



UNIVERSITI PUTRA MALAYSIA

***THE IMPACT OF WORK STRESS AND WORK FATIGUE ON RIDING
MOTORCYCLE BEHAVIOUR AMONG IMMIGRATION OFFICER
DEPARTMENTS OF MALAYSIA***

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MOTORCYCLE BEHAVIOUR AMONG IMMIGRATION OFFICER
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BY

RIDHWAN HABIB BIN MOHAMED SALEH

**Thesis submitted in fulfilment of the requirement for the degree of Bachelor
Science (Environmental and Occupational Health) from the Faculty of Medicine
and Health Sciences, Universiti Putra Malaysia**

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ABSTRACT

THE IMPACT OF WORK STRESS AND WORK FATIGUE ON RIDING MOTORCYCLE BEHAVIOUR AMONG IMMIGRATION OFFICER DEPARTMENTS OF MALAYSIA

RIDHWAN HABIB BIN MOHAMED SALEH

Introduction: Our goal in finding reasonable preventive measure to enhance our road safety and additionally to lessen the quantity of road casualty in Malaysia. Thus, this research aims to provide understanding of the impact of stress and fatigue from work upon behaviour and road safety. **Objective:** To evaluate the impact of work stress and fatigue on riding motorcycle outcomes among officer from Immigration Department of Malaysia. **Methodology:** This is a cross sectional study which aims to use questionnaire instrumental to determine the association between work related stress and fatigue to riding motorcycles behaviour among officer from Immigration Department of Malaysia. This study was conducted at Immigration Department of Malaysia, Wilayah Persekutuan Putrajaya, Wilayah Persekutuan Kuala Lumpur and Selangor with a total of 187 respondents were selected purposively. **Results:** Work stress and fatigue show an association towards three subscales of riding motorcycle behaviour (Unfit Erroneous Riding, Intrusive and Exhibitive Behaviour; Time and Money Opportunistic Behaviour; Using Helmet Behaviour). There is significant correlation ($p < 0.05$) between age and UIEB in which younger riders have more unfit erroneous ride, intrusive & exhibition behaviour than older riders. For the association of work-related fatigue with the respondent riding outcomes, there were significant correlation ($p < 0.05$) in which workers of office hour have poorer behaviour on helmet usage than workers working day and night shift. **Conclusion:** Based on this study, it can be conclude that workers having work-related stress will be having higher-level of work-related fatigue due to working task and will be showing more unfit erroneous riding, Intrusive and Exhibitive Behaviour. **Recommendation:** A module needs to be created with helps from Malaysian Institute of Road Safety (MIROS) to overcome the impact from psychosocial factor on motorbike rider behaviour among officer in Immigration Department of Malaysia.

Keywords: work stress, work fatigue, riding motorcycle behaviour, Immigration Department of Malaysia.

ABSTRAK

IMPLIKASI STRESS DAN KELETIHAN BEKERJA TERHADAP TINGKAH LAKU MENUNGGANG MOTOSIKAL DALAM KALANGAN PEGAWAI JABATAN IMIGRESEN MALAYSIA

RIDHWAN HABIB BIN MOHAMED SALEH

Pendahuluan: Matlamat kami dalam mencari langkah pencegahan yang munasabah untuk meningkatkan keselamatan jalan raya dan juga untuk mengurangkan jumlah mangsa jalan raya di Malaysia. Oleh itu, kajian ini bertujuan memberi pemahaman mengenai kesan stres dan keletihan daripada kerja-kerja terhadap tingkah laku dan keselamatan jalan raya. **Objektif:** Untuk mencari hubungkait antara tekanan dan tahap keletihan akibat tugas dengan kesan terhadap tingkah laku pegawai Jabatan Imigresen Malaysia semasa menunggang motosikal. **Metodologi:** Ini adalah kajian rentas lintang yang bertujuan untuk menggunakan soal selidik untuk menentukan hubungan antara stres berkaitan pekerjaan dan keletihan untuk menunggang motosikal di kalangan pegawai dari Jabatan Imigresen Malaysia. Kajian ini dijalankan di Jabatan Imigresen Malaysia, Wilayah Persekutuan Putrajaya, Wilayah Persekutuan Kuala Lumpur dan Selangor dengan seramai 187 responden dipilih secara purposif. **Hasil:** Stres kerja dan keletihan menunjukkan hubung kait terhadap tiga sub-skala menunggang motosikal (Tingahlaku yang tidak betul, pelakuan yang tidak menarik dan; Kelakuan Opportunistik Masa dan Wang; Perilaku Menggunakan Helmet). Terdapat korelasi yang signifikan ($p < 0.05$) di antara umur dan UIEB di mana penunggang yang lebih muda mempunyai kelakuan yang tidak betul yang salah, tingkah laku & pameran yang tidak sesuai daripada penunggang yang lebih tua. Bagi hubungan keletihan yang berkaitan dengan kerja dengan hasil menunggang responden, terdapat hubungan yang signifikan ($p < 0.05$) di mana pekerja normal mengikut 8 jam shift pejabat mempunyai tingkah laku yang lebih rendah terhadap penggunaan topi keledar daripada pekerja bekerja 12 jam shift sehari dan semalam. **Rumusan:** Berdasarkan kajian ini, dapat disimpulkan bahawa pekerja yang mengalami stres yang berkaitan dengan pekerjaan akan mengalami keletihan yang berkaitan dengan pekerjaan yang lebih tinggi akibat tugas kerja dan akan menunjukkan tunggakan yang lebih tidak tepat, Tingkah Laku dan Ekshibit. **Cadangan:** Modul perlu diwujudkan dengan bantuan Institut Keselamatan Jalan Raya Malaysia (MIROS) untuk mengatasi kesan daripada faktor psikososial terhadap tingkah laku pengendali motosikal di kalangan pegawai Jabatan Imigresen Malaysia.

Kata kunci: tekanan kerja, keletihan kerja, tingkah laku menunggang motorsikal, Jabatan Imigresen Malaysia.

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LIST OF ABBREVIATIONS

MIROS	Malaysian Institute of Road Safety
WHO	World Health Organization
NST	News Straits Times
PDRM	Polis Diraja Malaysia
UEIB	Unfit Erroneous Riding, Intrusive and Exhibitive Behaviour
TMB	Time and Money Opportunistic Behaviour
HB	Using Helmet Behaviour

CHAPTER 1

INTRODUCTION

1.1. STUDY BACKGROUND

Malaysia has been position at number 20 in its rundown nations with the most fatality brought on by road accidents in the World Health Ranking 2011. Road accidents have additionally been distinguished as the main source of death in Malaysia, after coronary illness, stroke, flu and pneumonia (NST, 2016). Malaysian Institute of Road Safety demonstrated that a normal of 18 individuals were dead on Malaysian roads day by day. The research anticipated that road fatalities would represent 10,716 death in 2020 contrasted and a normal of 6,915 yearly fatality lately (MIROS, 2016).

According to (Rowden, Matthews, Watson, & Biggs, 2011) work-related stress is a topic of particular concern to organisations due to increased turnover, absenteeism and exposure to substantial claims for compensation. In addition, the impact of stress becomes increasingly pertinent to organisations with fleets of vehicles considering that motor vehicle crashes are the major cause of work-related fatalities, injuries and absence from work.

Life events and work related stress result from specific major events or the cumulative effect of daily hassles. It has been linked to detrimental road safety outcomes in several previous studies (Rowden et al., 2011).

By taking a gander at the measurement, the quantity of death due to road casualty in Malaysia is very stressing. Further research study on the variables that add to such mishaps should be directed keeping in mind the end goal to recognize the inferable components, and finding reasonable preventive measure to enhance our road safety and additionally to lessen the quantity of road casualty. Thus, this research aims to provide understanding of the impact of stress and fatigue from work upon behaviour and road safety.

1.2. PROBLEM STATEMENT

1.2.1. Factor and cases trend

For many years, motorcycle has been the most preferable, convenient and affordable mode of transport. Our statistics have revealed an increase in numbers of death due to road accident from 6 286 deaths in 2003 to 6 917 in 2012. Of this, motorcyclists have been identified as the most vulnerable road user because they contribute to about 50 per cent of the total deaths. (PDRM, 2009).

For two decades, the trend shows motorcyclist has continued to outnumber other road users. In 2009, statistics showed that the ratio of other road users to motorcyclist fatalities is 1: 1.52. (Sarani, Roslan, & Saniran, 2011).

