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# Experimental Studies at Company X: Provision of Media Posters and K3 Inspections on Knowledge of Worker Safety in the Warping Section

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### ABSTRACT

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The purpose of this study was to analyze the effect of giving poster media and K3 inspection on the safety knowledge of workers in the warping section at PT X. This study used a quasi-experimental type of research. This research was conducted at a convection industry company, namely PT X which is prone to work accidents from the results of a survey conducted by researchers. There are 62 employees in the warping division, namely 18 women and 44 men. Respondents in this study had a minimum age of 21 years and a maximum of 51 years with an average age of 33,32258 years. The majority of respondents have a high school education, which is 52 people (83.9%). Then there are 8 people with junior high school education (12.9%), and 2 people with S1 (3.2%), with a total of 62 people (100%). The average respondent worked for 8,2903 years, the minimum respondent worked 1 year and a maximum of 19 years. This means that 62 respondents have standard work experience of 8 - 9 years. Results of this study indicate that the provision of a Media Poster has an effect on Occupational Safety Knowledge. There is a positive influence between the Provision of Media Posters on Occupational Safety Knowledge. K3 Inspection of Occupational Safety Knowledge. K3 inspection has a positive effect on Occupational Safety Knowledge. Meanwhile, education, age and years of service as confounding variables have no effect on employee safety knowledge.

## ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian media poster dan inspeksi K3 terhadap pengetahuan keselamatan kerja pada pekerja di bagian warping di PT X. Jenis dari penelitian ini adalah kuasi eksperimental. Penelitian ini dilakukan pada perusahaan industry konveksi yaitu PT X yang mana rentan terjadi kecelakaan kerja dari hasil survey yang dilakukan peneliti. Karyawan bagian warping adalah 62 orang yaitu 18 perempuan dan 44 laki-laki. Responden pada penelitian ini memiliki umur minimal 21 tahun dan maksimal 51 tahun dengan rata-rata berumur 33,32258 tahun. Responden mayoritas berpendidikan SMA yaitu berjumlah 52 orang (83,9%). Kemudian mereka yang berpendidikan SMP ada 8 orang (12.9%), dan S1 ada 2 orang (3.2%), dengan total 62 orang (100%). Rata-rata responden bekerja selama 8,2903 tahun, minimal responden bekerja 1 tahun dan maksimal 19 tahun. Hal ini berarti dari 62 responden mereka memiliki pengalaman kerja standar 8 - 9 tahun. Hasil penelitian ini menunjukkan bahwa pemberian Media Poster berpengaruh terhadap Pengetahuan Keselamatan Kerja. Terdapat pengaruh positif antara Pemberian Media Poster terhadap Pengetahuan Keselamatan Kerja. Inspeksi K3 terhadap Pengetahuan Keselamatan Kerja, Inspeksi K3 berpengaruh positif terhadap Pengetahuan Keselamatan Kerja. Sedangkan Pendidikan, usia dan masa kerja sebagai variable perancu tidak memiliki pengaruh terhadap Pengetahuan Keselamatan Kerja karyawan.

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Working in a factory has a high level of risk due to frequent work accidents. So it takes action to prevent work accidents by paying attention to occupational health and safety. However, there are still many factories that have not paid attention to occupational health and safety which causes a high risk of accidents that occur in factories. This risk is usually triggered by negligence in using personal protective equipment listed in occupational health and safety regulations. There are several phenomena found in field practice, for example, workers are rarely seen using personal protective equipment. In addition, they also seem to ignore the applicable SOP (Standard Operational Procedure). A work accident is an unwanted event that occurs unintentionally and causes loss of time, material, and loss of life during work. Therefore, work accidents consist of several elements, namely: (1) Unexpected, because there are no intentional and planned factors behind the accident; (2) Unpredictable and unwanted, because every accident will always be accompanied by physical and mental injury; (3) Always causing loss and damage, at least causing work disturbances (Tarwaka, 2016).

