

**OCCUPATIONAL RISK ASSESSMENT  
OF THE ROYAL MALAYSIA POLICE  
CID PERSONNEL**



**SABARDIN BIN RAZALI**

**MASTER OF SCIENCE  
UNIVERSITI PUTRA MALAYSIA**

**2001**

**FK 2001 73**

OCCUPATIONAL RISK ASSESSMENT  
OF THE ROYAL MALAYSIA POLICE  
CID PERSONNEL



By

SABARDIN BIN RAZALI

Project Paper Submitted in The Fulfilment of The Requirements for The  
Degree of Master Science in Faculty of Engineering  
Universiti Putra Malaysia

October 2001

OCCUPATIONAL RISK ASSESSMENT  
OF THE ROYAL MALAYSIA POLICE  
CID PERSONNEL

SABARDIN BIN RAZALI

MASTER OF SCIENCE (EMERGENCY RESPONSE AND PLANNING)

UNIVERSITI PUTRA MALAYSIA  
FACULTY OF ENGINEERING

OCTOBER 2001

## ABSTRACT

Abstract of project paper presented to the Senate of Universiti Putra Malaysia  
in fulfilment of the requirement for the Master of Science

### OCCUPATIONAL RISK ASSESSMENT OF THE ROYAL MALAYSIA POLICE CID PERSONNEL

By

SABARDIN BIN RAZALI

October 2001

Supervisor : Ir Haji Fuad Abas

Co-supervisor : Prof Madya Ir Dr. Mohamed Daud

The detectives are the plain clothed lower ranking officers who are attached to various sections and units in the CID. They are the group of officers who will carry out the detailed instructions given by the officers. Their job includes the execution of arrest, surveillance, escort, search, investigation and raids. The aim of the study is to assess the occupational risks faced by the CID detectives of the Royal Malaysia Police in the performance of their job. There has not been such study carried out before. However, there were some similar studies published by police research units abroad.

Detectives from Kuala Lumpur Contingent were taken as sample to represent the detectives in the whole country. Questionnaires were issued to

them to seek information about the occupational risks they encountered. The questionnaire focused on areas of personal background, courses and training, employment and regulations, risks and equipments.

One hundred and fifty-five questionnaires were distributed. However, only one hundred and thirteen questionnaires were good for analysis. The tools used were the SAS and Excel system. Results were presented in demographic profiles, for areas where statistical analysis were found inapplicable.

From Pearson correlation analysis, the factors of unit, frequency of job, personal protective equipment and rank were found to be significantly correlated with risks. However, courses and training factor were found not to be significantly correlated with risk factor. In another approach, regression analysis was used. Risk was used as dependent factor, while unit, frequency of job, personal protective equipment and rank were taken as independent factors. The relationship of the factors was expressed as a model.

In this study, the figure of  $R^2$  (63%) shows that there are some other factors contributing to risk assessment. Further study is recommended to look for a higher consistency model for risk assessment in this area of study.



## **ABSTRAK**

Abstrak kertas projek yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

### **KAJIAN TENTANG RISIKO PEKERJAAN KE ATAS ANGGOTA-ANGGOTA CID POLIS DIRAJA MALAYSIA**

Oleh

SABARDIN BIN RAZALI

Oktober 2001

Penyelia : Ir. Haji Fuad Abas

Penyelia Bersama : Prof Madya Ir. Dr. Mohamed Daud

Penugasan di Jabatan Siasatan Jenayah Polis Diraja Malaysia memerlukan sumbangan dan peranan berkesan daripada anggota berpangkat rendah. Mereka diberikan latihan khusus di samping diberikan elaun khas detektif. Detektif merupakan anggota polis berpangkat rendah yang tidak memakai unifom yang bertugas di pelbagai unit di Jabatan Siasatan Jenayah. Tugas mereka adalah melaksanakan arahan-arahan terperinci yang diberikan oleh pegawai-pegawai.

Tugas-tugas mereka termasuklah melaksanakan tankapan, pengintipan, eskot, soal siasat, pemeriksaan tempat kejadian jenayah, penyiasatan, serbuan dan lain-lain. Tujuan kajian ini dibuat adalah bagi mengetahui tentang risiko pekerjaan yang mereka hadapi di dalam

melaksanakan tugas-tugas mereka. Tidak ada kajian yang dilakukan sebelum ini di dalam tajuk yang sama. Walau bagaimanapun, terdapat beberapa kajian yang agak serupa dengannya dilakukan sebelum ini di negara lain.

