'Saya akui bahawa telah membaca karya ini dan pada pandangan saya karya ini adalah memadai dari segi skop dan kualiti untuk tujuan penganugerahan Ijazah Sarjana Muda Pengurusan Teknologi (Inovasi Teknologi)

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EXAMINING HEALTH AND SAFETY MANAGEMENT SYSTEM EFFECTIVENESS IN OIL AND GAS TRAINING COMPANY IN BANGI

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This report is submitted in partial fulfillment of the requirement for the Bachelor Degree of Technology Management (Innovation Technology)

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"Saya akui lap		n hasil kerja saya sendiri kecuali ringkasan dan petikan yang satunya saya telah jelaskan sumbernya''
	Tandatangar	ı:
	Nama	: RAJA NOR AZRINI BINTI RAJA MOHAMED
	Tarikh	:

"For my beloved parents, family and friends"



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ABSTRACT

Generally, health and safety, among many others are essential in life as well as at work. Health and safety are keys for the employer to create conducive environment for the employees, which eventually would strengthen the viability of the company. This research aims to examining the Health and Safety Management System (HSMS) effectiveness at the workplace. The research has been carried out at an Oil and Gas Training Company in Bangi, Selangor. As for the research methodology, a survey was conducted and 100 questionnaires were distributed, the rates of return were 80, while data was analyzed quantitatively. Four major elements have been determined to examine the HSMS effectiveness in that organization as follows; management commitment and employees' involvement, worksite analysis, hazard prevention and control, and health and safety training. As a result, the researcher has found out that, the employees were aware about the HSMS in the company. In addition, the aforementioned four elements were highly significant or in other words, greatly contributed to the effectiveness of the implementation of HSMS which also the dependent variable in this case. However, it is interesting to note that the correlations of the four elements towards dependent variable were weak, suggesting that, the company has to improve on those four elements.

ABSTRAK

Kesihatan dan keselamatan secara umumnya adalah penting dalam hidup dan juga di tempat kerja. Kesihatan dan keselamatan ialah kunci untuk majikan mewujudkan satu persekitaran yang kondusif bagi kakitangan, yang akhirnya akan mengukuhkan kelangsungan syarikat Penyelidikan ini bertujuan untuk mengkaji keberkesanan "Health and Safety Management System (HSMS)" di tempat kerja. Penyelidikan telah dilaksanakan di Syarikat Latihan Minyak dan Gas di Bangi, Selangor. Bagi kaedah penyelidikan, satu kajian dijalankan dan 100 borang soal selidik telah diagihkan, kadar pulangan ialah 80, manakala data dianalisis secara kuantitatif. Empat elemen utama telah dikenalpasti untuk memeriksa keberkesanan HSMS dalam organisasi tersebut seperti berikut; komitmen penglibatan pengurusan dan kakitangan, analisis tapak kerja, pencegahan dan mengawal bahaya, dan latihan kesihatan dan keselamatan. Hasilnya, penyelidik telah mendapat tahu bahawa, kakitangan sedar tentang HSMS di syarikat. Sebagai tambahan, empat unsur tersebut sebelumnya amat penting atau dengan kata lain, sangat menyumbang kepada keberkesanan pelaksanaan HSMS yang mana juga dalam kes ini sebagai pembolehubah bersandar. Bagaimanapun, ia menarik untuk dicatatkan bahawa hubung kait di antara empat unsur dengan pembolehubah bersandar, adalah lemah, mencadangkan bahawa, syarikat perlu memperbaiki empat unsur tersebut.

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NOMENCLATURE

HSMS : Health and Safety Management System

OSHA : Occupational Safety and Health Act

SOCSO : Social Security Organization

SD : Standard Deviation

SPSS : Statistical Package for Social Science

CHAPTER 1

INTRODUCTION

1.1 Background of the Research

Health and safety at the workplace is an important thing that the employer has to look after in order to create comfortable work environment for employees. According to Mathis, et al., (2008) the term health refers to general state of physical, mental, and emotional well-being. A healthy person is free from illness, injury, or mental and emotional problems that impair normal human activity. Health management practices in organizations strive to maintain the overall well-being of individuals. Typically, safety refers to a condition in which the physical well-being of people is protected. The main purpose of effective programs in organizations is to prevent work-related injuries and accidents. As being defined above, the health covers all aspect for human; physical, mental and emotion and for the safety, is more on the prevention from injuries and accidents.

Referring to the Occupational Safety and Health Act 1994 (Act 514), (2006), under the section 4, the objects of this Act are:

- (a) to secure the safety, health and welfare of persons at work against risks to safety or health arising out of the activities of persons at work;
- (b) to protect persons at a place of work other than persons at work against risks to safety or health arising out of the activities of persons at work;
- (c) to promote an occupational environment for persons at work which is adapted to their physiological and psychological needs;
- (d) to provide the means whereby the associated occupational safety and health legislations may be progressively replaced by a system of regulations and approved industry codes of practice operating in combination with the provisions of this Act designed to maintain or improve the standards of safety and health.

