

OPEN UNIVERSITY OF MALAYSIA

**A STUDY ON ATTITUDE, BEHAVIOUR AND
PEER INFLUENCE AMONG ILLEGAL
MOTORCYCLES STREET RACERS**

MOHD ROSLAN BIN MOHD TAHIR

PhD

APRIL 2020

OPEN UNIVERSITY OF MALAYSIA

THESIS DECLARATION

TITLE OF THESIS: STUDY ON DEMOGRAPHIC PROFILES, SELF-ESTEEM AND THE
INTENTION OF ILLEGAL MOTORCYCLE STREET RACERS'
BEHAVIOR

AUTHOR: MOHD ROSLAN BIN MOHD TAHIR

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ABSTRACT

The quantitative objectives of the study were to determine (1) whether attitude significantly influenced the behavioural intention of illegal racers to engage in illegal motorcycle street racing; (2) whether subjective norms significantly influenced the behavioural intention of illegal racers to engage in illegal motorcycle street racing; (3) whether perceived behaviour control significantly influenced the behavioural intention of illegal racers to engage in illegal motorcycle street racing behaviour; (4) whether low self-esteem significantly influenced the attitude, subjective norm and perceived behaviour control of illegal racers to engage in illegal motorcycle street racing behaviour; (5) whether demographic profiles of (abusive parenting and traumatic experience) significantly influenced the attitude, subjective norms and perceived behaviour control of illegal racers to engage in illegal motorcycle street racing behaviour. The qualitative objectives of the study were (1) to ascertain how low self-esteem of illegal racers significantly influence their attitude and behavioural intention to engage in illegal motorcycle street racing behaviour and (2) to ascertain the most significant impactful factors on attitude and behavioural intention of the illegal racers to engage in illegal motorcycle street racing behaviour. The Theory of Planned Behaviour (TPB) and its new extended constructs developed in this study and mixed methods of quantitative (n=261) and qualitative data (n=15) were used to measure the three original TPB constructs of attitude, subjective norm and perceived behaviour control of the illegal motorcycle street racers under study. The interpretation of the hypothesized Ha effect paths shows that out of five Ha hypothesis tested, three (H3, H4 and H5) were accepted with two (H1 and H2) rejected. The Wilayah Iskandar case revealed that the strongest predictor of on attitude and behavioural intention to engage in illegal racing among the illegal racers was the subject norm peer risk taking. These findings are supported by the qualitative data which revealed that 'focus on peers' to be the most significant impactful drive in influencing illegal racers' intention to race. The results also show that illegal motorcycle street racers' intentional behaviour appears to be affected by attitude (mental outlook and emotion) and perceived behaviour control (resources, past experience and rewards). These findings were supported by the qualitative data from the Deviant Theory of Social Learning dimensions of Differential Association, Imitation, Differential Reinforcement and Definitions collected through the face-to-face interviews with the illegal racers. However, the analysis found that demographic factors and low self-esteem did not have positive effect on illegal racers' attitude and subjective norm to influence their intention to engage in illegal motorcycle street racing. But there is positive effect between demographic factors and low self-esteem on illegals racers' perceived behaviour control in influencing their behavioural intention to engage in illegal racing behaviour. By identifying factors that influenced the intention of illegal racers in Wilayah Iskandar to engage in illegal motorcycle street racing, this research may inform future strategies to minimise if not overcome the pressing problems of illegal street racing menace.

ACKNOWLEDGMENTS

Alhamdulillah.

Dr Wong Huey Siew's contribution to my progress in this journey is immense. He has played a crucial role in my development as a writer and a scholar. His careful reading, analysis, and comments on the writing provided the necessary guidance and confidence to a novice writer like myself. His deep thinking and his calmness and kindness has made me feel comfortable and secured to reach the end of the tunnel. I thank him for making this journey a memorable one.

I would like to take this opportunity to express my gratitude to Associate Professor Dr Norsiah Fauzan, Faculty of Cognitive Science and Human Development, UNIMAS; Associate Professor Dr Mohamad Noorman Masrek, Associate Professor Dr Rusnah Johare, Dr Aziah Saa'ri and Associate Professor Hasnah Abdul Rahim, Faculty of Information Management, UiTM who have been supportive of my work and extremely helpful especially in giving advice and feedback in ensuring the validity and reliability of my research instruments. There were very generous indeed in sharing their opinions and views towards my study.

I am indeed indebted to those who have participated in this study as respondents and informants. I would like to convey my heartfelt gratitude for their time and willingness to share their experience, beliefs and perceptions to make this study a reality. Their trust on me has make me understand life better.

Finally, I would like to thank my wonderful wife, children, family members and friends for their unfailing support throughout my years of researching and writing of this thesis. This accomplishment of intellectual demanding and challenging task would not have been possible without them. Thank you.

