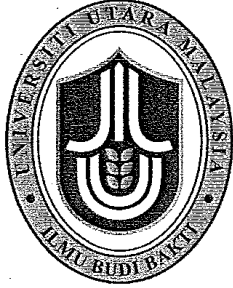


A CASE STUDY OF SAFETY BEHAVIOR IN THE  
CONSTRUCTION SITE

MOHD ZAKIR BIN IBRAHIM

UNIVERSITY UTARA MALAYSIA

2012



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## ABSTRACT

The construction industry has been recognised as one of the hazardous industries. Although there is an improvement of the safety performance and increase in safety awareness in this industry, the accident rate is still one of the highest across all sectors. Besides causing human tragedy and economic losses, construction accidents also affect the productivity and reputation of the construction industry. The statistic of accidents at construction sites give us a picture that Malaysian construction industry is one of the critical sectors that need a huge and fast overhaul from the current site safety practices. Accident don't just happen, they caused by unsafe acts, unsafe condition or both. Previous studied shows that most of the accidents happen due to unsafe acts rather than unsafe conditions. In order to improve the overall safety performance we need to investigate the root causes of the construction accidents. The specific objectives of this study are to find out the factors of safety climate, safety training and safety motivation influences the safety behaviour. Through literature reviews, the behavior safety conceptual framework, supported by theory Planned Behavior was develop. The measurements tools were adopted from previous researchers. The target respondents were the workers at construction site and quantitative method was applied. The data were gathered from the survey were analysed using Standard Package for Social Science (SPSS 19). The response of the survey were rated according to the Likert scale type with '1' indicated strongly disagree and '5' indicated strongly agree. This study shows safety motivation, safety training and safety climate were positively and significantly related with the safety behaviour. With this finding, it was recommended that importance of taking human factors into account in safety management.

## ABSTRAK

Sektor pembinaan adalah merupakan sektor pekerjaan yang sangat berisiko. Walaupun ada peningkatan prestasi keselamatan dan kesedaran, kadar kemalangan industri masih tinggi jika dibandingkan dengan lain-lain industri. Selain dari faktor kemanusiaan, harta benda, kemalangan di industri pembinaan akan menjejaskan kadar pengeluaran dan menjejaskan imej sektor pembinaan itu sendiri. Statistik kemalangan di tapak pembinaan di Malaysia menggambarkan satu keadaan yang kritikal dan memerlukan perubahan dan penilaian semula tentang sistem pengurusan keselamatan yang sediaada. Kemalangan berlaku adalah disebabkan faktor perlakuan yang tidak selamat dan keadaan yang tidak selamat atau gandingan kedua-dua faktor tersebut. Banyak kajian- kajian yang terdahulu membuktikan kebanyakan kemalangan adalah disebabkan oleh faktor perlakuan yang tidak selamat berbanding dengan keadaan yang tidak selamat. Untuk meningkatkan prestasi keselamatan di sektor pembinaan, kajian mestilah di lakukan untuk mencari punca berlakunya kemalangan di sektor tersebut. Objektif utama kajian ini adalah untuk menentukan pengaruh pemboleh ubah 'safety climate,' 'safety training' and 'safety motivation' terhadap 'safety behaviour.' Kajian ini adalah berasaskan kepada kajian terdahulu dengan menggunakan konsep 'Planned Behavior'. Kajian ini di jalankan keatas pekerja-pekerja di tapak pembinaan dengan menggunakan kaedah kuantitatif. Data yang dikumpulkan dan dianalisa menggunakan SPSS 19. Hasil kajian ini menunjukkan 'safety climate', 'safety training' dan 'safety motivation' mempengaruhi safety behaviour secara terus dan positif. Hasil dari kajian ini adalah disarankan agar faktor kemanusiaan diambilkira dalam pelaksanaan pengurusan keselamatan.

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# CHAPTER 1

## INTRODUCTION

### 1.0. Background of study

#### 1.1. Overview of construction industry

The construction industry has been classified as one of the most hazardous industries in the United States in terms of both fatal and nonfatal injuries. Construction workers are also at risk for exposure lead and other inhalation hazards. In addition, when compared to other workers, construction workers may also experience a higher proportion of early retirement due to illness and musculoskeletal disorders, losing over 24000 potential years of working life.

Controlling hazards that reduce injury rates is difficult in an industry such as construction where work is conducted under extreme condition an ever-changing physical environment and with variable workforce. Achieving change in this environment involves a widespread shift in safety culture because of the way in which work is conducted and the need to meet potentially competing imperatives such client demands and trade specific date line. This situation was made worst by workers negative attitude and behaviours toward safety (Choudry, R.M. & Fang, D., 2007) Occupational Safety & Health (OSH) issues in the construction industry are partly attributable to the fragmented nature in which the industry operates (Ringen et al. 1995). The “one-of-a-kind” nature of projects, with their temporary multi-organisations (Lingard and Rowlinson 2005, 5), results in constantly changing work assignments, worksites and employers (Ringen et al. 1995). Several trades often work simultaneously on one site. It is also common for each trade to be employed by a different contractor (Ringen et al. 1995). This “cyclical demand for contracted services” (Hislop 1999, 5), coupled with the shortage of skilled labour, creates staffing difficulties for construction companies. This state of affairs also results in workers being contracted for multiple specialist tasks, being forced to work in a pressured environment, and becoming responsible for their own health and safety

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