# THE EFFECT OF OCCUPATIONAL SAFETY AND HEALTH ON EMPLOYEE PERFORMANCEDIVISION OF THE

(Case Study on Employees of the ProductionTofu Factory W Jombang)

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### **ABSTRACT**

This study aims to determine the effect of safety and health on employee performance at the Tofu W Jombang factory. in the field. Population and sample are employees of the Tofu Factory Production W Jombang, totaling 35 people. data analysis using multiple linear regression method and hypothesis testing with t-test. Based on the results of the study, it showed that employee safety was able to improve the performance of the employees of the Tofu W Jombang Factory. Occupational Health can improve the performance of the employees of the Tofu W Jombang Factory.

Keywords: Occupational Safety, Occupational Health, and Employee Performance

# A. INTRODUCTION

Human resources are one of the company's main assets, therefore quality human resources are needed, the success of the company's goals is also supported by good occupational safety and health. The existence of a good occupational safety and health program will materially benefit employees. They will be absent less often and can work in a pleasant environment. This will result in increased work productivity and result in a good performance.

To support the activities of a company to run well, a company must be able to have competent employees, with their respective fields, namely having extensive knowledge and skills, having the desire to advance, and the company being able to manage as optimally as possible, so that employee performance can be better and improve. Improving performance greatly affects the company, so that the company can survive and compete. Performance can be used as material for company evaluation, namely by measuring the capacity and performance of employees at the company.

Work safety is one of the things that must be considered by the company. Safety is a form of protection using prevention and supervision in doing various things. Mangkunegara (2011:161). Work safety refers to conditions that are safe or safe from suffering, damage, or loss at work. Another factor that affects work safety is the state of the place. Where the preparation and storage of dangerous goods are not taken into account for their safety which can affect the safety of employees.

In addition to work safety factors, the decline in performance is caused by occupational health. Occupational health is an important thing and needs to be considered by the company. The existence of a good health program will benefit employees materially. Employees will be absent less often, work in a more pleasant environment so that overall employees will be able to work longer hours. According to

Mangkunegara (2011:161) "Occupational health programs show conditions that are free from physical, mental, emotional or pain disorders caused by the work environment".

# B. LITERATURE REVIEW

1. Occupational safety is an important factor in the implementation of company activities. Every employee will work optimally if there is a guarantee for employee safety. Mangkunegara (2011:161), "Work safety refers to conditions that are safe or safe from suffering, damage or loss in the workplace.

According to Mangkunegara (2000:107), work safety indicators are:

- a) The state of the work environment is a place provided for arranging and storing hazardous goods that can affect the safety of employees.
- b) Overcrowded and overcrowded workspace It is a place where the work process takes place that makes employees not feel free and comfortable when working, such as a narrow workspace and many machines and work equipment in the room.
- c) use of work equipment is personal protective equipment for employees who are no longer suitable for use and it is necessary to replace new protective equipment for employees so that there are no work accidents for employees, such as helmets, boots, masks, or gloves that are old (obsolete). that need to be replaced for workers.
- d) Use of machines, that is, every company must pay attention to how employees use machines, as well as adequate lighting arrangements for employees so that they can maintain work capacity and work efficiency, and electric light that is not too bright during the day so that the lighting in the workplace is not too bright.
- 2. Occupational Health According to Mangkunegara (2011:161) "Occupational health programs indicate conditions that are free from physical, mental, emotional or pain disorders caused by the work environment". Health risks are factors in the work environment that work beyond the specified period, an environment that can create emotional stress or physical disturbances.

According to Manullang (2000:87), occupational health indicators include:

- a) Cleanliness of the work environment. It is the cleanliness of the workplace that needs to be kept clean of the environment and the cleanliness of its employees so that their physical condition remains healthy so that they are not susceptible to various diseases in the workplace, such as the absence of garbage scattered in the workplace, the workplace is always cleaned so that the workplace is clean and makes the workplace clean. workers feel comfortable at work.
- b) Workforce health facilities are the efforts of the company to improve the health of its workers, such as the provision of clean water and suggestions for clean bathrooms to improve the health of the workers.
- c) Worker health care is a company that provides health services for workers when an accident occurs and can be handled immediately, such as providing complete first aid facilities.

**3. Employee Performance** According to Armstrong and Baron in the book Wibowo (2007: 7), performance is the result of work that has a strong relationship with the organization's strategic goals, customer satisfaction, and contributes to the economy. Employee performance is what affects how much they contribute to other organizations including output quantity, output quality, output period, attendance at work, cooperative attitude.

According to Stoner (2006:39) states several performance indicators, namely:

- a) Quantity of work is the number of work results following the existing working time, what needs to be considered is not routine results, but how quickly the work can be completed."The
- b) quality of work is the quality of work that is based on the standards set. The quality of work is measured by indicators of accuracy, thoroughness, skills, and work success."
- c) Work attitude is an attitude towards company employees and work and cooperation.

