A STUDY ON THE SAFETY CULTURE IN THE CONSTRUCTION SECTOR IN MALAYSIA

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A STUDY ON THE SAFETY CULTURE IN THE CONSTRUCTION SECTOR IN MALAYSIA

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<td>PKK</td>
<td>Pusat Khidmat Kontraktor</td>
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<td>PPE</td>
<td>Personal Protective Equipment</td>
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<td>SIRIM</td>
<td>Standards &amp; Industrial Research Institute of Malaysia</td>
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<td>SOCSO</td>
<td>Social Security Organisation</td>
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<tr>
<td>QMS</td>
<td>Quality Management System</td>
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ABSTRACT

A STUDY ON THE SAFETY CULTURE IN THE CONSTRUCTION SECTOR IN MALAYSIA

Gloria Chai Mei Wern

With the fast pace of world’s development and globalisation, nations are expected to be competent and ever ready for prominent changes. The construction industry undoubtedly plays a significant role in the development process of a country contributing towards employment and economic growth. However, statistics have proven this field to be a highly hazardous industry due to its fatality rates despite recognition on good safety cultures. Results gathered from studies conducted in West Malaysia found that safety culture consists of many elements that affect or influence accidents and incidents on site. Inspired by the results, this study adopted the qualitative approach with the purpose to explore further the underlying factors leading towards such worrying reputation of the construction industry particularly in Sarawak. In-depth interviews were carried out towards three G7 contractor companies in Sarawak and findings of this study identified two elements namely hazardous materials and companies’ years of establishment that led to the seven factors causing frequent accidents in the construction sites. Moreover, six prominent elements within safety culture namely organisational environment & communication, leadership & management commitment, regulations & authorities, workers factor, resource and cost allocation and training were also found to affect the commitment of both employers and employees towards safety management’s strategies in the construction sites.

Keywords: Safety culture, Accidents causing factors
ABSTRAK

KAJIAN TENTANG BUDAYA KESELAMATAN DI SEKTOR PEMBINAAN DI MALAYSIA

Gloria Chai Mei Wern

Pembangunan dunia yang semakin pesat dalam era globalisasi kini memerlukan bangsa yang berkemahiran tinggi dan serantasi bersedia dengan sebarang perubahan tekanan dunia yang ketara. Sektor pembinaan merupakan salah satu sektor yang memainkan peranan yang besar dalam menyumbang kepada pembangunan ekonomi bangsa dan negara dengan menyediakan peluang pekerjaan. Bagaimanapun, statistik telah menunjukkan bahawa sektor ini turut juga menyumbang kepada kadar kematian yang tinggi meskipun dengan adanya budaya keselamatan yang diiktiraf. Hasil daripada kajian-kajian yang dijalankan di Semenjung Malaysia menunjukkan bahawa budaya keselamatan merangkumi pelbagai aspek dan elemen yang mempengaruhi kematangan dan kejadian di tempat bekerja dan ini telah mendorong keperluan untuk menjalankan kajian yang serupa di negeri Sarawak. Oleh itu, kajian secara kualitatif telah diadakan dengan tujuan mengkaji faktor-faktor tersirat yang mendorong reputasi yang amat membimbangkan dalam industri pembinaan ini. Instrumen tenu bual telah digunakan ke atas tiga buah syarikat kontraktor G7 bagi mengumpul data. Hasil kajian ini telah mengenalpasti dua elemen iaitu bahaya berbahaya dan tempoh penubuhan syarikat pembinaan yang memangkinkan tujuh faktor utama berlakunya kejadian kematangan di tapak pembinaan. Selebih itu, sebanyak enam elemen yang berkaitan dengan budaya keselamatan ini iaitu, persekitaran organisasi dan komunikasi, kepimpinan dan komitmen pihak pengurus, peraturan dan pihak berkuasa, faktor pekerja, sumber dan kos perantukan dan latihan yang turut menyumbang kepada komitmen pihak majikan dan pekerja terhadap strategi pengurusan keselamatan di tapak pembinaan.

Kata kunci: Budaya keselamatan, Faktor kematangan
CHAPTER 1

INTRODUCTION

1.6 Introduction

The construction industry plays a big role in the development process of a country where successful development would contribute towards the economic growth generating additional demands for construction activities and increasing the gross domestic product (GDP) of the nation (Abdullah, 2004).

According to the Construction Industry Development Board (CIDB) (n.d.), the construction industry is equally important in which its contribution to employment is about 7.8 percent of the total employment in the country in the year 2003.

