



Barriers in the Foreign Workers in Industry: Investigation during Training Safety Programs in the case of a language barrier, safety knowledge, and background of workers

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ABSTRACT

The purpose of this study was to review barriers in the foreign workers in Industry. We took data for the industry in Malaysia. This study was conducted based on only 55 workers from the Ndayu site. It is recommended that the study be carried out in a larger sample and involvement of the Construction Industry Development Board (CIDB) and the registered CIDB contractor. This study focus on the language barrier, safety knowledge, and background of workers, and these factors contribute to the effectiveness of training. It is proposed to have an in-depth study on the syllabus, methodology of training, motivation, and commitment of the company to improve CIDB training.

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1. INTRODUCTION

The construction industry plays a big role to contribute to the country's development and indirectly contributes to improving the quality of life for locals (Stephen & Festus, 2022). This construction industry can consume and connect with local raw materials (Patil *et al.*, 2022; Irawan *et al.*, 2021, Patil *et al.*, 2022). This construction can be also encouraged in the educational field (Babalola & Omolafe, 2022a; Babalola & Omolafe, 2022b).

The industry provides job opportunities for approximately 800,000 people in this country (Ibrahim *et al.*, 2010; Stavrinides & Karatza, 2019). It requires high numbers of manpower from locals and foreigners together to keep the industry moving as required by the Malaysian government. Undoubtedly, the construction site is one of the most dangerous workplaces in Malaysia. The construction workers deal with hazardous sources, situations, and activities most of the time (Zakaria *et al.*, 2012). Perilous activities such as scaffolding, excavation, working with machines, and electrical-related equipment have become common for construction workers. Based on the SOCSO report, within these five years, the number of major accidents that occurred in Malaysia has slightly increased (Abidin *et al.*, 2018). Most of the report concludes that the root cause of the accidents was due to human error for example slips, trips and falls from height, being struck by an object, electrocution, and being caught in machinery. To increase awareness of safety and health among the workers of the industry, laws, and regulations have been set up not only to minimize these accidents but also to reduce the severity. One of the laws and regulations provided by the national agency is the safety training program. It is considered a preventive program that functions to protect the construction workers. Safety Training is a paramount preventive program where it provides awareness of safety to the local and foreign workers. At the same time, its objective aims to reduce the number of accidents in the workplace. From the safety training program, the workers will be able to understand the impact of conducting safety habits and safety acts at the construction site.

The purpose of this study was to review barriers in the foreign workers in Industry. We took data for the industry in Malaysia. This study was conducted based on only 55 workers from the Nadayu site. It is recommended that the study be carried out in a larger sample and involvement of the Construction Industry Development Board (CIDB) and the registered CIDB contractor. This study focus on the language barrier, safety knowledge, and background of workers, and these factors contribute to the effectiveness of training. It is proposed to have an in-depth study on the syllabus, methodology of training, motivation, and commitment of the company to improve CIDB training.

2. METHODS

This study was conducted based on only 55 workers from the Nadayu site. It is recommended that the study be carried out in a larger sample and involvement of the Construction Industry Development Board (CIDB) and the registered CIDB contractor. This study focus on the language barrier, safety knowledge, and background of workers, and these factors contribute to the effectiveness of training. It is proposed to have an in-depth study on the syllabus, methodology of training, motivation, and commitment of the company to improve CIDB training.

We also used a literature review for obtaining the data. The data were then summarized to get an explanation. Several references were used, including Anger *et al.* (2009), Endroyoa *et al.* (2012), Budiman (2011), Gervais (2003), Jafari *et al.* (2014a), Jafari *et al.* (2014b), Juarez-

Carrillo *et al.* (2017), Pinto *et al.* (2011), Crosby and Lester (2007), Tam and Fung (2012), and Tovar-Aguilar *et al.* (2014). We also used some literature on websites, such as <http://www.dosh.gov.my/index.php/en/occupational-accident-static>, Retrieved on 1 January 2018.

3. RESULTS AND DISCUSSION

Based on the result, we can see that the majority of workers are from Indonesia, followed by Bangladesh, Pakistan, and Myanmar. Most of them are not illiterate as they can do basic things such as read, write and count. Most general workers have secondary school as their highest level of education and only a minority have primary school as their highest level of education. This clearly shows that the respondents are not illiterate.

The majority of them were involved in the construction and agriculture industry of their previous working experience and only a minority are from the manufacturing industry. The foreign general workers who are from the agriculture field have very low knowledge and understanding of what safety is, therefore it is reflected in their answers to the questionnaire. Those who are from the field of construction had a moderate level of knowledge in safety. Therefore, their understanding of safety is slightly different.

