FACTORS RELATED To The BEHAVIOR OF LABOR SAFETY IN LOADING AND UNLOADING

Sulfikar. S, Tjipto Suwandi

Faculty of Public Health Master's Degree Program Studies Health and Safety Airlangga Universities

Abstract

Work accident happened on labor loading and unloading Dock in Tanjung Perak Surabaya City is the result of unsafe behavior and unsafe conditions in the workplace. Based on the data of Co-operative management loading/unloading labor Tanjung Perak Surabaya in 2013 occurred 27 cases of accidents and increases in the next year by 2014 happened 35 cases of work accident. The results of the accident data is obtained it is known that the main cause of occurrence of accidents by the year 2013-2014 because there are still many loading/unloading labor that do unsafe act while working. This research aims to analyze the factors that are associated with unsafe behavior at loading/unloading labor Dock Jamrud Tanjung Perak in Surabaya. This research is quantitative research with cross sectional design research that was carried out in April-May 2015.

Research results known from the 70 respondents, 47 respondents behave is not secure and 23 respondents behave safely. Regulatory factors and work environment is a factor associated with behavioral safety. Environmental regulations and the respective work place has significant (p-value: 0.00) and unsafe behavior loading/unloading labor in Jetty Jamrud Tanjung Perak in Surabaya. Based on the research results, it is recommended in the management of cooperatives loading/unloading labor Tanjung Perak Surabaya service users with various parties of labor and unloading to mutually cooperate to make a good rule K3 and creating a safe working environment for our workforce loading fit so hopefully can lead to a change in the behavior of labor safety and unloading of unsafe being safe

Key Words: Behavior, Safety Regulations, Equipment, Loading/Unloading Labor

1. Introduction

Tanjung Perak Surabaya City Pier is one of the Pier is owned by PT Pelindo III (Persero). The dock is quite that included City crowded by the carrier of the goods. One that plays an important role in the smooth running of the process of loading and unloading goods at the dock Jamrud Tanjung Perak Surabaya is a labor of unloading. Work accident data obtained from Cooperative management loading/unloading labor in 2013 occurred 27 cases of accidents and increased in the next 2014 going on 35 cases of work accidents. (Cooperative loading/unloading labor Tanjung Perak Surabaya 20014)

According to (Heinrich, 1931), accidents caused by unsafe actions of the deeds of human beings and working conditions are not safe. Heinrich stressed that more accidents caused by confusion, mistakes made by humans. Hereinafter the same thing according to Suizer (1999) and Cooper (1999), the main aspect in preventing the occurrence of accidents i.e. aspects of the behavior of workers. Although it is difficult to be controlled precisely, 80-95% of all work accidents happens caused by unsafe behavior.

Generally speaking the crashes that occur at loading/unloading labor near Jamrud due to unsafe behavior when working. Unsafe behavior is caused because of weak regulations concerning occupational health and safety are also unsafe work environment where loading/unloading labor it works. According to Birds (1967) cited by the toughest (2007) States that the existence of the unsafe act and unsafe condition shows weak management controls such as the K3 programs no or less specific and structuring a good working environment.

Based on the exposure, then the need for further research on factors related to the unsafe behavior of loading/unloading labor so that the result can be used later to prevent and minimize unsafe behavior and prevent the occurrence of accidents at loading/unloading labor near Jamrud Tanjung Perak in Surabaya.

2. Method

This research is descriptive research with quantitative approach. The respondents in this study was loading/unloading labor who works a day-a day in the dock Jamrud Tanjung Perak in Surabaya. This research was conducted during the months of March to May 2014 at the dock Jamrud Tanjung Perak in Surabaya. The focus of this research consists of rules that exist in the workplace and environment where loading/unloading

labor worked. Data collection is done by distributing a questionnaire to 70 respondents who selected into the sample research was done using SPSS program data processing with cross sectional design research to look at the relationships between variable researches.

3. Result

3.1 Behavior Safety At loading/unloading labor near Jamrud Tanjung Perak Surabaya by 2015

According to the biological behavior of the viewpoints is an activity or activities of the organisms (living beings) are concerned. Human behavior is in fact an action or activity from the man himself who has a very wide stretch include: walking, talking, crying, laughing, working, lectures, writing, reading, and so on. From this description it can be concluded that the intended behavior of the (human) are all activities or human activities, both of which can be observed directly, or which cannot be observed by outside parties (Notoatmodjo, 2003).

