The Effectiveness of Safety Practices on Safety Behavior among Employees at SMEs Manufacturing Sector

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ABSTRACT

SMEs are the significant key to the development of economic and long-term growth. However, according to the report, majority of the workplace accidents in Malaysia happened among SMEs. This shows that SMEs are still lagging in terms of maintaining workplace safety. This may cause a disruption in their business operations, as workplace accidents bring several negative effects. Therefore, this study explores the implementation of safety practices that promote safety behaviour among employees. This study aims to determine the relationship between safety practices and safety behaviour among SME workers. Three components of safety practice namely; safety communication, management commitment and safety training, that influence safety behaviour of employees in the workplace are being studied. This study was conducted at Bando Electronic (M) Sdn Bhd Rawang, Selangor to represent the SME manufacturing sector. A questionnaire was distributed and the findings show that the level of safety behaviour among employees. Finding also show that, there is a moderate correlation between safety communication, management commitment, and safety training and safety behaviour.

Keywords: Safety Practices, Safety Behaviour, Safety Communication, Management Commitment, Safety Training

INTRODUCTION

Small and medium-sized enterprises (SMEs) are the major contributors towards Malaysia's Gross Domestic Product (GDP) and become an integral part of all economic sectors (Hasbullah, 2014; Rhaffor & Jamian, 2020). The growth of SMEs transforms them into a significant key to the development of economic and long- term growth (Shahlan et al., 2015). According to the recent data from the Department of Statistics Malaysia (DOSM), SMEs' GDP increased by 5.8% in 2019 compared to 6.2% in 2018. The contribution of SMEs to GDP climbed to 38.9% from 38.3% in the previous year (Dr Dato' Sri Dr. Mohd Uzir Mahidin, 2020). Zuraida Hassan et al., (2019) also exposed that SMEs contribute around 65% of overall employment in Malaysia and generate millions of jobs each year. SMEs become a part of industry that produces over a thousand different products for the local and global markets.

There are several sectors in SMEs that were declared by SME Corp Malaysia official website such as service sector, mining and quarrying sector, construction sector, manufacturing sector, and agriculture sector. As of December 2020, SMEs from the manufacturing sector numbered approximately 58,439 firms in Malaysia. According to the Ministry of International Trade and Industry (MITI), SME manufacturing sectors are the second largest financial economic contributors. However, Social Security Organization (SOCSO) has found a concerning number of accidents in the manufacturing sector. According to Yeow et al., (2017) manufacturing sector is a major contributor to workplace accidents in Malaysia.

The advancement of the SME manufacturing sector does not exclude them to fulfill their responsibility in implementing safety practice efficiently. Implementation of safety practices is a method in which the physical and mental well-being of employees is protected. However, for SME cases, despite their economic importance and the number of employees dependent on them, SMEs still lag behind in implementation of safety practices in the workplace effectively. This was proven by the large number of percentages in the manufacturing sector of SME's workplace accidents. Several researchers also found that the manufacturing sector of SMEs encountered numerous challenges and were burdened with difficulty in implementing as they lack of capital (Shahlan et al., 2015), lack of skilled workforce, lack in access towards management ability (Noorhasimah et al., 2017; Hasbullah, 2014), and limited of financial resources (Rhaffor & Jamian, 2020). The lack of knowledge, skills and abilities among employers as well as employees is the reasons for the incompetent of safety workplace implementation. Employers and employees in SMEs are not exposed to certain significant skills and lack of awareness with regard to OSH and they assume OSH budgeting as a waste of money and not worth it compared to the operation cost.

The Department of Occupational Safety and Health (DOSH) and National Institute of Occupational Safety and Health (NIOSH), who are in charge of occupational safety in Malaysia, do not publish a guideline or indication based on risk or hazards on firm size. The ambiguity that arises causes small and medium firms to cast aside their responsibilities to provide a good safety practice in the workplace. A successful safety practices in the workplace can result in change behaviour of employees. It also results in the reduction of the chances of accidents in the workplace. Safety practices are the strategies, policies, activities, and procedures that can be implemented by the organization targeting safety of their employees

(L.H.Yee & Al-Rejal, 2016). Companies that provide good safety practice might influence their employees to improve their workplace safety behaviours and performance.

Workplace accidents are a major issue in the industrial world. In Malaysia, the issue became serious as the accident did not show a noticeable reduction from year to year. SMEs were responsible for 80% to 90% of all industrial accidents and injuries in Malaysia (Ismail, 2020). Additionally, since 2007, the cases on average do not vary much (K.T. Hong et al., 2016). This reveals that the high rate of workplace accident of SMEs reflects the poor of safety practices managed by the companies. An accident results in a significant reduction in productivity, quality, competitiveness, and reputation to an organization. This problem causes considerable losses to a company due to their low financial capability and production capacity, the loss can be damaging to the SMEs manufacturing sector (K.T. Hong et al., 2016).

Previous research concluded that accidents in the workplace and occupational diseases could be reduced if the employees and employer were committed to having and maintaining good safety behaviour (S.S.Zulkifly et al., 2018). This study aims to raise the level of awareness towards the importance of safety and health practices among employees at SMEs workplace. Employers and employees can broadly identify and perceive the efficiency of safety practices and plan various ways of preventative measures in controlling workplace accidents. This study is useful for SMEs to understand more in-depth with regard to safety practices and make further corrective action. This study hopes to be able to help SMEs to recognize how much safety practices will help the company to prevent further accidents in the workplace.

PROBLEM STATEMENT

Poor implementation of safety practice in the workplace is an obvious fact that leads to workplace accidents or injuries. Workplace accidents are catastrophic. It is also a cause to the loss for many parties such as organization, employer, employees, and it is also giving an impact to the country. Kah et al., (2018) investigate OSH management practice at SMEs manufacturing sector in Malaysia and the study found that death cases from January until April 2016 were well managed because of the implementation and performance in managing OSH. However, the death cases from January until April 2017 showed poor safety management due to the poor implementation and performance in managing OSH. Meanwhile, injury cases from January until April 2016 and 2017 also found to be poorly managed by the manufacturing sector due to the poor implementation and performance in managing OSH.