Detektif daripada Kontijen kuala Lumpur telah dipilih sebagai sampel bagi mewakili detektif di seluruh negara. Soalan-soalan telah dikendalikan terhadap mereka bagi mendapatkan maklumat tentang risiko pekerjaan yang mereka hadapi di dalam melaksanakan tugas-tugas mereka. Soalan-soalan tertumpu kepada hal-hal latar belakang, kursus dan latihan, penugasan dan peraturan-peraturan, risiko serta peralatan-peralatan yang digunakan.

Sebanyak seratus lima puluh lima set soalan telah diedarkan, Walau bagaimanapun hanya seratus tiga belas daripadanya yang didapati baik untuk dianalisis. Sistem SAS dan Excel telah digunakan untuk analisis. Bagi bahagian-bahagian di mana analisis statistik tidak sesuai atau tidak dapat dilakukan, penganalisan berbentuk demografik telah dilakukan.

Melalui penganalisan korelasi 'Pearson', adalah didapati faktor-faktor unit, kekerapan penugasan, peralatan perlindungan diri dan pangkat seseorang sangat berkaitan dengan faktor risiko. Walau bagaimanapun, kursus dan latihan didapati tidak berkaitan sangat dengan faktor-faktor risiko.

Melalui penganalisan regresi, risiko telah digunakan sebagai faktor bergantung, manakala unit, kekerapan penugasan, peralatan perlindungan

diri serta pangkat telah diambil sebagai faktor tidak bergantung. Hubungan antara faktor-faktor tersebut telah diterjemahkan sebagai model.

Di dalam kajian ini, nilai R (63%) menunjukkan bahawa terdapat beberapa faktor lain yang menyumbang dan patut diambil kira di dalam pengukuran risiko. Kajian seterusnya adalah dicadangkan bagi memperolehi model pengukuran risiko yang lebih tepat bagi kajian di dalam bidang ini.





## ACKNOWLEDGEMENTS

I would like to express my sincere appreciation to the following individuals and organization for their contributions in my study and the completion of this project paper.

Foremost is to Ir Haji Fuad Abas and Prof. Ir Dr. Mohamed Daud, who are my project supervisor and project co-supervisor respectively, whose vast scope of knowledge, experience and wisdom have guided and assisted me in my study and in the preparation of this project paper.

Special thanks go to Professor Dr Radin Umar, Prof. Madya Dr Ir Nor Mariah Adam, Prof Madya Dr Fakhru'l Razi Ahmadun, Dr Azmi Yahya, Puan Aini Mat Said and all my lecturers from UPM, for their invaluable contribution in my study in this course and in the preparation of this project paper. I wish to thank my fellow classmates for their sincere cooperation, assistance, courage and friendship.

I also wish to express my thanks to Royal Malaysia Police, my employer, for allowing and giving me the opportunity for to take part in this program, and the Commandant of Maktab Pegawai Kanan Kuala Lumpur (MPKKL) as well as PDRM for allowing the course to be carried on schedule with much convenience.

Appreciation also goes to members of my family for their understanding, patience and limitless encouragements that make my study possible.



## TABLE OF CONTENTS

		PAGE
	<b>Abstract</b>	iii
	<b>Abstrak</b>	v
	<b>Acknowledgements</b>	viii
	<b>Declaration</b>	x
	<b>Approval Sheet</b>	xi
	<b>List of Figures</b>	xvi
	<b>List of Tables</b>	xvii
	<b>List of Abbreviations</b>	xviii
<b>CHAPTER</b>		
<b>ONE</b>	<b>INTRODUCTION</b>	1
	1.1 Background	1
	1.2 Problem Statements	4
	1.3 Objectives of Study	5
	1.4 Significance of Study	5
	1.5 Limitations	6
<b>TWO</b>	<b>LITERATURE REVIEW</b>	8
	2.1 The Police Act, Inspector General Standing Orders (IGSO) and CID Directives	8
	2.2 The CID Establishment	10
	2.3 The CID Detectives	12
	2.4 Safety and Health Risks Faced by The Detective Personnel	14
	2.4.1 Raids	14
	2.4.2 Arrest	15
	2.4.3 Search	15
	2.4.4 Surveillance	16
	2.4.5 Escort	17
	2.4.6 Contact with Armed Criminals	17

