

A STUDY SAFETY AWARENESS AMONG WAREHOUSE WORKERS IN PASIRGUDANG INDUSTRIAL AREA

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Abstract

The main objective of this study is to determine the effectiveness of safety awareness. The data was collected from 24 respondents at 6 different companies at PasirGudang Industrial Area. The data was analysed by using Correlation. Result shows that there is a relationship between employees' attitudes, management practices and safety features towards level of awareness. It shows that employees' attitudes, management practices and safety features influence the effectiveness of safety awareness.

Index Terms-- Safety awareness, Warehouse workers, Effectiveness, Management Practices

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INTRODUCTION

Rapid economic growth via industrialization has given not only a significant impact in terms of income distributions and quality of life, but it also resulted in increasing number of accidents at workplace. Occupational Safety and Health (OSH) is a vital part to decrease risk at the workplace. It is a standard which danger at workplace eliminated and reduced by enacting legislation regarding safety issue.

Besides OSH, the term of 'safety culture' is also an important aspect in reducing risk and accident at workplace. Today's globalization of trade has a very competitive effect strictly in all aspects, especially labour, one of which requires protection for Occupational Safety and Health. NIOSH (2000) defines safety in terms of employment is a workplace free from accident hazard not only for working people but also for the general public that will affect the work activities carried out.

Year after year, there is an increasing number of workers suffer an injury in Malaysia. It entails news throughout social media, newspapers, television and newsletters. The article discusses the cause of the accident when no precise study was made by the investigator. Statistics shows that when an accident involving workers in warehouse, it usually results in three results which are Total Permanent Disability (TPD), Permanent Partial Disability and even death.

In the news, it was told that usually the accident happened among foreign workers, where they work with less safety equipment prepared by employer at once, causing the chances of accident becoming higher. Statistical data also shows that most fatal accidents happened in Johor with 17 deaths followed by Selangor and Sarawak with 11 deaths for both states.

In Malaysia, the percentages of accidents in manufacturing sector is always higher than other sectors. Human Resources Management (HRM) practices included training and safety and health are important to reduce accidents rate in manufacturing sector [1].

Figure 1 shows the number of occupational accidents by state until April, 2018. Johor has the highest number of accidents which caused death. Table 1 also shows Manufacturing sector has the highest number of accidents in 2018.

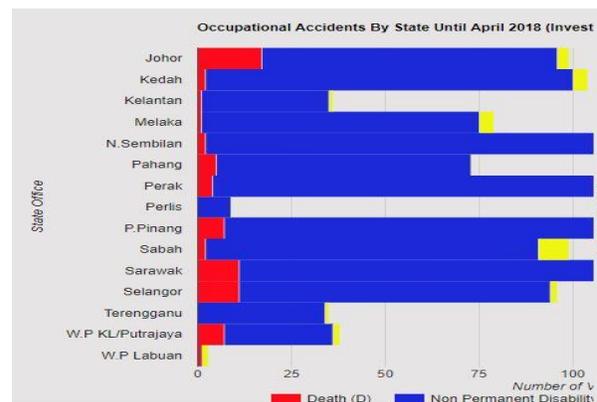


Figure 1. Occupational Accidents By State until April, 2018 (<http://www.dosh.gov.my/index.php/en/occupational-accident-statistics/by-sector/489>)

RESEARCH OBJECTIVE

- To determine safety features towards safety awareness among warehouse workers in manufacturing.
- To study management practices towards safety awareness among warehouse workers in manufacturing
- To study employees' attitude towards safety awareness among warehouse workers in manufacturing.

LITERATURE REVIEW

Safety and security are winding up increasingly significant in the public eye as well as for organizations. As per the Social Security Organization (SOCISO) Annual Report 2017, the transportation and storing industry had 3,694 accidents, 7.43% of all working environment accidents. Workplace-related accidents in Malaysia recorded an increase number of accidents which is 69,980 cases detailed in 2017 contrasted with 66,618 of 2016.