The total number of work-related accidents reported to Social Security Organization Malaysia (SOCSO) is increasing year by year since 2016. The claims that have been approved by SOCSO in 2018 and 2017, show that the total number of accidents reported was 72,682 cases and 69,980 cases respectively. The increment of the cases was reflected to 2702 cases or 3.88% in comparison to 69,980 cases in 2017. Meanwhile, in 2016, a total of 66,618 accident were reported and reflecting an increment of 3362 cases or 5.05% in comparison to 69,980 accident cases in 2017 (SOCSO annual report 2016, 2017, 2018). This problem has proven particularly unpleasant for SMEs, which have been identified as a major contributor to work-related accidents by SOCSO, accounting for around 80% to 90% of total accidents in Malaysia (Kah et al., 2018; H. Ismail, 2020). Meanwhile, Kah et al., (2019) express on their research, accidents in the manufacturing sector from SMEs have increased by 50% to 80%, which is greater than

large manufacturing companies. The accidents are caused by the lack of management control and non-compliance with the basic requirements, inadequacy of employer's knowledge and awareness of OSH requirements, and employers do not properly comprehend the need of allocating budget on it. The performance of SMEs manufacturing to Malaysia is exceptionally good. However, the accident case rate of the SMEs manufacturing sector might hinder the constant contribution as the percentage of accidents in the manufacturing sector is high. Z. Hassan et al., (2019) in their study stated that one of the factors leading to accidents in the workplace is unsafe behaviour. Unsafe behaviour that was committed by any kind of industry, adversely impacts the organization. One of the factors that make an organization commit unsafe behaviour is poor implementation of safety practices. This is a severe problem for SMEs, and it has a negative impact on their performance. Moreover, Zulkifly et al., (2018) determined that 97% of SMEs in Malaysia do not follow and comply with the OSH legislations and regulations. H. Ismail, (2020) carried out a research in Kelantan and discovered that 85% (1700 out 2000) of SMEs operators received a D score on the overall assessment in terms of OSH compliance. N. Mohamed, (2016) shared that most companies did not initiate and sustain preventive action in the workplace.

SMEs are also poor at putting together a proper plan and documentation for corrective and preventive action. A finding from Noradila (2016), management still pays less attention to the importance of workplace safety. OSHA knowledge is generally poor among SMEs due to the fact that they have limited resources, and as a result, SMEs often ignore OSH for cost-cutting (B.M. Deros et al., 2014). SMEs also tend to put OSH as the lowest priority in an operation and fail to recognize it as a critical component of overall management (N. Mohamed, 2014; N. Awang et al., 2017). Ignorance, selfishness, and carelessness about the significance of OSH drive employees to act in a dangerous manner and hazardous condition. M.Z. Saat et al., (2016) state the high rate of workplace accidents is one of the obstacles that SMEs in the manufacturing sector confront. This shows how poorly SMEs manage safety and health in their companies. Previous researches show that safety practices in SMEs are insufficient. Thus, taking a preventive action is essential because if the organizations fail to provide a safe and healthy workplace, the organization certainly leads to financial loss, personal injury, and death.

The expenditure for benefit's payment due to accidents in 2016, 2017 and 2018 had been increasing every year based on SOCSO annual report 2016-2018. In 2018, the total payment of all benefits increased by RM434.50 million or 13.28% to RM3,706.27 million compared to RM3,271.77 million in 2017. Meanwhile, in 2016, the total payment for benefits expenditure increased by 10.98% or RM 2948.64 million compared to 2017 expenditure. The features, aspects, and characteristics of SMEs and large firms differ, so when it comes to the safety practices implementation, these differences have a significant impact. Large organizations have the financial resource capability and good organizational structure to efficiently establish a good OSH system. N. Mohamed, (2014) found that the level of safety awareness among SMEs in manufacturing sectors was inadequate and it lagged more than the large manufacturing sectors. Meanwhile, according to Kah et al., (2019), a prior study shows that SMEs have a higher accident and injury rate than large enterprises because of inadequate and ineffective implementation of OSH in the workplace. Limited resources and lack of safety awareness are the reasons most SMEs are unable to put safety policies and laws into practice (H. Ismail, 2020). Study by Kah et al., (2018) manufacturing sector faces numerous problems in monitoring OSH requirements due to limited capital and financial resources. The researchers

also found that the growing number of manufacturing sectors shows that especially SMEs are still unaware of OSH regulations.

In a nutshell, preventing accidents is the best strategy in reducing accident cost. The implementation of the safety practices and the understanding of the effectiveness of safety practices is important, thereby, this study will explain in detail and help the organization, especially SMEs, to implement the safety practice confidently and trustfully in their companies. Along with that, it helps reducing the number of accidents and fatalities in the workplaces.

RESEARCH QUESTION

Based on the problem statement that has been discussed, this study was conducted to answer the following questions:

i. Is there any relationship between safety communication and safety behaviour among employees at SMEs manufacturing sector?

ii. Is there any relationship between management commitment and safety behaviour among employees at SMEs manufacturing sector?

iii. Is there any relationship between safety training and safety behaviour among employees at SMEs manufacturing sector?

iv. What is the current level of safety behaviour among employees at the SMEs manufacturing sector?

v. What are the most effective safety practices (safety communication, management commitment or safety training) that can affect the safety behaviour among employees at SMEs manufacturing sector?

RESEARCH OBJECTIVE

The main objectives of this study encompass matter to be achieved in this study. Particularly, this study aims to:

i. To assess the relationship between safety communication and safety behaviour among employees at SMEs manufacturing sector.

ii. To assess the relationship between management commitment and safety behaviour among employees at SMEs manufacturing sector.

iii. To assess the relationship between safety training and safety behaviour among employees at SMEs manufacturing sector.

iv. To assess the current level of safety behaviour among employees at the SMEs manufacturing sector.

v. To determine the most effective safety practices (safety communication, management commitment or safety training) that can affect the safety behaviour among employees at SMEs manufacturing sector.

