

# THE INFLUENCE OF OCCUPATIONAL SAFETY, OCCUPATIONAL HEALTH AND PHYSICAL WORKING ENVIRONMENT ON PRODUCTIVITY PALM FACTORY (PKS) WORK PROCESSING SECTION AT PT. PLANTATION NUSANTARA I COT GIREK NORTH ACEH EMPLOYEE

Alya Rehana<sup>1</sup>, Yanita<sup>2</sup>, Khairawati<sup>3</sup>, Likdanawati<sup>4</sup>

<sup>1,2,3,4</sup>Faculty of Economics and Business, Universitas Malikussaleh, Indonesia

Corresponding Author: [yanita@unimal.ac.id](mailto:yanita@unimal.ac.id)

## Abstract

*This research aims to examine work safety, work health and the physical work environment on work productivity at the Palm Oil Factory (PKS) Processing Section at PT. Perkebunan Nusantara I Cot Girek North Aceh. The data in this research uses a questionnaire as a data collection instrument. This research uses a quantitative approach with multiple linear regression analysis and is processed using the SPSS (Statistical Package for the Social Sciences) tool. The technique taken in this research is using a saturated sampling technique as a determinant of the sample. The population taken in this research was 65 respondents from palm oil mill employees in the processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh. The results of this research are that work safety partially has a positive and significant effect on the work productivity of palm oil factory employees in the processing section at PT. Perkebunan Nusantara I Cot Girek Aceh Utara, occupational health partially and significantly influences the work productivity of palm oil factory employees in the processing section at PT. Perkebunan Nusantara I Cot Girek Aceh Utara, the physical work environment partially has a positive and significant effect on the work productivity of palm oil mill employees in the processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh.*

**Keywords:** *Work Safety, Work Health, Physical Work Environment, Work Productivity*

## INTRODUCTION

Every company has the same goal, namely seeking profits in operational activities. In achieving company goals, the role of the employees or workers in it cannot be separated. Employees play a role Active in achieving company goals and is a planner and manager of all activities within the company. Employees are the backbone of a company and have thoughts, feelings and ideals that influence their attitudes towards work. If the attitude instilled is positive, it will produce good things for the company and make it better.

Companies in the era of globalization must be able to adapt to the demands of very rapid change. One of these changes is the emergence of technology to adapt to business needs. However, we find that technology roles require qualified and talented people. The aim is to further increase the company's efficiency and productivity. Apart from technology, the role of human resources as the spearhead of business is very much needed because humans are the most important element that plays a vital role in business (Nugroho & Haryono, 2020).

Source Human resources are one of the determining factors for the success of a company, because the role of employees as valuable assets is to plan, implement and manage various company operational activities. Human resources must be considered in carrying out company operations. Because, in order to be profitable and sustainable, a company must be able to improve its production process and the quality of its service to its customers. The problem that arises if human resources are not managed well is low employee productivity.

Work productivity is a very important topic, especially for company development plans. Work plays a very important role in increasing company productivity. For this reason, companies must pay attention to their employees so that they can achieve work productivity levels that meet

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expectations. Productivity is the main indicator for industrial improvement, because productivity developments can rapidly improve the industrial economy. Industry must be able to maintain and support the maximum productivity of its employees in order to achieve the goals of an industry. Low work productivity is a condition that requires more attention because it risks affecting the quality and quantity of the industry (Rosento et al., 2021). Work productivity represents the quality of human resources in a company (Wibowo et al., 2022). It is certainly important for a company to carry out its activities to maximize the potential of its employees and achieve optimal results. This aims to ensure that the human resources available in a company can participate optimally with the aim of implementing company succession. In controlling human resources, it is important to have management who can participate in processing resources in a structured, precise and practical manner (Wahyuni et al., 2018).

Productivity is the main factor for the development of a company, so increasing productivity in the entire composition of the company is a way to develop rapid economic growth in the company. The company tries to develop the productivity of all its employees so that it is able to compete with other companies because it can efficiently produce several goods and services (Rosento et al., 2021). Employees are said to be productive if they are able to produce the desired output (goods or services) within an effective and efficient time period. Employees who have high productivity are very useful in achieving company goals because they are able to carry out the employee's work well.