Work accidents can occur due to various factors, both internal and external, which are unexpected and of course the consequences will be detrimental to various parties, both morally and materially (Gunawan, & Waluyo, 2016). Work accidents are unexpected events that harm various parties, so accidents due to work must be minimized (Salami, 2016). Work-related accidents can be divided into several categories according to their severity, namely "mild", "moderate" and "severe". But every type of industrial accident must be considered important by management, including minor injuries (Kurniawan et al., 2016).

Data from the Department of Manpower and Transmigration noted that in 2020 there was an increase in cases of work accidents. Accident cases in 2019 were 114,000 cases, increasing to 177,000 work accident cases in 2020. Therefore, it is necessary to pay attention to work accident prevention practices. The culture of implementing K3 is also required to be applied by a company so that in the future it can reduce the risk of work accidents (Chowdhury dan Tanim, 2016). Occupational safety knowledge is the ability to understand and describe information obtained from sight and hearing. Knowledge is a key where a behavior is formed against individuals to provide long-term thinking balanced with knowledge (Atiqoh et al., 2014).

K3 inspection is the terms and conditions that must be met by the company in testing at the workplace that is taking place in the company. One of the things that can increase the effectiveness of K3 is the regular replacement of signs, posters, and other visual aids. Visual information that has been in use for too long will blend into the background and become unrecognizable. According to these principles, OSH posters cannot be used as a factor in worker safety behavior alone. K3 posters can also be used as a way to provide information related to information on a work activity (Alama dkk, 2020).

Factors that affect industrial accidents include temperature, noise, slippery floors, lighting, and K3 inspections. Insufficient light or a dazzling place can make the eyes tired. Eye fatigue can cause drowsiness, which is especially dangerous if workers operate dangerous machinery that can cause accidents (Alama dkk, 2020). Occupational Health and Safety (K3) is one of the most important things that must be implemented by all business actors. This is also in accordance with Article 87 of the Manpower Law Number 13 of 2003. The purpose of implementing OSH in the workplace is to protect co-workers, their families, consumers, and other people who may be affected by working conditions. K3 has an essential role in morals, legality and finance. Any business that functions as a gathering place for a group of people has a responsibility to ensure that workers and everyone involved is always safe.

Risk management is a topic that is sometimes overlooked because the risk opportunities are not always clear. Therefore, risk management must be applied when carrying out a business activity in order to limit risk, because the risk aspect will develop as soon as the activity is started. Risk management is the process of identifying and controlling the hazards the company faces. The basic objective of risk management is to keep things running well in the daily operations of the company and to minimize losses that are harmful to the survival of the business or organization. One of the risks that often arises and occurs in practice is inherent operational risk, meaning that this risk starts and appears before other risks arise, so that a procedure is needed that can minimize it (Suxia dkk, 2020).

This research will focus on one of the convection industrial companies, namely PT X which is prone to work accidents. "PT X is engaged in fabric production and has a total of 365 workers consisting of 305 men and 60 women. There are 62 employees in the warping division, namely 18 women and 44 men. Operational hours at PT X are 24 hours consisting of 3 shifts, namely morning 07.00-15.00, afternoon 15.00-23.00 and night shift 23.00-07.00. use personal protective equipment so that sometimes he gets hit by a knife when opening sacks and is not careful when working so that his hands hold a hot tub of sulfur dip to prevent falling due to slippery floors, hands are caught in rolls when cleaning cloth, feet are run over by beams from warping, splashed with fabric dye into the eye area, and slips when going down stairs. warping. This is what triggers many work accidents in the warping section. The accident that occurred at PT X in the warping section was a beam hit on the leg. Beam is a large and heavy iron so if hit by a beam it will cause fractures in the legs.

Workers must use personal protective equipment and always check machines regularly to minimize accidents while working such as using masks, safety shoes, and head coverings to prevent workers' long and flowing hair from getting caught during the warping process.

