

# The Impact of Occupational Health and Safety (OHS) Training and Compensation on Employees' Performance

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## **Abstract:**

The purpose of this study is to analyse the impact of Occupational Health and Safety (OHS) training and compensation on the employees' performance in the Indonesian state railroad company. Train is an alternative transportation that has many advantages such as low pollution, free traffic, bulk, cheaper costs, and also relatively faster. The highest frequency of train accidents in Indonesia is caused by human error. Therefore, it is important to provide OHS training for employees and provide appropriate compensation, in order to improve employee performance. The data were analysed by using multiple linear regression analysis. Respondents were 85 employees. The data is managed by using Statistical Package for Social Sciences (SPSS). The results of this study indicated that OHS Training provides a simultaneous effect on employee performance. While the partial test results of OHS Training have a positive and dominant influence on employee performance. The compensation variable has positive and significant influence on employee performance.

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## I. INTRODUCTION

Railways are one of the most preferred alternative transportation services for the people of Indonesia. That is why railways have many advantages such as low pollution, traffic congestion, mass, cheaper costs, and relatively faster time.

Effective railroad management can improve the competitiveness of a country, so that good railroad services are very important from a country. [1].

Tight transportation competition allows trains to continue to improve operational efficiency by adapting to new structures to survive. [2]. Indonesia railway state enterprise company is the largest railway transportation service provider in Indonesia that has provided services to the Indonesian people for land transportation.

The frequency of accidents that occur in railroad transportation is increasing.

TABLE 1  
ACCIDENT INCIDENT

Accident incident	Number of Accidents				
	2010	2011	2013	2014	2015
Railway collision vs train	3	2	3	0	4
Accident victim	23	10	12	0	28
Abrasion	20	12	15	10	3

Data Source : Indonesian Railway Company  
Regional Division

### III Palembang in 2015

The data in 2015 showed that the number of accident victims increased, there problems occurred due to the lack of understanding and implementation of OHS training. The OHS training program needs to be carried out continuously with a systematic and sustainable management of transportation safety. So that it can result in zero accidents for all employees. The biggest frequency of accidents caused by human error. Therefore, OHS training for employees is very important because employees are an important element and an asset of the company. [3]

OHS training that has been carried out in an area affects the evaluation of the safety performance of railroad operations. It reduced in the frequency of accidents extraordinary or extraordinary events from time to time. [4], [5].

Accident reduction due to OHS training carried out systematically and continuously can affect employee performance. Other efforts to improve employee performance by providing appropriate compensation for employees. Proper compensation can automatically provide motivation for employee performance. The Indonesian Railroad Company applies a competitive financial compensation package in accordance with applicable regulations and market prices, including basic salary and benefits, bonuses and other facilities. Companies with well-designed bonus compensation will result in improving employee performance. Employees

are also given flexible time and creative work schedule, so employees can spend more time with useful things. In addition, to avoid boredom at work [6], [7]. Health care facilities are also provided to employees including those who have retired through health clinics available in all operating areas. As a form of commitment to employee welfare, the company provides non-financial compensation in the form of appreciation for the achievement of employee performance that meets the set targets. [8]. Aside from being an expression of gratitude, giving an appropriate award also aims to motivate other employees to be able to achieve the same achievement in carrying out their duties. [9]. The Indonesian Railway state enterprise company evaluates employee performance every year as an evaluation of individual employee performance. So that employee performance will increase annually to be managed in the future career development.

Increasing OHS training and providing compensation can benefit employees in developing their careers in the future as a form of appreciation for the performance that employees have done.

## II. METHODOLOGY

### A. Stages of Research

There are several stages of research conducted by researchers [10], namely:

1. Research Preparation Researchers plan the stages of research, in the form of an activity schedule for next year.
2. The process of data collection is carried out through surveys to the location of the railway company in the regional III division of Palembang. The process of data collection is carried out too through direct interviews or questionnaire to the employee.

3. Sorting the data not all data obtained from the previous stage is used in research. So that sorting is done to get relevant data.

4. Data Sampling

B. Population and Samples

The population of this study is operational employees, who are directly related to the level of occurrence of accidents at the Indonesian Railway Company Persero Regional Division III Palembang.

This study used a sampling technique by drawing the Proportionate Stratified Random Sampling, this technique is used if the population has members that are not homogeneous and proportionately structured. Based on the calculation results of the sample size, it can be obtained that the total number of respondents were 85 people.

C. Research Variables

1. Independent variable; namely variables that affect the dependent variable, both positively and negatively and can be independent, namely OHS training (X1) and compensation (X2)
2. Dependent variable; that is, variables that are influenced by independent variables that cannot stand alone and are the main concern of researchers, namely employee performance (Y).

