

# EFFECTS OF WORK ENVIRONMENT AND LEADERSHIP STYLE ON WORK STRESS: A STUDY ON PT XXX, KARAWANG, WEST JAVA

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**Abstract**---This study aims to obtain empirical evidence and find clarity of phenomena and conclusions about the influence of the work environment and leadership style on work stress in the Quality Control division at PT. XXX. The research design uses descriptive and inductive methods, namely, collect, present, analyze and test hypotheses, and make conclusions and suggestions. The results of the analysis of the research data are: 1) the correlation test of the work environment with the leadership style of 0.382 with a significance value of 0,000, meaning that the figure shows that there is a positive and significant linear relationship between the work environment and the leadership style; 2) The results of the simultaneous determination coefficient test between work environment and leadership style on work stress obtained a value of 33.8%. This means that simultaneously the work environment and leadership style affect work stress by 33.8%, while the remaining 66.2% is influenced by other factors not examined; 3) The direct effect of work environment variables on work stress variables of 0.2642 or 26.42% and the indirect effect of work environment variables through its relationship with leadership style variables of 0.0274 or 2.74%. The direct and indirect influence of 0.2916 or 29.16%; 4) The effect of leadership style variables on work stress variables is 0.0196 or 1.96% and the indirect effect of leadership style variables through its relationship with work environment variables is 0.0274 or 2.74%. So the direct and indirect influence of 0.0470 or 4.7%.

**Keywords**---Work Environment, Leadership Style, Work Stress

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## I. Preliminary

PT. XXX is a foreign manufacturing company (PMA) of Japan which is engaged in the motorcycle assembly industry, located in the International Industrial Area of Karawang Regency, West Java Province. This company, in addition to assembling motorcycles, also produces spare parts from the motorcycles that it assembles. Quality control assy is a part that is tasked with maintaining the quality of assembling engine units and motorcycle units at PT. XXX which includes maintaining the quality of parts used and guaranteeing the assembly process carried out. The high demand for motorcycle products on the market makes PT. XXX to produce more motorbikes, by increasing the amount of production it encourages companies to add additional working hours (overtime). The high overtime hours that must be run by employees in the Quality Control Assy affect the increased workload that must be run. The situation has an impact on employees among them is work stress, work environment, the implementation of leadership styles and others.

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## II. Literature Review

Danang Sunyoto (2012: 43) states that the work environment is everything that exists around the workers and that can affect him in carrying out the tasks that are charged, such as cleanliness, music, lighting and others. Meanwhile, according to Sedarmayati (2011: 1) that the work environment is the overall tools and materials faced, the surrounding environment in which a person works, his work methods, and his work arrangements both as individuals and as groups. From these two opinions it can be concluded that the work environment is everything that exists around workers as both individuals and groups. According Sedarmayanti (2011: 28) there are several factors (indicators) that can influence the formation of a working environment including lighting / light, temperature / temperature, humidity, air circulation, noise, mechanical vibration, unpleasant odor, color arrangement, decoration, music and security. According to Veitzhal Rivai (2012: 42) leadership style is a set of characteristics used by leaders to influence subordinates so that organizational goals are achieved or it can also be said that leadership style is a pattern of behavior and strategy that is liked and often applied by a leader. Three types of leadership styles that influence subordinates to achieve organizational goals, namely: 1) Authoritarian leadership style; 2) Democratic leadership style; 3) Free control leadership style (Laissez-Faire). According to Sondang P. Siagian (2014: 300) work stress is a condition of tension that affects emotions, thoughts and physical conditions of a person. This is in agreement with Melayu Hasibuan (2012: 204) that work stress is a condition that affects emotions, thought processes and one's condition, stressed people become nervous and feel chronic worries.

## III. Research Methodology

The research method used is descriptive survey and explanatory which is a survey to describe the association, relationship or influence of independent variables on the dependent variable, while the nature of the study is descriptive and verification. Descriptive describes the characteristics of the variable under study, while verification tests the truth of a hypothesis. The study was conducted for 3 months from November 2019 to January 2020. The population was taken from the Quality Control Assy of 128 employees and the study sample of 97 respondents. The analytical tool used is path analysis.

## IV. Results and Discussion

Respondents regarding work environment variables have a score of 5726 and an average score of 381.7, in general are in a good position (good = 329.9 - 407.4). Respondents regarding the leadership style has a score of 4322 and an average score of 288.1, in general is in a fairly good position (good enough = 252.3 - 329.8). Respondents regarding work stress has a score of 5627 and an average score of 161.7, in general is in a very bad position (very bad = 97 - 174.6).

The following are the results of work environment correlation test with leadership style:

Table 1. Correlation Test of Work Environment with Leadership Style

	Work Stress	Work Environment	Leadership Style
Work Stress	1.000	-.567	-.336
Work Environment	-.567	1.000	.382

Leadership Style	-.336	.382	1.000
Work Stress	.	.000	.000
Work Environment	.000	.	.000
Leadership Style	.000	.000	.