#### METHOD

#### Participant characteristics and research design

This research was conducted on a convection industrial company, namely PT X which is prone to work accidents from the results of a survey conducted by researchers. PT X is engaged in fabric production and has a total of 365 workers consisting of 305 men and 60 women. There are 62 employees in the warping division, namely 18 women and 44 men. Operational hours at PT X are 24 hours consisting of 3 shifts, namely morning 07.00-15.00, afternoon 15.00-23.00 and night shift 23.00-07.00.

This study uses a quasi-experimental research type, which is to analyze the influence between the dependent variable and the independent variable according to the hypothesis testing. Quasi experimental design is the development of a real experimental design, has a control group (Sholihah, 2016).

#### Sampling procedures

The population is the object under study, in this study the population is 62 employees in the warping section at PT X. The sample of this research is the workers of PT X specifically employees of the warping section at PT X. The sampling technique in this study is total sampling, namely 62 employees of the warping section with inclusion criteria, namely:

a. Willing to participate in this research

b. Is an employee of the warping division at PT X.

This research was conducted at PT X and was carried out from March 22, 2021 – October 1, 2021.

Data sources are divided into two, namely:

a. Primary data

Primary data is data collected directly from the source or from the field without intermediaries. This research was conducted using a questionnaire and field observations. Interviews were conducted with factory managers to obtain work accident data at the factory at PT X. Primary data includes: poster media, K3 inspection, knowledge of work safety.

b. Secondary Data

Secondary data is data obtained from other sources or other publications, in this study obtained from data from the Ministry of Manpower, namely work accident data.

#### **Research Tools/Research Instruments**

The research tool or instrument used is a questionnaire with a closed type of questionnaire. Closed questionnaire is a type of questionnaire in which several answer options have been provided from the researcher, then the respondent or participant only needs to answer according to their respective answers.

#### **Data Processing and Analysis Techniques**

1. The first stage is Editing

In the first stage, namely editing, which is the initial stage where the researcher checks whether the data that has been collected is in accordance with the criteria and is complete.

2. The second stage is Coding

This is the stage where the researcher does coding or grouping and giving a certain name or code based on the applicable provisions to be continued before the data processing process.

3. The third stage is Entry

At this stage the researcher enters data from the results of distributing questionnaires

4. The fourth stage is Tabulating

This stage is the stage where the researcher performs data classification according to the research objectives to start before data analysis is carried out

5. The fifth stage, namely Scoring

At this stage, the researcher scores the data according to the results of the data tabulation.

The analysis steps are:

1. Validity and reliability testing

The validity test uses the product-moment correlation test, and is said to be valid if r count > r table. Although reliability using Cronbach Alpha > 0.6 is considered reliable.

2. Normality testing

Normality testing is a test carried out for data analysis requirements. Normality test is a test conducted to determine whether the distribution of the data in this study is normal or not. The distribution of the data is normal or not to prove that the research model has good data and is feasible to continue for analysis, then the Kolmogorov-Smirnov test technique is carried out.

3. Univariate analysis

Analysis to obtain an overview of the status of research variables

4. Regression analysis

This study uses regression analysis to determine the effect between the independent variable and the dependent variable at a confidence level of 0.05 and a 95% confidence interval.

The regression equation formula used is:

Y = a + b1X1 + b2X2

Information:

Y = Knowledge of work safety

b1-b2 = regression coefficient

X1 = poster media X2 = K3 inspection inspection

How to make a decision:

Ho is rejected: if the significance value is <0.05. This means that there is an influence between the variable X (independent) and the dependent variable (Y)

Ho is accepted: if the significance value is > 0.05. This means that there is no effect between the variable X (independent) and the dependent variable (Y)

# Table 1.Regression Coefficient Value Guidelines

Coefficient Interval	Category
0,09-0,199	Very low
0,20 – 0,399	Low
0,40-0,599	Medium
0,60-0,799	Strong
0,80 - 1,000	Very strong

