good physical work environment can reduce the level of boredom and stress, so that employee performance will increase. Facilities that are available without being supported by a good work environment will have meaning. The physical work environment has an important decisive position in generating and developing work productivity of employees. Satisfied employees will be more loyal to the company, so that these employees carry out their duties and responsibilities properly.

Another factor that affects productivity is leadership style, leadership is important in a company in achieving the desired goals; leaders also affect employee work productivity at the company.
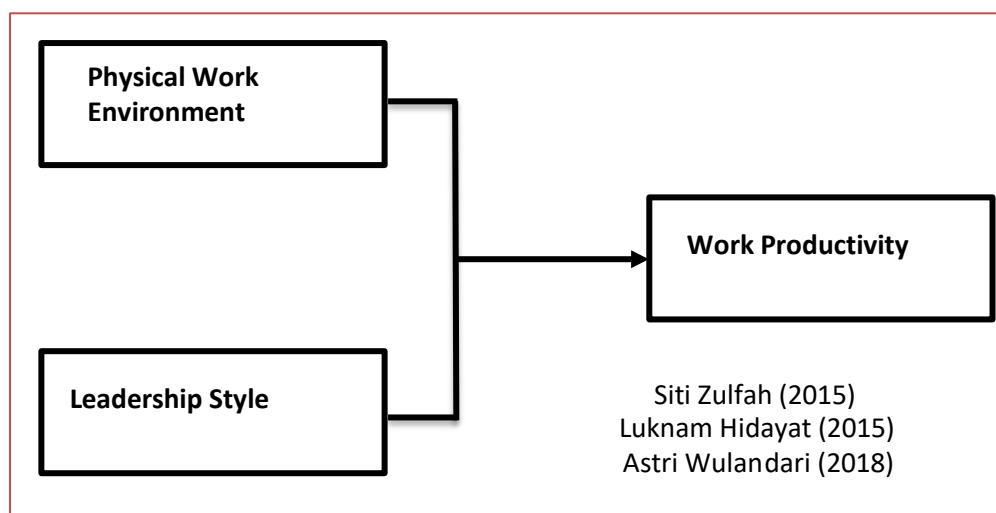

Figure 1 Research Paradigm

RESEARCH METHODS
This study uses an approach through descriptive verification with quantitative methods. According to Sugiyono (2017) defines the descriptive method as follows:

"The descriptive research method is used to determine the existence of independent variables, either only one or more variables (independent variables) without making comparisons of those variables in other samples and Looking for the relationship between the variable and other variables. "

While verification research according to Sugiyono (2017) is as follows:
"Research conducted on a specific population or sample in order to test the hypothesis that has been established."

Furthermore, using a quantitative approach, according to Sugiyono (2017) defines quantitative research methods as follows:

"Quantitative research methods can be defined as a research method based on a positivist philosophy, used for research on a particular population or sample, data collection, using research instruments, quantitative or statistical data analysis, with the aim of testing the established hypothesis."

Population and Sample

According to Sugiyono (2017) defines population as follows: "Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics that are determined by researchers to be studied and then draw conclusions."

This study uses a population of all employees of PT. Tarumatex Bandung, amounting to 314 people.

While the sample according to Sugiyono (2017) defines as follows:
"Sample is part of the number and characteristics possessed by the population"
This study used simple random sampling, namely the collection of a sample of members from the population which is carried out randomly without paying attention to the strata in the population (Sugiyono 2017).

RESULTS AND DISCUSSION

Validates and reliability test

Table 1. Results of the Validity Test of Physical Work Environment Variables

Desc.	r-Stat 0,……	r-Table 0,……	Remark Valid (V)
L01	,500	,300	V
L02	,468	,300	V
L03	,568	,300	V
L04	,570	,300	V
L05	,376	,300	V
L06	,688	,300	V
L07	,419	,300	V
L08	,519	,300	V
L09	,666	,300	V
L10	,495	,300	V

Source: Researcher Data Processing (2020)

Based on the results in Table 1, all statement items on the physical work environment variable (X1) have a higher r-count value above the r-table value of 0.300. So, it can be seen that all statement items on the physical work environment variable (X1) are valid and can be used to measure the variable under study.

