ASSESSING OCCUPATIONAL LEVEL OF AWARENESS FOR SAFETY AND HEALTH IN HIGHER EDUCATION: A CASE STUDY AT BENTONG COMMUNITY COLLEGE

KHAIRIANA RAZALI[1]*
MOHAMMAD FAIZAL AHMAD[1]
NORZI NGAVI[1]

Abstract

Safety is the most important aspect of an organization. Most of the common accidents that occur are caused by negligence and lack of knowledge in handling emergency situations. This study aims to measure the level of awareness of safety practices which includes aspects of safety and health training, aspects of emergency preparation, aspects of complaints and accident investigations as well as aspects of awareness of commitment and safety behavior among staff at Bentong Community College. The instrument used in this study is a questionnaire distributed in the google form to the 43 respondents of staff Bentong Community College. The findings of the data analysis are using descriptive statistics and inferential statistics which are mean, frequency and percentage using SPSS software version 29. Overall, the findings of this study show that the level of awareness of staff at Bentong Community College in implementing and practicing safety in the institution is at a high level. This shows that Bentong Community College staff are aware of the importance of safety and health training (mean : 4.67). In addition, the preparation of emergency actions as well as the level of awareness of investigating accidents that occur are also among those agreed in this study (mean : 4.26). This proves that the staff of Bentong Community College are ready to give commitment and have positive safety behavior in themselves. Based on the findings, it is hoped that this study can benefit all parties involved and some suggestions have been proposed to improve the quality of safety in higher education institutions for example this study also does not limit to staff only. Cleaning contractors and security guards may also be involved.

Keywords: safety, level of awareness, health, safety practices.

Cite This Article:
Khairiana Razali, Mohammad Faizal Ahmad & Norzi Ngavi. (2022). Assessing occupational level of awareness for safety and health in higher education: A case study at Bentong Community College. *Asian Journal of Civilizational Studies (AJOCS)*, 4(4), 12-26.

[1] Bentong Community College, Karak, Pahang, MALAYSIA.

Corresponding Author:
KHAIRIANA RAZALI, Bentong Community College, Karak, Pahang, MALAYSIA.
E-mail: khairiana@kkben.edu.my

INTRODUCTION

There are many causes which lead to accidents. Referring to accident types, the majority of those accidents are brought on by the workplace, transportation, and lifting equipment and machinery (National Occupational Accident 2021). Falls of Persons (4, 094), Stepping on, striking against, or being struck by Objects, including Falling Objects (5,330), and Other Sorts of Unclassified Accidents (4, 330) are three types of occupational mishaps that are caused by accidents (3,661). This causes is refer to all types of sectors and how the organization handled their safety awareness. Cause of accident is something that we can change and manage to avoid the repeated accident. Workplace inspections are one of the way employers to ensure the workplace environment is safe. Education sector like Bentong Community College is in service sector. If refer to National Occupational Accident 2021 Statistic: Cause of Accident (Agent) for Service Sector, 2, 988 cause of accident is the higher cause.

Although no institution or sector can completely eliminate the risk of injury or death, employers may be able to take steps to greatly minimize the risk. The management can identify possible risks and formulate strategies to minimize or reduce them by conducting a study of the level of occupational health and safety awareness among employees. Employers and safety committees have a responsibility to learn more about potential health and safety issues at work. Corrective and preventive measures should be used to address some workplace dangers. Adequate measures can only be devised by precisely and methodically describing the danger and the consequent risk. If the risk cannot be removed, they must evaluate the potential implications on safety and health and take the appropriate precautions to avert accidents and illnesses. Education sector like Bentong Community College is also not exempt from this problem. This matter needs to be taken seriously by employers.

PROBLEM STATEMENT

There are many causes which lead to accidents. Referring to accident types, the majority of those accidents are brought on by the workplace, transportation, and lifting equipment and machinery (National Occupational Accident 2021). Falls of Persons (4, 094), Stepping on, striking against, or being struck by Objects, including Falling Objects (5,330), and Other Sorts of Unclassified Accidents (4, 330) are three types of occupational mishaps that are caused by accidents (3,661). This causes is refer to all types of sectors and how the organization handled their safety awareness. Cause of accident is something that we can change and manage to avoid the repeated accident. Workplace inspections are one of the way employers to ensure the workplace environment is safe.