As development move further and faster and globalisation takes precedence, nations will need to keep abreast with these changes while changing their mindset from being a follower to a leader in order to compete equally in the fast pace of development. The construction industry will not further develop without the preservation and expansion of the workforce and its mentality. Studies conducted by CIDB showed the rapid growth of the construction sector over the last ten years did not only brought success to the country but also coupled with the rise in the number of fatalities (CIDB, n.d.). Efforts to develop a proactive safety culture within this industry may
require a long time for full acceptance and establishment due to many other factors (Hassan, Basha and Hanafi, 2007).

Nevertheless, it is undeniable that the construction industry is a very active and booming industry worldwide proceeding as one of the highest contributing industries towards the country's economy. However, such achievements have also contributed much towards the safety issues where statistics showed that this industry has earned the reputation of being a highly hazardous industry due to its fatality rates (Bakri, Zin, Misnan, Mohammed, 2006). With that statement in mind, this research will explore into the underlying factors leading towards such worrying reputation of the construction industry.

1.1 Background of the study

Accidents occurrence and property losses create greater impact towards construction companies' financial losses hence the importance of establishing safety legislation. The Occupational Safety and Health Act 1994 was enacted by the Duli Yang Maha Mulia Seri Paduka Baginda Yang Di-Pertuan Agong on the 25th February 1994 with the objectives of the providing a legislative framework in order to promote and secure the safety, health and welfare of persons at work against risks (Legal Research Board, 2006). It is also a practical tool that superimposed over the existing safety and health legislation such as the Factories and Machinery Act, 1967 (Ismail, Abdullah and
Majid, 2005). As a result of this legislation, it is mandatory for companies to be held responsible in providing a safe working environment to their workers (Bakri et al., 2006).

Nevertheless, in recent years, many construction companies in Malaysia have recognised the importance to establish a good safety culture in order to assist in controlling and reducing unnecessary construction costs due to accidents (Hassan, Basha and Hanañ, 2007). With that, there is a need for a better enforcement of the Occupational Safety and Health Act 1994 (OSH) because at present, the safety and health in the workplace of Construction companies are still very much opposing and below expectation. Statistics alone recorded by Social Security Organisation (SOCSON), Construction Industry Development Berhad (CIDB) and Department Of Occupational Safety and Health (DOSH) portray a significant worrying rise in accidents on site (Husin, Mustapa, Kamal and Wahab, 2005).

Many believe that the factors affecting such rise in accident cases have to do with the safety culture within the organisation where safety attitudes deliver an important insight of this culture (Cox and Cox, 1991, cited in Clarke, 2004). The term ‘safety culture’ was first introduced after the nuclear accident at Chernobyl in 1986 (Cox & Flin, 1998; Mearns & Flin, 1999; Rochlin & Von Meier, 1994; Pidgeons, 1998; Weick, 1987; Flin, Mearns, Gordon & Fleming, 1998, cited in Zhang, Wiegmann,
Thaden, Sharma and Mitchell, 2002). There are many definitions to “safety culture” and as suggested by the Health and Safety Commission in United Kingdom:

“The safety culture of an organisation is the product of the individual and group values, attitudes, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organisation’s health and safety programmes. Organisations with a positive safety culture are characterised by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventative measures.”


This awareness has led to many realisations on this issue and thus a large impact on research in the areas of occupational health practice where recent changes in technologies and working patterns are acknowledged (Kogi, 1997, Rantanen, 1999, cited in Kogi, 2002).

Paradigm shifts has led to the needs of sensible measures to reduce accidents within construction industry where elements of administering, managing as well as monitoring and controlling the safety aspects is essential from strict compliance orientation to performance orientation (Husin, et al. 2005). Such measures can be seen in the Occupational Safety and Health Management System (OSHMS) 2001
guidelines drawn by the International Labour Office (2001), which serves to become part of the overall management system administering elements of an organisation’s safety policy, organisational structure, planning and implementation of activities, measuring performance or monitoring and reviewing performance and auditing (ILO, 2001). Probing into the OSHMS guidelines drawn suggests that the current practice in Malaysia’s Construction Industry does incorporate features and characteristics of the said guidelines (Husin, et al. 2005). The OSHMS 2001 which serves only as a guideline is not mandatory but highly encouraged its application in all Malaysian Industries (Kogi, 2002) hence the Malaysian Standard of OSHMS is tailored to incorporate only elements such as policy, organisation, planning and implementation and evaluation (Husin, et al. 2005) which suits the local context.