Table 2 Leadership Style Variable Validity Test Results

Title	r-Statistic 0,……	r-Table 0,……	Desc. Valid (V)
GK1	,696	,300	V
GK2	,605	,300	V
GK3	,842	,300	V
GK4	,803	,300	V
GK5	,746	,300	V
GK6	,716	,300	V
GK7	,765	,300	V
GK8	,745	,300	V
GK9	,545	,300	V

Source: Researcher Data Processing (2020)

Based on the results in Table 2, all statement items on the leadership style
variable (X2) have a higher r-count value above the r-table value of 0.300. So
it can be seen that all statement items on the leadership style variable (X2) are
valid and can be used to measure the variables under study.

Table 4 Results of the Validity Test of Work Productivity Variables

Description	r-Statist	r-Table	ItemValid (V)
P1	,708	,300	Valid
P2	,577	,300	Valid
P3	,611	,300	Valid
P4	,643	,300	Valid
P5	,582	,300	Valid
P6	,598	,300	Valid
P7	,672	,300	Valid
P8	,371	,300	Valid
P9	,489	,300	Valid

Source: Researcher Data Processing (2020)

Based on the results in Table 3, all statement items on the work productivity
variable (Y) have a higher r-count value above the r-table value of 0.300. So,
it can be seen that all statement items on the work productivity variable (Y)
are valid and can benefit by identifying the variable being tested.

Table 4 Reliability Test Results

Instrument	Cronbach Alpha 0, ……	Critical Value 0, …..	Conclusion Reliable (R)
Physical Work Environment (X1)	,708	,700	R

Leadership Style (X2)	,881	,700	**R**
Work Productivity (Y)	,792	,700	**R**

Source: Researcher Data Processing (2020)

Consider Table 4, points reliability test conducted by the researcher showed that all variables got a Cronbach Alpha value above 0.700, meaning that all data taken were reliable and could be used.

Descriptive analysis results

On the basis of the responses of respondents regarding work productivity, it shows that the productivity variable (Y1) has an overall average value of 3.25, which is in the category of interval scale from 2.60 to 3.39 which means it is quite high.

Class assumpt test results
Norm test

Table 5 Kolmogrov-Smirnov Normality Test Results
One-S K-S Test

Unstandardized		Salvage
N		76
Norm Para[a,b]	Mean	.0000000
	Std. Dev	4.92876585
Most Extr. Diff	Abso.	.083
	Pos.	.052
	Neg.	-.083
Test Stat		.083
Asymp. Sig. (2-tail)		.200[c,d]

a.   Test dist. is Norm.
b.   Calc. from data.
c.   Lilliefors Sign Corr.
d.   This is a lower bound of the true significance.
Source: Researcher Data Processing (2020)

On the basis of the previous table which describes the results of the normality test using Kolmogorov-Smirnov (K-S) method. Based on the results of the data test, it can be seen that the accuracy value is 0.200. Because the significance is greater than 0.05, it can be explained that the distribution data is normal

Multicollinearity test

Table 6 Multicollinearity Test Results Coefficients

Mod.		Unstand.Coeff.		Stand. Coeffi.	t	Significant.	Coll.Stat.	
		B	Standard. Err.	Beta			Tol.	Variance Inflation Factor
1	(Const.)	-1.173	4.443		-.264	.792		
	Work Environment	.412	.128	.274	3.223	.002	.858	1.165
	Leadership Style	.509	.073	.593	6.988	.000	.858	1.165

a. Dependent Variable: Productivity
Source: Researcher Data Processing (2020)

From the test results that Looking at the table, it can be explained that the two independent variables have a tolerance value of 0.8580> 0.10 and the VIF value obtained is 1.165 <10, Now that it can be consumed, it turns out that there is no multicollinearity element in the regression model