Accident of industry in Malaysia has declined gradually from 2005 to 2017. In 2017 there was 3.7% expansion of the number of industrial accidents to 36,661 cases contrasted with 35,304 cases in 2016. The number of work-related commuting accidents expanded by 6.02% from 31,314 cases in 2016 when contrasted with 33,319 cases in 2017. Accident in industry contains 52.39% of accidents happened at the work environment while 47.61% happened in commuting accidents. The fatal cases reported was

recorded as 1,176 cases which were less compared to 1,209 cases in 2009 [2]. From 2000 to 2017, in Malaysia, the work-related accident demonstrated a persistent decreasing in number.

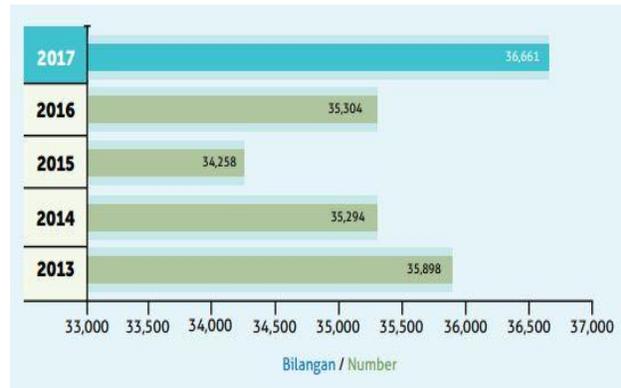


Figure 2. Number of Industrial Accident Reported 2013-2017 (https://www.perkeso.gov.my/images/laporan/laporan_Tahunan2018.pdf)

As indicated by [3] the management is a craft of completing things through and with the people in formally sorted out assemblies. It is an art of making a situation where individual can perform and people can co-operate towards accomplishment of team objectives. As indicated by [4], management is an art of understanding what to do, when to do and see that it is done in the best and least expensive way.

The management is a purposive movement. It is something that coordinates collective endeavors towards the fulfilment of certain pre-decided objectives. It is the way toward working with and through others to viably accomplish the objectives of the association, by proficiently utilizing restricted assets in the evolving scene. Obviously, these objectives may differ starting with one initiative then onto the next. As for example, for one organisation it might dispatch new items by directing business sector studies and for others it might be benefit amplification by limiting expense [5].

Management practices developed for industrial unrest at the end of the late eighteenth century. Revolution of industry was a time of progress from manual generation strategies to new assembling procedures in the late eighteenth century. Preceding this period, just little scale businesses were available for the survival of the world's immense populace. After the revolutionised of industry, individuals started to move their base to urban areas. As these urban areas were seeing the development of industrial facilities, there were an expansive number of work openings [6].

The present organisations are meeting a quickly changing condition with evolving invention, hierarchical structure, clients' desires and expanded challenge. In this situation, the achievement of an association relies upon its workers keeping pace with these progressions and improvements. This changing condition brings numerous difficulties for directors, for example, expanded working hours, versatility, flexibility, mindfulness and acknowledgment of social assorted variety, and the capacity to adapt to the pressure. Stress is, be that as it may, a worldwide issue and has turned out to be a serious medical problem in the fast-growing world. Workers are in danger of losing their positions, ambiguity of job, conflict of role and over-burden job, both qualitatively and quantitatively [7].

Risky conduct is characterized as any conduct occupied with by a worker without considering safety rules, guidelines, methods, directions, and indicated criteria in the framework that can

contrarily impact the system wellbeing or imperil the worker himself or his associates [8]. Unsafe conduct can likewise be seen from another perspective; as per the grouping made by [9], it tends to be gathered that safety conduct is a main marker, which implies it very well may be utilized as a device for evaluating safety performance of the organization in a proactive or "before the reality" way. By checking safety conduct of workers after some time, the success of safety programs, distinguish territories with insufficiencies, and create techniques to avoid future accident can be assessed.