2.5	Globalization and Its Impact on Crime in The Country	18
2.6	Cases of Similar Studies	19
2.6.1	A research on Training and Support Requirements of Police Constables in Scotland	19
2.6.2	Efficacy and Possible Health Risks of Pepper Spray	22
2.6.3	Risk Comparison between Police Officers and Municipal Workers	22
2.6.4	Possible Harmful Effects of Lead from Automobile Exhaust on Human Health	23
2.6.5	Relationship of Hemoglobin to Occupational Exposure to Motor Vehicle Exhaust	24
<b>THREE</b>	<b>METHODOLOGY</b>	<b>26</b>
3.1	Population and Sample Size	26
3.2	Data Collection	27
3.3	Scope of Questionnaire	28
3.3.1	Personal Background	28
3.3.2	Courses and Training	28
3.3.3	Employment and Regulation	29
3.3.4	Risk	29
3.3.5	Equipments	29
3.4	Analysis of Questionnaires	30
3.4.1	Statistical Analysis	30
3.4.2	Statistical Technique	31
3.4.3	Descriptive Statistics	32
3.4.3.1	Frequency Distributions	32
3.4.4	Inferential Statistics	32
3.4.4.1	Pearson Correlation	32
3.4.4.2	Multiple Regression Analysis	33

3.4.4.3	Advanced Bivariate Relationship of Rank, Unit, Frequency of Job, Courses and Training, Personal Protection Equipment and Risk	35
3.4.4.4	Multiple Regression Analysis	35
<b>FOUR</b>	<b>RESULT AND DISCUSSION</b>	<b>36</b>
4.1	Research Response	36
4.2	Demographic Profile of Respondents	37
4.2.1	Respondent Profile: Age	37
4.2.2	Respondent Profile: Gender	38
4.2.3	Respondent Profile: Ethnic Groups	40
4.2.4	Respondent Profile: Marital Status	42
4.2.5	Respondent Profile: Rank	43
4.2.6	Respondent Profile: Duration of Service in Current Unit	44
4.2.7	Respondent Profile: Current Unit	46
4.3	Procedure of Personal Safety	47
4.4	Risk Awareness	49
4.5	Threat Experienced by Respondents	49
4.6	Attitude Towards Being Armed	52
4.7	Bivariate Relationship of Rank, Unit, Frequency of Job, Risk, Courses and Training and PPE.	54
4.7.1	Multiple Regression Analysis on Risk Assessment	55
4.8	Advanced Bivariate Relationship of Rank, Unit, Frequency of Job, Courses and Training, Personal Protection Equipment and Risk	58
4.9	Multiple Regression Analysis on Respective Risk Factors	58



<b>FIVE</b>	<b>CONCLUSION AND RECOMMENDATIONS</b>	<b>61</b>
<b>References</b>		<b>66</b>
<b>Appendices</b>		<b>68</b>
Appendix A: Establishment of CID (D101)		68
Appendix B: CID Directives		79
Appendix C: IGSO D220		88
Appendix D: Questionnaire		102
Appendix E: Organization Charts of CID		112
Appendix F: Raw Data of Selected Ration-scaled Answers		117
Appendix G: Input and Output of Pearson Correlation Analysis		126
Appendix H: Input and Output of Multiple Regression Analysis		135
Appendix I: Input and Output of Pearson Correlation Analysis Based on Respective Risk Factor		143
Appendix J: Input and Output of Multiple Regression Analysis Based on Respective Risk Factor		161
Appendix K: Time Table / Syllabus for Detective Conversion Course		225

## LIST OF FIGURES

FIGURE		PAGE
1.1	Index of Crime in Malaysia Between 1970 and 2000.	3
4.1	Respondents Profile with Regards to Age	38
4.2	Respondents Profile with Regards to Gender	39
4.3	Distribution of Gender in RMP	40
4.4	Respondents Profile with Regards to Ethnic Groups	43
4.5	Distribution of Race in RMP	42
4.6	Respondents Profile with Regards to Marital Status	42
4.7	Respondents Profile with Regards to Rank	44
4.8	Respondents Profile with Regards to Duration of Service in Current Unit	45
4.9	Respondents Profile with Regards to Current Unit	47
4.10	Availability of Procedure for Personal Safety	48
4.11	Sources of Risk Awareness	50
4.12	Threat Statistics of Respondents	51
4.13	Reason of Carrying Firearm in Duty by Respondents	53
5.1	Distribution of Detectives in Kuala Lumpur RMP Personal	61
5.2	Distribution of Detective in Malaysia	62

