



UNIVERSITI PUTRA MALAYSIA

***POST-TRAUMATIC STRESS DISORDER (PTSD) AMONG 16 YEARS
OLD SCHOOL CHILDREN INVOLVED IN ROAD TRAFFIC CRASHES
IN KLANG, SELANGOR***

**BY
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ABSTRACT

POST-TRAUMATIC STRESS DISORDER (PTSD) AMONG 16 YEARS OLD SCHOOL CHILDREN INVOLVED IN ROAD TRAFFIC CRASHES IN KLANG, SELANGOR

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ABSTRACT

Introduction: Post-traumatic stress disorder (PTSD) is one of the problems arising from road traffic crash. Post-traumatic stress disorder (PTSD) is the development of a characteristic symptom complex in certain individuals consisting of a persistent re-experiencing of an event, avoidance of stimuli associated with the event and symptoms of increased arousal. Post Traumatic Stress Disorder can be divided into three categories which are re-experiencing, avoidance, hyper arousal and intrusion. **Objective:** The objective of this research is to study the association between Post-Traumatic stress disorders (PTSD) and road traffic crash among 16 years old school children in Klang, Selangor. **Method:** A self-administered questionnaire was used in determining the socio demographic data of the respondents. PTSD was determined by using Children Revised Impact Event Scale (CRIES-8). PTSD criteria such as intrusion and avoidance were detected by using CRIES-8. Two hundred respondents were chosen among four selected schools in Klang, Selangor. A cutoff score of 17 was used in the CRIES-8 in order to detect the criteria of PTSD among respondents. **Results:** Results shows that about 26.8% of female respondents were having PTSD meanwhile 17.8% of male respondents were having PTSD. The results show that types of road users had a significant association with PTSD. Besides, socio demographic factors and frequency of involvement in road traffic crash had no significant association with PTSD. **Conclusion:** The type of road users was the only factors that give significant association with PTSD.

Keywords: Road Traffic Crash, Children, PTSD

ABSTRAK

GANGGUAN TEKANAN SELEPAS TRAUMA DI KALANGAN KANAK-KANAK SEKOLAH 16 TAHUN YANG TERLIBAT DALAM KEMALANGAN JALAN RAYA DI KLANG, SELANGOR

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Pengenalan: Gangguan tekanan selepas trauma adalah salah satu masalah yang timbul daripada kemalangan jalan raya. Gangguan tekanan selepas trauma adalah pembangunan kompleks gejala ciri dalam individu-individu tertentu yang mengalami semula suatu peristiwa yang berterusan, mengelakkan rangsangan yang berkaitan dengan peristiwa dan tanda-tanda kebangkitan yang meningkat. Gangguan tekanan selepas trauma boleh dibahagikan kepada tiga kategori iaitu mengalami semula, mengelakkan, keterujaan yang ekstrim dan pencerobohan. **Objektif:** Objektif kajian ini adalah untuk mengkaji perkaitan antara gangguan tekanan selepas trauma dan kemalangan jalan raya dalam kalangan kanak-kanak 16 tahun di sekolah-sekolah di kawasan Klang, Selangor. **Kaedah:** Satu borang soal selidik yang ditadbir sendiri telah digunakan dalam menentukan data sosio demografi responden gangguan tekanan selepas trauma telah ditentukan dengan menggunakan senarai semak CRIES -8. Kriteria gangguan tekanan selepas trauma seperti pencerobohan dan mengelakkan dikesan dengan menggunakan CRIES -8. Dua ratus orang responden telah dipilih di kalangan empat buah sekolah terpilih di Klang, Selangor. Skor potong sebanyak 17 telah digunakan dalam CRIES 8 untuk mengesan kriteria gangguan tekanan selepas trauma di kalangan responden. **Keputusan:** Keputusan menunjukkan bahawa kira-kira 26.8% daripada responden perempuan mempunyai gangguan tekanan selepas trauma. Sementara itu, 17.8% responden lelaki mempunyai gangguan tekanan selepas trauma. Hasil kajian menunjukkan bahawa jenis pengguna jalan raya yang mempunyai hubungan yang signifikan dengan gangguan tekanan selepas trauma. Selain itu, faktor-faktor sosio demografi dan kekerapan penglibatan dalam kemalangan jalan raya tidak mempunyai hubungan yang signifikan dengan gangguan tekanan selepas trauma. **Kesimpulan:** Jenis pengguna jalan raya adalah faktor yang memberikan hubungan yang signifikan dengan gangguan tekanan selepas trauma.

Kata kunci: Kemalangan Jalan Raya, Kanak-Kanak, PTSD

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ABBREVIATIONS LIST

av	Avoidance
BMI	Body Mass index
CRIES-8	Children Revised Impact Event Scale -8
iv	Intrusive
m-KSI	Motorcyclists Killed and Seriously Injured
PTSD	Post Traumatic stress Disorder
UN	United Nation
WHO	World Health Organisation

CHAPTER 1

INTRODUCTION

1.1 Background

Road transportation provides benefits both to nations and to individuals by facilitating the movement of goods and people. It enables increased access to job, economics markets, education, recreation and health care, which in turn have direct and indirect positive impact on the health populations. However, the increase in road transportation has also placed a considerable burden on people's health (WHO, 2009).

According to WHO Global burden of Disease Project for 2004, road traffic crashes caused over 2.17 million deaths for that year which is a similar number to those caused by many communicable diseases. Road traffic injuries affect all groups, but their impact is most striking among the young ages. According to the WHO's statistic on "the leading causes of death by age, world, 2004" road traffic injuries is the second most causing death for the age of 5-14 years. Meanwhile it was the top most causing death for the age of 15-29 years. Those physically disabled as a result of a motor vehicle collision often face stigma and discrimination which can lead to social, educational, occupational and financial deprivation. In addition, many have mental consequences such as post-traumatic stress disorder, phobias, anxiety and depression (WHO, 2009).

Post-traumatic stress disorder (PTSD) is defined as the development of a characteristic symptom complex in certain individuals consisting of a persistent re-experiencing of an event, avoidance of stimuli associated with the event, symptoms of increased arousal (Mason *et al.*, 1997). PTSD occurs when the emergency response system outlined above has been conditioned, as a result of the experience, to respond to stimuli which trigger memories of the event. If the PTSD not treated, it can persist for years.

Children can develop PTSD after exposure to a range of traumatic stressors such as road traffic crashes. PTSD can give an effect to road crash victim including school children who are involved in road traffic crash. In United Kingdom, one in three children in everyday road traffic crash was found to suffer from post-traumatic stress disorder (Stallard *et al.*, 1998). Although there has been little systematic research into the effects of road traffic crash on children, there is increasing recognition that they too will be affected (Stallard *et al.*, 1998). Post Traumatic Response can occur in all age of people whether they are young or adult people. Instead of effecting adult people, PTSD also can happen in adolescent.

Approximately one third children if untreated will continue to exhibit PTSD five to eight years later (Tufnell *et al.*, 2008). Children can suffer significant and impairing acute and long-lasting psychological distress following road traffic crashes, particularly if they sustain injuries (Langeland *et al.*, 2008). Children also can develop PTSD after exposure to a range of traumatic stressors, including violent crime, *sexual* abuse, natural disasters, and war (Kaminer *et al.*, 2005). It was also reported that between 14% and 34% of children involved in road traffic crash will develop PTSD (Ehlers *et al.*, 2003).

1.2 Problem Statement

Road traffic crashes involving pedestrians occur at school areas vary by age groups. The highest is among age group 10–14 years old (18.5%) followed by age group 5–9 years old (16.5%), and 15-18 years (16.1%) (Malaysian Institute of Road Safety Research, 2011). They are involved in road traffic crash as a pedestrian, cyclist, motorcycle rider and bus or car passenger. According to the data from MIROS on the research report “an overview of road traffic injuries among children in Malaysia and its implication on road traffic injury prevention strategy” children motorcycle riders is the top group of traffic related death among children aged 15–18 years old (Malaysian Institute of Road Safety Research, 2011).

This fact showed that how serious the road crash happened among secondary school children who are in the range of those ages. Then, the data also showed that the involvement of children as motorcycle riders in road traffic crash has become worried. Out of 2,899 who was killed as motorcycle rider, 25% of them are aged 20 and below (Malaysian Institute of Road Safety Research, 2011). Focusing on “Motorcyclists Killed and Seriously Injured” (*m-KSI*) in Selangor, for year 2007 and 2008, data illustrates the highest *m-KSI* is in the district of Klang, then followed by Petaling Jaya (Malaysian Institute of Road Safety Research, 2011).

Some of the children after involved in road traffic crash suffer severe PTSD where the children re-experience of a crash even, nightmare, sleep disturbance, unable to concentrate, hyper vigilance and many more symptoms (Salmon *et al.*, 2002). There are about 14 to 34% of children involved in road traffic crash in United Kingdom developing PTSD (Ehlers *et al.*, 2003). One in three children involved in everyday road traffic crash was found to suffer from (Stallard *et al.*, 1998). PTSD was found in 41 (34.5%) children involved in road traffic crashes but only two (3.0%) who sustained sports injuries. Stallard also reported the presence of PTSD was not related to the type of road traffic crashes, age of the child, or the nature of injuries but was significantly associated with sex, previous experience of trauma, and subjective appraisal of threat to life. None of the children had received any psychological help at the time of assessment.

1.3 Study Justification

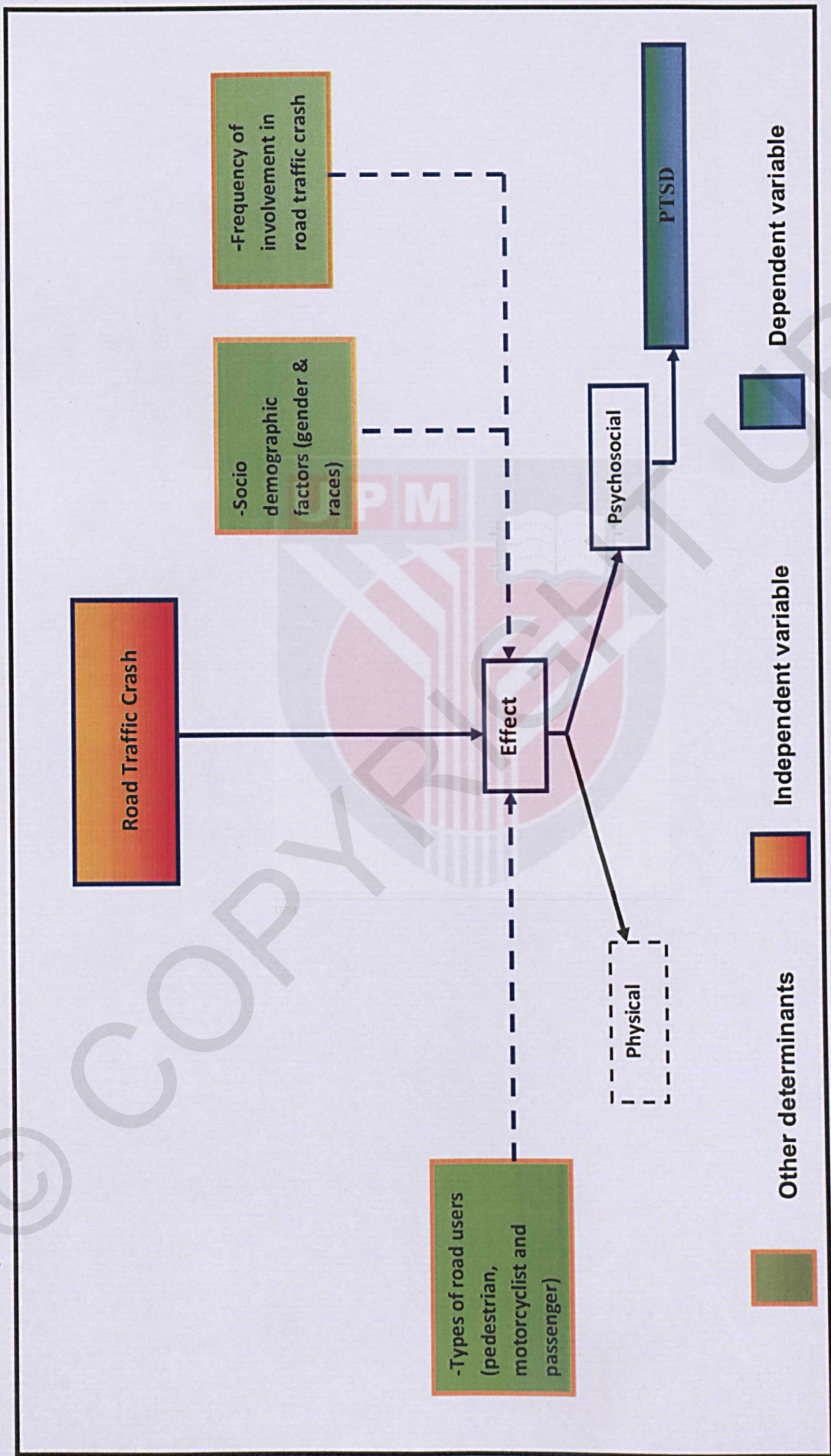
This study is about PTSD and road traffic crash among 16 years old school children. Besides that, the study is carried out in order to identify the other determinants which can develop PTSD among the 16 years old school children. The study location that has been selected in this study was in Klang, Selangor. Klang is chosen as the study location as it was the third area that has highest population in Malaysia. According to “Motorcyclists Killed and Seriously Injured” (*m-KSI*) in Selangor, in the year of 2007 and 2008, data illustrated that the highest *m-KSI* was in the district of Klang, followed by Petaling Jaya (Malaysian Institute of Road Safety Research, 2011).

Based on the data from research report regarding “an overview of road traffic injuries among children in Malaysia and its implication on road traffic injury prevention strategy”, motorcycle rider among children is the top group of traffic related death among children aged 15–18 years old (Malaysian Institute of Road Safety Research, 2011). This statistic showed that the number of 16 years old school children was also included in the statistic. At the age of 16, the only license that permitted to be hold by them is only the motorcycle licenses. On the other hand, children aged 15–18 (57.4%) years old accounted for the highest proportion of death followed by 10–14 (15.2%), 5–9 (10.8%), 1–4 (8.9%), and under one year old (7.5%) in the proportion of child involved

in road traffic injuries by age in 2007-2009 (Malaysian Institute of Road Safety Research, 2011).

This study is crucial to be carried out so that the PTSD among the 16 years old school children can be detected at the early stage and some recommendations could be suggested to this group of people such as the safety program. The initial steps to prevent this problem among the 16 years old school children is essential in order to prevent the survivors of this road crashes undergo more complicated psychosocial effects in the future. With the results obtained at the end of this study, appropriate actions and steps could be taken. In addition, further studies can be done on towards the program of PTSD among the secondary school children who involved in the road crashes.

1.4 Conceptual Framework



1.5 Study Objectives

1.5.1 General Objective

To study the association between Post-Traumatic Stress Disorder (PTSD) among 16 years old school children involved in road traffic crashes in Klang, Selangor.

