Influence Of Work Health Safety And Work Environment On Employee Satisfaction At PT. Indonesia Toray Synthetics

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Abstract

The results of processing the data obtained by multiple linear regression equation $Y = 2{,}937 + 0{,}485X1 + 0{,}415X2$, meaning that any increase or decrease in the occupational health safety variables by 1 point, then the level of job satisfaction of employees at PT. Indonesia Toray Synthetics will increase or decrease by 0.485 and any increase or decrease in the working environment variable by 1 point, then the level of job satisfaction of employees at PT. Indonesia Toray Synthetics would have increased or decreased by 0.415.

In addition, the authors also calculate the influence between variables. Correlation between occupational health safety and job satisfaction is equal to 0.661, and the correlation between the work environment and job satisfaction of employees amounted to 0.613. It can be concluded that the relationship between these three variables is strong and has a positive influence.

From the test results F, model 1 obtained value of 76.187 with a significance level of 0.000, and model 2 obtained value of 50.841 with a significance level of 0.000. The results are greater than the value of which amounted to 3.09 Ftabel, then H0 is rejected and Ha accepted. While the results of the t test can be calculated at 5.205 occupational health safety and working environment t value is 3.845. Both values are greater than the value that is equal to 1.98447 ttable. That is, there is a significant relationship between occupational health and environmental safety work on employee job satisfaction.

Keywords: **Occupational Health Safety (K3), Work Environment, Employee Satisfaction**

Preliminary

Safety should be a priority in some companies, many found their negligence or lack of attention to the importance of safety at work. This is because the problems that occur have in common, namely a minor accident and if left unchecked will cause a big accident. Whereas by implementing occupational health and safety system is good, it will produce a working environment that is comfortable and safe. Their awareness of safety too low for their health insurance provided by the company, so that they become less focused and not worry about the safety and health at work.

Safety is one of the efforts to create a workplace that is safe, comfortable, healthy, and free from environmental pollution. So as to protect and reduce the accident rate, which in turn can increase efficiency and productivity. When the Occupational Safety and Health are not addressed, then the work will be bad kondsi. Poor working conditions will potentially lead to a work accident, get sick, stress, inability to concentrate. So that then can lead to the decline in labor productivity. The working conditions include physical variables such as the distribution of working hours, work room temperature, lighting, noise level, and the characteristics of the architecture of the workplace environment that is uncomfortable.

Psychological effect on the working environment of employees. Suitable work environment can provide comfort to the employees, so that they are satisfied and comfortable to work in that environment. Employees also will be loyal to the company and do not want to move to work in other companies. Productivity will increase because there is no stress, accidents or other injuries suffered while working.

Hypothesis and Objectives

Based on previous studies and the framework can be formulated several hypotheses which is as follows:

1. Occupational Health Safety (X1) is expected to affect Employee Satisfaction (Y).
2. Working Environment (X2) is expected to affect Employee Satisfaction (Y).
3. Occupational Health Safety (X1) and the Working Environment (X2) simultaneously expected to affect the Employee Satisfaction (Y).

Interest authors conducted this study are:

1. To find out how much influence the Occupational Health Safety (K3) of the Employee Satisfaction.
2. To find out how much influence the Work Environment on Employee Satisfaction.
3. To find out how much influence the Occupational Health Safety (K3) and the Working Environment on Employee Satisfaction.

Research Methods

At the time of this study the author uses descriptive research model, because it can describe the results of a systematic and accurate research of the factors that have been studied. Research data collection is done by distributing questionnaires. The questionnaire was distributed to 100 respondents who are all employees of PT. Indonesia Toray Synthetics. Based on the above research title is Effects of Occupational Health Safety and Environment on Employee Satisfaction at PT. Indonesia Toray Synthetics, then there are three variables in this study, namely the Occupational Health Safety (X1), Working Environment (X2), and Employee Satisfaction (Y) Discussion and Analysis of

