

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**COMPLIANCE ON SAFETY BEHAVIOUR AMONG POLICE OFFICERS
IN ROYAL MALAYSIA POLICE (RMP)**



NORHIDAYA BINTI MOHAMAD OTHMAN

UUM
Universiti Utara Malaysia

**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Partially of the Requirement for the
Master of Science (Occupational Safety & Health Management)**



Othman Yeop Abdullah
Graduate School of Business

Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PENYELIDIKAN
(Certification of Research Paper)

Saya, mengaku bertandatangan, memperakukan bahawa
(I, the undersigned, certified that)

NORHIDAYA BINTI MOHAMAD OTHMAN (808299)

Calon untuk Ijazah Sarjana
(Candidate for the degree of)

MASTER OF SCIENCE (OCCUPATIONAL SAFETY & HEALTH MANAGEMENT)

Telah mengemukakan kertas projek yang bertajuk
(has presented his/her project paper of the following title)


**COMPLIANCE ON SAFETY BEHAVIOUR AMONG POLICE OFFICERS IN ROYAL
MALAYSIA POLICE (RMP)**

Seperti yang tercatat di mukasurat tajuk dan kulit kertas projek
(as it appears on the title page and front cover of the project paper)

Bahawa kertas projek tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang
ilmu dengan memuaskan.

(that the project paper acceptable in the form and content and that a satisfactory knowledge of the field
is covered by the project paper).

Nama Penyelia : **MADAM NORIZAN BT. HAJI AZIZAN**
(Name of Supervisor)

Tandatangan : 
(Signature)

Tarikh : **7 MAY 2017**
(Date)

PERMISSION TO USE

In presenting this thesis in fulfilment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this thesis in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s) or in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my thesis. It is understood that any copying or publication or use of this thesis or parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my thesis. Request for permission to copy or to make other use of materials in this thesis in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

DISCLAIMER

I declare that the substance of this project paper has never been submitted for any degree or post graduate program and qualifications.

I certify that all the supports and assistance received in preparing this project paper and all the sources abstracted have been acknowledge in this stated project paper.

NAME: NORHIDAYA BINTI MOHAMAD OTHMAN

MATRIX NO.: 808299

School of Business Management

College of Business

Universiti Utara Malaysia

06010 Sintok

Kedah DarulAman



UUM
Universiti Utara Malaysia

ABSTRACT

Very few studies focusing on safety behaviour among police officers in Malaysia have been conducted. Thus, this study was an attempt to determine the impacts of certain factors on safety behaviour compliance among police officers in Royal Malaysia Police (RMP) in particular those who are directly involved with operational tasks. The focus of this study was to examine the influence of job safety, co-worker safety, supervisor safety, management safety and satisfaction of safety programme /policies, on safety behaviour compliance among the RMP officers. This quantitative study utilized the five facets of Work Safety Scale (WSS) (Hayes *et al.*, 1998) questionnaire to measure perceptions on safety at work. 178 police officers from the Kuala Lumpur Police District were included in this study. The findings showed that co-worker safety, supervisor safety, management safety and safety programme were significantly related to compliance on safety behaviour. However, job safety is not significantly related to safety behaviour. Recommendations and suggestion for future study were also discussed.



UUM
Universiti Utara Malaysia

ABSTRAK

Tidak banyak kajian yang dilakukan tentang gelagat keselamatan dalam pekerjaan di kalangan pegawai polis di Malaysia. Oleh itu, kajian ini bertujuan untuk menentukan impak beberapa faktor terhadap kepatuhan gelagat keselamatan di kalangan pegawai Polis DiRaja Malaysia (PDRM) terutama mereka-mereka yang terlibat dengan tugas-tugas operasi. Fokus kajian ini adalah untuk melihat pengaruh keselamatan pekerjaan, keselamatan rakan sekerja, keselamatan penyelia, keselamatan pengurusan dan kepuasan terhadap program/polisi keselamatan terhadap kepatuhan gelagat keselamatan di kalangan pegawai polis. Kajian kuantitatif ini menggunakan kelima-lima aspek *Work Safety Scale* (WSS) (Hayes *et al.*, 1998) untuk mengukur persepsi terhadap keselamatan di tempat kerja. 178 pegawai polis dari Ibu Pejabat Polis Kuala Lumpur terlibat dalam kajian ini. Dapatan kajian menunjukkan bahawa keselamatan rakan sekerja, keselamatan penyelia, keselamatan pengurusan dan kepuasan terhadap program keselamatan mempunyai perhubungan yang positif dan signifikan terhadap kepatuhan gelagat keselamatan. Keselamatan pekerjaan didapati tidak mempunyai perhubungan yang signifikan terhadap gelagat keselamatan. Cadangan dan implikasi untuk kajian dan masa depan juga dibincangkan.



UUM
Universiti Utara Malaysia

ACKNOWLEDGEMENT

Thanks to Almighty Allah for giving me such a great strength, patience and courage to finally complete this thesis.

I would like to express my appreciation and gratitude to those who have contributed to the completion of this thesis.

It was such a privilege to have Madam Norizan Binti Hj Azizan as my supervisor throughout this study. I could never thank her enough for her unwavering guidance and support during this trying times as I struggled to complete my thesis. I would like to take this opportunity to thank another important person whom had made this thesis possible. He is none other than Dr. Chandrakanthan Subramaniam, thank you Sir for your valuable help in SPSS analysis.

Not forgetting my dear family, friends and senior officers whom had always been there for me since the beginning of this incredible journey.

Last but not least, I would like to express my gratitude to my UUM family. It was such a pleasure to meet such a great people of UUM. Thank you for all the help and guidance. Thank you for all your prayers, patience, support, and word of encouragement for me to keep going till the final end of this journey. I am truly indebted.

TABLE OF CONTENT

	Page
Permission to use	i
Disclaimer	ii
Abstract	iii
Acknowledgments	iv
Table of contents	v
List of Tables	viii
List of Figure	ix
 CHAPTER 1	 INTRODUCTION
1.1	Background of the Study 1
1.2	Problem Statement 7
1.3	Research Question 9
1.4	Research Objectives 10
1.5	Significance of the Study 11
 CHAPTER 2	 LITERATURE REVIEW
2.1	Introduction 13
2.2	Emprical Study on Safety Performance 13
2.3	The Relationship between Workplace Safety Scale (WSS) and Workplace Safety Scale (WSS) and Safety Performance 23
2.3.1	Job Safety on Safety Performance 23
2.3.2	Co-worker on Safety Performance 28
2.3.3	Supervisor Safety on Safety Performance 31
2.3.4	Management Safety on Safety Performance 34
2.3.5	Satisfaction of Safety Programmes on Safety Performance 35
2.4	Summary 36
 CHAPTER 3	 METHODS
3.1	Introduction 38
3.2	Framework 38

3.3	Conceptual Defination	39
3.4	Operational Defination	40
3.4.1	Independent Variables	40
3.4.2	Dependent Variables	42
3.5	Instrument Scale	42
3.6	Population	43
3.7	Pilot Test	43
3.8	Data Analysis	44
3.9	Summary	45
CHAPTER 4	RESULTS AND DISCUSSIONS	
4.1	Introduction	46
4.2	Response Rate	46
4.3	Profile of Respondents	46
4.4	Reliability Analysis	49
4.5	Correlations Measurement	49
4.6	Regression Analysis	50
4.7	Discussion	52
4.7	Summary	52
CHAPTER 5	CONCLUSION & RECOMMENDATION	
5.1	Introduction	54
5.2	Recapitlation of Results	54
5.3	Discussion	55
5.3.1	Job Safety with Compliance Safety Behaviour	55
5.3.2	Co-worker Safety with Compliance Safety Behaviour	55
5.3.3	Supervisor Safety with Compliance Safety Behaviour	57
5.3.4	Management Safety Practices with Compliance Safety Behaviour	58
5.3.5	Satisfaction of Safety Programmes with Compliance Safety Behaviour	58
5.4	Implication	59
5.4.1	Co-worker Safety	59
5.4.2	Supervisor Safety Programmes	60
5.5	Conclusion	62
REFERENCES		65
APPENDIX A:	WSS of the five facets	72
APPENDIX B:	The Compliance Safety Behaviour	80
APPENDIX C:	SPSS Output	82

List of Tables

3.1	Tested Alphas of Variables – Pilot Study	44
4.1	Demographic Scale of Respondents	48
4.2	Reliability coefficients for each variable	49
4.3	Pearson correlation coefficients analysis results	50
4.4	Linear regression results	51



UUM
Universiti Utara Malaysia

List of Figures

3.1 Framework of the Study

39



CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The Royal Malaysia Police (RMP) or *Polis Diraja Malaysia (PDRM)*, is a (primarily) uniformed federal police force in Malaysia. The force is a centralised organisation with responsibilities ranging from traffic control to intelligence gathering. Policing is a complex occupation. Differences in job design and in the wider societal context within which police work occurs, adds to the complexity of policing. Hunnur and Sudharshan (2014) emphasized that the police force is one of the most vital and toughest departments where the job requires that police officers work around the clock to safeguard the community and upholds the nation's sovereignty.

