



DETERMINANTS OF UNSAFE ACTION IN WORKERS PRODUCTION DEPARTEMENT AT PT KOKOH SEMESTA CIKANDE

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Abstract

The International Labor Organization (ILO) says that as many as 2.3 million deaths are caused by disease or work-related accidents that occur each year. This study aims to determine the factors associated with unsafe actions in production workers at PT. Sturdy Universe Cikande Serang Banten. type of research used is quantitative research with analytic observational method with cross sectional design. The number of respondents in this study were 60 respondents. The sampling technique used proportional sampling with univariate and bivariate analysis using the Chi Square test. The results of this study showed that as many as 21 (35%) respondents took safe actions, as many as 15 (25%) respondents had good knowledge, as many as 31 (51.6%) respondents had good attitudes and as many as 28 (46.6%) respondents had work 6-10 years. The results of the bivariate analysis test showed that there was a relationship between knowledge (Pvalue = 0.000), attitude (Pvalue = 0.003) and years of service (Pvalue = 0.012) with unsafe actions.

Keywords: Unsafe Act, Production, Knowledge, Attitude and Service Period

Introduction

Occupational safety and health (K3) is an effort to create a healthy and safe work environment, so as to reduce the probability of work accidents/work-related illnesses. According to the Republic of Indonesia's Basic Health Law no. 9 of 1960 Chapter I Article II, occupational health is a health condition that aims to make workers obtain the highest degree of health, both physically, spiritually and socially with efforts to prevent and treat diseases or health problems caused by work and the work environment and diseases general.

Economically, morally and legally, worker safety is an important issue that must always be properly considered. Occupational safety is useful for avoiding workers from unsafe actions, so that workers are not too worried about their own safety, especially workers in the production



section. Occupational safety is protection for work security experienced by workers both physically and mentally in the work environment. Therefore, every company must always pay attention to work safety for workers in the work environment.

Unsafe actions are failures (human failures) in following the correct work requirements and procedures resulting in work accidents, such as actions without qualifications and authority, lack of or not using personal protective equipment, failure to save equipment, workers at dangerous speeds, and so on.

According to Notoatmodjo (2018) the causes of work safety that are often encountered are unsafe actions (88% unsafe actions) and unsafe environmental conditions (10% unsafe conditions) and 2% are things that cannot be avoided (anavoidable). Thus, more accidents are caused by unsafe human actions which include factors of knowledge, attitude and years of service.

The International Labor Organization (ILO) says that work-related accidents are basically caused by three factors, namely human factors, work, and the environment at work. According to Sucipto (2014), 80-85% of accidents are caused by negligence (unsafe human acts) and human error (human error). According to Arifin (2016) stated that in 2010 there were 54,398 cases of work accidents due to 96% unsafe actions and 4% due to unsafe conditions.

Some data shows that as many as 3.7 million workers have had work accidents and 5,214 people have died. Based on the report of the International Labor Organization (ILO) which states that every day there are work accidents that result in approximately 6,000 fatalities, while in Indonesia out of every 100,000 workers there are 20 people who experience fatal work accidents (Levi, 2017)

Several factors related to unsafe behavior among workers according to Green in Notoadmodjo include knowledge, attitude, motivation, tenure and supervision (Notoatmodjo, 2018). Based on the results of previous research conducted by Perwitasari & Tualeka (2014), it was stated that there is a relationship between knowledge and unsafe behavior in workers (Tulaeka, 2018). In addition, the results of research conducted by Sangaji found a relationship between attitudes and unsafe behavior in workers (Sangaji et al., 2018).



PT. Kokoh Semesta Cikande Serang Banten is a private company founded in 2016 with main products namely mechanical work, pressure vessels, storage tanks, piping systems in the production process in the form of machines, skills and supervision are required for their use, so employees are required to have knowledge of K3 and also have a good attitude at work in order to minimize the occurrence of work accidents that can harm workers and companies. In 2022 at PT. Sturdy Semesta Cikande Serang Banten 2 cases of work accidents occurred to workers, namely injuries to the toes and little toes while carrying iron without using tools. Therefore, researchers are interested in conducting research on unsafe conditions in production workers at PT. Sturdy Universe Cikande Serang Banten.

Research methods

This study examines the relationship between knowledge, attitudes and years of service with unsafe actions with the target of researchers namely workers who work in the production department of PT. Sturdy Universe Cikande Serang Banten. A total of 60 populations with a sample of 60 respondents. The research was conducted in April-June 2022. This type of research was analytic observational with a cross-sectional research design. This study used a sampling method, namely Proportional Sampling with random sampling technique. The instrument used in this study was a questionnaire sheet. The data in this study are in the form of primary data from questionnaires and secondary data from journal searches and data libraries.

