EFFECT OF WORK SAFETY, WORK HEALTH AND WORK ENVIRONMENT ON WORK PRODUCTIVITY OF PT. YAMBALA INDONESIA

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Abstract - This study aims to determine the effect of work safety, occupational health and work environment on work productivity of PT. Yambala Indonesia. Work productivity as the dependent variable, while occupational safety, occupational health and work environment are independent variables. This study uses a quantitative type, which is analyzed with a survey approach, namely data collection and respondent assessment using a questionnaire and using SPSS 24 software. The population of this study were all employees of PT. Yambala Indonesia, including sub-contracted employees who are outside the island of Java. The sample of this study is based on convenience sampling method, with a sample of 58 respondents. In this study using primary data. The data collection technique used a questionnaire. Hypothesis testing using the coefficient of determination, t test and f test. The research results prove that work safety has no effect on the work productivity of PT. Yambala Indonesia. Meanwhile, work health and work environment have an influence on the work productivity of PT. Yambala Indonesia.

Keywords: Work Safety, Work Health, Work Environment, Work Productivity.

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The research results prove that work safety has no effect on the work productivity of PT. Yambala Indonesia. While work health

and work environment have an influence on the work productivity of PT. Yambala Indonesia.

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I. Introduction

Human Resources (HR) or employees is an important element in an organization or company. Human resources act as executors in the management or production activities of a company. Even though today many companies or organizations use modern tools or technology, they cannot be separated from human existence. Therefore, it is the responsibility of every company to pay special attention to its workers or employees.

PT. Yambala Indonesia is a company engaged in steel construction which includes the manufacture of steel-frame bridges and building structures. For this reason, companies need to pay attention to work safety, occupational health and work environment. Because at work, employees have a very high risk because they use dangerous work tools and heavy materials that can cause physical harm. Poor work safety can cause employees to work uncomfortable and can cause work accidents due to a lack of safe conditions at work, safe conditions at work, namely the company provides regulations on the importance of using personal protective equipment in the workshop area.

In addition to the safety and health factors at work is the work environment. The work environment in a company is very important for management to consider. Although the work environment does not carry out the production process in a company, the work environment has a direct influence on the employees who carry out the production process. A work environment that can provide comfort for workers allows workers to increase their productivity, such as a lighting system in a workshop environment that is sufficient to encourage employees to work and not lose concentration. Conversely, if the work environment is inadequate, workers do not feel comfortable at work.

Taking into account these few things, it is important to study work safety, health, work environment and work productivity programs, all of which aim to achieve the company's vision and mission. Researchers are interested in conducting research for employees of PT. Yambala Indonesia with the title "The Effect of Safety, Work Health and Work Environment on Work Productivity at PT. Yambala Indonesia ".

II. THEORETICAL BASIS

1. Research Review

The first research was conducted by Sukatmadireja et al, Mahardika School of Economics, Scientific Journal of Business Economics, Volume 3 Number 3 2017 ISSN 2442-4560, entitled "The Effect of Democratic Leadership Style and Environment on Employee Performance Productivity at PT. Sentra Bumi Palapa Gresik ". Nowadays, car body and construction companies have undergone rapid changes, so it is necessary to have professional, skilled, responsible leadership and understand the desires of their employees. This study aims to determine the effect of leadership style and work environment on employee morale at the car body company PT. Palapa Utama Bumi Center. This research method uses quantitative analysis. The statistical tool used is multiple regression through the SPSS 20 program. The results showed that simultaneously democratic leadership and work environment influence work activity. Democratic leadership has a partial effect on

work productivity, while the Work Environment variable partially has no effect on work productivity.