3.1. Language Barrier

The findings show language as one of the barriers to communication for a foreign worker. This is proven when the researcher asked about the language preference of the foreign general workers during training and all of them opted for their mother tongue.

Most Indonesians who work in Malaysia understand good Bahasa Malaysia. However, the foreign general workers from Pakistan, Bangladesh, and Myanmar their an understanding of Bahasa Malaysia is still moderate, they only know certain simple everyday words used for work purposes. However, if they are working in Malaysia for more than 2 years they can easily understand and speak quite fluently in Bahasa Malaysia. It is difficult for workers to understand Occupational Safety and Health because of the low literacy in the local language.

Findings show understanding of safety topics such as excavation, working at height and in confined spaces is still very low among foreign general workers from Pakistan, Bangladesh, and Myanmar. This can be due to the language used in the slide presentation which is in Bahasa Malaysia as the foreign general workers have a limited vocabulary base so they find it hard to grasp the meaning behind the words. Other same findings support this research. Low efficacy in training is due to the material provided in the non-native language.

3.2. Background of Participant

Findings show the worker's highest level of education background which is divided into 2 groups; primary school and secondary school. The majority of them completed their secondary school. This group can read, write and count in contrast with the primary school as they seem to have a lack of competency in reading, writing, and counting. Most of them are from a rural areas in their country and only acquire basic education.

Through the survey, we discovered that most of them worked in the construction field before entering Malaysia. Hence, they have exposure to on-site conditions, awareness of safety at the site, basic requirements for PPE, and the terms that are used in construction such as PPE, toolbox, safety harness, and housekeeping. It is also easy for them to adapt to the new working environment in Malaysia. Furthermore, a few of them have experience working in Malaysia and are willing to return with a new permit.

Other workers who worked in other industries like agriculture they have lacked knowledge of safety in the construction field. Most of them who previously worked as fruit pickers, farmers, and fishermen mostly did not receive a formal education in construction. Due to that, they are not familiar with certain terms causes them to have a lack of awareness of safety. Most of them are also unskilled workers as they do not have the knowledge and skill required in construction such as welding, carpenter, bar bending, and others. It causes them to struggle to learn and adapt to their surroundings.

3.3. Basic Safety Knowledge

Findings show that the workers who have been working in the construction field have a good understanding and basic knowledge of safety. However, it also depends on the year of their experience in that field. Most of them are cautious about safety awareness proven when they were asked to answer a question no.7 *It is my responsibility to make sure myself safe and people around me working in safe conditions*. The video attached is prove to strengthen this point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other.

A person's attitude towards their environment or object will reflect the state of understanding and knowledge of that person. This is in line with question number 4 *"I feel free to voice my concerns or make suggestions about my workplace to my supervisor"*. Most of the experienced workers have answered strongly agreed that they need to express their concerns about their surroundings to the supervisor.

Compared to the workers who have experience in agriculture, most of them lack safety knowledge. The majority of them are not aware of the staff welfare that their employer should provide to them. Attending toolbox meetings is made compulsory for all employees and they were also made aware of the basic PPE they should wear while working. According to some of them just follow the rules without knowing the purpose (Hasse-bieber, 2014). Besides, safety knowledge on Safety and Health Issues seemed to be very low as the workers were not trained well.

3.4. The Knowledge Improvement among the Workers

Knowledge is an introduction to something, or to what will be studied. Knowledge is an important factor in doing something, with knowledge, work can be done smoothly. Safety knowledge is one factor that is important while working in construction, lack of knowledge can cause many problems, especially accidents. Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other.

To achieve the objective of safety training learning, the performance of workers plays an important role. Based on the analysis conducted, it shows the improvement of knowledge from pre-test before class and post-test after class. Post-test before class, this tool is to convince the workers on their knowledge transfer through examination or test. The findings are consistent. Training improves workers' knowledge, skills, and attitudes toward the implementation of Occupational Safety and Health in the workplace.

The questions used are simple, basic, and general with job descriptions. It's to measure the understanding of workers during a training session. It is determined learning performance

whether it is effective or not during learning session in class, most researcher has agreed to use examination or test. Contradicting with another researcher who believes it is more convincing to determine understanding of workers through examination or test and training transfer through self-perfection. Moreover, he did not evaluate the worker from the workers' supervisors as he believe the data from them would be biased because it represents the company's image and reputation [Namian et al., \(2016\)](#).