### T-test Differential Test

If the data scale of the two variables is quantitative, then the paired t-test is used as a comparison or difference test (interval or ratio). Paired t-test is another name for this test. The parametric difference test on two paired data is a paired t-test. According to this definition, these exams are designed for various kinds of tests or comparison tests. This requires determination whether the mean or mean of the two paired groups is different. The term "paired" refers to the fact that the data sources come from the same source. Paired t-test is a hypothesis testing procedure that uses non-independent (paired) data. One individual (object of study) was subjected to two separate treatments, which was the most common trait identified in paired cases. Despite the fact that the researcher used the same person, the researcher obtained two types of sample data: data from the first treatment and data from the second treatment. Since the data were not normally distributed, Paired Sample T-Test was used to see changes in the mean before and after. For paired samples, the manual t-test formula is:

$$t = \frac{\delta}{SD\delta/\sqrt{n}}$$

Description:

Δ	= mean standard deviation
SDδ	= Standard deviation of
n	= number of samples

#### **RESULTS AND DISCUSSION**

#### **General description**

This research was conducted at a convection industrial company, namely PT X which is prone to work accidents from the survey results conducted by researchers. "PT X is engaged in fabric production and has a total of 365 workers consisting of 305 men and 60 women. There are 62 employees in the warping division, namely 18 women and 44 men. Operational hours at PT X are 24 hours consisting of 3 shifts, namely morning 07.00-15.00, afternoon 15.00-23.00 and night shift 23.00-07.00. The sample of this research is the workers of PT X specifically employees of the warping division at PT X, namely 62 employees of the warping division.

#### **Quantitative Research Results**

In this section, we will discuss the results of quantitative research. The first is univariate analysis, which is carried out to describe each variable in the form of a distribution table.

#### Table 2.

Safety Knowledge	Variable	Frequency	Distribution
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Questions	Average
1	4
2	3,886559
3	1,064516
4	3,870968
5	1,048387
6	3,887097
7	3,177419
8	3,419355
9	1,258065
10	2,758065
11	3,870968
12	3,548387
13	3,16129
14	3,129032
15	3,951613

From table 2. it is known that the research questions have various averages. The lowest average score is question number 5 which is 1.048387 and the highest is question number 1 which is 4.

Table 3.
Media Poster Variable Frequency Distribution

Questions	Average	Category
1	4	High
2	3,966667	High
3	1,096774	Low
4	3,83871	High
5	1,096774	Low
6	3,903226	High
7	2,967742	High
8	3,387097	High
9	1,129032	Low
10	2,774194	High
11	3,83871	High
12	3,903226	High
13	3,322581	High
14	2,83871	High
15	4	High

Based on table 3. it is known that on poster media respondents have the majority response included in the high category with an average of more than 2.5.

#### Table 4. Inspection Variable Frequency Distribution

Questions	Average	Category
1	4	High
2	3,806452	High
3	1,032258	Low
4	3,903226	High
5	1	Low
6	3,870968	High
7	3,387097	High
8	3,451613	High
9	1,387097	Low
10	2,741935	High
11	3,903226	High
12	3,193548	High
13	3	High
14	3,419355	High
15	3,903226	High

From table 4. it is known that the respondents in the study had a majority response included in the high category with an average of more than 2.5.

#### Table 5. Distribution of Respondents' Education Frequency

Decription	Amount	Percentages
Bachelor's degree	2	3.2%
Senior high school	52	83.9%
Junior high school	8	12.9%
Total	62	100%

Table 5. Shows that the majority of respondents in the study have high school education, which are 52 people (83.9%), 8 people have junior high school education (12.9%), and 2 people have bachelor's degree (3.2%), with a total of 62 people (100%).

#### Table 6. Frequency Distribution of Respondents Age and Length of Work

	N	Minimum	Maximum	Mean	Std.deviation
Age	62	21.00	51.00	33.32258	7.096417
Long work	62	1.00	19.00	8.2903	5.4723

Based on the table, it is known that the respondents in this study have a minimum age of 21 years and a maximum of 51 years with an average age of 33,32258 years, and a standard deviation of 7,096417. This shows that those who work at PT X are still in their productive age, which is 33 years old. Average working period of the respondents is 8.2903 years with a standard deviation of 5.4723. The respondent has a minimum of 1 year of service and a maximum of 19 years. This means that 62 respondents have standard work experience of 8 - 9 years

Table 7.

