Research Article

The Effect of Training and Work Motivation on Operator Performance During the COVID-19 Pandemic

Simon Gultom, Hendy Sepriandi*, Eka Dewi Puspita Sari, Sherina Artamevia, Edhie Budhi Setiawan, Irwan Chairrudin

Institute of Transportation and Logistic Trisakti, Jakarta, Indonesia

Abstract.
This research was conducted on a quay container crane operator at KSO TPK Koja. The quantitative research method was collecting data on 28 questionnaires and using SPSS version 21 applications to analyze data. The study used the validity, reliability, normality and hypothesis test. This study aimed to identify the influence of training and work motivation on operator performance during the COVID-19 pandemic at KSO TPK Koja. The result of this study showed that training and work motivation have a positive influence on operator performance, but training had no significant effect on operator performance. In addition, work motivation had a significant influence on operator performance.

Keywords: Training, Work Motivation, Operator Performance, COVID-19

Corresponding Author: Hendy Sepriandi; email: hendysep@gmail.com

1. Introduction

COVID-19 is a global outbreak of disease. The COVID-19 pandemic is now affecting Indonesia and other parts of the world that have a very wide impact on the social, political, and economical fields such as KSO Terminal Petikemas Koja (TPK Koja). TPK Koja is a company that was born as a cooperation company between PT. Port of Indonesia II (Persero) with PT. Hutchison Ports Indonesia (PT. HPI). TPK Koja is a business in the field of unloading services at the Port of Tanjung Priok Jakarta. The company focuses on trying to improve performance in order to give customer satisfaction. One of the efforts made by TPK Koja is by improving the performance of quay container crane operators during the COVID-19 pandemic. Operator performance is a subject that refers to the work or achievement of tasks in carrying out the work as a controller of work equipment or production equipment. Operator performance is important part in increasing work productivity. Having a superior operator performance is expected to

have an effect on the company's profit which is expected to grow every year. Moreover, it is also expected to affect the quality of management in a company to improve continuously. Improving operator performance can be done by improving the quality of operator performance and always paying attention to the needs of the operator during the COVID-19 pandemic. However, company sometimes faces the reality that not all operators have a desire to gain improvement.. This is a serious challenge for the company because the success of the achievement of the objectives and the running of the company's life depends on the quality performance of the operators.

Operator performance is also one of the factors in achieving punctuality while the ship is in the dock. Less effective and efficient handling can be caused by a lack of training and work motivation on the operators. Therefore, training is very important. Training will provide skills and skills development, moreover it helps the operator's performance to improve, giving motivation as the reasons to work, and also provide opportunities for the operators themselves to increase knowledge and expertise.

Training is also important to assist operators in mastering specific skills or in repairing deficiencies in doing a job. In addition to training, motivation in work is also important for operators. According to [1] work motivation is the driving force for employee performance in performing their duties in the company's organization. Motivation will provide opportunities for operators to spur and strengthen the operator's commitment to the company and of course to improve their performance.

[2] stated that revealed motivation is a potential force in a human being that can be developed by other forces or developed by themselves. It affects the performance results positively or negatively depending on the situation faced by the person concerned. Each individual has the potential to act into various forms of activity. According to [3], performance achievement is influenced by motivation factors and ability.

The study is conducted to analyze the influence of independent variable training (X_1) and work motivation (X_2) on dependent variable operator performance (Y). This study is expected to be the solution towards the problems faced by the company.

Based on the field observations made by the writer, damage to the quay container crane often occurred and some factors have been examined as the cause. Therefore, based on the background and the description above, the writers conduct the research of "The Effect of Training and Work Motivation on Operator Performance during The COVID-19 Pandemic".

2. Literature Review

According to [4] human resource management is a science and art that regulates the relationship and role of the workforce in order to actively and efficiently help the realization of the goals of the company, employees and society.

Operational management is a collection of activities that generate value in the form of goods and services by converting inputs into outputs according to [5].

According to [3] training is a short-term educational process that uses systematic and organized procedures where non-managerial employees learn technical knowledge and skills in limited purposes.

Furthermore, [4] motivation is the provision of driving power that creates the excitement of one's work, so that they will work together, work effectively and integrated in all their efforts to achieve satisfaction. Indicators to measure motivation are as follows:

1. Physiological needs

2. The need for security

3. Social needs or a sense of belonging

4. Self-esteem needs

5. The need for self-actualization

Performance or performance of work is the result or level of success of a person as a whole during a certain period in carrying out a task compared to various possibilities, such as standards of work, targets or criteria that have been predetermined and mutually agreed, according to.[6]

3. Hypothesis Formulation

1. **H1** : Training (X1) affects Operator Performance (Y)

2. **H2** : Work Motivation (X2) affects Operator Performance (Y)

3. **H3** : The influence of Training (X1) and Work Motivation (X2) simultaneously affects Operator Performance (Y)
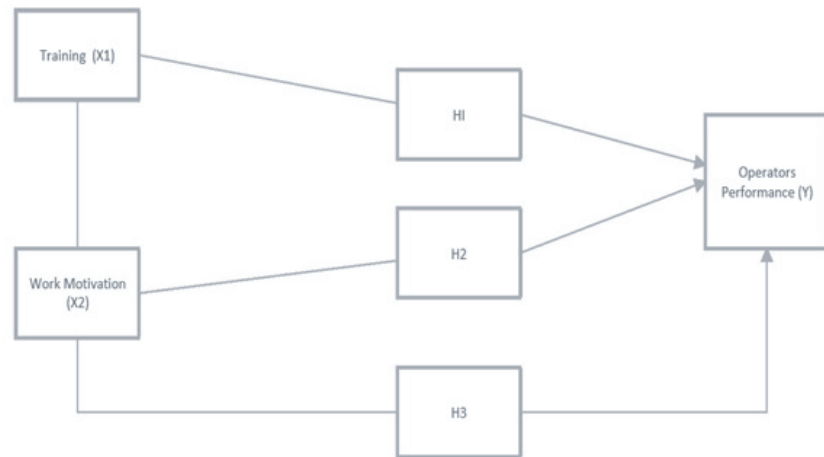
Figure 1: Framework.