Figure 1 shows the trend analysis of motorcyclists and other road user's fatalities for the last thirty years. From early 80's, up to year 1992, other road users fatalities is always more than motorcyclists. As observed, a big jump on three consecutive years for motorcyclist fatalities; 1993 – 1994 from 2 416 to 2 946, 1994 (2 946) – 1995 (3 362), and 1995 (3 362) – 1996 (3 778) with 22%, 12% and 14 % increment respectively. In the last ten year trend (2000-2010), the biggest jump was in 2007 (3,646) – 2008 (3,898), almost 7% increment, and the biggest reduction was in year 2000 (3,591) – 2001 (3,693), by 4%. Annually, the number of fatalities among motorcyclist has an average of 2% increment for the last ten years. (MIROS, 2011)

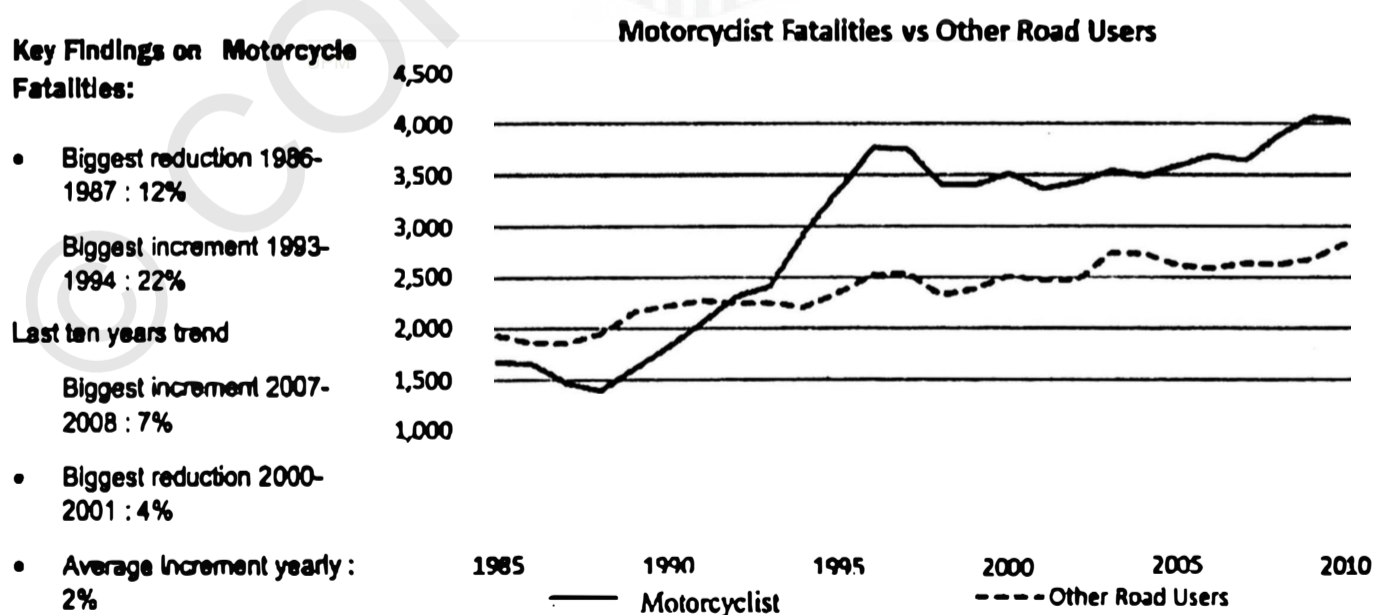


Figure 1: Motorcyclist Fatalities vs Other Road Users from 1985 to 2010 (MIROS,2011)

1.2.2. Increased New Registered Motorcycle Yearly

The number of registered motorcycles continue to grow rapidly each year. At least, 1% of them get involved in road accidents. Although the percentage is small, but the numbers are big enough to bring huge losses to the economic output of the country. Moreover, out of the 1% of motorcycle involved in road accidents, more than 10 000 riders and pillions are injured and killed every year. Figure 2 below shows the motorcycle accident fact and the number of new registered motorcycle.

Years	New Registered Motorcycle (accumulative) (A)	No. of Motorcycle Accidents (B)	% (B/A)	No. of Rider Fatalities (C)	No. of Rider Casualties* (D)	% (C/D)	No. of Pillion Fatalities (E)	No. of Pillion Casualties* (F)	% (E/F)
2000	5,356,604	79,816	1.490	3,118	30,109	10.356	401	3,542	11.321
2001	5,609,351	85,761	1.529	2,971	30,348	9.790	398	3,279	12.138
2002	5,842,617	86,834	1.486	3,034	29,201	10.390	395	3,450	11.449
2003	6,164,958	95,545	1.550	3,166	30,832	10.269	382	3,416	11.183
2004	6,572,366	99,227	1.510	3,101	32,023	9.684	399	3,704	10.772
2005	7,008,051	97,072	1.385	3,181	27,445	11.590	410	3,777	10.855
2006	7,458,128	104,382	1.400	3,243	19,394	16.722	450	3,017	14.915
2007	7,943,364	111,958	1.409	3,197	18,151	17.613	449	3,124	14.373
2008	8,487,451	111,819	1.317	3,459	14,074	24.577	439	2,527	17.372
2009	8,940,230	113,962	1.275	3,640	13,561	26.842	430	2,250	19.111
2010	9,441,907	120,156	1.273	3,614	12,112	29.838	422	1,936	21.798

Source: PDRM road accident annual statistic reports
*Including death

Figure 2: Motorcycle Accident Fact until 2010 by PDRM 2011

1.2.3. Highest Fatalities in Selangor and Kuala Lumpur

Statistics from PDRM in Figure 3 show that at least 15% of total motorcycle fatalities in the country occurred in Selangor, the most developed state after the capital city of Kuala Lumpur in 2006 until 2009. (Research, 2011).

SELANGOR				
Years	2006	2007	2008	2009
Accidents	16 628	12 710	17 203	15 637
Fatalities	355	363	356	389

Figure 3: Total number of Motorcycle fatality in Malaysia for 4 years by PDRM 2011

Looking deeper into the type of area, motorcycle fatalities are mostly recorded on motorways and primary roads (62%). Motorcycle fatalities are also found more in residential areas (20%), as compared to other types of areas as shown in figure 4.

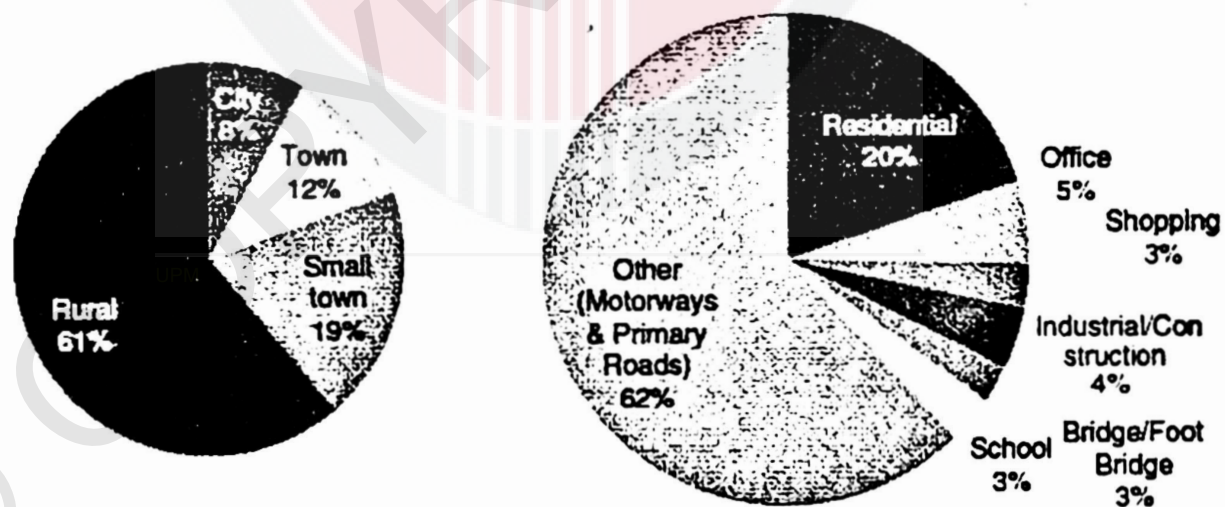


Figure 4: Motorcycle fatality according to Rural and Urban area and type of road Motorcycle in Malaysia by PDRM 2011

Figure 5 shows that the majority of motorcycle fatalities occur on arterial or primary roads, Related to the road length, the highest fatality rate per 100 km and per 100,000 motorcycles also occurs along primary or arterial roads.

Moreover, there are more motorcycle fatalities per 100 km of Malaysian primary roads than on secondary roads, local streets and minor roads combined.

Road hierarchy	Road length		ADT (million)		MC fatalities		MC fatal/ 100 km	MC fatal/ 100,000 MC
	km	%	Veh	MC	N	%		
Expressway	1635	1.3	20.6	*	121	3.0	7.4	*
Primary/arterial	16,939	13.6	12.8	2.6	2021	49.7	11.9	76.7
Secondary/collector	54,681	43.9	6.3	1.6	672	16.5	1.2	42.0
Local street	43,363	34.8	*	*	755	18.6	1.7	*
Minor roads	8038	6.4	*	*	501	12.3	6.2	*
Total	124,656	100	-	-	4070	100	3.3	-

ADT – average daily traffic, Veh – vehicle, MC – motorcycle,
 (*) – data is not available.
 The traffic count (ADT) covers 70% of each road hierarchy in Malaysia.

Figure 5: Motorcycle fatality by road type in Malaysia in 2009

1.3. STUDY JUSTIFICATION

1.3.1. Less research on Psychosocial Factor

As there is less study research on the impact of psychosocial factors on driving behaviour in Malaysia, this study is needed to reveal and evaluate the association between work stresses, added with relevant variables which is work fatigue on motorcyclist outcome. These will help to add and widen the knowledge for the issue.

A clear relative contribution of work stress on the riding outcomes and behaviour will be assessed and measured. This study is relevant because stress at work will greatly give impact on someone quality of life. The problems are even could disturb one's way of thinking and action. According to Gulian et al. (1989) driver stress mainly occurs when an individual perceives his or her driving ability to be insufficient to manage the demands and dangers of driving, and it may induce a dislike of driving and hazard monitoring. Thus, the impact of stress on motorcyclist outcomes need to be identified, evaluated and their association need to be proven.

