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THE RELATIONSHIP BETWEEN BEHAVIOR AND WORK ACCIDENTS AMONG SHIP CREW (ABK) ON PASSENGER SHIPS

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Abstract

Work accidents are unexpected and undesirable events, and work accidents are related to the employment relationship with the company, hospitals, or community health centers. The employment relationship here indicates that accidents occur as a result of work or while performing work. Occupational health and safety (K3) on ships has long been a concern among the government and businesses. K3 factors are closely related to the performance of ship crew (ABK) and, in turn, to the performance of the company. The more safety facilities available, the less likely work accidents are to occur. This study aims to determine how the Relationship Between Health and Safety Behavior (K3) and Work Accidents Among Ship Crew (ABK) on Passenger Ships. The type of research uses a quantitative method with a Cross Sectional approach. The sampling technique in this study is Total Sampling with a sample size of 31 respondents. Data collection was obtained from direct observation, interviews, and questionnaires. Data analysis was conducted through univariate and bivariate tests, with the hypothesis testing using the Chi-square test at a confidence level (α=0.05). The results showed that there is a relationship between behavior and work accidents, with a value of (p=0.03), indicating a relationship between behavior and work accidents.
Keywords : Work accidents, behavior

1. INTRODUCTION

In the era of globalization, the implementation of Occupational Health and Safety (K3) is required in every workplace. Therefore, all parties need to develop and enhance K3 in order to minimize the risk of accidents and diseases resulting from work relationships, as well as to improve productivity and work efficiency. The causes of accidents are divided into two groups: direct causes (unsafe actions and unsafe conditions) and contributing causes (safety management systems, mental conditions of workers, and physical conditions of workers). Factors influencing unsafe actions include education level, work experience, length of work, fatigue, and knowledge (Sucipto, 2014).

Indonesia, known as an archipelagic country, has a sea area larger than its land area, which is twice the size of the land. This highlights the importance of maritime connections as a means of communication between islands in realizing unity and integrity in defense, security, politics, social, culture, and especially in the economic and trade sectors. However, until now, the management, empowerment, and utilization of waters, including the sea, by the state have not been optimal for the welfare of the people. Work safety on ships must always be maintained to ensure safe, smooth, fast, and secure voyages to their

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destinations. Occupational health and safety (K3) on ships has long been a concern among the government and businesses. K3 factors are closely related to the performance of ship crew (ABK) and, in turn, to the performance of the company. The more safety facilities available, the less likely work accidents are to occur.

The implementation of Occupational Health and Safety (K3) in Indonesia is regulated by the Law of the Republic of Indonesia Number 13 of 2003 concerning Manpower. K3 generally aims to protect the safety and health of workers or laborers in achieving optimal work productivity (Nagandla K, et al 2015). Occupational Health and Safety (K3) encompasses all activities to ensure and protect the safety and health of the workforce through efforts to prevent workplace accidents and occupational diseases (PP No. 50 of 2012 on the Management System of Occupational Health and Safety Article 1). Efforts to prevent workplace accidents are carried out by identifying potential hazards and risks of diseases that may arise in the future. This aims to minimize casualties, injuries, and losses that are physical or material due to workplace accidents.

With the description of the issues above, the author will review a brief overview of occupational health and safety (K3), therefore, the author wishes to conduct research titled "The Relationship Between K3 Behavior (Knowledge, Attitude, and Action) and Workplace Accidents Among Crew Members on Passenger Ships."

2. METHOD

This type of research is quantitative research using a cross-sectional design, where data collection of all variables studied is conducted simultaneously within a certain time frame, namely during field research.

3. RESULTS AND DISCUSSION

Respondent Characteristics

Table 1. Distribution of Respondents by Age

Category	N	%
Productive Age (15-64 Years)	31	100
Non-Productive Age (< 14 or ≥ 65 Years)	0	0
Total	31	100

Respondents' ages are classified based on the Ministry of Health of the Republic of Indonesia (2018), where ages < 14 or ≥ 65 years are included in the non-productive age category, and ages 15-64 years are included in the productive age category. Based on Table 1, it can be seen that all respondents fall into the productive age category.

Table 2. Distribution of Respondents by Last Education

Education Level	N	%
Elementary School	10	32,26
Junior High School	8	25,81
Senior High School	13	42,94
Higher Education	0	0
Total	31	100

Based on Table 2, it can be seen that workers with the last education of elementary school amount to 10 people (32.26%), last education of junior high school amounts to 8 people

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(25.81%), and last education of senior high school amounts to 13 people (41.94%). The majority of the last education completed by workers is senior high school.

Table 3. Distribution of Respondents by Length of Work

Education Level	N	%
1-0	6	19,35
10-19	8	25,81
20-29	17	54,84
Total	31	100

Based on Table 3, it can be seen that workers with a length of work of 1-9 years amount to 6 people (19.35%), workers with a length of work of 10-19 years amount to 8 people (25.81%), and workers with a length of work of 20-29 years amount to 17 people (54.84%).