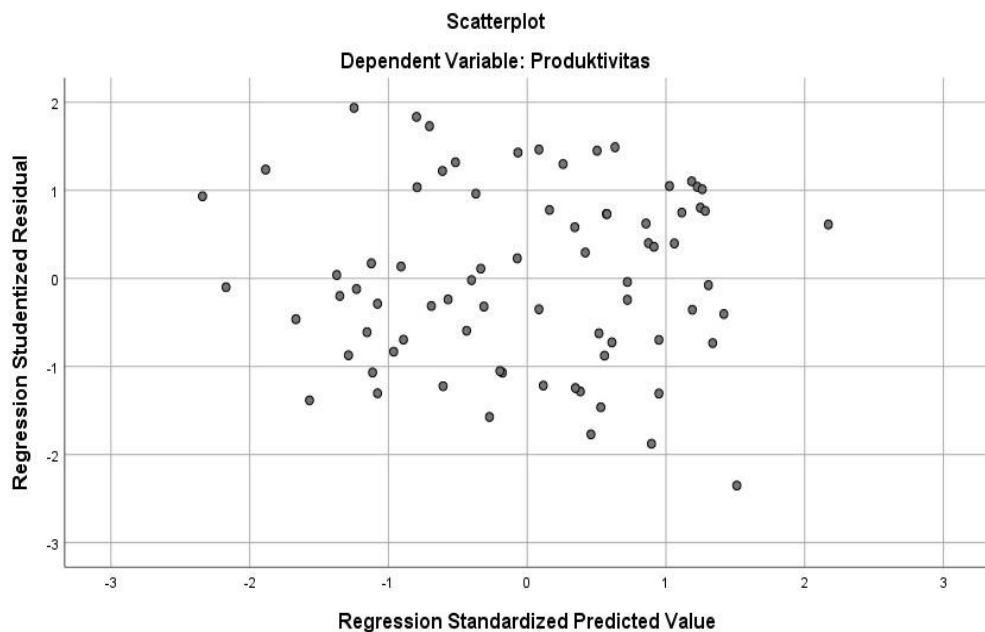***Heteroscedasticity test***

Figure 2: Scatterplot Heteroscedasticity Results of Test

Based on the heterosledasticity data test in the previous figure where the Scatterplot test has been used, which illustrates that the regression model used

in this study does not appear heterosledasticity, this can be seen from the random distribution coordinates and not collected above and below. Below the 0 point on the y line and not a particular pattern.

Table 7 Result of Correlation Coefficient Analysis

		WorkEnvironment	Leadership Style	Productivity
Work Environment	Pearson Corr.	1	.376**	.497**
	Significant (2-t)		.001	0.000
	N Obj	76,0	76,0	76,0
Leadership Style	Pearson Corr.	.376**	1	.696**
	Signif. (2-tail)	0.001		0.000
	N	76,00	76,00	76,00
Productivity	Pears Correl.	.497**	.696**	1
	Sign. (2-tailed)	0.000	0.000	
	N	76,000	76,000	76,000

**. Corr. is sign 0.01 level (2-tailed).

Source: Researcher Data Processing (2020)

From the results of the data that have been obtained in Table 8, the following is an explanation:

1.   The relationship between physical work environment variables (X1) on work productivity (Y) is 0.497, which is in the interpretation 0.40 - 0.599 meaning that the variable has a sufficient and unidirectional positive relationship to the dependent variable.

2.   The relationship between the variable leadership style (X2) on work productivity (Y) is 0.696, is in the interpretation 0.60 - 0.799 meaning that this variable has a strong and unidirectional positive relationship to the dependent variable.

As for illustrating the presence of simultaneous correlation, it can be seen in the Model Summary table by listening to the R value in the table:

Coefficient of determination of physical work environment and leadership style on work productivity

Results of Simultaneous Determination Coefficient Analysis

Model Summary b

Model	R	R Square	Adjusted R Square	Standard. Err. of the Estimate
1	.741ᵃ	.549	.536	4.99583

a.   Predictors: (Constant), Leadership Style, Work Environment
b.   Depend Var.: Productivity
Source: Researcher Data Processing (2020)

Based on the table above, the formula for the coefficient of determination can be used as follows:

$KD = R^2 \times 100\%$
$KD = 0,549 \times 100\%$
$KD = 54,9\%$

From the results of the above calculations, it appears that the coefficient of determination obtained simultaneously is 54.9%. This shows that the physical work environment (X1) and leadership style (X2) contribute to work productivity (Y) simultaneously by 54.9%, As for the number of 45.1% influenced   by   other   factors   outside   the   research.