Due to the complexity of policing, police officers are exposed daily to occupational hazards which may be much higher compared to other professions. Aside from dealing with constant and potentially dangerous individuals and situations, many police officers feel a significant level of stress from the organization (Magenthiran, 2016). Organizational and work-related factors have been found to affect stress levels amongst police officers. Factors, such as fatigue due to work shifts, workforce shortages as well as co-workers' relationship, are found to be more stressful than the perceived risk of violence or exposure to traumatic events that is inherent to police work (Youngcourt & Huffman, 2005).

Police often encounter stressful situations in their daily work, and these stressors have cumulative effects. These stressful situations, such as dangerous

missions, overloaded shift hours, hierarchical and disciplined structure and lack of understanding from family, could affect their behavioural, psychological, and physical conditions, as well as their relationships, which subsequently can adversely influence their job performance and safety at work (Jayesh, 2014).

Jayesh (2014) classified the problems encountered daily by police officers as highly dangerous whereby officers may encounter violent criminals or may need to use weapons in their work. While performing in such situations, police officers may behave in ways that could harm their own safety and others. Ali, Abdullah & Subramaniam (2009) found that 88% of workplace accidents and injuries were caused by unsafe behaviours and actions. The way employees react and behave to certain events or hazards could lead to unsafe work practices, workplace accidents or injuries.

In general, there are five types of hazards, namely physical hazards, chemical hazards, biological hazards, ergonomics hazards and psychosocial hazards. Physical hazards arise from the physical environment. Physical hazards may be visible as for example, a person with a weapon, or completely invisible to the naked eye, like radiation. Chemical hazards may originate from several sources including, for example, furnace fumes or car exhaust. Biological hazards may involve micro-organisms which may come from experimental material used in laboratories or from contact with humans or human cells carrying communicable diseases like HIV/AIDS and hepatitis A, B or C. Ergonomic hazards involve risk of injury to the musculoskeletal system of the worker. Ergonomic hazards arise from uncomfortable working positions or heavy physical tasks. An example of an ergonomic hazard is sitting in a police patrol car for long hours. The final category of workplace hazards is

psychosocial hazards, which can involve difficulties with supervisors or fellow workers, such as sexual harassment, but may also result from the perception of other types of risks such as, the fear of acquiring HIV/AIDS (Uryan, 2010).

Another problem faced by police officers that relates to the characteristics of their job is fatigue. Fatigue affects mental and/or physical state resulting from insufficient quality sleep or from prolonged or intense physical, emotional or mental interfere with decision making (Youngcourt & Huffman, 2005). Research has also shown that fatigue tends to undermine a person's ability to make sound decisions, control his or her emotions and behaviour at work, as well as work performance. During periods of high activity, fatigue tends to increase accident proneness.

Safety behaviour compliance involves adhering to safety procedures and carrying out work in a safe manner. Safety participation involves helping co-workers, promoting safety programme within the workplace, demonstrating initiative and putting effort into improving safety in the workplace. Model of safety performance was introduced based on current theories of job performance (Neal & Griffin, 2002). Organizational factors, such as job factors, policies and practices, and training programs, as well as human factors such as supervisors and co-workers, were some of the factors highlighted to affect safety behaviour and safety performance at the workplace.

Occupational accidents are the result of random combination of factors found in the workplace. Factors including organizational and social factors are also found to have some influence towards workplace safety behaviours (Choudhry & Fang, 2008). Majority of workplace accidents and injuries were due to unsafe behaviour of the employees rather than unsafe work environment (Mullen, 2004). Smith and DeJoy

(2014) found that safety climate at the workplace affected safety behaviour among employees. They also found that safety compliance behaviour and safety participation behaviour could reduce workplace injuries and accidents.

1.2 Problem Statement

Studies have highlighted the importance of a strong safety culture in ensuring both the organization and employees achieve a high standard of safety in the workplace (Smith and DeJoy, 2014). They added that there is a need for studies to be conducted to improve safety behaviour compliance and avoid unsafe workplace. Safety behaviours could lead to safety performance. Factors such as job overloaded and fatigue could add pressure in ensuring safety behaviour and performance. Organizations are more concerned with work performance rather than safety (Uryan, 2010).

Police officers are exposed to a variety of risks and threats which could increase workplace accidents and injuries. For instance, traffic police work around the clock to ensure the streets are safe. While doing their daily routine, they are exposed to assaults (physical attacks), being hit by a car, overexertion injuries such as sprains and strains, stress which might cause mental health such as post-traumatic stress after witnessing a traumatic event, and also exposure to radiation from traffic radar devices.

Very few studies focusing on safety behaviour among police officers in Malaysia have been conducted. Thus, this study was an attempt to determine the impacts of certain factors on safety behaviour compliance among police officers in

Royal Malaysia Police in particular those who are directly involved with operational tasks.

Safety behaviour among police officers in Royal Malaysia Police is really important to reduce workplace accidents and injuries. As such, the RMP occupational safety and health system, *Sistem Pengurusan Keselamatan Dan Kesihatan (SKKP)*, was launched in 2015 by Inspector General Tan Sri Dato' Sri Khalid Bin Abu Bakar, as a guideline for all employees.

Occupational injury is the second most critical issue at the workplace (Haslam et al, 2016). Workplace injuries due to at-risk work behaviour remain a significant problem (Smith and DeJoy, 2014). More emphasis is now being directed on examining the main causes to safety failures due to human error since human factors play a significant role in safety performance (Neal & Griffin, 2002).

In order to combat the ever-present threat of employee injury and associated losses, it is critical for the Royal Malaysia Police (RMP) to identify factors which could lead towards unsafe behaviours amongst police officers. The outcome from this study might be a reference on how to improve and to enhance the acceptance of safety culture among police officers in general. Therefore, the compliance safety behaviour among police officers in RMP will be conducted in this study.

1.3 Research Questions

The focus of this study was to examine the influence of the five facets of Work Safety Scale (WSS) (Hayes *et al.*, 1998) on safety behaviour compliance among the RMP officers. This study attempted to answer the following research questions:

- a) What is the relationship between job safety and compliance safety behaviour among RMP officers?
- b) Is there a relationship between co-worker safety and compliance safety behaviour among RMP officers?
- c) Does supervisor safety have a relationship with compliance safety behaviour among RMP officers?
- d) Is there a relationship between supervisor safety and compliance safety behaviour among RMP officers?
- e) Does satisfaction with safety programme affect compliance safety behaviour among RMP officers?

1.4 Research Objectives

Specifically, this study intended to:

- a) determine the relationship between job safety and compliance safety behaviour among RMP officers;
- b) examine the relationship between co-worker safety and compliance safety behaviour among RMP officers;
- c) establish the relationship between supervisor safety and compliance safety behaviour among RMP officers;
- d) determine the relationship between supervisor safety and compliance safety behaviour among RMP officers; and
- e) examine the relationship between satisfaction with the safety programme and compliance safety behaviour among RMP officers.

1.5 Significance of the Study

The findings of this study could provide a better understanding on the factors which affect compliance of safety behaviour among police officers. It can be used to review the current safety policies and practices to improve perception on safety behaviour in the workplace and help reduce risks.

The study also can be used by management to enhance the manual of occupational safety and health in Royal Malaysia Police. This study will provide important and specific information of safety effectiveness, and influencing factors on safety perception among police officers in ensuring a safer workplace. The findings can be used in future study as a reference in other agencies facing similar risks.

1.6 Organization & Structure of the Thesis

Chapter One discussed the background of the study and the problem statement, as well as the research questions and research objectives.

Chapter 2 highlighted past studies related to the safety compliance behaviour, job safety, co-worker safety, supervisor safety, management safety practices and satisfaction with safety programs.

Chapter 3 focused on the research design, research framework, population and sampling, instrument, data collection and data analysis.

Chapter 4 reported the findings of the study.

Chapter 5 discussed the findings of the study. Recommendations and future research suggestions were given.

1.7 Summary

Police officers are exposed daily to occupational hazards. Police often encounter stressful situations in their daily work which subsequently can adversely influence their job behaviour and safety at work. Hence, this study attempted to examine factors which could reduce unsafe job behaviours amongst police officers at the Royal Malaysia Police (RMP).



UUM
Universiti Utara Malaysia

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter discussed the five independent variables namely job safety, co-worker safety, supervisor safety, management safety practices and satisfaction with safety programs and their impacts on the dependent variable, compliance on safety behaviour. Past studies related to the variables were examined.

2.2 Safety Behaviour Compliance

Workplace accidents lead to problems for organizations. For instance, other employees have to cover the tasks of those involved in the accidents especially when they are injured. It also involves costs to organizations, including medical expenses. Safety behaviour defines in terms of safety compliance and safety participation (Neal and Griffin, 2006). Safety compliance refers to the core activities that individuals need to carry out to maintain workplace safety. Safety participation describes the behaviour that do not directly contribute to an individual personal safety but that do help to develop an environment which supports safety.

Safety behaviour is referred to as employee compliance to the organisation's safety policies, rules and regulation, as well as employee participation in safety programs and efforts (Neal & Griffin, 2002). Safety compliance is directly contributed to personnel safety and represents the core activities that need to be performed to maintain workplace safety. The basic compliance is requirement for the use of personnel protective equipment which is enforced by many organizations and also mandated by authority under the Occupational Safety and Health Act, 1994. Safety participation described the behaviours that do not directly contribute to

employee personal safety but help to create an environment that support safety at workplace.