LITERATURE REVIEW

Safety Behaviour

Safety behaviour is widely recognized as one of the most important factors in ensuring the prevention of accidents and injuries. Safety behaviour is about the workforce's attitudes, habits, and norms towards safety. As stated by Rusyda et al., (2021), safety behaviour is tied to the employee's compliance with policies and procedures to prevent accidents and injuries, as well as to maintain physical and psychological health, from an industrial and psychological point of view. Involvement of employees and management roles is the key in creating safety behaviour with nurturing positive beliefs, right mindsets, and good attitudes.

There are 2 dimensions of safety behaviour that have been adopted by many following safety behaviour-related studies, which is safety compliance and safety participation (Rusyda et al., 2021). Based on O.C. Hee & L.L. Ping, (2014), safety compliance is concerning employees adhering to safety requirements such as wearing personal protective equipment (PPE) and performing safety instruction appropriately. Meanwhile, safety participation refers to citizenship behaviour in which employees demonstrate their commitment to support safety efforts. Unsafe behaviour is threatening safety in the workplace, in which the employees have a natural inclination to adopt undesirable working habits collectively because of working overtime, inexperienced workers, complex jobs or tasks, or high-risk jobs, coupled with haphazard work conditions. This can be worsened if there is no managerial control over creating a safe work environment. Workers that take shortcuts, perform tasks dangerously, disregard safety regulations, fail to observe work instructions and claim that their methods are more productive than the instructions that have been set up. These negligence of carelessness when doing work has an impact on safety performance and raises the rate of workplace accidents (Hidayu et al., 2015).

However, safety management practices can change and correct employee's bad safety habits, attitudes, and behaviour. Several researchers from related studies found the relationship between safety management practices and safety behaviour. Zaidi et al., (2016) conducted a study and found that OSH practices (employee participation, training, management commitment, communication, and feedback) can help to improve safety performance. Furthermore, this study also shows that safety management practices which consist of management commitment, safety training and safety communication and feedback are the main predictors of safety performance. Safizal et al., (2016) discover that safety culture behaviour is significantly influenced by employee's attitude and subjective norms. Additionally, L. Asamani, (2020) also proves that safety culture as a strong predictor of safety behaviour, and a moderate predictor to safety performance. Finding from the study by Utami, (2019) indicates that the organizational culture and leadership are significantly affected to safety behaviour. It also states that the culture of the workplace is an important part in developing a safety behaviour in the workplace. A good safety work culture encourages the implementation of safety and health practices. A conducive organization culture is necessary, so that the employee is engaged with the safety program provided, comply with the safety rules and regulations, and actively apply safety procedures during work.

Safety Practices

A study conducted by Kah et al., (2018) revealed that the best practice to reduce occupational accidents is to ensures the workers apply safety practices in their tasks or jobs that have been set by top management such as obliging what has been stated in procedure and rules in internal regulation that were developed. In addition, organization should make a survey and inspect the best safety practices that can be implemented in the workplace to acquire zero accidents or injuries in the workplace and provide a safe workplace environment to workers. Good safety management practices are also helpful in assessing risks, identifying hazards, providing an effective accident prevention program, and developing positive and safe work culture and habits in the workplace.

OSH management system facilitates the risks associated with the business of the organization which include safety practices, organizational structure, safety planning, and safety procedure. A previous study found that the well-implementation of the OSH management system reduced occupational accidents within organizations (N. Mohamed, 2016). Besides, Yee & Hussein (2016) conducted an interview in their study at the manufacturing industry, Ong Chuan Hin Rice Mill Sdn Bhd which is located at Kedah. They found that implementation of OSH practices in the company can help in improving staff morale, reduce employee turnover and low absenteeism. Performance of employees, productivity and production rate can improve indirectly when the accident rate are reduce. Naiemah et al., (2021) state that the reduction of occupational accidents can promote an optimum level of human safety performance and the influence of safety management practices can improve attitudes and behaviour among employees.

Many researchers described safety practices in several dimensions which focused on management commitment (N. Awang et al., 2017), safety training (K.T. Hong et al., 2016), workers' involvement (Zaidi et al., 2016), safety communication and feedback (Z. Hassan et al., 2019), hiring practices (L. Surienty, 2019), safety promotion (C. Subramaniam et al., 2016), safety rules and procedures (D. Feriyanto et al., 2020), and government regulation (H.C. Chong et al., 2018). However, this study chooses three safety practices which is safety communication, management commitment and safety training as variable. The reason for this selection is the significance of communication itself. Through the past research reading, effective communication can help to solve several issues and resolve problems. Management commitment was selected because of few research was conducted on it. Meanwhile, safety training also been selected because of the inconsistent finding from past research. The importance of safety training also become a reason to be selected as the safety training can improve employee's performance. To possess a safe work culture, the workplace should have clear direction, sufficient resources, and management support, as well as compliance to the statutory Occupational Safety and Health Act (OSHA). Management must demonstrate good work practices, developing safe work culture, adhering to OSH rules and regulations, emphasizing on good work values, and taking care of safety, health, and welfare of workers.

Safety Communication

N. Awang et al., (2017) found that the safety communication and feedback and safety behaviour have relation. They also added, in two-way communication, the coverage and impact

of communication will be greater, and this might lead to behavioural changes. Safety communication and feedback also found to be positively related to safety participation by M.S. Mashi et al., (2020). Meanwhile, Z. Hassan et al., (2019) prove in their study that safety communication has a significant and positive relationship with safety compliance behaviour. The author added, majority of respondents agreed that the management communicated openly when dealing with safety issues in their workplace. Nurulhuda et al, (2018) also found a moderate positive correlation between safety communication and safety performance which means this practice directly affected safety performance. These findings indicate that safety communication is effective in improving safety behaviour and reducing accidents. Communication can track hazards and prevent accidents or injuries simultaneously.