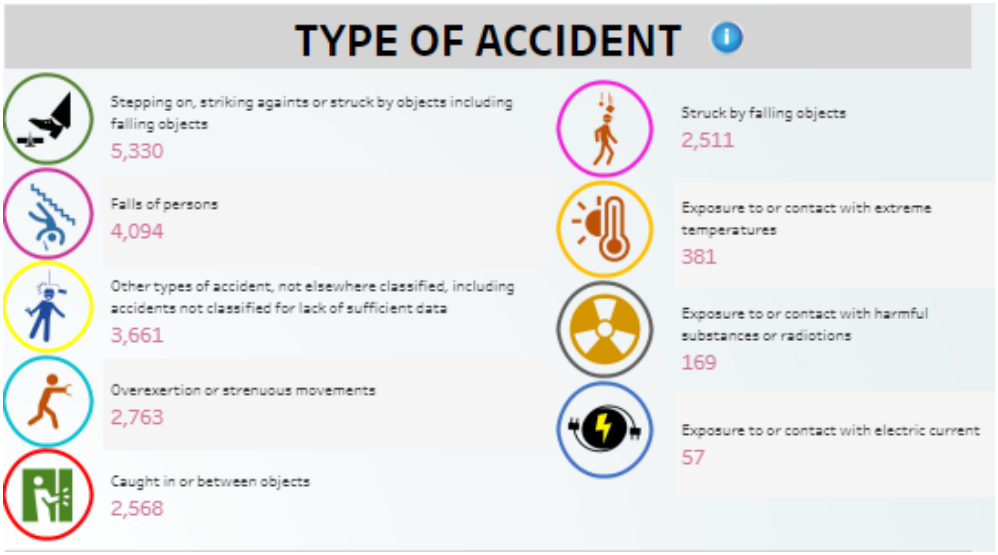

Figure 1: National Occupational Accident 2021 Statistic**:** Type of Accident

If refer to Figure 1.2 from National Occupational Accident 2021 Statistic : Cause Of Occupational Accidents, working environment is the higher statistic of accident (10, 412). Its got many cause of this total number of accident.

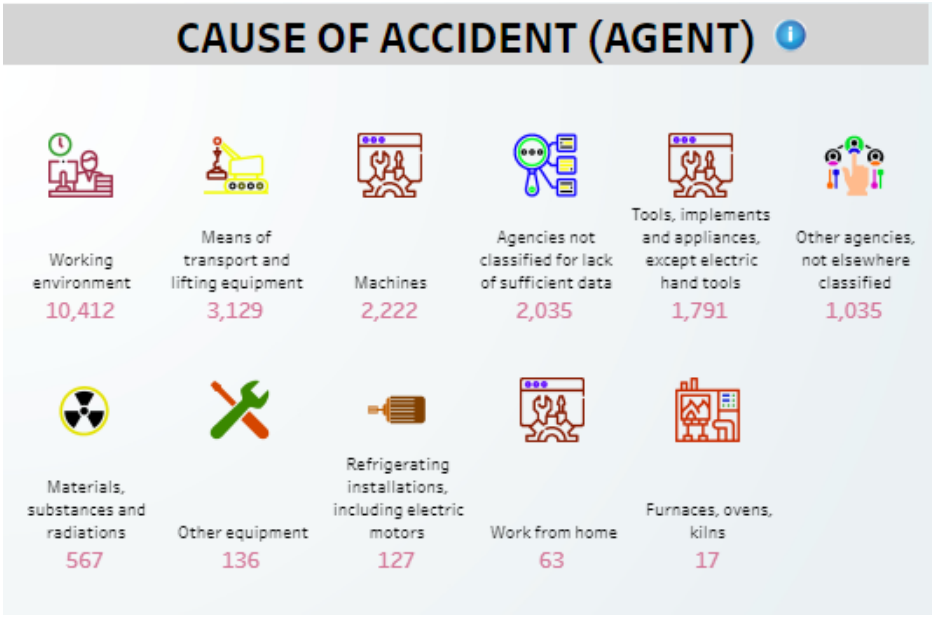

Figure 2: National Occupational Accident 2021 Statistic: Cause of Occupational Accidents.

