



UNIVERSITI PUTRA MALAYSIA

***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***

NORADILA BINTI MOHAMED

FPSK(M) 2014 23



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By

NORADILA BINTI MOHAMED

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
Malaysia, in Fulfilment of the Requirement for the Degree of Master of
Science**

July 2014

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in
fulfilment of the requirement for the degree of Master of Science

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July 2014

Chair: Assoc. Prof. Shamsul Bahri Mohd Tamrin, PhD

Faculty: Medicine and Health Sciences

Small medium industries in Malaysia have grown rapidly and face challenges such as a high rate of occupational accidents in workplaces. The frequency of occupational accident in small medium industries decreased from 2008 in general, but fluctuated each year, which shows that improvement is needed in handling safety and health of the employees. It is believed that safety climate perception, job satisfaction and occupational safety health management system influence occupational accident in an organization. Therefore, to facilitate the expansion of current theoretical perspectives in this research area, this research attempts to study the relationship between safety climate perception, job satisfaction and occupational safety health management system practices with occupational accident. A cross-sectional design was employed for data collection. A safety audit checklist and a self-administered questionnaire were distributed to the involved small medium industries from March 2013 until August 2013 for data collection. The results were based on seven small medium manufacturing industries in Shah Alam and Kuala Langat, Selangor. The response rate was 86 percent (n=237). The findings show that safety climate perception and job satisfaction of employees were high in small medium industries. Most of the organizations involved showed low compliance with the occupational safety health management system. The findings also revealed that 36% of the respondent were involved in occupational accident in the last six months. In addition, Kuala Langat showed significantly higher scores of safety climate perception, job satisfaction, occupational safety health management system and occupational accident

than Shah Alam. High compliance with the occupational safety health management also showed a higher score for safety climate perception and job satisfaction, and lower frequency of occupational accident. Findings also showed that there were significant relationships between safety climate perception, job satisfaction and occupational safety health management system with occupational accident in the organizations ($p < 0.05$). The findings also revealed safety climate perception, occupational safety health management system, age and middle income are predictors for occupational accident.

Keywords: safety climate perception, job satisfaction, occupational safety health management system, occupational accident, small medium industries

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk Ijazah Master Sains

**HUBUNGAN ANTARA PERSEPSI KESELAMATAN IKLIM, KEPUASAN
KERJA DAN SISTEM PENGURUSAN KESELAMATAN DAN KESIHATAN
PEKERJAAN DENGAN KEMALANGAN DI INDUSTRI KECIL
SEDERHANA DI DUA KAWASAN DI SELANGOR, MALAYSIA**

Oleh

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Industri kecil sederhana di Malaysia sedang berkembang dengan pesat dan menghadapi cabaran seperti kadar kemalangan pekerjaan yang tinggi di tempat kerja. Kekurangan kemalangan pekerjaan di industri-industri kecil sederhana menurun dari 2008 secara umum, tetapi berubah-ubah setiap tahun, dan ini menunjukkan bahawa penambahbaikan adalah diperlukan bagi mengendalikan aspek keselamatan dan kesihatan pekerja. Persepsi iklim keselamatan, kepuasan kerja dan sistem pengurusan keselamatan dan kesihatan pekerja dipercayai mempengaruhi kemalangan pekerjaan dalam organisasi. Oleh itu, bagi memudahkan perkembangan perspektif teori semasa di kawasan kajian, kajian ini berusaha mengkaji hubungan antara persepsi iklim keselamatan, kepuasan kerja dan amalan sistem pengurusan kesihatan dan keselamatan pekerjaan dengan kemalangan pekerjaan. Satu reka bentuk keratan rentas telah digunakan untuk tujuan pengumpulan data. Senarai semak audit keselamatan dan soal selidik urus sendiri telah diagihkan kepada industri kecil sederhana yang terlibat dari Mac 2013 hingga Ogos 2013 bagi aktiviti pengumpulan data. Keputusan yang diperolehi adalah berdasarkan kepada 7 industri pembuatan kecil sederhana di Shah Alam dan Kuala Langat, Selangor. Kadar respons adalah 86 peratus ($n = 237$). Dapatan kajian menunjukkan bahawa persepsi iklim keselamatan dan kepuasan kerja para pekerja adalah tinggi dalam industri-industri kecil sederhana. Kebanyakan organisasi yang terlibat menunjukkan tahap pematuhan yang rendah terhadap sistem pengurusan keselamatan kesihatan pekerjaan. Dapatan kajian juga menunjukkan 36% daripada responden pernah terlibat

dalam kemalangan pekerjaan dalam tempoh 6 bulan yang lepas. Di samping itu, Kuala Langat menunjukkan skor yang lebih tinggi yang ketara berbanding Shah Alam bagi persepsi iklim keselamatan, kepuasan kerja, sistem pengurusan keselamatan dan kesihatan pekerjaan dan kemalangan pekerjaan. Tahap pematuhan yang tinggi terhadap pengurusan keselamatan kesihatan pekerjaan juga menunjukkan skor yang lebih tinggi untuk persepsi iklim keselamatan dan kepuasan kerja, serta kekerapan yang lebih rendah untuk kemalangan pekerjaan. Dapatan kajian juga menunjukkan bahawa terdapat hubungan yang signifikan antara persepsi iklim keselamatan, kepuasan kerja dan sistem pengurusan keselamatan dan kesihatan pekerjaan dengan kemalangan pekerjaan di organisasi ($p < 0.05$). Akhir sekali, dapatan kajian juga menunjukkan persepsi iklim keselamatan, sistem pengurusan dan keselamatan kesihatan pekerjaan, umur dan pendapatan sederhana telah diramalkan bagi kemalangan pekerjaan.