D. Research Instruments

The instrument used was a questionnaire with an assessment using a Likert scale. The likert scale used in this study is as follows: [11]

TABLE 2  
LIKERT SCALE

Scale	Score
Very Agree	5
Agree	4
Doubt	3
Disagree	2
Strongly Disagree	1

E. Types and Data Sources

The data sources used in this study are as follows:[12]

1. Primary data; namely data obtained directly at the location of the study using a questionnaire.
2. Secondary data; i.e. data obtained by quoting from other sources such as textbooks, journals and previous studies.

F. Collection Method

Data in this study was collected through questionnaires and observations.

III. DISCUSSION

A. Classical Basic Assumption Testing Results

1. Data Normality Test Results

Normality testing in this study was carried out through graph analysis of normal probability plots, shown in the table below:

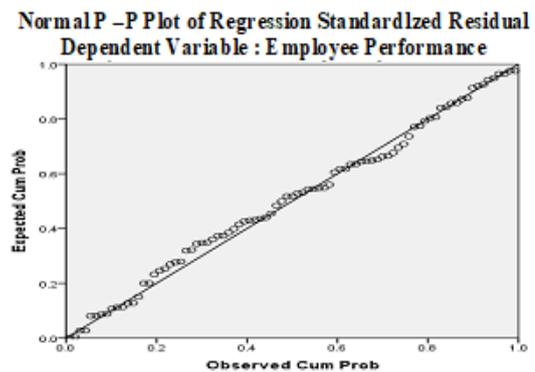


Fig. 1 Normality test

2. Multicollinearity Testing Result

For the results of multicollinearity testing, can be seen from the following table:

TABLE 3  
MULTICOLLINEARITY TEST

Model		Collinearity Statistics	
		Tolerance	VIF
1	OHS Training	.782	1.279
	Compensation	.782	1.279

<sup>a</sup>Dependent Variabel : Employee Performance

Based on the table above, the value of the Variant Inflation Factor for the two independent variables is below 10, this shows that the independent variables are not related to each other, so that the data is free from multicollinearity problems

3. Heteroscedasticity Test Results

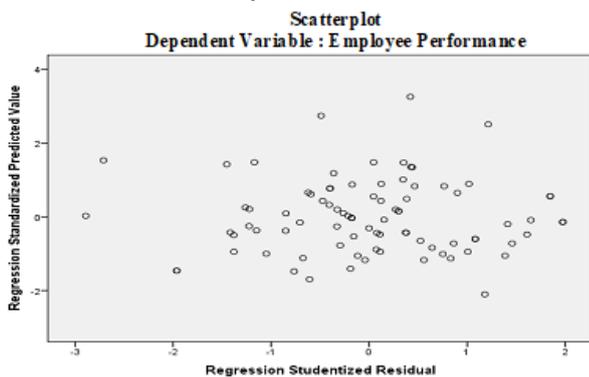


Fig. 2 Heteroscedasticity

Based on the scatterplot above shows that the data do not experience heterokedasticity problems, because the data is spread evenly above and below the 0 axis, and the data distribution does not form a particular pattern.

B. Results of Multiple Linear Regression Tests and the t Hypothesis (Partial Test)

1. Coefficient of Determination (R<sup>2</sup>) and Multiple Correlation Coefficients (R)

Correlation values between independent variables with the dependent variable (R) and the coefficient of determination (R<sup>2</sup>) can be seen in the table below:

TABLE 4  
SUMMARY OF MULTIPLE LINEAR REGRESSION MODELS

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.541 <sup>a</sup>	.292	.272	3.391

a. Predictors: (Constant), OHS Training, Compensation  
b. Dependent Variable: Employee Performance

From the table above, it can be seen that the value of R (multiple correlation coefficient) is 0.541, which means that 54.1% indicates that there is an influence of the relationship between the dependent variable and the independent variable. While the value of R<sup>2</sup> (coefficient of determination) of 0.292 means that the increase in employee performance 29.2% is influenced by OHS training and compensation, where the remaining 70.8% is influenced by other variables not tested in this study.

2. Simultaneous Significance Test (Test F)

From the statistical analysis carried out, the results show that together the OHS training (X1) and compensation (X2) independent variables significantly affect the performance of Palembang Regional Division III employees.

TABLE 5  
ANNOVA TABLE/ CONCURRENT TEST

Annova <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	f	Sig.
1	Regression	389.660	2	194.830	16.940	.000 <sup>b</sup>
	Residual	943.117	82	16,328		
	Total	1332.776	84			

a. Dependent Variable: Employee Performance  
b. Predictors: (Constant), OHS Training, Compensation

From the table above ANOVA (Test F) using df = 5 obtained F table of 3.11. While the calculated F was 16.940, the significance value of F was below 0.05 so from the above calculation it can be seen that Ho was rejected and Ha was accepted, meaning that overall the independent

variable (OHS training variable, compensation) had a significant influence on the dependent variable (employee performance). In other words the proposed hypothesis is accepted.