Employees are no longer seen as a liability in the era of human resources but as an asset for the organization. A similar thing also happened to PT workers. Perkebunan Nusantara I Cot Gires North Aceh which is one of the general palm oil producers in Indonesia, especially in North Aceh. This company operates in palm oil. As a company pursuing this goal, we require professionalism and high operational productivity to meet market needs. The application of an occupational safety and health program in a company is the main ingredient which carries quite a large risk, improving and progressing a system is able to encourage the company to operate better and will have a positive impact on employees, sufficient affection from the company can produce satisfaction at work, so that it would be very good in the future if facilities, facilities and guarantees for safety and health were increasingly paid attention to in a company or industry (Hasibuan et al., 2023).

Work safety is a mindset and effort in protecting the body and soul of a worker in particular, with an acquired culture aimed at creating a just and prosperous environment (Suriyanti & Wahyudi, 2020). Occupational Safety and Health is one of the factors that influences employee work productivity (Sinature et al., 2022). Occupational safety refers to the protection of workers from injuries caused by work accidents. Safety hazards include aspects of the work environment that can cause fire, electric shock, cuts, bruises, sprains, broken bones, loss of limbs, and loss of sight or hearing. Occupational health means ensuring that the working community is at the highest level of physical and mental health through efforts to prevent and treat common illnesses as well as diseases and health disorders caused by work and the work environment. Social health care. Workplace health is an important topic for companies to consider.

Next is the third factor environment physical work which influences employee work productivity. According to Robbins and Coulter (2019), says that the work environment is an environment related to institutions or forces that are outside the organization and can potentially influence company performance either directly or indirectly. A work environment that is good for you gives you peace of mind and helps you work better and perform optimally. If employees like the work environment, employees will work well. In order to create a comfortable environment for workers to work, companies pay attention to the work environment of employees in the workplace as a means of improving employee performance (Ardhianti & Susanty, 2020). Creating a conducive work environment is one of several variables that can increase employee productivity. The workplace environment has the potential to shape how a person behaves at work. In other words, the conditions that surround an individual when they are working, including physical and non-physical elements, constitute the work environment (Tarigan et al., 2022). Employee work comfort is greatly influenced

by the work environment, including how hot it is, how well the air circulates, how busy it is, how clean it is, and how loud it is. Among other things, maintenance of physical infrastructure, for example, such as always maintaining cleanliness, adequate lighting, ventilation, healthy music, and a comfortable layout can contribute to a comfortable workplace.(Tarigan et al., 2022). According to previous research, namely research conducted Tarigan et al., (2022), which states that the physical work environment has a positive and significant effect on work productivity. The physical work environment has a positive and significant effect on work productivity variables(Dzahabiyah et al., 2024).

Basically, companies not only expect talented human resources, but most importantly, they are willing to work hard and achieve perfect work results. The expertise, competencies and skills possessed by human resources are of no value to an organization if they are not willing to work hard with the skills, competencies and skills they possess. The Palm Oil Factory (PKS) is one of the three PKS factories owned by PT Perkebunan Nusantara I, which is located in Cot Girek Village, Cot Girek District, North Aceh Regency, Aceh Province, around 385 KM to the north of Banda Aceh City. The Palm Oil Factory (PKS) was built in 1991. The Palm Oil Factory (PKS) owned by PT Perkebunan Nusantara I is a fairly large company based in Cot Girek District, North Aceh Regency. This company operates in the plantation sector. The main product of the plantation industry is palm oil. In its operations, the company manages palm oil from Fresh Fruit Bunches (FFB) into Crude Palm Oil (CPO) or oil raw palm.

Based on the author's initial observations, the number of Palm Oil Factory (PKS) employees in the Processing section at PT. Perkebunan Nusantara I, Cot Girek, North Aceh with 148 employees. It can be seen that the author found problems related to work safety and health that are less than optimal and efficient, namely there are work accidents at the Palm Oil Factory (PKS) processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh which can be divided into 2 levels, namely light and heavy. Recapitulation of work accidents at the Palm Oil Factory (PKS) processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh in the last 6 years from 2019 to 2024. Types of minor work accidents such as slipping, falling due to slippery floors, lack of focus of employees at work due to sleepiness, not wearing personal protective equipment which often results in hitting the head directly on the factory iron poles.