From this we know, education sector like Bentong Community College is in service sector. If refer to Figure 1.4 National Occupational Accident 2021 Statistic: Cause of Accident (Agent) for Service Sector, 2, 988 cause of accident is the higher cause.

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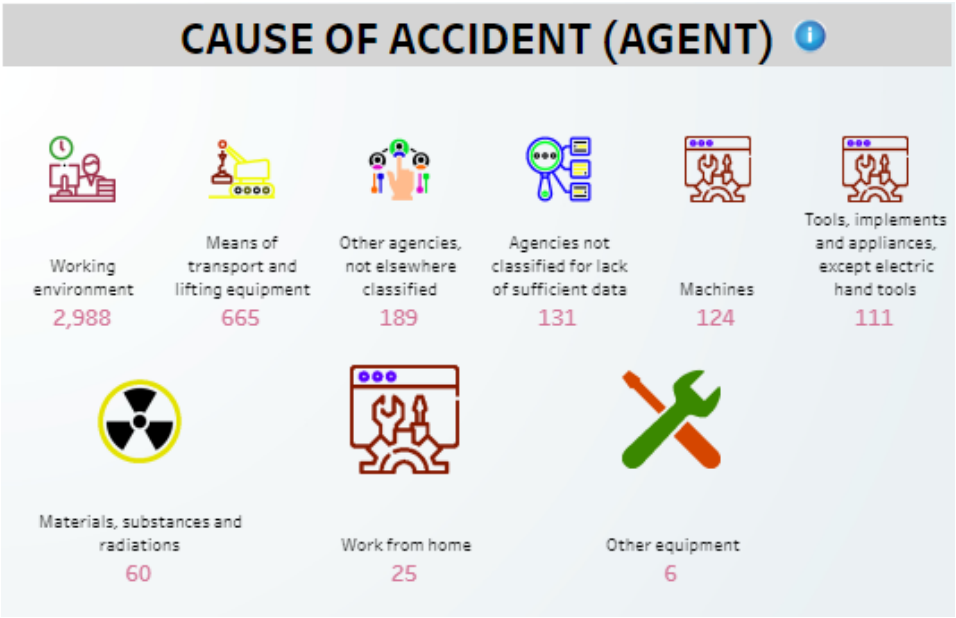

Figure 3: National Occupational Accident 2021 Statistic: Cause of Accident (Agent) for Service Sector

RESEARCH OBJECTIVE

To implement the purpose of this study, several objectives have been listed such as the following:

1. To measure the level awareness of safety and health training.
2. To measure the level awareness of emergency action preparation.
3. To measure the level awareness of complaint and accident investigation.
4. To Measure the level awareness of safety commitment and behaviour.

RESEARCH QUESTIONS

This research will be focus on following research questions:

1. How far the awareness prioritized and implemented by staff while working at Bentong Community College?
2. How far the staff of Bentong Community College preparead emergency situation?
3. How far the staff of Bentong Community College can handle complaint and accident investigation?
4. What is the level awareness of safety commitment and behavior?

LITERATURE REVIEW

Safety Awareness

Safety awareness refers to the act of being conscious of any questions of safety and potential hazards that would endanger workers within the workplace (Barrett et al. 2005). Delivering safety -related information can increase safety awareness among employees within the workplace besides safety knowledge, two -way communication and ongoing promotion are some of the areas that will result in safety awareness and safety behaviors, which can indirectly improve organizational safety and employee well -being. (Stellman, 1998). Safety awareness is an important aspect of organizations to ensure safety rules are followed and reduce accident rates among workers (Mardziah 2002; Mohammad Lui & Kadir 2020).

Occupational safety and health awareness is a crucial role in prevention occupational injuries and illnesses (Ancita et al. 2013; Kadir et al. 2020). Awareness of practice safety is a crucial matter for employers and employees to make sure safety at work is guaranteed also as reducing the danger of accidents at work (Kadir & Norfadillah 2020; Siti Nakiah et al. 2015).

Safety Training

Safety training, according to Law et al. (2006), is the dissemination of knowledge regarding safety and how this knowledge may be applied to make sure that personnel operate in the safest manner possible without risking their health. Brahm & Singer claim that companies with low accident and injury rates in 2013 have very active safety training programmes. In addition, many experts agree that training, especially in hazard identification, is a major factor impacting safety standards (Simon & Piquard, 1991; Jaselskis et al., 1996). Improved safety awareness among construction workers can help prevent accidents, according to Kumar & Bansal (2013).