The impacts of work-related stress on riding behaviour need to be studied in depth. This is because, occupational stress may lead someone to take drugs or consume alcohol, and speeding. Moreover, that action obviously led to road casualty. In another perspective, such action is illegal under the Road Safety Act 1987 (Section 41) (1). These stressful workers really need help based on the strong evidence from road safety research.

I hope that the data of this study will be helpful in developing education initiatives or community campaigns by organizations, policies, legislation and infrastructure intended to improve road safety and awareness in Malaysia.

1.4. CONCEPTUAL FRAMEWORK

Figure 3 shows the conceptual framework which summarize of this study. This conceptual framework is the summarization of the study on the impact of work stress and work fatigue with riding behaviour and outcomes.

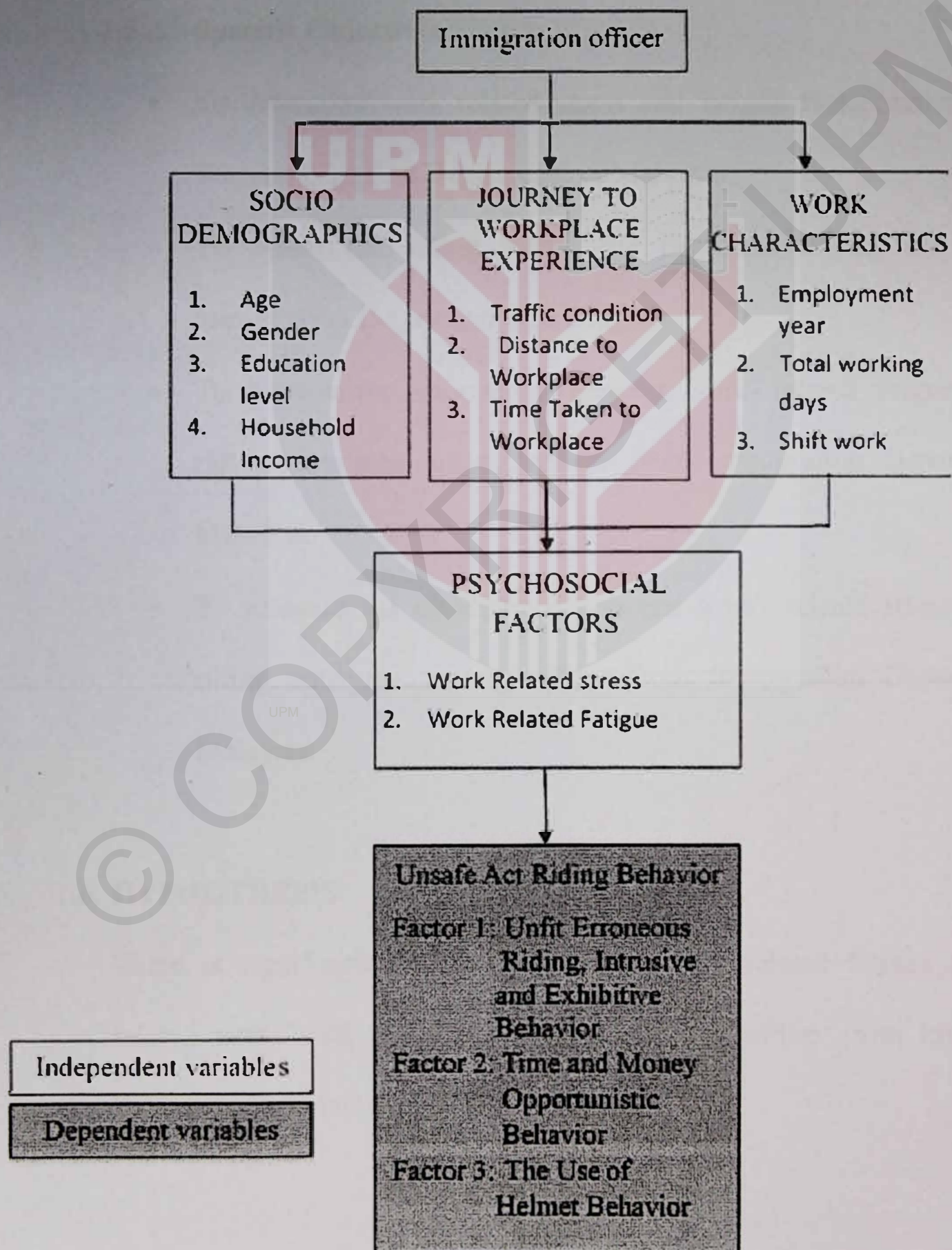


Figure 6: Conceptual Framework

1.5. OBJECTIVES

1.5.1. General Objectives

To evaluate the impact of work stress and fatigue on riding motorcycle outcomes among officer from Immigration Department of Malaysia.

1.5.2. Specific Objectives

- To determine work-related stress and fatigue factor among officer from Immigration Department of Malaysia.
- To assess the riding motorcycle outcomes among officer from Immigration Department of Malaysia.
- To measure the associations between work- related fatigue with the riding outcomes among officer from Immigration Department of Malaysia.
- To measure the associations between work- related stress with the riding outcomes among officer from Immigration Department of Malaysia.

1.6. HYPHOTHESIS

There is significant association between work related fatigue and work related stress with the riding behavior among officer from Immigration Department of Malaysia.

CHAPTER 2

LITERATURE REVIEW

2.1. Work Related Stress

A healthy job is likely to be one where the pressures on employees are appropriate in relation to their abilities and resources, to the amount of control they have over their work, and to the support, they receive from people who matter to them. As health is not merely the absence of disease or infirmity but positive state of complete physical, mental and social well-being (WHO, 1986), a healthy working environment is one in which there is not only absence of harmful conditions but an abundance of health-promoting ones. (“WHO | Stress at the workplace,” 2010)

Work related stress is the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope. Stress occurs in a wide range of work circumstances but is often made worse when employees feel a little support provided from their supervisors and colleagues, as well as little control over work processes. There is often confusion between pressure or challenge and stress bad sometimes it used

to excuse bad management practice. (“WHO | Stress at the workplace,” 2010)

2.2. Work fatigue

Fatigue is more than feeling tired and drowsy. In a work context, fatigue is a state of mental and/or physical exhaustion, which reduces a person’s ability to perform work safely and effectively. It can occur because of prolonged mental or physical activity, sleep loss and/or disruption of the internal body clock. Fatigue can be caused by factors, which may be work related, non-work related or a combination of both and can accumulate over time (Queensland, 2018).

2.3. Fatigue in motorcycling

Fatigue in motorcycling has been largely ignored by road safety practitioners and governments. Currently, researchers do not have sufficient information needed to draw reliable conclusions regarding the magnitude of the effects of factors that may contribute to motorcycle fatigue or subsequent crashes. Hence, more knowledge of the phenomenon is needed to allow countermeasures to be developed (Haworth & Rowden, 2006).