Behavior that is referred to in this research is behavioral safety (safety behavior) labor loading and unloading are judged based on the results of the identification of the cushioned answer about the actions being performed while working as follows:

Table 1.1 Results identification of Unsafe Behavior At loading/unloading labor near Jamrud Tanjung Perak Surabaya by 2015

No.	Safety Behavior	n	%
1	Unsafe Act	46	65,71
2	Safe Act	24	34,29
	Total	70	100,00

From table 1.1 obtained the results that most (65,71%) labor loading and unloading have unsafe behavior when working and only a small fraction (34,29%) labor loading and unloading which has behavioral safely while working.

3.2 Regulation On LOADING/UNLOADING LABOUR Near Jamrud Tanjung Perak Surabaya By 2015

The rules referred to in this research is standard operating procedure, command, and unloading for labor that is assessed based on the identification of the loading and unloading of labor answers about the rules that are in place they work.

Table 1.2 Results Identification Regulations at LOADING/UNLOADING LABOUR near JamrudTanjung Perak Surabaya by 2015

No.	Against the Rule	n	%
1	Not good	45	64,29
2	Good	25	35,71
	Total	70	100,00

From table 1.2 obtained the results that most (64,29%) and unloading labor rate regulations exist with respect to their work still lacks good only a fraction (35,71%) that existing regulations already good. This can be affected from the regulations the company is still not good where the management has not set a clear rule and evaluating and revising the existing regulations so that it can be accepted and implemented by both labor and unloading.

 Table 1.3 Test result of the relationship between the rules in the workplace With Safety Behavior At loading/unloading labor Dock Jamrud Tanjung Perak Surabaya by 2015

	Safety Behavior				Total		p-value	Explanation
Rule	Unsafe		Safe		10tai		p-value	Explanation
	n	%	n	%	n	%		
Not Good	40	88,89	5	11,11	45	100	0,000	Signifikan
Good	6	24	19	76	25	100		

Based on Table 1.3 knowable that labor loading and unloading which have less good judgment about other rules work more unsafe behavior has while working from on labor loading and unloading which has good judgment about the work place regulations. Test results showed no relationship Chi Square was significant (p-value of 0.000) between the regulation of conduct safety (safety behavior) labor loading and unloading.

3.3 The Work Environment At LOADING/UNLOADING LABOUR Near Jamrud Tanjung Perak Surabaya

By 2015

The working environment referred to in this research is the layout, lighting, noise, temperature and existing hazards warning system on site labor loading and unloading works are judged based on the results of the identification of the loading and unloading of Labor's answer about their work environment.

Table 1.4 The results of the identification of the working environment at loading/unloading labor near Jamrud Tanjung Perak Surabaya by 2015

No.	Work Environment	n	%
1	Not Good	50	71,43
2	Good	20	28,57
	Total	70	100

From table 1.4 obtained results that 71, 43%) majority (labor unloading rate environment where they are working only less good, only a small percentage of 28, 57%) (Work environment they are already good. This can be effected from the working environment in the Harbor City is rarely done socializing hazards in the workplace and also rarely performed the repair effort by conducting monitoring towards the working environment at regular intervals in the City Docks.

 Table 1.5 Test results of the relationship between the environments of the workplace With Safety

 Behavior At loading/unloading labor Dock Jamrud Tanjung Perak Surabaya by 2015

	Safety Behavior				T-4-1			
Work Environment	Uns	afe	Un	safe		Fotal	p-value	Explanation
	n	%	n	%	n	%		
Not Good	44	88	6	12	50	100	0,000	Significant
Good	2	10	18	90	20	100		

Based on Table 1.5 can note that loading and unloading work force who have less good judgment about the workplace environment more unsafe behavior has while working from on labor loading and unloading which has good judgment about the workplace environment. Test results showed no relationship Chi Square was significant (p-value of 0.000) between the environment of the workplace with safety behaviors (safety behavior) labor loading and unloading.