**LIST OF TABLE**

<b>TABLE</b>		<b>PAGE</b>
3.1	Summary of Selected Questions for Analysis	33
4.1	The Process of Questionnaires	36
4.2	The Scope of Job of The Five Units	46
4.3	Summary of Pearson Correlation Matrix	54
4.4	Regression Model Summary	56
4.5	Summary of Regression Analysis on Respective Risk Factor	59

## LIST OF ABBREVIATIONS

CCID	Commercial Crime Investigation Division
CID	Criminal Investigation Department
CP	Commissioner of Police
CPO	Chief Police Officer
CT	Courses and Training
FJ	Frequency of Job
ICT	Information and Communication Technology
IGSO	Inspector General Standing Orders
IPK	Contingent Headquarters.
PPE	Personal Protective Equipments
RMP	Royal Malaysia Police

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background

The role of Royal Malaysia Police (RMP) is to serve as the law enforcement agency to the government. In particular, RMP is responsible over crime matters. Its history is traceable back to the early history of the state itself. The police unit was formed during the Malacca Sultanate and was responsible for the order, peace and stability of the port and the state as well.

The modern police in this country began in the year 1807 when the Colonial British introduced the Charter of Justice in Penang. The High Sheriff and Deputy Sheriff was appointed and was made responsible for maintaining peace and security and the enforcement of laws in the Prince of Wales Island, that is today's Penang (Aslie, 1984). RMP have just celebrated its 194th birthday on March 25<sup>th</sup> this year (BBA, 2001). Its roles and functions are still basically the same.

As the country advances and the nation progresses, the crime follows as well, the crimes becomes more complicated in nature. New methods were deployed; sophisticated equipments were used in committing crimes. The "modest operandi" or the methodology is as advance as the world's advancement in all walks of life. The advancement of Information and communication technology (ICT) is not spared with. Today, the criminal uses



the ICT to commit crimes. The challenges for today's force members are undoubtedly tremendous.

Over times, the number of crimes committed continued to grow. This ascending trend is contributed by various related factors such as the social, economic, educational levels, law enforcement and others. The force members have to constantly measure themselves up with the surrounding and be sufficiently reliable. Therefore, everybody in this country will be able to feel safe in terms of life, property and mind. The ascending crime trend in the country is seen through the statistic of overall crime index for the past 30 years as shown in figure 1.1. The index is summary of violent crime and property crime indices.

The substantial increases of major types of crimes in late 1980s and 1990s indicated that the country's rapid economic and industrialization progress have brought about its attending social problems. Studies conducted by well-known criminologists such as Clifford Shaw, Robert Mackay and Frederick Thrasher have revealed that high crime rates are associated with areas undergoing rapid economic and industrial transition (CCP, 1997).

Nowadays, reading our daily newspapers can be very disheartening. There are numerous heinous crimes, which are reported almost everyday. Rape, murder, robbery, snatch theft and so on. What has become of our country? In our quest to be a fully industrialized nation, we have overlooked one important element that is to be able to feel safe in term of person,