Frequency Distribution Based on Working Status and Gender (N=62)

Amount	Percentages
52	83.9%
10	16.1%
44	71%
18	29%
	52 10 44

From table 7. it is known that the majority of respondents in the study were permanent employees, which amounted to 52 people (83.9%). Then there are 10 non-permanent employees (16.1%). The majority of respondents in the study were 44 men (71%) and 18 women (29%). This shows that the majority of employees working at PT X are male.

#### Table 8. Pre Poster Validity Test Results

No. Items	r counted	r table	Results
Pre_post1	0,409	0.355	Valid
Pre_post2	0,383	0.355	Valid
Pre_post3	0,413	0.355	Valid
Pre_post4	0,577	0.355	Valid
Pre_post5	0,409	0.355	Valid
Pre_post6	0,383	0.355	Valid
Pre_post7	0,421	0.355	Valid
Pre_post8	0,376	0.355	Valid
Pre_post9	0,413	0.355	Valid
Pre_post10	0,376	0.355	Valid
Pre_post11	0,464	0.355	Valid
Pre_post12	0,376	0.355	Valid
Pre_post13	0,724	0.355	Valid
Pre_post14	0,395	0.355	Valid
Pre_post15	0,364	0.355	Valid

Based on table 8, it is known that the calculated r value for the 15 questionnaire questions for the first question is 0.409, the second question is 0.383, the third question is 0.413, the fourth question is 0.577, the fifth question is 0.409, the sixth question is 0.383, the seventh question is 0.421, the eighth question is 0.376, the ninth question is 0.413, the tenth question is 0.376, the eleventh question is 0.464, the twelfth question is 0.376, the thirteenth question is 0.704, the fourteenth question is 0.395, the fifteenth question is 0.364 > r table (0.355) so that all the question items for this Pre Poster can be said to be valid.

Based on table 9. it is known that the calculated r value for the fifteen questionnaire questions for the first question is 0.375, the second question is 0.393, the third question is 0.418, the fourth question is 0.369, the fifth question is 0.403, the sixth question is 0.384, the seventh question is 0.477, the eighth question is 0.370, the ninth question is 0.382, the tenth question is 0.380, the eleventh question is 0.700, the twelfth question is 0.746, the thirteenth question is 0.682, the fourteenth question is 0.672, the fifteenth question is 0.690 > r table (0.355) so that all questions for this Pre inspection can be said to be valid.

#### Table 9. Pre-Inspection Validity Test Results

No. Items	r counted	r table	Results
Pre_Inspeksi1	0,375	0.355	Valid
Pre_Inspeksi2	0,393	0.355	Valid
Pre_Inspeksi3	0,418	0.355	Valid
Pre_Inspeksi4	0,369	0.355	Valid
Pre_Inspeksi5	0,403	0.355	Valid
Pre_Inspeksi6	0,384	0.355	Valid
Pre_Inspeksi7	0,477	0.355	Valid
Pre_Inspeksi8	0,370	0.355	Valid
Pre_Inspeksi9	0,382	0.355	Valid
Pre_Inspeksi10	0,380	0.355	Valid
Pre_Inspeksi11	0,700	0.355	Valid
Pre_Inspeksi12	0,746	0.355	Valid
Pre_Inspeksi13	0,682	0.355	Valid
Pre_Inspeksi14	0,672	0.355	Valid
Pre_Inspeksi15	0,690	0.355	Valid

Based on table 10, it is known that the calculated r value of the questionnaire for the first question is 0.395, the second question is 0.486, the third question is 0.381, the fourth question is 0.376, the fifth question is 0.440, the sixth question is 0.521, the seventh question is 0.653, the tenth question is 0.371, eleventh question 0.420, twelfth question 0.776, thirteenth question 0.485, fourteenth question 0.419, fifteenth question 0.593 > r table (0.355) so that all question items for this Post Poster can be said to be valid. Then the following are the results of validity testing for Post Inspections.