4. Discussion

4.1 Behavioral Safety

Work accident is generally caused by two things the subject matter i.e. the unsafe work behavior (unsafe act) and the unsafe working conditions (unsafe conditions). Heinrich (1980) estimated 85% of accidents were the result of the contribution of unsafe work behavior (unsafe act). Based on this, then it can be said that human behavior is items that play an important role in the resulting in an accident. Geller (2001) also States that the factors of behavior and people is an aspect of a human being and usually both of these factors less note than on environmental factors.

Based on the results of the research on the behavior of safety (safety behavior) labor loading and unloading Dock in Jamrud 2015 are listed in table 1.1 Note that respondents who behave much more insecure. Nevertheless, there is still a small portion of workers who behave safely at the time of work. This shows the culture and safety

performance are not yet formed thoroughly too all workers. Neal and Graffin (2002) distinguish the performance of safety into two types namely safety compliance and safety participation. Safety compliance are described as core activities that need to be implemented by individuals to maintain safety in the workplace, such as standard work procedures and protective tools to use yourself well. While safety participation described as behavior-behavior that does not directly contribute to the salvation of the individual but can help develop an environment, which supports safety, such as voluntarily participate in activities safety, helping colleagues against things relating to safety and safety meetings.

Based on the above, in theory this research researcher researching about safety behavior loading and unloading work force that includes safety compliance and safety labor participation, where loading and unloading is not only doing the activity/activities that need to be done to maintain safety as standard work procedures, wear personal protection equipment, but also contribute to activities such as safety training and safety events related to safety.

The respondent is the manifestation of behaviors that are influenced by internal factors and external factors of the individual. Observations of the researchers in the field, there is still a lack of attention from the management to the workers to behave as safe as the lack of supervision of the work behavior of the respondents against the occasional Act of insecurity, wear personal protection equipment is not good, the less careful in working, and more concerned with the completion of the work that ignore Safety Act is not secure. In addition, the communication will be a danger to the safety of the management of the still lacking such as posters/signs of the dangers that exist in the work area, the personal protection equipment signs should be used in the work area. Sahab (1997) says that the failure in carrying out the Mission of the occupational health and safety because of lack of motivation to work safely. He also said that the HSE communication needed to encourage changes in behavior so motivated to work safely.

4.2 Relationship with the behavior of the safety rules safe

Regulation is a written document, which documents the standards, norms, and policies for expected behavior (Geller, 2001). According to education and culture (1990) in Utommi (2007), compliance is the obedience of doing something that is recommended or specified. Compliance is also how big the worker to comply with/live regulations related to safety. More and more corporate regulations applied by the worker the worker then allegedly dutifully/nice, if rather than those workers deemed not complying with safe regulations the work that has been established by the company.

In General, the HFACS (Human Factor analysis and Classification system) to classify the actions are not safe (unsafe act) becomes errors and violations. The error is a representation of a person's physical and mental activity that fails to achieve anything you want. The breach on the other hand refers to the intention to ignore instructions or rules that have been assigned to perform specific tasks (Wiegman, 2007).

Based on the study results in table 1.2, it is known that more respondents who rate their work place regulations. In table 1.3 knowable that respondents who rate less well against the regulations also behave more unsafe than respondents who rate both the existing regulations. The Chi square test results indicate there is a meaningful relationship between regulation of the behavior of labor safety and unloading where labor loading and unloading which considers regulations there are still less well also have behavior that is not secure.

This is because labor unloading still doesn't understand about the rules of safety and give priority to safety while working due to the lack of socialization of the regulations has been set by management. In this case, change the behavior of the unconscious by consciousness itself will not last long (Notoadmodjo, 2003). Although with the use of power or power in the form of regulations and laws that must be obeyed can produce rapid behavior change, but these changes will not necessarily last long because behavior change happens or not is not based on the consciousness of itself (Notoadmodjo, 2003).

Reason (1997) revealed workers should have the awareness of the dangerous circumstances so that the risk of the occurrence of accidents can be minimized. Geller (2001) also revealed a change in behavior is a good compliance rate is internalization, where individuals do something because to understand the meaning, knowing the importance of action and this form. These tend to be long and settled in the individual. So, the workers comply with safety regulations because they realize and understand the importance of maintaining salvation then such behavior tends to last long. In addition, the regulation is not communicated extensively and is not enforced as it should be. While the rule was made so that workers can behave safely and many workers who break the rules because of the lack of punishment for those who violate and the Trustees themselves tend to ignore or underestimated the offence that has been committed by the workers. In this case, as Geostsch (1996) describe

that the management should formulate appropriate regulation; communicate the regulation to workers, and enforcing the regulations with respect to the work. Enforcement of the rule is often forgotten.