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CHAPTER ONE

INTRODUCTION

This chapter provides a general introduction to the study. It starts with an overview of the reasons why the study of illegal motorcycle street racing behaviour in Wilayah Iskandar, Johor is chosen. The central research questions, objectives, problem statement are set out, and the gaps of past studies on illegal motorcycle street racing is summarized. It is followed by the relevance and limitation of the study. The chapter ends with definition of terms used in this study and the structure of the thesis.

1.0 AN OVERVIEW

Street racing or road racing is typically an unsanctioned and illegal form of auto racing that occurs on a public road. A private racing venue was not always available, and therefore the race would be held illegally on public roads. It can be spontaneous or well-planned and coordinated. Illegal street racing is not only the phenomenon of the developing countries such as Malaysia but it is also a problem facing the developed countries such as Australia, Canada, the European countries, United Kingdom and the United States of America (Smith, 2016; Wickens et.al. 2017; Lund et.al. 2016; Ngueutsa and Kouabenan, 2016).

Based on previous studies and interviews conducted on illegal racings in Malaysia, generally there are three types of illegal racing namely is Drag Racing and Touge which is also known as Drifting and Cannonball Run. Drag Racing is a sprint race in one way. It is usually a ¼ mile (402.33 meters) race of testing motorcycles with the skills to maximize speed and reduce the playback tire change gear at the right time (most riders use this for

maximum manual gear speed) due to the low horsepower of vehicles and do not involve control and traction. Touge in the Japanese language is “mountain pass” because this race is usually held in a high area of winding roads, especially on hilly and mountainous areas. Touge involves a more conscious control when manoeuvring sharp corners at high speed (drifting). This type of racing activity is popular in Japan and Malaysia. The Cannonball Run is illegal racing which involves long rallies, with history way back since the 19th century in Europe, but it was stopped for security reasons. However, in the mid-1910s, this race reappeared which were often conducted formally and very rarely done illegally (Lund et.al. 2016; Ngueutsa and Kouabenan, 2016).

Traditionally, motor vehicles street racing is seen as a youthful activity and strongly associated with rebellion against parents, society, authorities, speeding, driving recklessly and aggressive which involved in traffic violation, road range, as well as violation of social norms and values (Smith, 2016; Wickens et.al. 2017; Lund et.al. 2016; Ngueutsa and Kouabenan, 2016). The words utilized to identify illegal street races varies from countries. They are called Hoon and Boy-Racer in New Zealand and Australia; Pegas or Rachas in Brazil; Tramero in Spain; and Hasyiriya in Japan (Rozmi et.al. 2015).

1.1 BACKGROUND OF THE STUDY

Illegal street racing among young people is a form of risky behaviour (Leigh, 1996). In Malaysia, the illegal street racers are popularly known as “Mat Rempit”, who are infamous for their “Superman” stunts and other feats performed on their under bone motorcycles locally term as “kapcai” (Noh Amit et.al., 2016). They are also notorious for their “Cilok”, a kind of racing in which racers weave in-between moving and stationary traffic at high-speed (Mohd Suhaimi et.al. 2018). In addition to doing their stunts and racing around, they have a habit of causing public disorder. They usually travel in large groups and at times raid

isolated petrol stations. They can deter off normal traffic flow to allow their friends race along a predetermined circuit (Rozmi et.al., 2015).

According to Norhayati et.al. (2015) the percentage number of male youth participated in this activities of “Mat Rempit” is increasing, and score of them were detained by police as the illegal street racing represents the tip of the iceberg of a bigger problem. “Mat Rempit” activities are associated with gangsterism, robbery, stealing motorcycles and cars for spare parts, vandalism, substance abuse, house breakings, snatch theft, bullying and rape among other violation of the laws (Jo-Lyn, 2015).

Zalmizy (2017) categorised “Mat Rempit” as youngsters who are normally school leavers or those who are still in school/college who are being unemployed or unskilled workers. On the other hand, Noh Amit et.al. (2017) categorised them as those of younger age group, from low to moderate educational level, with high sensation seeking, and low self-esteem. Whereas, Rozmi et.al. (2015) characterised “Mat Rempit” as i) youngsters (ii) using low-powered motorcycles iii) involved in illegal street racing, iv) racing involves betting, v) propagates activities in own group vi) has set an informal structure, vii) have their own subcultures and viii) action propagates harm, risky behaviour and disturb public order. Most countries the world-over have laws against illegal street racing that result in fines, license suspension, seizure of vehicles involved in street racing, or jail time for the street racers.