#### Table 10. Post Poster Validity Test Results

No. Items	r counted	r table	Results
Post_Poster1	0.395	0.355	Valid
Post_Poster2	0.486	0.355	Valid
Post_Poster3	0.381	0.355	Valid
Post_Poster4	0.376	0.355	Valid
Post_Poster5	0.440	0.355	Valid
Post_Poster6	0.521	0.355	Valid
Post_Poster7	0.791	0.355	Valid
Post_Poster8	0.386	0.355	Valid
Post_Poster9	0.653	0.355	Valid
Post_Poster10	0.371	0.355	Valid
Post_Poster11	0.420	0.355	Valid
Post_Poster12	0.776	0.355	Valid
Post_Poster13	0.485	0.355	Valid
Post_Poster14	0.419	0.355	Valid
Post_Poster15	0.593	0.355	Valid

Based on table 11, it is known that the calculated r value for all 15 questions in the questionnaire for the first question is 0.432, the second question is 0.522, the third question is 0.860, the fourth question is 0.460, the fifth question is 0.368, the sixth question is 0.413, the seventh question is 0.466, the eighth question is 0.470, the ninth question is 0.409, the tenth question is 0.391, the eleventh question is 0.702, the twelfth question is 0.747, the thirteenth question is 0.684, the fourteenth question is 0.676, the fifteenth question is 0.690 > r table (0.355) so that all question items for this Post Inspection can be said to be valid. Then the following are the results of the reliability test.

Table 11.			
Post Inspection	Validity	Test	Results

No. Items	r counted	r table	Results
Post_Inspeksi1	0.432	0.355	Valid
Post_Inspeksi2	0.522	0.355	Valid
Post_Inspeksi3	0.860	0.355	Valid
Post_Inspeksi4	0.460	0.355	Valid
Post_Inspeksi5	0.368	0.355	Valid
Post_Inspeksi6	0.413	0.355	Valid
Post_Inspeksi7	0.466	0.355	Valid
Post_Inspeksi8	0.470	0.355	Valid
Post_Inspeksi9	0.409	0.355	Valid
Post_Inspeksi10	0.391	0.355	Valid
Post_Inspeksi11	0.702	0.355	Valid
Post_Inspeksi12	0.747	0.355	Valid
Post_Inspeksi13	0.684	0.355	Valid
Post_Inspeksi14	0.676	0.355	Valid
Post_Inspeksi15	0.690	0.355	Valid

Based on table 12. The results obtained for Cronbach Alpha for pre poster 0.658, pre inspection 0.679, post poster 0.700 and post inspection 0.762 and have a value greater than 0.6 so that it is said to be reliable, or the respondent's answer can be trusted.

#### Table 12. Reliability Test Results

Variables	Cronbach Alpha	Results
Pre-Poster	0.658	Reliable
Pre-Inspection	0.679	Reliable
Posters	0.700	Reliable
Post Inspection	0.762	Reliable

Based on table 13, it is known that the Asymp.Sig Kolomogorof Smirnov value is 0.169> 0.05, meaning that the data in this study is normally distributed.