As for the types of serious accidents, such as a work accident occurring when an employee was repairing a damaged machine, however, due to a noisy work environment, a communication error occurred, resulting in the pinching of one of the employees tasked with repairing the damaged processing machine. This results in fractures and displacement of the hip and knee bones. The second was an accident while working which resulted in the severing of the finger of one of the employees on duty, resulting in permanent disability for the employee. With this incident, the company could be subject to a bad claim for a work accident in its work area. Companies tend to think that occupational safety and occupational health issues are solely the responsibility of employees, even though the implementation of occupational safety and occupational health is the responsibility of the company and all employees.

Another problem related to work safety is that there are employees who do not wear complete work uniforms and Personal Protective Equipment (PPE) that have been provided by the company. This is one of the mistakes made by employees, because it can endanger themselves if an accident occurs at work. The aim of using personal protective equipment is to avoid injury when working. Wearing complete personal protective equipment can help to minimize the occurrence of accidents at work. Occupational health is a factor that can influence employee work productivity. A company can be said to be efficient if its employees themselves can carry out activities optimally, healthily, safely and comfortably. It is very important for companies to pay attention to occupational health in order to achieve optimal work productivity. Poor (dark) lighting can cause employees to get tired quickly and have unclear vision, which can affect employee work productivity. Apart from that, the noise from factory machines is loud enough to cause poor communication between employees. The negative impact of noise can also cause damage to employees' hearing. And the strong smell of factory waste can also endanger employee health and disrupt employee work productivity.

Apart from occupational safety and occupational health, factors that can influence work productivity are the physical work environment. The physical work environment can be said to be

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efficient if the employees feel healthy and comfortable. The phenomenon that exists in the Palm Oil Factory (PKS) in the Processing section of PT. Nusantara I Cot Girek North Aceh is considered less than optimal as indicated by the presence of some of the facilities provided are not yet available, the designated smoking area is still haphazard, and the noise is very disturbing because the entire work area is in one room.

Lack of meeting employee needs, such as the workplace being too closed, lack of AC (Air Conditioning) facilities, insufficient computer equipment and internet/Wi-Fi network, work space not being spacious enough, many employees still smoking in the work space, and air circulation not being optimal. Of course, the presence of various types of problems can cause discomfort for employees. This can affect employees' ability to concentrate, slow down or hinder their productivity in achieving the work and goals set by the company. Based on previous research conducted (Hartawan & Lemiyana, 2019), it shows that the physical work environment has a positive and significant influence on work productivity. Furthermore, research conducted by (Tarigan et al., 2022), also states that the physical work environment has a significant effect on work productivity.

## **LITERATURE REVIEW**

### **Work safety**

According to Tarmizi et al., (2023) Occupational safety is the company's responsibility to provide health service guarantees to employees who experience accidents while carrying out their work. Work safety is a person's safe situation in carrying out work at their workplace. A safe situation comes from within or from outside. According to Ali Hasan, (2020) Work safety is protection for the work security experienced by workers both physically and mentally in the work environment.

### **Occupational Health**

According to Pramesti, (2023) Occupational health is a physical, mental, social condition, and not just the absence of disease or weakness when carrying out work. According to Pratama & Pradana, (2023) Occupational health is all efforts and thoughts carried out in order to prevent, overcome and reduce the occurrence of accidents and their impacts through identification, analysis and control of hazards by implementing appropriate hazard control systems and implementing legislation on occupational safety and health.