1.5.2 Specific Objectives

- i. To determine the prevalence of PTSD among 16 years old school children involved in road traffic crashes.
- ii. To determine the association between PTSD among 16 years old school children involved in road traffic crash and their socio-demographic factors (gender and races).
- iii. To determine the association between PTSD among 16 years old school children involved in road traffic crash and their frequency of involvement in road traffic crash.
- iv. To determine the association between PTSD among 16 years old school children involved in road traffic crashes and type of road users.

1.6 Study Hypothesis

- i. There is a significant association between PTSD among 16 years old school children involved in road traffic crash and their socio-demographic factors (gender and races).
- ii. There is a significant association between PTSD among the 16 years old school children involved in road traffic crash and their frequency of involvement in road traffic crash.
- iii. There is a significant association between PTSD among 16 years old school children involved in road traffic crash and type of road users.

1.7 Conceptual Definition

1.7.1 Road Traffic Crashes

Road traffic crashes excluded non-motorized vehicles, is a crashes that occur on private roadways such as on farms, driveways on unsurfaced roads .Road traffic injuries will rise in rank to sixth place as a major cause of death worldwide (WHO, 2010).

1.7.2 Secondary School Student

In Malaysia, normally the range of secondary school student age is between 13-17 years old. Secondary school student can be divided into two stages, lower secondary school student form 1 to 3 and higher secondary school student form 4 to 5 (Ministry of Education, 2011).

The secondary school student includes the adolescents' age between 10-19 years old (WHO, 2009). Secondary school student also can be classified as a child according to the definition of child as used by the United Nations Convention on the Right of the Child, Article 1 which states that “a child means every human being below the age of 18 years”. However, as the risk, exposure,

and injuries are different for different age groups, standard age groupings are needed to obtain an accurate profile of child injury and to recognize the different characteristics of the different age groups. Commonly used age breakdowns are (i) infancy, <1 year; (ii) early childhood, 1–4 years of age; (iii) childhood, 5–9 years of age; (iv) early adolescence, 10–14 years of age; and (v) late adolescence, 15–17 years of age. Without such a breakdown, it will be difficult to design adequate interventions and, equally important, to monitor and evaluate their effectiveness (Linnan *et. al* 2007). In addition, children and young people under the age of 25 years account for over 30% of those killed and injured in road traffic crashes (WHO, 2007).

1.7.3 Pedestrian

Pedestrian is a person who travels on foot across a road (WHO, 2010). The high risk of traffic injuries among pedestrians is attributed to several environmental, developmental, and socio demographic factors.

1.7.4 Motorcycle Pillion Rider

Motorcycle pillion rider is a person or passenger that seated behind the rider of a motorcycle (WHO, 2010).

1.7.5 Post Traumatic Stress Disorder

Post Traumatic Stress Disorder is a development of a characteristic symptom complex in certain individuals consisting of persistent re-experiencing of an event, avoidance of stimuli associated with the event, and symptoms of increased arousal (Kaminer *et al.*, 2006). A person defined with PTSD is someone who has one or both the intrusion criteria, avoidance or hyperarousal.

CHAPTER 2

LITERATURE REVIEW

2.1 Post-Traumatic Stress Disorder (PTSD)

Post-traumatic stress disorder (PTSD) is defined as the development of a complex characteristic symptom in certain individuals consisting of a persistent re-experiencing of an event, avoidance of stimuli associated with the event, symptoms of increased arousal (Mason *et al.*, 1997). PTSD occurs when the emergency response system outlined above has been conditioned, as a result of the experience, to respond to a stimulus which triggers memories of the event. If the PTSD not treated, it can persist for years. PTSD also could be defined as a memory linked with unpleasant emotions that

result in a spectrum of psychological and physical signs and symptoms (Joseph, 2010). PTSD can cause many symptoms. These symptoms can be grouped into three categories which are re-experiencing, avoidance and hyperarousal.

The most characteristic symptoms of PTSD are re-experiencing symptoms. PTSD sufferers involuntarily re-experience aspects of the traumatic event in a very vivid and distressing way. This includes flashbacks where the person acts or feels as if the event was recurring; nightmares; and repetitive and distressing intrusive images or other sensory impressions from the event. Reminders of the traumatic event arouse intense distress and/or physiological reactions. In children, re-experiencing symptoms may take the form of reenacting the experience, repetitive play or frightening dreams without recognizable content (Clinical Guideline, 2005).

Avoidance of reminders of the trauma is another core symptom of PTSD. This includes people, situations or circumstances resembling or associated with the event. People with PTSD often try to push memories of the event out of their mind and avoid thinking or talking about it in detail, particularly about its worst moments. (Clinical Guideline, 2005). PTSD sufferers also experience symptoms of hyperarousal including hypervigilance for threat, exaggerated startle responses, irritability and difficulty concentrating, and sleep problems. Others with PTSD also describe symptoms of emotional numbing. These include lack of ability to experience feelings, feeling

detached from other people, giving up previously on significant activities, and amnesia for significant parts of the event. (Clinical Guideline, 2005).

Nature of event and higher exposure to a traumatic situation related with development of PTSD. Individuals who had died, having a family member who died or was missing, loss of livelihood, and having a household member contemplate suicide were independently associated with higher prevalence rates on PTSD (Griensven *et al.*, 2008). Previous studies have indicated that PTSD prevalence is generally higher after man-made or technological disasters relative to natural disasters (Adeola, 2009).

2.2 Association between PTSD and Road Traffic Crash

There are many factors that can contribute to PTSD and one of them is road traffic crash. Road traffic crashes are one of the principal causes of PTSD which has been extensively described since the 1980s (Guillard *et al.*, 2005). Road traffic crashes, even those of a non serious nature, appear to increase the risk of severe psychiatric morbidity in survivors. The present review examines the evidence indicating the levels of psychiatric morbidity in road traffic crashes survivors. Although no consistent profile has emerged, the most commonly reported symptoms are depression,

anxiety, irritability, driving phobia, anger, sleep disturbances, and headache, with rates of PTSD across studies of 0% to 100%. (Alex *et al.*,1998).

Road traffic crashes are the most frequent type of trauma experienced by American males each year and the second most frequent trauma experienced by American females. On average, 1% of the United States population is injured in a road traffic crashes each year. That translates into over 3 million individuals who are injured in road traffic crashes on a yearly basis. Fortunately, fatalities are rare relative to the total number of people injured. Approximately 40,000 individuals are killed in the United States each year in road traffic crashes. Similar injury and fatality rates have been reported in other industrialized nations such as Canada, Australia, Great Britain, and Germany (Buckley, 2007).

Considering road traffic crashes casualties, in a number of studies conducted in various countries, PTSD prevalence 6 months after the road traffic crashes ranged between 18% and 23% (Ehlers *et al.*, 1998). PTSD following road traffic crashes has been reported as common, disabling and in some cases persistent over time (Blanchard *et al.*, 2001; Ursano *et al.*, 1999). In addition, PTSD in road traffic crash victims may affect to the everyday's routine of the victims such as work routine. A study in Australia study highlighted the difference in employability of road traffic

accident victims according to whether they were suffering from PTSD or not (Tull *et al.*, 2009) and they found patients with PTSD had more difficulty returning to work 8 months after the road traffic crashes.

2.3 Association between PTSD and Road Traffic Crash among Children

Children can develop PTSD after exposure to a range of traumatic stressors such as road traffic crashes. PTSD can give an effect to road crash victim including school children who are involved in road traffic crash. In United Kingdom, one in three children in everyday road traffic crash was found to suffer from post-traumatic stress disorder (Stallard *et al.*, 1998). Although there has been little systematic research into the effects of road traffic crash on children, there is increasing recognition that they too will be affected (Stallard *et al.*, 1998). Post Traumatic Response can occur in all age of people whether they are young or adult people.

Approximately one third children if untreated will continue to exhibit PTSD five to eight years later (Tufnell *et al.*, 2008). Children can suffer significant and impairing acute and long-lasting psychological distress following road traffic crashes, particularly if they sustain injuries (Langeland *et al.*, 2008). In addition, children

involving road traffic crash will have mental consequences such as post-traumatic stress disorder, phobias, anxiety and depression (WHO, 2009). It was also reported that between 14% and 34% of children involved in road traffic crash will develop PTSD (Ehlers *et al.*, 2003).

Several studies reported subsyndromal PTSD occurred among children, this was because research has shown that although some children may not meet all 3 symptom cluster criteria, they show similar levels of functional impairment and distress to children with a full PTSD diagnosis (Aaron, 1999). In addition, children who were admitted to a hospital after injuries will develop PTSD symptomatology which can have a significant impact on academic and social development. It is essential to develop some strategies for early identification of children at risk of developing PTSD (Aaron, 1999).

If left untreated, PTSD can follow a long insidious course (Gillies, 2003). Therefore, it is important that distressed children are identified early on so that they can receive further assessment and treatment before the problems become entrenched. It is also important to rule out children not at risk, because some research has shown that early prevention, such as psychological debriefing, may have a deleterious effect if provided to people who do not need help (Kenardy, 2000).

There is now considerable evidence that children can suffer significant and impairing acute and long-lasting psychological distress following road traffic crashes, particularly if they sustain injuries (Caffo *et al.*, 2003). Studies found that about 10–36% of traffic-injured children experience clinically significant distress in the immediate aftermath of these road traffic crashes including acute stress disorder (ASD) (Winston *et al.*, 2002; Holbrook *et al.*, 2005; Meiser *et al.*, 2005). In addition, studies indicated that about 10–35% of pediatric emergency patients develop PTSD, with even more children showing sub threshold clusters of distressing symptoms (Mirza *et al.*, 1998; DeVries *et al.*, 1999; Stallard *et al.*, 1999; Keppel-Benson *et al.*, 2002). As symptoms of PTSD can be very debilitating and interfere with a child's social and educational development and physical health (Seng *et al.*, 2005), it is particularly important to prevent PTSD in children.

2.4 Factors Contributing to PTSD

2.4.1 Socio-Demographic Factors (Age, Gender and Races)

Age during exposure to the traumatic event mediates the prevalence of PTSD. Young age during exposure to traumatic event significant different with the development of PTSD where person that expose to traumatic event during young age still have PTSD after many years. In other cases, prevalence of PTSD increased with the age where elder age is more effected in term of psychological after traumatic event compare to young age (Kar *et al.*, 2007). Cognitive immaturities make younger children less vulnerable than older children to some of the cognitive effect of trauma, such as recurrent intrusive thoughts. Immature ability in young children to inhibit cognitive processes may provide the opportunity for enhanced adaptation (Salmon *et al.*, 2002). Cognitive immaturity may protect the younger children from appreciating the implication of the disaster. However, it could be possible that very young children may not be able to verbalize their feelings or the manifestation may be different due to developmental stage. Lower prevalence in older adolescents may be due to factors like greater resilience or coping strategies compared to younger age (Kar *et al.*, 2007; Piyasill *et al.*, 2008).

Females are being more at risk of developing PTSD than males (Stallard *et al.*, 1998; Piyasill *et al.*, 2008; Tufnell *et al.*, 2008). This mean the gender of the children is related with presence or absence of Post Traumatic Responses. Studies on adult after motor vehicle crash showed women were more likely to experience chronic PTSD (Beck *et al.*, 2006). In contrast with some study done before this where gender was not significantly related to PTSD (Bryant, 2003; Ehlers *et al.*, 2003; Kar *et al.*, 2007).

Racial and ethnic background does not really seem to increase the probability of developing PTSD. Instead, a person's race/ethnicity seems to influence the development of PTSD only to the extent that other risk factors are present (Tull *et al.*, 2009). A person's race or ethnicity was not found to influence whether or not they had PTSD at some point in their life. However, other differences were found which are African Americans, Asian Americans, and Native Americans reported to experience less traumatic events compared to European Americans and Latinos. Despite this, African Americans, Asian Americans, and Native Americans were all more likely to develop PTSD after experiencing a traumatic event as compared to European Americans and Latinos (Matthew, 2009).

2.4.2 Sexual Abuse

Sexual abuse among teenagers or adolescents also can lead to post traumatic response which later can develop to PTSD. It had been proven in many Asia countries in which the sexual abuse rate is high. For instant, sexual abuse of children and adolescents has been a major category of sex crime in Taiwan. More than 10,000 cases of sexual assault are estimated to take place every year in Taiwan (Hwang, 1995; Chen, 1996). Among all sexual assault cases reported to the police, sexual abuse of children and adolescents constitute an average of 42% of the total reported cases for the past decade (Criminal Investigation Bureau, 1984–1993; Hwang, 1995; Luo, 1995).

As a side effect, sexual abuse of children and adolescents, which has often been considered attributing to child prostitution, has recently been acknowledged as a social problem in Taiwan. In child development perspective, sexual abuse experience among child and adolescent survivors is considered as imposing disruption to the self-development process. Disruptive development includes deviations in the intra-psychic processes of defining, regulating, and integrating aspects of self; and deviations in the related ability to experience a sense of trust and confidence in relationships. These are reflected in disturbances

of the physical and phenomenological sense of self, such as identity confusion, dissociation of aspects of self, poorly modulated affect and impulse control, including a variety of self-critical and self-destructive symptoms, and insecurity in relationships, particularly distrust, suspiciousness, lack of intimacy, and isolation (Cole *et al.*, 1992).

2.4.3 Alcohol Dependence

Alcohol consumption and intoxication prior to the traumatic event may prevent the development of PTSD (Macheal *et al.*, 2001). In addition, one large study found that 15.8% of people with PTSD also suffer from co-morbid alcohol dependence (AD), with White Persons at a higher risk than Black Persons for alcohol abuse and AD (Breslau *et al.*, 2003). However, there was some evidence that symptoms in African Americans found may be more severe (Penk *et al.*, 1989) than African American alcohol and drug abusers who experienced heavy combat in Vietnam suffered from greater post-war dysfunction compared to a similar group of European Americans.

2.4.3 War

War and political conflicts also can be one of the factors that contribute to PTSD. In Palestine, there was a study conducted to determine the prevalence of PTSD among Palestinians. The study has documented that approximately 76.5% of the injured victims qualify as having PTSD with excess risk for chronic symptoms and comorbidity with other psychiatric disorders such as anxiety and depression. This high prevalence is comparable to the rate of PTSD found in children and adolescents exposed to the stress of extreme political violence (Elbedour *et al.*, 2007). Children have physical disabilities arising from their involvement in combat operations and surgical intervention is needed in study done among former child soldiers attending a rehabilitative service and primary school education in Northern Uganda showed severe psychological distress among them (Ovugo *et al.*, 2008).

CHAPTER 3

METHODOLOGY

3.1 Study Design

The study design was a cross sectional study that is to study the relationship between PTSD and road traffic crashes.

3.2 Study Location

This study was conducted in secondary schools in Klang, Selangor in order to the association between PTSD and road traffic crash among secondary school

children in Klang, Selangor. Secondary schools were selected as the location of the study.

3.3 Sampling

3.3.1 Study Population

The study population of this study was the 16 years old school children who were studying in Form 4 in the selected schools in Klang, Selangor.