1. *Validity and Reliability of Variable Occupational Health Safety (X1)*
At the time of conducting this research, the authors make a 10 (ten) statement on Occupational Health (K3). To see whether all statements are reliable, the authors conducted a reliability test using IBM SPSS Version 20.0 program with the results of Cronbach's Alpha value is equal to 0,800. If compared with the alpha value by Uhar Suharsaputra in his book entitled Quantitative Research Methods, Qualitative and Actions(Suharsaputra 2012, 114)namely with Cronbach's Alpha value is 0.60, then the value of Cronbach's Alpha variable Occupational Health Safety (K3) of the table above is greater than the value of α = 0.60. Thus, it can be concluded that all the statements that the authors ask in a questionnaire about the variable Occupational Health Safety (K3) is proved to be reliable. Table Item-Total Statistics show the results of the calculation of validity for 10 (ten) statement. First we determine the value of rtabel with the provisions of the confidence level (degree of freedom = df), where the number of respondents minus 2 or 100-2 = 98 with significant level of 5%, then the value rtabel amounted to 0.1975. Then we compare rtabel with each rhitung statement by comparing the Corrected Item-Total Correlation, with rtabel (0.1975).

2. *Validity and Reliability of Variable Working Environment (X2)*
At the time of conducting this research, the authors make a 10 (ten) statements about the Work Environment. To assess if the statement is reliable, the authors conducted a reliability test using IBM SPSS Version 20.0 program with the results of Cronbach's Alpha value is equal to 0.810. If compared with the alpha value by Uhar Suharsaputra in his book entitled Quantitative Research Methods, Qualitative and Actions(Suharsaputra 2012, 114)namely with Cronbach's Alpha value is 0.60, then the value of Cronbach's Alpha Work Environment variables from the table above is greater than the value of α = 0.60. Thus, it can be concluded that all the statements that the authors ask in a questionnaire about the Work Environment variables are proven reliable. Table Item-Total Statistics show the results of the calculation of validity for 10 (ten) statement. First we determine the value of rtabel with the provisions of the confidence level (degree of freedom = df), where the number of respondents minus 2 or 100-2 = 98 with significant level of 5%, then the value rtabel amounted to 0.1975. Then we compare rtabel with each rhitung statement by comparing the Corrected Item-Total Correlation, with rtabel (0.1975).

3. **Validity and Reliability of Variable Job Satisfaction (Y)**
At the time of conducting this research, the authors make a 10 (ten) statement Job Satisfaction. To assess if the statement is reliable, the authors conducted a reliability test using IBM SPSS Version 20.0 program with the results of Cronbach's Alpha value is 0.868. If compared with the alpha value by Uhar Suharsaputra in his book entitled Quantitative Research Methods, Qualitative and Actions(Suharsaputra 2012, 114)namely with Cronbach's Alpha value is 0.60, and Cronbach's Alpha value of job satisfaction variables from the table above is greater than the value of α = 0.60. Thus, it can be concluded that all the statements that the authors ask in a questionnaire about job satisfaction variables is proven reliable. Table Item-Total Statistics show the results of the calculation of validity for 10 (ten) statement. First we determine the

value of rtabel with the provisions of the confidence level (degree of freedom = df), where the number of respondents minus 2 or 100-2 = 98 with significant level of 5%, then the value rtabel amounted to 0.1975. Then we compare rtabel with each rhitung statement by comparing the Corrected Item-Total Correlation, with rtabel (0.1975).

Correlation

		Occupational Health Safety	Work environment	Job satisfaction
Keselamatan_Kesehatan_Kerja	Pearson Correlation	1	, 595 **	, 661 **
	Sig. (2-tailed)		, 000	, 000
Work environment	Pearson Correlation	, 595 **	1	, 613 **
	Sig. (2-tailed)	, 000		, 000
Job satisfaction	Pearson Correlation	, 661 **	, 613 **	1
	Sig. (2-tailed)	, 000	, 000	