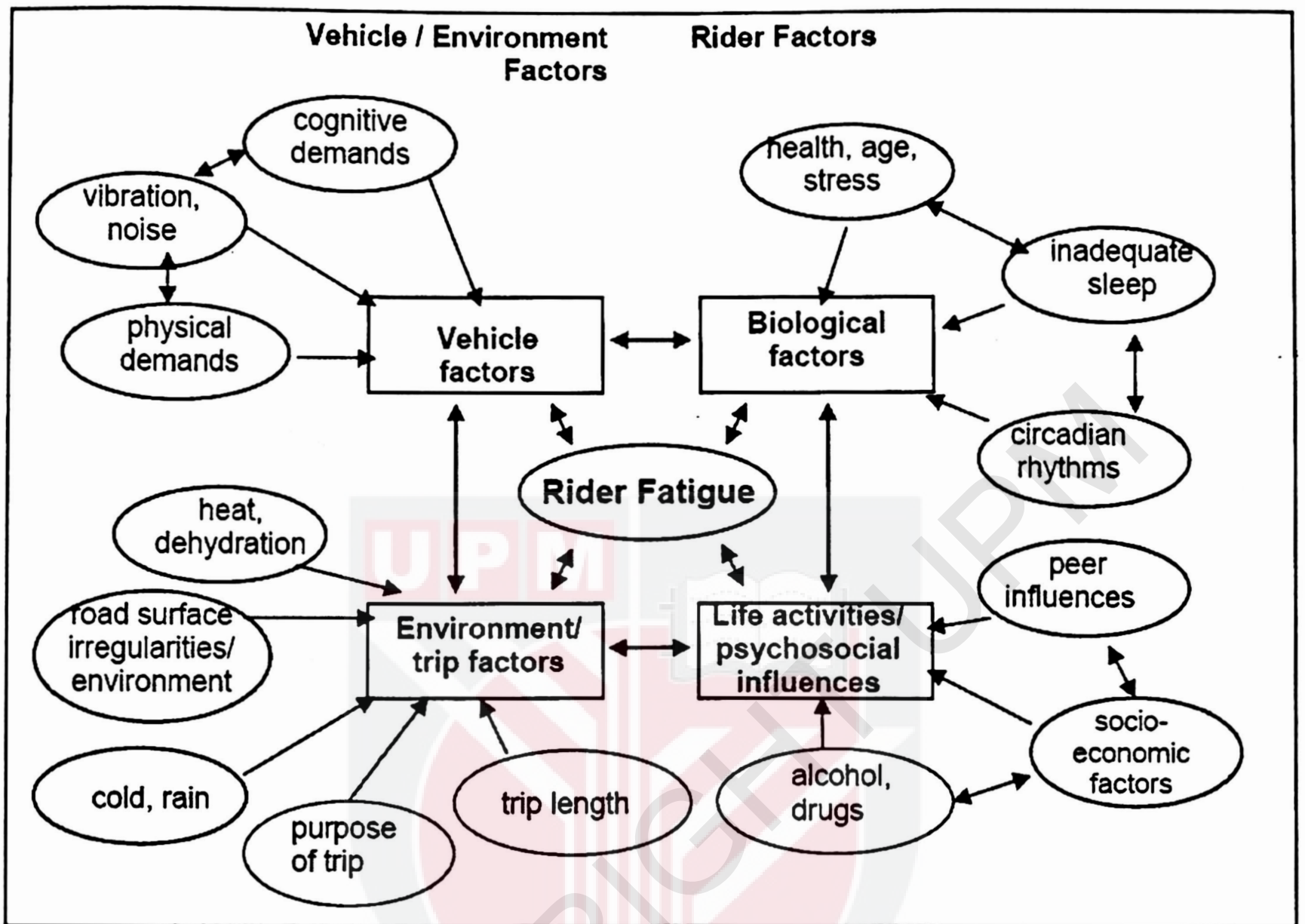


Figure 7: Motorcycling Fatigue Model. A conceptual representation of factors that potentially contribute to fatigue in motorcycling (adaptation from NTC, 2001).

CHAPTER 3

METHODOLOGY

3.1. Study Location

This study was conducted at Immigration Department of Malaysia, Wilayah Persekutuan Putrajaya, Wilayah Persekutuan Kuala Lumpur and Selangor.

3.2. Study Design

This is a cross sectional study which aims to use questionnaire instrumental to determine the association between work related stress and fatigue to riding motorcycles behavior among officer from Immigration Department of Malaysia.

A total of 187 respondents were selected purposively. The sampling technique used was purposive sampling based on the purpose of officer that are riding a motorcycles to get to the work place.

3.3. Study sampling

3.3.1. Sampling population

The respondent of this study were among Immigration officer from various department which used or ride a motorcycle to get to the workplace in Wilayah Persekutuan Putrajaya, Wilayah Persekutuan Kuala Lumpur and Selangor.

3.3.2. Sampling Frame

The sampling of this study was obtained randomly through briefing and meeting with the Director of each Immigration Unit and also before the study instrument been distribute to the respondent. All respondents have signed consent letter to agree in participate in this study.

3.3.3. Sample size

For recruitment of respondent, the purposive sampling was implemented. No additional inclusive and exclusive criteria emphasized in this study. Nevertheless, individual factors and work factors were controlled in statistical analysis. The total population of sample was about 215 personnel. For the sample size calculations of respondents, the formula by (Lemeshow, W, Klar, & Lwanga, 1990) was used. The estimated precision, 0.9 was based on the previous study (Rusli, B. N., Edimansyah, B. A., & Naing, 2008) The total of sample size estimated in this study was 167 officer. In fact, 200

questionnaires distributed among sample group that 177 have returned completely.

3.4. Study instrumentation

3.4.1. Questionnaire

The questionnaire was constructed based on the listed of information according to the study objectives. This is a self-administrated survey.

The survey were divided into 6 parts (Part A to Part B). Part A consisted of questions about socio demographics data of respondents.

Part B was about the general work characteristics. Part C was about

Riding Journey to Workplace Experience. Part D was about

Workplace Environment that included Work-Related Quality of life

Scale: A Measure of Quality of Working Life First Edition(Easton &

Van Laar, 2013). Part E that consist of Modified Fatigue Impact Scale

(Frith & Newton, 2010).

Lastly, Part F include the short Persian version of motorcycle

riding behavior questionnaire and its interchangeability with the full

version (Hosseinpourfeizi et al., 2018). The designed questionnaire

will be translated to *Bahasa Melayu*. To ensure the validity of the

language used without changing the meaning of the content, the

questionnaire will be assessed a few times by professional and

lecturer from Department of Environmental and Occupational Health,
Faculty of Medicine and Health Sciences, UPM.

The Work-Related Quality of Life (WRQoL) Scale is an evidence based measure of Quality of Working Life (QoWL), (Van Laar et al., 2007) based on the following six independent psychosocial subscales. The 6 subscales analysed were General Well Being (GWB), Home-Work Interface (HWI), Job and Career Satisfaction (JCS), Control at Work WRQoL (CAW), Working Conditions (WCS), and Stress at Work (SAW). This subscale assesses the extent to which you see work pressures and demands as acceptable and not excessive or “stressful”.

The UK Health & Safety Executive (HSE) define stress as: “the adverse reaction people have to excessive pressure or other types of demand placed on them”. Work pressures and demands can be a positive aspect of our work experience, providing challenge and stimulation, but, where we see them as excessive and beyond our ability to cope, we are likely to feel overloaded and stressed. (Easton & Van Laar, 2013).

Modified Fatigue Impact Scale (FIS) was an evidence-based measure of fatigue. The score reflects functional limitation due to fatigue experienced daily rather than a measure of the level of fatigue (Frith & Newton, 2010). The FIS has proven to be a robust tool for the patient groups listed below. Internal consistency is high for overall scores and the three subscales (Cronbach's $\alpha \geq 0.87$) (Fisk JD, Ritvo PG, 1994). Test-retest reliability is high

(0.72–0.83) as is convergent validity [multiple sclerosis (MS) and healthy controls]. Validity as a quality of life measure has been established against the Sickness Impact Profile. External validity has been established in the following patient groups (although it has been used in many more): patients presenting with chronic fatigue, MS, chronic obstructive pulmonary disease, primary biliary sclerosis and chronic hepatitis C infection (Kramer L, Hofer H, 2005).

The short Persian version of motorcycle riding behaviour questionnaire and its interchangeability with the full version (Hosseinpourfeizi et al., 2018) a valid and reliable short motorcycle riding behaviour questionnaire (SMRBQ) and assess its interchangeability with the original 48-item tool. Through a psychometric study in Bukan district of Iran in 2015, the most recent available Persian version of the motorcycle riding behaviour questionnaire (MRBQ) was used as a reference to develop its short version, the SMRBQ. The preliminary version was prepared through expert reviews, and its dimension was further reduced through principal component analysis (PCA).

An exploratory factor analysis (EFA) was then applied on the remaining items and the final version was developed with 23 items. The validity, consistency, agreement and interchangeability of the SMRBQ were assessed in parallel with the MRBQ using several statistical methods including Kendall's Tau, intra-class correlation coefficient (ICC), Bland-Altman plot and receiver operating characteristics (ROC) curve analysis. All

the 340 participants were males. The mean age of the participants was 30.2 (SD = 9.1). SMRBQ was developed including 23 items. The mean normalized score for the full version was 30.5 (SD = 11.2) and it was 30 (SD = 13.9) for the short version. There was a high correlation between the normalized scores of MRBQ and SMRBQ (Kendall's Tau = 0.82). The ICC of the interchangeability of the full version and short version scales was as high as 0.92 (95% CI: 90.2–93.5).

The scale had adequate internal consistency based on the calculated Cronbach's alpha which was 0.85 for the scale. Bland-Altman and ROC curve analysis confirmed the interchangeability and criterion validity of the SMRBQ. The Persian version of SMRBQ was found to be a valid, reliable and feasible tool for assessing motorcycle riding behaviour in the studied population.