Result and Discussion

A. Univariate Analysis

Table. 1 Distribution of Determinant Frequency Relating to Actions Not Safe (Unsafe Action)

Unsafe Action	Frequency	Percentage
Unsafe	39	65%
Safe	21	35%
Total	60	100%

Knowledge	Frequency	Percentage
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Not good	45	75%
Good	15	25%
Total	60	100%

Attitude	Frequency	Percentage
Not good	29	48,4%
Good	31	51,6%
Total	60	100%

Length of Service (Year)	Frequency	Percentage
≤ 1	6	10%
2-5	17	28,4%
6-10	28	46,6%
>10	9	15%
Total	60	100%

It is known from 60 respondents in the production department at PT. Kokoh Semesta Cikande Serang Banten resulted in 39 (65%) respondents taking unsafe actions and 21 (35%) respondents taking safe actions.

It is known from 60 respondents in the production department at PT. Kokoh Semesta Cikande Serang Banten, the results showed that 45 (75%) respondents had poor knowledge, while 15 (25%) respondents had good knowledge. It is known from 60 respondents in the production department at PT. Kokoh Semesta Cikande Serang Banten, the results obtained were 29 (48.4%) respondents who had a bad attitude, while 31 (51.6) respondents had a good attitude. It is known from 60 respondents in the production department at PT. Kokoh Semesta Cikande Serang Banten, the results obtained were 6 (10%) respondents who had worked ≤ 1 year, 17 (28.4%) respondents who had 2-5 years of service, 6-10 years of service years as many as 28 (46.6%), and responses that have worked > 10 years as many as 9 (15%).

Unsafe action is a failure (human failure) in following the correct work requirements and procedures resulting in work accidents, such as actions without qualifications and authority, lack or not using personal protective equipment, failure to save equipment, work at breakneck speed (Oktaviani, 2022).



This is in line with Abdon's research (2016) at PT. Kharisma Cakranusa Rubber Industry showed that 19 respondents (44.2%) took unsafe actions and 24 (55.8%) respondents did not take unsafe actions.

Knowledge is the result of "knowing" and this occurs after someone has sensed a particular object. Sensing of objects occurs through the five human senses, namely sight, hearing, smell, taste and touch alone. Most human knowledge is obtained through the eyes and ears. Measurement of workers' knowledge is measured using research instruments, so that it can be categorized into good or bad knowledge levels.

Attitude is a person's action in carrying out unsafe acts (unsafe act), attitudes are categorized into good attitudes and unfavorable attitudes in carrying out unsafe acts (unsafe act). This is in line with Ramadhany (2019) research (2018) which said that 34 workers (68.0%) had negative attitudes.

Tenure of work is a work experience that is closely related to the experiences a person gains while carrying out his work, where experienced workers can be seen as more capable of carrying out and understanding their work. Factors that affect work productivity are length of work (Nainggolan et al., 2012). In this study, years of service are categorized into old and new years of service. This is in line with research conducted by Oktaviani (2022) which said that there were 38 respondents (54.3%) who had a new working period and 32 respondents (45.7%) who had a long working period.

Analisis Bivariat

Table 2. Factors Influencing Unsafe Action in Production Workers

Variables	Unsafe Action				Total		P Value	OR
	Unsafe		Safe		N	%		
	N	%	N	%				
Knowledge								
Not good	45	75	20	33,3	65	100	0,000	2,321
Good	15	25	12	20	27	100		



Attitude								
Not good	29	48,4	37	61,6	66	100	0,003	3,562
Good	31	51,6	28	46,6	59	100		
Length of Service (Year)								
≤ 1	6	10	16	26,6	22	100	0,012	6,025
2-5	17	28,4	21	35	38	100		
6-10	28	46,6	33	55	61	100		
>10	9	15	19	31,6	28	100		

Source: Primary Data, 2022

Based on the bivariate table analysis, it is known that from 60 respondents, who had poor knowledge, there were 45 (75%) of respondents who took unsafe actions and as many as 15 (25%) of respondents had good knowledge and unsafe actions, respondents who had bad knowledge but did safe action as many as 20 (33.3%) and as many as 12 (20%) respondents who have good knowledge in carrying out safe action. Based on statistical tests, it shows a P value of 0.000, which means that the P value is smaller than α (0.05). So it can be concluded statistically that at α 5% there is a significant relationship between knowledge and unsafe actions in production workers at PT. Kokoh Semesta Cikande Serang Banten in 2022 and the Odds Ratio (OR) value is 2.321, meaning that respondents who have poor knowledge have 2 times greater risk of taking unsafe actions compared to respondents who have good knowledge in carrying out safe actions for workers in the production section.

From the results of these statistical tests, it can be seen that workers have good knowledge, especially about K3 in the production process. In addition, the quality of human resources is good. This is due to the company's role in implementing OSH in the workplace in order to provide concern for the work safety of workers.

This research is in line with research conducted by Syamtingrum (2017) which shows that the results of an analysis of the influence of personal factors (K3 knowledge) on unsafe actions with a correlation test with a confidence level of 95% have a correlation coefficient value of 0.529 and a P value of $0.000 < \alpha = 0.05$. From these results it can be concluded that there is a significant influence of personal factors (K3 knowledge) on unsafe actions.