3.3.2 Study Sample

The study sample consists of 16 years old school children involved in road traffic crash who were studying in the Form 4 among the selected schools in Klang, Selangor

3.3.3 Sampling Frame

The list of secondary schools was obtained from the State Education Department of Selangor. There are 25 secondary schools in Klang area. From the 25 secondary schools listed, four schools were selected randomly for the study. The name list of form 4 students was obtained from the school.

3.3.4 Sampling Unit

A respondent was chosen based on the inclusive and exclusive criteria as below:-

The inclusive criteria in the study were:

- i. 16 years old school children
- ii. Had been involved in road traffic crash

The exclusion criterion in the study was:

- i. Foreigner student

3.3.5 Sampling Method

A purposive sampling method was used in this study. The 16 years old school children who were involved in road traffic crash was selected randomly in the selected school until the number of respondents required are achieved.

3.3.6 Sample Size

The sample size was calculated by using formula Robinson and Neutens formula (1987). The estimation incident for population of Post Traumatic stress disorder in children involved in road traffic crash was 15% (Di Gallo, 1997). The calculation is as followed:

$$\begin{aligned} N &= (Z/e)^2 (p) (1-p) \\ N &= (1.96/0.05)^2 (0.15) (1-0.15) \\ &= 196 \end{aligned}$$

N: Sample Size

Z: Standard score for significant level

P: estimation incident for population

For 95% significant level = 1.96, e = 0.05

Minimum study sample obtained was 196 respondents.

By increasing 10% to the minimum sample size for purpose of account for any missing data during data collection then it become;

$$\begin{aligned} N &= 216 + [(10/100) \times 216] \\ &= 216 \text{ respondents} \end{aligned}$$

So, there were 216 respondents in this study

3.4 Variables

3.4.1 Dependant Variable

Post Traumatic Stress Disorder

3.4.2 Independent Variables

- i. Road traffic crashes
- ii. Socio-demographic factors
- iii. Type of road users
- iv. Frequency of involvement

3.5 Data Collection and Study Instrumentation

3.5.1 Data Collection

A self-administered questionnaire was used which all respondent corresponding to the study were required to answer two sets of questionnaires comprising of socio-demographic factors and The Children's Impact of Events Scale (8) (CRIES-8) which took between 5 to 10 minutes. Initially, pre test of questionnaire had done by taking 10% of person that have similar criteria to the

target population (Cronbach $\alpha = 0.88$). This was done in order to test the level of understanding among the respondents towards all of the questions.

3.5.2 Study Instrumentation

A self-administered questionnaire was used in which all the respondents corresponding to the study were required to answer two sets of questionnaires comprising of socio-demographic factors and The Children's Impact of Events Scale (8) (CRIES-8). The CRIES-8 was used to determine the intrusion and avoidance score which was part of PTSD symptom. Initially, pre test of questionnaire was done among 20 form four school children in SMK Putrajaya. The Cronbach α obtained was 0.88. This was done in order to test the level of understanding among the respondents towards all of the questions. For interpretation of the (CRIES-8) score, it consisted of 8 items, 4 items measuring Intrusion and 4 items measuring Avoidance, hence it is called the CRIES-8. There are 8 items that are scored based on four point scale which were 0 (Not at all), 1 (Rarely), 3 (Sometimes) and 5 (Often). There were two sub-scales used. The intrusion score got from the sum of items 1, 3, 6 and 7 while the avoidance score got from the score of items 2, 4, 5, and 8. A cutoff score of 17 was used in the CRIES-8 in order to detect the symptoms of PTSD among respondents (Perrin, 2005).

3.6 Data Analysis

Data were analyzed using Statistical Package for Social Science (SPSS) version 19. Types of analysis that involved in this study were:

- i. Univariate analysis
- ii. Bivariate analysis

For this study, univariate analysis was used to analyze the socio-demographic factors of the respondent and their post traumatic response score. Descriptive statistics such as means and standard deviation was used to explore the data collected and also to summarize the data collected. In addition, descriptive statistics can be used to identify the missing value in data collected. Chi-square was used to identify association between traffic road crash and post traumatic response among the secondary school children.

3.7 Quality Control

3.7.1 Questionnaires

First of all, pre-test was done by taking 10% of population that have similar criteria to the target population. It was done among the 16 years old secondary school children in SMK Putrajaya. This was done in order to ensure the understanding towards the questions among the respondents.

3.8 Study Limitation

In this study, there were some study limitations. First, there was recall and information bias in the questionnaire as the respondents were asked to remember the history of road crash happened to them. Second, the sample size also did not meet the sample size required due to some of the respondents refused to participate in this study. Besides, there were a limited number of respondents that allowed taking part in the study as the researcher could not interview them when they were still having the class. So, the respondents were only allowed to be interviewed when they had the break time. Lack of experience of the researcher in doing the study also gives limitations to this study.

3.9 Ethical Concern

First of all, all the respondents were briefed about the study that will be conducted. Later, parent's approval sheets were given to the student's parents through their children to get their permission to involve their children in the study. Respondents were given choices whether they would likely to participate in the study or not. Finally, the respondents were informed that all the information based on this study will be confidential and had got the approval from the Ethical committee of the Faculty Medicine and Health sciences of UPM.

CHAPTER 4

RESULTS

4.1 Socio Demographic Distributions

There were 200 students aged 16 years old selected to be the respondents in this study and 64.5% of the respondents were male students. The response rate for this study was 92.6% it was due to some of the respondents refused to participate in this study. From the type of races, most of the respondents were Malay (67.0 %), followed by Indian (27.5%), Chinese (5.0%) and Others which is Punjab (0.5%). About 24.5% of the respondents have 3 siblings which was the most in this population. Thoroughly, most of

the respondent's monthly parent's salary was between RM 2000 – RM 5000 (38%). In term of the parent's status, 95% was married and 3.5% divorced (Table 4.1.1).

Table 4.1.1 Socio-demographic of the respondents

Variables	Frequency (N)	%
Gender		
Male	129	64.5
female	71	35.5
Races		
Malay	134	67.0
Chinese	10	5.0
Indian	55	27.5
Others	1	0.5
Number of siblings		
1	17	8.5
2	29	14.5
3	49	24.5
4	41	20.5
5	30	15.0
6	16	8.0
7	13	6.5
8	5	2.5
Parent's monthly salary		
< RM 2000	70	35.0
RM 2000- RM 5000	76	38.0
> RM 5000	54	27.0
Parents' status		
Married	190	95.0
Divorced	7	3.5
Died	3	1.5

N=200

The respondents also had been asked whether they had the motorcycle licenses or not. Based on the questionnaire, there was none of the respondents having motorcycle licenses.

Table 4.1.2 Motorcycle license among the respondents

Variable	Frequency (%)	
	Yes N (%)	No N (%)
Having motorcycle license	0(0)	200(0)
N=200		

For the alcohol consumption, it was about 2.5% of the respondents were consuming the alcohol in their daily lives. In the other hand, 97.5% of them respondents were not consuming the alcohol in their daily lives

Table 4.1.3 Alcohol consumption among the respondents

Variable	Frequency (%)	
	Yes N (%)	No N (%)
Alcohol consumption	5(2.5)	195(97.5)
N=200		

The academic performance after the road crash was categorized into three which were decrease, increase and no changes performance. Based on the questionnaire, it was about 63% of the respondents had no changes in their academic performance after the road crash. In the other hand, 30% of them had increase their academic performance after road crash and only 7% of them had decrease their academic performance after road crash.

Table 4.1.4: Academic performances after road crash among the respondents

Variable	Frequency (N)	(%)
Academic performances		
Decrease	14	7
Increase	60	30
No changes	126	63
N=200		

In the previous treatment or therapy history regarding PTSD, only 10% of the respondents were having it. About 90% of them were not having any of the treatment or therapy history regarding PTSD.

Table 4.1.5: Previous treatment or therapy history regarding PTSD

Variable	Frequency (%)	
	Yes N (%)	No N (%)
Previous treatment/therapy	20 (10)	180 (90)
N=200		

Based on the questionnaire, there was 95% of the respondents had no previous trauma experiences in their lives. However, there was 5% of them had other no previous trauma experiences in their lives.

Table 4.1.6: Previous trauma experiences among the respondents

Variable	Frequency (%)	
	Yes N (%)	No N (%)
Previous trauma experiences	10 (5)	190 (95)
N=200		

4.2 Type of Road Users

There were many type of road users that could be involve in the road crash. They were vehicle passengers, motorcycle pillion riders, motorcycle riders, cyclist and pedestrians. The highest percentage of road crash in this study was involving the motorcycle riders (25.5%), followed by motorcycle pillion riders (21%), cyclist (20.5%) and pedestrians (20.0%). The lowest number of road crash was involving the vehicle passengers which were 13.5%. Table below showed the frequency and percentage of different type of road users involved in road crash.

Table 4.2.1: Different type of road users in the road crash

Variables	Frequency	%
Vehicle passenger (bus, car, lorry)	27	13.5
Motorcycle pillion riders	42	21.0
Motorcycle riders	50	25.0
Cyclist	41	20.5
Pedestrians	40	20.0

4.3 Frequency of Involvement in Road Crash

The frequency of involvement in road crash was related on how many times the respondents had involved in road traffic crash in their lifetime. From the results of the questionnaire, there were 46.5% of the respondents involved in road traffic crash 2 times in their lifetime. Meanwhile, there were only 35.5% of the respondents involved in road traffic crash once in their lifetime. The table below summarizes the distribution of frequency of involvement in road crash among the respondents.

Table 4.3.1: Distribution of frequency of involvement in road crash among respondents

Variables	Frequency	%
Once	71	35.5
2 times	93	46.5
3 times	31	15.5
4 times	5	2.5

N=200

4.4 Prevalence of PTSD among the Respondents

There were 42 (21%) out of 200 respondents in this study having PTSD. Among the 42 respondents who having PTSD, 54.8% of them had intrusion criteria, 33.3% had avoidance criteria and 11.9% had both criteria. Table below summarizes all the prevalence of PTSD among the 16 years old children. PTSD can be screened by using CRIES-8 Checklist as the checklist provides some questions on detecting avoidance and intrusion criteria. The person can be said to have PTSD if the person have one of the criterion whether intrusion criteria or avoidance criteria or the person have both criteria.

Table 4.4.1: Distribution of intrusive and avoidance score among respondents

Variables	Frequency (%)
Intrusion	23 (54.8%)
Avoidance	14 (33.3%)
Intrusion and avoidance	5 (11.9%)
PTSD	42 (21.0%)

4.5 Association between PTSD and Gender

About 26.8% of the female respondents having the PTSD while only 17.8% of female respondents having the PTSD. Based on the results, PTSD and gender showed no significant association among the respondents as p-value was more than 0.05 ($p = 0.1380$)

Table 4.5.1: Association between PTSD and gender

Variables	PTSD		χ^2	p
	YES Freq (%)	NO Freq (%)		
Gender				
Male	23 (17.8%)	106 (82.2%)		
Female	19 (26.8%)	52 (73.2%)	2.202	0.138
Total	42 (21.0%)	158 (79.0%)		

*Significant at $p < 0.05$

4.6 Association between PTSD and Races

Based on the results, 25.4% of the respondents who were having PTSD were Malay and 14.3% was non-Malay. PTSD and races shows no significant association among the respondents as p-value is more than 0.05 ($p = 0.119$) as showed in the table below.

Table 4.6.1: Association between PTSD and races

Variables	PTSD		χ^2	p
	YES Freq (%)	NO Freq (%)		
Race				
Malay	34 (25.4%)	100 (74.6%)		
Non-Malay	8 (14.3%)	58 (85.7%)	5.850	0.119
Total	42 (21%)	158 (79%)		

4.7 Association between PTSD and Frequency of Involvement in Road Traffic Crash

Based on the results, about 22.2% of the respondents having PTSD were involved in road traffic crash above than 2 times in their lifetime. PTSD and frequency of involvement in road traffic crash also shows no significant association among the respondents as p-value is more than 0.05.

Table 4.7.1: Association between PTSD and frequency of involvement in road crash

Variables	PTSD		χ^2	P
	YES	NO		
	Freq (%)	Freq (%)		
Frequency of involvement in road crash				
≤ 2 times	34 (20.7 %)	130 (79.3%)	0.835	0.841
> 2 times	8 (22.2%)	28 (77.8%)		
Total	42 (21.0%)	158 (79.0%)		

4.8 Association between PTSD and Type of Road Users

Motorcycle riders (32.0%) showed the highest percentage of respondents who having the PTSD. It was followed by vehicle passenger (29.6%) and the lowest percentage was cyclist (4.8%) of the respondents. For the pedestrians, there are only 3% of the respondents having the PTSD. There is a significant association between PTSD and type of road users among the respondents as p-value is less than 0.05 ($p= 0.015$) as shown in the table below.

Table 4.8.1: Association between PTSD and type of road users

Variables	PTSD		χ^2	P
	YES Freq (%)	NO Freq (%)		
Type of road user				
Passenger	8 (29.6%)	19 (70.4%)		
Motorcycle rider	16 (32.0%)	34 (68.0%)		
M. pillion rider	10 (23.8%)	32 (76.2%)	12.350	0.015
Pedestrian	6 (15.0%)	34 (85.0%)		
Cyclist	2 (4.8%)	39 (95.2%)		
Total	42 (21.0%)	158 (79.0%)		

CHAPTER 5

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

5.1.1 Socio-Demographic

The study was conducted among the 16 years old children in secondary schools in the area of Klang, Selangor. Initially, pre test of questionnaire was done among 20 form four school children in SMK Putrajaya. The Cronbach α obtained was 0.88. The list of schools in Klang area was obtained from the State

Education Department of Selangor as in appendix. There were 4 selected schools that had been chosen randomly from the list as the location of the study location. They were SMK Kampung Jawa Klang, SAMT Sultan Hishamuddin, SMK Tengku Ampuan Rahimah and SMK La Salle Klang. From the sample size that had been calculated, only 200 school children had been selected to be the respondents in this study based on their previous experiences involving in the road crash. All the respondents were Form 4 students who were involved in road crash and they were asked to answer CRIES-8 Checklist in order to screen whether there was any PTSD among them. The data collection was carried out for 2 weeks from 19th March until 31th March 2012.

From the questionnaire regarding the socio demographic data of the respondents, 2.5% of the respondents were consuming the alcohol in their daily lives. Alcohol is a depressant, which slower the functions of the brain, causing impaired cognitive functioning such as poor concentration, judgement, and coordination, and emotional mood swings. None of the respondents was having motorcycle licenses based on the questionnaire. For Malaysians, the minimum age required to have a motorcycle license is 16 years old. This means that most of the respondents who were motorcycle riders in this study were riding in the road crash without having any licenses.

Besides, the respondents' academic performance after the road crash also being asked in the questionnaire and it was found that 63.0% of the respondents had no changes in their academic performance after the road crash. This may be due to their injury severity in the road crash as most of the respondents did not have any severe injury. About 90.0% of the respondents had no previous treatment or therapy related with psychology and counseling. It shows that most of the respondents do not have awareness on this psychological problem. Based on the respondents' previous trauma experiences, most of them had no other trauma experiences.