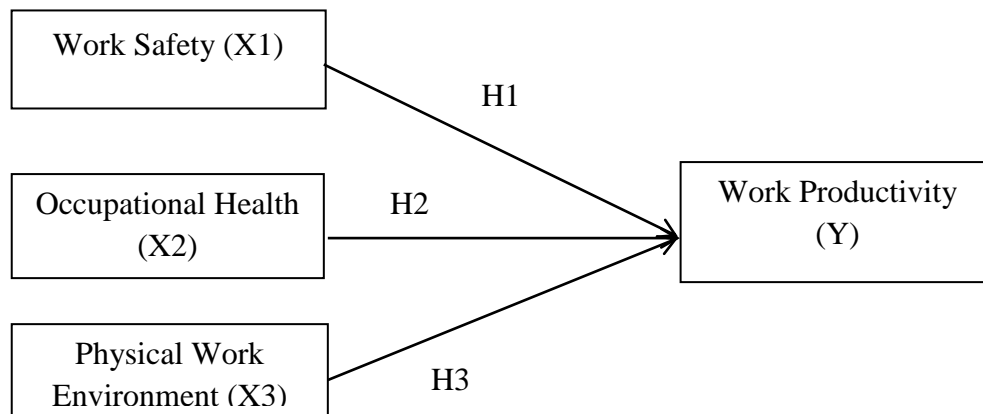
### **Physical Work Environment**

The work environment is what surrounds employees that can help them in carrying out work productivity tasks (Hanif et al., 2022). Where employees can do their work in a company or organization every day. The importance of the work environment in increasing employee productivity in every organization or company (Aprilia & Nathanael, 2024). According to Wahyu & Shinta, (2018), physical work environment refers to the worker's physical environment which can influence the worker's condition in carrying out work. According to Putu Aprilia & I Gede, (2018), the physical work environment is the environment around the workplace that can affect workers directly or indirectly.

### **Work Productivity**

According to Khairuddin, (2022) states that work productivity refers to the ability of employees to make maximum use of all available facilities and infrastructure, so that they are able to achieve optimal production results and even reach the highest level. Work productivity can be said to be successfully achieved if employees can do it with maximum ability, accompanied by excellent performance in producing the best work products.

## **Conceptual Framework**



**Figure 1 Conceptual Framework**

### Hypothesis

A hypothesis is a temporary response to a research formulation based on previous research or theory. The relationship between variables in this study is based on the following hypothesis.

- H1: Work safety influences the work productivity of Palm Oil Factory (PKS) employees in the processing section at PT. Perkebunan Nusantara ICot GirekNorth Aceh?
- H2: Occupational health influences the work productivity of Palm Oil Factory (PKS) employees in the processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh?
- H3: The physical work environment influences the work productivity of Palm Oil Factory (PKS) employees in the processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh?

### IMPLEMENTATION METHOD

#### Location and Research Objects

This research was conducted at PT. Perkebunan Nusantara I Aceh Utara which is located in Cot Girek, North Aceh Province. The purpose of this research is to determine the influence of work safety, work health and the physical environment on the work productivity of Palm Oil Factory (PKS) employees in the processing section at PT. Perkebunan Nusantara ICot GirekNorth Aceh. Meanwhile, the subjects in this research were all employees at the Palm Oil Factory (PKS) Processing section at PT. Perkebunan Nusantara ICot GirekNorth Aceh.

#### Population and Sample

The population in this research is all employees at the Palm Oil Factory (PKS) Processing section at PT. Perkebunan Nusantara ICot GirekNorth Aceh, totaling 65 employees. The sampling technique used was a saturated sampling technique. According to Sugiyono, (2019) Saturated sampling is a sampling technique that includes the entire population as a sample. This is done when the population is relatively small, less than 30 people or when the researcher wants to generalize with a very small margin of error. The number of employees in the Palm Oil Factory (PKS) Processing Section at PT. Perkebunan Nusantara ICot GirekNorth Aceh, totaling 65 employees, so the sample in this study was all employees of the Palm Oil Factory (PKS) Processing Section at PT. Perkebunan Nusantara ICot GirekNorth Aceh.

#### Variable/Instrument Measurement

The data collection technique used in this research is using a questionnaire which is done by making a list of questions or statements to respondents. This questionnaire uses an ordinal scale, where there are 5 scores, where 5 is the highest score and 1 is the lowest score. The measurement aspect of the analyzed data is carried out by establishing indicators for each question asked using a Likert scale, which is an interval scale where each question has an answer between 1 (strongly disagree) and 5 (strongly agree).



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**RESULTS AND DISCUSSION**

**Validity**

**Table 1 Validity Test Results**

No	Question Indicator	Calculated r value	rtable value	Note
1	Work Safety (X1)			
	1. Question 1	0.488	0.244	Valid
	2. Question 2	0.601	0.244	Valid
	3. Question 3	0.455	0.244	Valid
	4. Question 4	0.453	0.244	Valid
	5. Question 5	0.537	0.244	Valid
2	Occupational Health (X2)			
	1. Question 1	0.595	0.244	Valid
	2. Question 2	0.439	0.244	Valid
	3. Question 3	0.481	0.244	Valid
	4. Question 4	0.436	0.244	Valid
3	Physical Work Environment (X3)			
	1. Question 1	0.582	0.244	Valid
	2. Question 2	0.690	0.244	Valid
	3. Question 3	0.600	0.244	Valid
	4. Question 4	0.258	0.244	Valid
	5. Question 5	0.477	0.244	Valid
	6. Question 6	0.562	0.244	Valid
	7. Question 7	0.487	0.244	Valid
4	Work Productivity (Y)			
	1. Question 1	0.655	0.244	Valid
	2. Question 2	0.649	0.244	Valid
	3. Question 3	0.530	0.244	Valid
	4. Question 4	0.769	0.244	Valid
	5. Question 5	0.674	0.244	Valid
	6. Question 6	0.732	0.244	Valid