The second research was conducted by Munasih et al, Malang National Institute of Technology, Journal of Innovative Industries, Volume 5 number 1 2015 ISSN 2087-8869, with the title "The Effect of K3 Implementation on the Productivity of Pengesian Labor in the Mall Dimoyo Malang project". Research on the application of K3 is mostly carried out in manufacturing companies but is rarely carried out at service companies. This study aims to: Determine the role of management in dealing with K3 problems, how much K3 influence on worker productivity. The population in this study were all workers in the construction of the Mall Dimoyo Malang project with a total population of around 300 workers. The sample selected to be respondents based on the Solvin formula is as many as 100 workers. The data used in this study are primary data and secondary data collected through observation, interviews and questionnaires and documentation and processed using the SPSS program. The results of the research show that the company has implemented the K3 program as a form of responsibility for its work, although there is still an accident rate of 0.7% of the total employees. The relationship between the application of K3 to productivity increases with the equation Y = 16.548 + 0.18X1 + 0.072X2; Where Y = Productivity and X1 = Work Safety; X2 = Occupational Health. The results of the research show that the company has implemented the K3 program as a form of responsibility for its work, although there is still an accident rate of 0.7% of the total employees. The relationship between the application of K3 to productivity increases with the equation Y = 16.548 + 0.18X1 + 0.072X2; Where Y = Productivity and X1 = Work Safety; X2 = Occupational Health. The results of the research show that the company has implemented the K3 program as a form of responsibility for its work, although there is still an accident rate of 0.7% of the total employees. The relationship between the application of K3 to productivity increases with the equation Y = 16.548 + 0.18X1 + 0.072X2; Where Y = Productivity and X1 = Work Safety; X2 = Occupational Health.

The third research was conducted by Polla et al, Sam Ratulangi University, Faculty of Engineering, Manado Civil Department, Tekno Journal, Volume 13 Number 63 ISSN 0215-9617, with the title "The Effect of Environmental Occupational Health and Safety Management System Implementation on Labor Productivity in Construction Projects". In the implementation of construction projects, accidents often occur during work. This has fatal consequences for the workforce, and creates huge losses for construction service companies, due to decreased work productivity and late completion of work. Environmental safety and health management aims to create conditions that support work comfort and excitement so as to increase work performance and productivity. In conducting the research, interviews were conducted, observations and questionnaires distributed to 80 workers who worked on the Manado Town Square 3 construction project to obtain test data. The data obtained are data on labor status, years of service, and education. As well as the variables measured are variable X (safety and health management of the environment) and variable Y (labor productivity). Data processing was carried out by correlation analysis, regression analysis, F test and t test. Based on the independent variable X (occupational safety and health management environment), and the dependent variable Y (labor productivity), the Correlation analysis obtained a correlation coefficient r of 0.730 and a coefficient of determination (R. Square) of 53.29%. The results of the simple Linear Regression Analysis obtained the following regression equation: Y '= 9.39 +

0.16X. tcount = 9.428> ttable = 1.66462. And Fcount = 88.883> Ftable = 3.96. Thus the H1 hypothesis is accepted, meaning that there is a significant influence between the application of environmental safety and health management with an increase in labor productivity.

The fourth research was conducted by Putri & Sari, Telkom University, Journal of e-Proceeding of Management, Volume 2 Number 1 2015 ISSN 2355-9357, entitled "The Effect of Work Safety on Productivity of Cold Rolling Mill Factory Employees PT. Krakatau Steel (PERSERO) Tbk ". This study aims to analyze the effect of work safety on employee productivity at the Cold Rolling Mill PT. Krakatau Steel (Persero) Tbk. The variables used in this study were safety as the independent variable and productivity as the dependent variable. This research is a quantitative descriptive study using simple regression analysis method. Data collection was carried out using a questionnaire consisting of 40 questions about the variables studied. The sampling technique used was simple random sampling on 614 employees of the Cold Rolling Mill PT. Krakatau Steel (Persero) Tbk. The Slovin technique is used to determine the number of employees to be sampled, as many as 243 people. The results in this study indicate that work safety has a significant effect on the productivity of employees of the Cold Rolling Mill PT. Krakatau Steel (Persero) Tbk because the value of tcount> ttable, so H0 is rejected and H1 is accepted. The effect of work safety on productivity is 23.8%, while the remaining 76.2% is influenced by other factors. Work safety and productivity of Cold Rolling Mill factory employees are included in the good category. The Slovin technique is used to determine the number of employees to be sampled, as many as 243 people. The results in this study indicate that work safety has a significant effect on the productivity of employees of the Cold Rolling Mill PT. Krakatau Steel (Persero) Tbk because the value of tcount> ttable, so H0 is rejected and H1 is accepted. The effect of work safety on productivity is 23.8%, while the remaining 76.2% is influenced by other factors. Work safety and productivity of Cold Rolling Mill factory employees are included in the good category. The Slovin technique is used to determine the number of employees to be sampled, as many as 243 people. The results in this study indicate that work safety has a significant effect on employee productivity at the Cold Rolling Mill PT. Krakatau Steel (Persero) Tbk because the value of tcount> ttable, so H0 is rejected and H1 is accepted. The effect of work safety on productivity is 23.8%, while the remaining 76.2% is influenced by other factors. Work safety and productivity of Cold Rolling Mill factory employees are included in the good category. Krakatau Steel (Persero) Tbk because the value of tcount> ttable, so H0 is rejected and H1 is accepted. The effect of work safety on productivity is 23.8%, while the remaining 76.2% is influenced by other factors. Work safety and employee productivity in the Cold Rolling Mill factory are included in the good category. Krakatau Steel (Persero) Tbk because the value of tcount> ttable, so H0 is rejected and H1 is accepted. The effect of work safety on productivity is 23.8%, while the remaining 76.2% is influenced by other factors. Work safety and employee productivity in the Cold Rolling Mill factory are included in the good category.