### 3. Hypothesis t (Partial Test)

The results of hypothesis testing using the t test can be seen in the Coefficients table below:

TABLE 6  
REGRESSION COEFFICIENT VALUE AND  
TEST RESULTS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	1 (Constant)	34.393	10.337		
OHS Training	.369	.095	.408	3.880	.000
Compensation	.252	.125	.213	2.025	.046

a. Dependent Variable: Employee Performance

Based on the table above can also be made a regression equation as follows:

$$\text{Employee Performance} = 34,393 + 0,369 \text{ OHS training} + 0,252 \text{ compensation}$$

Where if without OHS training and compensation the employee's performance will increase by 34,393, whereas if there is an additional compensation where other variables are considered permanent, the employee's performance will increase by 0.252. If there is an increase in OHS training by one unit, it will increase employee performance by 0.369.

From the results in the Coefficients table seen in the Sig. Column, it shows:

1. The value of the regression coefficient for the OHS training variable is 0.369 with a tcount of 3.880 is greater than the t table value of 1.989 to 3.880 ttable 1.989 and has a significant value of 0.000 which is smaller than a of 0.05, then H0 is rejected. This means that with a confidence of 95% it can be stated that if the OHS training is considered permanent, and an alternative

hypothesis (Ha2) is accepted. which means that the OHS training variable has a significant and positive effect on employee performance.

2. The value of the regression coefficient for the compensation variable is 0.252 with a value of 2.025 is greater than the value of t table of 1.989 for 2.025 ttable 1.989 and has a significance value of 0.046 which is smaller than a of 0.05, then H0 is rejected. This means that with a confidence of 95% it can be stated that if compensation is considered fixed, and an alternative hypothesis (Ha1) is accepted. which means that the compensation variable significantly and positively influences employee performance.

### C. Discussion Resul

It can be concluded the independent variables (OHS training and compensation variables) have a significant influence on the dependent variable (employee performance). It was explained that OHS training and Compensation could improve the performance of employees, especially division III of Palembang.

1. Analysis of the impact of OHS training variables

(X1) on Employee Performance (Y)

The results of statistical data analysis can prove the existence of a significant and positive effect partially from the OHS training variable on employee performance with a regression coefficient of 0.369. This shows that OHS training has a direct influence on performance. OHS training is tailored to the field of expertise of each employee can provide a sense of security. OHS training is comfort in work so that the work provided can be completed properly. Conversely, OHS training that is inappropriate and feasible will lead to social jealousy among employees that can cause disputes and will disrupt employees' concentration in carrying out their work, which in

turn can reduce employee performance in the company.

## 2. Analysis of the impact of Variable Giving

Compensation (X2) on Employee Performance (Y). The results of statistical data analysis can prove the existence of a significant. It can also positive effect partially from the variable giving compensation to the performance of employees with a regression coefficient of 0.252. This shows that giving compensation has a direct influence on performance. [13]

Providing good employee compensation is very important benefits for the company, the greater the compensation given to employees, the better the ability to get work done. Providing good compensation to employees will give good confidence not to make mistakes while working and to get the job done properly. Performance compensation based awards are more attractive than seniority based. So that it can produce quality and reliable employee performance. Different compensation can reflect the culture of the organization and affect the attractiveness of the company. [14].

Based on the results of statistical calculations, it can be seen that the more dominant effect on the performance of employees of the operational section.

The Indonesian Railroad Company Persero Regional Division III Palembang is the OHS training variable of 36.9. While the compensation variable has an effect of 25.2. The results of this study are in accordance with the theoretical concept put forward by the Human Factors Theory, describing accidents as a chain of events caused by human error. In this theory there are three main factors that cause human error, namely overload, inappropriate responses and inappropriate activities. The overload referred to in this theory refers to the imbalance between the

capacity and burden carried by a person. This may be caused by environmental factors (noise and other interference from outside), internal factors (problems personal and stress) and situation factors (unclear instructions). Inappropriate responses referred to in this case are how one responds to a situation that might cause or prevent an accident. OHS training can provide added value to the company's success in preventing accidents or injuries at work, so as to create a safe work climate. [15]

## IV. CONCLUSION

Based on the results of the research and discussion that has been described, it can be concluded as follows:

1. OHS training has a positive and significant effect on the performance of employees in the operational section of the Indonesian Railway Company Persero Regional Division III Palembang.
2. Giving compensation has a positive effect on employee performance. There is a significant relationship between giving compensation and the performance of employees of the operational part of the Indonesian Railway Company Persero Regional Division III Palembang.
3. There is a significant and positive influence between OHS training and simultaneous compensation (together) on employee performance
4. Without OHS training and compensation, the employee's performance will increase by 34,393, whereas if there is one additional compensation where other variables are considered constant, then the employee's performance will increase by 0,252. If there is an increase in OHS training of one unit, it will improve employee performance by 0.369.

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