3.5. Study Flow Chart

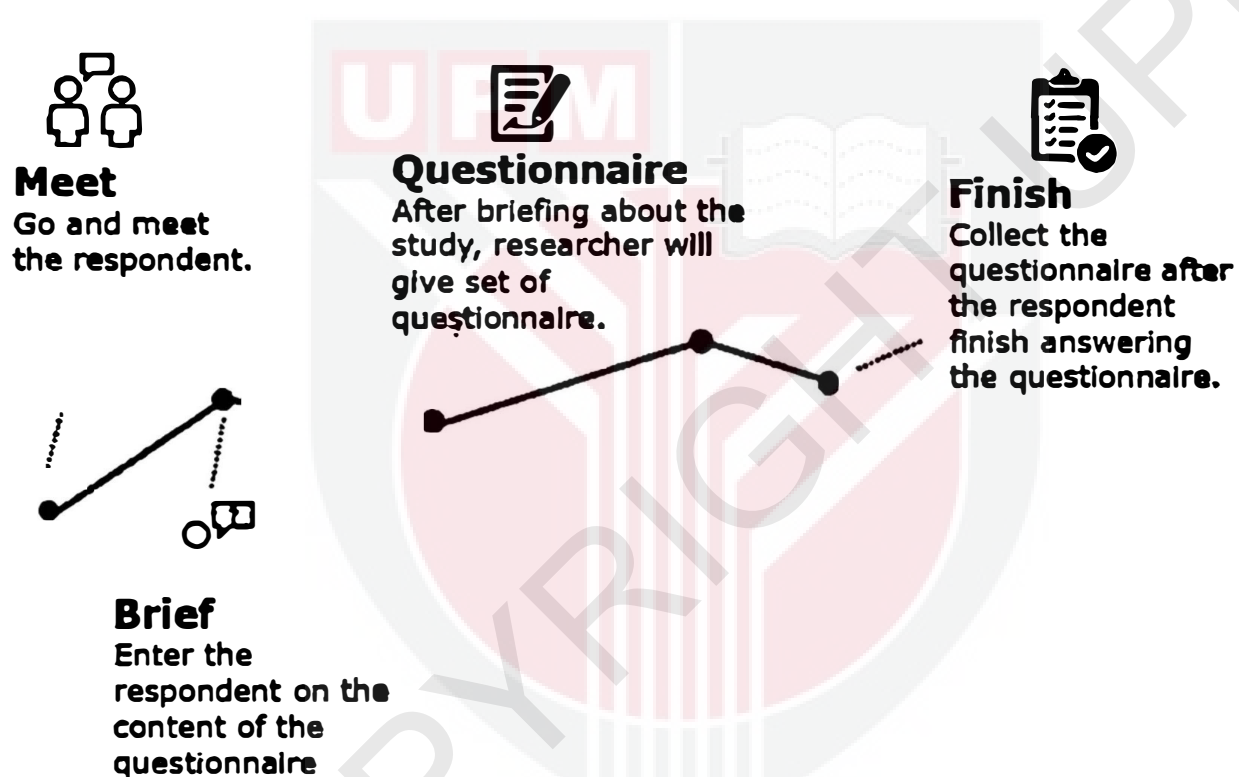


Figure 8: Study Flow Chart

Figure 8 shows the study flow chart which explain the process of this study. Step 1 is the meeting session with the director of human resource department to brief regarding to research topic and acquired permission for the research to be done. Proceed to step 2 that was briefly explaining on research to the respondent. Next, step 3 was distribution of the questionnaire to the respondent to be completed. Last, completed questionnaire was collected from the respondent and were to analyse the data according to the specific objectives of this study.



CHAPTER 4

RESULTS

4.1 Socio- demographic information of respondents.

The table 4.1 shows the distribution of socio-demographic of respondent, the data shows that the minimum age was 20 years old and the maximum age was 56 years old mean 33.54 ± 7.41 years among respondents. The highest age group was between 31 – 40 years old (54.2%). Male was the majority compared to female (n: 116, 65.5%). There were 93 respondents or 52.5% were certificates or diploma holder on education level. The salary was high within the range RM1600 to RM3000, which are 86 personnel or 48.6%. Majority of the participants were married (n=133, 75.1%). Most of the participant did not drink alcohol (n = 175, 98.9%) but majority

of respondent were a smoker (n=128, 72.3%) and majority answer 'no' at the health status condition from chronic diseases (n =163, 92.1%).

Table 4.1: The socio demographic status of the respondents (Age, gender, marital status, educational level, total liability, alcohol consumption, smoking, health status) (N= 177).

	CATEGORICAL		CONTINUOUS	
	Frequency (f)	Percentage (%)	Mean ± SD	Range (Min-Max)
AGE				
21 – 30	56	31.6	33.54±7.410	20–60
31 – 40	96	54.2		
41 – 50	19	10.7		
Above 50	6	3.4		
GENDER				
Male	116	65.5		
Female	61	34.5		
MARITAL STATUS				
Single	40	22.6		
Married	133	75.1		
Divorced	4	2.3		
EDUCATIONAL LEVEL				
No education	1	0.6		
SPM	65	36.7		
Cert / Diploma	93	52.5		
Bachelor and above	18	10.2		
TOTAL LIABILITY OF FAMILY			2.23±1.735	0 – 7
TOTAL MONTHLY HOUSEHOLD INCOME			3855.47 ± 4046.65	1200.00 – 50 000.00
Below RM 1500	9	5.1		

RM 1600 – RM 3000	86	48.6
RM 3100 – RM 5000	31	17.5
Above RM 5000	51	28.8
ALCOHOL CONSUMPTION		
Yes	2	1.1
No	175	98.9
SMOKING STATUS		
Yes	49	27.7
No	128	72.3
HEALTH STATUS		
Yes	14	7.9
No	163	92.1



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4.2 General work characteristic of respondents.

Table 4.2 shows that all of the respondent working status were permanent or fixed. Most of respondent having an average working hour of more than 8 hours (n 127, 71.8%) and not working in a shift but all of them were working during normal office hour (n 167, 94.4%). Majority of the respondent work 5 days a week (n 148, 83.6%). Only 7.3% or 13 respondent having not active work orientation.



Table 4.2: The general work characteristics of respondents (work department, working status, average working hour, working in shift, working days) (N= 177).

CATEGORICAL		
	Frequency (f)	Percentage (%)
DEPARTMENT		
Human Resources Division	16	9.0
Foreign Workers Division	14	7.9
Administration Services Division	23	13.0
Security and Passport Division	32	18.1
Visa, Passport, Visitor Pass, Student Pass Division	27	15.3
Enforcement Division	10	5.6
Quality Management Division	1	0.6
Others	54	30.5
WORKING STATUS		
Fixed	177	100
Contract	0	0
Temporary	0	0
Part Time	0	0
AVERAGE WORKING HOUR		
5 – 8 hours	50	28.2
More than 8 hours	127	71.8
WORKING IN SHIFT		
Office Hour	167	94.4
Day and Night	10	5.6
Day	0	0
Night	0	0
WORKING DAYS		
5 days	148	83.6
6 days	9	5.1
7 days	6	3.4
Not fixed	14	7.9
WORK ORIENTATION		
Not Active	13	7.3
Moderate	40	22.6
Quite Active	48	27.1

Active	70	39.5
Very active	6	3.4

4.3 Riding to Workplace Experience of respondent.

Table 4.3 shows that average workplace distance from respondent home mean score was 18.85 ± 15.66 with minimum range of 1 km to its maximum value of 90 km. Majority of respondent were riding through a moderate but slow moving traffic condition twice, daily (n=73, 41.2%). The mean score of 36.24 ± 25.457 with minimum of 3 minutes and maximum of 120 minutes were shows as a result from respondent average time taken to workplace from home. A total number of 126 respondent represented 71.2% was not involved in road accident in the past 5 years. Next, the result show that the mean score of 13.27 ± 7.267 with minimal of 1 years and maximum of 34 years were the result to respondent years of holding at least a valid B2 license. Majority of respondent were riding and using an under bone/moped type of motorcycle (n= 90, 50.8%).

Table 4.3: Riding to Workplace Experience of respondent (N= 177)

	CATEGORICAL		CONTINUOUS	
	Frequency (f)	Percentage (%)	Mean \pm SD	Range (Min-Max)
Average Workplace Distance from home (km)			18.85 \pm 15.66	1 - 90
Traffic Condition to Workplace				
Normal Traffic	65	36.7		
Moderate but Slow moving	73	41.2		
Congested and Heavy amount of Traffic	39	22.2		
Average Time Taken To Workplace (minutes)			36.24 \pm 25.457	3 – 120
Involvement in accident in the past 5 years?				
Yes	51	28.8		
No	126	71.2		
Years of Holding B2 License			13.27 \pm 7.267	1 – 34
Type of Motorcycle Used / Owned				
Motorbike	43	24.3		
Under bone/moped	90	50.8		
Scooter	43	24.3		
others	1	0.6		

4.4 The work-related stress outcomes among officer from immigration department Malaysia.

The work related stress and level of scoring was measured by using a questionnaire and scale from Work-Related Quality of life Scale: A Measure of Quality of Working Life First Edition (Easton & Van Laar, 2013). Based on the measurements, the total scores of stress at work with means 5.16 ± 1.49 with range of minimal value of 2 and maximum value of 10 as recorded in table 4.4.

Table 4.4: The work-related stress outcomes among officer of the immigration

Variables	Mean± SD	Range (min – max)
Work- related stress		
I often feel under pressure at work	2.72±0.898	1 – 5
Always having a stress while performing work	2.44±0.824	1 – 5
Total scores	5.16±1.49	2 – 10

department Malaysia (N= 177)

Variables	Categorical	
	Frequency (n)	Percentage (%)
Low Stress at Work	65	36.7
Average Stress at Work	34	12.4
High Stress at work	90	50.8

4.5 The work-related fatigue outcomes among officer from immigration department Malaysia.

The work related fatigue and level of scoring was measured by using a questionnaire and scale from Modified Fatigue Impact Scale (Frith & Newton, 2010)(Shahid, Wilkinson, Marcu, & Shapiro, 2012) measurements, the mean score of fatigue at work through physical, cognitive and psychosocial subscale are 2.94 ± 0.824 , 2.42 ± 0.883 , 2.29 ± 0.842 respectively as shown in table 4.5.



Table 4.5: The work-related fatigue outcomes among officer from immigration department Malaysia (N= 177)

Variables	Mean± SD	Range (min – max)
Work related Fatigue		
Physical Subscale	2.94±0.824	
Cognitive Subscale	2.42±0.883	
Psychosocial Subscale	2.29±0.842	
Total scores	7.66±2.093	
Categorical		
Variables	Frequency (n)	Percentage (%)
Average work Fatigue	86	48.5
High work fatigue	91	51.4

4.6 The riding motorcycle behavior (unsafe act) outcomes among officer from immigration department Malaysia.

Table 4.6 shows the results of riding motorcycle behavior (unsafe act) outcomes with 3 factor, which are , main factor of Unfit Erroneous Riding, Intrusive And Exhibitive Behavior , second factor of Time And Money Opportunistic Behavior, and The Use Of Helmet Behavior. Overall, the mean score for the factors are 24.477 ± 8.337 , 11.468 ± 4.256 , 3.361 ± 1.628 respectively.