According to OSH Management System in MS1722 : 2011 requirement about competent person, a person need to have suitable training to perform on specific job.

Emergency Preparedness

According to Gillespie and Colignon (1993), achieving emergency preparedness entails a process of preparation that includes planning, training, and exercise as well as the purchase of tools and apparatus to support emergency action. Being ready to react to environmental threats is being prepared. It results from a process in which a community assesses its susceptibility to all environmental risks (vulnerability analysis), determines the material and human resources available to counter these threats (capability assessment), and establishes the organisational structures by which a coordinated response is to be made (plan development). In order to establish and maintain emergency preparedness, planning and training must be continual processes because vulnerability, resources, and organisational structures change over time and performance skills disappear when not in use (Daines, 1991; Buckle et al., 2000).

Management Commitment

The current research indicates that a key element of efficient safety management strategies is managerial commitment to safety. This stance is based on research undertaken in a variety of occupational, social, and demographic situations.

In the safety management study, the most important safety component, according to Zohar, 1980; Dedobbeleer & Beland, 1991; Neal & Griffin, 2004; Mearns et al., 2003; and Vinodkumar & Bhasi, 2010, is management commitment to safety. Its impact on safety-related behaviour has been demonstrated in several research conducted in a range of settings.

Management commitment to safety is essential in affecting workplace safety performance, according to Vinodkumar & Bhasi (2010). A study conducted in both Asian and Western nations found a link between management commitment to safety and workforce safety compliance (Vinodkumar & Bhasi, 2010; Keffane, 2014). The management's commitment to and involvement in safety is the most important factor in establishing a high degree of safety, according to a number of earlier studies (Jaselskis et al., 1996).

Workplace Safety

Currently, The World Health Organization (WHO) views workplace safety as a model for promoting health in the twenty-first century (Takala, 1999 WHO, 2010). According to reports from the International Labour Organization (ILO) and the WHO, many manufacturing workers experience plant injuries and property damage that results in extreme profitability (ILO, 2010 WHO, 2010). A worker passes away from a work-related accident or complaint every 15 seconds. 153 employees have a work-related accident every 15 seconds. More than 2.3 million deaths occur annually as a result of workplace illnesses or accidents, or 300 individuals every day.

Safety Culture

When referring to related ideas, the phrases "safety culture" and "safety climate" are frequently used interchangeably (Bentley & Tappin, 2010). Since the safety culture is more unstable and vulnerable to change than the safety climate, which serves as a snapshot of the latter (Wiegmann et al., 2004; cited in Bentley and Tappin, 2010). Safety atmosphere is described as a superficial construct made up of employees' attitudes and beliefs that influence their conduct in the future (Bentley & Tappin, 20110). Every organisation has a set of universal internal traits known as culture.

According to Rousseau (1988), O'Connor et al. (2011), Glendon and Litherland (2001), Cooper (2000), and Olsen (2010), culture is the shared ways of thinking, acting, and believing among members of a social unit. Both static (an organization's unchangeable core values) and dynamic cultures exist (how the organisation operates, type of work process it feels comfortable with). Workplace risk exposure and health outcomes can be impacted by social and cultural differences in employment structures and working conditions between nations. The element of organisational safety culture assumed to influence employees' attitudes and actions in connection to an organization's continuous performance in terms of health and safety (Cooper, 2000). The framework of shared health and safety values and beliefs that produces behavioural norms that direct enterprise health and safety activities (Kaluza et al., 2012).

METHODOLOGY

Sampling Size

For this research, the sampling method used is calculated by Raosoft, Inc . By key in the margin of error, level of confident that we need, the population size and the response distribution ; the sample size of the potential respondents can we get. Therefore, a minimum of 48 sample size is required for this study to be viable.