Kata kunci: persepsi keselamatan iklim, kepuasan kerja, sistem pengurusan keselamatan dan kesihatan pekerjaan, kemalangan pekerjaan, industri kecil sederhana

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I certify that an Examination Committee has met on 18 July 2014 of viva voce to conduct the final examination of Noradila Mohamed on her degree thesis entitled "Relationship between safety climate perception, job satisfaction and occupational safety health management system with occupational accident at small medium industries at two localities in Selangor" in accordance with the Universities and University Collage Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U. (A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

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TABLE OF CONTENTS

		Page
	ABSTRACT	i
	ABSTRAK	iii
	ACKNOWLEDGEMENTS	v
	APPROVAL	vi
	DECLARATION	viii
	LIST OF TABLES	xiv
	LIST OF FIGURES	xvi
	LIST OF ABBREVIATIONS	xvii
	CHAPTER	
1	INTRODUCTION	1
	1.1 Introduction	1
	1.2 Problem statement	3
	1.3 Study justification	5
	1.4 Conceptual framework	6
	1.5 Research objectives	9
	1.6 Research hypothesis	9
	1.7 Scope of study	10
	1.8 Definition of terminologies	10
	1.9 Limitation of study	12
2	LITERATURE REVIEW	14
	2.1 Small medium enterprises/industries in Malaysia	14
	2.1.1 Small medium enterprises/industries definition in Malaysia	16
	2.1.2 SMIs problem in Malaysia	16
	2.2 Safety climate perception	17
	2.2.1 Measurement of safety climate perception	18
	2.2.2 Dimensions of safety climate perception	18
	2.2.3 Relationship between safety climate perception and occupational accident	20
	2.3 Job satisfaction	22
	2.3.1 Job Descriptive Index (JDI)	22
	2.3.2 Relationship between job satisfaction and occupational accident	24
	2.4 Occupational safety health management system (OSHMS)	26
	2.4.1 Occupational safety health management system in Malaysia	26
	2.4.2 Elements of Occupational Safety Health Management System	27
	2.4.3 Relationship between occupational	29

	safety health management system and occupational accident, safety climate perception and job satisfaction	
2.5	Association between socio-demographic and safety climate perception, job satisfaction, occupational accident and occupational safety health management	30
2.6	Association between organization location and safety climate perception, job satisfaction, occupational safety health management and occupational accident	31
2.7	Occupational accident	32
2.8	Conclusion	32
3	MATERIALS AND METHODS/METHODOLOGY	34
3.1	Study design	34
3.2	Study location	34
3.2.1	Shah Alam	36
3.2.2	Kuala Langat	36
3.3	Study duration	37
3.4	Study variables	37
3.5	Sampling population	37
3.5.1	Target population	37
3.5.2	Sampling frame	37
3.6	Sampling unit	38
3.7	Sample size calculation	38
3.8	Sampling method	40
3.9	Sampling flowchart	42
3.10	Instruments	43
3.10.1	Safety audit checklist	43
3.10.2	Self- administered questionnaires	46
3.11	Data collection technique	49
3.11.1	Measurement of safety climate perception, job satisfaction and occupational accident.	49
3.11.2	Measurement of occupational safety health management system	49
3.11.3	Face to face interview and document review	50
3.12	Quality control	50
3.12.1	Pre-test questionnaire	50
3.12.2	Reliability of questionnaire	50
3.12.3	Translation of questionnaire	51
3.13	Data analysis and interpretation	51
3.13.1	Statistical analysis	52
3.13.1.1	Univariate analysis	52
3.13.1.2	Bivariate analysis	52
3.13.1.3	Multivariate analysis	53
3.14	Ethical consideration	53

4	RESULTS	55
	4.1 Response rate of the respondents	55
	4.1.1 Socio-demographic of the respondents	55
	4.2 Compliance level with the occupational safety and health management system at the selected SMIs	56
	4.3 Safety climate perception at SMIs	58
	4.4 Job satisfaction for each factory	60
	4.5 Prevalence of occupational accident at SMIs	62
	4.6 The safety climate perceptions score, job satisfaction score, occupational safety and health management compliance level and occupational accident based on socio-demographic information.	64
	4.6.1 Gender	64
	4.6.2 Nationality	64
	4.6.3 Age group	65
	4.6.4 Marital status	66
	4.6.5 Education level	66
	4.6.6 Working experience	67
	4.6.7 Basic income level group	68
	4.7 Comparison of the means of safety climate perception score, job satisfaction score and occupational accident with the compliance level of occupational safety and health management system	69
	4.8 Safety climate perception, job satisfaction, occupational safety health management and occupational accident based on study locations	70
	4.9 Relationship between safety climate perception, job satisfaction, occupational safety health management, socio-demographic and occupational accident.	71
	4.10 Predictor for occupational accident	72
5	DISCUSSION	74
	5.1 Introduction	74
	5.2 Socio-demographic of the respondents	74
	5.3 Occupational safety health management system compliance at SMIs	75
	5.4 Safety climate perception level at SMIs	76
	5.5 Job satisfaction level at SMIs	76
	5.6 Prevalence of occupational accident in SMIs	77
	5.7 Comparison of safety climate perception, job satisfaction, occupational accident and occupational safety health management based on socio-demographic	78
	5.7.1 Safety climate perception	78
	5.7.2 Job satisfaction	80

