Safety Management Practices In The Malaysia Technical And Vocational Education Training (TVET)

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Abstract

For many years, the value of safety management practice has been the subject of research attention in many sectors in Malaysia in order to achieve a positive workplace safety climate. The practice of safety management among accredited centers in the education sector, however, has hardly been examined. This study was therefore conducted in Johor, Malaysia, to investigate the elements of the safety management practices in the Technical and Vocational Education Training (TVET). This research included seven participants consisting of safety and health (SH) coordinators from each accredited TVET center in Johor, Malaysia. Via interview data collection, this study used the full qualitative approach. The outcome of the thematic analysis showed that there are ten key elements of safety management practices that have become factors among accredited TVET centers in Johor, namely management commitment, safety policy, safety committee, instructor involvement, safety rules and procedure, safety training, safety audit, risk management, communication and feedback and also safety promotion. The accredited center is advised to pay attention to these ten elements in order to improve safety management practices in the TVET sector.

Keywords: safety management practices, accredited centers, TVET, thematic analysis

Introduction

Safety management means systematic control over workers, machinery and the environment (Li & Guldenmund, 2018). Even in their industry they set zero accident targets to determine whether or not safety management is successful.Safety management practices is a policy, strategy, procedure and activities implemented by management to improve the safety of their employees(Jaafar, Choong, & Hakim, 2017). Labodová (2004) assumes safety management practices as a subsystem in overall organizational management and designed for controlling hazards that can affect health and worker safety. According to Cooper and Phillips (2004), efficient occupational safety management practices ensure high returns to the organization increase productivity. Instead, neglect safety and health issues will cause employers had to bear costs such as employee compensation and medical costs, accident investigation costs, and costs legislation.

Therefore, effective safety management practiceare very helpful in preventing the occurrence of accidents in theaccreditedcentersthat cause not only a mere loss but also the reputation of the organization will fall (Yulia, Mohd Salleh, Noorazman, & Roslan, 2015). A development of positive safety management provided little guidance on how organizations might improve safety performance. A goal of positive safety management is to create an atmosphere in which employees are aware of the risk in their workplace, continually on guard against them, and avoid taking any unsafe actions (Ostrom, Wilhelmsen, & Kaplan, 1993).

An accident is a sequence of unexpected and unplanned events that occur through a logical sequence and as a result of a combination of several factors then resulting in physical injury to the individual, property damage, near accident, loss or combination of such effects (Salleh, Ahmad, & Darus, 2017). Based on statistics released by the Ministry of Human Resources, the official website of the Department of Occupational Safety and Health, shows the number of accidents in the industrial sector in Malaysia during 2017 recorded the highest accident record compared to other sectors (DOSH, 2017).

According to statistics released by the Department of Occupational Safety and Health under the Ministry of Human Resources, until October 2017 the number of accidents for the industrial (manufacturing) sector recorded the highest record compared to other sectors of 46 deaths, 1,559 Permanent Disability (THUK) and 86 Permanent Disability (HUK) (Salleh, & Abdullah, 2018). This shows that all employment sectors are at risk of accidents. All parties need to play a role in fostering awareness to prioritize safety in all work done. Awareness of safety practices in laboratories and workshops should not only be emphasized by employees, but also for students during the learning and teaching process in the workshop.

Occupational accident statistics reported in Malaysia show an increase in the number of accidents in the services sector and statutory bodies during 2012-2016 (DOSH, 2016) and decreased slowly in 2017 (reported until October). Table 1.1 shows the statistical report by the Department of Occupational Safety and Health (DOSH) in the sector. Accidents and their effects continue to be a public concern even though statistical data shows accidents that occur in this sector are relatively lower than other sectors such as the manufacturing sector, construction sector and others. The daily newspaper continues to report many accident cases in the education sector which shows that the low level of safety management in this service sector especially in the education sector is relatively low. (Kamilah et al 2018).

In addition, less qualitative research has been built to enable TVET sector staff (e.g. top management, instructor, students, non-academic staff and outsiders) to explore among them the safety management practices. The critical element of enhancing safety management practices in the Malaysian TVET sector is thus discussed in this paper. Many research have been published out in different sectors to study safety management practices, but as reported by Ismail, Shukri, Badzis, & Ssekamanya (2016)there are not the best safety management practices that can be used in all occupational sectors in general. It is hoped that this proposed element of the next discussion would be helpful in guiding future research on safety management practices in the TVET field.