4. Method

The method used in this study is quantitative with SPSS version 21 data analysis techniques. The population in this study is quay container crane operator at KSO TPK Koja. The sample size was calculated by the census sample because the population was less than 100, so the writer used the entire population of 38 respondents with a 5% error rate. Data collection conducted is by distributing questionnaires to quay container crane operators. Validity, reliability, multiple regression analysis, multicollinearity, heteroscedasticity, normality, T test, F test, and coefficients of determination test were conducted to analyze the results of respondents' answers.

5. Results and Discussion

1. **Validity Test**

The validity test was conducted using SPSS version 21. In the validity test there are 38 samples taken from the entire population, then r_{table} = 0,320. The result of validity test on training variable, work motivation and operator performance is $r_{value} > r_{table}$. It can be concluded that the questionnaire is valid.

1. **Reliability Test**

Based on tests conducted, the result of the calculation of alpha Cronbach value for all variables used in this study is greater than 0,600. Thus, the data of training variables, work motivation, and operator performance is reliable.

1. **Normality Test**

The statistical test used to test residual normality is non-parametric statistic kolmogorov-smirnov. Normal testing methods of data distribution are performed by looking at the value of variable significance. If the significance value is greater than 5% then it indicates a normal distribution.

TABLE 1: Kolmogorov-Smirnov Test.

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		38
Normal Parameters^{a,b}	Mean	.0000000
	Std. Deviation	2.54756077
Most Extreme Differences	Absolute	.199
	Positive	.199
	Negative	-.193
Kolmogorov-Smirnov Z		1.227
Asymp. Sig. (2-tailed)		.099

6. Source: Data processed by the author using SPSS v. 21

Based on table 1, the test results of One-Sample Kolmogorov-Smirnov Test resulted in Asymptotic Sig > 0.05 i.e. 0.099. Based on the test results above, it can be concluded that the regression model has fulfilled the assumptions of normality.

1. **Multiple Regression Analysis**

Multicollinearity Test was conducted to test whether there is a correlation between independent variables. A good regression model should have no correlation between independent variables. Testing the absence of multicolumnity in the regression model can be seen by looking at the tolerance value and vif value (Variance Inflation Factor). If the VIF value is not more than 10 and the tolerance value is not less than 0.1, then it can be said to be free from Multicollinearity. Here is a table of Multicollinearity test results in table 2 as follows:

Table 2 shows that the magnitude of the VIF (Variance Inflation Factor) value of each independent variable has a VIF value of no more than 10 and a tolerance of not less than 0.1. It can be concluded that the variables of training and work motivation have no Multicollinearity.

TABLE 2: Multicollinearity Test.

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Training	.536	1.865
Work Motivation	.536	1.865
Source:Data processed authors using SPSS v.21		

1. **T Test**

Based on statistical calculations using SPSS version 21 program listed in table 4 obtained Sig value, for X_1 influence on Y is 0.131 > 0.05 and t_{square} value 1.547 < 2.024, so it can be concluded that H_1 is rejected which means that there is no influence of X_1 on Y. Furthermore for the influence of X_2 on Y is 0.006 < 0.05 and t_{square} 2.915 > t_{table} 2.024, so it can be concluded that H_2 is accepted which means there is an influence of X_2 on Y.

1. **F Test**

F Test conducted to test the significance of the regression coefficient of all predictors (independent variables) in the model simultaneously. The formulation of zero hypotheses (H0) and alternative hypothesis (Ha) regarding the influence of training variables and simultaneous work motivation on operator performance are as follows:

H_0: There is no influence of training and work motivation simultaneously towards operator performance.

H_a: There is an influence of training and work motivation simultaneously on the performance of the operator.

TABLE 3: ANOVA.

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	217.868	2	108.934	15.877	.000[b]
	Residual	240.132	35	6.861		
	Total	458.000	37			
a. Dependent Variable: Kinerja Operator (Y)						
b. Predictors: (Constant), Motivasi Kerja (X2), Pelatihan (X1) **Source:Data processed authors using SPSS v.21**						

From the results of statistical calculations using SPSS V.21 listed in table 5, it can be known that the significance value for the simultaneous influence of X1 and X2 on

Y is 0.000 < 0.005 and the calculated F value of 15.877 > F table 3.24 so it can be concluded.

1. **Coefficient of Determination**

The determination coefficient is used to measure the magnitude of the influence of free variables (Training and Work Motivation) on bound variables (Operator Performance). The results of the determination test are in the table as follows:

Model Summary				
Model	R	R Square	R Square	Estimate
1	.690ᵃ	.476	.446	2.619

Source: Calculation result using SPSS v. 21

Figure 2: Model Summary.

Based on table 6 known values R Square or R2 0.476 (47.6%). This means that 47.6% of the training and work motivation variable variables can explain operator performance variables, while the remaining 52.4% are explained by other factors not studied in this study.

7. Conclusion

Based on the results of the study, it can be concluded that training is not required in the performance of the operator, because the test results show the absence of the effect of training on the performance of the operator but not significant. In addition, work motivation is required in the performance of the operator, because the test results show an influence of work motivation on the performance of the operator. Moreover, work motivation and training simultaneously gives influence on operator performance.

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