5.7.3 Occupational accident	82
5.7.4 Occupational safety health management system	83
5.8 Comparison between safety climate perception, job satisfaction and occupational accident with occupational safety health management level.	85
5.9 Differences between safety climate perception, job satisfaction, occupational safety and health management, occupational accident and study location	86
5.10 Relationship between socio-demographic and occupational accident	87
5.11 Relationship between safety climate perception and occupational accident	89
5.12 Relationship between job satisfaction and occupational accident	90
5.13 Relationship between occupational safety health management systems with occupational accident.	91
5.14 Predictor for occupational accident occurrence	91
6 CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH	93
6.1 Conclusion	93
6.2 Recommendation	94
6.3 Recommendations for future research	95
REFERENCES/BIBLIOGRAPHY	96
APPENDICES	115
BIODATA OF STUDENT	149
LIST OF PUBLICATION	150

LIST OF TABLES

Table		Page
2.1	Definition of small medium enterprises/industries	16
2.2	Studies on safety climate perception	21
2.3	Summary of job satisfaction studies	25
2.4	Summary of occupational safety health management association with occupational accident	30
3.1	Distribution of SMIs at five local authorities in Selangor	36
3.2	Probability proportionate to size	41
3.3	Element and measure in occupational safety health management system audit checklist	43
3.4	Total numbers of indicators by elements and measures	44
3.5	Occupational safety health indicator rating	45
3.6	Level of achievement of occupational safety health management system	46
3.7	Dimensions, items and score of safety climate measurement	47
3.8	Job satisfaction items	48
3.9	Questionnaire reliability test	51
4.1	Socio-demographic of the respondents	56
4.2	Description of occupational safety health management system at each factory	57
4.3	Description of safety climate perception dimension mean score at each factory	59
4.4	Description of job satisfaction facet mean score for each factory	61
4.5	Occupational accident and injuries frequencies for each factory	62
4.6	Overall occupational accidents and injuries in the last six months	63
4.7	Comparison of safety climate perception, job satisfaction, occupational accident and occupational safety health management with gender	64
4.8	Safety climate perception score, job satisfaction score, occupational accident frequency and occupational safety and health management based on nationality	65
4.9	Safety climate perception score, job satisfaction score, occupational accident frequency and occupational safety health management compliance based on age	65
4.10	Safety climate perception score, job satisfaction score, occupational accident frequency and occupational safety health management compliance based on marital status	66

4.11	Differences in the means of safety climate perception score, job satisfaction score, occupational accident frequency and occupational safety health management compliance between educational levels	67
4.12	Comparison of the mean difference of safety climate perception score, job satisfaction score, occupational accident frequency and occupational safety health management compliance based on working years	68
4.13	The mean difference between safety climate perception score, job satisfaction score, occupational accident frequency and occupational safety health management compliance based on basic income	69
4.14	Safety climate perception score, job satisfaction score and occupational accident frequency based on compliance levels of occupational safety health management system	70
4.15	Safety climate perception score, job satisfaction score, occupational safety health management system compliance and occupational accident frequency based on study locations	71
4.16	Relationship between safety climate perception, job satisfaction, occupational safety health management system , and socio-demographic with occupational accident	72
4.17	Predictors of occupational accident among workers in SMIs	73

LIST OF FIGURES

Figure		Page
1.1	Targets set in small medium enterprises (SME) Master Plan for 2020	1
1.2	Workplace accidents in the manufacturing sector from 2008 to 2013	4
1.3	Conceptual framework of factors that contribute to occupational accident occurrence In the workplace	8
2.1	Distribution of small medium enterprises by sector, 2010	15
2.2	Small medium enterprises in manufacturing sub-sectors in 2010	15
2.3	Elements of occupational safety health management system	28
3.1	Distribution of SMIs manufacturing sector by state in 2010	35
3.2	Study location	35
3.3	Summary of sampling flowchart	42

LIST OF ABBREVIATIONS

SMI	Small medium industries
DOSH	Department of Occupational Safety and Health
OSHMS	Occupational Safety Health Management System
ILO	International Labour Organization
nadj	Sample adjustment
DEFF	Design effect
MSOSH	Malaysian Society of Occupational Safety and Health
NIOSH	National Institute of Occupational Safety and Health
SOCISO	Social Security Organization
MITI	Malaysian International Trade and Industry
SMIDEC	National Small Medium Industries Development Council
RISDA	Rubber Industry Smallholders Development Authority
HIRARC	Hazard identification, risk analysis and risk control



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CHAPTER 1

INTRODUCTION

1.1 Introduction

The manufacturing sector in Malaysia is currently dominated by small and medium industries (SMI) where 84% of manufacturing establishments in Malaysia are SMIs, while the remaining 16% are large industries (Small Medium Enterprises Corporation, 2012). Small Medium Enterprises/Industries Corporation reported that most SMIs in Malaysia are involved in four types of business sectors, which are manufacturing, agriculture, mining and services (SME Annual Report, 2012). SMIs also play an important role in Malaysian economy since it provides ample opportunities and income for Malaysians, contributing an average of 59% of job opportunities and 32% of the country's total gross domestic product (GDP) (SME Annual Report, 2012). The SMI manufacturing sector in Malaysia has expanded rapidly and consistently due to the Malaysia's 2020 vision to become an industrialized country. Therefore, Malaysia introduced a small and medium enterprises/industries Master Plan in 2010 in order to establish the direction of SMI through to year 2020 to become a high-income nation (SME Annual Report, 2012) (Figure 1.1).