**. Correlation is significant at the 0:01 level (2-tailed).
 b. Listwise N = 100
Source: Data Processed SPSS 20.0

Based on the data presented in the table above, we can see thatthe influence of Occupational Health Safety on the Job Satisfaction indicated by a correlation coefficient of 0.661 which is close to 1, and the influence of Work Environment on Employee Satisfaction indicated by a coefficient of 0, 613 which is close to 1, then the influence of Occupational Health Safety (K3) and Work environment is strong and has a positive influence. It can be said that the influence of Health Safety (K3) and the Working Environment on Employee Satisfaction at PT. Indonesia Toray Synthetics have a strong influence. Correlation of the table, Effect of Occupational Health Safety (K3) and the Working Environment significantly with Employee Satisfaction can be seen from the figures the probability of 0.000 <0.05, explaining that if the number probability <0, 05, then a significant difference between these three variables. Significant value of 0.000 indicates that the correlation of these three variables is significant, which means it is H0 rejected and Ha accepted.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	DF1	DF2	Sig. F Change
1	661a	, 437	, 432	3.57176	, 437	76.187	1	98	, 000
2	715b	, 512	, 502	3.34435	, 074	14.781	1	97	, 000

 a. Predictors: (Constant), Keselamatan_Kesehatan_Kerja
 b. Predictors: (Constant), Keselamatan_Kesehatan_Kerja, Lingkungan_Kerja
 c. Dependent Variable: Kepuasan_Kerja
Source: Data Processed SPSS 20.0

Based on the data in the table above, we can see that column R to model 1 presents the correlation coefficient of 0.661. This means that the influence of Occupational Health Safety (K3) of the Employee Satisfaction is strong. In addition, at this table can also be seen that the column R Square for model 1 shows the number of R Square of 0.437. The figure is the result of squaring the correlation coefficient or 0.661 x 0.661 = 0.437. R Square called the coefficient of determination. This means that the effect of Occupational Health Safety on Job Satisfaction is 43.7%, while the rest (100% - 43.7% = 56.3%) is influenced by other factors. R Square is ranged from 0 to 1, because the R Square figures on the amount of 0.437 then shows the relationship between the Occupational Health Safety on Job Satisfaction is moderate. Furthermore, theColumn R for model 2 showed the correlation coefficient is equal to 0.715. This means that the influence of Occupational Health Safety (K3) and the Working Environment on Employee Satisfaction is strong. Column R Square for model 2 indicates the number of R Square of 0.512.The figure is the result of squaring the correlation coefficient or 0.715 x 0.715 = 0.512. R Square called the coefficient of determination. This means that the effect of the Occupational Health and Environmental Safety Working on Job Satisfaction amounted to 51.2%, while the rest (100% - 51.2% = 48.8%) is influenced by factors - other factors. R Square is ranged from 0 to 1, because the R Square figures on the amount of 0.512 then shows the relationship between the Occupational Health Safety and Environment on Job Satisfaction is moderate.

ANOVA

Model		Sum of Squares	df	mean Square	F	Sig.
1	Regression	971.955	1	971.955	**76.187**	, 000b
	residual	1250.235	98	12.757		
	Total	2222.190	99			
2	Regression	1137.277	2	568.639	**50.841**	, 000c
	residual	1084.913	97	11.185		
	Total	2222.190	99			

a. Dependent Variable: Kepuasan_Kerja

b. Predictors: (Constant), Keselamatan_Kesehatan_Kerja

c. Predictors: (Constant), Keselamatan_Kesehatan_Kerja, Lingkungan_Kerja

From the test results f contained in the above column ANOVA, F test obtained for model 1 is 76.187 with a significance level of 0.000 where the figure 0.000 <0.05 and F count> F table or 76.187> 3.09. Thus, H0 is rejected and Ha accepted, meaning that there is a linear relationship between the variables of Occupational Health Safety (K3) of the Employee Satisfaction, it can be said that the regression model is feasible and appropriate. Furthermore, the F test for model 2 is 50.841 with a significance level of 0.000 where the figure 0.000 <0.05 and F count> F table or 50.841> 3.09. Thus, H0 is rejected and Ha accepted, meaning that there is a linear relationship between the

variables of Occupational Health Safety (K3) and the Working Environment on Employee Satisfaction.