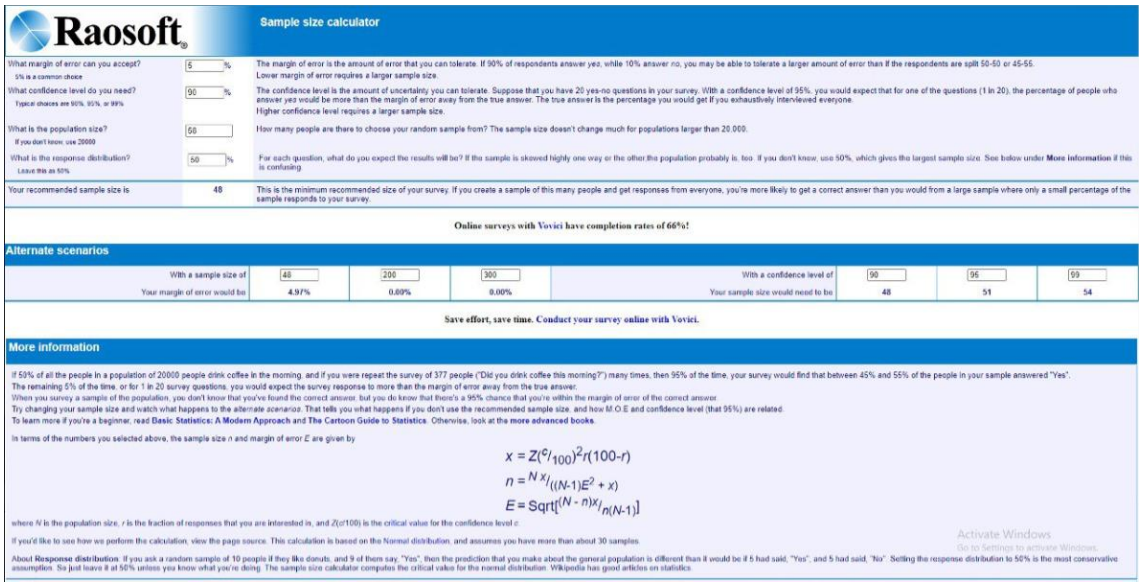

Figure 4: Sampling Size Formula using Raosoft, Inc Software

Population

The target population of this study was all the staff of Bentong Community College which is 58 people. The staff is selected as respondents in this study are due to them being directly involved with various activities or actions that should be given priority to knowledge of safety in the workplace.

Data Collection

By using Google Form: The findings of the study include respondents' responses to the questionnaire distributed. This study uses questionnaire instrument to analyze the data. The questionnaire is an appropriate method for data collection because it is easy to manage, save time and simplify processing steps.

The process of collecting the research data is to use the questionnaire self-distributed by the researcher to the respondent. Data obtained analyzed by using Satistical Package for the Social Sciences (SPSS) version 29 software.

The strategy of this research is adopting the questionnaire from the previous research and quantitative research methodologies is using in this research. The research objective and research question is answering by descriptive analysis. According to Sutton & Austin (2015), Quantitative testing techniques on the other hand, maybe used to assess how often individuals participate in such activities.