The fifth research was conducted by Nitayani et al, Ganesha Singaraja Education University, Undiksha Economic Education Journal, Volume 9 Number 2 2017 ISSN 2599-1418, with the title "The Effect of Work Discipline and Occupational Health on Employee Productivity at PT. Semen Tonasa Gerokgak, Jalan Pelabuhan Celukan Bawang, Bali ". This study aims to determine the effect of work discipline and occupational health partially

and simultaneously on employee work productivity at PT. Semen Tonasa Gerokgak. This research is a causality study with the sample in this study were 66 employees. Data were collected using a questionnaire method and analyzed by t-test, f-test, with SPSS version 16.0 for windows.

2. Definition of Human Resource Management

According to Hasibuan (2014: 10) Human resource management is the science and art of managing the relationships and roles of the workforce to be effective and efficient in helping the realization of company, employee, and community goals.

3. Work safety

According to Swasto (2011: 107) states that work safety includes the entire process of protecting workers against possible hazards that can arise in the work environment.
The work safety indicators according to Swasto (2011: 108) are as follows:

1. Workplace conditions:
   a. Arrangement of machines and their accessories.
   b. Lighting system.
   c. Work equipment condition.
2. Actions of action:
   a. Use of personal protection.
   b. Use of work procedures.
   c. Equipment security habits.
3. The mental atmosphere of the employees:
   Employees who work under pressure or feel that their job is threatened or insecure are more likely to have an accident than those who are not under stress.

4. Occupational Health

According to Widodo (2015: 244) Occupational health is a health condition that aims to make the working community obtain the highest degree of health, both physically, spiritually and socially, by preventing and treating diseases or health problems caused by work and the work environment as well as common illness.
The occupational health indicators according to Swasto (2011: 110) are as follows:

1. Workplace environmental conditions, these conditions include:
   a. Physical condition
   In the form of lighting, air temperature, workplace ventilation, noise levels, mechanical vibrations, radiation and air pressure.
   b. Physiological conditions
   This condition can be seen from the construction of machinery / equipment, posture and work methods in doing work, things that can cause physical fatigue and can even result in physical changes in the employee's body.
   c. Chemic conditions
   Conditions that can be seen from gas vapor, dust, fog, smoke, clouds, ciran and solid objects.
2. Psychological mentality
   This condition includes work relations in groups / co-workers, work relationships between subordinates and superiors and vice versa, work atmosphere, and others.