5.1.2 Prevalence of PTSD among the Respondents

There were 21.0 % of the respondents experiencing PTSD after the road crash. This indicated that the prevalence of PTSD among the respondents was lower than the previous study done by Stallard in United Kingdom (1998) which was 35.0%. Among the respondents who experienced the PTSD, male respondents experienced PTSD more percentage than female respondents. The intrusion criteria is having symptoms such as intrusive thoughts, nightmares, intrusive feelings and imagery, and dissociative-like re-experiencing while

avoidance criteria is having symptoms such as numbing of responsiveness, avoidance of feelings, situations, and ideas. All of these PTSD criteria were interpreted based on the CRIES-8 Checklist.

Report from major road traffic crash indicated that the children display considerable psychological reactions and in many cases present with a range of symptoms characteristic of post traumatic responses. These symptoms persist longer than one month and cause clinically measurable distress or impairment in social, occupational, or other areas of functioning. The diagnostic of this disorder involve the experiencing of a traumatic event that is outside the range of usual human experience. This event results in persistent re-experiencing of the trauma, avoidance of stimuli associated with it and increased rates of arousal (Stallard *et al*, 1998).

5.1.3 Association between PTSD and Gender

From the Chi-square test, it shows that there was no significant association between PTSD and gender among the respondents. The first study hypothesis stated that there was a significant association between PTSD and

gender among the respondents. So, the first hypothesis is rejected. The finding of this study was similar with the previous study which was reporting that gender was not significantly related to development of PTSD (Ehlers *et al*, 2003). In this study, female respondents were having PTSD more than male. Based on some studies that had been done in some countries, it showed that females were being more at risk of developing PTSD than males (Stallard *et al.*, 1998; Tufnell *et al.*, 2008). It is suggested if difference between gender and Post traumatic Responses, it may depend on various factors by higher exposure to trauma event (Kar *et al*, 2007).

5.1.4 Association between PTSD and Races

In this study, Malay respondents had the highest percentage of PTSD. Chi square test showed that there was no significant association between PTSD and race. The second study hypothesis states that there was a significant association between PTSD and races among the respondents. So, the second hypothesis was also been rejected. Racial and ethnic background really does not seem to increase the likelihood of a person will develop PTSD. A person's race or ethnicity was not found to influence whether or not they had PTSD at some point in their life (Tull *et al.*, 2009).

5.1.5 Association between PTSD and Frequency of Involvement in Road Crash

There was no significant association between PTSD and frequency of involvement in road crash. The third study hypothesis states that there was a significant association between PTSD and frequency of involvement in road crash among the respondents. So, the third hypothesis was also rejected. Frequency of involvement in road crash were divided into two category which is children involved in road traffic crash less than or equal to 2 times and children involved in road traffic crash more than 2 times. Some studies suggested that frequency of involvement is associated with PTSD. Intensity of the exposure or repeated experience the same stressors could have differences with development of PTSD (Kar *et al.*, 2007).

The results showed those who were involved more than 2 times in the road traffic crash had the highest percentage of PTSD symptoms which was 22.2%. The insignificant of the finding could be due to terms of recalling period between the crash and the data collection period (about a year recalling period). When they experienced more than once road traffic crash within one year, this can make they remember the road crash history.

5.1.6 Association between PTSD and Type of Road Users

In this study, it showed that there was a significant association between PTSD and type of road users. The fourth study hypothesis stated that there was a significant association between PTSD and type of road users among the respondents. So, the fourth hypothesis was accepted. By referring to the results, motorcycle riders showed the highest percentage of having PTSD compared to others. The p-value was less than 0.05 and the Chi value was 12.30. It means that in this study, the type of road users was the only one factor that associated with PTSD.

A previous study showed that the type of road users was one of the factors that related to the presence of PTSD (Stallard *et al.*, 1998). The significant finding could due to the variety of type of road users involved in the road crash. They were motorcycle riders, motorcycle pillion riders, cyclist, vehicle passengers and pedestrians. The differences between the type of road users can lead to different type of injuries and traumatic event to the respondents. So it gives a significant association to PTSD among the respondents.

5.2 Conclusion

From this study, there are about 21% of the respondents having PTSD. There was no significant association between gender, race and frequency of involvement in road traffic crashes among the respondents with PTSD. However, there was a significant association between PTSD and the type of road users among respondents involved in road traffic crash. It can be concluded that there was only one out of four factors tested, only the type of road users was associated with PTSD in this study.

5.3 Recommendations

In this study, the motorcycle riders showed the highest percentage of respondents having PTSD and from the study also showed that all the respondents do not have any motorcycle licenses. The motorcycle licenses provision to the school children should be relooked and reassessed so that the minimum age qualification to have a motorcycle license can be increased from 16 to 18 years old similarly done in Taiwan. In addition, the teachers and counselors in the schools should play an important role in advising their students on the negative effects of riding motorcycles without having a motorcycle licenses. The risk of riding motorcycle without motorcycle licenses can lead to high probability of road traffic crashes which can lead to the development of PTSD.

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APPENDIX 1

Evidence of approval ethical by
Medical Research Ethics
Committee

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7.0 APPENDICES

PENERANGAN KEPADA PESERTA

TAJUK KAJIAN:

Gangguan tekanan selepas trauma (Post-traumatic stress disorder) dalam kalangan pelajar sekolah menengah yang terlibat dalam kemalangan di Klang, Selangor .

1. Apakah kajian ini?

Gangguan tekanan selepas trauma didefinisikan sebagai pembentukan simptom ciri-ciri kompleks dalam sebahagian individu seperti sering mengalami gangguan semula kejadian yang pernah dialaminya, mengelak untuk mengingati semula kejadian tersebut dan simptom tindak balas yang meningkat. Penyakit ini boleh dialami oleh sesiapa sahaja dan tidak mengira peringkat umur sama ada orang dewasa remaja, atau kanak-kanak. Kajian ini berkaitan dengan tindak balas selepas trauma yang dialami oleh pelajar sekolah menengah di sekolah-sekolah menengah yang terletak di kawasan Kajang, Selangor.

2. Apakah tujuan kajian ini?

Kajian ini dijalankan bertujuan untuk mengkaji perkaitan di antara gangguan tekanan selepas trauma dan kemalangan jalan raya yang dialami oleh pelajar sekolah menengah di Klang, Selangor.

3. Berapa ramai responden yang terpilih?

Responden akan dipilih dari kalangan pelajar sekolah menengah di sekolah-sekolah menengah di kawasan Klang, Selangor yang pernah terlibat dalam kemalangan jalan raya. Seramai 110 orang peserta akan dipilih untuk kajian ini.

4. Apakah jenis ujian yang akan dijalankan?

Semua peserta akan ditemuduga berkaitan dengan soalan yang terdapat di dalam borang soal selidik. Selain itu, peserta akan ditemuduga berdasarkan soalan atau item yang terdapat di dalam Children Revised Impact Event Scale (CRIES-8). Di sini, kaedah pengumpulan data hanya dengan menemuduga peserta.

5. Adakah bayaran dikenakan?

Pengkaji akan menanggung segala pembiayaan ujian yang akan dijalankan dan tiada sebarang bayaran dikenakan terhadap setiap responden.

6. Adakah maklumat dijamin sulit?

Semua maklumat yang diberikan oleh responden di dalam borang kaji selidik adalah dijamin sulit. Tiada huraian individu akan dibuat pada mana-mana bahagian di dalam kajian atau penerbitan.

7. Adakah hak anda?

Kajian ini melibatkan anda secara sukarela. Oleh itu, peserta mempunyai hak untuk menarik diri dari penyertaan dalam kajian ini pada bila-bila masa sekiranya peserta merasa tidak selesa untuk memberikan maklumat kepada pengkaji.



8. Apakah yang anda akan dapati?

Kajian ini menjelaskan simptom tindak balas selepas trauma yang berpunca dari kemalangan jalan raya. Seandainya anda adalah peserta yang telah dikenal pasti mengalami simptom terbahit, maka maklumat ini amatlah berguna untuk tindakan rawatan yang selanjutnya.

8. Apakah yang harus anda lakukan?

Anda dikehendaki menandatangani borang penyertaan responden yang menyatakan minat anda untuk menyertai kajian ini. Ianya boleh dilakukan setelah anda membaca dan memahami isi kandungan penerangan ini. Borang penyertaan responden haruslah dikembalikan kepada penyelidik sebelum ujian dijalankan. Sekiranya anda mempunyai sebarang kemusykilan, penyelidik akan membantu untuk memberi maklumat yang selanjutnya.

Terima kasih atas kerjasama dan bantuan anda.

MOHD SAFWAN BIN MAHMUD

Penyelidik

B. Sc. Kesihatan Persekitaran dan Pekerjaan

Unit Kesihatan Persekitaran dan Pekerjaan

Jabatan Kesihatan komuniti

Fakulti Perubatan dan Sains Kesihatan

Universti Putra Malaysia.

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The image features a large, faint watermark of the Universiti Putra Malaysia (UPM) logo in the background. The logo is a shield-shaped emblem with a red and white design, including a book and a building. The letters 'UPM' are prominently displayed in a red box at the top of the shield. The watermark is oriented diagonally across the page.

APPENDIX 2

Respondent's information sheet

APPENDIX 3

Respondent's approval sheet



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BORANG PERSETUJUAN RESPONDEN

TAJUK KAJIAN : Gangguan tekanan selepas trauma (Post-traumatic stress disorder) dalam kalangan pelajar sekolah menengah yang terlibat dalam kemalangan di Klang, Selangor

PENYELIDIK : MOHD SAFWAN BIN MAHMUD

Saya.....No.K/P.....
alamat.....
..... bersetuju untuk menyertai kajian bertajuk seperti di atas.

Saya telah membaca dan memahami isi kandungan kajian berdasarkan apa yang telah dinyatakan di dalam 'PENERANGAN KEPADA PESERTA' yang telah dilampirkan bersama surat kebenaran ini dan penerangan tambahan daripada penyelidik.

Saya faham bahawa kajian ini dijalankan untuk mengkaji kaitan di antara gangguan tekanan selepas trauma dan kemalangan jalan raya yang dialami oleh pelajar sekolah menengah di Klang, Selangor.

Saya juga faham bahawa segala maklumat yang diberikan dan segala keputusan yang saya peroleh adalah sulit dan hanya akan digunakan untuk tujuan penyelidikan dan rujukan penyelidik.

Saya juga faham bahawa maklumat ini boleh digunakan untuk penerbitan tetapi setiap individu tidak akan dinyatakan identitinya.

Saya faham bahawa saya mempunyai hak untuk menarik diri dan juga mempunyai hak untuk menarik semula keizinan pada bila-bila masa sekiranya perlu apabila merasa tidak selesa pada mana-mana ujian atau aktiviti yang dijalankan oleh penyelidik semasa kajian dijalankan dan tiada sebarang tindakan boleh dikenakan ke atas saya atas tindakan tersebut.

Tandatangan
(Responden)

Tandatangan
(Saksi)



**FAKULTI PERUBATAN DAN SAINS KESIHATAN
FACULTY OF MEDICINE AND HEALTH SCIENCES
UNIVERSITI PUTRA MALAYSIA, 43400 UPM SERDANG,
SELANGOR, MALAYSIA**

Tarikh :

Nama :

No. K/P :

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

Tarikh

Tandatangan
(Penyelidik)



APPENDIX 4

Questionnaire



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FAKULTI PERUBATAN DAN SAINS KESIHATAN

BORANG SOAL SELIDIK

Tajuk kajian: Gangguan tekanan selepas trauma (Post-traumatic stress disorder) dalam kalangan pelajar sekolah menengah yang terlibat dalam kemalangan di Klang, Selangor

Maklumat yang dikumpulkan adalah **SULIT** dan bertujuan untuk kajian sahaja. Kerjasama dan jasa baik tuan/puan amat dihargai.

A. DATA SOSIODEMOGRAFI

No Responden : (Diisi oleh penyelidik)

Nama sekolah : _____

Jantina (**Bulatkan**) : Lelaki / Perempuan

Tarikh Lahir : _____

Bangsa : Melayu

Tandakan (/) Cina

India

Lain-lain: _____

Bilangan adik beradik: (1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 & melebihi 14) termasuk anda (**Bulatkan jumlah**)

Pendapatan bulanan ibu-bapa. Tandakan (/)

i Kurang
RM 2000

ii RM 2000-
RM 5000

iii Lebih
RM 5000

Status ibu-bapa. Tandakan (/)

Berkahwin

Bercerai

Meninggal dunia

Pengambilan alcohol secara berlebihan

i. Ya

ii. Tidak

Jenis pengguna jalan raya (semasa kemalangan berlaku). Tandakan (/)

Penumpang kenderaan (Bas, Kereta, Lori)

Pembonceng motosikal

Pejalan kaki

Berbasikal

Penunggang motosikal

Bilangan kemalangan yang dialami: (1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10) (Bulatkan jumlah)

Adakah anda mempunyai lesen memandu

i. Ya

ii. Tidak

Prestasi akademi anda selepas kemalangan: **Tandakan (/)**

i Menurun

ii Meningkat

iii Tiada perubahan

Pernah mendapat rawatan atau terapi berkaitan psikologi/kaunseling: **Tandakan (/)**

i. Ya

ii. Tidak

Pernah terlibat dengan apa-apa kemalangan selain daripada kemalangan jalan raya, pembedahan atau apa-apa yang mendatangkan trauma (previous experience of trauma): **Tandakan (/)**

i. Ya

ii. Tidak

B. CRIES-8 SCORE (Diisi oleh penyelidik): in: _____

av: _____

KEMALANGAN JALAN RAYA

Revised Child Impact of Events Scale

CRIES-8 (VERSI BAHASA MALAYSIA)

Sila tandakan (/) di kotak yang disediakan bagi menjelaskan perasaan anda tujuh hari yang lalu. Sekiranya anda tidak mengalami apa-apa masalah dalam tempoh tersebut sila tandakan "Tidak sama sekali" pada kotak yang disediakan.