Employee behaviours at the workplace have some influence on organizational effectiveness (Campbell, 1990). Productive work behaviour contributes positively to the organization. According to Jex and Britt (2008), productive work behaviours are related to work performance, organizational citizenship behaviour and innovation.

Meanwhile, counterproductive behaviour at work contributes negatively to organizational effectiveness. Accordingly to Motowidlo (2003) counterproductive behaviours could lead to poor work performance for individuals who behaved negatively. Cumulative effects could be hurtful to the organizational performance.

Job behaviour influences employee performance. To ascertain work safety, employees must behave according to the rules and regulations, and policies and practices set by the organizations. However, certain occupations cannot escape exposures from potential risks and hazards which could lead to work injuries and accidents. This includes occupations such as policemen, firemen, and soldiers.

Safety behaviour can be influenced by many factors including leadership, safety perception, training programme, inspection and enforcement. Management leadership style should be visionary, flexible, innovative and responsive. Through such management style, organizations will be able to respond quickly to changes to gain competitive edge. Leadership is one of the important predictors of good safety performance. Organizations that achieve optimal safety performance have effective safety performance leadership. These organizations applies visionary leadership from the top down, which aligns and applies performance leadership throughout the organization.

Employee participation can also influence safety behaviour compliance. It is important for employers to implement safety programmes and activities constantly and consistently that encourage active employee involvement. Employee involvement will ascertain that every member of the organization embraces safety as a core value. Employee participation provides the means, through which employees recognize and manage hazards, recommend and monitor solutions if necessary, or participate in their own safety program. Employee involvement is desirable in influencing safety behaviour and safety performance at work.

Training provides employees the opportunity to learn new skills and knowledge. Training is necessary for employees to perform their jobs effectively and safely. Hence, training must cover the safety responsibilities of all employees to ensure that they comply with those responsibilities. Organizations that achieve optimal safety performance have effective safety training programs.

Inspecting and assessing physical conditions and people's actions are necessary to identify workplace hazards. Regular safety inspections are essential to ensure compliance with safety legal requirements and standards in the organizations. A safety inspection program can locate potential hazards than can adversely affect safety behaviours among employees. Management is responsible to perform inspections. Effective and periodic inspections can lead to better safety performance and an opportunity for sharing experiences.

Safety is a major concern for organisations as the impacts can be costly to organizations (Neal & Griffin, 2002). Organizations need to manage safety on a proactive basis in order to improve safety for individuals at work and prevent significant financial loss (Giovanis, 2010).

Models and approaches of human error have been developed to examine employee work behaviours leading to accidents. According to Rasmussen (2003), 70%-80% of industrial accidents were partly caused by human factors. Other factors like work requirements and work systems, as well as mechanical errors, were some of the other causes to workplace accidents. Reason (1990) explained that unsafe behaviours or acts can be influenced by a chain of events, including failures such as management decision and organizational processes; and working conditions such as workload, supervision, communication, equipment and ability. Unsafe acts or behaviours can lead to accidents or adverse outcomes.

Reason (1990) identified two types of work behaviours which could lead to undesirable outcome or work performance. Human failures, as Reason (1990) termed it, could be caused by human slips i.e. misapplied competencies or know-how; and human mistakes, i.e. expertise or rule-based failure, or lack of expertise or knowledge. Unsafe behaviours which do not comply with organizational safety policies, rules and regulations can lead to negative work performance.

Sawacha *et al.* (1999) reported several factors associated with work safety. Management must constantly remind employees the importance of safety at work. For instance, site managers and supervisors must have regular talks with site workers to ensure safety behaviour compliance. Employees must be given booklets or employee handbooks which include safety rules and regulations, as well as safety policies and practices. Required safety equipments should be provided to employees. Employees must use the correct type of protective equipment and clothing, and must be trained to ensure safety performance is adhered to. Management must ensure a safe working environment and climate to avoid workplace injuries or accidents. Trained safety representatives must be assigned on site. A well-trained safety representative on site

can improve safety performance by undertaking fault spotting and insisting on corrective actions being taken of (Sawacha *et al.*, 1999).

Yang *et al.* (2009) found that factors like top management's poor safety awareness, lack of training, failure to provide and use safety equipment and clothing, as well as negligence and reckless (unsafe) behaviours were the main causes of workplace accidents. They found that most Chinese contractors failed to use the proper system as laid down in the safety manual. Only a small percentage provided adequate personal protective equipment for their workers and offered systematic safety training. Essentially, the management lacked emphasis on safety as revealed by their infrequent attendance at safety meeting.

2.3 The Workplace Safety Scale (WSS)

This study examined the relationship between compliance safety behaviour and five independent variables which are the facets in the Workplace Safety Scale (WSS) developed by Hayes *et al.* (1998). The independent variables are job safety, co-worker safety, supervisor safety, management safety and satisfaction of safety programme / policies.

Safety performance focuses on work safety practices including policies, strategies, rules and regulations, procedures and activities which the organization implemented or followed to enhance workplace safety (Vinodkumar & Bhasi, 2010). Safety practices are followed to reduce workplace accidents and injuries, as well as deaths due to work-related mishaps. Hayes *et al.* (1998) categorized workplace safety practices into five categories, namely

1. Job safety – the extent to which employees perceive that the job they perform are safe (i.e. whether the job is perceived to be unsafe, hazardous, daunting etc.).
2. Co-worker safety – the extent to which co-workers are perceived to follow and comply with safety work behaviour (i.e. whether they observe safety rules or persuade others to comply with safety rules, regulations and procedures)
3. Supervisor safety – the extent to which the supervisor is perceived to observe and comply with workplace safety-related behaviour (i.e. whether he/she enforces safety rules and regulations, follows safety procedures, acts on safety suggestions etc.)
4. Management safety – the extent to which management is perceived to design and enforce safety culture at work (i.e. includes rewarding safe behaviour, providing safe working conditions etc.)
5. Satisfaction with safety program – the extent to which safety programs conducted are perceived to be satisfactory (whether the safety program is perceived to be clear, worthwhile, important etc.).

In general, the five facets of workplace safety reflect the level of workplace safety practices carried out in organizations. Employees could have different perceptions with regards to the different aspects of safety at work, which can lead to safety work behaviour or unsafe work behaviour.

Safety practices cover various safety dimensions; hence, it is important to scrutinize the impacts of each dimension in order to encourage employees to comply with safety behaviour at the workplace. By doing so, not only can we enhance our understanding of the extent of safety practices can impact safety compliance behaviour, more effective measures can be implemented as organizations have scarce and limited resources. Therefore, this study was conducted with to examine the

workplace safety practices, as measured by Hayes and his associates (1998), in influencing employee compliance with workplace safety behavior.

2.3.1 Job Safety

The level of safety at work can be influenced by the working environment, the conditions that people are required to work in and the nature of their work. This in turn, can affect work performance and productivity, as well as the employees' health and well being. Job safety includes the work nature or environment that protects every worker from any unwanted work-related injuries, mishaps or accidents (Giovanis, 2010). Employees' perceptions of safety on the job are generally related to accident occurrences; i.e. positive perceptions on job safety are normally associated with very few work-related accidents. Workers' perceptions on work safety have been regarded as a principal guide to safety performance.

Past studies indicated that workers with negative perceptions on their work safety are inclined to behave unsafely when performing their jobs. This in turn could increase the possibilities of workplace accidents (Giovanis, 2010; Gyekye, 2005). Giovanis (2010) also added that employees with job insecurity, higher job risks, and involved with hazardous materials and operations, have recorded a relatively higher accident involvement rate. In contrast, workers with positive perceptions regarding their work safety have expressed greater job satisfaction, reported higher compliance with safety behaviours, and registered fewer accidents (Gyekye, 2005).

Gyekye and Salminen (2004) used the Work Safety Scale (WSS) to study the causal attribution of Ghanaian industrial workers for accident occurrences. The finding revealed that job accident occurrences were mainly caused by human error and environmental factors.

A study on Occupational Safety and Health Management System (OSHMS) guideline compliance had been conducted among medical laboratories in Klang Valley (Anuar, Zahedi, Kadir & Moktar, 2008). The objective of this study was to measure the compliancy level of national occupational safety and health management system guidelines among medical laboratories in Malaysia. It involved in-depth investigation for occupational safety and health measurements in job management elements such as policy, organising, planning and implementation, evaluation and action for improvement.

It was carried out on 17 public medical laboratories and 17 private medical laboratories in Klang Valley by selecting samples that consists of seven executives, 52 managers and 53 supervisors to assess the level of compliance for national OSHMS guidelines in the medical laboratories. The findings reported that job safety influenced behaviour compliance with regards to OSHA and organizational safety policies, rules and regulations. In other words, employees who perceived job safety as important would behave safely on the job and would comply to OSHA and organizational safety policies, rules and regulations. The study also reported a significant difference between private medical laboratory and public medical laboratory, and between medical laboratories that were accredited and non-accredited with MS ISO 15189 with regards to job safety perceptions.

2.3.2 Co-Worker Safety

Haslam *et al.* (2016) found that workers who perceived a high level of organisational concern and support and are satisfied with workplace conditions, felt a sense of indebtedness and a need to reciprocate in terms that will benefit their organisations / management.