Source: Data Processing Results, 2024

Based on table 1 above, the values of all indicator answers for the variables Occupational Safety, Occupational Health, and Physical Work Environment and Work Productivity, each have a large correlation with the r table. The rtable value for (df) =  $n-2 = 65-2 = 63$ . So the rtable value is 0.2441. Therefore, it can be concluded that all variable data used in this research has valid and accurate data which has passed the validity test

## Reliability Test

**Table 2 Reliability Test Results**

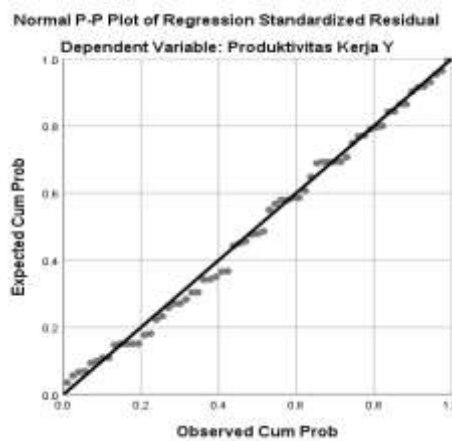
Variable	Cronbach's Alpha	Information
Work Safety (X1)	0.667	Reliable
Occupational Health (X2)	0.607	Reliable
Physical Work Environment (X3)	0.708	Reliable
Work Productivity (Y)	0.767	Reliable

Source: Data Processing Results, 2024

Based on table 2 above, it can be seen that each Cronbach's alpha value for the Occupational Safety variable (X1) shows a value of 0.667, the Occupational Health variable (X2) shows a value of 0.607, the Physical Work Environment variable (X3) shows a value of 0.708 and the Work Productivity variable (Y) shows a result of 0.767. Each of these variables has shown Cronbach's alpha results of more than 0.6 so it can be concluded that each of these variables is declared reliable.

## Classic Assumption Test

### Normality Test Results



**Figure 2 Normal Probability P-PLOT Test Results**

Source: Data Processing Research Results, 2024

Based on Figure 2, it can be seen that the independent and dependent variables are normally distributed. The Normal Probability Plot graph spreads around the diagonal line and follows the direction of the center line of the curve and does not expand.

## Multicollinearity Test Results

**Table 3 Multicollinearity Test Results**

Model	Coefficients <sup>a</sup>	Collinearity Statistics	
1	(constant)	<i>Tolerance</i>	VIF
	Work safety	0.571	1,752
	Occupational Health	0.591	1,693
	Physical Work Environment	0.410	2,442