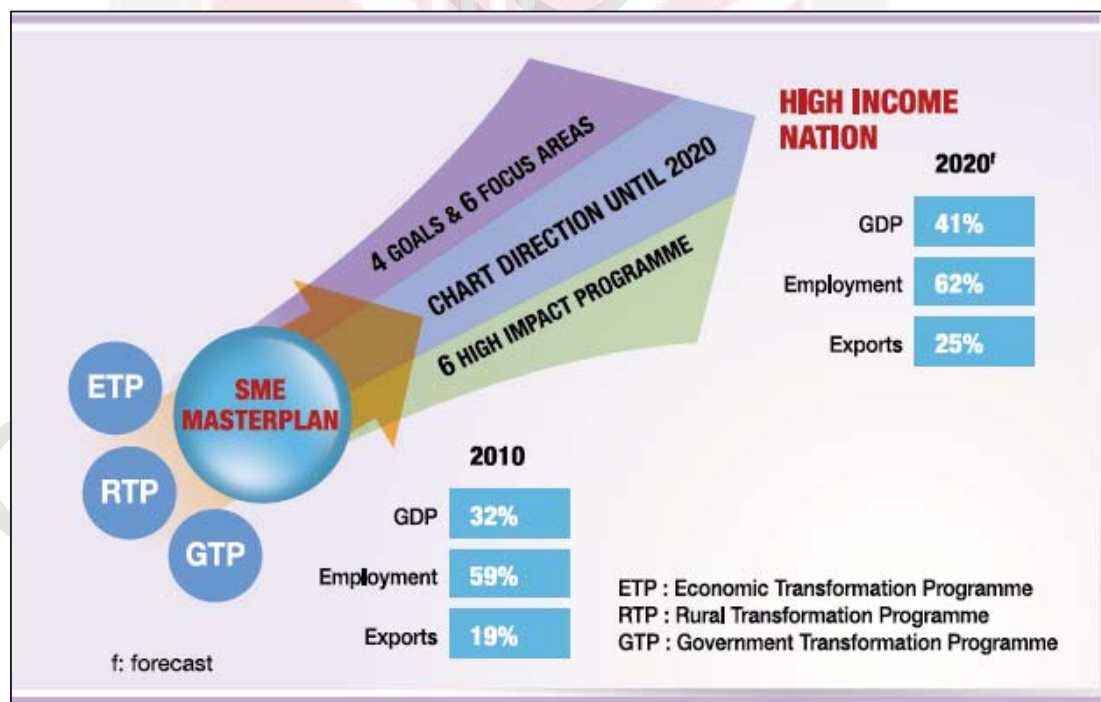


Figure 1.1. Targets set in small medium enterprises (SME) Master Plan for 2020

(Source: SME Corporation Malaysia, 2012)

Despite the contribution of SMIs to Malaysian economy, employees in this sector suffer a high number of fatal injury cases annually due to accidents in the workplace and work-related health hazards. In 2011, 35,088 (58.58%) industrial accidents were reported and published by the Social Security Organization (SOCSO) of Malaysia. The scenario that concerns responsible bodies is that 80% of reported industrial accidents were contributed by SMI (Sorenson *et al.*, 2007). It can be concluded that there is unquestionable evidence that SMI has high risk for occupational accident compared to larger industries.

SMIs in most developing countries have a number of common similarities and limitations. In Malaysia, the Malaysian International Trade and Industry (MITI), (2012) has recognized that SMIs are facing difficulties in financial resources and management skill. Most SMIs tend to view occupational safety and health as having the lowest priority in an operation and have never treated it as a crucial part of the overall management (Department of Occupational Safety and Health, 2000). Therefore, the Malaysian government has taken proactive measures by implementing 2015 Occupational Safety and Health Master Plan with the main target of fostering a preventive safety climate, developing occupational safety and health management system in companies, and enhancing the involvement of all stakeholders. This Master Plan also aims to reduce injuries and fatalities by 2015 (International Labour Organization, 2012).

Typically, occupational accident is caused by unsafe condition and unsafe behavior (Sadullah & Kantan, 2009). Rather than conventional method, which measures safety using retrospective data (occupational accident), leading indicators such as safety audit and safety climate measurement are more proactive and predictive of occupational accident. Safety audit and safety climate also helps to identify appropriate control measures before a system fails (Flin *et al.*, 2000). In this context, occupational safety and health management, safety climate perception and job satisfaction are factors that may affect the safety behavior of an employee, either directly or indirectly.

Safety management and organization impact the safety performance of a company (Carillo *et al.*, 2012). Tharaldsan *et al.*, (2010) found that the safety management of an organization can directly or indirectly affect safety performance and increases the rate of occupational accidents.