Socializing is one factor which could influence employees' safety behaviours at the workplace. A study on this factor was advanced to investigate factors that influence individual safety behaviour at work place (Mullen, 2004). The findings had revealed that organizational factors and social factors clarified why individuals were involved in unsafe work practices. The factors were categorized into common themes such as roll over, performance over safety, socialization influences, safety attitudes and perceived risks for organizational factors.

As for social factors, this element composed of image savings and avoiding negative consequences such as teasing from co-workers and fear of losing a good position. Both factors were caused from the worker's socializations with their closest encounter for peers and colleagues which then transform their safety behaviour in the workplace.

Managers are responsible to enhance positive co-worker relationships as it could affect organizational commitment and also improve team development, group functioning and cohesiveness but if he failed, this would lead to subgroup polarity, caused problems in managing tension among co-workers reduce organizational commitment (Gyekye, 2005). He added that another finding reported the influence of co-worker on other employees' work attitudes. It was discovered that diversity in co-worker relationships could lead to negative influence on safety behaviour and safety performance. For instance, co-workers from different countries might have communication problems. Thus, certain information may get twisted or misinterpreted. This could cause misunderstanding of job requirements including safety policies and procedures.

Zohar (2008) studied on transformational leadership and group networking interaction analysis to explore the long assumed effects of leadership and group

interaction towards safety performance and climate. The major findings of the study presented that the effect of the transformational leadership on safety-climate strength was arbitrated by the density of communication network.

2.3.3 Supervisor Safety on Safety Performance

Supervisors are an important part of manufacturing organizations and play an increasingly critical role in delegating job tasks, managing subordinate performance and juggling competing demands for productivity, quality and safety and they are also seen as having a key role in communications between management and hourly employees.

Supervisors are increasingly important to the functioning of manufacturing operations, in large part due to their role as lead. While supervisor's relations and communication with their subordinates are known to be important in influencing subordinate's behaviour, little is known about how these two factors will impact subordinate's safety (Cox *et al.*, 2004). Results from this study further emphasized the importance of supervisors and illustrated the role of supervisors in enhancing workplace safety. Specifically, organizations should foster positive social exchange between their employees and supervisors and enhance the leadership qualities of supervisors to help reduce workplace injuries.

Zohar (2008) revealed that transformational and constructive (contingent-reward) leadership foresee injury rate in organizational subunits. Safety priority dispersed by higher superiors moderate the leadership-safety relationship with the present of interaction depending on leadership dimension.

Zohar (2008) stated that the visibility of the supervisors at work could determine the work safety and employee's behaviour. When employees know that

their supervisors are around and observing them performing their work, they will behave in compliance with safety rules and regulations. Employees will be more careful when working. Hence, their safety behaviour in compliance with the safety policies and rules could avoid workplace accidents or injuries.

The survey also found that constant monitoring by supervisors, such as through random observation schedule and inspecting work samples, would significantly influence compliance of safety behaviours among employees. The findings reported a significant impact of supervisory safety interventions on employee safety behaviours. The result of the leader's interaction is similar to the outcome of their safety orientation on the employees' safety climate and safety conduct.

2.3.4 Management Safety

Workplace injuries due to unsafe work behaviours remain a significant problem for organizations. Many studies recognized the importance of a strong safety culture in ensuring the workplace is safe for everyone (Haslam, 2016). The management is responsible in setting up the safety policies, strategies and procedures to ensure all safety rules are adhered to.

Idoro (2008) investigated the level of effort made by the Nigerian contractors to maintain a healthy and safe work environment. The objectives are to determine the level of management efforts made by contractors on health and safety (H&S), and their correlation with H&S performance. The result revealed that contractors efforts on managing H&S on site were significantly correlated with H&S performance. Management safety effort in the provision of personal protection equipment (PPE) to employees had a significantly strong correlation with employee compliance with

H&S regulations. The findings indicated that the management efforts by Nigerian contractors to ensure a healthy and safe work environment have a positive impact on employee safety compliance behaviours.

2.3.5 Satisfaction with Safety Programme & Policies

Safety programmes and policies are interventions planned by the management in their effort to reduce workplace accidents (Gyekye & Salminen, 2007). Safety programmes include training including manuals and job instructions to provide employees with the necessary knowledge on safety rules, concepts, or attitudes necessary to function effectively in specified task situations (Luria *et al.*, 2008).

Training can be described as a systematic learning process which is work-related to equip employees with the knowledge, skills and attitudes required to perform their jobs more effectively (Blanchard & Thacker, 2008). Effective training strategies and practices meet the needs of the organisation and the individual employees. Effective training depends on several factors including the employees, the programme design and implementation, as well as the working environment.

The Construction Owners' Association of Alberta (COAA) (2013) emphasized on the importance of safety training in order to improve the safety performance. An effective training of construction workers can be one of the best ways in improving site safety performance. Safety training should be able to influence the employees' safety behaviours. Knowledge acquired from effective training on safety policies, rules and regulations should be able to influence employee to comply with those job requirements.

Employees must be trained and constantly reminded that they are responsible for their own safety and must behave safely to reduce the risk of accidents and injuries while working. In addition, all staff must work as a team and work together to stop workplace injury or accidents (Uryan, 2010).

COAA (2013) highlighted that some accidents such as falling from height and hit by falling materials in construction sites could easily be prevented by implementing training programs to employees. Sawacha *et al.* (1999) found that most workers at the construction sites received limited education about safety matters including organizational safety policies, rules and procedures, as well as related legislations. They found that some construction sites did not provide appropriate and certified safety equipments and clothing to employees. This factor could be one of the causes of work-related accidents and injuries.

Many studies have shown that there is a close relationship between individual safety behaviour and safety performance (Sawacha et al., 1999). An effective training of workers can also significantly reduce unsafe behaviour. Employees with good safety knowledge behave more positively at work than those with poor safety knowledge.

Mullen (2004) identified lack of training as a critical factor that influenced employees' attitudes towards safety behaviour and compliance with relevant safety legislations. Mullen found that training of construction employees and safety supervisors is important to enhance safety awareness and improve performance. Knowledge and competence influence personal safety performance. Thus, companies must maintain and update their workers with relevant work-related skills and knowledge through training, skill updates and effective on site communication (Motowidlo, 2003).

2.4 Summary

This chapter discussed past studies related to the factors which influenced how employees behaved on the job. Employees who have positive perceptions on the importance of job safety, the roles of co-worker safety, supervisor safety and management safety, as well as the satisfaction on safety programmes and policies, would be more inclined to comply to safety legislation, policies, rules and practices.



UUM
Universiti Utara Malaysia

CHAPTER 3

METHODOLOGY

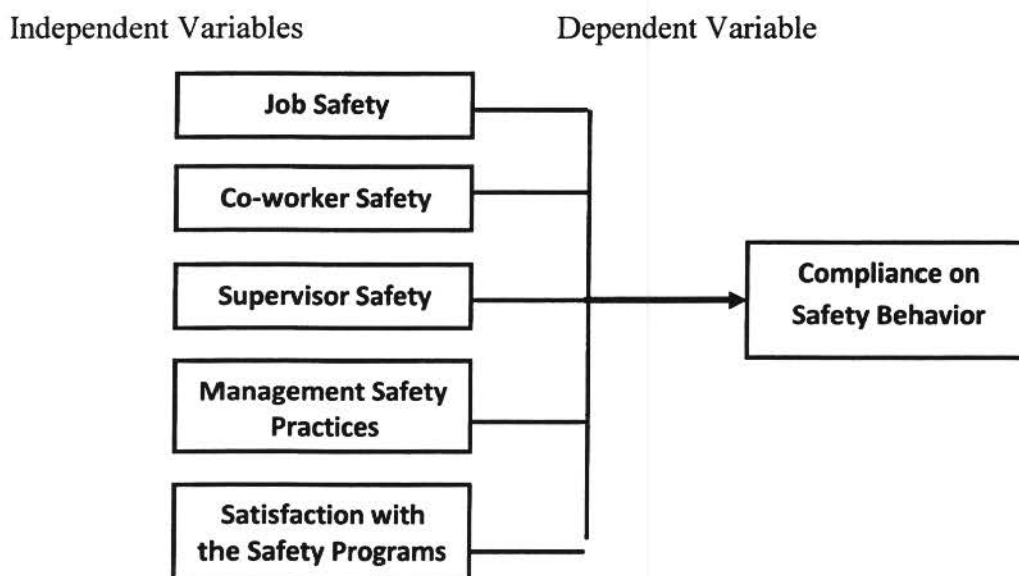
3.1 Introduction

This chapter discussed the methodology applied in this study. The population and sampling of the study, research instrument, data collection and data analysis were also explained.

3.2 Research Framework

The framework of the study consists of five independent variables of Work Safety Scale that are: (a) job safety, (b) co-worker safety, (c) supervisor safety, (d) management safety practices and (e) satisfaction of the safety programme. All the independent variables were measured on their influence towards the compliance of safety behaviour (dependent variable).