Correlation test results of the work environment with a leadership style of 0.382 with a significance value of 0.000, meaning that the figure indicates a positive and significant linear relationship between the work environment and leadership style.

The results of the coefficient of determination test can be seen in the following table:

Table 2. Determination Coefficient Test

					Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.582 <sup>a</sup>	.338	.324	4.95656	.338	24.309	2	94	.000

a. Predictors: (Constant), Leadership Style, Work Environment

The results of the simultaneous determination coefficient test between work environment and leadership style on work stress obtained a value of 33.8%. This means that simultaneously the work environment and leadership style affect work stress by 33.8%, while the remaining 66.2% is influenced by other factors not examined.

Path analysis results:

Table 3. Path Analysis Results

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound

1	(Constant)	55.577	4.201		13.229	.000	47.236	63.918
	Work Environment	-.405	.071	-.514	5.658	.000	-.547	-.263
	Leadership Style	-.107	.069	-.140	1.545	.126	-.244	.031

a. Dependent Variable: Work Stress

The following is a picture of the path coefficient:

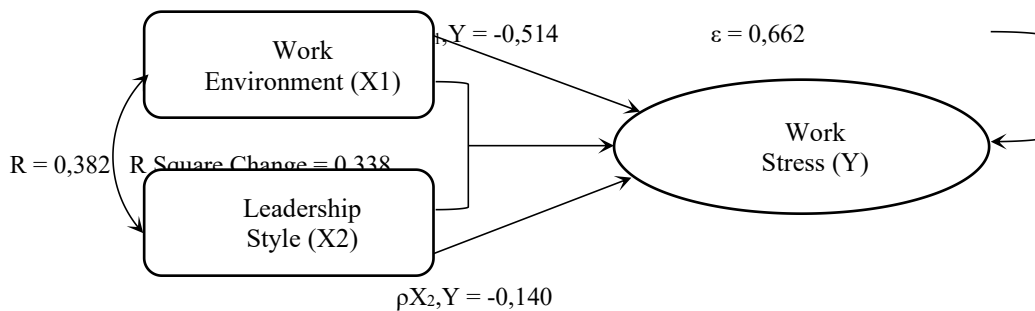


Figure 1. Effect of Work Environment and Leadership Style on Work Stress

The magnitude of the direct and indirect effects of each independent variable on the dependent variable can be seen in the following table:

Table 4. Direct and Indirect Effects of Free Variables towards Bound Variables

Variable	Direct Effects	Indirect Effects		Amount Influence
		X1	X2	
Work Environment (X1)	-0,514 × -0,140 = 0,2642		-0,514 × -0,140 × 0,382 = 0,0274	0,2916
Leadership Style (X2)	-0,140 × -0,140 = 0,0196	-0,514 × -0,140 × 0,382 = 0,0274		0,0470
Total Influence				0,338
ε (1,00 – 0,338)				0,662

The direct effect of work environment variables on work stress variables is 0.2642 or 26.42% and the indirect effect of work environment variables through its relationship with leadership style variables is 0.0274 or 2.74%. So the direct and indirect influence of 0.2916 or 29.16%.

The direct effect of leadership style variables on work stress variables is 0.0196 or 1.96% and the indirect effect of leadership style variables through its relationship with work environment variables is 0.0274 or 2.74%. So the direct and indirect influence of 0.0470 or 4.7%.

The total contribution of the influence of all independent variables (work environment and leadership style) to the dependent variable (work stress) is 0.338 or 33.8% and the remaining 0.662 or 66.2% is influenced by other factors not examined.

## V. Recommendation

The work environment of PT. XXX in the quality control department is good but needs to be improved because it has not reached very good conditions, considering the work environment has a significant effect on employee work stress.

Leadership style in the quality control department at PT. XXX is good enough but needs to be improved to be good or very good even though the leadership style in the quality control department does not have a significant effect on employee work stress.

The level of work stress of employees at the quality level is very low, so the company must be able to maintain the working environment and leadership style that currently exists at PT. XXX specifically the quality control assy section.

Considering the influence of other factors on employee job stress of 66.2%, it is recommended that companies need to analyze other factors that can affect employee job stress, especially in the quality control department so that company goals can be achieved.

## VI. Conclusion

Work environment partially has a significant effect on work stress on the quality control assy at PT. XXX. This situation is shown by the tcount of -5,658 with a significance value of 0,000, a negative value indicates that the work environment has a relationship opposite to work stress.

Partial leadership style does not have a significant effect on work stress on the quality control assy at PT. XXX. This situation is shown by the tcount of -1.545 with a significance value of 0.126, a negative value indicates that the leadership style has a relationship opposite to work stress.

Work environment and leadership style simultaneously have a significant effect on work stress in the quality control department at PT. XXX. This situation is shown from the Fcount value of 24.039 > 3.09, with a significance value of 0,000.

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