However, there are several past studies that found no significant link between safety communication and safety behaviour. Chandrakantan Subramaniam, et al., (2016) was one of the studies that discovered no significant link between safety communication and safety behaviour in the context of safety performance of employees. Lack of resources to establish a comprehensive OSH management are the reason the link was not found. Hong et al., (2018) also found the same results that they failed to establish a relationship between safety communication and safety performance. The author also added, there is a chance that the predictive capacity of safety communication reflected directly on safety matters in which one of the items was related to workplace safety while the others were general. Author explained that there is a possibility that these items could not extract what they expected. Several methods were used to communicate in the workplace such as regular safety meetings, regular personal contact by way of walk-about, safety committees and publications in the form of newsletters, emails, memoranda, and so on (C. Subramaniam & Shamsudin, et al., 2016). Sign posts, caution signs, other indications of safety that help to remind employees to adhere to safety rules continuously. Communication is an important tool for delivering safety objectives and information, as well as encouraging suggestions for OSH development. Communication also enables any concerns, ideas, and inputs of employees in regard to OSH and then the matters are received, considered, and responded to.

Communicating, disseminating, and enforcing safety practices is to ensure employees are aware and comply, as a result, creating a safe and healthy workplace. It is important to keep employees informed and interested in the OSH implementation in the workplace. Effective communication is crucial, especially during an emergency. It is a method to alert employees for evacuation or action needed.

Management Commitment

Management commitment in providing a safe working environment for the employees is crucial. However, N. Mohamed & S. Bahri, (2016) found that management from small medium industry in Selangor manufacturing industries gives less attention to the importance of safety priority in the workplace. They also added that some employers encourage employees to disregard safety to achieve productivity targets and increase the income level of the company. Safizal et al., (2016), found that employee's attitude influences safety culture behaviour, therefore, some employees are less concerned about safety and willing to take additional risks to complete the work. SMEs must understand and accept full responsibility on OSHA requirements and the safety management elements. It is important for management to be aware

and proactive in regard to OSH problems. Management also should emphasize safety and health concerns as important as other core business priorities such as sales, productivity, quality products and profits.

Provision of resources, support, and interest to develop a safe workplace from management can help reduce accidents or injuries. This has been proven by F. Hanim et al., (2016) that investment in safety and health can reduce fatalities, injuries and illnesses in the workplace. Also, in H.C. Chong et al., (2018) study, they also found that commitment of management in committing maximum efforts to provide appropriate resources and support is the crucial factor to achieve good safety performance. One of the investments on promoting OSH is through persuasion, encouragement, and motivation among employees such as programs, rewards, or punishments. This statement matches with the results from Hamidah, (2019) that found the significant effect of leadership on safety behaviour which means the ability of leaders to foster employee involvement by giving rewards or punishment of employee performance. Zeeshan & S. Nizam, (2017) also disclose that giving rewards when employee obligatory standard and create an environment in which employees can express worries about safety are approach that helps employee to participate more in regard of safety in the workplace.

Top management support such as establishment of OSH policies, stimulation of safety and health awareness, express interest, and cooperation in providing a safe and healthful work conditions. D. Feriyanto et al., (2020) found that top management has a critical role in reducing injuries and accidents in the workplace, but employees must also commit to supporting the policies. Establishment of OSH policies express the management's commitment in regard of OSH concern in the workplace. S.S. Zulkifly et al., (2017) revealed that safety concern and safety policy had significantly influenced safety compliance, thus, employees have intention to perform their work and comply with the safe working procedures to hinder accidents.

Management role is the key to develop safe working environment and a major element to encourage employees to create good and safe habits while working. Studies has been made from previous research which found that management commitment has significant relationship to safety behaviour in the context of safety compliance (B. Sugumaran et al., 2017) and safety participation (C. Subramaniam et al., 2016) (M.S. Mashi et al., 2020). Moreover, H. Ismail, (2020) reveals that management commitment also has a significant relationship to safety performance.

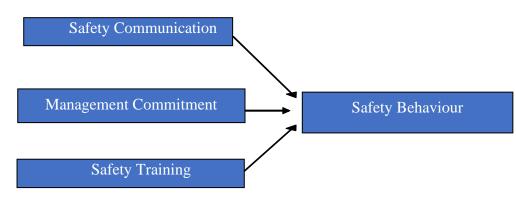
Safety Training

Safety training is important to protect employees from hazards and the effective safety training helps to reduce accidents and injuries. Training is one of the best methods that can be used to influence human behaviour and create good and safe work habits while working. As proven by N. Awang et al., (2017), safety training was found to be the reason for the improvement of safety behaviour and reduction in industrial accident rate. A proper training can cause the employee to perform their jobs and tasks in the safe manner, therefore the chances of human error can be minimized. Organizations with good safety records such as Ong Chuan Hin Rice Mill Sdn Bhd believes that the continuous safety training is important to keep employees on track to perform their job safely and ensure the employees are aware about safety rules (L.H. Yee & Hussein, 2016). Implementing effective training, the training should be conducted on a

regular and ongoing basis to keep employee's enthusiasm high in performing safety practices in the workplace. Employees must be encouraged to follow safety laws and regulations and to take an active role in making their workplace safer through the training (H.C. Chong et al., 2018). Safizal et al., (2016) also argue, for the purpose of raising awareness and maintaining a safe working environment, the organization must provide training program on a regular basis, not just at the beginning of employment. Organization should ensure that employees receive periodic safety and health training to refresh their memories and to teach new methods of controlling the hazards.