Safety climate perception is also seen as a crucial predictor for individual behavior in the workplace (Kantan, 2013). Safety climate is an organization construct believed to affect the safety behavior of employees at individual, group and organizational levels (Smith *et al.*, 2006). Yule (2003) stated that safety climate anticipates safety related outcome. Safety climate is a measurement of safety behavior of employees while working. Better safety climate indicates lower accident rate in an organization (Clarke, 2006a).

Other than safety management and safety climate, job satisfaction also plays an important role in enhancing safety performance. According to Aziri (2011), job satisfaction represents a feeling that comes from the perception of

employee toward their material and psychological needs. Teoh *et al.* (2011) stated that employees' behavior while at work is directly affected by their working environment. Job satisfaction is also recognized as an important element in influencing employees' behavior and leads to better safety climate in workplaces (Kelly *et al.*, 2011). It is also believed that there is a positive relationship between job satisfaction and job performance (Hussin, 2011).

The aim of this study was to investigate three factors, which were occupational safety health management, safety climate perception, and job satisfaction believed to influence the occurrence of occupational accidents at workplace. The influence of safety climate perception, job satisfaction and safety management of the organization on occupational accident occurrence was evaluated.

1.2 Problem statement

SMEs in Malaysia have grown rapidly and are facing challenges to maintain their performances and competitiveness in the current market (Hussin *et al.*, 2008). Even though they contribute to a quarter of gross domestic product of our nation, awareness towards employees' safety and health is still lower compared to larger industries. Prioritizing employees' safety and health is important because they can lead to better performances and improve organization revenue.

Each organization should strive for zero accident in the workplace. Accidents at work waste tremendous resources. A great amount of money is lost through loss of wages, worker's compensation, medical benefits and loss of working days (Zakaria *et al.*, 2012). One of the many challenges faced by SMEs is high rate of occupational incidents and accidents at workplaces (Surienty, 2012). The manufacturing industry has the largest contribution on industrial workplace accidents in Malaysia since 2001 (Department of Occupational Safety and Health, 2010). Statistics for occupational accident cases in Malaysian manufacturing sector fluctuated between 2008 and 2013 (Figure 1.2). The number of workplace accident decreased from 2008 to 2009, increased slightly in 2010, and this pattern continued until 2013. Statistics showed unstable pattern of investigated occupational accidents. The frequency of occupational accident decreased from 2008 in general, but fluctuated each year, which shows that improvement is needed in handling safety and health management and employees' wellbeing in Malaysian manufacturing sector (Surienty, 2012).

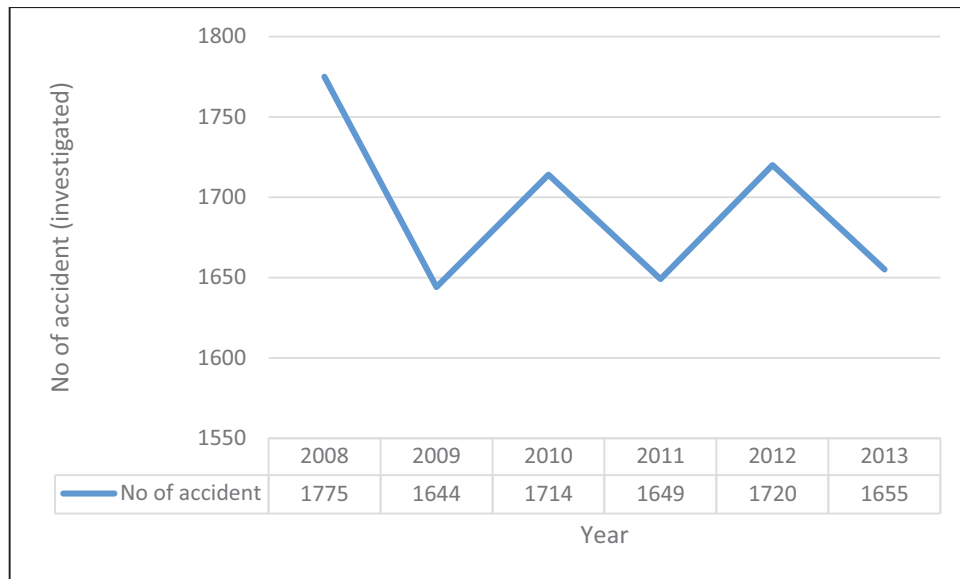


Figure 1.2. Workplace accidents in the manufacturing sector from 2008 to 2013.

(Source: Department of Safety and Health (DOSH), 2014)

Less attention on safety and health management in SMIs in Malaysia has resulted in 80% of reported industrial accidents to come from this sector (Hussin *et al.*, 2008). Zohar (2010) found that over the past three decades, safety climate has been accepted to be important in improving safety in the workplace. It was also shown that safety climate is directly associated with decreased workplace accident and injuries (Huang *et al.*, 2006; Siu *et al.*, 2004; Zohar 2004). However, Bahari (2011) found that only few safety climate studies were conducted in Malaysia, especially in the manufacturing industry. Similarly, Malaysian Department of Occupational Safety and Health (DOSH, 2010) also reported very limited research on safety climate and safety management conducted in Asian countries. Other than safety climate, job satisfaction is also widely acknowledged as a crucial factor affecting organizational performance (Teoh *et al.*, 2011). A study conducted by Dizgah *et al.*, (2012) on public sector in Iran reported the significant effect of job satisfaction on occupational injuries and accident ($p=0.023$).