a. Dependent Variable: Work Productivity

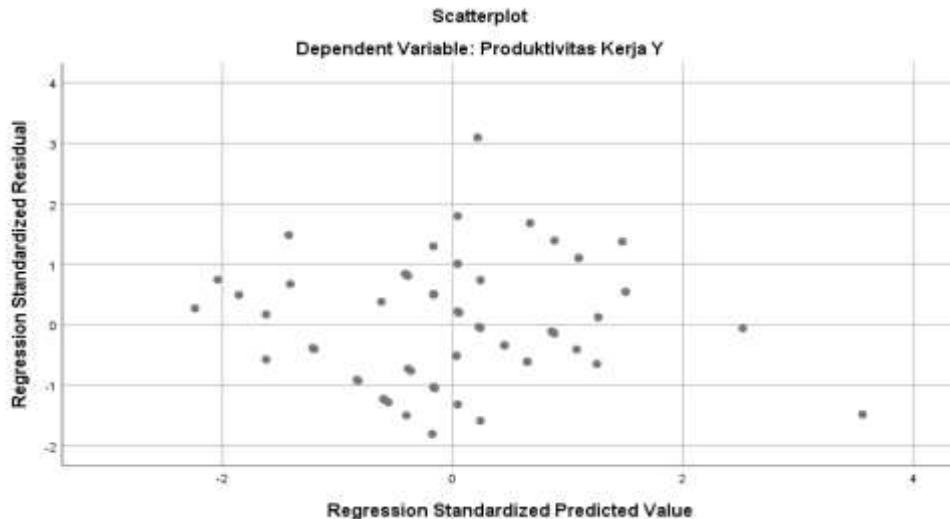
Source: Data Processing Results, 2024

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Based on table 3 above, it can be seen that all variables have a VIF value < 10 and a tolerance value > 0.10. So it can be concluded that in this study there was no multicollinearity in the independent variables and the test can be used in this research model.

**Heteroscedasticity Test Results**



**Figure 4 Heteroscedasticity Test Results**

Source: Research Data Processing Results, 2024

Based on Figure 4, it can be seen that the points are scattered in various directions, both above and below the number 0 on the Y axis and do not form a particular pattern. So it can be concluded that there is no heteroscedasticity in the regression model so it is suitable for use in this research.

**Multiple Linear Regression Test**

**Table 4 Multiple Linear Regression Test Results**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	43,320	36,421		1,189	,239
Work Safety (X1)	,290	,103	,277	2,814	,007
Occupational Health (X2)	,248	,100	,239	2,475	,016
Physical Work Environment (X3)	,439	,118	,431	3,711	,000

Source: Data Research Results, 2024

Based on table 4 above, the multiple linear regression equation is obtained as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

$$Y = 43.320 + 0.290X_1 + 0.248X_2 + 0.439X_3 + \epsilon$$

1. Based on the interpretation of the equation above, it is known that the value of  $\alpha$  is 43.320, which is a constant or condition when the work productivity variable has not been influenced by independent variables such as work safety variables (X1), work health (X2) and physical work



- environment variables (X3). If the independent variable does not exist then the work productivity variable does not change.
2.  $\beta_1$  (the regression coefficient value of the work safety variable X1) is 0.290, which means the coefficient is positive, which means there is a positive relationship between work safety and work productivity. If work safety increases, work productivity will also increase. This shows that with work safety, there will be an increase in work productivity (Y).
  3. The regression coefficient for the occupational health variable (X2) is 0.248, which means the coefficient is positive, which means there is a positive relationship between occupational health and work productivity. If occupational health improves, work productivity will increase. This shows that with occupational health, there will be an increase in work productivity (Y).
  4. The regression coefficient for the physical work environment variable (X3) is 0.439, which means the coefficient is positive, which means there is a positive relationship between the physical work environment and work productivity. If the physical work environment improves, work productivity will increase. This shows that with a physical work environment, there will be an increase in work productivity (Y).

### Correlation Coefficient (R) and Determination (R<sup>2</sup>) Test

**Table 5 Coefficient of Determination Test Results**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	,814	,663	,647	21,493

Source: Data Processing Results, 2024

Based on the results of the coefficient of determination test in table 4.14 above, it can be seen that the adjusted r-square coefficient of determination obtained is 0.647. This shows that work productivity (Y) at the Cot Girek Palm Oil Mill (PKS) has a relationship with work safety (X1), work health (X2), and the physical work environment (X3) of 64.7%. Meanwhile, the remaining 35.3% of work productivity at the Cot Girek Palm Oil Mill (PKS) has a relationship with other variables not used in this research. Therefore, it can be concluded that work productivity (Y) at the Cot Girek Palm Oil Factory (PKS) has a strong correlation or relationship with the variables of work safety (X1), work health (X2), and physical work environment (X3).

### Hypothesis Testing

#### Discussion

#### The Influence of Work Safety on Work Productivity

Based on the results of data analysis, it is known that the significant value of the work safety variable is 0.007, namely  $<0.05$ , so it is concluded that work safety (X1) has an influence or is significant on work productivity. This means that the work safety variable (X1) has a partially positive and significant effect on work productivity (Y). This means that if the work safety is higher for employees, the higher the level of work productivity will be for employees of the Palm Oil Factory (PKS) processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh. The results of this research are supported by Previous research states that Based on the results of the analysis, work safety has a positive and significant effect on employee work productivity (Sinaga & Bernardo, 2022). In line with research conducted by Zega & Nainggolan, (2024) that work safety partially has a significant effect on employee work productivity. Furthermore, research conducted by Daspar & Ferrose, (2023) states that work safety has a significant effect on work productivity.