Figure 3.1 Research Framework



3.3 Operational Definition

The following definitions are applied in this study:

- i. Safety behaviour is referred to as employee compliance to the organisation's safety policies, rules and regulation that need to be performed to maintain workplace safety, as well as employee participation in safety programs and efforts (Neal & Griffin, 2002).
- ii. Job safety includes the work nature or environment that protects every worker from any unwanted work-related injuries, mishaps or accidents (Giovanis, 2010).
- iii. Co-worker safety was a safety concern among worker toward their colleagues when performing a given supervisor safety.
- iv. Management safety provides an understanding of all the efforts brought up by the management level to ensure proper safety practices in the workplace.
- v. The satisfaction of safety programs are the personal judgement of workers towards all the safety program or policies that were carry out by the management to nurture safety culture in the workplace.

As a result, compliance of safety behaviour is the outcomes in the form of safety practice or safety performance of the entire mentioned five safety contents domain.

3.4 Research Instrument

This study utilized the Work Safety Scale questionnaire to measure perceptions on safety at work (Hayes *et al.*, 1998). The main objective of this study was to find out the relationship of the safety perceptions and compliance with safety behaviour.

3.4.1 Independent Variables

The perceptions of work safety were measured with the 50-items of the Work Safety Scale (WSS) developed by Hayes *et al.* (1998). A five-point Likert scale were used ranging from 1 to 5 of which 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, and 5 = Strongly agree. Respondents were required to indicate the extent to which they agree or disagree to the items in the questionnaire. The five facets of the Work Safety Scale (Hayes *et al.*, 1998) were translated into Bahasa Malaysia for better understanding for the respondents. A pilot test was conducted to ensure the reliability of the translated version.

The first variable measures the perception of the job safety in the workplace on the nature of their job on such condition such as dangerous, safe, hazardous, risk, unhealthy, unsafe or scary (refer to Appendix A). The second variable is perceptions on co-worker safety in the workplace. Items explore the extent to which employees care about other employees' safety. The third variable measures how they perceive the supervision practice on safety on the job. The questions include few questions such as "keep workers inform of safety rules", "involves workers in setting safety goals", "updates safety rules" or enforce safety rules.

The fourth variable focuses on the management safety. It comprises ten items including "conduct frequent safety inspection", "provides safe working conditions" or "investigates safety problem quickly". This data can assist management to revise and improve current efforts and practices on safety in the workplace. The final independent variable evaluates the employees' satisfaction on safety programmes conducted by the organization. Evaluation items include programme worthiness, help prevent accident, useful, good, first rate, practicality of programmes, usefulness, and effectiveness in reducing injuries.

3.4.2 Dependent Variable

The compliance with safety behaviour was measured using the 11-items developed by Hayes et al. (1998). Respondents were required to indicate how frequently they behaved safely at work using a scale from 1 to 5 (1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always). This 11-items variable reflected the opinion on whether the workplace or work conditions are safe or unsafe. Respondents were asked to answer the frequency of their behaviours at work by using the given scale.

3.5 Population & Sampling

The target population in this study comprised of police officers working at one Kuala Lumpur police district department. These police officers are chosen based on the nature of their jobs which are directly involved in traffic, narcotics and criminal operations such as club raids, roadblocks, catching criminals and other risky operations. A total population of 178 police officers were included in this study. Based on Krejcie and Morgan's (1970 cited in Sekaran & Bougie, 2013) table for determining the sample size for this study, for a population size of 178, the appropriate sample size should be 118.

3.6 Pilot Test

To ensure the reliability of study's results, the questionnaires were being tested by using pilot test separately on 30 samples with the Cronbach's alpha tests to deal with relevancy of the study. The 30 questionnaires were distributed to police officers

from another police district office. The alpha score above 0.70 for items in internal consistency test were considered acceptable and above 0.80 were considered good and appropriate for the study (Sekaran & Bougie, 2013).

Table 3.1

Pilot Study Results

Independent Variables	Items	Cronbach-Alpha
Job Safety	10	0.890
Coworker Safety	10	0.864
Supervisor Safety	10	0.909
Management Safety	10	0.919
Safety Programme	10	0.805
Dependent Variable		
Compliance of Safety Behaviour	11	0.772

3.7 Data Collection

Understanding the busy work schedules and commitment among police officers in operations, a total of 150 sets of questionnaires were distributed to the head of the office with instructions that completed questionnaires will be collected in one week. A total of 120 sets of questionnaires were collected for data collection.

3.8 Data Analysis

Data collected will be analysed to answer the research questions. A Pearson correlation analysis will be applied to examine the relationship between the dependent variable namely the compliance on safety behaviour and the independent

variables, namely job safety, co-worker safety, supervisor safety, management safety and satisfaction on safety programmes.

A Pearson correlation matrix indicates the direction, strength, and significance of the relationships among all the variables. According to Cohen (1988), the relationship between the independent variables and dependent variables can be considered as strong when the r value is 0.50 and above, moderate when the r value is between 0.30 – 0.49, and weak with an r value below 0.30. A negative r value shows the direction of the relationships.

The regression analysis will be used to determine the total variance in the dependent variable which can be explained by the independent variables. According to Sekaran and Bougie (2013), the square of multiple R^2 will explain the dependent variable by the predictors known as Multiple Regression. Through R^2 , the F statistics and its significance level; the result can then be interpreted.

3.9 Summary

The study will be using the 50-items of WSS to investigate on the five facets of safety perceptions for independent variables against 11-items of the compliance of safety behaviour as a dependent variable. The internal consistency shall be determined with Cronbach's alpha reliability test and the result of the pilot study will be the indicator for the study to be proceeded with determinations of those variables. The variables later will be generated with bivariate analysis by using descriptive analysis, correlation matrix and regression analysis.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter will be reporting the analysis conducted to the data collected by using reliability test, descriptive frequencies, Pearson correlations and regression analysis. The descriptive frequencies involved the demographics measurement on job area, level of education, race, work experience and age. The results of the current study explained and discussed throughout this chapter.

4.2 Response Rate

150 questionnaires were distributed and 120 were collected and used in this study. The response rate is 80%.

4.3 Profile of Respondents

The 120 respondents were from operational unit in one of the police district headquarters in Kuala Lumpur and all the respondents are involved directly in operations such as club raids, roadblock, catch criminals and other risky operation. The results are shown in Table 4.1.

76.7 percent of the respondent are male and 23.3 percent are female. From the result 43.3 percent of respondent possessed SPM which are the highest percentage of the respondents. The second highest is diploma and higher which are 41.7 percent. Followed by STPM holder with 11.7 percent and PMR / SRP holder is the lowest percentage at 3.3 percent.

As the result generated from data provided shows that (Table 4.1) most of the respondents are Malay which are 78.3 percent from overall. Second highest is Indian

which are 10 percent, other races came out 8.3 percent and lastly Chinese with 3.3 percent. Out of 120 respondents, 43.3 percent respondents had working experiences below 5 years and 21.7 percent of respondents had six to ten years of working experiences in the agencies.

4.1 Demographic Scale of Respondents

	Frequency	Percentage
Job Rank		
SAC / ACP	2	1.7
Supt / DSP	4	3.3
Asp / Insp	36	30
SI / SM	6	5
Sjn / Kpl	46	38.3
L/Kpl / Konst	26	21.7
Level of Education		
SRP / PMR	4	3.3
SPM / SPMV	52	43.3
STPM	14	11.7
Dip / Deg / Master / PhD	50	41.7
Race		
Malay	94	78.3
Chinese	4	3.3
Indian	12	10
Others	10	8.
Age	Mean = 3.57	SD = 1.935
Working Experience	Mean = 2.5	SD = 1.782

Referring from age statistics in the table (Table 4.1) mean is 3.57. The youngest age to join the agencies is more than 17 years as the lowest education level requested to join the agencies is SPM certificate and the maximum age is 60 years old.

The standard deviation measured from data provided is 1.935. The highest percentage of age is between 31 years old to 35 years old followed by age between 26 years old to 30 years old with 20 percent.

4.4 Reliability Analysis

The reliability measurement was done through Cronbach’s alpha approach to check on internal consistency for each factor (Sekaran & Bougie, 2013). It is suggested that the reliability of basic research must be above 0.7. The result shows the corresponding alphas of the study are : job safety ($\alpha=0.755$), co-worker safety ($\alpha=0.817$), supervisor safety ($\alpha=0.919$), management safety practices ($\alpha=0.931$), safety programme ($\alpha=0.805$), and compliance of safety behaviour ($\alpha=0.755$). The Cronbach’s alpha coefficient for each measurement as in the Table 4.2.

Table 4.2 Reliability coefficients for each variable	
Measurement	Cronbach’s Alpha
Job Safety	0.897
Co-worker Safety	0.817
Supervisor Safety	0.919
Management Safety	0.931
Safety Programme	0.805
Compliance Safety Behaviour	0.755

4.5 Correlation Analysis

Table 4.4 shows a matrix of correlations and sample statistics of all variables included in the study. The finding reports that job safety is the only independent

variable that did not have any significant relationship with safety behaviour. The four others independent variables, namely co-worker, supervisor, management and safety programme, are positively and significantly related to safety behaviour.

As the table shows, co-worker safety is significantly correlated at .318, supervisor safety is significantly correlated at .210, management safety at .370 and safety programme is significantly correlated at .431. According to Cohen's guidelines (1988), co-worker safety, management safety and safety programme are moderately related to compliance on safety behaviour. The relationship between supervisor safety and compliance on safety behaviour is weak but significant. Job safety is not significantly related to safety behaviour.