The 2015 Occupational Safety and Health Master Plan has moved beyond the standard setting (2004-2010) and is now at the enforcement level (2011-2015). Then, it will move towards the preventive level (2016-2020) (Department of Occupational Safety and Health, 2009a). One of the strategies to achieve these goals is to develop the skills and knowledge as well as promote the culture and climate of preventive safety. It is also important to establish a comprehensive safety and health management system in the workplace. This study would help to determine the enforcement level of safety and health management and to promote safety climate in SMIs in Selangor.

To date, few have argued on the impact of safety climate, job satisfaction and safety management in small and medium manufacturing industry in Malaysia.

1.3 Study justification

This study is important as it provides further information on occupational accidents in SMIs in Selangor. In addition, research related to job satisfaction and safety climate perception is highly necessary in Malaysia especially in SMIs to further understand how to handle safety and health in the workplace (Surienty, 2012).

Furthermore, further research is needed to assess occupational safety and health management and the frequency of occupational accidents in Malaysian SMIs because safety management practices in this sector is still in its early stages. All legislation, guidelines and codes of procedure that have been regulated are mainly established to protect workers in the workplace. Therefore, it is important to examine employees' job satisfaction that can directly influence their safety behavior at workplaces. Both of these indicators need further examination to determine their relationships with and effects on occupational accidents in factories.

Findings from this study would also benefit related organizations, the government, and non-governmental organizations interested in this area of study. Measurement of employees' job satisfaction could help to fill the knowledge gap in this area and provide ideas on organizational psychology. In addition, the study would also enable an organization to measure the safety climate perception and prevalence of occupational accidents at their workplaces, thus improving their weaknesses in safety management. The result of this study would contribute significantly to the knowledge on the relationship between safety climate as measured through questionnaire and self-reported accidents in small and medium manufacturing industries.

This study would also benefit researchers and organizations involved. Researchers would gain information regarding safety climate perception, job satisfaction and occupational safety health management in small and medium industries in Selangor, whereas involved organizations would gain knowledge regarding the importance of occupational safety and health management and an employer's responsibility towards safety and health awareness. Most employers have knowledge regarding safety and health of the employees, but it is not implemented accordingly.

In addition, this study would also benefit other interested stakeholders such as the Department of Safety and Health (DOSH) and the National Institute of Occupational Safety and Health (NIOSH) as a reference regarding safety climate perception, job satisfaction and safety management in SMIs in Selangor. Government and non-government bodies interested in this area could also develop deeper understanding regarding the relationships between safety climate, job satisfaction and occupational safety and health management system with occupational accidents in an organization.

Therefore, this study is beneficial from the theoretical, management and also academic perspectives.

1.4 Conceptual framework

Five main factors influence the occurrence of occupational accident, namely (i) personal, (ii) organizational, (iii) others (socio-demographic and location), (iv) job and (v) environmental factors (Khdair *et al.*, 2012; Hughes & Ferret, 2009) (Figure 1.3).

The first factor is personal factors, which can be divided into three main factors: (i) motivation, (ii) attitude, and (iii) perception. Motivation is the driving force behind the way a person act. Job satisfaction is a factor that contributes to the motivation of a person. Job satisfaction can be assessed through certain indicators, including (i) attitude towards the current job, (ii) satisfaction with the current salary, (iii) satisfaction with promotion opportunities, (iv) satisfaction with coworkers, (v) satisfaction with supervisor and (vi) satisfaction with the job in general.

Attitude is the tendency to behave in a certain situation. Attitude is influenced by the prevailing safety climate within the organization, commitment of the management, individual experience and peer group influence. Perception is the way in which human interpret the surrounding environment. Perception of hazard is an important concern in health and safety (Hughes & Ferret, 2007).

Attitude and perception of a person can be influenced by prevailing health and safety climate perception within the organization. By measuring safety climate perception at the organization, it is possible to know the way a person perceives their workplace environment and how the person behave if a risk of injury is present. Safety climate perception is measured by six dimensions, namely (i) management safety priority, (ii) management safety empowerment, (iii) management safety justice, (iv) workers' safety commitment, (v) safety communication and (vi) workers' trust in the efficiency of the safety system.

The second factor is organizational factor. Safety and health management in an organization contributes to injury and accident. Negative characters in human may lead to hazardous act (Shariff, 2007), resulting from a social environment with inadequate occupational safety and health management system. Accidents happen when the management fails to establish the basic occupational safety and health management control and to comply with current law and regulations. The main elements in the occupational safety health management system (OSHMS) are (1) policy, (2) organization, (3) planning and implementation, (4) evaluation and (5) action for improvement.

The third factor is other factors including socio-demographic and geographic factors that affect accident rate. Socio-demographic factors include age, race, marital status, experience and level of education. Geographic factors mean the different locations of the organization that may affect occupational accident frequency due to different methods in handling employees' occupational safety and health. Different locations also have different authorities promoting occupational safety and health awareness among employers and employees.