5. Work environment

According to Sunyoto (2012: 43) defines the work environment as a very important component in employees performing work activities. The work environment indicators according to Afandi (2016: 57) are as follows:

1. Lighting
   a. Workplace lighting lamps.
   b. Workplace window.
2. Color
   a. Color arrangement.
   b. Decor.
3. Sound
   a. The sound of factory machinery, workshop.
4. Air
   a. Air temperature
   b. Air humidity

6. Work productivity

Private and Ibnu (in Widodo, 2015) explain that productivity is a concept that describes the relationship between results (the amount of goods and services produced) and the sources (labor, raw materials, energy, etc.) used to produce these goods. . According to Sutrisno E, (2014: 104) there are 6 indicators of work productivity, namely as follows:

1. Ability.
   The ability of an employee to carry out a task is highly dependent on the skills they have and their professionalism while working. This gives the power to complete the tasks assigned to them.
2. Increase the results achieved.
   The result is one that can be felt by both those who do and those who enjoy the results of the work. So, this is an effort to take advantage of work productivity for those involved in a job.
3. Spirit at work.
   This is an attempt to be better than yesterday. This indicator can be seen from the work ethic and results achieved one day later compared to the previous day.
4. Self-development.
   Self-development can be done by looking at the challenges and expectations with what is being faced. Because, the stronger the challenges, self-development is absolutely necessary. Likewise, the hope to be better, in turn, will greatly impact the desire of employees to improve their abilities.
5. Quality.
   Quality is the result of work that can show the quality of an employee. So, improving quality aims to provide the best results which in turn will be very useful for the company and itself.
6. Efficiency.
   Efficiency is a comparison between the results achieved and the overall resources used. Input and output are aspects of productivity that have a significant effect.

III RESEARCH METHOD

The sampling technique used is convenience sampling method, namely the sample is determined according to the convenience of the researcher (Sekaran & Bougie, 2013). The sample used is all employees of PT. Yambala Indonesia is a subcontracted employee located outside Java Island.

For sampling from a population of 140 authors use the Slovin formula, with the following formula:

$$n = \frac{N}{1 + Ne^2}$$

Information :

n = Sample size

N = Population size

E = Percent leeway in inaccuracy due to sampling errors which can still be tolerated by assuming a distributed population.

In this study, the authors set a 10% percent slack so that the results of the sampling calculation are as follows:

$$n = \frac{140}{1 + (140)(0,1)^2}$$

n = 58.3 or 58

So based on the above calculations, it can be seen that the sample to be taken from this study is 58 respondents.

This study uses data collection techniques, namely by distributing questionnaires online with google form media which contains a set of questions used to measure each research variable to be tested, namely Work Safety (X1), Occupational Health (X2), Work Environment (X3).) and Work Productivity (Y) .. Data processing using the software program SPSS 24.0.

IV RESULTS

1. *Validity Test of Work Safety Variables*

In the Work Safety variable (X1), each statement has a value of rcount greater than 0.30. Therefore, all statements on the Work Safety variable can be used in data collection for this study. The following are the results of processing data for 7 statements in the work safety research instrument, shown in table 4.1 as follows:

Table 4.1. Validity of the Work Safety Variable Instrument (X1).

No. Statement	*rhitung*	*critical*	Decision
1	0.841	0.30	Valid
2	0.838	0.30	Valid
3	0.516	0.30	Valid
4	0.868	0.30	Valid
5	0.787	0.30	Valid
6	0.683	0.30	Valid

7	0.892	0.30	Valid

Source: Data processed (2020)

2. ***Validity Test of Occupational Health Variables***

In the Occupational Health variable (X2), each item of the statement has a value of r count greater than 0.30. Therefore, all statements on occupational health variables can be used in the research data collection. The following are the results of data processing for 4 statements in the Occupational Health instrument, shown in table 4.5 as follows:

Table 4.2. Validity of Occupational Health Variable Instruments (X2).

No. Statement	*rhitung*	*critical*	Decision
1	0.795	0.30	Valid
2	0.763	0.30	Valid
3	0.844	0.30	Valid
4	0.756	0.30	Valid

Source: Data processed (2020)

3. ***Validity Test of Work Environment Variables***

In the Work Environment variable (X3), each item of the statement has a value of rcount greater than 0.30. Therefore, all statements on Work Environment variables can be used in collecting research data. The following are the results of data processing for 7 statements in the Occupational Health instrument, shown in table 4.6 as follows:

Table 4.3. Validity of Work Productivity Variable Instruments (X3).