Table 4.4 Pearson Correlation Coefficients

	Job Safety	Co- worker Safety	Supervisor Safety	Mgmt Safety	Safety Prgrm	Compliance Safety Behaviour
Job Safety	1.000					
Co-worker Safety	.046	1.000				
Supervisor Safety	-.034	.424**	1.000			
MgmtSafety	.219*	.450**	.613**	1.000		
Safety Programme	-.030	.364**	.489**	.497**	1.000	
Compliance Safety Behaviour	-.034	.318**	.210*	.370**	.431**	1.000

**** Correlation is significant at the 0.05 level (2 - tailed)**

4.6 Regression Analysis

F value of the data collected is 7.865 as shows in Table 4.5 and significant at all predictors / independent variables. From the analysis, the R square value of 25.6 reported that 25.6% of the variance in compliance safety behaviour is significantly

explained by job safety, co-worker safety, supervisor safety, management safety and safety programme. 74.4% of the variance is explained by other variables which are not included in this study.

As shown in Table 4.5, safety programme contributes the most to the compliance safety behaviour with a coefficient beta of .326 (sig=.001). The other contributing factor is management safety with coefficient beta of .272 (sig=0.020). Supervisor safety, co-worker safety and job safety are reported for not making any significant contribution to the prediction of compliance on safety behaviour (sig>0.05).

Table 4.5
Linear Regression Results

Model	Standardized Coefficient		
	Beta	t	Sig
(Constant)		4.169	0.000
Job Safety	-0.098	-1.150	0.253
Co-worker Safety	0.161	1.726	0.087
Supervisor Safety	-0.188	-1.715	0.089
Management Safety	0.272	2.362	0.020
Safety Programme	0.326	3.323	0.001

F Value = 7.865

R = 0.506

R² = 0.256

Adjusted r² = 0.224

Notes :

Predictors (Constant) : Job Safety, Co-worker Safety, Supervisor Safety, Management Safety, Safety Programme

Dependent Variable : Compliance on Safety Behaviour

4.7 Discussion

In this study, co-worker safety, supervisor safety, management safety and safety programme were significantly related to compliance on safety behaviour. However, job safety is not significantly related to safety behaviour. The findings on factors which influence compliance on safety behaviour at work were consistent with past studies. The findings were consistent with a study conducted by Haslam *et al.* (2016) which found that workers who emphasizes on work safety compliance will have a higher level of organisational concern regarding of their co-workers' safety and safe workplace conditions. Mullen (2004) also found consistent findings where organizational factors and social factors clarified why individuals were involved in unsafe work practices. Unsafe work practices included performing without adhering to safety rules, socialization influences, as well as safety attitudes.

Gyekye (2005) also emphasized that supervisors are responsible to enhance positive co-worker relationships as it could affect organizational commitment towards safety as work in order to enhance safety work performance. Cox *et al.* (2004) also highlighted the importance of supervisors' role in enhancing workplace safety. Zohar (2008) revealed that safety priority by supervisors moderate the safety conditions at the workplace. He further added that constant supervision at work could enhance work safety and influence employee's safety behaviour.

Idoro (2008) also found consistent findings. He found that management's focus and practice on safety at the workplace were significantly correlated with safety performance and employees' compliance with safety regulations. Safety programmes and policies, as well as management's effort to reduce workplace accidents (Gyekye & Salminen, 2007; Luria *et al.*, 2008) were found to be critical factors in influencing

employees’ behaviour towards safety. Safety programmes include training including manuals and job instructions to provide employees with the necessary knowledge on safety rules, concepts, or attitudes necessary to function effectively in specified task situations (Luria *et al.*, 2008). Sawacha *et al.* (1999) found that most workers at the construction sites received limited education about safety matters including organizational safety policies, rules and procedures, as well as related legislations.

Past studies indicated that workers with negative perceptions on their work safety are inclined to behave unsafely when performing their jobs. This is turn could increases the possibilities of workplace accidents (Giovanis, 2010; Gyekye, 2005). Giovanis (2010) also added that employees with job insecurity, higher job risks, and involved with hazardous materials and operations, have recorded a relatively higher accident involvement rate. In contrast, workers with positive perceptions regarding their work safety have expressed greater job satisfaction, reported higher compliance with safety behaviours, and registered fewer accidents (Gyekye, 2005).

4.8 Summary

Work Safety Scale (WSS) tool had been used to test the influence of five facets toward the compliance of safety behaviour and the result show internal consistency of the reliability scores above 0.7 on all of the independent variables tested. The findings based on correlation analysis were summarised as below:-

RESEARCH OBJECTIVE	FINDING
1. To determine the relationship between job safety and compliance safety behaviour among RMP officers	Not Significant

2. To examine the relationship between co-worker safety and compliance safety behaviour among RMP officers	Significant
3. To establish the relationship between supervisor safety and compliance safety behaviour among RMP officers	Significant
4. To determine the relationship between supervisor safety and compliance safety behaviour among RMP officers	Significant
5. To examine the relationship between satisfaction with the safety programme and compliance safety behaviour among RMP officers	Significant



UUM
Universiti Utara Malaysia

CHAPTER 5

CONCLUSION & RECOMMENDATION

5.1 Introduction

In this chapter, the key finding will be discussed and conclude the presence study examining the relationship between perception of WSS and the compliance of safety behaviour among police officers in Royal Malaysia Police. In the addition, implications to both theory and practice would follow onwards by suggesting the best solutions and more practical approaches to enhance the compliance of safety behaviour among police officers overall.

5.2 Recapitulation of Results

The Pearson correlation analysis reported that co-worker, supervisor, management and safety programme, were found to be positively and significantly related to compliance of employees' safety behaviour at the workplace. The strength of the relationships was moderate to weak. Nonetheless, job safety was found not to have any influence on employees' safety behaviour.

The multiple regression analysis showed that 25.6% of the variance in compliance safety behaviour was significantly explained by the independent variables included in this study. However, only safety programme and management safety were found to contribute significantly to the compliance on employees' safety behaviour at work. The other three independent variables namely supervisor safety, co-worker safety and job safety were found not to have any significant contribution to the prediction of compliance on safety behaviour.

5.3 Conclusion

The response rate of 100 percent indicated that results were likely to represent the perceptions in all the area surveyed. All the measures indicated would be discussed on the relationship between the five independent variables to the dependent variable. This discussion would be answering the objectives developed in chapter one.

5.3.1 Job Safety with Compliance of Safety Behaviour

The results indicated that job safety did not contribute to the variance in compliance of safety behaviour. This result might be caused by the nature of the job itself as most off operational involving police officers such as roadblock, arresting criminal and club raid are very dangerous and expose to the risk of accident and injury. Due to the complexity of policing, risks and exposures may vary within forces, between forces and internationally.

Police officers are exposed daily to occupational hazards which may be much higher risk compare to those of many other professionals. Aside from dealing with potentially dangerous individuals and situations on the street, many police officers feel a significant source of stress from the organization. The work related situations that pose the greatest threat of homicide for police officers include responding to disturbance calls and arrest situations.

5.3.2 Co-Worker Safety with Compliance Safety Behaviour

The results indicated that co-worker safety did contribute to the variance in the compliance of safety behaviour. This might be influenced by teamwork concept that being one of the important values as a uniform body agency. When the officers

are involved in every operation are very protective toward each other safety, possibility of accident can be reduce or prevent. Each team members in every operation carried the responsibilities to make sure others are fit to perform the assigned job or task as well to ensure the perfect outcomes of the job completion. Moreover, experienced worker would act the role as socializing agent (Mullen, 2004).

Co-worker feels responsible in keeping the job environment safe as they are trained in safety procedures then observe their fellow workers to monitor, report and correct unsafe behaviour. Individual differences in behaviour safety and discover practical interventions to help increase the safety awareness among team will help to improve safety and health. Therefore the socialization process could provide informal education of safety attitudes for the newcomer to act the conservative ways as senior workers.

Through repeated administrations of the safety culture survey, organizations often find that the gap between “employees should caution co-workers” and “ I do caution co-workers” is greatly diminished following safety implementation. In other words, employees are much more likely to caution one another about risky behaviours when they are involved in the process. Also, companies demonstrate that peer-to-peer safety feedback is increasing by charting the number of behaviour observation checklist completed over time.

When done properly, the number of observation will be increase same goes to safety conversations between employees. This leads to more open and healthy organizational safety culture. Beyond correcting feedback, it is also important to consider the power of rewarding safety feedback to increase safe work practices. Praising people for safe work practices can increase the probability that these work

practices will be performed safely in the future and build a more open and positive safety culture.

5.3.3 Supervisor Safety with Compliance Safety Behaviour

The results of supervisor safety indicated that it did not contribute significantly to the variance in compliance with safety behaviour. This is probably due to the supervisors daily take the responsibilities on making sure all the police officers under his / her practicing all the guidelines or standard operating procedure (SOP) that had been given by the department.

Furthermore, as a uniform body command and control concept do giving a positive impact on the supervisory system in Royal Malaysia Police. Daily briefing, meeting, checking before going to job and reminder on safety precaution made the trust and dependency on the supervisor. The respects and obedience to supervisory may reduce the number of accident and injury as the safety guideline will be followed.