3.5. Improvement of Behaviour among the Workers

One set of questionnaires has been given to the site management personnel regarding workers' behavior after attending CIDB Green Card Training. Findings show a positive impact on training workers' behavior. This is proven when answering a question no 3. The workers wear PPE all the time, all the site management agreed with this statement and evaluated it with a high mean score. The same opinion discussed by [Strong LL \(2008\)](#) that after having trained the worker's behavior increases, they display their positive response, especially when using PPE.

Housekeeping is a routine process after office hours. Findings show that the workers are more alert to keeping their area clean and tidy. This is proven when answering question no.6. The worker does housekeeping after office hours. The response from site management personnel showed that there is a change in behavior after the training. This results in the reduction of the number of site memos complaints from clients.

Observations made by site management personnel show improvement in changing behavior in every action they take such as housekeeping, the use of PPE, lifting works and excavation works. Based on question no. 9 "The worker knows how to respond to any safety and health concern at the workplace". Through observation made by all the site management personnel, they have agreed that the workers show their concern about any safety and health issues in their site area. They respond using the written report to their supervisor or they will address and settle the problem among them. The findings of this research emphasized that motivation comes from training. It results in a good move for the worker, increased awareness among workers, changes in behavior, and promotes zero accidents in the workplace.

3.6. Improvement in Safety Performance of the Company

Based on the findings, it clearly shows that training and safety performance is interrelated. A worker who knows safety tends to have positive behavior at the site and it reflects the safety performance of the company. The workers that have good behavior always comply with safety rules and regulations at work. If they lack the knowledge they will not be able to understand and practice safety culture in their workplace. This statement is supported by [Grover and Frose \(2016\)](#) regarding loss of life caused by lack of knowledge in safety meaning knowledge is vital in the construction industry to cover the needs and helps to reduce the number of accidents.

Safety improvement is one of the indicators to encourage workers to work safely, can be closely monitored by superiors, prepare information for management, and also boost the potential of company performance. CIDB training program is an initiative by the company in reducing the number of NCR, memos, first aid, and safety penalty to create a safety culture among the workers, the impact of the training for the Ndayu site shows a slight improvement, even though it is not too much of an increase. This is because the results were taken only for a short duration which is 5 weeks. Also in line with what [Pinto A \(2011\)](#) said, a

lack of knowledge may cause a poor safety culture in the workplace and will be reflected in company safety performance.

Information that is used during the training sessions hour is very helpful to workers in doing their daily routine work. Understanding unsafe acts and unsafe conditions are enough to give awareness to workers to take care of themselves and others. Learning from accidents and near-miss at the site is a fundamental element in safety performance by avoiding repetitive mistakes that cause an accident. The higher safety performance of a company comes from intense safety training. Thus, this statement gives strong support for the findings. Hence, the current literature review of studies supports that training is the main factor that sustains and improves the safety of the company.

3.7. Research Implication

The implication of this research is to increase basic knowledge among workers, understanding safety towards a safety behavior to create a “safety” culture in the workplace. The safety knowledge helps the company to enhance safety performance by reducing the number of site memos, NCR, first aid, and penalties. This research also gives good implications to CIDB to upgrade their information slide and method of teaching to the trainer to make this training program more effective.

4. CONCLUSION

This study reviews barrier in the foreign workers in Industry. We took data for the industry in Malaysia. This study was conducted based on only 55 workers from the Nadayu site. It is recommended that the study be carried out in a larger sample and involvement of the Construction Industry Development Board (CIDB) and the registered CIDB contractor. This study focus on the language barrier, safety knowledge, and background of workers, and these factors contribute to the effectiveness of training. It is proposed to have an in-depth study on the syllabus, methodology of training, motivation, and commitment of the company to improve CIDB training.

Research Recommendation is in the following:

- (i) The training should be given in their mother tongue for them to comprehend better. During training sessions, it is better to have a translator to assist a trainer in delivering the CIDB Green Card Training module.
- (ii) The Malaysian government should be more concerned about screening workers who want to be involved in the construction industry. Only those who have experience in construction can work on construction lines in Malaysia as they already have basic safety knowledge.
- (iii) Method of teaching in the training session; the class should have more practical training and study by using 3D simulated virtual job which are effective in enhancing learning for workers who have limited language proficiency
- (iv) CIDB's slide presentation should be updated every time; to give new information to the participants. Furthermore to get attention in the class, slides should be in multi-language and simple word.
- (v) Evaluation of participants after class session; By doing this we can test their understanding on basic safety at site.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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