No. Statement	*rhitung*	*critical*	Decision
1	0.845	0.30	Valid
2	0.799	0.30	Valid
3	0.888	0.30	Valid
4	0.848	0.30	Valid
5	0.896	0.30	Valid
6	0.567	0.30	Valid
7	0.578	0.30	Valid

Source: Data Processed 2020

4. ***Test of the Validity of Work Productivity Variables***

In the Work Productivity (Y) variable, each item of the statement has a value of rcount greater than 0.30. Therefore, all statements on the Work Productivity variable can be used in collecting research data. The following are the results of data processing for 6 statements in the Occupational Health instrument, shown in table 4.7 as follows:

Table 4.4. The Validity of Work Productivity Variable Instruments.

No. Statement	*rhitung*	*critical*	Decision
1	0.856	0.30	Valid
2	0.835	0.30	Valid
3	0.855	0.30	Valid
4	0.680	0.30	Valid
5	0.789	0.30	Valid
6	0.710	0.30	Valid

Source: Data processed (2020)

5. Reliability Test

In addition to the validity test, this study also conducted a reliability test. Reliability test or reliability test aims to find out how far a measuring instrument is reliable (consistent). Testing using the Cronbach Alpha method. Ghozali further(2014: 144) a construct or variable instrument of this research can be said to be reliable if it gives a Cronbach alpha value> 0.60. Or in other words the instrument is said to be reliable if (ri. 0.60 or (ri.rb). The following is data processing, table 4.8. As follows:

Table 4.5. Reliability Test Results

No.	Variable	*ri*	*critical*	Decision
1	Work Safety (X1)	0.889	0.60	Reliable
2	Occupational Health (X2)	0.793	0.60	Reliable
3	Work Environment (X3)	0.885	0.60	Reliable
4	Work Productivity (Y)	0.886	0.60	Reliable

Source: Data processed (2020)

Thus it can be concluded that the instruments of occupational safety, occupational health, work environment and work productivity can be said to be reliable because of their real value > rb 0.60.

6. Partial Determination Coefficient Test

(1) The Partial Determination Coefficient of Work Safety (X1), on Work Productivity (Y) is as follows:

Table 4.6. Work Safety Partial Determination Coefficient.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.460a	.212	.198	2.68551

a. Predictors: (Constant), Work Safety

Source: Data processed (2020)

Based on Table 4.9. shows an R value of 0.460, which means the closeness of the relationship between work safety variables and work productivity in the same direction or positive.

This shows that the partial determination coefficient is 0.212. This can be interpreted that the effect of work safety on work productivity is 21.2% or in other words the remaining 78.8% is influenced by other factors.

(2) The Coefficient of Partial Determination of Occupational Health (X2) on Work Productivity (Y) is as follows:

Table 4.7. Occupational Health Partial Determination Coefficient.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.756a	.572	.564	1.97937

a. Predictors: (Constant), Occupational Health.

Source: Data processed (2020)

Based on Table 4.10. shows an R value of 0.756, which means the closeness of the relationship between occupational health variables and work productivity is unidirectional or positive.

This shows that the partial determination coefficient is 0.756. This can be interpreted that the effect of occupational health on work productivity is 57.2% or in other words the remaining 42.8% is influenced by other factors.

(3) The Coefficient of Determination of Partial Work Environment (Y) on Work Productivity (Y) is as follows:

Table 4.8. Work Environment Partial Determination Coefficient.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.484a	.234	.220	2.64753

a. Predictors: (Constant), Work Environment

Source: Data processed (2020)

Based on Table 4.11. shows an R value of 0.484, which means the closeness of the relationship between work environment variables and work productivity is unidirectional or positive.

7. Multiple Determination Coefficient Test

The coefficient of determination of the variable work safety (X1), occupational health (X2), and work environment (X3) on the work productivity of PT. Yambala Indonesia as follows:

Table 4.9. Multiple Coefficient of Determination

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805a	.648	.629	1,82736

a. Predictors: (Constant), Work Environment, Work Safety,
Occupational Health
Source: Data processed (2020)

Based on Table 4.12. shows the R value of 0.805 which means that the close relationship between the variables of work safety, occupational health and work environment with work productivity is unidirectional or positive. In addition, the results of the multiple coefficient of determination with R2 value of 0.648 can be interpreted that the effect of work safety, occupational health and work environment simultaneously on work productivity is 64.8% or in other words 64.8% of work productivity variables can be explained by work safety variables. , work health and work environment simultaneously, while the remaining 35.2% is the influence of variables that are not in this research model.