Supervisor commitment to safety was predictive of worker propensity to take safety initiatives and comply with rules (O'Dea, 2002). Tomas et al. (1999) found that supervisors played on important role in the accident prevention process by transferring the elements of safety climate to members of the workplace. Zohar (2002) also found that supervisors could dramatically improve the safety performance use by merely emphasising safety in interactions.

5.3.4 Management Safety Practices with Compliance Safety Behaviour

In the current study, the result of regression analysis of management safety practices is significantly influence the compliance of safety behaviour among police

officers that involved in operational tasks. As the study among the police officers who were directly involved in dangerous operations such as road block, club raid and arresting criminals, the management of this department had played a very good role in promoting and reminding of the important of following each guidelines and SOP provided in order to reduce the accident and injuries.

5.3.5 Satisfaction of Safety Programmes with Compliance Safety Behaviour

The results indicated that satisfaction of safety programmes significantly influenced the compliance of safety behaviour among police officers. Training can be one of the best ways to enhance safety behaviours and performance. Employees must be made known of the organization's safety policies, rules and regulations in order for them to be able to comply to those policies and rules.

Knowledge acquired from effective training on safety policies, rules and regulations should be able to guide employees when performing their jobs. Employees must be trained and constantly reminded that they are responsible for their own safety and must behave safely to reduce the risk of accidents and injuries while working (Uryan, 2010).

5.4 Implication

In this chapter, both theoretical implication and practical implication of the study will be discussed.

5.4.1 Theoretical Implication

This study was done to investigate the influence of five selected facets of WSS on the compliance of safety behaviour among police officers in Royal Malaysia

Police. Although this study seems familiar as it been conducted in the industries like construction, factory, telecommunication and other but by having this type of study in the enforcement body in Malaysia is something new and different.

As the occupational safety and health field is still new thing in Royal Malaysia Police, this study might being used as one of the references in the future to enhance the safety system in the force as launched in 2015 by the Inspector General of Police Tan Sri Khalid Bin Abu Bakar. As the enforcement body, police officers are very expose to the risk of accident and injuries ranging from traffic control and arresting criminal.

By referring previous studies in the same subject, five facets which are job safety, co-worker safety, supervisor safety, safety programme and also management safety had been chose to analyse the relationship to the compliance of safety behaviour among police officers. As the variety of police duty that most of it exposed to accident and injuries risk, this type of study can be used in the future study to enhance the safety in the workplace. Apart from that, this study also can be used in the academic world as a reference for future study.

5.4.2 Practical Implication

The result from this study shows that only the job safety does not significantly influence the compliance of safety behaviour among police officers. Whereas, the other four variables which are co-worker safety, supervisor safety, management safety and safety programme are significantly related to the compliance of safety behaviour. From the result show, the most influencing factor is safety programme. To enhance the safety programme in the future, those steps can be taken:

- (i) Create a plan to control workplace hazards to minimize or eliminate the hazards in the workplace;
- (ii) Conduct regular inspections so that the improvement toward safety workplace can be maintain or enhance by time;
- (iii) The safety training such as safety road show should be continuously held to give a better understanding on the importance to complying to safety guideline or SOP;
- (iv) The employer should continuously talk and reminding the employees (police officers) on the important of complying the safety guidelines and SOP; and
- (v) In every accident or injury happen, investigation should be done to know the cause of accident so it can be avoid in the future.

This in turn can probably reduce the number of workplace injuries and accidents (Hayes et. Al, 1998; Zohar 1980; Uryan, 2010; Jayesh, 2014). The second important factor on influencing the compliance of safety behaviour among police officers is management safety. The organisation should establish and maintain procedures to respond to accidents and emergency situations, and to prevent and minimise the safety and health impacts associated with them. Emergency planning should cover:

- I. the development of emergency plans
- II. the testing and rehearsing of these plans and related equipment, including fire fighting equipment and fire alarms

- III. training personnel on what to do in the event of an emergency, particularly those people who have to carry out duties (e.g. fire-fighting teams, first-aiders)
- IV. advising people working or living near the installation about what they should do in the event of an emergency
- V. familiarising the emergency services with the facilities at the organisation so that they know what to expect in the event of an emergency.

It is suggested that comprehensive system should be construct for measuring safety performance that leads to predictable and desirable results. In the other word focus on the system that can give a clear view on how to prevent or reduce the risk of accident, injuries or fatality versus just solving the problem in a short term period.

5.5 Summary

As overall of the study, the management of Royal Malaysia Police can improve and enhance co-worker safety, supervisor safety, management safety and also safety programme to increase the safety level in the workplace. The exposure too so much hazard including physical, mental and also chemical needing the enforcement body to keep improving the understanding and important of complying the safety way in workplace including workplace and also behaviour.

Continuous communication should be held actively to educate and explain to the police officers on the importance of safety climate at workplace. Clear understanding on the importance of compliance of safety behaviour not only can reduce the number of accident and injuries at the workplace but might be saving the life of the officers as well. The mission of Royal Malaysia Police is to keep the

country safe and peach, so how could that possibly achieve as if the safety behaviour among police officers are not good enough to keep themselves safe at the first place.



UUM
Universiti Utara Malaysia

REFERENCES

- Ali, H, Chew, N.A. & Subramaniam, C. (2009). Management Practice In Safety Culture and Its Influence on Workplace Injury. *Disaster Prevention and Management*, 18(5): 470 – 477.
- Anuar, I, Zahedi, F, Kadir, A. & Mokhtar, A.B. (2008). Occupational Safety and Health Management System (OSHMS) Guidline Compliance among Medical Laboratories in Klang Valley. *Journal of Community Health*, 14 (1): 39 – 44
- Aziz, M.A, (2009). SOCSO Initiatives Towards Continuous Improvement of OSH in SMEs. Paper presented at Seminar of Occupational Safety and Health in SME Sectors, ASSET Bangi, Selangor, Malaysia.
- Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1: 91-97.
- Blanchard, P. N., & Thacker, James W. (2008). *Effective Training, Systems, Strategies, and Practices* (3rd Edition). New Jersey: Pearson Prentice Hall.
- Campbell, J. P. (1990). Modelling the performance prediction problem in industrial and organizational psychology. In: M. D.Dunnette & L. M. Hough (Eds), *Handbook of industrial and organizational psychology*, 1 (687-732). Palo Alto, CA: Consulting Psychologists Press.
- Carayon, P., Alvarado, C. J. & Hundt, A. S. (2003). *Reducing Workload and Increasing Patient Safety Through Work and Workspace Design*. University of Wisconsin-Madison, CQPI Technical Report No. 185.
- Carder, B. & Ragan, W.P. (2003). A survey Based System for Safety Measurement and Improvement. *Journal Of Safety Research*, 34: 157-165.

- Chan-Yeung, M, J.L. (1994). Aetiological Agents in Occupational Astma, *European Respiratory Journal*, 7: 346 – 371.
- Choudhry, R.M. & Fang, D. (2008). Why Operatives Engage in Unsafe Work Behavior: Investigating Factors on Construction Sites, *Safety Science*, 46: 566-584.
- Clever, L.H. (1981). Health Hazards of Hospital Personnel. *The Western Journal of Medicine*, 135 (2): 162 – 165.
- Cohen, J.W., (1988). *Statistical Power Analysis for the Behavioural Sciences*, 2nd Ed. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Construction Owners Association of Alberta (COAA) (2013). *Best Practice For Behaviour Based Safety*, COAA: Alberta, Canada
- Cox, S., Jones, B., & Rycraft, H.(2004). Behavioural Approaches to Safety Management Within UK Reactor Plants. *Safety Science*, 42: 825 – 839.
- DeJoy, D.M., Gershon, R.M. & Scheffer, B.S. (2004). Safety Climate: Assessing Management and Organizational Influences On Safety. *Professional Safety*, 49, 50-57.
- Geller, E. S. (1996). *The Psychology of Safety: How to Improve Behaviors and Attitudes on the Job*. Boca Raton, FL: CRC Press.
- Giovanis, N. (2010). The measurement of Health and Safety Conditions at Work Theoretical Approaches, Tools and Techniques a Literature Review. *International Reseach Journal of Finance and Economics*, 36.
- Gorea R.K. (2005) Crime Scene Investigation – A Holistic View, *Journal of Indian Academy of Forencis Medicine*, 27(1): 0971-0973.

- Gyekye, S.A. & Salminen, S. (2004). Causal Attributions of Ghanaian Industrial Workers for Accident Occurrence. *Journal of Applied Social Psychology*, 34, (11): 2324-2342.
- Gyekye, S.A., (2005). Workers' Perceptions of Workplace Safety and Job Satisfaction. *International Journal of Occupational Safety and Ergonomics*, 11: 291-302.
- Gyekye, S.A., & Salminen, S. (2007). Workplace Safety Perceptions and Perceived Organisational Support: Do Supportive Perceptions Influence Safety Perception? *International Journal of Occupational Safety and Ergonomics*, 13: 189 - 200.
- Hale, A.R., Heming, B.H.J., Carthey & J. Kirwan.B, (1997) Modelling of Safety Management System, *Safety Science*, 26: 121 -140.
- Haslam, C., O'Hara, J., Kazi, A., Twumasi, R. & Haslam, R. (2016). Proactive Occupational Safety and Health Management: Promoting Good Health and Good Business, *Safety Science*, 81: 99-108.
- Hayes, B.E., Perander J., Smecko T. & Trask J. (1998). Measuring Perceptions of Workplace Safety: Development and Validation of the Work Safety Scale. *Journal of Safety Research*, 29, 145-161.
- Henning, J. B., Stuft C. J., Payne, S. C., Bergman, M. E., Mannan, M. S. & Keren, N(2009). The Influence of Individual Differences on organizational Safety Attitudes. *Safety Science*, 47(3), March.
- Hunnur & Sudarshan (2014). Cause and Effect at Workplace Stress Among Police Personnel: An Empirical Study. *International Journal of Management Research and Business Strategy*. 1: 319-345.