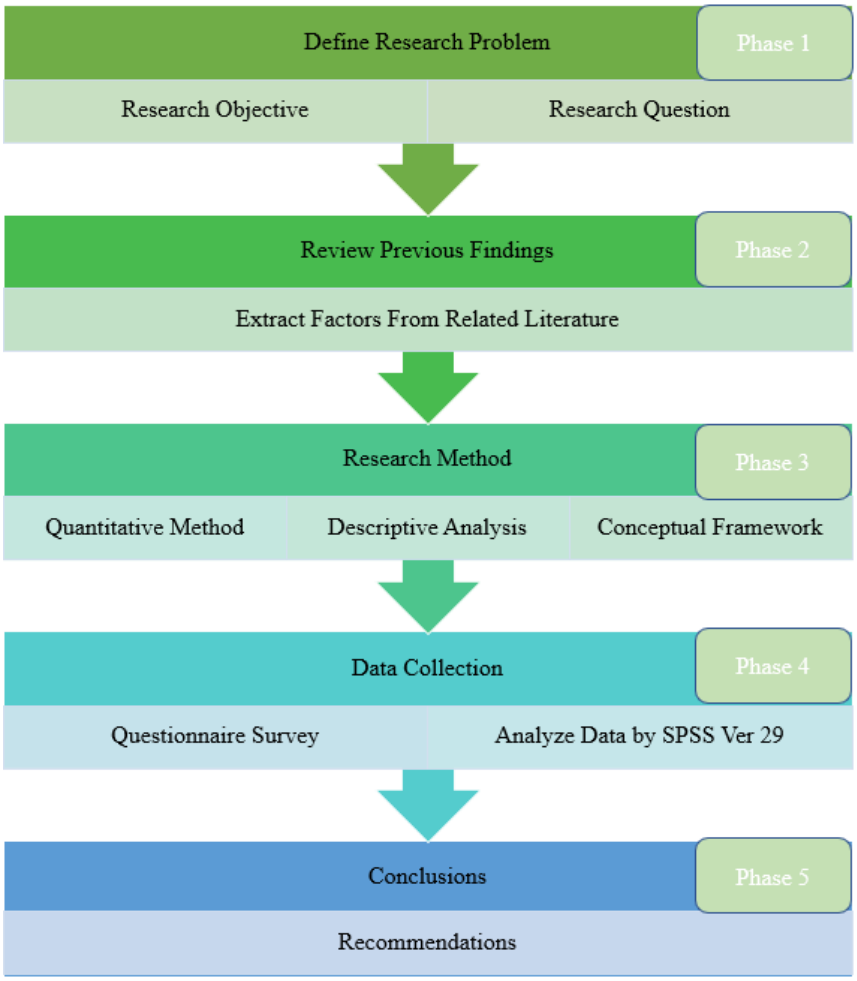

Figure 5: Research Methodology

RESULTS AND ANALYSIS

Descriptive Analysis

The descriptive analysis is using to analyses the variables in the research statistically. Descriptive statistics such as mean and standard deviation were employed for independent factors, moderating variables, and dependent variables. Four variables were taken from section B, section C, section D and section E.

The highest mean value, 4.67, is seen in Table 4.1 for Section B (Level Awareness Of Safety And Health Training). The highest mean for Level Awareness Of Safety And Health Training suggested that it is the most significant variable for safety risk assessment, according to the majority of respondents. The majority of respondents believed that Level Awareness Of Complaint And Accident Investigation Plays An Important Role In Safety Awareness Despite the Lowest Mean (4.12), which is found in Section D (Level Awareness Of Complaint And Accident Investigation), Being in the "Agree" Category. Sections C (Level Awareness of

Emergency Action Preparation) and E (Level Awareness of Safety Commitment and Behavior) have mean values of 4.26 and 4.27, respectively

Variable	N	Min	Max	Mean	Std. Deviation
Section B (Level Awareness Of Safety And Health Training)	43	4	5	4.67	±0.474
Section C (Level Awareness Of Emergency Action Preparation)	43	3	5	4.26	±0.581
Section D (Level Awareness Of Complaint And Accident Investigation)	43	3	5	4.12	±0.544
Section E (Level Awareness Of Safety Commitment And Behavior)	43	3	5	4.67	±0.522

Table 1: Descriptive Statistics of Variables

Demographics

The research to analyze the level of knowledge of employee in ensuring safety is always at a safe level is divided into five main sections, which are Section A: Demographic Survey, Section B: Level Awareness of Safety and Health Training, Section C: Level Awareness of Emergency Action Preparation, Section D: Level Awareness of Complaint and Accident investigation E: Level Awareness of Safety commitment And Behavior. There are five items in Section A which are, gender, age, education, service group and service period have shown on descriptive analysis findings using percentage (%) and frequency value (*f*).

Demographic Information		Frequency (*f*)	Percentage (%)
Gender	Male	17	39.5
	Female	26	60.5
Age	18 to 29 years	4	9.3
	30 to 39 years	15	34.9
	40 to 49 years	23	53.5
	More than 50 years	1	2.3
Education	PhD	1	2.3
	Master	12	27.9
	Degree	17	39.5
	Diploma	9	20.9
	Certificate	1	2.3
	SPM	3	7.0
Service Group	Management & Professional	27	62.8
	Support	16	37.2
Service Period	Less than 5 years	7	16.3
	5 to 9 years	4	9.3
	10 to 15 years	15	34.9
	More than 15 years	17	39.5