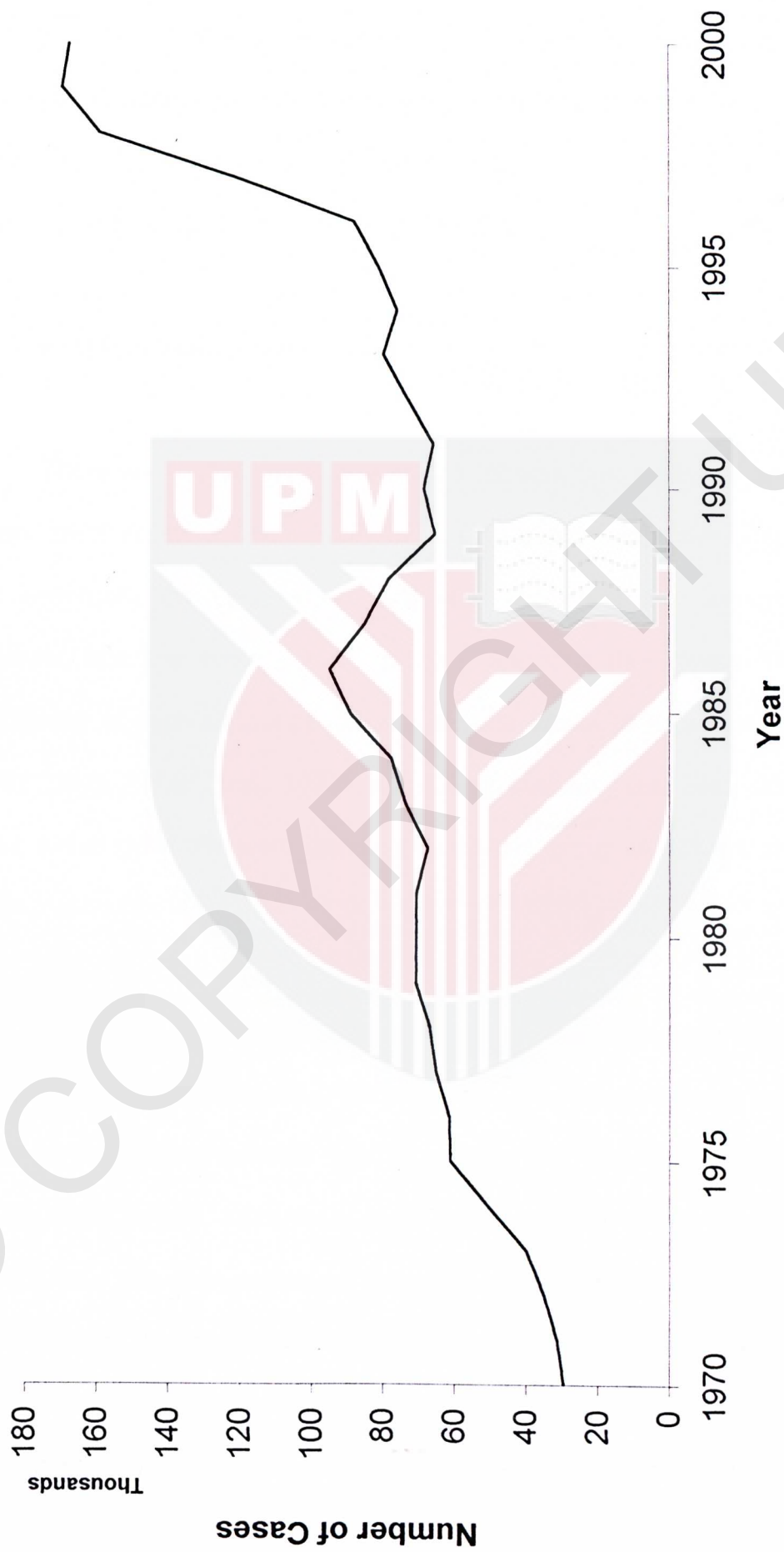


Figure 1.1: Index of crime in Malaysia Between 1970 and 2000. (D4-JSJ, 2001)

property and mind. Without this element, it serves no purpose for us to have a high GDP, economic growth rate or world-class infrastructure. This is because we will still be unable to enjoy a high quality of life when we always have to be on guard against falling victim to crime (Yuen, 2001).

## 1.2 Problem Statements

There are incidences where armed robbers being gunned down by the police, serial rapist arrested, dangerous character in gangsters overpowered and eventually arrested. There are also abduction and ransom money. However, fast and smart actions of the police save the victims. There were abundance of such instances like the popular cases of Kalimuthu (The Star, 1999), gang Azhar (UM, 1998) and Gang Mamak (The Star, 2000). And, these cases generally were handled by certain group of officers in the RMP force.

Even though they are always on the upper hand and the criminals always in adverse eventuality, the risks could be overwhelming which could give an adverse eventuality too. In carrying out their duties, they have to handle dead bodies, hazardous crime scene or site. There may be HIV or Tuberculosis diseases exposure that may cause possible vulnerability to the officers. Were they adequately equipped and trained for their jobs? Were they happy to shoot at the criminals while fully aware that they too could be shot by the criminals? How stressed are they when they were called or assigned for a job?

The study was intended to assess the risk encountered by the group of personnel in the CID, particularly health and safety risks and looking into their equipments and training provided. They were the personnel in the lower ranking officers from Police Constable to the Sub-Inspector who are serving as detectives or the plain cloth policeman. They were chosen in this study, as they are the immediate responders to the crime apprehension and investigation activities.

### **1.3 Objective of Study**

Objectives of the study were: -

- (a) To assess the occupational risks faced by the CID detectives.
- (b) To make recommendation on any possible measures, procedures, methods, training or equipments be changed or be adopted by the authority in order to enhance the working condition of the group under study.