CONCEPTUAL FRAMEWORK

The conceptual framework is something that is related and support to each other in a research. This conceptual framework was adapted from [10]. This framework consists of three independent variables (IV) which are safety features, management practices and employee's attitude while safety awareness as dependent variable (DV). These three IVs are seemed to be the factors that might affect the effectiveness of safety awareness.

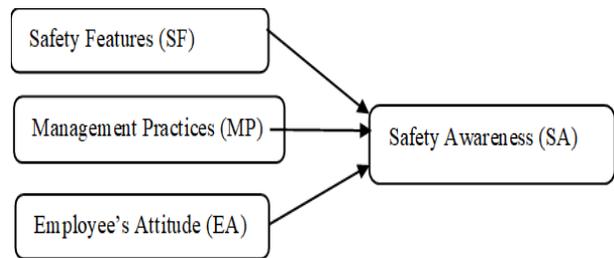


Figure 3. Conceptual Framework

RESULTS

The data was collected in the form of a printed questionnaire, 24 of the total respondents gained from 6 different companies for this survey distribution. The questionnaire was divided into 3 sections, which are Section A - Demographic Section, Section B - Safety Awareness at Workplace which contains question from one Dependent Variable and three Independent Variables. Respondents were briefly explained about the study and guided by the Likert Scale to answer each item in the questionnaire. Each section was to be analysed to satisfy the objectives of this study. Below are the questions selected from each section.

Table 1. Demographic Profile Responden

Item	Frequency	Percent
Job position		
Staff	16	66.7
Executive	8	33.3
Education Level		
Sijil Pelajaran Malaysia	6	25
Diploma	15	62.5
Degree	3	12.5
Working Experience		
Less than 1 year	3	12.5
2-5 years	9	37.5
6-10 years	9	37.5
11 to 15 years	1	4.2
16 years above	2	8.3
Age		
18-24 years	3	12.5
25-30 years	12	50
31-35 years	6	25
41 above	3	12.5
Gender		
Male	14	58.3
Female	10	41.7
List of Company		
Chugoku Paints (M) SdnBhd	4	16.7

Kontena NasionalSdnBhd	4	16.7
Antara Steel Mills SdnBhd	4	16.7
Sam Hwa Steel SdnBhd	4	16.7
Isolite Ceramic FibersSdnBhd	4	16.7
AikJoo Can Factory SdnBhd	4	16.7

Table 2.Not sure on how to do / practice the job safety

Not sure on how to do / practice the job safety	Frequency	Percent
Strongly Disagree	6	25
Disagree	6	25
Neutral	2	8.3
Agree	4	16.7

Table 3. Wear Personal Protective Equipment

Wear Personal Protective Equipment	Frequency	Percent
Neutral	3	12.5
Agree	7	29.2
Strongly Agree	14	58.3

Table 4.Management respond positively when respondent raise safety issues

Management respond positively when respondent raise safety issues	Frequency	Percent
Neutral	4	16.7
Agree	9	37.5
Strongly Agree	11	45.8

i. Hypothesis Testing

Based on the regression analysis test in table 6 it is found that the relationship between safety features and safety awareness not supported. Using the statistical formula $\beta = 0.131$, $t = 0.589$, $p < 0.05$. While employee attitudes and management practice the result shows $\beta = 0.257$, $t = 1.011$, $p < 0.05$ (not supported) and $\beta = 0.393$, $t = 1.909$, $p < 0.05$ (supported).

Table 6. Regression Analysis

IV	Standardized Coefficients (β)	t	Sig.	Result
EA	0.257	1.011	0.324	not supported
MP	0.393	1.909	0.071	Supported
SF	0.131	0.589	0.563	Not supported
R2	0.628			
Adjusted R2	0.340			

a. Dependent Variable: Mean_AS

CONCLUSION

The objectives of this study are to assess how far safety awareness is implemented in 6 different companies, to see all three variables which are safety features, employee's attitude and management practices towards level of awareness of safety in those companies. The three factors of the safety awareness which are employee's attitudes, management practices and leadership behaviour have significant relationship with the effectiveness of safety awareness.