The next factor is job factors. A job is considered as highly dangerous if the risk of injury is present. The main factors in a job are the workstation (ergonomic) design, and engineering control. Lack of engineering control may contribute to occupational accidents in the workplace (Shariff, 2007). The last factor is environmental factors such as distraction while performing a task, noise and misuse of machinery and tools (Goetsh, 2004).



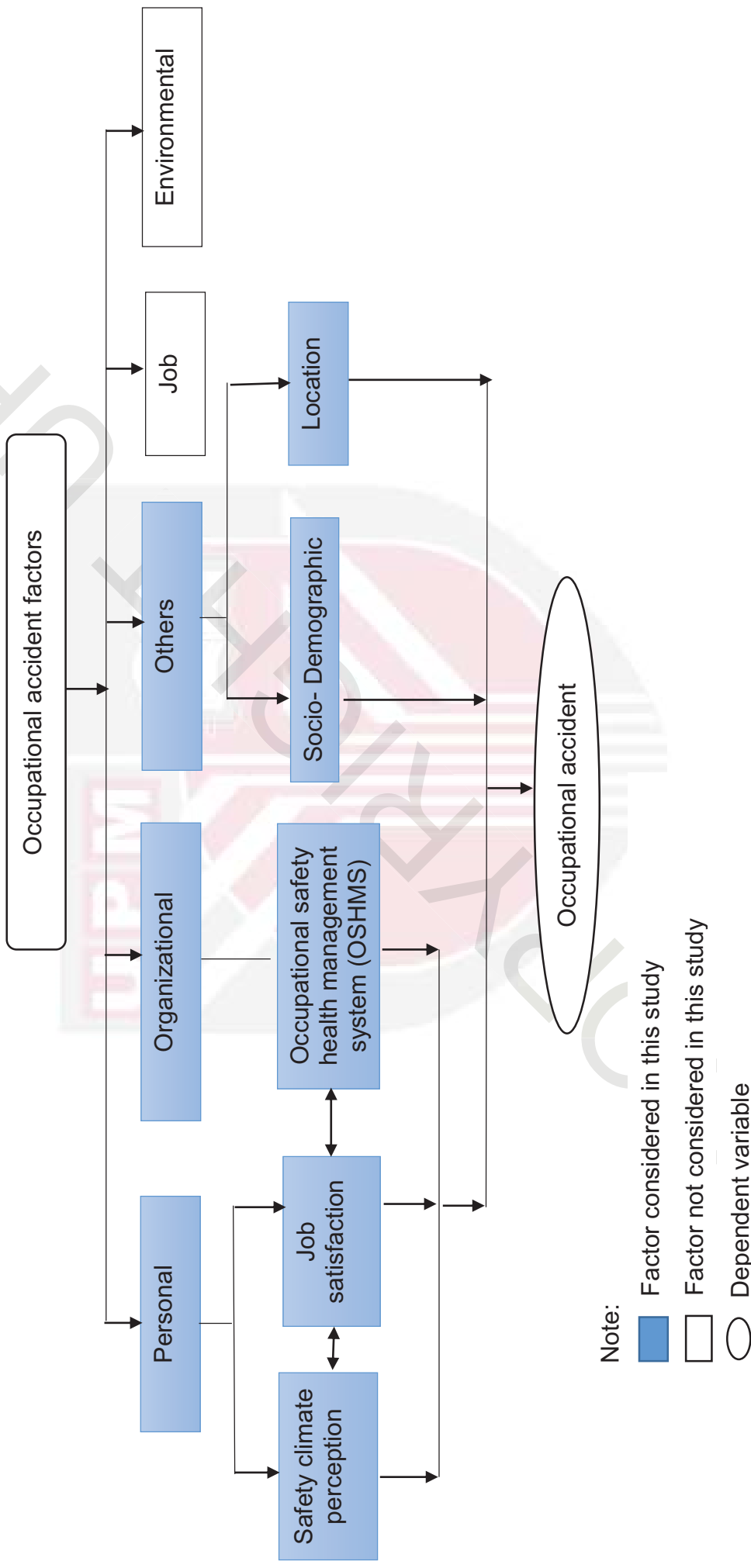


Figure 1.3: Conceptual framework of factors that contribute to occupational accident occurrence in the workplace.

1.5. Research objectives

General Objective

The general objective of this study was to investigate the relationship between safety climate perception, job satisfaction, and occupational safety and health management system (OSHMS) with occupational accidents in selected SMIs in Selangor.

Specific Objectives

In order to achieve the general objective, several specific objectives were aimed, including:

1. To determine the Occupational Safety and Health Management System compliance level, safety climate perception, job satisfaction and occupational accident in selected SMIs.
2. To compare the differences between safety climate perception, job satisfaction, occupational accident and occupational safety health management with socio-demographic of the respondents.
3. To compare the differences between safety climate perception, job satisfaction and occupational accident with the compliance level of occupational safety and health management system.
4. To compare the differences between safety climate perception, job satisfaction, occupational safety health management and occupational accident with the location of the study.
5. To determine the relationship between socio-demographic, safety climate perception, job satisfaction and occupational safety and health management system with occupational accident.
6. To determine the predictors for occupational accident.

1.6 Research hypothesis

Hypothesis 1: There is a significant difference between safety climate perception, job satisfaction, occupational accident and socio-demographic data and working years of the respondents (Objective 2).