Univariate Analysis

a. Behavior

Table 4 Distribution of Respondents by Behavior

Behavior	N	%
Safe	18	58,0
Unsafe	13	41,9
Total	31	100

Based on Table 4, it can be seen that workers with safe behavior amount to 18 people (58.0%), while workers with unsafe behavior amount to 13 people (41.9%). The majority of workers exhibit safe behavior. However, there are still workers who exhibit unsafe behavior.

b. Workplace Accidents

Table 5 Distribution of Respondents by Workplace Accidents

Behavior	N	%
Never	23	74,1
Ever	8	25,8
Total	31	100

Based on Table 5, it can be seen that workers who have never experienced workplace accidents amount to 23 people (74.1%), while workers who have ever experienced workplace accidents amount to 8 people (25.8%).

Bivariate Analysis

Table 6. Cross Tabulation of Behavior Variables with Workplace Accidents

Behavior	Workplace Accidents				Total		P-Value
	Ever		Never		N	%	
	N	%	N	%			
Safe	2	22,2	7	77,78	9	100	0,03
Unsafe	18	81.81	4	19,19	22	100	
Total	20	64,51	11	35,48	31	100	

Based on table 6, it can be seen that the number of workers who behave safely is 9 people, of which 2 people (22.2%) experienced work accidents. Meanwhile, 7 people (77.78%) did not experience work accidents. The number of workers who behave unsafely is 22 people, with 18 people (81.81%) experiencing work accidents and 4 people (19.19%) never having experienced work accidents. The chi-square test results for the behavior variable with work accidents obtained a p-value of 0.03. Overall, out of 31 workers studied, 20 people (64.51%) experienced accidents, while 11 people (35.48%) did not experience accidents. This means

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there is a significant relationship between behavior and work accidents. In other words, workers with unsafe behavior have a much higher risk of accidents compared to workers who behave safely.

Discussion

Human behavior in the workplace can create risks related to occupational safety. Unsafe behavior is considered a result of mistakes made by workers directly involved. According to Geller (2021), behavioral factors are human aspects that are often less considered than environmental factors. Unsafe behavior is a fundamental cause of most near-miss incidents and accidents in the workplace. Therefore, in-depth observation of workers regarding unsafe work behavior is necessary. Feedback on observations of behavior has proven successful in reducing unsafe behavior among workers (Geller, 2021).

Based on the initial survey, it was found that the passenger ship management has made efforts for Occupational Safety and Health (K3) in the workplace, including installing K3 posters and signs in the work environment and having regulations in the form of Standard Operating Procedures (SOP). However, the facts on the ground indicate that safe behavior is still not optimally implemented. Actions are practices or implementations of what is known or perceived by someone and are considered good for them. Workers often engage in unsafe acts that can increase the likelihood of work accidents.

Based on the research results on the behavior variable, it can be seen that the majority of workers exhibit safe behavior, although there are also crew members who exhibit unsafe behavior. Niel & Griffin (2002) classified safety performance into two types: safety compliance and safety participation. Safety compliance is described as the core activities that individuals need to perform to maintain their safety at work, including following work procedures and complying with the use of personal protective equipment. Based on interviews with the crew members, 2 workers stated that they had experienced work accidents. Factors influencing work accidents include worker behavior, such as a lack of knowledge about hazards in the workplace and a trivial attitude towards the risks present at work.

The research results on the relationship between behavior and work accidents show that out of 31 workers studied, 20 people (64.51%) experienced accidents, while 11 people (35.48%) did not experience accidents. This indicates a significant relationship between behavior and work accidents. In other words, workers with unsafe behavior have a much higher risk of accidents compared to workers who behave safely. This study is in line with that conducted by Muharani, where the statistical chi-square test yielded a p-value of 0.002 < 0.05. This result indicates that the null hypothesis is rejected and the alternative hypothesis is accepted, thus concluding that there is a significant relationship between actions and the occurrence of work accidents.

Worker behavior can play a significant role in workplace accidents. This is in line with research conducted (Erwin, 2020), which found a significant relationship between worker behavior and workplace accidents at PT. Linggarjati Mahardika Mulia Pacitan, where there were 2 accidents in December 2020 and 2 accidents in January. It is common in a work environment for workers to engage in unsafe behavior because their colleagues are also behaving unsafely, and vice versa. The role of supervisors is essential to ensure the implementation of Occupational Health and Safety on passenger ships, including safe

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worker behavior. As an external factor, supervision alone will not permanently change safe worker behavior. This is because safe behavior exhibited by workers is only influenced by the presence of supervision; when supervisors are not monitoring, workers will begin to revert to unsafe behavior again.

4. CONCLUSION

Based on the research titled the relationship between behavior and workplace accidents among Crew Members (ABK) on the passenger ship KM. Barcelona, the following conclusions were drawn:

1. There is a relationship between behavior and workplace accidents among workers, in this case, Crew Members (ABK) on the passenger ship KM. Barcelona.
2. The characteristics of the respondents include a productive age group (100%), with the last education level being elementary school for 10 people (32.26%), junior high school for 8 people (28.81%), and senior high school for 13 people (41.94%). The work experience of the respondents was 1-9 years for 6 people (19.35%), 10-19 years for 8 people (25.81%), and 20-29 years for 17 people (54.84%).

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