### Table 13. Normality Test Results

#### **One-Sample Kolmogorov-Smirnov Test**

		Unstandardized
		Residual
Ν		62
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	2,35374747
Most Extreme Differences	Absolute	,213
	Positive	,150
	Negative	-,213
Test Statistic		,213
Asymp. Sig. (2-tailed)		,169 <sup>c</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

#### Table 14. Regression Test Results

#### **Coefficients**<sup>a</sup>

Model		Unstandar	dized Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		-
1	(Constant)	4,252	4,996		,851	,398
	Age	,074	,050	,096	1,464	,149
	Education_Resp	-,017	,548	-,002	-,030	,976
	Years of service	,015	,065	,015	,235	,815
	Poster	,920	,067	1,434	13,675	,000
	Inspection	,891	,059	1,601	15,132	,000,

a. Dependent Variable: Knowledge

# a. The Effect of Giving Poster Media on Work Safety Knowledge at PT X.

The first hypothesis in the study reads that the provision of Media Poster has an effect on Occupational Safety Knowledge. From the table, the significance value of t for the poster variable is 0.000, the significance value is <0.05 and the regression coefficient is +0.920. This means that there is a positive influence between the Provision of Media Posters on Work Safety Knowledge. So H1 is accepted.

# b. The Effect of Giving K3 Inspections on Knowledge of Work Safety at PT X

The second hypothesis of the study reads that K3 Inspection has an effect on Occupational Safety Knowledge. Based on the table, the significance value of t for the poster variable is 0.00, the significance value is <0.05 and the regression coefficient is +0.891. This means that K3 Inspection has a positive effect on Occupational Safety Knowledge. So the second hypothesis is accepted. For the confounding variable, namely Education, the significance value is 0.976 > 0.05, which means that there is no effect of Education on knowledge of employee safety. The confounding variable of age has a significance value of 0.149 > 0.05, which means that there is no effect of age on knowledge of employee safety. The confounding variable of service period has a significance value of 0.815 > 0.05, meaning that there is no effect of tenure on employees' knowledge of work safety.

Based on the regression coefficient value, the most effective in influencing employee safety knowledge is poster media with a regression coefficient of 0.920 greater than inspection (0.891).

Based on table 15, it is known that the significance value of t is 0.000 < 0.05, meaning that there is a difference in K3 knowledge between pre-inspection and post-inspection. The results obtained a significance value of t of 0.000 <0.05, meaning that there is a difference in knowledge of K3 between pre poster and post poster.

		Paired Differences				t	df	Sig. (2-tailed)	
		Maar	Ctd Doviation	Std. Error	95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Mean	Lower	Upper			
Pair 1	Pre_Inspeksi - Post_Inspeksi	-17.58065	6.04304	1.08536	-19.79725	-15.36404	-16.198	30	.000
Pair 1	Pre_Poster - Post_Poster	-15.29032	4.59125	.82461	-16.97441	-13.60624	-18.542	30	.000

#### Table 15. Different test results t-test Inspection and Poster Paired Samples Test

#### DISCUSSION

# The Effect of Giving Poster Media on Work Safety Knowledge at PT X

After doing research, the results of the study show that the provision of Media Posters has an effect on Knowledge of Work Safety. This is evidenced by the obtaining of a significance value of t for the poster variable of 0.000 with a significance value <0.05 and a regression coefficient of +0.920. This means that there is a positive influence between the Provision of Media Posters on Occupational Safety Knowledge.

The poster method is part of an active learning strategy. The main function of a poster is to attract a moving audience with a message. When designing a poster, plan the design carefully. You will have less time to attract and hold the attention of the reader or audience. Think about one aspect of the information that must convey the message and plan a design around it.

Posters are media that contain messages or health information that are usually affixed to walls, and in strategic places. In this study, posters were made visually with animated images to attract respondents so that employees as respondents were more interested and knew more clearly the meaning of the poster. which in this case is that the employees of PT X have better knowledge of K3. Posters contain short messages that are conveyed in the form of images in order to influence other people to be interested or interested in what is in the poster media. So it can be said that posters are effective in increasing the knowledge of respondents' work safety.

# The Effect of K3 Inspection on Work Safety Knowledge at PT $\rm X$

The results showed that K3 Inspection had an effect on Knowledge. This is evidenced by the obtaining of a significance value of t for the poster variable of 0.000 with a significance value <0.05 and a regression coefficient of +0.891. This means that K3 Inspection has a positive effect on Occupational Safety Knowledge.