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**The Influence of Occupational Health on Work Productivity**

Based on the results of data analysis, it is known that the significant value of the occupational health variable is 0.016, namely  $<0.05$ , so it is concluded that occupational health (X2) has an influence or is significant on work productivity (Y). This means that the occupational health variable (X2) has a partially positive and significant effect on work productivity (Y). This means that if the work health is higher in the employees, the higher the level of work productivity will be in the employees of the Palm Oil Factory (PKS) processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh. So the second hypothesis is "work health influences the work productivity of Palm Oil Factory (PKS) employees in the processing section at PT. Perkebunan Nusantara ICot GirekNorth Aceh" H2 is acceptable. The results of this research are supported by previous research which states that there is a significant influence of occupational health on work productivity(Husain et al., 2024). Furthermore, research conducted byZega & Nainggolan, (2024)also stated that occupational health partially has a significant effect on employee work productivity. This means that the better the safety and health implemented by employees at work, the more the employee's work productivity will also increase.

**The Influence of the Physical Work Environment on Work Productivity**

Based on the results of data analysis, it is known that the significant value of the physical work environment variable is 0.000, namely  $<0.05$ , so it is concluded that the physical work environment (X3) has an influence or significance on work productivity. This shows that the physical work environment variable (X3) can increase work productivity for Palm Oil Factory (PKS) employees in the processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh. This means that the physical work environment is a driving factor in increasing work productivity, where the better the physical work environment, the higher the work productivity of employees of the Palm Oil Factory (PKS) processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh. The results of this research are in line with several previous studiesstates that the physical work environment has a positive and significant effect on work productivity according to research results(Kusumadewi, 2022). Furthermore, research conducted byDzahabiyah et al., (2024)which states thatPhysical work environment variables have a positive and significant effect on work productivity variables.

**Conclusion**

Based on the results of research conducted with the title "The Influence of Work Safety, Work Health and the Physical Work Environment on the Work Productivity of Palm Oil Mill Employees (PKS) in the Processing Division at PT. Perkebunan Nusantara ICot GirekNorth Aceh". So the conclusions in this research are as follows:

1. Work safety partially has a positive and significant effect on the work productivity of Palm Oil Factory (PKS) employees in the processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh.
2. Occupational health partially has a positive and significant effect on the work productivity of Palm Oil Factory (PKS) employees in the processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh.
3. The physical work environment partially has a positive and significant effect on the work productivity of Palm Oil Factory (PKS) employees in the processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh.

**Suggestion**

Based on the results of research that has been carried out. Researchers would like to convey several suggestions regarding research, namely as follows:

1. For companies

Based on the analysis carried out by researchers, it is known that variables, work safety and the physical work environment partially influence employee work productivity at the Palm Oil Factory (PKS) processing section at PT. Perkebunan Nusantara I Cot Girek North Aceh. For this reason, palm oil mills in the processing section should pay more attention to work safety, in order to help increase employee work productivity and continue to improve work safety and work health for employees. Apart from that, palm oil processing factories also need to pay attention to the physical work environment by regularly monitoring employee work productivity so that the comfort of the physical work environment between co-workers and superiors is better established. And can create a Palm Oil Factory (PKS) destination at PT. Perkebunan Nusantara I Cot Girek North Aceh can be achieved precisely and efficiently.

## 2. For Further Researchers

It is hoped that other independent variables can be added so that the research results are more widespread, so that future researchers can look at other variables that can influence work productivity so that the results of further research can explain the problem more broadly and it is hoped that they can obtain a larger population and sample so that the research is accurate. and get better results to study at a later date. And it is hoped that you will be able to use analytical methods others to test the valid level of a variable.

## Research Limitations

In this research, the researcher has several research limitations that may make this writing less than perfect, including:

1. This research only uses the Work Productivity variable which consists of Work Safety, Work Health and Physical Work Environment as independent variables, therefore it is hoped that in future research we can add various other variables.
2. This research has limitations in reading journal references because this research has not been researched much before so it is difficult to get references.

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Alya Rehana<sup>1</sup>, Yanita<sup>2</sup>, Khairawati<sup>3</sup>, Likdanawati<sup>4</sup>

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