8. Hypothesis testing

1) Hypothesis Test Partially

Table 4.10. Partial Hypothesis Testing of Work Safety (X1), Occupational Health (X2) and Work Environment (X3) Variables

Coefficients[a]

Model		T	Sig.
1	(Constant)	2.900	.005
	Keselamatan Kerja	1.321	.192
	Kesehatan Kerja	7.646	.000
	Lingkungan Kerja	-3.421	.001

a. Dependent Variable: Produktivitas Kerja

Source: Data processed (2020)

1. Effect of Work Safety (X1) on Work Productivity (Y).
   H0: ρy1.23 = 0, there is no effect of work safety on work productivity.
   Ha: ρy1.23 ≠ 0, there is a safety effect
   work on work productivity.
   After testing the hypotheses of the above research and based on the results of the calculation of SPSS Version 24.0, the P-value of variable X1 was 0.192 (Table 4.13) greater than the real level or 0.192 ≥ 0.05. This means that Ha is rejected or H0 is accepted, there is no influence between work safety on work productivity.
2. Effect of Occupational Health (X2) on Work Productivity (Y).
   H0: ρy2.13 = 0, there is no effect of work health on work productivity.
   Ha: ρy2.13 ≠ 0, there is an effect of occupational health on work productivity.
   After testing the hypothesis of the above research and based on the results of the calculation of SPSS Version 24.0, the P-value of the X2 variable is 0.000 (Table 4.13) which is smaller than the real level or 0.000 <0.05. This means that H0 is accepted or Ha is rejected, there is an influence between work health on work productivity.

3. Effect of Work Environment (X3) on Worker Productivity (Y).
   H0: ρ3.12 = 0, there is no influence of the work environment on work productivity.
   Ha: ρ3.12 ≠ 0, there is an influence of the work environment on work productivity.
   After testing the hypotheses of the above research and based on the results of the calculation of SPSS Version 24.0, the P-value of the X3 variable is 0.001 (Table 4.13) smaller than the real level or 0.001 <0.05. This means that H0 is accepted or Ha is rejected, there is an influence between the work environment on work productivity.

2) Simultaneous Hypothesis Testing

Table 4.11. Partial Hypothesis Testing of Work Safety (X1), Occupational Health (X2) and Work Environment (X3) Variables on Work Productivity (Y).

ANOVAa

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	332,095	3	110,698	33,151	.000b
	Residual	180,319	54	3,339		
	Total	512,414	57			

a. Dependent Variable: Work Productivity
b. Predictors: (Constant), Work Environment, Work Safety, Occupational Health

Source: Data processed (2020)

Ho: ρy123 = 0: There is no effect of work safety, occupational health and work environment on work productivity.

Ha: ρy123 ≠ 0: There is an effect of work safety, occupational health and work environment on work productivity.

After processing the hypothesis testing data in accordance with the test steps that have been carried out in the previous chapter and based on the results of the calculation of SPSS 24.0, it is obtained a Significance F of 0.000 or it can be explained that the value of Significance F is smaller than the real level or 0.000 <0.05. This means that Ha is rejected or H0 is accepted, there is an effect of work safety, work health and work environment on work productivity.

RESEARCH FINDINGS

Based on the research analysis shows that partially there is no effect of work safety variables on the work productivity of PT. Yambala Indonesia, where the P-value of variable X1 was obtained at 0.192 (Table 4.13), which was greater than the real level or 0.192 ≥ 0.05. This means that Ha is rejected or H0 is accepted, there is no influence between work safety on work productivity. With the contribution of the effect of work safety on work productivity of PT. Yambala Indonesia is 21.2% or in other words, the remaining 78.8% is influenced by other factors. This is not in line with the research conducted by Putri & Sari (2015) with the title "The Effect of Work Safety on Employee Productivity of the Cold Rolling Mill PT. Krakatau Steel (PERSERO) Tbk. "It shows that work safety has a significant effect on employee productivity. Researchers see that differences in results can be influenced by those applied by each company. Research conducted by Putri & Sari shows that PT. Krakatau Steel (PERSERO) Tbk. Choosing a supervisor who has understood or attended K3 training. Meanwhile at PT. Yambala Indonesia only has written regulations on OSH, without any leaders who understand or participate in OSH training.