L.h. Yee & Hussein (2016) also found the significance in their study that improvement of worker's knowledge about OSH practices can reduce accidents in the workplace. Effective safety training is when the employees apply the knowledge and skills that were gained in their training to their working routine daily at work. This statement was proven by C. Subramaniam, et al., (2016) & K.T. Hong et al., (2016) resulting from their research that safety training was positively related to safety compliance and safety participation. Meanwhile, L. Surienty, (2019) found safety training is positively related to safety procedures of the OSH implementation. Although previous research in the same fields has found that safety training influences employee behaviour toward safety, there is a study that finds that original equipment manufacturing (OEM) enterprises are different. R. Sharma & D.K. Mishra, (2020) found that the post-safety training has no significant contribution towards the perceived self-behaviour change and development of a safe work environment. The researcher added, in ensuring a safe work environment are through the educational background of the supervisor, exposure of safety-related training of the supervisor and work experience of the supervisor.

However, D. Feriyanto et al., (2020) found the evidence through their study that adequate training can prevent the injuries sustained in accidents, thus, ineffectiveness of safety training will increase accidents and injuries in the workplace. Safety behaviour of employees will improve after receiving safety training, thus, in turn, safety training can reduce industrial accident rate because when employees act safely while performing their tasks, the chance of human error is also reduced (N. Awang et al., 2017). Haslinda et al., (2016) also reveal, management and employees that are aware of the effectiveness of accident management will adopt a more positive attitude and put into practice the knowledge and skills that had been learned, consequently, the employee will be more prepared to handle difficult or emergency situations.



RESEARCH FRAMEWORK

METHODOLOGY

SAMPLING METHOD

POPULATION AND SAMPLE

The population in this study involves a compant of Small Medium-sized Enterprises (SMEs) from manufacturing sector. Meanwhile, the sample of this study is focused on the employees from Bando Electronic Malaysia Sdn Bhd. There are 182 employees, only 123 are eligible to be sampled, as suggested by (Krejcie & Morgan, 1970).

PROBABILITY SAMPLING TECHNIQUES

Sampling frame and list of the population has been obtained; therefore, simple random sampling techniques were used in this study. The sample is selected from the population in such a way that each item has the same chance of being selected as a respondent.

RESEARCH INSTRUMENT

The instrument of this study is in the form of a adopted questionnaire. The researcher also refers to other material that is taken from previous studies related to workplace accidents.

DATA MEASUREMENT

In evaluating the questionnaire, this study used Likert scale as an evaluation method. Respondents must answer the questionnaire according to the scale provided. Likert scale was divided into 5 different measurements and the respondent had to choose only one suitable scale for each question.

PILOT STUDY

Pilot study was conducted to ensure the questionnaire is valid, reliable, and answerable to the main objective. 30 employees who work at BEM were selected as respondents. The selection of respondents on pilot and real study is not vary. All the respondents are employees who work at BEM. However, the numbers of respondents are smaller compared to the real study. According to Baker and Risley (1994), in pilot study, 10% to 20% of the total number of respondents from the actual sample size is sufficient. The researchers discovered that the value of Cronbach Alpha successfully achieved for all items is above the value of 0.6 after analyzing the data with SPSS software. Following Table 3.4 gives an idea of the value of Cronbach's Alpha, the internal consistency coefficient for a given questionnaire with the degree of reliability of the questionnaire by A. Aithal & P.S. Aithal, 2020.

FINDINGS

Basically, this study accesses how safety practices contribute to employee safety behaviour, as well as discovering how the variables influence safety behaviour of employees who work at BEM. This study is unique in the sense that it focuses mainly towards the SMEs manufacturing sector rather than viewing all business sectors. Since the manufacturing sector is different from other sectors. Manufacturing involves the process of turning raw materials, therefore, these sectors mostly use machinery and chemical processing. Scope of this study was narrowed down by focusing on SMEs only. The reason for this study focused on SMEs due to the prior study proven that SMEs have difficulty in implementing OSH because of the limited financial resources and skilled workforce, thus, SMEs management perceives the financial resources are better spent on operation expense, where the return is visible, rather than on OSH. Unique findings are expected from this study. To develop a better understanding regarding safety practices and safety behaviour of employees within the SMEs manufacturing sector.

	Variables	Mean	Significant	Correlation	Correlation	Beta
		Score	Level		Strength	
DV	Safety	4.22	Highly	-	-	-
	Behaviour		Satisfied			
	Safety	4.55	Highly	.460	Moderate	.124
	Communication		Satisfied			
IV	Management	4.31	Highly	.560	Moderate	.391
	Commitment		Satisfied			
	Safety Training	4.40	Highly	.533	Moderate	.264
			Satisfied			

Table 5. 1 Summary of Finding

RESEARCH FINDINGS AND DISCUSSION

In this part, the research findings are discussed based to the objectives and hypothesis testing as the results summarized in chapter 4. This study was summarized by answering the research questions.

Research Question 1: Is there any relationship between safety communication and safety behaviour among SMEs manufacturing?

H1: There is a significant relationship between safety communication and safety behaviour among SMEs manufacturing sectors. (r=0.460, p<0.00)

Description Analysis:

Referring to the correlation analysis results in Chapter 4, the researcher found that there is a significant relationship between safety communication and safety behaviour. Correlation analysis finding shows that safety communication recorded a correlation at a moderate level that is (r = .460) and this factor has a significant relationship (p<0.000) with safety behaviour. Thus, safety communication is one of the techniques or practices that drives positive and excellent safety behaviour.

This finding is in tune with other researchers who conducted a study on safety communication, for instance, N. Awang et al., (2017) and Z. Hassan et al., (2019). These researchers found that the safety communication and safety behaviour have a relation. Therefore, the application of safety communication such as safety meetings, regular personal contacts, and signposts can improve safety behaviour in organizations. Dissemination of information through safety communication, employees can be reminded of the importance of being safety conscious and work safely.

However, this finding is not consistent to some authors that presented there was a insignificant relationship between safety communication and safety behaviour such as C. Subramaniam, (2016) and H.C. Chong et al., (2018). Hence, few perspectives are related to the influence of safety communication on safety behaviours within SMEs manufacturing employees.

Research Question 2: Is there any relationship between management commitment and safety behaviour among SMEs manufacturing?