Coefficients

Model		Coefficients unstandardized		standardized Coefficients	t	Sig.	correlations		
		B	Std. Error	beta			Zero-order	Partial	par t
1	(Constant)	11.682	3.254		3,590	.001			
	Keselamatan_Kesehatan_Kerja	, 698	, 080	, 661	8.729	, 000	, 661	, 661	,661
2	(Constant)	**2,937**	3.802		, 773	, 442			
	Keselamatan_Kesehatan_Kerja	**, 485**	, 093	, 459	**5.205**	, 000	, 661	, 467	,369
	Work environment	**, 415**	, 108	, 339	**3.845**	, 000	, 613	, 364	,273

a. Dependent Variable: Kepuasan_Kerja

Source: Data Processed SPSS 20.0

Based on the data presented in column *Coefficientsa*, we can compile regression equation, the data can be used are the numbers in column B model 2, the column Coefficients unstandardized. From column B model 2, the B constant value obtained 2,937, Occupational Health Safety coefficient values and coefficient 0.485 0.415 Working Environment. From the values of these coefficients, regression values obtained as follows:

$$Y = A + \beta X1 + \beta X2 + e$$
$$Y = 2{,}937 + 0{,}485 X1 + 0{,}415 X2 + e$$

Meaning of the linear regression equation is when the variable X1 (Occupational Health Safety) increased or decreased by 1 point, then the variable Y (job satisfaction) would have increased or decreased by 0.485. Whereas when X2 (Working Environment) increased or decreased by 1 point, then the variable Y (job satisfaction) would have increased or decreased by 0.415. Furthermore, the column t, is used for testing the truth of the hypothesis predetermined, this is done in a way membandingkannilai t have been obtained with ttabel value. Testing criteria are as follows:

If t> t table then H0 is rejected and Ha accepted.

If t <t table then H0 is accepted and Ha rejected.

In column 2 that the model t t Occupational Health Safety (X1) is 5.205. By using the normal distribution table t and using a confidence level of testing (1-α) of 95% and an error rate (α) is n - 3 = 100-3 = 97, the obtained value ttabel distribution is 1.98447. Therefore, the Occupational Health Safety t greater than t table or 5.205> 1.98447, then H0 is rejected and Ha accepted. While the t column for Working Environment variables (X2) is 3.845. By using the normal distribution table t and using a confidence level of testing (1-α) of 95% and an error rate (α) is n - 3 = 100-3 = 97, the obtained value ttabel distribution is 1.98447. Therefore, the Working Environment t greater than t table or 3.845> 1.98447,

Conclusion

1. Based on the results of hypothesis testing for variable coefficients table Occupational Health Safety (K3) result thitung 5.205 and for the Working

Environment variables hypothesis test result of 3.845 while t ttable 1.98447, so that it can be concluded that t is greater than t table which means H0 rejected and Ha accepted. This shows that there is influence between Occupational Health Safety (K3) and the Working Environment on Employee Satisfaction.

2. R Square (R2) in the Model Summary table showing determination coefficient means the percentage contribution of the influence of the independent variable on the dependent variable. The R2 variable to the Occupational Health Safety Employee Satisfaction at PT. Indonesia Toray Synthetics is 43.7%, while the remaining 56.3% is influenced by other factors. The R2 variable Occupational Health Safety and Environment on Employee Satisfaction at PT. Indonesia Toray Synthetics was 51.2%, while the remaining 48.8% is influenced by other factors.

3. The results of the multiple regression equation Y = 2,937 + 0,485X1 + 0,415X2 + e, which means that any increase or decrease in the value of Occupational Health Safety (K3) by 1 point, the Employee Satisfaction at PT. Indonesia Toray Synthetics will experience an increase or decrease of 0.485, whereas when there is an increase or decrease in the value of Work Environment at one point, then the level of Employee Satisfaction at PT. Indonesia Toray Synthetics would have increased or decreased by 0.415. Significant influence means peningktan or decrease Occupational Health Safety and Environment can increase or decrease the Employee Satisfaction at PT. Indonesia Toray Synthetics.

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