Below is the list of comments made by people after stressful life. Please tick each item showing how frequently these comments were true for you during the past seven days. If they did not occur during that time please tick the "not at all" box

Tidak sama sekali = 0 Jarang-jarang = 1 Kadang-kadang = 3 Selalu = 5

Not at all = 0 Rarely = 1 Sometimes = 3 Often = 5

		Tidak sama sekali <i>Not at all</i>	Jarang- jarang <i>Rarely</i>	Kadang- kadang <i>Sometimes</i>	Selalu <i>Often</i>	<i>in</i>	<i>av</i>
1	Adakah anda berfikir tentang kejadian itu walaupun ketika anda mahu melupakannya? <i>Do you think about it even when you don't mean it?</i>						
2	Adakah anda cuba melupakannya dari ingatan anda? <i>Do you try to remove it from your memory?</i>						
3	Adakah anda mempunyai perasaan yang kuat tentang perkara ini? <i>Do you have waves of strong feelings about it?</i>						
4	Adakah anda mengelak dari sesuatu yang mengingatkan anda tentang kejadian itu? (cth: tempat/keadaan kejadian itu.) <i>Do you stay away from reminders of it.? (eg:places ; situation)</i>						
5	Adakah anda mencuba tidak mahu bercakap mengenainya? <i>Do you try not to talk about it?</i>						
6	Adakah gambaran tentang kejadian itu selalu menjelma di fikiran anda? <i>Do pictures about it pop into your mind?</i>						
7	Adakah perkara lain selalu membuatkan anda terfikir tentang kejadian itu? <i>Do other things keep making you think about it?</i>						
8	Adakah anda mencuba untuk tidak berfikir tentangnya? <i>Do you try not to think about it?</i>						

APPENDIX 5
PHOTOGRAPH OF
RESEARCH STUDY

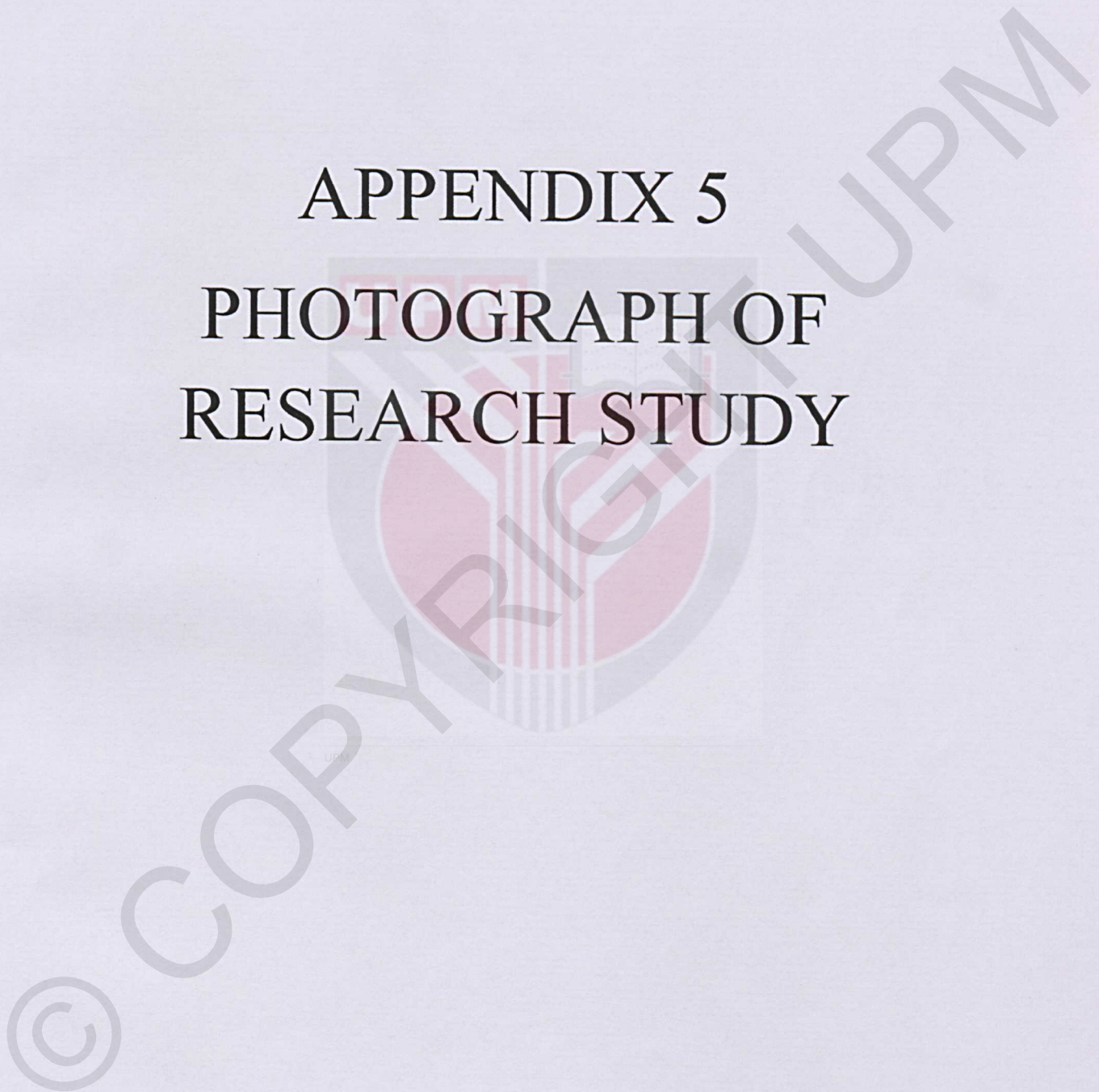




Figure 1: Distributing the questionnaire to the respondents



Figure 2: Respondent answering the questionnaire



Figure 3: In front one of the selected school

APPENDIX 6

List of School in Selangor



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Negeri	KodSekolah	NamaSekolah	AlamatLokasiSekolah	BandarLokasiSekolah	PostkodLokasiSekolah	Lokasi	NoTelefon	NoFak	L	P	Enrolmen
SELANGOR	BEA0091	SMK RAJA MAHADI	TAMAN KLANG JAYA	KLANG	41200	Bandar	0333241973	0333242091	1258	1101	2359
SELANGOR	BEA0092	SMK RAJA LUMU	JALAN RAJA LUMU, PANDAMARAN	PELABUHAN KLANG	42000	Bandar	0331685844	0331654849	835	606	1441
SELANGOR	BEA0093	SMK TENGGU AMPUAN BAHIMAH	PERSIARAN RAJA MUDA MUSA	KLANG	41200	Bandar	0333738582	0333737929	925	867	1792
SELANGOR	BEA0094	SMK TENGGU AMPUAN JEMAAH	JALAN PANDAMARAN	PELABUHAN KLANG	42000	Bandar	0331686939	0331657834	1242	1043	2285
SELANGOR	BEA0095	SMK TENGGU IDRIS SHAH	JALAN TAP	KLANG	41300	Luar Bandar	0332508368	0332501104	2039	410	2449
SELANGOR	BEA0096	SMK SULTAN ABDUL SAMAD	JALAN LANDASAN, BUKIT KUDA	KAPAR	41300	Bandar	0333414198	0333446984	873	330	1208
SELANGOR	BEA0097	SMK PULAU INDAH	KAMPUNG SUNGAI KEMBONG, PULAU INDAH	PELABUHAN KLANG	42920	Luar Bandar	0331023046	0331013046	445	416	861
SELANGOR	BEA0099	SMK SRI ISTANA	JALAN ISTANA	KLANG	41000	Bandar	0333724846	0333730941	454	484	938
SELANGOR	BEA0100	SMK RANTAU PANJANG	JALAN KAPAR	KLANG	42100	Luar Bandar	0332911004	0332906367	1284	1248	2532
SELANGOR	BEA0101	SMK (P) KAPAR	PERSIARAN HAMZAH ALANG	KAPAR	42200	Luar Bandar	0332506565	0332506565	0	2285	2285
SELANGOR	BEA0102	SMK PENDAMARAN JAYA	JALAN YOUNG, PANDAMARAN	PELABUHAN KLANG	42000	Bandar	0331682398	0331672398	943	933	1876
SELANGOR	BEA0103	SMK TELOK GADONG	JALAN SERAMPANG 3, OFF JALAN TELUK PUJAI	KLANG	41100	Bandar	0333710804	0333722259	1278	1257	2535
SELANGOR	BEA0104	SMK SRI ANDALAS	JALAN SRI DAMAK 10, TAMAN SRI ANDALAS	KLANG	41200	Bandar	0333737394	0333730981	1261	1120	2381
SELANGOR	BEA0105	SMK JALAN KEBUN	BATU 7, JALAN KEBUN SEKSYEN 32	SHAH ALAM	40460	Luar Bandar	60351613964	0351618324	1317	1214	2531
SELANGOR	BEA0106	SMK KAMPUNG JAWA	JALAN RAJA NONG	KLANG	41000	Bandar	0333734848	0333722953	998	989	1987
SELANGOR	BEA0108	SMK KOTA KEMUNING	PERSIARAN SG. KERAMAT, TAMAN KLANG UTAMA,	KLANG	42100	Bandar	03-32918081	03-32904276	1021	1001	2022
SELANGOR	BEA0109	SMK BANDAR BARU SULTAN SULEIMAN	LOT 4, JLN ANGGERIK DORITIS 3/143, KOTA KEMUNING	SHAH ALAM	40460	Bandar	0351219140	0351219148	1303	1288	2591
SELANGOR	BEA0110	SMK SUNGAI KAPAR INDAH	LEBUH SULTAN ABDUL SAMAD	PELABUHAN KLANG	42000	Luar Bandar	0331760464	0331760466	538	537	1075
SELANGOR	BEA0111	SMK SHAHBANDARAYA	JALAN HARAPAN 3A, TAMAN SUNGAI KAPAR INDAH	KAPAR	42200	Luar Bandar	0332903121	0332903122	1236	1090	2326
SELANGOR	BEA0112	SMK BATU UNJUR	JALAN RAJA NONG	KLANG	41000	Bandar	0333714653	0333714417	840	861	1701
SELANGOR	BEA1064	SMK JENJAROM	JALAN NILAM 1, BANDAR BUKIT TINGGI	KLANG	41200	Bandar	0333244054	0333244079	1187	1046	2233
SELANGOR	BEA1065	SMK JUGRA	KG JENJAROM	JENJAROM	42600	Luar Bandar	0331913977	0331913977	804	798	1602
SELANGOR	BEA1066	SMK TELOK DATOK	JALAN SULTAN ABDUL SAMAD	BANTING	42700	Luar Bandar	0331201808	0331203946	885	851	1736
SELANGOR	BEA1068	SMK BATU LAUT	TANJOING SEPAT	BANTING	42800	Luar Bandar	0331871303	0331871303	397	518	915
SELANGOR	BEA1069	SMK TELOK PANGLIMA GARANG	TELOK PANGLIMA GARANG	TANJOING SEPAT	42800	Luar Bandar	0331481233	0331481233	331	314	645
SELANGOR	BEA1070	SMK BUKIT CHANGGANG	BANTING, KUALA LANGAT	BANTING	42900	Bandar	0331227914	0331229899	1336	1401	2737
SELANGOR	BEA1071	SMK SIANGLANG JAYA	TELOK DATOK, KUALA LANGAT	BANTING	42700	Luar Bandar	0331856088	0331852411	528	624	1152
SELANGOR	BEA1072	SMK BANDAR BANTING	KG. MEDAN	TELOK PANGLIMA GARANG	42900	Luar Bandar	0331229403	0331228542	981	962	1943
SELANGOR	BEA3074	SMK SRI TANJUNG	PERSIARAN MAJUIS	BANTING	42700	Bandar	0331874817	0331802409	876	789	1665
SELANGOR	BEA3075	SMK DATO HARUN	JALAN KERAMAT TANJUNG	KUALA SELANGOR	45000	Bandar	0332891164	0332896751	841	862	1703
SELANGOR	BEA3077	SMK RAJA MUDA MUSA	BATU 8, JALAN BERNAM	TANJOING KABANG	45500	Luar Bandar	0332698151	0332692769	844	804	1648
SELANGOR	BEA3078	SMK JERAM	JALAN BUKIT BADONG	BESTARI JAYA	45600	Luar Bandar	0332719587	0332717226	728	747	1475
SELANGOR	BEA3079	SMK SG. BURONG	JALAN SIMPANG TIGA	JERAM	45800	Luar Bandar	0332719091	0332717226	728	747	1475
SELANGOR	BEA3080	SMK RANTAU PANJANG	BATU 12, SUNGAI BURONG	TANJOING KABANG	45500	Luar Bandar	0332647696	0332646418	1158	1063	2221
SELANGOR	BEA3081	SMK RANTAU PANJANG	JALAN SEKEMBANG, KG. SERI TIRAM JAYA	TANJOING KABANG	45500	Luar Bandar	0332698341	0332698341	443	378	821
SELANGOR	BEA3082	SMK PENGKALAN PERMATANG	KM. 16, JALAN RAWANG, RANTAU PANJANG	BESTARI JAYA	45600	Luar Bandar	0332695667	0332695667	394	336	730
SELANGOR	BEA3083	SM SAINS KUALA SELANGOR	PASIR PENAMBANG	KUALA SELANGOR	45000	Luar Bandar	0332719587	0332719587	245	216	461
SELANGOR	BEA3084	SMK SALUJANA UTAMA	JALAN STADIUM	KUALA SELANGOR	45000	Bandar	0332891868	0332896631	366	390	756
SELANGOR	BEA3085	SMK PUNCAK ALAM	PERSIARAN SAJUJANA 3, SAJUJANA UTAMA	SUNGAI BULOH	47000	Luar Bandar	0360386997	0360383118	994	1016	2010
SELANGOR	BEA4601	SMK TAMAN TASIK	JALAN MAHKOTA IMPIAN 2/1, SEKSYEN 2,	BANDAR PUNCAK ALAM	42300	Luar Bandar	0333928216	33928246	1290	1183	2463
SELANGOR	BEA4602	SMK TAMAN TASIK	JALAN TASIK TAMBAHAN 2/1	AMPANG	68000	Bandar	0342912049	0342912049	984	1101	2085
SELANGOR	BEA4603	SMK BANDAR BARU BANGI	JALAN 17/E, BANDAR BARU BANGI,	BANDAR BARU BANGI	43650	Bandar	0389250245	0389251590	1079	1023	2102
SELANGOR	BEA4604	SMK ABDUL JALIL	KM 22, JALAN CHERAS	KAJANG	43000	Bandar	0387376387	0387371267	1090	1222	2312
SELANGOR	BEA4605	SMK KHIR JOHARI	JALAN SEMENYIH	BERAMANG	43700	Luar Bandar	0387667230	0387669652	448	435	883
SELANGOR	BEA4606	SMK ENGRU HUSAIN	KM 22, JLN HULU LANGAT	HULU LANGAT	43100	Luar Bandar	0390211332	0390214452	1276	1355	2631
SELANGOR	BEA4608	SMK ENGRU HUSAIN	KAMPUNG BARU CINA (SEMENYIH)	SEMENYIH	43500	Luar Bandar	0387236285	0342958742	1262	1286	3245
SELANGOR	BEA4609	SMK TAMAN KOSAS	JALAN BUNGA MELATI 8	AMPANG	68000	Bandar	03429236130	0342958742	1262	1286	2548
SELANGOR	BEA4610	SMK TAMAN SERAYA	JALAN BUNGA MELATI 8	AMPANG	56100	Bandar	0342923696	0342953820	823	838	1661
SELANGOR	BEA4611	SMK PERIMBUN	KM.16 JALAN CHERAS	CHERAS	43200	Bandar	0390745828	0390745828	1336	1374	2710
SELANGOR	BEA4612	SMK TASEK PERMAI	JALAN PERMAI K,	AMPANG	68000	Bandar	0342961829	0342961009	479	467	946
SELANGOR	BEA4613	SMK JALAN REKO	JALAN REKO	KAJANG	43000	Bandar	0387372912	0387390225	1063	958	2021
SELANGOR	BEA4614	SMK JALAN TIGA	JALAN 3/4,	BANDAR BARU BANGI	43650	Bandar	0389261755	0389262755	1193	1073	2266
SELANGOR	BEA4615	SMK PANDAN JAYA	JALAN PANDAN 5, PANDAN JAYA	CHERAS	55100	Bandar	0392888235	0392837919	1112	1020	2132
SELANGOR	BEA4616	SMK PANDAN INDAH	JALAN PANDAN LUMU,	AMPANG	55100	Bandar	0342956866	0342957566	1145	1044	2189

