

The Effect off Occupational Safety and Health on Employee Performance in the Palm Oil Plantation of Persada Banyuasin

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Abstract

This study aims to assess the effect of occupational safety and health on employee performance at Persada Banyuasin Palm Oil Plantation. The background of this study is the high incidence of work accidents that occur in plantations, which have a negative impact on employee productivity and morale. This study uses a quantitative approach, with data collected through the distribution of questionnaires to all 55 employees, using a saturated sample technique. The results of the analysis show that occupational safety and health have a significant effect on employee performance, with a significance level of 0.000, which is much smaller than 0.05. These findings indicate that good safety and health factors can improve employee performance, improve productivity, and reduce accidents that can disrupt operations. Overall, this study confirms that improving occupational safety and health can directly contribute to improving employee performance at the Persada Banyuasin Palm Oil Plantation. This highlights the importance of investing in safety and health aspects as part of efforts to enhance productivity and worker well-being.

Keywords

Work Safety, Occupational Health, Employee Performance

Introduction

Every company is required to achieve its goals optimally and efficiently, one of which is by improving the performance of its human resources (HR). Human resources play a crucial role in achieving company targets because good performance and productivity are highly dependent on the quality and welfare of the workforce. Therefore, companies need to pay special attention to the welfare, comfort, and safety of their employees. In many industrial sectors, especially in high-risk sectors such as palm oil plantations, it is important to ensure that work safety is strictly maintained to protect not only the physical health of employees but also to maintain optimal performance. Persada Banyuasin Palm Oil Plantation is a clear example of this sector, where a high frequency of work accidents can have a negative impact on the productivity and operations of the company.

Table 1. Data on Work Accidents in the Persada Banyuasin Palm Oil Plantation 2021-2023

Year	Serious accidents	Minor accidents
2021	5 person	8 person
2022	7 person	10 person
2023	7 person	12 person

The high rate of workplace accidents at the Banyuasin Palm Oil Plantation is a major concern, as workplace accidents not only reduce productivity but can also lower employee morale and motivation. Between 2021 and 2023, various types of workplace accidents were recorded at the plantation, including serious accidents, such as falling from palm trees, falling from a motorcycle while transporting palm oil fruits, and being struck by palm oil fruits during harvesting, as well as minor accidents, such as being hit by palm tree branches, being struck by thorny tree branches, and being cut by sharp objects used as tools for harvesting palm oil fruits. These accident data underscore the importance of paying attention to work safety, especially in the plantation sector, which is highly dependent on the physical labor of workers.

Perkebunan Kelapa Sawit Persada Banyuasin has strived to maintain the safety and health of its employees by providing various personal protective equipment (PPE) such as helmets, gloves, and boots. However, the problem that still exists is the lack of adequate PPE and insufficient quantities for all employees, considering that almost all employees work at the same time. This shows that although efforts have been made to prevent work accidents through the provision of PPE, the inadequate quantity remains a major obstacle to improving work safety.

In addition, the increasing number of work accidents each year has caused a decline in palm oil production, which can be seen in the production data for the last three years. Each accident causes disruption to employee productivity, which ultimately leads to a decrease in palm oil harvest targets.

Table 2. Personal Protective Equipment Data for the Persada Banyuasin Oil Palm Plantation 2021-2023

Number	Description	Total	Usable	Unusable
1.	Helm	60	50	10
2.	Gloves	85	74	9
3.	Boots	55	48	7

Employee performance that is disrupted due to injury or discomfort during work hinders their ability to meet the targets set by the company, which has a direct impact on production and company revenue. Overall, workplace accidents at the Persada Banyuasin Palm Oil Plantation not only affect the physical safety of workers but also contribute to a decline in their performance.

Employees who experience accidents tend to feel uncomfortable or depressed, which ultimately affects their work performance. Therefore, it is crucial to conduct an in-depth evaluation of existing occupational safety policies and ensure that occupational safety and health are a top priority in every aspect of the company's operations.