Through the awareness and responsiveness towards the issue of OSH, this study focus towards exploring the safety culture within the construction companies in Malaysia, which helps to facilitate the OSH Act 1994 safety policy implementation. The fundamentals of this study probes into the factors that affects the rise of accidents occurrence as well as the influence of safety cultures with regards to implementing the safety policy in the construction company. The purpose of this research aims to discover what are the prominent safety cultures in the Malaysia’s Construction Industry and the relevant safety strategy recommendations towards development of safety culture in order to minimise the current increase in accident rates.
1.2 Statement of Problem

It is known that the enactment of the Occupational Safety and Health Act 1994 serves to protect all the entities within an organisation from risk of health and fatalities (Legal Research Board, 2006). However, researches conducted from other countries found that such act though mandatory may not contribute as much as expected in countering the accidents occurrence at work (Kawakami and Kogi, 2005). Kogi (2002) found that it is not sufficient alone to monitor and evaluate each and every organisation’s compliance only by reliance on the OSHA to act upon itself for the society and that a proper safety policy and management systems should be incorporated within companies adjusting to the locally suited risk management procedures. Nevertheless, the efficiency of safety policies within a construction company also depends on the influence of safety cultures practised (Ismail, et al., 2005). Statement of problems gathered from other researches basically discussed on many issues relating to OSH, however for this research the statements are drawn down to the following:

(i) The frequency and number of accidents rises in the construction sector is alarming

The number of accidents occurrence in the United Kingdom alone saw a highly dominated figure coming from the construction sectors from the year 1995 to 2000
(Edwards and Nicholas, 2002). In the United States, accidents accounted for alone within the construction industry remains the most worrying and dangerous sector although there was a substantial decrease in the year 1999. However, its statistics remains above the average (Weil, 2001). In other Asian countries, Hong Kong reported a significant high level of injuries and fatalities encountered also in the construction industry followed by Japan (Chan, Kwok and Duffy, 2004). Malaysia, recorded a worrying increase in the numbers of accidents occurring at the construction sites by the Social Security Organisation (SOCSO) indicating the number of permanent disabilities and fatalities from year 1996 to 2008. Although the construction industry is not the highest contributing industry towards the accident statistics in Malaysia, however, its figures showed a very high rate in the year 2000. Table 1.1 and Figure 1.1 list the rate for the year 2001 to 2004 in which further analysing show irregularities in fluctuations followed by a sudden increase in the year 2005 and later a sudden leap to the highest rate so far at 1060 cases in the year 2008. With such unpredictable figures reported, accidents in this industry have captured the attention and concerns from both governmental and non-governmental organisations.

(ii) Safety cultures in construction sector influence the enforcement of safety practices

Individual and group values, attitudes, perceptions and behavioural patterns are the elements that formulate the style and effectiveness of a safety programme
(Weigmann, 2002, cited in Ismail et al., 2005). The provision of OSH Act 1994 in Malaysia is based on self-regulation approach, which cannot be materialised without embedding safety culture to ensure the safety and health of those who create risk and those who works with the risks (Ismail et al., 2005). According to Cox and Cox (1991) cited in Clarke (2004) organisational safety culture is closely related to the safety attitudes of the entities within an organisation. In general, safety culture refers to the level and extent each individual and groups that will commit themselves to personal responsibility for safety thus act to communicate safely and learn, adapt and modify behaviour based on mistakes done (Zhang et al., 2002). Despite the safety policies’ existence and implementation in the construction companies in Malaysia, the statistics reading the total of accidents on site is still at the increasing rate. Past similar researches emphasised that the aspects of safety culture plays a vital role in influencing the implementation and compliance to the organisational safety policy and hence the OSH Act 1994. Therefore, it is crucial to further understand what are the elements within the comprehension of safety culture contributes towards these influences.

(iii) Lack of implementation of the safety management strategies in the construction sites

In most developing countries, Murray (as cited in Rowlinson, 2004) stated that the appropriate legislation in combating unsafe issues or occurrence in the construction
sites usually exists but not applied accordingly due to reasons of infraction of law such as hiring of illegal workers or paid lower than stipulated within the employment law. Research conducted by Chan et al., (2004) on the safety management system in the context of Hong Kong, the authors discovered that there is a strong need for construction enterprises to be more proactive and prepared for emergency cases or situations on site instead of being reactive and act to implement the safety strategies only when incidents occur. Hassan et al., (2007) in their study found that larger construction companies have better and more consistent level of safety compared to smaller companies and this has to do with the commitment of both the employer and employees. Therefore, this study would look into the commitments of the employers and employees towards the safety and health management system in the Malaysian context.
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