Table 4.6: The riding motorcycle behavior (unsafe act) outcomes among officer from immigration department Malaysia (N= 177).

Variables	Mean± SD
Part 1: Unfit Erroneous Riding, Intrusive And Exhibitive Behavior (UEIB)	24.477±8.337
Part 2: Time And Money Opportunistic Behaviour (TMB)	11.468±4.256
Part 3: The Use Of Helmet Behaviour (HB)	3.361±1.628
Total scores	39.255±12.872

4.7 The correlation between socio demographic with the riding outcomes among officer from immigration department Malaysia.

Table 4.7 shows the correlation result between socio-demographic information of respondent with three main factor in unsafe riding behavior outcomes, that were Unfit Erroneous Riding, Intrusive and Exhibitive Behavior (UEIB), Time And Money Opportunistic Behavior (TMB), and The Use Of Helmet behavior (HB).

As shown on the table, the results shows there is a significant correlation between age, gender and also total liability of family members with unfit erroneous riding , intrusive and exhibitiv Behavior (UIEB) factor in which younger riders have more unfit erroneous riding, Intrusive and exhibitiv behavior than older riders.

Time and Money Opportunistic Behavior (TMB) factor showing a correlation with educational level of the respondents which is rider with higher educational level or furthering their studies after SPM tends to have more time and money opportunistic behavior compared to those that having only stop at SPM level or no education at all.

For the third factor which is The Using of Helmet Behavior (HB) showing a significant correlation with the household monthly income. In assumption, rider who riding an expensive and powerful motorcycle tend to concern more of using of helmet behavior than those riding usual type of motorcycle.

Table 4.7: The correlation between socio demographic with the riding outcomes among officer from immigration department Malaysia (N= 177).

Variables	Part 1:UEIB		Part 2: TMB		Part 3: HB	
	r	p-value	r	p-value	r	p-value
Age	-0.325	0.00*	-0.191	0.01*	0.210	0.005*
Gender	-0.259	0.001*	-0.298	0.00*	0.139	0.06*
Marital status	-0.122	0.11	-0.006	0.94	-0.024	0.75
Education level	-0.078	0.31	-0.054	0.48*	-0.181	0.02*
Monthly income	-0.183	0.02	-0.114	0.14	-0.213	0.006*
Total liability of family	-0.145	0.06	-0.049	0.52	-0.111	0.14
Alcohol consumption	0.094	0.22	0.063	0.41	-0.076	0.31
Smoking status	-0.120	0.11	-0.068	0.37	-0.063	0.41
Health status	0.063	0.40	0.027	0.72	0.056	0.46

*significant at alpha values $p < 0.05$ a= Spearman correlation

4.8 The correlation between work characteristics with the riding outcomes among officer from immigration department Malaysia.

Table 4.8 showing correlation of respondent work characteristics with outcomes factor of riding behavior part 1, part 2 and part 3. We can see from the result that work characteristic have no correlation with unfit erroneous riding, intrusive and exhibitivive behavior (UIEB) factor.

For Time and Opportunistic Behavior (TMB), there is a significant correlation with average working hour of an officer. Immigration Officer with working hour of 8 and above have more time and money opportunistic behavior than those who averaged working hour of 5 – 8 hours.

Factor 3, the using of helmet behavior (HB) showing a correlation significant with shift working hours' system in which workers of normal office hour (Total of 8 –hours per shift of working system) have poorer behavior on helmet usage than workers who working day and night (Total of 12-hours per shift of working system).

Table 4.8: The correlation between work characteristics with the riding outcomes among officer from immigration department Malaysia.

Variables	Part 1:UEIB		Part 2: TMB		Part 3: HB	
	r	p-value	r	p-value	r	p-value
Work division (department)	-0.055 ^a	0.466	-0.016 ^a	0.831	-0.105 ^a	0.163
Work status	-	-	-	-	-	-
Average working hour	0.078 ^a	0.304	0.151 ^a	0.044 [*]	0.091 ^a	0.229
Working in shift	-0.048 ^a	0.528	-0.051 ^a	0.498	-0.156 ^a	0.038 [*]
Working days	-0.034 ^a	0.654	-0.025 ^a	0.742	-0.146 ^a	0.052 [*]
Work orientation	0.033 ^a	0.667	-0.009 ^a	0.908	-0.045 ^a	0.548 ^a

*significant at alpha values (p<0.05) a= Spearman correlation b= Pearson correlation

4.9 The correlation between riding to the workplace experience with the riding behavior outcomes among officer from immigration department Malaysia.

The relationship between riding to the workplace experience with the riding behaviour outcomes among officer from Immigration Department of Malaysia showing that there were correlation significant ($p < 0.05$). It were years of holding a B2 license ($p = 0.002$), and type of motorcycle used/owned ($p = 0.002$) with the first part of unsafe act in riding a motorcycle, that was part 1: Unfit Erroneous Riding, Intrusive and Exhibitive Behavior factor.

Type of motorcycle used/owned show correlation significant ($p < 0.05$) with the third factor of unsafe act in riding a motorcycle that was, part 3: the use of helmet behavior with p-value of 0.046 as show in the table 4.9 below.

Table 4.9: The correlation between Riding to the Workplace Experience with the Riding Behaviour Outcomes among Officer from Immigration Department of Malaysia (N=177)

Variables	Part 1:UEIB		Part 2: TMB		Part 3: HB	
	F/r/t/Z	p-value	F/r/t/Z	p-value	F/r/t/Z	p-value
Average Workplace Distance From Home (km)	0.047 ^a	0.537	0.103 ^a	0.174	-0.047 ^a	0.534
Traffic Condition to Workplace	0.015 ^a	0.839	0.110 ^a	0.145	-0.054 ^a	0.478
Average Time Taken to Workplace (minutes)	0.074 ^a	0.330	0.114 ^a	0.129	0.051 ^a	0.498
Involvement in accident in the past 5 years	-0.073 ^a	0.334	-0.106 ^a	0.160	-0.012 ^a	0.874
Years of Holding B2 License	-0.234 ^a	0.002*	-0.126 ^a	0.094	-0.121 ^a	0.107
Type of Motorcycle Used/ Owned	-0.234 ^a	0.002*	-0.138 ^a	0.067	-0.150 ^a	0.046*

*significant at alpha values (p<0.05 a= Spearman correlation b= Pearson correlation)

4.10 The association between work-related stress and work-related fatigues with the riding outcomes among officer from immigration department Malaysia.

Table 4.10 showing results on the association between work-related stress and work-related fatigues with the riding outcomes among officer from Immigration Department of Malaysia.

As shown in the table, there is a difference significantly ($p < 0.05$) in the unsafe riding act factors Part 1: unfit erroneous riding, intrusive and exhibitive behavior factor and Part 3: the use of helmet behavior with work-related stress score which were $p = 0.004$ for Part 1 and $p = 0.005$ for part 3.

For the association of work-related fatigue with the respondent riding outcomes, there were significant different ($p < 0.05$) at factors from part 1: unfit erroneous riding, intrusive and exhibitive behavior factor and part 2: time and money opportunistic behavior with work-related fatigue score that were $p = 0.041$ and $p = 0.035$ respectively.

Table 4.10: The association between work-related stress and work-related fatigues with the riding outcomes among officer from immigration department Malaysia (N=177)

Variables	Part 1:UEIB		Part 2: TMB		Part 3: HB	
	r	p-value	r	p-value	r	p-value
Work- related stress						
Always Stress at Workplace	0.153 ^a	0.042*	0.087 ^a	0.251	0.105 ^a	0.165
Always having a stress while performing work	0.211 ^a	0.005*	0.093 ^a	0.217	0.279 ^a	0.000*
Total scores	0.211 ^a	0.005*	0.109 ^a	0.150	0.211 ^a	0.005*
Work- related fatigue						
Fatigue after Working	0.128 ^a	0.091	0.042 ^a	0.580	0.004 ^a	0.961
Difficulties to Think Clearly after Work	0.120 ^a	0.113	0.156 ^a	0.039*	0.112 ^a	0.137
Not enough energy to work in the next consecutive days	0.119 ^a	0.117	0.130 ^a	0.085	0.067 ^a	0.374
Total scores	0.154 ^a	0.041*	0.159 ^a	0.035*	0.092 ^a	0.224

*significant at alpha values (p<0.05) a= Spearman correlation b= Pearson correlation

CHAPTER 5

DISCUSSIONS

In this study, the impact from socio-demographic information, work characteristic, riding experience to the workplace, work-related stress and work related fatigue on riding behaviour outcomes from officer in Immigration Department of Malaysia was determined. A statistical analysis of spearman correlation was perform to determine the relationship between the variables and the result shows there was significant different ($p < 0.05$) between respondent age, gender, monthly household income, and educational level with the unsafe behaviour of riding motorcycles outcomes. Consistent with previous study, the results showed that females, young riders, those more likely to be negligent of potential risk and violation, with more riding exposure, higher education level, and lower monthly income tended to have a greater likelihood of being involved in an accident (Chang & Yeh, 2007).