Partially there is an effect of occupational health variables on the work productivity of PT. Yambala Indonesia where the P-value of the X2 variable is 0.000 (Table 4.13) which is smaller than the real level or 0.000 <0.05. This means that H0 is accepted or Ha is rejected, there is an influence between work health on work productivity. With the contribution of the influence of work health on work productivity of PT. Yambala Indonesia amounted to 57.2% or in other words the remaining 42.8% was influenced by other factors. This is in line with the research conducted by Munasih et al. (2015) entitled "The Effect of K3 Implementation on the Productivity of Pengesian Labor in the Mall Dimoyo Malang project," which shows that occupational safety and health have a significant effect on productivity.

Partially there is an influence of work environment variables on the work productivity of PT. Yambala Indonesia where the P-value of the X3 variable is 0.001 (Table 4.13) which is smaller than the real level or 0.001 <0.05. This means that H0 is accepted or Ha is rejected, there is an influence between the work environment on work productivity. With the contribution of the influence of the work environment on the work productivity of PT. Yambala Indonesia amounted to 23.4% or in other words the remaining 76.6% was influenced by other factors. This is not in line with research conducted by Sukatmadiredja et al (2017) entitled "The Effect of Democratic Leadership Style and Environment on Productivity of Employee Performance at PT. Sentra Bumi Palapa Gresik "shows that the work environment partially has no effect on work productivity. The difference in research results can be seen where the employees of PT. Sentra Bumi Palapa Gresik is not satisfied with the surrounding environment.

There are multiple effects of work safety, occupational health and work environment on work productivity of PT. Yambala Indonesia. Obtained a Significance F of 0.000 or it can be explained that the value of Significance F is smaller than the real level or 0.000 <0.05. This means that Ha is rejected or H0 is accepted, there is an effect of work safety, work health and work environment on work productivity. With the contribution of the effect of work safety, occupational health, work environment on work productivity simultaneously at 64.8% or in other words 64.8% of work productivity variables can be explained by the variables of work safety, occupational health and work environment simultaneously, while the rest is equal to 35.2% of the influence of variables that are not in this research model.

V. CONCLUSION

Based on the results of the analysis and research discussion, it can be concluded that:

1. Partially there is no effect of work safety variables on the work productivity of PT. Yambala Indonesia. Researchers see that employees work without complying with regulations given by the company, such as the use of personal protective equipment (safety helmets, gloves, and masks).
2. Partially there is an effect of occupational health variables on the work productivity of PT. Yambala Indonesia. Researchers see that unhealthy employee conditions can reduce the number of employees and increase the number of absences so that it can cause a decrease in productivity.
3. Partially there is an influence of work environment variables on the work productivity of PT. Yambala Indonesia. Researchers see that the work environment in the company can create a sense of comfort such as adequate greening areas, adequate lighting systems in the company and complete facilities so that employee work productivity can be influenced by the work environment at PT. Yambala Indonesia.
4. Simultaneously there is an effect of work safety, occupational health and work environment variables on the work productivity of PT. Yambala Indonesia

VI. SUGGESTION

Based on the results of the analysis of the discussions and conclusions that have been carried out, the suggestions that can be given by the researcher as a basis for consideration of PT. Yambala Indonesia in making decisions in the future are as follows:

1. With regard to work safety, companies should conduct research or re-research to determine the role of work safety.
2. Regarding occupational health, the company maintains the health of its workers and provides socialization about healthy lifestyles such as eating healthy foods and always washing hands before eating. With employees who live healthy, they can reduce the absentee level in the company.
3. In connection with the work environment, it is hoped that the company can add various facilities for work areas such as lighting in the workshop area and greening the company area in order to create a comfortable environment for employees.

VII. Limitations of Research and Further Research Development

For further researchers, this research is expected to be only as a reference for further research because there are still limitations of the researchers, namely:

a. The next researcher is expected to be better prepared in the process of data collection and retrieval.

b. The next researcher is expected to have a place for the object of research that is not too broad so that it is easy to obtain data

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