Researchobjective

Explore element of safety management practices in accreditedcentersTVET

Researchquestion

What are the element of safety management practices inaccreditedcentersTVET.

Methodology of Research

To gather qualitative data, the researcher utilizes interview techniques. These interviews were performed separately to allow the researcher to focus on the topics being addressed(Turner, 2010). The researchers interviewed seven SH coordinators in Johor for this research since, according to (Creswell & Clark, 2011), the sufficient number for the case study was four to ten participants. However, according to (Sekaran, 2006), depending on the aim of the interview, the number of participants was not rigid. The selection of SH co-ordinators is because they are persons in accredited TVET centers who handle safety and health workplace. They are also consulting management, before being accepted by the organization, all concerns about safety and health will go through the coordinator. As a participant, each accredited TVET center in Johor is represented by the SH coordinator. Seven participants from a different accredited TVET centers participating throughout that Advanced Technology Training Center (ADTEC), Industrial Training Institute (ILP), MARA Skills Institute (IKM), MARA High Skills College (KKTM), National Youth High Skills Institute (IKBN) and two Vocational College (KV) from different district. A semi-structured interview that contains some main questions and some added questions is the preferred interview technique. To facilitate researchers to manage data acquisition, this technique was selected(Blandford, 2013). At the end of the interview session, transcripts were generated and then subjected to thematic analysis to obtain answers to the research questions. The thematic analysis of the suggestions(Braun & Clarke, 2006) was carried out, as shown in Fig. 1.



Fig.1 Braun Clarke's six- phase and framework for doing a thematic analysis

Results of Research

Through thematic analysis, there are tenelements contributing to safety management practices among accredited centers in Johor, namely management commitment, safety policy, safety committee, instructor involvement, safety rules and procedure, safety training, safety audit, risk management, communication and feedback and also safety promotionas shown in Table1.

Table 1. Elements Of Safety Management Practices Among Accredited Centers In Johor.

Themes / Element	P1	P2	P3	P4	P5	P6	P7	Total
management commitment	/	/	/	/	/	/	/	7/7
safety policy	/	/	/	/	/	/	/	7/7
safety committee	/	/	/	/	/	/	/	7/7
instructor involvement	/	/	/	/	/	/	/	7/7
safety rules and procedure	/	/	/	/	/	/	/	7/7
safety training	/	/	/	/	/	/	/	7/7
safety audit	/	/	/	/	/	/	/	7/7
risk management	/	/	/	/	/	/	/	7/7
communication and feedback	/	/	/	/	/	/	/	7/7
safety promotion	/	/		/	/	/	/	6/7



Figure 2: Elements of Safety Management Practices Among Accredited Centers In Johor

Discussion

The participants generally agreed that the accreditedcenters Johor were practices with the safety management were facing inaccreditedcenters. Through thematic analysis of interview transcripts, there are tenelements that make accreditedcenters instructors in Johor feel the best practices, namely management commitment, safety policy, safety committee, instructor involvement, safety rules and procedure, safety training, safety audit, risk management, communication and feedback and also safety promotion. All participants generally agreed that management commitment, safety policy, safety curves and procedure, instructor involvement, safety rules and procedure, safety promotion. All participants generally agreed that management commitment, safety policy, safety committee, instructor involvement, safety rules and

procedure, safety training, safety audit, risk management, communication and feedbackbut 6 out of 7 agreed safety promotion was a factor for the safety management practices.

Management commitment can be seen through participation, involvement, support, style of leadership, positive attitude towards safety, activity control, existence of values, trust and giving recognition to significant safety programs (Ismail, et al., 2017). Safety related concern require relatively high costs and budgets andhighlighted in previous studies (Hong, Ramayah, & Subramaniam, 2018; Yunus & Abdullah Tahmidi, 2018), management commitment is the most important element to the success of safety management in an organization.

Meanwhile, the Malaysian government rules out the responsibilities of employers to develop safety policies to protect employees from occupational hazard and injuries (DOSH, 2006). In addition to stating the role and commitments of organizational members, safety policy is a policy to demonstrate the organization's vision and goal. The establishment of this safety committee not only meets the requirements of the Occupational Safety and Health Act 1994 but also encourages the participation of employees in the organization to establish cooperation and cooperation between management and employees in decision making any mutual decisions on safety and health aspects in the workplace(Parasuraman, Othman, Jurup, & Rathakrishnan, 2009).