It was stated in the Act 514 that all organizations in Malaysia need to comply with the act, protecting the employees' rights and it's a must to the employer to follow the act in order to maintain the well-being of the employees.

In order to meet the minimum OSHA guidelines for safety and health programs. According to Reese (2003), the composition or components of your safety and health program may vary depending on the complexity of your operations. They should at least include:

- Management's commitment and safety and health policy.
- Hazard identification and evaluation.
- Hazard control and prevention.
- Training.

Based on Government Accountability Office (2012), OSHA encourages employers to take a multifaceted approach to preventing and controlling hazards and creating an effective safety and health management system or a positive safety culture. According to OSHA, the four elements of an effective safety and health management system are as follows:

1) Management commitment and employee involvement

Employers should develop a safety and health policy, communicate it to all employees, and demonstrate commitment to it by, for example, instilling accountability for safety and health and ensuring an open exchange of information about safety issues. Employees should be involved in safety and health related activities such as accident investigations.

2) Worksite analysis

Employers should have a thorough understanding of all hazardous situations to which employees may be exposed, as well as the ability to recognize and correct these hazards. Accurate injury and illness records can be used to identify and prevent work-related injuries and illnesses.

3) Hazard prevention and control

Employers should have clear procedures for preventing and controlling hazards identified through worksite analysis, such as a hazard tracking system and a written system for monitoring and maintaining workplace equipment.

4) Safety and health training

Training is necessary to reinforce and complement management's commitment to safety and health and to ensure that all employees understand how to avoid exposure to hazards.

1.2 Problem Statement

The health and safety in the office workplace must be treated the same as other industry. Because, normally people tend to neglect about the importance of safety and health in the office workplaces because the danger and hazard is unseen such as the electricity hazard from the office

equipment, fire hazard and life safety, ergonomics; multidisciplinary science that seeks to conform the workplace and all of its physiological aspects to the worker as mentioned by Goetsch and Hassan, (2012).

The highest rate of accidents at the workplace can adversely affect the organization itself, thus according to Goetsch and Hassan (2012), accidents at the workplace can result in injury, loss of life and property damage. Both the person involved in the accident and the employer may lose their income or profit due to extra costs incurred and an increase in various expenses in company operations. Accident costs are normally higher than most people expert because of the indirect or hidden costs incurred.

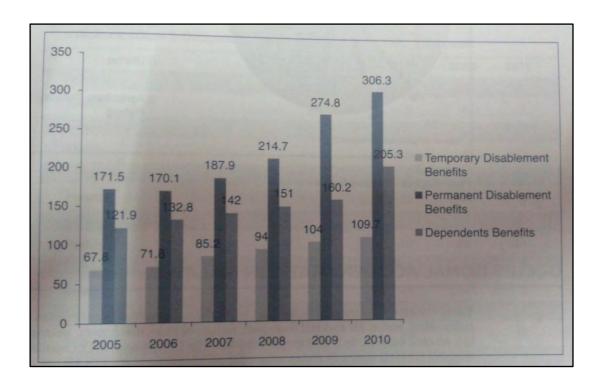


Figure 1.1: Total benefits (in RM) Paid by SOCSO from 2005 to 2010, cited in Goetsch and Hassan, (2012: p.23)

Based on the figure 1.1, according to Goetsch and Hassan, (2012) every year, more than 50,000 accidents occur at the workplace, resulting in more than 12,000 permanent disabilities. The cost of one death is estimated to be RM 1.2 million and the cost of one permanent disability is RM120,000. Besides that, 4% of the world's gross domestic product is lost due to cost

injury, death and disease through absence from work, sickness treatment, disability and survivor benefit. With the cost of one death estimate to be RM1.2 million, 1,231 occupational deaths in 2009 resulted in a national loss of RM 1.4 million. SOCSO's annual report up till 2010 revealed an increase in total benefits paid to workers who were involved in workplace accidents from 2005 to 2010, covering temporary disablement benefits, permanent disablement benefit and dependents benefit

According to recent news by (NST, 2013) KUALA LUMPUR: RHB Bank recently launched the Occupational Safety and Health Campaign 2013 to promote a safe and healthy working environment for its employees and a better understanding of the importance of safety and health issues at the workplace. The campaign will help to reduce work place accidents for employees and visitors alike. It was pointed out that, "making the workplace safe is a joint responsibility of both employer and employees." Besides, an effective health and safety system in the workplace can have a significant positive effect on productivity, and therefore on an organization's success. On top of that, based on internal findings, most health cases that affected staff were work stress-related and orthopedic injuries to the hands or wrists and shoulders.