### **1.4 Significance of Study**

Research or a study itself is started from a "problem". Generally, a problem occurs when changes take place in the areas such as politic, economy, society, safety and etc. The society will decide if the statement would be considered as a problem. Commonly, the statement would become a problem if it affects the society (Mahdzan, 1995).



In other words, a research is important to organizations, societies and certain individuals. In this study, the research was carried out to,

- (a) Investigate whether the CID detectives are;
  - i. Sufficiently trained.
  - ii. Properly equipped.
  - iii. Encountering health and safety risks.
- (b) Determine the factors that are contributing to the occupational risk in current organization.
- (c) Reveal the occupational risks that occur repetitively and yet to be overcome.
- (d) Suggest the solution to the problems frequently faced by CID detectives at the end of the study.

### 1.5 Limitations

Occupational hazards faced by the CID detectives are a big topic by itself. Considering the constraints in time and resources, the scope of the study was confined to the following:

1. The group taken for study was the RMP's CID detectives serving in Kuala Lumpur Contingent only. They are the supporting group in the CID functional activities.



2. Areas of study were only confined to:

- i. Personal background of the respondents.
- ii. Safety and health risks encountered in the performance of their duties.
- iii. The effectiveness of the courses and training provided.
- iv. Logistic preparation, in particular the PPE.



## REFERENCES

- Askandar, A.K. (1997) *Country Paper (Malaysia) for 7<sup>th</sup> Joint Asean Senior Police Officer Course (Policing Toward The Next Millennium)*. 17pp.
- Aslie, M.R. (1984) *Polis Diraja Malaysia: Sejarah Peranan dan Cabaran (1<sup>st</sup>)*. Kumpulan Karang kraf Sdn Bhd.p5-12, 268-280.
- Clarke, R.V.G. and Hough J. M. (1984) *The effectiveness of Policing*. Gower Publishing company Ltd. Gower House. Croft. Road. Hampshire. GU 11 2 HR.
- Edward A. T., M. L. Lawrence and R. B. Mc. Bride (1995) *Proactive Police Management*. Prentice Hall Inc. Engalewood Cliff. New Jersey. 07632.
- Gabrial P. and Charles L. (1995). A Star Poll. *The Star* on 16 October 1995.
- Mahdzan, A. A. (1995) *Kaedah Penyelidikan Sosioekonomi*. Edisi Kedua. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Martin, S. (1980) *Breaking and Entering: Policewomen on Patrol*. Berkeley, C. A. University of California Press. Ltd. In: More, H. W. (1992) *Special Topics in Policing*. Anderson Publishing Co. 268p.
- Mitchell, M and M. Cowan (1998) *Facing Violence: Assessing The Training and Support Requirements of Police Constables in Scotland*. In: <http://www.Scotland.gov.uk/cru/resfind/erf19-00.htm> p2-5.
- More, H. W. (1992) *Special Topics in Policing*. Anderson Publishing Co. 268p.
- Nik Mohd. Amin, N. A. (1998) *Training Needs for Police Personnel in An Effort to Upgrade The Organizational Services of TheRoyal Malaysian Police*. 130p.

OSHA (Occupational Safety And Health Act) (1984).

Paul, B. W. and M. W. Kenneth (1974) Criminal Investigation (Basic Perspectives). Prentice Hall Inc. Englewood Cliffs. New Jersey.

RMP (Royal Malaysia Police) (1967a) Inspector Generals Standing order (IGSO) D220; *In* 'Detective Definition' Para4.1 to 4.4.

RMP (Royal Malaysia Police) (1967b) Inspector Generals Standing order (IGSO) D101; *In* 'CID Establishment', Para 1,2 and 3.

SAS Institute (1996). SAS User's Guide: Statistics. (6<sup>th</sup> Edition) Cary, NC, USA: SAS Institute. p1028.

SBPP (Seminar Bahagian Perkhidmatan / Perjawatan) (2000). Bahagian Pengurusan Bukit Aman. p5-8.

SPSS (Statistical Package for Social Science) (1999). *Guide to Data Analysis*. (9<sup>th</sup> Edition) Prentice Hall. New Jersey. USA. p577.

The Star (2000). Electronic Components Robbed in Highway.

The Star (1999). Businessman murdered in Old Klang Road.

UM (Utusan Malaysia) (1998). Rompakan Kedai Emas JB, Polis Buru Gang Azhar.

Wayne, W. B. and M. H. Karen (1997). Criminal Investigation (5<sup>th</sup> Edition) West / Wadsworth Publishing Company.