Hypo test

Part Hypo Test (t test)

Table 8 Hypothesis Test (t test)
Coeff.

Mod.		Unstand. Coeff.		Standard. Coeff.	t	Significant
		B	Standard Error	Beta		
1	(Const.)	-1.173	4.443		-.264	.792
	Work Environment	.412	.128	.274	3.223	.002
	Leadership Style	.509	.073	.593	6.988	.000

a. Dependent Variable: Productivity

Source: Researcher Data Processing (2020)

Simultaneous Hypothesis Test (Test F)

Simultaneous Hypothesis Test of Test (Test F)

ANOVAª

Model		Sum of Sq	df	Mean Sq	F	Significant
1	Reg.	2215.242	2	1107.621	44.379	.000ᵇ
	Residual	1821.955	73	24.958		
	Total	4037.197	75			

a. Depend. Var.: Productivity
b. Predict.: (Const.), Leadership Style, Work Environment
Source: Researcher Data Processing (2020)

On the basis of the calculations from the table, it can be stated that the F value obtained is 44.379, this data will be compared with these values.

F table in the distribution table F, using α = 5% with the formula: df1 = k = 2; df2 = n − k − 1 = 76−2−1 = 73, the F table value is 3.12. From the values above, it can be seen that the value of Fcount (44.379)> Ftable (3.12). Then the results of testing the hypothesis It turns out that H0 is rejected while H1 is accepted, meaning that it has a significant positive effect between the physical work environment variables and leadership style simultaneously on the work productivity of PT. Tarumatex Bandung.

DISCUSSION
Physical Work Environment and Leadership Style Against Employee Productivity.

Based on the results of the hypothesis data test (f), it turns out that the value of Fcount (44.379)> Ftable (3.12). This indicates that H0 is rejected and H1 is accepted, which is interpreted as having a positive effect and there is a significance between the physical work environment. and leadership style simultaneously on the work productivity of PT. Tarumatex Bandung. In line with the research of Siti Zulfah (2015), Luknam Hidayat (2015) and Astri Wulandari (2018) which states that the physical work environment and leadership style affect both partially and simultaneously on employee work productivity.

CONCLUSION
From the analysis and information that has been explained about the physical work environment and leadership styles on the work productivity of employees of PT. Tarumatex Bandung, it can be seen the conclusions from the results of this study:

Respondent response regarding the physical work environment received a good response, meaning that the physical work environment has made employees feel comfortable in carrying out their duties. With the highest average value is obtained in the statement "The lighting from the lamp in the work room is enough for work" which means that the light from the lamp goes well, making employees not find it difficult to see when working and making it comfortable. While the lowest average value is obtained in the statement "The noise around the work environment does not make me feel disturbed at work" this needs to be considered because employees can be distracted by their concentration and do not feel comfortable with the noise that occurs from their work environment which causes a decrease in employee productivity.

Respondents' responses regarding the leadership style received quite good responses. With the highest average score obtained in the statement "I feel the leader supervises closely" which means the leader always supervises each employee in their work for the sake of smoothness. While the lowest average value is obtained in the statement "Leaders only make little contact with employees", this needs to be considered so that the task delivery progresses well.

Respondents' responses regarding work productivity received a fairly high response, which means that the productivity of employees in the company is quite high. With the highest average value obtained in the statement.

"The time used to complete a job according to predetermined standards" which means that employees always complete their tasks according to the standard time that has been given. While the lowest average value is obtained in the statement "I am able to use the resources in the company effectively", this needs to be considered so that employees make maximum use of existing company resources to increase their productivity.

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