As for the impact of work characteristic on riding behaviour outcomes, the significant different value of $p < 0.05$ are shown between average working hour, working in shift round working, and total working days with riding behaviour outcomes. This finding might contradicted with some research that have found shift working could increase the possibility of accident. Based on the study conducted by Lee et al, (2016), they have found that a high risk of dangerous driving and near-crash events during actual driving by night-shift workers following overnight work,

when physiological markers of drowsiness were significantly increased. The situation may become worsen if the drivers are required to work in irregular working shift and suffer sleep deprivation.(Kee, Bahri, Tamrin, & Goh, 2010) This result could be agreed since majority of the respondents did not work on shift.

As for the association of riding to the workplace experience with riding behaviour outcomes, there is significant different ($P < 0.05$) with years of holding a B2 license with riding behaviour outcomes. From the result, we can conclude that rider that newly get their license will having a less skill in riding and a little experience in handling the motorcycle itself. Moreover, it will tend to do more mistake and error thus, increasing the involvement in an accident. A study suggested by National Institute of Health state that teenage drivers are eight times more likely to be involved in a collision or near miss during the first three months after getting a driver's license, compared to the previous three months on a learner's permit (NIH, 2018).

As for the association between work-related stress and work-related fatigues with the riding outcomes, there are significant different ($P < 0.05$) with the three subscales of riding motorcycle behaviour (Part 1: Unfit Erroneous Riding, Intrusive and Exhibitive Behaviour; Part 2: Time and Money Opportunistic Behaviour; Part 3: Using Helmet Behaviour). From the result, we can conclude that work stress and fatigue are the important factors influence individual behaviour including the riding behaviour. A study from Fereshteh. Z et al (2017) on motorcyclist risk-taking behaviour, found that age, marital status, economic condition, health condition and

including daily stress were influenced the risk- taking behaviour among motorcyclists. Moreover, according to Jafarpour (2014), driver' physical and mental ability influence the unintentional risky behaviour which including memory impairment, increase in mental work load due to anger, anxiety or depression, sleep deprivation and also fatigue.



CHAPTER 6

CONCLUSIONS

This study have determine the association between the independent variables (the work- related stress and work- related fatigue) and dependent variables (riding motorcycle behaviour). The results from this study giving an idea about which factors contributed to the riding motorcycle behaviour among the immigration officer in Malaysia. Based on this study, it is safe to conclude that work stress and fatigue are the important factors influence the riding motorcycle behaviour among the immigration officer. These variables have significant impact towards three subscales of riding motorcycle behaviour (Part 1: Unfit Erroneous Riding, Intrusive and Exhibitive Behaviour; Part 2: Time and Money Opportunistic Behaviour; Part 3: Using Helmet Behaviour). The result of the riding motorcycle behaviour of subscale 1 (Unfit Erroneous Riding, Intrusive and Exhibitive Behaviour) show the association with both variables (work stress and fatigue) mean while the riding motorcycle behaviour of subscale 2 (Time and Money Opportunistic Behaviour) and subscale 3 (Using Helmet Behaviour) were only associated with only one variable of work stress and work fatigue respectively. These results obtained might due to their nature of works to handle with variety of people during their work hour and the workplace variables that have high chances on stress-cause factors and exposed too many hazards which might elevate the severity of fatigue.

RECOMMENDATION

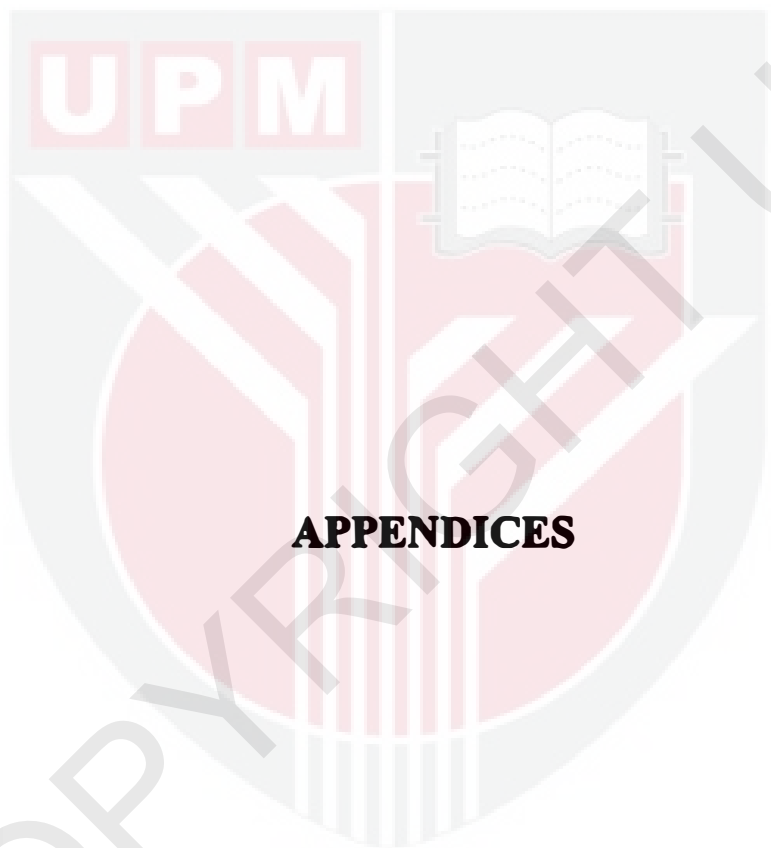
A module needs to be created with helps from Malaysian Institute of Road Safety (MIROS) to overcome the impact from psychosocial factor on motorbike rider behaviour among officer in Immigration Department of Malaysia.



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APPENDICES

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YBhg. Dato/Tuan/Puan,

KEBENARAN MENJALANKAN PENYELIDIKAN BAGI KURSUS EOH49999A&B (PROJEK ILMIAH TAHUN AKHIR) UNIVERSITI PUTRA MALAYSIA

Dengan segala hormatnya saya diarah merujuk kepada perkara di atas.

2. Sukacita dimaklumkan pelajar Tahun Empat (4) Program Ijazah Sarjana Muda Sains (Kesihatan Persekitaran Dan Pekerjaan), Fakulti Perubatan Dan Sains Kesihatan, UPM akan menjalankan penyelidikan bagi memenuhi syarat pengajian dan keperluan projek ilmiah mereka di Jabatan Imigresen Malaysia. Justeru, pihak BPSM telah mengadakan pertemuan awal bersama pelajar-pelajar ini pada 25 Januari 2019, untuk melihat skop kajian dan bentuk soal selidik yang bakal dijalankan. Kajian ini akan dilaksanakan bermula pada 18 Februari 2019 hingga 29 Mac 2019.



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Pengarah Bahagian Visa, Pas dan Permit

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Pengarah

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BORANG KAJI SELIDIK

TAJUK:

1. HUBUNGKAITAN ANTARA KELETIHAN BERKAITAN PEKERJAAN, TEKANAN BERKAITAN PEKERJAAN DAN LATAR BELAKANG KERJA TERHADAP TINGKAH LAKU MENUNGGANG MOTOSIKAL DALAM KALANGAN PEKERJA IMIGRESEN, MALAYSIA

2. IMPLIKASI KUALITI KEHIDUPAN BEKERJA (KKB) TERHADAP TINGKAH LAKU MENUNGGANG MOTOSIKAL DALAM KALANGAN PEKERJA IMIGRESEN, MALAYSIA

ARAHAN SOALAN:

1. Borang soal selidik ini terbahagi kepada enam (6) bahagian:

Bahagian A: Latar Belakang Responden

Bahagian B: Maklumat Am Pekerjaan

Bahagian C: Pengalaman Pergi Balik tempat Kerja

Bahagian D: Keadaan Tempat Kerja

Bahagian E: Keletihan Berkaitan Kerja

Bahagian F: Tingkah Laku Ketika Menunggang Motosikal

2. Anda dikehendaki menjawab semua soalan di dalam buku ini.

3. Untuk menjawab, sila tandakan (/) jawapan anda pada kotak yang telah disediakan.

4. Semua jawapan akan menjadi sulit dan rahsia, hanya untuk tujuan kajian.

5. Borang soal selidik perlu dikembalikan kepada penyelidik setelah selesai

menjawabsoalan.

PERSETUJUAN

Saya..... No Kad Pengenalan.
beralamat.....
.....dengan ini bersetuju untuk mengambil bahagian secara sukarela dalam penyelidikan yang tersebut di atas *(kajian klinikal/percubaan ubat-ubatan/rakaman video/kumpulan sasaran/temuduga/ soal selidik).

Saya telah diberi penjelasan secara menyeluruh mengenai penyelidikan ini dari segi metodologi, risiko dan komplikasi (seperti tertulis pada Helaiian Penerangan Responden). Saya memahami bahawa saya berhak menarik diri dari penyelidikan ini pada bila-bila masa tanpa memberi sebarang alasan.Saya juga memahami bahawa sebarang maklumat yang berkaitan identiti saya akan dirahsiakan.

Saya* berminat / tidak berminat untuk mengetahui keputusan kajian yang melibatkan saya.

I setuju/tidak bersetuju untuk imei/gambar/rakaman video/ rakaman suara digunakan dalam apa jua bentuk penerbitan atau pembentangan. (sekiranya berkaitan).

*potong yang tidak berkenaan

Tandatangan
(Responden)

Tandatangan
(Saksi)

Tarikh :.....

Nama :.....

No. K/P:

Saya mengesahkan bahawa saya telah menerangkan kepada responden ini sifat dan tujuan penyelidikan yang tersebut di atas.