# **Hypotheses**

Based on the framework of thinking above regarding theories, the authors make the following hypothesis:

H1: It is suspected that work safety has a positive and significant effect on employee performance at the Tofu W Jombang Factory.

Suspected occupational health positive effect on the performance of employees at the factory to Know W Jombang.

# C. RESEARCH METHODS

1. Types of Research This study describes the relationship between influencing and being influenced by the variables to be studied. The approach used in this research is a quantitative approach, to analyze the relationship between the variables researchers use numbers or a numeric scale (Kuncoro 2003:124). In this study, the variables to be studied are the influence of the work environment and work stress on employee performance.

# a. Test Validity

variables	Statement	r table	Corralatio n	
	Item	table	Corrected	Description
			Item	
Safety (X1)	X1.1	0.3	0.401	Valid
	X1.2	0.3	0.661	Invalid
	X1.3	0.3	0.675	Invalid
	X1.4	0.3	0.600	Valid
Health Work	X2.1	0.3	0.542	Valid
$(X_2)$	X2.2	0.3	0.672	Valid
	X2.3	0.3	0.856	Valid
	X2.4	0.3	0.750	Valid

Employee	Y.1	0.3	0.825	Valid
Performance	Y.2	0.3	0.641	Valid
(Y)	Y.3	0.3	0.649	Valid
	Y.4	0.3	0.732	Valid

Source: SPSS data (processed) 2020

Based on the data in table 3.4 above which is the result of the instrument validity test for each variable, it shows that all items are declared valid because they have a coefficient (r) 0.3 and a significant value of all instruments = 0.05. So that all items in the research instrument can be used in the next analysis.

**b.** Reliability Test Reliability test is useful for determining whether the instrument, in this case, the questionnaire, can be used more than once, at least by the same respondent. Calculation of reliability test using Cronbach's alpha test, with the following criteria, if the value of Cronbach's alpha > 0.6, then the research instrument is reliable. And if the value of Cronbach's alpha < 0.6, then the research instrument is not reliable.

Reliability Test Results

Variable	ValueCronbach Alpha	coefficient α	Description
Safety (X1)	0.773	0.6	Reliable
Health (X2)	0,885	0.6	Reliable
EmployeePerforman ce (Y)	0.861	0.6	Reliable

Source: SPSS data (processed) 2020

# D. RESEARCH RESULTS AND DISCUSSION

a. Results of Multiple Linear Regression Analysis

Coefficients<sup>a</sup>

			dardized	Standar dized Coeffici ents			C	orrelations		Collin Stati	-
Mode	el	В	Std. Error		t	Sig.	Beta- orderZero	Partial	Part	Toleran ce	VIF
1	(Constant)	1657	2.060		.804	.427					
	Safety Kerja_X1								.420 .155 .395 2,710 .011 .611 .432		
	Kerja_X2 Health	.524	.182	.419	2,882	.007	.454 .359 .734			.623	1,362

a. Dependent Variable: TOTAL\_Y

Source: Primary data processed (2020)

The dependent variable in this regression is Employee Performance (Y), while the independent variables are Occupational Safety (X1) and Occupational Health (X2). Based on the analysis above can be obtained by the regression equation as follows:

$$= a + b1x1 + b2X2 + e$$

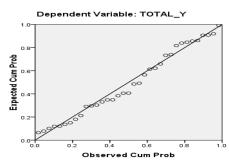
Y = 1,657 + 0,420X1 + 0,524X2

Based on these equations show

- 1. The results of the coefficient b1 (X1) or variable coefficients worth Safety positive value of 0.420 X1 so that workplace safety has a positive influence on employee performance. So, the better the employee's workplace safety, the better the employee's performance at the Tofu W Jombang Factory.
- 2. The result of the coefficient b2 (X2) or the coefficient of Occupational Health is positive at 0.524 so that Occupational Health has a positive influence on employee performance. This shows that the Occupational Health variable has a positive and significant effect on employee performance at the Tofu W Jombang Factory.

# b. Normality Test

Normal P-P Plot of Regression Standardized Residual



Source: SPSS data (processed) 2020

Based on the picture above, it can be seen that the PP Plott output from the analysis using SPSS version 16 describes the data spreading around the diagonal line and following the direction of the diagonal line, then the data is distributed normally and meets the assumption of normality.

# c. Multikolieritas Test

Test ResultsMulticolinearity

Statisticscollinearity				
Tolerance	VIF			
.743	1362			
.743	1362			

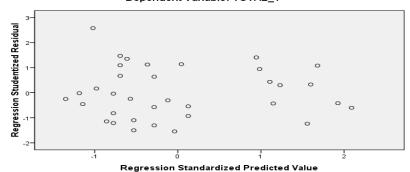
Source: primary data (processed) in 2020

Based on the table above shows that the test results multikoloniaristas contained in this research multikolinierita no symptoms, it can be seen with the VIF < 10 and tolerance value > 0.1.