Therefore, it takes a consistent and objective oversight so that the application of the rules is thoroughly enforced. In addition, it held the award (reward) and punishment (punishment). Punishment is an accepted consequence of individuals or groups as a result of unexpected behavior. Penalty emphasizes or weakens behavior (Geller, 2001). The award is given to the positive consequences for individuals or groups with the aim to develop, support, and maintain the expected behavior. If used as it should be, the award can give the very best to everyone because the award from the feelings of self-confidence, self-control, optimism, and a sense of belonging (Geller, 2001).

4.3 The Relationship Of The Work Environment With Safety Behaviors

Based on the results of the study, noted that most respondents who considered their work environment is still less well and it turns out that most of the respondents who considered their work environment less well also have behavior that is less good. After a test of Chi-Square obtained significant results. From the results above, note that there is a meaningful relationship between environment with labor safety behavior of loading and unloading.

Working environment factors can lead to the emergence of unsafe conditions in the form of latent conditions. Called latent condition because of unsafe conditions that emerged in the working environment when interacting with the unsafe actions of the workers party, which then can lead to accidents. One example of a latent condition is design work which does not provide comfort and convenience and do good surveillance at regular intervals against the possibility of danger that exists at the places of work. This is very risky because if the supervision is not done, can appear the risk of work accidents (Reason, 1997).

That explanation in accordance with the opinion of the Mar'at (1986) in the book Notoatmodjo (2007) living environment that is a product of the socialization process where someone reacts in accordance with stimulus received. Living environment is also a reaction against the suitability of a particular stimulus categories are often faced with social stimuli and reactions are emotional.

5. Conclusion

Based on the above research results can be conclude that:

- 1. There is a meaningful relationship between the regulation of conduct safety (safety behavior) labor loading and unloading.
- 2. There is a meaningful relationship between the working environment with the safety behavior labor loading and unloading.

Based on the conclusions obtained advice that can be given to the company and the respondents are:

- 1. To increase awareness of good safety behavior, labor unloading should understand well the rules are made by the company and if any of the glaring discrepancy between regulations with work should be evaluated and improved.
- 2. To increase the safety of safe behavior, companies should always provide and maintain a safe working environment.

References

Galler E Scott, (2001). The Psychology of Safety Handbook. Lewis Publishers. US.

Geotsch, et. Al. (1996). Safety and Health Management. Amsterdam Hall : Mac Gill Inc

Henrich H.W, (1931). Industrial Accident Preventiion. New York : Mc. Graw Hill Book Company.

Koperasi LOADING/UNLOADING LABOUR, (2014). Profil Koperasi Tenaga Kerja Bongkar Muat, Pelabuhan Tanjung Perak, Surabaya.

Neal, Andrew dan Graffin, Mark. (2002). Safety Climate And Safety Behavior.

Australian Journal of Management.

Notoatmojo, S., (2003) Pengantar Pendidikan Kesehatan dan Ilmu Perilaku Kesehatan

Andi Offset, Jakarta.

Reason, J T. (1997). Managing The Risk Of Organizational Accidents. England : Ashgate Publishing Ltd

- Sahab, Syukri. (1997). Teknik Manajemen Keselamatan dan Kesehatan Kerja. Jakarta : PT. Bina Sumber Daya Manusia.
- Suardi, R. (2005). *Sistem Management Keselamatan dan Kesehatan Kerja*. Jakarta: PPM.
- Utommi, Sendy. (2007). Gambaran Tingkat Kepatuhan Pekerja Dalam Mengikuti Prosedur Operasi pada Pekerja Operator Dump Truck di PT. Kaltim Primacoal tahun 2007.: UI.
- Wiegmann, A. Dauglas and Shappell, A. Scot. (2001). The Human Factor Analysis and Classification System-HFACS. *Human Factors and Aerospace Safety*, 1(1): 59-86. Washington DC.USA.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: <u>http://www.iiste.org</u>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <u>http://www.iiste.org/journals/</u> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