H1: There is a significant relationship between management commitment and safety behaviour among SMEs manufacturing sectors. (r=0.560, p<0.00)

Description Analysis:

The result of the study also shows that there is a correlation between management commitment and safety behaviour. Management commitment recorded correlation analysis at a moderate level that is (r = .560) and this variable has a significant relationship to safety behaviour (p<0.000). These results were supported by employees at BEM as the respondent of this study and shows that management commitment as the practices that influence safety behaviour. A previous study is also consistent with this study when they found there is a relationship between management commitment and safety behaviour. The results of this study are in line

with C. Subramaniam, (2016) which found management commitment has relation with safety participation, and B. Sugumaran et al., (2017) found management commitment has relation with safety compliance. Meanwhile, H.Ismail, (2020) supported that management commitment have relation with safety performance. A satisfactory and adequate safety participation, safety compliance and safety performance can lead to a positive safety behaviour. The commitment of management in providing the highest effort to provide sufficient resources and support is

one of the most important factors in achieving good safety behaviour among employees in the SMEs manufacturing sector.

Research Question 3: Is there any relationship between safety training and safety behaviour among SMEs manufacturing?

H1: There is a significant relationship between safety training and safety behaviour among SMEs manufacturing sectors. (r=0.533, p<0.00)

Description Analysis:

From the study, researchers found that safety training have a significant relationship with safety behaviour since p-value shows (p<0.000). The level of correlation analysis of safety training is at a moderate level (r = .533). Good safety behaviour will produce when the employees apply the knowledge and skills on safety by working in a safe manner.

This result is matched with the results from K.T. Hong et al., (2016) and C. Subramaniam, (2016) which found that safety training has a positive relation with safety compliance and safety participation. However, this study is not consistent with R. Sharma & D.K. Mishra, (2020) study which found that post-safety training had no significant relation on self-behaviour change and development of a safe work environment.

As proven by N. Awang et al., (2017), safety training also was determined to be the reason for safety behaviour improvement, thus, reducing industrial accident rate. A proper safety training enables employees to do their job safely and reduce the chance of human error.

Research Question 4: What is the current level of safety behaviour among SMEs manufacturing?

Table 4.8 shows that the level of safety behaviour of respondents is considered as high (.42185). Thus, it means that the employee at BEM's safety behaviour is high. The level of safety behaviour is acceptable and has been displayed by the employee in the workplace. The optimum safety behaviour which is implemented by both the management and employees will be an effective measure to prevent the occurrence of accidents and injuries at the workplace. **Research Question 5**: What are the most effective safety practices (safety communication, management commitment or safety training) that can affect the safety behaviour among SMEs manufacturing?

Based on Table 4.18, regression analysis was used to discover this objective. Results found that among all variables, management commitment found to be the most influential and effective safety practices. This has been proven by the results of regression analysis that is β value is .391 and p value is .000. This has been categorized as the highest value among variables.

CONCLUSION

The purposes of this research were to examine the relationship of safety practices (safety communication, management commitment and safety training) and safety behaviour. As a

result of these findings, the proposed framework for this research was substantially accepted and met all stated objectives as well all research questions have been answered. Researcher expects that the findings of these studies can provide useful knowledge and understanding regarding safety practices and safety behaviour.

Despite the fact that SMEs often face financial resources constraints, it is an organization's obligation to find the best solution on how to reduce accidents and injuries at the workplace. Employees also have the responsibility to participate in and support any safety strategies that are implement by the organization. In summary, researcher suggested that management and employees work together to keep expanding and compete in nowadays challenging economic situations.

References

Archita Aithal & P.S Aithal, (2020). Development and Validation of Survey Questionnaire & Experimental Data – A Systematical Review-based Statistical Approach. International Journal of Management, Technology, and Social Sciences, 5(2), 233–251.

Arneet Kaur, (2013). Maslow's Need Hierarchy Theory: Maslow's Need Hierarchy Theory: Applications and Criticisms, 3(10), 1061–1064.

Aruma, D. E. O., & Hanachor, D. M. E. (2017). Abraham Maslow's Hierarchy of Needs and Assessment of Needs in Community Development. International Journal of Development and Economic Sustainability, 5(7), 15–27.

Baba Md Deros, Ahmad Rasdan Ismail, Jaharah A. Ghani & Mohd Yusri Mohd Yusof (2014). Conformity to occupational safety and health regulations in Malaysian small and medium enterprises. American Journal of Applied Sciences, 11(3), 499–504.

Bavani Sugumaran, Muhammad Safizal Abdullah, Arman Hadi Abdul Manaf, (2017). Saudi Journal of Humanities and Social Sciences Safety Compliance Behaviour in Manufacturing Industry: A Malaysian Perspective. Saudi Journal of Humanities and Social Sciences, 2(1), 66–73.

Chandrakantan Subramaniam, Faridahwati Mohd Shamsudin, Md Lazim Mohd Zin, Subramaniam Sri Ramalu, Z. H. (2014). Safety management practices and safety compliance in small medium enterprise: mediating role safety perticipation. Asia- Pacific Journal of Business Administration, 8(3).

Chandrakantan Subramaniam, (2016). Safety Management Practices and Safety Compliance: A Model for SMEs in Malaysia. The Europe(February), 856–862.

Chandrakantan Subramaniam, Faridahwati Mohd Shamsudin, Md. Lazim Mohd Zin, Subramaniam Sri Ramalu & Zuraida Hassan, (2016). Safety management practices and safety compliance in small medium enterprises: mediating role of safety participation. Asia-Pacific Journal of Business Administration, 8(3).

Chandrakantan Subramaniam, Faridahwati Mohd Shamsudin, Md. Lazim Mohd Zin, Subramaniam Sri Ramalu & Zuraida Hassan. (2016). The influence of safety management practices on safety behavior: A study among manufacturing smes in Malaysia. International Journal of Supply Chain Management, 5(4), 148–160.