1.3 Research Questions

The research questions designed as follows:

- i. Are the Health and Safety Management System elements appropriately in place?
- ii. Which of the key elements in Health and Safety Management System contributed most to the effectives of the programs implemented?
- iii. What are the recommendations to improve the effectiveness of the Health and Safety Management System?

1.4 Research Objectives

The aims of the research were:

- i. To identify Health and Safety Management System elements that was important in the organization.
- ii. To rank the key elements of the Health and Safety Management System implemented in the organization.
- iii. To make recommendations so as to improve the existing implementation of Health and Safety Management System.

1.5 Scope, Limitations and Key Assumptions of the Study

This research is focusing on the safety and health in the office workplaces. The chosen company has their own health and safety management system in order to comply with the Occupational Safety and Health Act 1994 (Act 514). Therefore, the researcher will carry out the research to examine the health and safety management system effectiveness that has been implemented in the Oil and Gas Training Company based on the 4 elements that have been highlighted.

The research is limited to one organization only, as the organization has the Health, Safety and Environment department, although the company is categorized under the Management Training Centre. However, the researcher will extract the topic in a good way to ensure that the objectives can be accomplished later on. The key assumption of this research is to know how far the adaptation and awareness among employees about the importance of the health and safety in the office workplaces.

1.6 Significance of the Study

We know for the fact that, the health and safety, is important in the workplaces, nevertheless the awareness among employer and employees about the health and safety in the office workplace is not the same as other industry such as manufacturing, constructions and others. The researcher wanted to know how effective the health and safety management system in the organization. Moreover, this research should be continued for the next research regarding on the same topic for a wider scope later on. Besides, the researcher will come up with the recommendations based on the results of research later on which could help the organization to implement the effective Health and Safety Management System.

1.7 Summary

The health and safety in the workplace is vital. Hence, the workers at the office workplace need to be alert about the health and safety in light of the OSHA, the Act 514. The researcher has taken into account the movement of the OSH in Malaysia to obtain the clearer and wider picture about this topic. In this research, the effectiveness of the Health and Safety Management System is made as the dependent variable to be observed in order to accomplish the research objectives.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter introduces the fundamental concepts that are necessary to understand and then on implement the HSMS in an organization. This review has covered what is health and safety, the Act pertaining to it and the Health and Safety Management System (HSMS). In addition, the literatures if regards to the major element to evaluate the HSMS. The elements were; management commitment and employees involvement, worksite analysis, hazard prevention and control and safety and health training. On top of that, additional review has been done on the accidents and the risk management. By and large, this literature review acts as guidance for the researcher in executing the research study.

2.2 Health and Safety

According to Geotsch and Hassan, (2012) the occupational safety and health movement in Malaysia dates back some 120 years to the late 19th century. It started with steam boiler safety, followed by machinery safety, industrial safety, industrial safety and hygiene, and lastly, occupational safety and health, which covered every sector. In 1994, the government introduced new legislation on occupational safety and health, namely the Occupational Safety and Health act 1994 (Act 1994). The Act was approved by parliament in 1993 and gazette in February 1994. The enactment of the new legislation was due to the fact that the Factory and Machinery Act 1967 only covers workers in the manufacturing, mining, quarrying and construction sectors, and not those in other sectors. The new Act covers 90% of the nation's total manpower, except and people working on ships and in the armed forces.

The safety and health movement today, according to Goetsch (2010), the safety and health movement has come a long way since the Industrial Revolution. Today, there is widespread understanding of the importance of providing a safe and healthy workplace. The tone was set during and after World War II when all the various practitioners of occupational health and safety began to see the need for cooperative efforts. These practitioners included safety engineers, safety managers, industrial hygienists, occupational health nurses, and physicians. Make employee health and safety a high priority.

2.3 Occupational Safety and Health Act 1994 (Act 514)

Since the health and safety at the workplace is a serious matter, all companies in Malaysia have to comply with the Occupational Safety and Health 1994 (Act 514). According to Goetsch and Hassan (2012), the main purpose of OSHA 1994 is to promote and encourage occupational safety and health awareness among workers and to create a culture of safety in organizations along with effective safety and health measures. The act encourages self-regulation among workers and management in creating safer workplaces. The Act contains 15 sections as a measure to overcome any conflict or voids in the Factory and Machine Act 1967.

The Occupational Safety and Health Act 1994 complement existing legislative provisions and in the event of the conflict, the Act will supersede it and act as the main legislation. In researcher opinion, as stated by the Act 514, the employers have to make sure the safety and health of the employees in order to create a safer and comfortable for the workplace employees. Hence, the employees would be able to focus on the performance at work for the greater benefits of the company.