Table 3. Palm Oil Production Results of Persada Banyuasin Palm Oil Plantation 2021-2023

Year	Total
2021	4.800.000
2022	4.000.000
2023	3.550.000

The novelty of this study lies in its attempt to analyze in greater depth how the implementation of occupational safety and health directly affects employee performance in the palm oil plantation sector, which has tended to receive little attention in previous studies. This study will also provide a clearer picture of the relationship between occupational safety policies and labor productivity and their impact on the sustainability of company operations. The findings of this study are expected to provide strategic recommendations for improving work safety and employee welfare, which will ultimately have a positive impact on the overall performance of the company. Thus, this study does not only focus on work safety aspects, but will also look at the long-term impact on productivity and operational efficiency, which are very important in the context of the palm oil plantation industry, which is highly dependent on labor.

Methods

This study uses a descriptive quantitative approach that aims to analyze and explain the relationship between the variables studied, namely the effect of occupational safety and health on employee performance at Perkebunan Kelapa Sawit Persada Banyuasin. In this study, simple linear regression was used as the analysis method to test the relationship between occupational safety and health as the independent variable and employee performance as the dependent variable. Simple linear regression was chosen because the objective was to determine the extent to which occupational safety and health variables influence employee performance variables.

Data analysis was performed using SPSS version 26 software, which facilitates the processing and interpretation of quantitative data. The main data used in this study were obtained through a questionnaire distribution to all employees at the Persada Banyuasin Palm Oil Plantation. The population studied in this research was all employees working at the plantation, totaling 55 people. Given the relatively small population size, a saturated sampling technique was applied, whereby all existing employees were used as respondents in this study. This was done to obtain more representative data that describes the actual conditions in the field.

The hypotheses proposed in this study are as follows:

1. H0 (Null Hypothesis): There is no significant effect of occupational safety and health on employee performance at Persada Banyuasin Palm Oil Plantation.
2. H1 (Alternative Hypothesis): There is a significant effect of occupational safety and health on employee performance at Persada Banyuasin Palm Oil Plantation.

Using simple linear regression, this study will examine whether occupational safety and health significantly contribute to improving employee performance in the environment of the Persada Banyuasin Palm Oil Plantation, as well as provide a deeper understanding of the importance of safety aspects in the plantation sector.

Results and Discussion

Result

This study aims to analyze the effect of occupational safety and health on employee performance. Various statistical tests were conducted to ensure that the questions in the questionnaire could accurately measure the variables to be tested. To test the effect between variables, a simple linear regression test was used.

Based on the regression results listed in Table 1, the regression equation can be written as follows:

$$Y = 57.959 + 0,396X$$

Table 4. Results of The Multiple Linear Regression Test

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	57.959	3.456		16.769	.000
	Occupational Safety and Health	.396	.091	.514	4.362	.000

The explanation of the above regression equation is as follows:

1. 57.959 is the constant value, which means that if occupational safety and health (X) is 0, then performance (Y) will have a value of 57.959.
2. 0.396 is the regression coefficient for the variable occupational safety and health (X), which indicates that every one unit increase in occupational safety and health will cause an increase in performance of 0.396 units.

Furthermore, a T-test (partial) was conducted to test whether there is a significant relationship between the variables occupational safety and health and employee performance. Based on Table 1, the calculated t value is 4.362, which is greater than the table t value of 2.0057, and the significance value is 0.000, which is less than 0.05. This indicates that H0 is rejected, meaning that there is a significant influence of occupational safety and health on employee performance at Perkebunan Kelapa Sawit Persada Banyuasin.

Table 5. Results of Correlarions Test

		Correlations	
		Occupational Safety and Health	Employee Performance
Occupational Safety and Health	Pearson Correlation	1	.514**
	Sig. (2-tailed)		.000
	N	55	55
Employee Performance	Pearson Correlation	.514**	1
	Sig. (2-tailed)	.000	
	N	55	55

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation test results presented in Table 2 indicate a moderate relationship between occupational safety and health and employee performance, with an R value of 0.514 or 51.4%. This value falls within the correlation range of 0.40-0.599, which shows that there is a positive relationship between occupational safety and health and employee performance. This means that the better the occupational safety and health, the higher the employee performance.

Table 6. Results of Determination Test

Model	Model Summary			
	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.514 ^a	.264	.250	4.770

a. Predictors: (Constant), Keselamatan dan Kesehatan Kerja

In addition, the coefficient of determination shows the extent to which the independent variable can explain the variation in the dependent variable. Based on the results of the coefficient of determination test listed in Table 3, the R^2 value obtained is 0.264. This means that 26.4% of the change in employee performance can be explained by changes in occupational safety and health. Meanwhile, the remaining 73.6% is influenced by other factors not covered in the scope of this study.