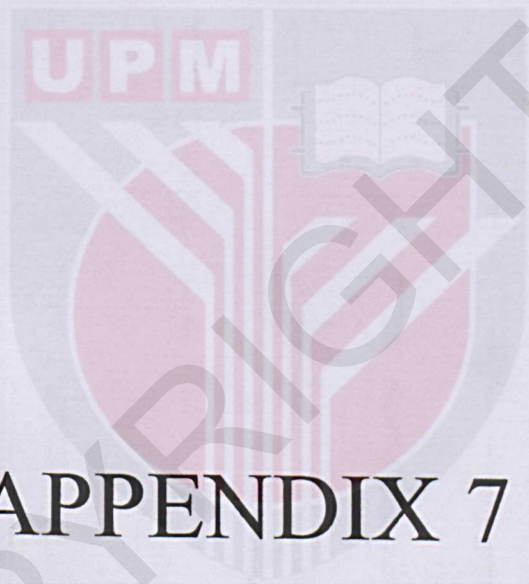
Negeri	KodSekolah	NamaSekolah	AlamatLokasiSekolah	Bandar	Lokasi	PoskodLokasiSekolah	NoTelefon	NoFax	L	P	Enrolmen
SELANGOR	BEA4617	SMK CHERAS PERDANA	LOROWG CP 5/39, TAMAN CHERAS PERDANA, BT 9 3/4,	CHERAS	Bandar	43200	0390769576	0342510210	966	790	1756
SELANGOR	BEA4618	SMK DATO' AHMAD RAZALI	JALAN 13A, AMPANG JAYA	AMPANG	Bandar	68000	0342511650	0342510377	610	595	1205
SELANGOR	BEA4619	SMK BUKIT INDAH	TAMAN BUKIT INDAH	AMPANG	Luar Bandar	68000	0342964989	0342965157	658	643	1301
SELANGOR	BEA4620	SMK CHERAS JAYA	JALAN 3/13, TAMAN CHERAS JAYA, BALAKONG	CHERAS	Bandar	43200	0390905423	0390750522	1406	1300	2706
SELANGOR	BEA4621	SMK SALUJANA IMPIAN	KM22, JALAN CHERAS,	CHERAS	Bandar	43000	0387397609	0387397609	1314	1314	2628
SELANGOR	BEA4622	SMK BANDAR BARU AMPANG	BANDAR BARU AMPANG	AMPANG	Bandar	68000	0390753549	0390753784	1536	1386	2922
SELANGOR	BEA4623	SMK BANDAR BARU SUNGAI LONG	JALAN SUNGAI LONG, BANDAR BARU SUNGAI LONG,	KAJANG	Bandar	43650	0389258028	0389254749	670	895	1565
SELANGOR	BEA4624	SMK JALAN EMPAT	JALAN 4/10 SEKSYEN 4	BANDAR BARU BANGI	Bandar	43000	0387338414	0387336225	580	539	1119
SELANGOR	BEA4625	SMK KAJANG UTAMA	TAMAN KAJANG UTAMA	KAJANG	Bandar	43000	0387344522	0387345925	1188	1295	2493
SELANGOR	BEA4627	SMK DUSUN MANDING	JALAN KP 3/1, KAJANG PRIMA	KAJANG	Bandar	43100	0390756715	0390756715	1022	775	1997
SELANGOR	BEA4628	SMK BANDAR TASIK KESUMA	KM 17, JALAN HULU LANGAT	HULU LANGAT	Luar Bandar	43700	0387667599	0387660669	854	785	1639
SELANGOR	BEA4629	SMK BANDAR DAMAI PERDANA	JALAN KESUMA 7/1, BANDAR TASIK KESUMA	BERANANG	Bandar	48000	0391012514	0391021605	1434	1335	2769
SELANGOR	BEA4630	SMK BANDAR TUN HUSSEIN ONN 2	JALAN DAMAI PERDANA 2, CHERAS (HULU LANGAT)	KUALA LUMPUR	Bandar	43200	0390763467	0390763467	1240	1253	2493
SELANGOR	BEA4631	SMK BANDAR TUN HUSSEIN ONN	PERSIARAN SUADAMAI, BANDAR TUN HUSSEIN ONN	CHERAS	Bandar	55100	03942954210	0342977040	1076	1069	2145
SELANGOR	BEA4632	SMK PANDAN MEWAH	JALAN 2/9A, PANDAN MEWAH	SEMENTIH	Luar Bandar	43500	0387247578	0387248206	1071	1028	2073
SELANGOR	BEA4633	SMK BANDAR RINCHING	JALAN 2/9A, PANDAN MEWAH	SEMENTIH	Luar Bandar	43500	0387247578	0387248206	1071	1028	2073
SELANGOR	BEA4633	SMK BANDAR SRI PUTRA	PERSIARAN SRI PUTRA 1, BANDAR SRI PUTRA	KAJANG	Bandar	43000	TIADA	TIADA	340	327	667
SELANGOR	BEA5061	SMK KUALA KUBU BHARU	JALAN KOLAM AIR	KUALA KUBU BHARU	Luar Bandar	44000	0360641162	0360641162	518	635	1153
SELANGOR	BEA5062	SMK KAMPONG SOEHARTO	FELDA KG. SOEHARTO	KUALA KUBU BHARU	Luar Bandar	44010	0360461193	0360461193	240	268	508
SELANGOR	BEA5063	SMK SUNGAI CHOH	KG. SUNGAI CHOH	RAWANG	Luar Bandar	48000	0360916081	0360913750	307	419	746
SELANGOR	BEA5064	SMK KALUMPANG	JALAN RUMAH MURAH KALUMPANG	KERLING	Luar Bandar	44100	0360491676	0360491676	304	348	652
SELANGOR	BEA5065	SMK GEDANGSA	KAMPONG GEDANGSA	KUALA KUBU BHARU	Luar Bandar	44020	0360461340	0360461340	156	179	335
SELANGOR	BEA5066	SMK BUKIT SENTOSA	BANDAR BARU BUKIT SENTOSA,	RAWANG	Luar Bandar	48300	0360283611	0360284694	1051	1073	2124
SELANGOR	BEA5067	SM SAINS HULU SELANGOR	HULU YAM BHARU,	BATANG KALI	Luar Bandar	44300	0360753838	0360753416	371	345	716
SELANGOR	BEA5068	SMK AMPANG PECAH	JALAN HAMZAH	KUALA KUBU BHARU	Bandar	44000	0360644109	0360644109	510	522	1032
SELANGOR	BEA5069	SMK BANDAR BARU BATANG KALI	JALAN RAJA CHULIAN	BATANG KALI	Luar Bandar	44300	0360573820	0360573516	939	889	1828
SELANGOR	BEA5070	SMK BANDAR SUNGAI BUAYA	SEKSYEN 3, BANDAR UTAMA BATANG KALI	RAWANG	Luar Bandar	48010	0360283371	0360283371	519	536	1055
SELANGOR	BEA5071	SMK TAMAN SUNGAI BUAYA	KAMPUNG SUNGAI BUAYA	RAWANG	Luar Bandar	48300	0360216189	0360216189	821	826	1647
SELANGOR	BEA5072	SMK SERENDAH	BUKIT BERUNTUNG	RAWANG	Bandar	48300	0360815854	0360812418	906	835	1741
SELANGOR	BEA5073	SMK BUKIT SENTOSA 2	JALAN CEMPAKA	RAWANG	Bandar	48300	0360212116	0360212170	811	762	1573
SELANGOR	BEA6041	SMK LINGKU AZIZ	JALAN ANGGERIK 4, BANDAR BARU BUKIT SENTOSA 7	RAWANG	Bandar	45200	0332161275	0332163640	597	589	1186
SELANGOR	BEA6042	SMK MUNSHI ABDULLAH	JALAN RAJA CHULIAN	SABAK BERNAM	Luar Bandar	45100	0332161275	0332163640	467	412	879
SELANGOR	BEA6043	SMK SUNGAI BESAR	BATU 10, JALAN BESAR	SUNGAI AIR TAWAR	Luar Bandar	45300	0332241331	0332244818	898	887	1785
SELANGOR	BEA6044	SMK BAGAN TERAP	JALAN PEGAWAI	SUNGAI BESAR	Luar Bandar	45300	60332161643	60332162096	490	451	941
SELANGOR	BEA6045	SMKA SIMPANG LIMA	JALAN BESAR, PEKAN BAGAN TERAP	SUNGAI BESAR	Luar Bandar	45300	6033242894	6033243423	229	323	552
SELANGOR	BEA6601	SMKA DATO MUSTAFFA	JALAN SG. NIPAH BAROH, SIMPANG LIMA	SUNGAI BESAR	Luar Bandar	45300	0332410337	0332415044	548	476	1024
SELANGOR	BEA7601	SMK GOMBAK SETIA	JALAN SEKOLAH, PASIR PANJANG	SEKINCHAN	Bandar	53100	0361896929	0361851355	1454	1490	2944
SELANGOR	BEA7602	SMK TAMAN SELAYANG	JALAN SRI SETIA	KUALA LUMPUR	Bandar	68100	0361896028	0361875303	1157	1036	2193
SELANGOR	BEA7603	SMK LEMBAH KERAMAT	JALAN SUNGAI TUA	BATU CAVES	Bandar	54200	0341072115	0341068711	706	730	1436
SELANGOR	BEA7604	SMK TAMAN EHSAN	JALAN AJU, LEMBAH KERAMAT	KUALA LUMPUR	Bandar	52100	0362762618	0362755767	1074	1031	2105
SELANGOR	BEA7605	SMK RAWANG	KEPONG, SELANGOR	KUALA LUMPUR	Bandar	48000	0360917240	0360924881	1340	1355	2695
SELANGOR	BEA7606	SMK TAMAN KERAMAT	KM 25.6, JALAN IPOH	RAWANG	Bandar	54200	0342579837	0342574344	586	623	1209
SELANGOR	BEA7607	SMK SRI GOMBAK	TAMAN GREENWOOD	BATU CAVES	Bandar	68100	0361895384	0361869505	1162	1098	2260
SELANGOR	BEA7608	SMK HILLCREST	TAMAN SRI GOMBAK	BATU CAVES	Bandar	68100	0361884777	0361852582	1161	1077	2238
SELANGOR	BEA7609	SMK IDEAL HEIGHTS	JUN BUKIT IDAMAN	BATU CAVES	Bandar	68100	0361371944	0361351746	1417	1081	2498
SELANGOR	BEA7610	SMK TAMAN MELAWATI	JALAN JS, TAMAN MELAWATI	GOMBAK	Bandar	53100	0341086723	0341086093	1356	1175	2531
SELANGOR	BEA7611	SMK SRI SELAYANG	JALAN SUNGAI TUA	BATU CAVES	Bandar	68100	0361853448	0361874508	691	721	1412
SELANGOR	BEA7613	SMK SUNGAI KERTAS	KG SUNGAI KERTAS	BATU CAVES	Bandar	68100	0361853532	0361862591	813	748	1561
SELANGOR	BEA7614	SMK SRI KERAMAT	JALAN AU 4, LEMBAH KERAMAT	KUALA LUMPUR	Bandar	54200	0341065002	0341053033	559	517	1076
SELANGOR	BEA7615	SMK DARUL EHSAN	JALAN 29, SELAYANG BARU	BATU CAVES	Bandar	68100	0361861701	0361871512	681	731	1412
SELANGOR	BEA7616	SMK SUNGAI PUSU	KM 11, JALAN GOMBAK	KUALA LUMPUR	Bandar	53100	0360917935	0360917930	816	840	1656
SELANGOR	BEA7617	SMK BANDAR TASIK PUTERI	BANDAR COUNTRY HOMES	RAWANG	Bandar	48000	0360917935	0360917930	816	840	1656
SELANGOR	BEA7618	SMK BUKIT RAHMAN PUTRI	BANDAR TASIK PUTERI,	RAWANG	Luar Bandar	48000	0361574670	0361574653	1172	1114	2286
SELANGOR	BEA7619	SMK BUKIT RAHMAN PUTRA	JALAN BRP 7/1, BUKIT RAHMAN PUTRA	SUNGAI BULOH	Luar Bandar	47000	0360342595	0360342642	658	674	1332
SELANGOR	BEA7620	SMK SRI KUNDANG	KAMPUNG MELAYU SRI KUNDANG	RAWANG	Bandar	48020	0360342595	0360342642	658	674	1332