OSH inspection is a method to identify potential hazards in the workplace to reduce losses and accidents while implementing occupational safety and health. The purpose of OHS Inspection is to ensure the achievement of production efficiency, establish policies for the equipment used so that the usability of the machine can be increased, and determine when the equipment will be repaired or overhauled, and estimate the cost, reduce the level of damage to the machine or equipment, identify hazardous conditions and behaviors, and identify root causes and make changes. When all the objectives of the OHS inspection have been met, conducting an OHS Examination provides several advantages. Some of the advantages of conducting an OHS Inspection are immediate repairs, direct communication with personnel, employees react quickly to hazardous situations and behaviors, implement appropriate security and control measures, participate in OHS programs, increase OHS awareness and standards, and demonstrate the company's OHS commitment (Sholihah, 2016).

K3 inspections are implemented to minimize the risk of work accidents. An OH&S inspection is a documented or formal procedure often performed by safety specialists to identify potential hazards. Most safety inspections involve checklists, which help the inspector thoroughly assess each area or potential hazard and pinpoint specific events that could cause safety problems. In this study, K3 inspections were carried out by providing research socialization and then conducting counseling to employees of PT X in the warping division, the results of the study showed that there was a significant influence between K3 inspections on work safety knowledge, meaning that respondents were responsive to the K3 inspections so that their knowledge increased.

#### Provision of K3 Inspections and Effective Posters to Increase Operator Knowledge About K3

Based on the results of the study, it is known that the provision of K3 inspections and posters is effective in increasing the knowledge of employees at PT X about K3. Operator knowledge about K3 increases because by looking at posters, employees will be able to get a better idea of things that can cause work accidents because with poster media it will be more efficient than asking K3 members directly.

The results of this study are supported by Suparwo (2019) which states that the implementation of supervision accompanied by K3 management can create a safe workplace and minimize the risk of work accidents. This means that with good supervision and adequate K3 inspections will reduce the risk of work accidents in the workplace.

The results of this study are also supported by Sukmawati (2020) The results showed that there were many potential hazards in the three convection home industries, namely mechanical hazards, ergonomic hazards, electrical hazards, chemical hazards, and biological hazards. and Psychological hazards in any convection work process. Permata, Kalisegoro, and Fanny concluded that the potential hazards of the home furnishing industry are: needle pricked finger, cut finger, tripping, falling, slipping, cut, cut, standing posture with half-arched body and neck, repetitive hands Service activities, electric shock , fires, so it is necessary to educate employees about this

The results of this study are in line with research conducted by Ramadlan (2016) which shows that work accidents can be caused by various potential hazards from various sources, ranging from equipment (inanimate objects) to users (biological). potential hazards do occur, the consequences of which can range from mere abrasions to the death of the worker. Therefore, K3 is the most important thing that must be instilled by every worker in order to work well.

The results of this study are supported by Yasmina Intan Reisita (2017) which shows that if in the work environment there is a risk of accidents such as the work environment and unsafe machines or production equipment, it will increase the risk of work accidents. It is recommended that companies take immediate action to control hazards, especially at high and medium risk levels.

The results of this study are in line with research Atiqoh (2017), shows that there is a relationship between age, length of working hours, nutritional status, work posture, workload and work fatigue. The management of the company must provide additional light according to the type of work in order to meet the lighting according to the Lux standard, and design a work place (chair) according to the size of the worker.

#### CONCLUSIONS AND SUGGESTION

From the results of the analysis, it was concluded that the provision of poster media and K3 inspection had an effect on knowledge of work safety. So it is necessary to provide poster media through electronic media, which can be accessed casually at any time more effectively, the company should further increase the provision of posters in this way, to increase employee knowledge and awareness about work safety. Companies can share diverse, informative and interesting posters every day. In terms of counseling, the company should more often provide inspections or counseling to employees related to K3 at the company to minimize the occurrence of work accidents at PT X. Inspection should be done by giving points and can be done interactively, for example by asking some questions.

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