# d. Heteroscedasticity Test

#### Scatterplot





Source: SPSS Data Version 16 (processed) 2020 The

the graph above shows that the points spread randomly and do not form a certain pattern, spread both above and below the number 0 on the Y-axis. So it can be concluded that this regression model can be said to have no heteroscedasticity, and the regression model is feasible to use for prediction.

### e. Autocorrelation Test

Results Autocorrelation

# **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.709 <sup>A</sup>	.502	.471	2,630	1,772

a. Predictors: (Constant), TOTAL\_X2, TOTAL\_X1

b. Dependent Variable: TOTAL\_Y

Source: SPSS output (2020)

Above to find out the distribution of Durbin Watson values, it is necessary to use a Durbin table with a significance level of 5%. So that it can produce du (1.7245) < dw (1.772), so it can be stated that there is no autocorrelation.

# f. Hypothesis test (t-test or partial test)

# Comparison of t count and t table

No.	Variable	Value t	Significance
1.	Occupational	2.710	0.11
	Safety		
2.	Occupational	2.882	0.07
	Health		

Source: Primary data processed, 2020 then the following can be explained:

# 1. First Hypothesis Testing (H1)

Work Safety Variable (X1) has t value of 2.710 with a significance of 0.001 < 0.05, Thus it can be stated that Work Safety has a positive influence on Employee Performance at the W Jombang Tofu Factory. The First Hypothesis is accepted.

# 2. Testing the Second Hypothesis (H2)

Occupational Health Variable (X2) has t value of 2.882 with a significance of 0.010 < = 0.05. Thus, it can be stated that Occupational Health has a positive influence on Employee Performance at the Tofu Factory W Jombang. The second hypothesis is accepted.

# g. Coefficient of Determination

**Determination Coefficient Test Results** 

# **ModelSummary**<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.709 <sup>A</sup>	.502	.471	2,630	1,772

a. Predictors: (Constant), TOTAL\_X2, TOTAL\_X1

b. Dependent Variable: TOTAL\_Y

Source: SPSS data (processed) 2020 The

above shows that the R2 value of 0.502 means that employee performance based on the results of this analysis is 50% influenced by Occupational Safety and Health factors. Thus the rest, which is 50% Employee Performance is influenced by other factors not examined in this study, such as work motivation, job satisfaction, worker characteristics, etc.

- 1. Based on the results of the analysis showed that workplace safety was able to improve employee performance at the Tofu W Jombang Factory. This can be supported by the results of the answers to the questionnaire which states that employees have better work safety. And can also have a good influence in carrying out their responsibilities, and can reduce the rate of work accidents.
- 2. Based on the analysis results indicate that occupational health also affects employee performance, namely where occupational health can improve employee performance at the Tofu W Jombang Factory. This can be supported by the results of research that is based on the respondents' answers to the

questionnaire which states that employees who have good performance will tend to have loyalty, feelings of pride. A clean workplace and making workers feel more comfortable makes employees feel more at home in working, the factors that make employees choose to stay at the Tofu W Jombang Factory.

# E. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis and discussion of the influence of Occupational Safety and Health at Work on the Performance of Manufacturing Personnel Know W Jombang conclude the study as follows:

- 1. From the processed data will Occupational against Employee Performance factory Know W Jombang obtained good results, things it can be concluded that the variable of work safety affects the performance of the employees of the Tahu W Jombang factory, meaning that the better the work safety in a company, the employee's performance will increase.
- 2. From the results of the processed data on the effect of Occupational Health on the Performance of Tofu W Jombang factory employees, the results obtained are quite good, it can be concluded that the variable of Occupational Health influences the Performance of the employees of the Tofu W Jombang factory, meaning that the better the occupational health obtained by employees, the performance results produced by employees are getting better too.

The authors provide suggestions that are expected to contribute to improvements as a reference for further research. These suggestions include:

- 1. Occupational safety is one of the factors that can affect employee performance. Therefore, it is suggested to the owner of the Tofu Factory W Jombang, that they should continue to improve and pay attention to their work safety both in the state of the work environment such as work equipment and the use of work equipment and the use of machines.
- 2. The owner of the Tofu W Jombang factory should pay more attention to their work health because if the employee feels tired it will affect the quality of his work which will affect the Tofu W Jombang factory itself. And there is still a need for improvement in work morale, and employees should be more enthusiastic and passionate about doing their jobs.
- 3. For the Tofu W Jombang factory to pay attention to the quality of its work, it is necessary to continuously pay attention to the quality, quantity, work attitude, and cooperation as well as to increase the sense of responsibility of its employees.
- 4. Further researchers can also develop their research model by learning from the weaknesses contained in this study, adding other variables, and by using new models such as using mediation.

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