1. Safety features towards level of safety awareness

Based on the findings of the study, it was found that a vast majority of the respondents disagreed to using a badly-maintained equipment, defective equipment and they also disagreed to operate without safety devices. However, there is still a little number of respondents reported negative response from many aspects despite many other respondents gave positive outcome such as unsafe equipment and material, working without safety devices, equipment failure, low tool maintenance and using defective tools or equipment. For the first

question which is unsafe equipment and material 37.5% of the respondents disagreed. It is thought that some companies do not maintain their equipment and machinery as frequent as it should be due to a limited amount of time to maintain it accordingly. Secondly, for third and fourth question which are equipment failure and low tool maintenance, 66% of the respondents disagree to both items. The equipment failure could be traced from a lack of maintenance of the equipment, tools and machineries because some of those things really need to be frequently according to the equipment and machinery manual guideline. Other than that, equipment failure could be from the aggressive and reckless use of those equipment and machinery, such as the forklift that is driven a lot faster than a human walking pace.

2. Employee's attitudes towards level of safety awareness

Based on the findings of the study, it was found that the respondents have no problem to follow safety procedure at workplace and to wear Personal Protective Equipment while working in the warehouse. Secondly, more than half of the respondents did not agree that it is their responsibility for the safety of their colleagues. Next, study shows that more respondents reported that they knew about others skipped the safety procedures when doing a job and it is interesting to find out that even most respondents said agree to following safety procedure and obey safety regulation, some of the workers still take risk to skip some safety procedures. It could be due to the fact that worker or company or both are really busy to finish the job that some of the workers just ignore the safety rules in order to find faster way to complete the task that will automatically leave some safety procedures to be overlooked.

3. Management practices towards level of safety awareness

The finding of third objective found that a large majority of respondents agree with first question which is management respond positively when they raise safety issues. It shows that management did not deny the opinion of the worker and concern about the problems that happened in the past or could happen in the future. Secondly, the next question shows that some of the respondents said the management turn the blind eye when safety procedures are broken. It is because the company may be hiring an expatriate worker that some of them working illegally so there will be a chance the company do not need to worry about welfare of the worker and the complaints from the worker's family. However, there is ambiguity about the result because 29.2% of total respondents said unsure or neutral and it is just assumption without strong response from respondents to balance it. The third question which is distribution of safety leaflets to the staffs from supervisor shows that 41.7% respondents did not sure about that. It shows that they do not remember about that but they probably learned about safety procedure during the first day at the company when the trainer distributed the leaflets or books about the company including safety procedure in that documents. The next question which is getting the job done quickly is management highest priority shows that 50% of the respondents said unsure. It shows some companies actually used that approach in order to maximize productivity to avoid taking additional time based on safety procedure. The last question which safety sign displayed at the premises shows that 45.8% said unsure, 45.8% said agree while 8.4% said disagree and strongly disagree. It probably means that the safety signs are not really placed at the suitable place that people can notice or the safety sign's color might fade away as it prevents people from seeing it.

RECOMMENDATION FOR THE FUTURE STUDY

Here are some of the recommendation to this study that can be considered based on the findings discussed in the previous topic. Firstly, for future research, researcher should focus on the bigger scale for example do a research only on a single company because it will help to get better information in many aspects

such as a better connection with the company that will lead to a smooth process of visit, interview and observation. It is because the warehouse worker especially for logistics company are a busy to find their time to answer questionnaire.

Secondly, in order to get a clearer view on safety awareness, researcher should also go to related places to safety in the company such as warehouse and the path that connect warehouse to production and also observe the situation and working culture in that company to get a point of view about the reason behind the result of the answered questionnaire.

Next, the researcher should make a comparison between each company from a variety of industry in order to categorise that company to be compared with different kind of company that run and produce different types of product. In this way, the results can be seen in more detail to distinguish between different industrial factories from different angles to identify common problems faced by warehouse workers.

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