Table 2: Respondent's Demographic Descriptive Analysis

FINDINGS AND RECOMMENDATIONS

Research Objectives	Research Questions	Methodology	Analysis / Test	Result (Mean)	Interpretation
To measure the level awareness of safety and health training.	How far the awareness prioritized and implemented by staff while working at Bentong Community College?	Quantitative	Descriptive	4.67	The most significant variable for safety risk assessment, according to the majority of respondents.
To measure the level awareness of emergency action preparation.	How far the staff of Bentong Community College preparead emergency situation?	Quantitative	Descriptive	4.26	97.7% of respondents agree with 'all staff should be exposed to safety training programs and health.
To measure the level awareness of complaint and accident investigation.	How far the staff of Bentong Community College can handle complaint and accident investigation?	Quantitative	Descriptive	4.12	Respondents are aware that there are emergency action preparation procedures and action team's emergency at work is important.
To Measure the level awareness of safety commitment and behavior.	What is the level awareness of safety commitment and behavior?	Quantitative	Descriptive	4.67	The overall mean score indicates the level of awareness the response to the investigation of complaints and accidents is at a very high level.

Figure 6: Summary of Main Findings

Implications of Research

This research will have an impact on several management departments in the Bentong Community College and at the same time the findings will contribute to improvements that can be made in the future. The intended part are discussed in this section is:

1. The management.
2. Bentong Community College staff.
3. Occupational health and safety committee.

a. Contribution to Management

Through this study, the management can find out how far an employees' awareness and understanding of occupational safety and health that they tried to emphasize before. Through safety and health training that has been given in collaboration with the Fire Department, this becomes a measuring point of how well the management and employees are prepared to face emergency situations. Section D in the questionnaire is also expected to have an impact on the management so that complaints and incidents that occur should have follow-up actions.

This study will make the managements know about the level of safety-related awareness in this institution. The management will be aware of the constraints and the needed of the employees, according of their understanding of safety, training and how to use the existing safety tools. This study also measures how far employees are aware of the presence of the occupational health and safety committee in the institution.

Management's dedication to safety has an impact on staff members' social awareness of safety, safety performance, and injury rates (Michael et al. 2005). Employees typically ask management for cues about safety, according to Zohar (2010).

b. Contribution to Bentong Community College staff

Through this study, employees can assess how much they know or are aware of the importance of safety and health training. If there is an emergency, are they prepared enough to face it? What about the investigation and complaint procedures that need to be done after an accident? Through this study, they can do a self-assessment and at the same time objective 4 which is awareness of commitment and safety behavior is achieved.

From here they are realizing the existence of occupational health and safety committee in the institution that is an important role in ensuring the safety of its staff.

c. Contribution to Occupational Health And Safety Committee

This study is the starting point of occupational health and safety committee in improving the lack that occur in ensuring the safety of all staff. A Likert scale indicating strongly disagree, disagree and unsure is something that needs to give attention. This improvement can be done with solid support from the management and all staff. This improvement can be referred directly to each section that has been questioned and most employees agree with the safety and health related matters of this job.

Recommendations

This study is not only focused on the level of awareness. The correlation between each factor can also be studied to see how far the objectives of this study can be achieved. The study also does not limit to staff only. Cleaning contractors and security guards may also be involved. This is because they are also part of the employees who work in the same institution.

CONCLUSION

This research attempts to identify the level of awareness of college staff, identifying the impact of four variables to measure the level awareness of safety and health training, to measure the level awareness of emergency action preparation, to measure the level awareness of complaint and accident investigation and lastly to measure the level awareness of safety commitment and behaviour on the implementation of occupational safety and health in educational institutions. Findings from the literature review have identified various models of awareness and related to safety that have been used in various studies. The study focuses on safety studies and the findings highlight the successful implementation of occupational safety risks in various industries in Malaysia. It also found that the variables surveyed had a positive effect on respondents in evaluating the level of security implemented, and it was at a high level.

Educational institutions also need to always carry out safety risk assessments to achieve a safe work environment because it brings impact and the institution's image to students as a customer. The value of human life even involving the slightest injury should not be taken lightly, especially the injury caused by negligence because it will affect the current and future generations. Various stakeholders, especially top management, need to work together and reach a consensus to ensure a safe workplace environment. In order to improve the standard of educational institutions in relation to occupational safety and health, the occupational safety and health committee appointed by the employer needs to carry out the monitoring and assessment of occupational safety risks diligently.

It is hoped that this research as well as the suggestions presented will receive the attention of all parties involved so that changes can be made in the future. It is also important to understand that, not everyone understands what is meant in the occupational health and safety policy posted in the college. Further action is required after this study results and this is important in ensuring occupational safety and health is guaranteed.

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