Employee (e.g. instructor and non-academicstaff) involvement refers to opportunitiesgiven by the management to the partyworkers in giving opinions and makingdecisions related to safety issues.Rasmussen et al. (2006)noted that employee attitudes changed from caring about individual safety to caring about the group's safety after the implementation of programs that encouraged employee participation in safety. Furthermore, Vredenburgh (2002) suggests that employees close to work are the most qualified to make recommendations on improvement. Therefore, employees need to be empowered and participation is allowed in organizational decision making (Hadikusumo, Jitwasinkul, & Memon, 2017).

Shi (2009)explains that safety rules will reduce the most serious accidents, and then improve overall safety performance. However, another explanation is that safety rules take time to be effective. For example, safety regulations will have a full impact 5 years after their initial implementation (Bradbury, 2006). This safety training is intended to enable each employee to understand in detail and clearly about the safety aspects. Dorji & Hadikusumo (2006) say education and training need to be focused onmanagement is based on safety rules, safety management system, conditions and benefits because the role of management is very important to achieve decisions in matters related to safety. Therefore, the importance of this safety training is more focused towards providing a knowledgeable workforce and understanding of all safe work activities. Training plays an important role in improving knowledge and skills among employees.

Audit is defined as evaluation of record and activities conducted to evaluate the control system in order to ensure it is consistent with the process and procedures that have been determined (Gay & New, 1999). Safety audit can be used as a tool to monitor and at the same time lower the accident rate at workplace (Arifin, Aiyub, Pawanteh, & Jaludin, 2010). There are six risk management procedures, namely risk identification, risk analysis, risk feedback and risk communication, risk control, risk monitoring and risk understanding, according to Zou, Zhang and Wang (2007). In contrast to Kliem and Ludin (1997), who claim that the risk management process is only divided into four, namely risk identification, risk classification, risk assessment, and risk solution Flanagan and Norman (1993) also share this argument, saying that the risk management process includes only four processes namely risk identification, risk control, risk assessment and risk reporting.

Mohamed (2003) suggested that organizations should provide a medium to communicate in relation to clear safety goals and objectives. Vredenburgh (2002) explains the importance of effective communication in fostering organizational culture. However, organizations that want to reduce safety risks in the workplace will always put safety communications as a priority (Frazier, Ludwig, Whitaker, & Roberts, 2013).Vinodkumar and Bhasi (2010)also emphasize that the approach of promoting safety is one of the safety management practices and considers the use of items focusing on safety behaviour as a possible indicator to promote, recognition, incentives to report hazards, build awareness among employees, by compiling programs such as during safety week festivals, health competitions between employees to report unsafe conditions or acts and encourage employees to report issues concerning safety.

Conclusions

In conclusion, this research contribution to the existing of safety management practices literature and its key elements. The results of this study highlight the importance of management commitment, safety policy, safety committee, instructorsinvolvement, safety rules and procedures, safety training, safety audit, risk management, communication and feedback, as well as safety promotion to improve safety at the accredited TVET centers in Johor. However, we need to be careful in generalizing the study findings because of the limitation: the data was collected only from the public accredited TVET center in Johor, one of the states in Malaysia. Despite the limitations, the findings can be used by the Human Resources Ministry of Malaysia, in specific the accredited TVET management center, to gain knowledge about the importance of management commitment, safety policy, safety committee, instructors involvement, safety rules and procedures, safety training, safety audit, risk management, communication and feedback, and also safety promotion. The Ministry of Human Resources could also play a more important role in the prevention of accidents and injuries, as well as in promoting safety and health at the accredited TVET center through advocacy, data collection, education and research to address this issue. Safety management practices are mostly a main goal of most industries, especially those with high risk in the workplace, such as manufacturing sectors. Laboratories and workshops are really a risky place in the accredited TVET center and require more management attention to make this a safer place to work safely. Safety management practices among institutional environment instructors, which is a TVET accredited centre, play an important role in making vocational sites a better and safer place for them to work and to learn for students. Finally, to accurately identify the safety issues in the accredited TVET center environment, we call further future researchers to resolve aspects that were not included in this study.

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