- Idoro, G. I. (2008). Health and Safety Managemeny Efforts as Correlates of Performance in the Negerian Construction Industry. *Journal of Civil Engineering and Management*, 14(4): 277-285.
- Ivie, D., & Garland, B. (2011). Stress and Burnout in Policing : Does Military Experience Matter, *Policing: An International Journal of Police Strategies & Management*, 34 (1): 49-66.
- Jabatan Pengurusan Polis DiRaja Malaysia (2015), *Garis Panduan Pelaksanaan Sistem Pengurusan Keselamatan dan Kesihatan Polis DiRaja Malaysia* (SPKKP), Kementerian Dalam Negeri.
- James, L.A. & James, L.R. (1989). Integrating work envirointment perceptions: Explorations into the Measurement of Meaning. *Journal of Applied Psychology*, 74: 739-751.
- Janelle Roach (2012). *Police Stress: The Effects on Interpersonal Relationship with Intimate Partners*. Department of Criminology and Criminal Justice. Central Connecticut State University
- Jayesh, K., J. (2014). Stress in Police Officers, *Journal of Humanities and Social Science*. 19(10): 283-297.
- Jex, S.M., & Britt, T.W. (2008). *Organizational Psychology: A scientist-practitioner approach*. New Jersey: John Wiley & Sons.
- Joshanloo, M. & Afshari, S.(2009). Big Five Personality Traits and Self-esteem as Predictors of Life Satisfaction in Iranian Muslim University Students. *Journal of Happiness Studies*, 10: 902-917.
- Liberman, A. M., Best, S.R., Metzler, T.J., Fagan, J.A., Welss, D.S. & Marmar, C.R. (2002). Routine occupational stress and psychological distress in police. *Policing : An International Journal of Police Strategies & Management*, 25 (2): 421-442.

- Luria, G., Zohar, D. & Erev, I. (2008). The effect of Workers Visibility on Effectiveness of Intervention Programmes: Supervisory-Based Safety Interventions. *Journal of safety Research*, 39: 273-280.
- Magenthiran, Vagine (2016). *Study on Factors That Contribute Towards Work Stress Among Police Officer at Johor Bahru South District Police Department*, Unpublished thesis for Master of Human Resource Management, Othman Yeop Abdullah Graduate Business School, Universiti Utara Malaysia.
- Manuele, F.A. (2003). *On the Practice of Safety*. 3rd Edition: John Wiley & Sons, Inc.: USA.
- Mattila, M. & Kiviniitty, J. (1993). Job Characteristics and Occupational Safety of Manufacturing Jobs at Different Level of Automation. *The International Journal of Human Factors in Manufacturing*. John Wiley & Sons, Inc., 3: 243-252.
- Michael, J.H., Wiedenbeck, J., & K., Ray, C. D. (2006). Production supervisor impacts on subordinates safety outcomes: An investigation of leadermember exchange and safety communication. *Journal of Safety Research* 37: 469-477.
- Motowidlo, S. J. (2003). Job performance. In: W. C., Borman, D. R. Ilgen & R. J. Klimoski (Eds), *Handbook of Psychology, Vol. 12: Industrial and Organizational Psychology*, (39-64). New Jersey: John Wiley & Sons.
- Mullen, J. (2004). Investigating Factors that Influence Individual Safety Behaviour at Work, *Journal of Safety Research*, 35: 275-285.
- Murray, J.L., A.D. (1996), *The Global Burden of Disease*, Harvard University Press: USA.

- Nasab, H. S., Ghofranipour, F., Kazemnejad, A., Khavanin & Travakoli, R.(2008). The Effect of Safety Education on Promote in Petrochemical Workers Safety Behaviour. *European Journal of Scientific Research*, 23(1): 167-176.
- Neal, A. & Griffin, M.A. (2006). A Study of the Lagged Relationships Among Safety Climate, Safety Motivation, Safety Behavior and Accidents at the Individual and Group Levels, *Journal of Applied Psychology*, 91(4): 946-953.
- Neal & Griffin. (2002). Safety Climate and Safety Behaviour. *Australian Journal of Management*, 27(1): 67-76.
- Pao, T.H., & Kleiner, B. H. (2001). New Developments Concerning the Occupational Safety and Health Act. Stand up Workers Protections, *Managerial Law* 43 (1/2).
- Parsons, J.R.L. (2004). *Occupational Health and Safety Issues of Police Officers in Canada, The United States and Europe*. Parsons: USA.
- Patterson., T., G., Chung., W., I. & Swan., G., P (2012). *The effect of stress management intervention among police officers and recruits*. Campbell Systematic Reviews, Hunter College School of Social Work.
- Ranta, R., S. (2009). Management of Stress and Coping Behaviour of Police Personnel through Indian Psychological Technique. *Journal of the Indian Academy of Applied Psychology*. January Edition. 35 (1): 47 – 53.
- Rasmussen, J. (2003). The Role of Error in Organizing Behaviour. *Qual Saf Health Care*, 12: 377–385.
- Reason, J. (2000). Human Error: Models and Management. *BMJ: British Medical Journal*, 320(7237), 768–770.

- Reichers, A. E., & Schneider, B. (1990). Climate and culture: An evaluation of constructs. In B. Schneider (ED.), *Organizational Climate and Culture*. San Francisco: Jossey-Bass.
- Rhoades L, Eisenberger R. (2002). Perceived Organizational Support. A review of the Literature. *Journal of Applied Psychology* 2002; 87: 698-714.
- Roberg, R., Novak, K., & Cordner, G. (2005). *Police and Society*. New York Oxford University Press.
- Sawacha, E., Naoum, S. and Fong, D, (1999). Factors Affecting Safety Performance on Construction Sites, *International Journal of Project Management*, 17(5): 309-315.
- Sekaran, U. & Bougie, R., (2013). *Research methods for business: a skill building approach*. New York: John Wiley and Sons, Inc.
- Senjo, S. R., (2011). Dangerous Fatigue Conditions: A Study of Police Work and Law Enforcement Administration, *Police Practice & Research*, 12(3), 235-252.
- Shane, M., J., (2010). Organizational Stressors and Police Performance, *Journal of Criminal Justice*, 38 (4): 807-818.
- Sherony, K.M. & Green, S.G., (2002). Co-worker Exchange: Relationships between Co-workers, Leader-Member Exchange and Work Attitudes, *Journal of Applied Psychology*, 87(3), 542-548.
- Smith, T.D. & DeJoy, D.M. (2014). Safety Climate, Safety Behaviours and Line-of-Duty Injuries in the Fire Service, *International Journal of Emergency Services*, 3(1): 49-64.

- Sommerfeldt, V. (2010). *An Identification of Factors Influencing Police Workplace Motivation*, Unpublished dissertation for the Doctor of Education, Faculty of Education, Queensland University of Technology, Australia.
- Sulzer-Azaroff, B., & De Santamaria, M. C. (1980). Industrial safety hazard reduction through performance feedback. *Journal of Applied Behavior Analysis*, 13, 287-297.
- Tucker, S., Chmiel, N., Turner, N and Hershcovis, M. S., & Stride, C. B. (2008). Perceive Organizational Support for Safety and Employee Safety Voice: The Mediating Role of Coworker Support for Safety. *Journal of Occupational Health Psychology*, 13 (4) 319-330.
- Uryan, Y. (2010). *Organizational safety culture and individual safety behaviour: A case study of the Turkish National Police Aviation Department*, Unpublished dissertation for the Doctor of Philosophy, College of Health & Public Affairs, University of Central Florida, Orlando, Florida.
- Vincent, C., Taylor-Adams, S., & Stanhope, N. (1998). Framework for Analysing Risk and Safety in Clinical Medicine. *British Medical Journal*, 316 (7138), 1154-1157.
- Yang, C. C, Wang, Y.S, Chang S. T, Guo, S.E. & Huang, M.F. (2009). A study on the Leaderships Behavior, Safety Culture and Safety Performance of Healthcare Industry, *World Academy of Sciences, Engineering and Technology*, 53, 1148-1155.
- Youngcourt, S.S. & Huffman, A.H. (2005). Family-Friendly Policies in the Police: Implications for Work-Family Conflict, *Applied Psychology in Criminal Justice*, 1(2), 138-162.

Zohar, D. & Gazit, O.T. (2008). Transformational Leadership and Group Interaction as climate Antecedent: A Social Network Analysis. *Journal of Applied Psycology, The Manerican Psychological Associates*, 93 (4): 744, 757.



UUM
Universiti Utara Malaysia