Curtis, K. R. (2008). Conducting Market Research Using Primary Data. Chapter 7 of Niche Markets: Assessment & Strategy Development for Agriculture, May, 1–10.

Dato' Sri Dr. Mohd Uzir Mahidin (2020, July 29). Small and Medium Enterprises (SMEs). Performance 2019.

Dafit Feriyanto, Abdulmalik, S. S. Abdulmalik, & Supaat Zakaria, (2020). Occupational Safety and Health (OSH) Practices and Its Influenced Factor - Review OSH in Malaysia. International Journal of Advanced Technology in Mechanical, Mechatronics and Materials, 1(3), 108–117.

Dr Nyameh Jerome, (2013). Application of the Maslow's hierarchy of need theory; impacts and implications on organizational culture, human resource and employee's performance. International Journal of Business and Management Invention ISSN (Online, 2(3), 23198028.

Fatin Hanim Binti Mohamed Taufek, Zulhafiza Binti Zulkifle & Siti Zubaidah Binti Abdul Kadir, (2016). Safety and Health Practices and Injury Management in Manufacturing Industry. Procedia Economics and Finance, 35, 705–712.

George Kofi Amoako, & Kwasi Dartey-baah, (2011). Application of Frederick Herzberg 's Two -Factor theory in assessing and understanding employee motivation at work : a Ghanaian Perspective. 3(9), 1–9.

Hamidah Nayati Utami, (2019). Improving Safety Behavior in the Workplace. Advances in Economics, Business and Management Research, 154, 142–146.

Haslinda A, Shaharulliza Saharudin, Nur Hidayah Roslan, Rosmah Mohamed, (2016). Safety Training, Company Policy and Communication for Effective Accident Management. International Journal of Academic Research in Business and Social Sciences, 6(9), 141–158.

Hong Chee Chong, T. Ramayah, Chandrakantan Subramaniam, (2018). The relationship between critical success factors, internal control and safety performance in the Malaysian manufacturing sector. Safety Science, 104, 179–188.

Jian Ai Yeow, Mohamad Khanbin Jamal Khan & Poh Kiat Ng, (2017). Enforcement of safety and health policy reduces human error in SMEs in the manufacturing industry. Advanced Science Letters, 23(11).

Khauthar A. Rhaffor & Rahim Jamian, (2020). The Role of 5S in Improving Occupational Safety and Health Management The Role of 5S in Improving Occupational Safety and Health Management System (OSHMS) in Small and Medium Enterprises (SMEs). Journal of Safety, Health and Ergonomics, 2(1), 1–6.

Khoo Nee Kah, Hanipah Hussin, Norida Abdullah, (2018). Managing Occupational Safety and Health (Osh) Culture Practices At Small and Medium (S&M) Malaysia Manufacturing Sector. Journal of Human Capital Development (JHCD), 11(1), 79–90.

Khoo Nee Kah, Hanipah Hussin, Norida Abdullah, (2019). Occupational Safety and Health (O.S.H) Towards Green Environment Practices at Malaysia Small and Medium Manufacturing Sector. International Journal of Engineering & Technology, 8(1), 71–79.

Khoo Teng Hong, Lilis Surienty, & Daisy Khee Mui Hung, (2011). Occupational Safety and Health (OSH) in Malaysian Small and Medium Enterprise and Effective Safety Management. International Journal of Business and Technopreneurship, 1(November), 321–338.

Khoo Teng Hong, Lilis Surienty, & Daisy Khee Mui Hung. (2011). Safety Management Practices and Safety Behaviour : A Preliminary Investigation in Malaysian Small and Medium Enterprises in Northern Corridor Economic Region (NCER). Journal Occupational Safety & Health, 8(July).

Khoo Teng Hong, Lilis Surienty & Mohd Nasir Selamat, (2016). Safety training and safety behaviour in the malaysian SME. Journal of Occupational Safety and Health, 13(2), 55–62.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 38(30), 607–610.

Lebbaeus Asamani, (2020). Promote Safety Culture and Enhance Safety Performance through Safety Behaviour. European Journal of Business and Management Research, 5(4), 1–11.

Lilis Surienty, (2019). OSH Implementation in SMEs in Malaysia: The Role of Management Practices OSH Implementation in SMEs in Malaysia: The Role of Management Practices and Legislation. Advances in Intelligent Systems and Computing, 819, 650–671.

Lim Hui Yee & Hussein Mohammed Esmail Abu Al-Rejal, (2016). Occupational Safety and Health Practices in Manufacturing Industry. Symposium on Technology Management & Logistics (STML–Go Green).

M.A Muhamamad Hasbullah, A. M. Leman and I. Baba, (2014). The Implementation of Osh Management System In Small And Medium Enterprise For Sustainable Development. Occupational Safety and Health Journal, 2015(June), 91–94.

Mohammed Alshmemri, Lina Shahwan-Akl & Philip Maude, (2017). Herzberg's two-factor theory of job satisfaction. Life Science Journal, 14(5), 12–16.

Muhammad Zeeshan Mirza & Ahmad Shahrul Nizam Bin Isha, (2017). An Approach towards Safety Leadership Framework in Manufacturing Sector of Malaysia. Global Business and Management Research, 9(1s), 613–621.

Muhammad Safizal Abdullah, Yusuf Hj Othman, Abdullah Osman, & Shahrul Nizam Salahudin, (2016). Safety Culture Behaviour in Electronics Manufacturing Sector (EMS) in Malaysia: The Case of Flextronics. Procedia Economics and Finance, 35(October 2015), 454–461.

Mohd Zaidi Mat Saat, Chandrakantan Subramaniam & Faridahwati Mohd Shamsudin, (2016). A Proposed Relationship between Organizational Safety Practices and Safety Performance in the Manufacturing of Small and Medium Enterprises in Malaysia. Sains Humanika, 8(4–2), 91–97.