Discussion

This study shows that occupational safety and health has a significant effect on employee performance at Persada Banyuasin Palm Oil Plantation, although the level of relationship found is moderate with a correlation value of 0.514. This correlation indicates a fairly strong positive relationship between the two variables, but does not fully explain the overall variation in employee performance. In other words, although occupational safety and health influence employee performance, factors other than occupational safety and health also contribute significantly to their performance.

From the data analysis, the contribution of occupational safety and health to improving employee performance was recorded at only 26.4%. This shows that although occupational safety and health have an influence, their contribution to employee performance is still relatively small. One of the main causes of this low contribution is the suboptimal implementation of occupational safety and health, both in terms of management and implementation in the field. Although management has provided various Personal Protective Equipment (PPE) such as helmets, gloves, and boots, their implementation is still not optimal.

Most employees consider their work environment to be unsafe. They face various risks, such as threats from dangerous animals, slippery ground when it rains, and hygiene issues that are not properly maintained. All these factors create a risky work environment that can affect their performance. The perceived insecurity can reduce employee focus and concentration, which in turn can potentially affect their work results.

In addition, although personal protective equipment has been provided by management, many employees do not use it optimally. One of the reasons for this is the limitation of personal protective equipment available, which is insufficient for all employees working at the same time. This creates an imbalance between the number of employees and the personal protective equipment provided, forcing some employees to work without adequate protection. Furthermore, a low level of understanding of how to use work equipment safely also contributes to the low level of PPE usage.

In addition, low employee awareness of the need to use personal protective equipment is also a major contributing factor. Although some employees understand the importance of safety, they do not always comply with established safety procedures. This indicates a gap between understanding and implementation of existing safety policies in the field. This reflects that the success of occupational safety and health programs does not only depend on the provision of equipment, but also on coaching, training, and education on occupational safety for employees.

However, despite the various challenges in implementing occupational safety and health programs, most employees continue to strive to deliver the best work results and meet the targets set by the Banyuasin Palm Oil Plantation.

This shows that even though occupational safety and health conditions are not yet optimal, employee motivation and dedication to continue working well remain high. Employees are still trying their best to achieve the company's goals despite facing major challenges in the field. Overall, although there is a significant influence between occupational safety and health on employee performance, more optimal improvements in occupational safety and health are needed to increase their contribution to employee performance. This includes improving safety facilities, providing adequate personal protective equipment (PPE), conducting more intensive training on the use of safety equipment, and enhancing safety awareness and a safety culture among employees. With these measures, it is hoped that a safer work environment will be created, which will ultimately improve overall employee performance.

Conclusion

From the results of the discussion on the influence of occupational safety and health on employee performance at Perkebunan Kelapa Sawit Persada Banyuasin, it can be concluded that occupational safety and health has a significant positive influence on employee performance. However, the relationship between these two variables is classified as weak, with occupational safety and health contributing only 26.6% to employee performance. The remaining 73.4% is influenced by other factors that are not directly related to occupational safety and health. This indicates that although occupational safety and health plays a role in improving performance, other factors, such as motivation, work environment, and company management, also influence employee performance.

Based on the results of the data analysis of the Persada Banyuasin Palm Oil Plantation, there are several suggestions that can improve safety, occupational health, and employee performance, namely: first, the Persada Banyuasin Palm Oil Plantation must pay attention to the condition of personal protective equipment (PPE) that is not suitable for use, such as helmets, gloves, and boots. This equipment must be replaced with new and usable equipment so that it can be used by employees while working to ensure their safety and comfort in the workplace. Second, employees need to increase their awareness of the importance of using personal protective equipment in accordance with Standard Operating Procedures (SOPs). More intensive training on the use of PPE and the implementation of work safety procedures must be carried out to ensure that employees follow existing safety rules.

Third, to improve employee performance, Perkebunan Kelapa Sawit Persada Banyuasin must pay more attention to the occupational safety and health of its employees by ensuring the availability of first aid kits, adequate PPE, and health insurance, which should be provided by the company. Providing better health facilities and safety support will help employees feel safer and more comfortable, which in turn will improve their performance and productivity. With these steps, it is hoped that a safer and more productive work environment will be created, thereby improving the overall performance of employees at Perkebunan Kelapa Sawit Persada Banyuasin.

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