SENARAI SEKOLAH MENENGAH DI SELANGOR SEPERTI PADA 31 JANUARI 2011

Negeri	KodSekolah	NamaSekolah	AlamatLokasiSekolah	BandarLokasiSekolah	PostkodLokasiSekolah	Lokasi	NoTelefon	NoFax	L	P	Enrolmen
SELANGOR	BEA7621	SMK TAMAN DESA 2	JALAN DESA JAYA, BANDAR COUNTRY HOMES	RAWANG	48000	Bandar	0367337872	0367337870	866	835	1701
SELANGOR	BEA8601	SMK PUCHONG	BATU 14 JALAN PUCHONG	PUCHONG	47100	Bandar	0380621305	0380621935	760	847	1607
SELANGOR	BEA8602	SMK SRI PERMATA	JALAN SS3/98	PETALING JAYA	47300	Bandar	0378750623	0378777027	839	641	1480
SELANGOR	BEA8603	SMK SULTAN SALAHUDDIN ABDUL AZIZ SHAH	JALAN BUNGA MAWAR 2/5	SHAH ALAM	40000	Bandar	0355196213	0355196213	636	616	1252
SELANGOR	BEA8604	SMK SUBANG JAYA	JALAN SS14/6	SUBANG JAYA	47500	Bandar	0356334589	0356318202	642	580	1222
SELANGOR	BEA8605	SMK BUKIT GADING	KM. 26, SG. PILING	SUNGGAI BULOH	47000	Luar Bandar	0360383258	0360381421	1001	1037	2038
SELANGOR	BEA8606	SMK SERI SERDANG	TAMANI SRI SERDANG	SERI KEMBANGAN	48300	Bandar	0389489199	0389488995	1126	1170	2296
SELANGOR	BEA8607	SMK TAMAN DATO' HARUN	KM 12, JLN KLANG LAMA	PETALING JAYA	46000	Bandar	0377828358	0377815712	928	801	1729
SELANGOR	BEA8608	SMK DAMANSARA JAYA	JALAN SS 22A/1, PETALING JAYA	PETALING JAYA	47400	Bandar	0377296018	0377291880	979	979	1949
SELANGOR	BEA8609	SMK BATU 8	BATU 8, JALAN PUCHONG	PUCHONG	47100	Bandar	0380702830	0380761967	697	739	1436
SELANGOR	BEA8610	SMK SEKSYEN 16	JALAN HALIA 16/8, SEKSYEN 16, SHAH ALAM	SHAH ALAM	40200	Bandar	0355109168	0355125021	637	613	1250
SELANGOR	BEA8611	SMK DAMANSARA UTAMA	JUN SS 20/21, DAMANSARA UTAMA	PETALING JAYA	47400	Bandar	0377278715	0377277488	602	571	1173
SELANGOR	BEA8612	SMK PENDIDIKAN KHAS SHAH ALAM	JALAN SENANGIN 17/2A, SEKSYEN 17	SHAH ALAM	40200	Bandar	0355109719	0355109715	135	106	241
SELANGOR	BEA8613	SMK TAMAN MEDAN	KM 12 JLN KLANG LAMA	PETALING JAYA	46000	Bandar	0377820455	0377850751	818	755	1573
SELANGOR	BEA8614	SMK SUBANG UTAMA	JALAN SS 18/1A, SUBANG JAYA	SUBANG JAYA	47500	Bandar	0356348971	0356361915	707	700	1407
SELANGOR	BEA8615	SMK KELANA JAYA	JALAN BAHAGIA SS4	PETALING JAYA	47301	Bandar	0378035121	0378035120	510	385	895
SELANGOR	BEA8616	SMK SEKSYEN SEBELAS	JUN WAU 11/1	SHAH ALAM	40000	Bandar	0355106711	0355101545	260	143	403
SELANGOR	BEA8617	SMK SEKSYEN 18	JLN KELAPA BAW 18/43	SHAH ALAM	40200	Bandar	0355421403	0355491659	587	713	1300
SELANGOR	BEA8618	SMK SEAFIELD	JALAN USI 2/5	UEP SUBANG JAYA	47600	Bandar	0356371301	0356377610	1054	1094	2148
SELANGOR	BEA8619	SMK SEKSYEN 24	JALAN TIMUN 24/1	SHAH ALAM	40300	Bandar	0355414172	0355429290	642	584	1226
SELANGOR	BEA8620	SMK BANDAR BARU SUNGGAI BULOH	JALAN BRP 2/10A, BANDAR BARU SUNGGAI BULOH	SUNGGAI BULOH	47000	Bandar	0361568849	0361576041	1467	1460	2927
SELANGOR	BEA8621	SMK SEKSYEN 19	JALAN GEORA 19/46, SEKSYEN 19	SHAH ALAM	40300	Bandar	0355493306	0355495382	1096	1112	2208
SELANGOR	BEA8622	SMK ALAM MEGAH	JLN. SG. BATU 27/72, SEKSYEN 27	SHAH ALAM	40400	Bandar	0351910709	0351920042	662	658	1320
SELANGOR	BEA8623	SMK TAMAN SRI MUDA	JALAN SABAR 25/83, JALAN SABAR	SHAH ALAM	40400	Bandar	51218388	51226489	1102	956	2058
SELANGOR	BEA8624	SMK SRI UTAMA	JALAN 227B/51A	PETALING JAYA	46100	Bandar	0379575299	0379571219	409	312	721
SELANGOR	BEA8625	SMK SS 17	JALAN SS 17/1 SUBANG JAYA	SUBANG JAYA	47500	Bandar	0356338747	0356319384	482	441	923
SELANGOR	BEA8626	SMK BANDAR SUNWAY	JALAN PJ5/715	PETALING JAYA	46150	Bandar	0356328335	0356325149	850	782	1632
SELANGOR	BEA8627	SMK SRI INDAH	TAMAN SERI SERDANG	SERI KEMBANGAN	43300	Bandar	0389434263	0389456695	944	824	1768
SELANGOR	BEA8628	SMK PUCHONG PERDAMA	BATU 13, TAMAN PUCHONG PERDAMA	PETALING JAYA	47150	Bandar	0380626505	0380626506	1263	1142	2405
SELANGOR	BEA8629	SMK SEKSYEN 9	JALAN TENGGU AMPUAN RAHIMAH 9/20	SHAH ALAM	40100	Bandar	0355129942	0355124113	838	854	1692
SELANGOR	BEA8630	SMK SUBANG	KAMPUNG MELAYU SUBANG	SHAH ALAM	40150	Bandar	0378469673	0378471436	1259	1081	2340
SELANGOR	BEA8631	SMK BANDAR UTAMA	1, PINTASAN BANDAR UTAMA	PETALING JAYA	47800	Bandar	0377252829	0377263708	414	395	809
SELANGOR	BEA8632	SMK USI 4	JALAN USM/3	SUBANG JAYA	47600	Bandar	0380246618	0380244144	819	706	1525
SELANGOR	BEA8633	SMK USI 13	JALAN USI 13/1	UEP SUBANG JAYA	47630	Bandar	0356214642	0356214163	855	791	1646
SELANGOR	BEA8634	SMK USI 8	PERSIARAN KEWAJIPAN	UEP SUBANG JAYA	47610	Bandar	0356310144	0356214457	810	744	1554
SELANGOR	BEA8635	SMK USI 12	PERSIARAN SETIA, USI 12	UEP SUBANG JAYA	47650	Bandar	0380233236	0380233892	1163	1086	2219
SELANGOR	BEA8636	SMK PUCHONG UTAMA (1)	JALAN PU 5 BANDAR PUCHONG UTAMA	PUCHONG	47100	Bandar	0380607592	0380607597	1369	1286	2655
SELANGOR	BEA8637	SMK TTDI JAYA	JALAN SASTERA UZ/1, SEKSYEN UZ, SHAH ALAM	SHAH ALAM	40150	Bandar	0378471096	0378471145	1062	1039	2101
SELANGOR	BEA8638	SMK SEKSYEN 10 KOTA DAMANSARA	PERSIARAN MAHOGANY, SEKSYEN 10, KOTA DAMANSARA	SHAH ALAM	40150	Bandar	0361568514	0361563534	1098	1096	2194
SELANGOR	BEA8639	SMK SEKSYEN 1 BANDAR KINRARA	BANDAR KINRARA	PETALING JAYA	47810	Bandar	0380704075	0380704067	648	635	1283
SELANGOR	BEA8640	SMK TROPICANA	JALAN TROPICANA SELATAN	PUCHONG	47180	Bandar	0378042140	0378042170	382	309	691
SELANGOR	BEA8641	SMK BANDAR SRI DAMANSARA 2	PERSIARAN MERANTI, SEKSYEN 1,	Petalang Jaya	47410	Bandar	0378042140	0378042170	382	309	691
SELANGOR	BEA8642	SMK USI 23	JALAN HARMONI	KUALA LUMPUR	52200	Bandar	0362757094	0362757402	692	642	1324
SELANGOR	BEA8643	SMK BANDAR UTAMA DAMANSARA 3	JALAN HARIMUTI	SUBANG JAYA	47640	Bandar	0380235014	0380233012	601	619	1220
SELANGOR	BEA8644	SMK BANDAR UTAMA DAMANSARA (4)	PERSIARAN UTAMA, BANDAR UTAMA	PETALING JAYA	47800	Bandar	0377276166	0377267199	704	655	1359
SELANGOR	BEA8645	SMK SEKSYEN 3 BANDAR KINRARA	JALAN DATARAN UTAMA BANDAR UTAMA	PETALING JAYA	47800	Bandar	0377258100	0377268284	692	706	1398
SELANGOR	BEA8646	SMK SEKSYEN 4 BANDAR KINRARA	JALAN BK SB, BANDAR KINRARA	PUCHONG	47180	Bandar	0380757760	0380757760	779	766	1545
SELANGOR	BEA8647	SMK SEKSYEN 7	JALAN BK SA, BANDAR KINRARA	PUCHONG	47180	Bandar	0380757273	0380757315	922	871	1793
SELANGOR	BEA8648	SMK SEKSYEN 7	JALAN PLATINUM 7/37	SHAH ALAM	40000	Bandar	0355119828	0355131663	1045	1021	2066
SELANGOR	BEA8649	SMK PUSAT BANDAR PUCHONG 1	JLN WAWASAN 2/23	PUCHONG	47160	Bandar	0358917014	0358917013	1303	1239	2542
SELANGOR	BEA8650	SMK BUKIT JELUTONG	NO.2, JALAN SERAMBI UB/21, BUKIT JELUTONG	SHAH ALAM	40150	Bandar	0378467940	0378456705	877	857	1734
SELANGOR	BEA8652	SMK DAMANSARA DAMAJ 1	NO. 2, JALAN PIU 10/1, DAMANSARA DAMAJ	PETALING JAYA	47830	Bandar	0361574547	0361579426	918	911	1829
SELANGOR	BEA8653	SMK ALAM MEGAH 2	NO. 1, PERSIARAN KUALA LANGAT, SEKSYEN 28	SHAH ALAM	40400	Bandar	0351922141	0351924092	616	665	1281
SELANGOR	BEA8654	SMK SEKSYEN 24 (2)	JALAN CILU BUNGA 24/25	SHAH ALAM	40300	Bandar	0355484962	0355426275	524	619	1143
SELANGOR	BEA8655	SMK SEKSYEN 4 KOTA DAMANSARA	SEKSYEN 4, KOTA DAMANSARA	PETALING JAYA	47810	Bandar	0361402997	0361402721	925	945	1870
SELANGOR	BEA8656	SMK BANDAR PUCHONG JAYA (A)	JALAN PIPTI,	PUCHONG	47100	Bandar	0380754728	0380757513	650	598	1248

Negeri	KodSekolah	NamaSekolah	AlamatLokasiSekolah	Bandar/LokasiSekolah	PostkodLokasiSekolah	Lokasi	NoTelefon	NoFak	L	P	Enrolmen
SELANGOR	BEA9657	SMK BANDAR PUCHONG JAYA (B)	JALAN TEMPUJA 3	PUCHONG JAYA	47100	Bandar	0380620463	0380620487	693	557	1250
SELANGOR	BEA8658	SMK BANDAR UTAMA DAMANSARA (2)	JALAN BU 1/11	PETALING JAYA	47800	Bandar	0377105286	0377105287	480	341	771
SELANGOR	BEA8659	SMK BANDAR SRI DAMANSARA 1	PERSIARAN PERDANA	KUALA LUMPUR	52000	Bandar	0362740927	0362741105	748	721	1469
SELANGOR	BEA8660	SMK SEKSYEN Z7	JALAN SELAYANG 27/27	SHAH ALAM	40400	Bandar	0351921493	0351916273	373	347	720
SELANGOR	BEA8661	SMK LEMBANG SUBANG	PIU JA'4	SELATAN JAYA	47301	Bandar	0378430616	0378430594	941	870	1811
SELANGOR	BEA8662	SMK SUBANG BESTARI	JALAN NOVIA U5/63, SEKSYEN U5	PUCHONG	47150	Bandar	0380623576	0380623540	583	525	1108
SELANGOR	BEA8664	SMK TAMAN DESAMINIUM	LOT 65079, PERSIARAN PRIMA UTAMA, TMIN PUCHONG PRIM	Bandar	43300	Bandar	03-	-	241	229	470
SELANGOR	BEA8665	SMK SETIA ALAM	NO. 6, PERSIARAN SETIA PRIMA, SEKSYEN U13	SHAH ALAM	40170	Bandar	0133588758	-	78	103	181
SELANGOR	BEA8666	SMK SEKSYEN 8, KOTA DAMANSARA	Sei syen 8, Kota Damansara	Bandar	47810	Bandar	03-	-	99	144	243
SELANGOR	BEA9601	SMK SUNGAI RAWANG	SUNGAI PELEK	SUNGAI PELEK	43950	Bandar	0331411039	0331411039	307	298	605
SELANGOR	BEA9602	SMK BANDAR BARU SALAK TINGGI	BANDAR BARU SALAK TINGGI	SEMPANG	43900	Bandar	0387064643	0387064643	855	782	1637
SELANGOR	BEA9604	SMK BANDAR BARU SALAK TINGGI	TAMAN DAHLIA, BANDAR BARU SALAK TINGGI	SEMPANG	43900	Bandar	0387068849	0387068851	939	1001	1940
SELANGOR	BEA9607	SMK SERI PUTERI (SMBP)	PERSIARAN TASIK	CYBERJAYA	63000	Bandar	0383192414	0383193937	0	829	829
SELANGOR	BEA9609	SMK PANTAI SEPANG PUTRA	PERSIARAN FAUNA 2, ZON FLAGSHIP 2	CYBERJAYA	63000	Bandar	03831413558	0383183588	321	348	669
SELANGOR	BEA9610	SMK PUTRA PERDANA	JALAN PP 3A, TAMAN PUTRA PERDANA	PUCHONG	47130	Bandar	03833202921	0383202922	890	835	1725
SELANGOR	BEA9612	SMK DATO' ABU BAKAR BAGINDA	JALAN MAKTAB, SUNGAI MERAB	BANDAR BARU BANGI	43650	Bandar	03-89266839	03-89266840	486	413	899
SELANGOR	BEB0099	SMK METHODIST (ACS)	JALAN RAYA BARAT	KLANG	41000	Bandar	0333718814	033372941	1328	65	1393
SELANGOR	BEB0100	SMK CHUNG HWA	1, JALAN NAGASARI 36/10, SEKSYEN 36	SHAH ALAM	40470	Bandar	0351623531	0351623530	692	631	1323
SELANGOR	BEB0101	SMK CONVENT	112, JALAN TENGGU KELANA	KLANG	41000	Bandar	0333712596	0333726602	0	1390	1390
SELANGOR	BEB0102	SMK TINGGI KLANG	LOT 161 & 48, JALAN MERU	KLANG	41710	Bandar	0333412340	0333440711	1587	166	1753
SELANGOR	BEB0103	SMK KWANG HUA	TAMAN ENG ANN	KLANG	41150	Bandar	0333416713	0333424840	1803	1834	3637
SELANGOR	BEB0104	SMK LA SALLE	PERSIARAN RAJA MUJDA MUSA	KLANG	41200	Bandar	0333717469	0333736905	1276	0	1276
SELANGOR	BEB0105	SMK (P) METHODIST	JALAN RAYA BARAT	KLANG	41000	Bandar	0333711330	0333735728	0	1655	1655
SELANGOR	BEB0106	SMK (P) BUKIT KUDA	JALAN PERAK	KLANG	41300	Bandar	0333424810	0333422822	0	1331	1331
SELANGOR	BEB0108	SMK DATO' HANZAH	PERSIARAN RAJA MUJDA MUSA	PELABUHAN KLANG	42000	Bandar	0331686924	0331666200	1333	81	1414
SELANGOR	BEB0109	SMK (P) RAJA ZARINA	BATU 7, PEKAN MERU	PELABUHAN KLANG	42000	Bandar	0333921035	0333926735	2164	1944	4108
SELANGOR	BEB0110	SMK MERU	PULAU KETAM	PELABUHAN KLANG	42940	Bandar	0331104314	0331104314	236	269	505
SELANGOR	BEB0111	SMK PULAU KETAM	TELUK DATOK	BANTING	42700	Bandar	0331871532	0331871532	615	606	1221
SELANGOR	BEB1070	SMK SULTAN ABDUL SAMAD	TANJUNG SEPAT	TANJUNG SEPAT	42800	Bandar	0331974229	0331974229	532	563	1095
SELANGOR	BEB1072	SMK SUNGAI MANGGIS	KAMPUNG SUNGAI MANGGIS,	BANTING	42700	Bandar	0331871035	0331801461	470	440	910
SELANGOR	BEB1073	SMK PULAU CAREY	PULAU CAREY	PULAU CAREY	42960	Bandar	0331036143	lieda	124	129	253
SELANGOR	BEB1074	SMK PULAU CAREY	JALAN DATO' HANZAH	KUALA SELANGOR	45000	Bandar	0332891380	0332895035	795	851	1646
SELANGOR	BEB3078	SMK SULTAN SULAIMAN SHAH	JALAN SEKOLAH	BESTARI JAYA	45600	Bandar	0332719827	0332719946	546	549	1095
SELANGOR	BEB3080	SMK SERI DESA	JALAN BOMBA	TANJUNG KARANG	45500	Bandar	0332698186	0332694213	460	463	913
SELANGOR	BEB4068	SMK CONVENT (M)	JALAN GEREJA	KAJANG	43000	Bandar	0387331525	0387331525	0	1004	1004
SELANGOR	BEB4069	SMK TINGGI KAJANG	JALAN SEMENYIH	KAJANG	43000	Bandar	0387363044	0387341478	1197	96	1293
SELANGOR	BEB4070	SMK JU RAJA	JALAN LOW TI KOK	KAJANG	43000	Bandar	0387367514	0387368670	1634	1738	3372
SELANGOR	BEB4071	SMK YALAN BUKIT	JALAN BUKIT	KAJANG	43000	Bandar	0387331235	0387394787	977	1061	2038
SELANGOR	BEB5065	SMK SYED MASHOR	JALAN BATANG KALI - ULU YAM	BATANG KALI	44300	Bandar	0360573245	0360573245	923	879	1802
SELANGOR	BEB5066	SMK DATO' HI KAMARUDDIN	JALAN RASATHURAI	KUALA KUBU BHARU	45200	Bandar	0360841378	036082378	437	371	808
SELANGOR	BEB6044	SMK TUNJUK ABDUL RAHMAN PUTRA	JALAN KALABAKAN	SABAK BERNAM	45000	Bandar	0332161394	0332161394	661	603	1264
SELANGOR	BEB6045	SMK SERI BEDENA	JLN BESAR	SUNGAI BESAR	45300	Bandar	032242272	0332466808	571	528	1099
SELANGOR	BEB6047	SMK YOKE KUJAN	JALAN SEKOLAH	SEKINCHAN	45400	Bandar	0362740080	0362756009	1327	1178	2505
SELANGOR	BEB7651	SMK KEPONG	JALAN FRIM, KEPONG	KUALA LUMPUR	52100	Bandar	0342563159	0342532985	246	214	460
SELANGOR	BEB7652	SMK HULU KELANG	KM 7, JALAN HULU KELANG	AMPANG	68000	Bandar	0361386340	0361387109	1016	940	1956
SELANGOR	BEB7653	SMK SELAYANG BHARU	JALAN 29, SELAYANG BHARU	BATU CAVES	68100	Bandar	0360916491	0360927264	1445	1593	3038
SELANGOR	BEB7654	SMK SERI GARING	JALAN KUALA GARING	RAWANG	48000	Bandar	0360352237	0360353198	334	289	623
SELANGOR	BEB7655	SMK TUANKU ABDUL RAHMAN	BATU ARANG	RAWANG	48100	Bandar	0379575745	0379559629	0	1801	1801
SELANGOR	BEB8651	SMK ASSUNTA	JALAN CHANGGAI	PETALING JAYA	46000	Bandar	0379565819	0379606625	874	16	890
SELANGOR	BEB8652	SMK (L) BUKIT BINTANG	JALAN UTARA	PETALING JAYA	46200	Bandar	0379565484	0379543236	1312	1483	2795
SELANGOR	BEB8653	SMK KATHOLIK (M)	JALAN 10/3	PETALING JAYA	46000	Bandar	-	-	-	-	-