Tarikh

Tandatangan
(Penyelidik)

BAHAGIAN A: LATAR BELAKANG RESPONDEN

Sila isikan maklumat di ruang kosong dan tandakan pada petak yang berkenaan

1. Umur: _____ Tahun
2. Jantina: Lelaki Perempuan
3. Status perkahwinan: Bujang Berkahwin Bercerai hidup/mati/berpisah
4. Tahap pendidikan tertinggi: Tiada pendidikan Sekolah rendah Sekolah Menengah
 Sijil/Diploma Ijazah & ke atas
5. Jumlah pendapatan isi rumah sebulan: RM _____
6. Jumlah Tanggungan: _____ orang
7. Status kewarganegaraan: Malaysia Bukan Malaysia, Nyatakan _____
8. Adakah anda mengambil alkohol? Tidak Ya, setiap bulan
 Ya, setiap minggu Ya, setiap hari
9. Adakah anda merokok? Tidak Ya, bukan setiap hari
 Ya, setiap hari
10. Adakah anda menghadapi penyakit kronik?
 Tidak Diabetes Asthma/masalah paru-paru kronik
 Kanser/Ketumbuhan Masalah buah pinggang Masalah Jantung
 Lain-lain. Nyatakan _____

BAHAGIAN B: MAKLUMAT AM PEKERJAAN .

1. Sila nyatakan bahagian/unit anda berkhidmat organisasni ini:

- | | |
|--|---|
| <input type="checkbox"/> Bahagian sumber Manusia | <input type="checkbox"/> Bahagian Pekerja Asing |
| <input type="checkbox"/> Bahagian Keselamatan dan Passport | <input type="checkbox"/> Bahagian Pengurusan Kualiti |
| <input type="checkbox"/> Bahagian Perkhidmatan Pentadbiran | <input type="checkbox"/> Bahagian Visa, Passport dan Permit |
| <input type="checkbox"/> Lain-lain. Nyatakan _____ | |

2. Nama penuh jawatan sekarang:
3. Status pekerjaan: Tetap Kontrak Sementara Sambilan
4. Berapa lamakah anda telah bekerja untuk jawatan semasa anda sekarang? _____ tahun
5. Berapa jam purata anda bekerja sehari? _____ jam
6. Adakah anda bekerja syif? Tidak (waktu pejabat) Ya, siang
 Ya, malam Ya, siang dan malam
7. Berapa hari anda bekerja dalam seminggu?
 5 hari 6 hari 7 hari Tidak tetap

Terangkan kebiasaan jenis kerja anda di di tempat bekerja

- Tidak aktif (contoh: duduk di kerusi dan melakukan kerja-kerja komputer/perkeranian)
- Sederhana aktif (contoh: duduk dan melakukan kerja-kerja manual ringan menggunakan tangan/lengan)
- Agak aktif (contoh: berdiri dan melakukan kerja-kerja manual ringan menggunakan tangan/lengan dan berjalan sekali sekala)
- Aktif (contoh: Banyak berjalan dari satu kawasan ke satu kawasan di dalam satu bangunan/kawasan kerja)
- Sangat aktif (contoh: Melakukan kerja-kerja berat seperti mencangkul, mengangkat barang berat, banyak pergerakan badan)

BAHAGIAN C: PENGALAMAN PERGI BALIK TEMPAT KERJA

1. Anggaran jarak tempat kerja dari rumah: _____ km
2. Purata masa perjalanan pergi balik kerja setiap hari:
_____ jam _____ minit
3. Apakah keadaan lalu lintas perjalanan pergi balik kerja setiap hari
 Lancar Bergerak perlahan Kesyakan yang teruk
4. Adakah anda pernah terlibat dalam kemalangan jalan raya dalam 5 tahun kebelakangan ini?
 Ya Tidak
5. Berapa lamakah anda telah mendapat lesen memandu yang sah? _____ tahun
6. Jenis motosikal yang digunakan pergi balik kerja
 Motorbike Underbone/moped (Kapcai) Skuter Lain-lain. Nyatakan _____

BAHAGIAN D: KEADAAN TEMPAT KERJA

ARAHAN: Soal selidik ini direka untuk menilai kualiti hidup berkaitan dengan pekerjaan anda. Sila TANDAKAN (/) di skala yang disediakan di bawah.

SEJAUH MANA ANDA BERSETUJU DENGAN BERIKUT?		SKALA				
		Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat Setuju
1.	Saya mempunyai matlamat yang jelas dalam melakukan tugas					
2.	Saya boleh memberi pendapat dan berpengaruh untuk membuat perubahan terhadap kerja saya.					
3.	Saya berpeluang untuk menggunakan kebolehan-kebolehan saya ditempat kerja					
4.	Saya berasa selesa ketika ini.					
5.	Majikan menyediakan kemudahan mencukupi untuk saya menyesuaikan antara kerja dan keluarga					
6.	Waktu kerja/corak masa kerja sesuai dengan keadaan peribadi saya					
7.	Saya sering berasa tertekan ditempat kerja					
8.	Apabila saya telah melakukan perkerjaan dengan baik, pihak atasan saya akan menghargai					
9.	Kebelakangan ini, saya berasa tidak gembira dan tertekan					
10.	Saya berpuas hati dengan kehidupan saya					
11.	Saya digalakkan untuk menambah kemahiran baru					
12.	Di dalam kerja, saya terlibat membuat keputusan yang akan memberi kesan kepada saya					
13.	Majikan memberikan apa yang saya perlu untuk melaksanakan tugas dengan baik					
14.	Majikan mengalakkan waktu kerja/corak masa kerja yang fleksibel					
15.	Cara kehidupan saya hampir ideal/sempurna					
16.	Saya bekerja dalam persekitaran yang selamat					
17.	Secara amnya, semua perkara lancar untuk saya					
18.	Saya berpuas hati dengan peluang perkembangan kerjaya yang ada untuk saya disini					

	SEJAUH MANA ANDA BERSETUJU DENGAN BERIKUT?	SKALA				
		Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat Setuju
19.	Saya sering merasa stres yang melampau dalam kerja					
20.	Saya berpuas hati dengan latihan yang diterima untuk melaksanakan kerja sekarang					
21.	Kebelakangan ini, setelah mempertimbangkan semua perkara, saya berasa cukup gembira					
22.	Keadaan tempat kerja adalah memuaskan					
23.	Di dalam kerja, saya terlibat membuat keputusan yang akan memberi kesan kepada pekerja lain					
24.	Saya berpuas hati dengan keseluruhan kualiti kehidupan kerja saya					
25.	Majikan saya mementingkan keselamatan dan kesihatan tempat kerja					
26.	Secara amnya, budaya/amalan keselamatan dan kesihatan pekerjaan di tempat kerja adalah baik					
27.	Saya menitikberatkan amalan kerja selamat					

BAHAGIAN E: KELETIHAN BERKAITAN KERJA

ARAHAN: Soal selidik ini direka untuk menilai keletihan anda berkaitan dengan pekerjaan anda. Sila **TANDAKAN (/)** di skala yang disediakan di bawah.

	SITUASI	SKALA				
		Tidak Pernah	Jarang	Kadang-Kadang	Selalu	Sangat Kerap
1.	Saya merasa keletihan yang maksimum dengan kerja saya setelah tamat waktu kerja					
2.	Selepas waktu kerja saya mempunyai kesukaran untuk berfikir dengan jelas kerana kepenatan					
3.	Saya berasa tidak cukup tenaga untuk memulakan kerja pada hari/syif berikutnya					

BAHAGIAN F: TINGKAHLAKU MENUNGGANG MOTOSIKAL

ARAHAN: Bahagian ini mengandungi soalan berkaitan tingkah laku anda semasa menunggang motosikal. Sila TANDAKAN (/) di skala yang disediakan di bawah.

	SITUASI	SKALA				
		Tidak pernah	Jarang	Kadang-kadang	Selalu	Sangat kerap
1.	Mengikuti kenderaan di hadapan dengan jarak yang terlalu dekat					
2.	Memotong di antara kenderaan secara cilok (zig zag)					
3.	Menunggang dengan bahaya di sekitar selekoh					
4.	Memecut (apabila mencapai selekoh)					
5.	Memecut dengan kelajuan ngeri (ketika mencapai selekoh)					
6.	Percubaan untuk melakukan "wheelie"					
7.	Tersasar dari jalan disebabkan menunggang dengan laju					
8.	Putaran roda belakang motosikal berputar dengan lebih cepat dari keadaan normal (disengajakan/bertujuan)					
9.	Putaran roda belakang motosikal berputar dengan lebih cepat dari keadaan normal (tidak disengajakan)					
10.	Menunggang pada waktu malam hanya dengan cahaya lampu rendah					
11.	Menunggang motosikal yang rosak					
12.	Menunggang semasa dalam pengaruh dadah/alkohol atau ubat yang menjejaskan keselamatan menunggang					
13.	Menunggang melawan arah trafik					
14.	Menunggang di kawasan pejalan kaki					
15.	Menggunakan telefon atau menghantar mesej semasa menunggang					
16.	Memecut (di kawasan lebuhraya)					
17.	Memecut (di kawasan perumahan)					
18.	Membawa bebanan yang berat semasa menunggang					
19.	Menunggang dengan lebih daripada satu penumpang					
20.	Kemungkinan untuk melanggar pintu kereta yang terbuka					
21.	Melanggar lampu isyarat merah					
22.	Tidak menggunakan topi keledar semasa menunggang					
23.	Pembonceng tidak menggunakan topi keledar					

TAMAT, TERIMA KASIH