

THE IMPORTANCE OF SAFETY AND HEALTH MEASURES DURING CONSTRUCTION STAGE

Lai Zhi Yin¹, Mohd Amir Shazwan Hashim²

^{1,2}INTI International University

¹zhi_yin92@hotmail.com

²amirshazwan.hashim@newinti.edu.my

ABSTRACT Construction sector in Malaysia has the highest fatality rate among all of the sectors as safety and health measures had always been neglected, all construction sites always full of hazards and accidents and it can happen anywhere and anytime. This issues have been a major problem to the contractors and they need to ensure that the construction workers safe while conducting construction activities instead of putting themselves in accidents. The contractor can only curb this issues when they fully utilized the safety and health measures provided, they can minimize the risk of accidents. Safety is one of the essential elements for a successful project as accidents happened will also affect the project in term of time, cost and quality. Thus, this research was carried out to prove the vitally importance of safety and health measures during construction stage. This research was conducted in Kuala Lumpur area through survey. 37 numbers of construction workers are randomly selected as the respondents who participate in this research. The finding of this study reveals that most of the construction workers aware that safety and health measures are very important and must be provided on their working sites.

Keywords: Health and Safety, Construction Stage, Awareness, Prevention, Kuala Lumpur.

1. INTRODUCTION

This research focuses the study onto justifying “the importance of safety and health measures during construction stage. Importance can be defined as a condition of being significant, powerful or worthy of note or esteem [1]. “Safety and health” is an idea or a theory that is designed to keep people safe from injury or disease at workplace [2]. Safety in the workplace is not for avoiding fatality when it is come for his/her on fate, but unless conducting safety and health measures can reduce the risk of getting injured or died. The Malaysia government is really concern about the construction industry fatality rates as the rates are higher than other industry [3]. Safety in construction site had always been neglected, this causes high accident rate in construction industry as compared to other sectors, thus affecting the work progress, cost, reputation and productivity [4]. When accidents happened on site, additional time, cost and manpower are needed to repair the situation so that the particular project can be continued [5]. This research is to improve the understanding of health and safety, so that the people will realize how important the safety is to a human while they are working in the construction sector.

2. RESEACH METHODOLOGY

Quantitative research being used for this research, by applying survey method. Questionnaire was distributed to the 4 selected construction sites in Kuala Lumpur area, 37 respondents questionnaire collected from the random survey. The numbers of construction workers are randomly selected as the respondents who participate in this research and their being guided to answer the questionnaire.

3. FINDINGS AND DISCUSSION

Generally, the findings of this research can be classified into two main groups – (1) Types of accidents on construction site, and (2) Prevention method for accidents on construction site, which are further explained as follows:

3.1. Types of accidents on construction site

From data collection by using the average index of each type of accidents as referred to figure 1. Average index analysis was used to show the frequency of each types of accidents based on construction workers’ opinion and experience. The type of accidents which has the highest average index is “stepping on, striking against or strike by object” with average index of 4.68, it is because most of the construction site have a tendency to have lots of material such as nail, bolt nut or any others material that may harm workers during construction process. The second highest accident is “caught in between object” which has the average index of 4.62. The third highest accidents rate is falls with average index of 4.51 . Falls also one of the most common accidents on site, it because most of construction project especially multi storey project they have high tendency that object may fall from top floor and may affect others workers who works on the ground level . The accident which has the least accident index is explosion with average index of 1.92. its shows that explosions are less accident that occur on site.



Figure 1. Types of accidents on construction site

3.2. Prevention method for accidents on construction site

From data collection based on the safety and health measure rankings in figure 2, safety and health policy with average index of 7.27 is the highest method to reduce accidents on construction site .by applying Safety and health policy its can ensure the commitment of the parties involved as the responsibilities and duties are stated clearly in the policy to safeguard the safety of workers so that it will minimize the impact of accidents on construction site. The second highest measures that can be apply on site is safety training with the average index 7.22, by applying safety training, most of the workers will alert and knows how to protect them self and others worker from having any injuries or accidents on site. The third highest safety and health measure is safety equipment with 7.16, safety equipment is one of the importance elements that need to be provided to the workers as a way to prevent any injuries, because some of the constructions sites involve with the heavy equipment and high hazardous, due to that safety equipment should be used to minimize accident rate on construction site. First aid equipment is the least necessary safety and health measure. It can be said that the accidents happened on site are mostly serious fatal cases and the victims are died on the spot. So first aid equipment is less likely to be used.

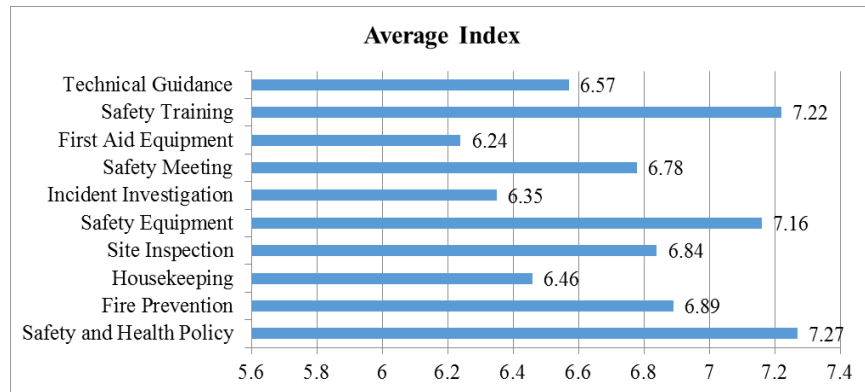


Figure 2.Prevention method for accidents on construction site

4. CONCLUSION

As a conclusion, most of the construction workers are aware of accidents that always happen on construction site, most of the accidents happen will going to give impact to the construction project in terms of cost, time and quality. In order to reduce the accidents rate that occur on construction site, the health and safety measures should be apply in construction industry. The application of health and safety measures will produce good impact to the construction industry as construction project is dirty, dangerous and demeaning.

REFERENCES

1. Pickett (2011). "Editors of The American Heritage Dictionaries", Editor of the American Heritage Dictionaries.
2. Oxford (2016). "Oxford Dictionary", Oxford University Press. [Retrieved from <http://www.oxforddictionaries.com/definition/english/health-and-safety>].
3. Yakubu, D.M. and Bakri, I.M. (2013). "Evaluation of Safety and Health Performance on Construction Sites (Kuala Lumpur)", *Journal of Management and Sustainability*, 3(2), 100-109.
4. Petrovic, L.S., Perry, M. and Ranjan, R. (2007). "Improving the Occupational Health and Safety Measures in the Australian Construction Industry", *Zagreb International Review of Economics & Business*, 10(2), 17-34.
5. Aniekwu, N., (2007). "Accidents and Safety Violations in the Construction Industry", *Journal of Science and Technology*, 27(1), pp. 81-89