Lack of knowledge about Occupational Safety and Health (K3) in the workplace can cause a



person to not understand the potential hazards around him, making it difficult to determine actions to control these potential hazards. Therefore, someone will be less aware of the risks that can occur from their behavior while working.

It is known that out of 60 respondents who had unfavorable attitudes and unsafe actions as many as 29 (48.4%) and respondents who had good attitudes but carried out unsafe actions as many as 31 (51.6%), as many as 37 (61.6%) Respondents had unfavorable attitudes but had safe actions and respondents who had good attitudes and carried out unsafe actions were 28 (46.6%). Based on statistical tests, it shows a P value of 0.003, which means that the P value is smaller than α (0.05). So it can be concluded statistically that at α 5% there is a significant relationship between attitudes and unsafe actions in production workers at PT. Kokoh Semesta Cikande Serang Banten in 2022 and obtained an Odds Ratio (OR) value of 3.562, meaning that respondents who have an unfavorable attitude have 3 times greater risk of taking unsafe actions compared to respondents who have a good attitude in carrying out safe actions for workers in the production section.

The results of this study are in line with previous research conducted by Shiddiq (2014) at PT. Semen Tonasa concluded that there is a relationship between attitudes and unsafe actions by workers. In addition, in another study conducted by Setiarsih and Yuliani Setyaningsih who obtained a P value = 0.031, it was found that there was a relationship between attitudes and unsafe actions in workers. This shows that the attitude of workers during work can influence the occurrence of unsafe actions. Unfavorable attitudes are more likely to commit unsafe acts than good attitudes possessed by workers, so that unfavorable attitudes can create potential hazards in the workplace.

It is known that out of 60 respondents, 6 (10%) respondents with working period ≤ 1 year were not good at taking unsafe actions and as many as 16 (26.6%) took safe actions, as many as 17 (28.4) respondents with working years 2-5 years committed unsafe acts and as many as 21 (35%) carried out safe actions, 28 (46.6%) respondents who had a working period of 6-10 years committed unsafe acts and 33 (55%) respondents who had safe actions, while 9 (15%) of respondents who had worked more than 10 years took unsafe actions and 19 (31.6%) took safe



actions. Based on statistical tests, it shows a P value of 0.012, which means that the P value is smaller than α (0.05). So it can be concluded statistically that at α 5% there is a significant relationship between length of service and unsafe acts in production workers at PT. Kokoh Semesta Cikande Serang Banten in 2022 and the Odds Ratio (OR) was obtained, which was 6.025, meaning that respondents who had a new working period had a 6 times greater risk of taking unsafe actions compared to respondents who had a long working period of taking safe actions on production workers.

In terms of years of service, it can be seen that the dominant respondents during the 6-10 years of service were 28 people. This can show that a long working period can add to a person's experience and understanding of the potential hazards that exist in the workplace properly, so that with a long working period they will be more familiar with danger points and can further minimize the occurrence of work accidents. Tenure is related to a person's experience while carrying out his work, experienced workers can be seen as more able to carry out and understand their work.

This is in line with previous research conducted by Bancin (2017) which showed that there was a relationship between length of service and unsafe actions with a P value of 0.009. Working period is the accumulated time of workers at work. Tenure is interrelated with job satisfaction which continues to increase until the length of service is 5 years and then decreases until the working period is 8 years, but until the eighth year it slowly starts to increase again. Based on the results of interviews using a questionnaire, there are some workers who have worked for 2-5 years when they work, who do unsafe actions such as smoking while doing work, are not careful when working and some workers do not use the gloves provided so that this can cause work accidents at work.

Conclusion

Based on the results of research conducted on 60 respondents regarding the determinants that influence unsafe actions in production workers at PT. Kokoh Semesta Cikande Serang Banten, the following conclusions are obtained:



1. As many as 39 (65%) workers took unsafe actions and there were 21 (35%) workers who took safe actions while working.
2. As many as 45 (75%) workers have poor knowledge and there are 15 (25%) workers who have good knowledge at work.
3. As many as 45 (75%) workers have a bad attitude and there are 15 (25%) workers have a good attitude in carrying out unsafe actions.
4. 6 (10%) workers have ≤ 1 year of service, 17 (28.4%) workers have 2-5 years of service, 28 (46.6%) workers have 6-10 years of service years and there were 9 (15%) workers who had worked > 10 years.
5. There is a significant relationship between knowledge and unsafe actions in the production workers of PT. Sturdy Universe Cikande Serang Banten with P value = 0.000 and OR = 2.231
6. There is a significant relationship between attitudes and unsafe actions in the production workers of PT. Sturdy Universe Cikande Serang Banten with P value = 0.003 and OR = 3.562
7. There is a significant relationship between length of service and unsafe acts in production workers at PT. Sturdy Universe Cikande Serang Banten with P value = 0.012 and OR = 6.025

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