Munir Shehu Mashi, Chandrakantan Subramaniam & Johanim Johari, (2020). The effect of management commitment to safety, and safety communication and feedback on safety behavior of nurses: the moderating role of consideration of future safety consequences. International Journal of Human Resource Management, 31(20), 2565–2594.

Nik Nor Hidayah Ismail, (2020). Employees' Perceptions Towards the Relationship Between Safety Management Practices and Safety Performance of Smes Industry in Kelantan. International Journal of Entrepreneurship and Management Practices, 3(11), 01–09. Noradila Mohamed & Shamsul Bahri Mohd Tamrin, (2016). Relationships Between Safety Climate Perception, Job Satisfaction and Occupational Safety Health Management System with Occupational Accident at Small Medium Industries at Two Localities in Selangor, Malaysia. 4th Scientific Conference on Occupational Safety and Health, 13(2), 63–69.

Noorhasimah Awang, Nur Marsyifa Nadila Zamzani & Mohd Rafee Baharudin, (2017). Awareness of Safety Management and Safety Behaviour among Malaysian Small and Medium Enterprise Workers. Journal of Occupational Safety and Health NIOSH Malaysia, 14(1), 9–16.

Nurul Hidayu Jusoh, Siti Fatimah Bahari & Siti Aisyah Abdul Rahman, (2015). Does Personality affect Safety Performance? 3rd Scientific Conference on Occupational Safety and Health : Sci-Cosh, 12(1), 5–8.

Nurulhuda Ahmad Razali, Nor Izzati Nor Redzuan, Ain Najjiah Kamaruddin, Azieera Darlina Dahlan, Farah Nadhirah Abu Nobli, Nurul Syahira Azlin Atan, Siti Nurafiqah Mohd Hanafi (2018). A Study On Safety Management Practices And Safety Performance. The European Proceedings of Social & Behavioural Sciences, 5(4), 261–266.

Ong Choon Hee & Lim Lee Ping, (2014). Organizational Culture and Safety Performance in the Manufacturing Companies in Malaysia: A Conceptual Analysis. International Journal of Academic Research in Business and Social Sciences, 4(1), 99–108.

ORCAN, F. (2020). Parametric or Non-parametric: Skewness to Test Normality for Mean Comparison. International Journal of Assessment Tools in Education, 7(2), 236–246.

Osman Rosliza, Awang Noorhashimah, I. S. N. (2014). Behaviour Based Safety (BBS) Implementation Reduce Incidents at The Workplace in Major Industry. 3rd Scientific on Occupational Safety and Health, 12(1), 105–108.

Ravi Sharma & Dharmesh K. Mishra, (2020). The role of safety training in original equipment manufacturing companies on employee perception of knowledge, behavior towards safety and safe work environment. International Journal of Safety and Security Engineering, 10(5), 689–698.

Rusyda, H. M., & Siti Fardaniah Abdul Aziz, (2021). The Development of Safety Behavior: A 30-Year Review. International Journal of Academic Research in Economics and Managment and Sciences, 10(1), 1-.

Robert J. Taormina & Jennifer H. Gao, (2013). Maslow and the motivation hierarchy: Measuring satisfaction of the needs. American Journal of Psychology, 126(2), 155–177.

Siti Suhaili Shahlan, Mimi H. Hassim, Kamarizan Kidam, Haszlee Mohd Safuan, Nurasikin Othman, Adnan Ripin, Mohamed Wijayanuddin Ali, Zaki Yamani Zakaria, Saharudin Haron, Azman Ahmad, Nazruddin Mat Ali, Syed Hassan, Hairozie Asri, Zulkifly Sulaiman & Mohamad Fazli Masri, (2015). Occupational safety and health assessment in metal industry within small and medium enterprise. Journal Occupational Safety & Health, 12(1), 81–84.

Stephen Aurice Wekoye, Wilkister Nyaora Moturi & Stanley Makindi, (2019). Factors Influencing Non-compliance to Occupational Safety and Health Practices in the Informal Non-food Manufacturing Sector in Kampala City, Uganda. Current Journal of Applied Science and Technology, 38(6), 1–12.

Tan Teck-Hong & Amna Waheed, (2011). Herzberg's motivation-hygiene theory and job satisfaction in the Malaysian retail sector: The mediating effect of love of money. Asian Academy of Management Journal, 16(1), 73–94.

Tope Shola Akinyetun, (2016). Ensuring Organizational Productivity: Lessons from Maslowws Hierarchy of Needs. SSRN Electronic Journal.

Suhaila Abdul Hamid, A. M. Leman, & I. S. Baba, (2015). Development of Safety and Health Performance Indicators for SMEs. 3rd Sci. Conf. Occup. Saf. Heal. Sci- Cosh 2014, 2015(June), 95–100.

Syazwan Syah Zulkifly, Chandrakantan Subramaniam & N.H.Hasan, (2017). Examining the Influence of Safety Leadership towards Safety Behaviour in SME Manufacturing. Occupational Safety and Health, 14(1), 17–24.

Syazwan Syah Zulkifly, Izani Mohd Zain, Nor Halim Hasan & Mohd Rafee Baharudin, (2018). WORPLACE SAFETY IMPROVEMENT IN SME MANUFACTURING: A GOVERNMENT INTERVENTION. International Journal of Science and Technology, 4(2), 29–39.

Ummi Naiemah Saraih, V.I Maniam, Muhamad Radzi Wan Norsyafawaty, Md. Isa Evawaynie Valquis, (2021). Safety behaviour among employees in the Malaysian manufacturing company: What really matters? Safety behaviour among employees in the Malaysian manufacturing company: What really matters? AIP Conference Proceedings, 2339(1), 1–11.

Zuraida Hassan, Chandrakantan Subramaniam, Md. Lazim Mohd Zin, Faridahwati Mohd Shamsudin & Subramanian Sri Ramalu, (2019). The connection between safety compliance behaviour, safety communication and safety standard and procedure: An investigation among workers in Malaysian SME'S. Academy of Entrepreneurship Journal, 25(Special Issue 2).