Negeri	KodSekolah	NamaSekolah	AlamatLokasiSekolah	BandarLokasiSekolah	PostkodLokasiSekolah	Lokasi	NoTelefon	NoFax	L	P	Enrolmen
SELANGOR	BE88654	SMK LA SALLE, PJ	JALAN CHANTEK 5/13	PETALING JAYA	46000	Bandar	0379566200	0379552849	1239	35	1274
SELANGOR	BE88655	SMK (P) SRI AMAN	JALAN 14/49	PETALING JAYA	46100	Bandar	0378765041	0378775658	0	1111	1111
SELANGOR	BE88656	SMK SULTAN SEA	JALAN 21/37	PETALING JAYA	46300	Bandar	0378752576	0378730641	967	748	1715
SELANGOR	BE88657	SMK SULTAN ABDUL SAMAD	JALAN 5/52, TAMAN PETALING	PETALING JAYA	46200	Bandar	0379565085	0379575746	673	461	1134
SELANGOR	BE88658	SMK (P) TMN PETALING	JALAN 5/52, TAMAN PETALING	PETALING JAYA	46000	Bandar	0377827923	0377828414	0	1057	1057
SELANGOR	BE88659	SMK SERI KEMBANGAN	JALAN SEKOLAH	SERI KEMBANGAN	43300	Bandar	0389486358	0389482117	1720	1694	3414
SELANGOR	BE88661	SMK SUNGAI PELEK	SUNGAI PELEK	SG. PELEK	43950	Luar Bandar	0331411245	0331414908	810	817	1627
SELANGOR	BE89701	SMK DENGKIL	BATU 1, JALAN AIR HITAM	DENGKIL	43800	Luar Bandar	0387686226	0387686226	590	813	1563
SELANGOR	BFT0001	SAMT SULTAN HISAMUDDIN	JALAN KOTA RAJA, KG JAWA	KLANG	41000	Bandar	0333713793	0333732594	488	686	1174
SELANGOR	BFT0002	SAM HISAMUDDIN	JALAN TEPI SUNGAI, SUNGAI BERTIH	KLANG	41100	Bandar	0333724120	0333724120	390	462	852
SELANGOR	BFT0003	SAM NURUL IMAN	KAMPUNG BUKIT CHERAKAH	KLANG	41050	Luar Bandar	0333931066	0333926054	230	258	488
SELANGOR	BFT1001	SAM UNWANUS SAADAH	KM. 39, KANCHOING DARAT,	KLANG	42700	Luar Bandar	0331872377	0331872377	338	412	750
SELANGOR	BFT1002	SAMT TENGGU AMPUAN RAHIMAH	SUNGAI MANGGIS	BANTING	42700	Bandar	60331817396	60331813595	470	602	1072
SELANGOR	BFT3001	SAM JERAM	JERAM	CHEBAS	45800	Luar Bandar	0332647396	0332648499	339	530	869
SELANGOR	BFT3002	SAM TANJONG KARANG	BATU 9 1/2, JALAN BERNAM	CHERAS	45500	Bandar	0332690053	0332690053	356	518	874
SELANGOR	BFT4001	SAM HULU LANGAT	BATU 10, JALAN CHERAS	CHERAS	43200	Bandar	0390751343	0390754537	387	481	868
SELANGOR	BFT5001	SAM SUNGAI SELEK	KAMPUNG SG SELEK	K. KUBU B HARU	44020	Luar Bandar	6054541632	6054541632	146	174	320
SELANGOR	BFT5002	SAMT KUALA KUBU BHARU	JALAN PAHANG	KUALA KUBU BHARU	44000	Luar Bandar	0360641224	0360648900	362	454	816
SELANGOR	BFT6001	SAM PARIT BARU	TANAH LSEN PARIT BARU	Sabak Bernam	45100	Luar Bandar	0332136470	0332136470	152	320	472
SELANGOR	BFT6002	SAM BAGAN TERAP	JALAN LUBUK PUSING, BAGAN TERAP	SUNGAI BESAR	45300	Luar Bandar	0332242564	0332242564	136	340	476
SELANGOR	BFT6003	SAM SUNGAI HAJI DORANI	JALAN LAMA KUALA SELANGOR,	SUNGAI BESAR	45300	Luar Bandar	0332243239	0332243239	196	266	462
SELANGOR	BFT6004	SAM PASIR PANJANG	TALI AIR 10 PASIR PANJANG	SEKINCHAN	45400	Luar Bandar	0332410314	0332410314	198	256	454
SELANGOR	BFT6005	SAM MUHAMMADIAH	KOMPLEKS SEKOLAH AGAMA MUHAMMADIAH PEKAN SABAK	SABAK BERNAM	45200	Bandar	60932161308	60932161473	400	504	904
SELANGOR	BFT6006	SAM TENGGU AMPUAN JEMAAH	JUN KG BARU NELAYAN	SUNGAI BESAR	45300	Luar Bandar	0332242564	0332242564	136	340	476
SELANGOR	BFT6007	SAMT SULTAN SALAHUDDIN ABD AZIZ SHAH	BELAKANG MASJID ATTAQWA B T38	SABAK BERNAM	45200	Luar Bandar	0332161270	0332161648	342	473	815
SELANGOR	BFT7001	SAM RAWANG	BATU 16 JALAN IPOH	RAWANG	48000	Bandar	0360918934	0360922028	294	421	715
SELANGOR	BFT8001	SAM PAYA JARAS	PAYA JARAS	SUNGAI BULOH	47000	Luar Bandar	0356376811	0356376811	343	405	748
SELANGOR	BFT8002	SAM BESTARI	JALAN USJ/3A, SUBANG JAYA	SUBANG JAYA	47610	Bandar	0355102505	0355102505	349	459	808
SELANGOR	BFT8003	SAMT TENGGU AMPUAN JEMAAH	JALAN CAHYA 11/7, SEIKYEN 11	SHAH ALAM	40000	Bandar	0389259824	0389254507	224	281	505
SELANGOR	BFT9001	SAM SUNGAI MERAB LUAR	SUNGAI MERAB LUAR SEPAK	KAJANG	43000	Bandar	0387060455	0387063191	418	474	892
SELANGOR	BFT9002	SAM BANDAR BARU SALAK TINGGI	BANDAR BARU SALAK TINGGI	SEPAK	43900	Bandar	0387060455	0387063191	418	474	892
SELANGOR	BHA8002	SMV SUNGAI BULOH	KM 22 JALAN KUALA SELANGOR	SUNGAI BULOH	47000	Bandar	0361565433	0361575031	590	147	737
SELANGOR	BKA3001	SMT KUALA SELANGOR	JALAN SEKOLAH OFF JALAN BESAR	BESTARI JAYA	45600	Luar Bandar	0332718370	0332718371	316	191	507
SELANGOR	BKA4001	SM TEKNIK KAJANG	JALAN SEMENYIH	KAJANG	43000	Bandar	0387363955	0387370354	618	169	787
SELANGOR	BKA7001	SM TEKNIK GOMBAK	JALAN SG PUSU, GOMBAK	KUALA LUMPUR	53100	Luar Bandar	0361866085	0361866081	537	293	830
SELANGOR	BKA8003	SM TEKNIK SHAH ALAM	JALAN BATU TIGA	SHAH ALAM	40300	Bandar	0351916326	0351916325	495	113	608
SELANGOR	BKA9001	SM TEKNIK SEPAK	JALAN DENGKIL	DENGKIL	43800	Luar Bandar	0389255245	0389255244	457	374	831
SELANGOR	BKE0001	SM TEKNIK KLANG	KM. 3, PERSIARAN TENGGU AMPUAN RAHIMAH	KLANG	41200	Bandar	0333234507	0333231284	585	184	769
SELANGOR	BRA0001	KOLEJ ISLAM SULTAN ALAM SHAH (SMBP)	JALAN KOTA RAJA, KAMPUNG JAWA	KLANG	41906	Bandar	0333711658	0333711448	165	193	358
SELANGOR	BRA3001	SMKA KUALA SELANGOR	PASIR PENAMBANG	KUALA SELANGOR	45000	Luar Bandar	0332895509	0332895518	260	367	627
SELANGOR	BRA4001	SMKA MAHAD HAMI DIAH	JALAN SUNGAI RAMAL LUAR	KAJANG	43000	Bandar	0387376300	0387376295	352	577	929
SELANGOR	BRA4003	SMA PERSEKUTUAN (SMBP)	BATU 13 JALAN CHERAS	KAJANG	43000	Bandar	0332138346	0332138346	214	234	448
SELANGOR	BRA6001	SBP SABAK BERNAM	KAMPUNG SUNGAI APOING	SG AIR TAWAR	45100	Luar Bandar	0321138348	0321138346	214	234	448
SELANGOR	BRA7001	SBP RAWANG	BANDAR TASHI PUTERI	RAWANG	48020	Bandar	0360928192	0360917309	316	301	617
SELANGOR	BRA7002	SBP GOMBAK	BATU 8, JALAN SUNGAI PUSU, GOMBAK	KUALA LUMPUR	53100	Bandar	0361863050	0361858472	267	270	537



APPENDIX 7

Parent's approval sheet

BORANG PERSETUJUAN IBU BAPA/PENJAGA

**TAJUK KAJIAN : GANGGUAN TEKANAN SELEPAS TRAUMA DI
KALANGAN KANAK-KANAK SEKOLAH 16 TAHUN
YANG TERLIBAT DALAM KEMALANGAN JALAN
RAYA DI KLANG, SELANGOR**

PENYELIDIK : MOHD SAFWAN BIN MAHMUD

Saya.....No.K/P.....
alamat.....
.....bersetuju untuk membenarkan anak/jagaan saya untuk
menyertai kajian yang bertajuk seperti di atas.

Saya telah membaca dan memahami isi kandungan kajian berdasarkan apa yang telah dinyatakan di dalam 'PENERANGAN KEPADA PESERTA' yang telah dilampirkan bersama surat kebenaran ini. Saya faham bahawa anak/jagaan saya mempunyai hak untuk menarik semula keizinan pada bila-bila masa sekiranya perlu apabila merasa tidak selesa pada mana-mana ujian atau aktiviti dalam kajian ini. Saya juga faham bahawa segala maklumat yang diberikan dan segala keputusan adalah sulit dan hanya akan digunakan untuk tujuan penyelidikan dan rujukan penyelidik.

Saya berharap untuk ingin tahu/tidak ingin tahu keputusan kajian ke atas anak/anak jagaan saya ini.
* potong yang tak berkaitan

Tandatangan Tandatangan
(Ibu bapa/Penjaga) (Saksi)

Tarikh : Nama :
No. K/P :

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

Tarikh Tandatangan
(Penyelidik)