Hypothesis 2: There is a significant difference between safety climate perception, job satisfaction and occupational accident with the compliance level of occupational safety and health management (Objective 3).

Hypothesis 3: There is a significant difference between safety climate perception, job satisfaction, occupational safety health management and occupational accident with the location of study (Objective 4).

Hypothesis 4: There is a significant relationship between socio-demographic and occupational accident (Objective 5).

Hypothesis 5: There is a significant relationship between safety climate perception and occupational accident (Objective 5).

Hypothesis 6: There is a significant relationship between job satisfaction and occupational accident (Objective 5).

Hypothesis 7: There is a significant relationship between occupational safety and health management system and occupational accident (Objective 5).

1.7 Scope of the study

In many countries, occupational accident is a major problem in public health (Saha *et al.*, 2004). The main focus in this study was to determine the factors that contribute to occupational accident occurrence at small and medium industries in Selangor localities. The occupational accident factors involved in this study were employees' perception on safety climate, employees' job satisfaction, occupational safety and health management in the organization and other factors including employees' socio-demographic and location of the organization.

1.8 Definition of terminologies

1.8.1 Safety Climate

Theoretical definition

The measurement of temporal state of a safety culture is subjected to the commonalities among individual's perception on the organization. Safety climate is based on the perceived state of safety at a particular time and place, which changes depending on the features of the current environment and fundamental conditions (Wiegman *et al.*, 2002).

Operational definition

In the context of this study, safety climate is defined as a measurement of shared perceptions of management safety priority, management safety empowerment, management safety justice, workers' safety commitment, safety communication and workers' trust in the efficiency of the safety system using Nordic Safety Climate Questionnaires (Kines *et al.*, 2011).

1.8.2 Job satisfaction

Theoretical definition

Job satisfaction refers to the attitude and feelings a worker has regarding his or her job. Positive attitudes towards one's job indicate job satisfaction, while negative attitudes indicate job dissatisfaction (Armstrong, 2006)

Operational definition

Job satisfaction includes a number of indicators, namely attitude towards the present job, satisfaction with the pay, satisfaction with promotion opportunities, satisfaction with co-workers and satisfaction with the supervisor (Ilham, 2009).

1.8.3 Occupational safety and health management system

Theoretical definition

A set of interrelated or interacting elements to establish occupational safety and health policy and objectives (MS1722: Part 1: 2005).

Operational definition

In the context of this study, occupational safety and health management system is a measurement on the combination of organizational management, planning and review, and safety program arrangement to improve safety and health performance at the organization using a safety audit checklist adapted from Malaysian Society of Occupational Safety and Health.

1.8.4 Occupational accident

Theoretical definition

Occupational accident is defined as a hazard materializing in a sudden and probabilistic event with adverse consequences (accident) that occurs in a working life context and the consequences are limited to injuries on involved workers. Injuries are classified based on the nature of injury, affected bodily parts and severity of injury (Hovden *et al.*, 2008).

Operational definition

In the context of this study, occupational accident is defined as the frequency of occurrence of any accident, incident or near-misses in the workplace within the last six months after this study began using self-reported measurement questionnaire.

1.8.5 Incident

Theoretical definition

Work related events in which an injury or ill health or fatality occurred, or could have occurred (OHSAS 18001:2007).

Operational definition

In the context of this study, incident is defined as any accident, dangerous occurrence and near miss that arises from or in the course of the work being measured by self-reported questionnaire.

1.8.6 Near miss

Theoretical definition

Near miss is defined as an unsafe occurrence arising from or in the course of the work where no personal injury or property damage is caused. (MS 1722: Part 1:2005).

Operational definition

In this context, near miss is defined using self-reported questionnaire that refers to an incident, where personal injury or property damage is narrowly avoided, and if this unsafe condition continues, injury or accident may occur (Clancy *et al.*, 2011).

1.9 Limitations of Study

Similar to other research, this study also had several limitations. Findings obtained from this study should be viewed in consideration of the limitations shared by most correlational studies that relied on self-reported data from questionnaires.

The first limitation was that this study was a cross-sectional study and all measures were collected during the same period of time. Therefore, it can only provide a static perspective on the study and hence, establishing a sequential relationship between predictors and outcomes was admittedly difficult. Therefore, future research should replace the findings in this study with longitudinal data. The findings also may not be applicable for other countries.

The second limitation was due to the self-reported measurement used in this study. Since all measures were self-reported, it introduced the possibility of common method bias. Thus, there is a possibility for the findings to be distorted by participants' desire to respond in a consistent manner. However, Gyekye (2006) reported that self-reported measures have been effectively used in accident and safety analysis. In addition, the main purpose of self-

reported accident in this study was not to determine the actual number of accidents, but to show the patterns and changes in self-reported accidents in small and medium manufacturing industries in Selangor.

The third limitation was due to the time given to answer the questionnaires. The questionnaires distributed to the employees were collected either on the same or the next day after they were completed. It depended on the availability of the respondents since their main priority was their job. To overcome the possibility of bias when answering the questionnaires, all questions were constructed in simple and easy sentences for easier understanding by the respondents.

The other limitation was the selection of study location. Only two districts in Selangor were selected, and it did not represent the entire small and medium industries in Selangor. Therefore, an additional area for future research is to represent a more complete scenario in small and medium industries in Selangor. Such research would confirm the initial conclusion presented in this study.



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