In Malaysia illegal street racing comes under Section 42 (1) Road Traffic Act 1987 (Reckless and Dangerous Driving) 42. This Section of the law stipulated that:

(1) Any person who drives a motor vehicle on a road recklessly or at a speed or in a manner which having regard to all the circumstances (including the nature, condition and size of the road and the amount of traffic which is or might be expected to be on

the road) is dangerous to the public shall be guilty of an offence and shall on conviction be punished with imprisonment for a term not exceeding five years and to a fine of not less than five thousand ringgit and not more than fifteen thousand ringgit and, in the case of a second or subsequent conviction, to imprisonment for a term not exceeding ten years and to a fine of not less than ten thousand ringgit and not more than twenty thousand ringgit.

(2) The court shall order particulars of any conviction under this section to be endorsed on any driving licence held by the person convicted.

(3) A person convicted under this section shall be disqualified from holding or obtaining a driving licence for a period of not less than two years from the date of the conviction and, in the case of a second or subsequent conviction, be disqualified for a period of ten years from the date of the conviction.

(4) Notwithstanding subsection (1), where a person who is a holder of a probationary driving licence is convicted under this section, the court shall revoke his driving licence. NOTE--previously "liable to a fine not exceeding six thousand ringgit or to imprisonment for a term not exceeding three years or to both and, in the case of a second or subsequent conviction, to a fine not exceeding ten thousand ringgit or to imprisonment for a term not exceeding five years or to both" (Please refer to Act A1065).

1.1.1 Police Operations' Statistical Evidences on Illegal Motorcycle Racing

In Malaysia motorcycles accidents are the leading cause of death between the ages of 16 and 20 which may well include illegal street racers. According to a study carried by Mohd Suhaimi et.al. (2018), nationwide statistics show that 49 people are injured for every 1,000

who participated in illegal motorcycles street racing. By the time of writing this statistic may have increased or otherwise.

Illegal motorcycle street racing in Malaysia is always a hot topic, whether through the media or the government with endless efforts undertaken by the enforcement departments of the police authority. Many efforts in combating illegal racing in the form of series of operations carried out by the police authorities throughout Malaysia which involves arrests and court cases as shown in the chart below for the period from 2016 to 2017.

Table 1.1
ILLEGAL RACE OPERATION STATISTICS (MOTORCYCLE)
- ARRESTED UNDER SECTION 42 (1) OF THE ROAD TRANSPORT ACT 1987

DATE: 01/01/2014 – 31/12/2014

CONTINGENT	TOTAL OF OPERATIONS	ARRESTED	CHARGED	RACE					AGE					JOB								
				MALAY	CHINESE	INDIAN	OTHERS	TOTAL	<15	16 - 20	21 - 25	26 - 30	>30	TOTAL	STUDENT	FACTORY	MECHANIC	LABOUR	DESPATCH	UNEMPLOYED	GOVERNMENT EMPLOYEES	OTHERS
BUKIT AMAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERLIS	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KEDAH	40	8	1	8	0	0	0	8	2	4	2	0	0	8	0	0	0	0	7	0	1	8
PULAU PINANG	103	1	1	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	1	1
PERAK	47	2	2	0	0	2	0	2	0	1	1	0	0	2	0	0	0	0	0	0	2	2
SELANGOR	27	30	6	26	0	4	0	30	0	22	8	0	0	30	0	0	0	0	2	8	0	20
KUALA LUMPUR	32	65	31	60	2	3	0	65	1	47	16	1	0	65	6	0	1	0	2	1	55	65
N. SEMBILAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MELAKA	338	45	29	30	5	10	0	45	0	37	8	0	0	45	6	3	2	6	0	2	0	26
JOHOR	132	45	35	36	8	1	0	45	0	28	16	1	0	45	3	2	0	0	10	3	0	27
PAHANG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERENGGANU	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KELANTAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SABAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SARAWAK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	798	196	105	160	16	20	0	196	3	140	51	2	0	196	15	5	3	6	12	22	1	132

Sources from traffic police Bukit Aman Police Headquarters

In 2014, a total of 798 operations were carried out by the police authority involving a total arrests of 196 persons and a total of 165 offenders were charged in courts. The statistics counts consists of 160 Malays, 16 Chinese, and 20 Indian. The age categories consists of 16-20 years old offenders, of a total of 140 persons and a breakdown by occupation: a

student population of 15 persons, factory workers of 5 persons, 6 persons labourers, 12 despatch riders, 1 person in the public service, and others 132 person.

Table 1.2 shows illegal race operations statistics involving motorcycles with arrest cases under Section 42 (1) of the Road Transport Act 1987.

Table 1.2

**ILLEGAL RACE OPERATION STATISTICS (MOTORCYCLE)
– ARRESTED UNDER SECTION 42 (1) OF THE ROAD TRANSPORT ACT 1987**

DATE: 01/01/2015 – 31/12/2015

CONTINGENT	TOTAL OF OPERATIONS	ARRESTED	CHARGED	RACE					AGE					JOB									
				MALAY	CHINESE	INDIAN	OTHERS	TOTAL	<15	16 - 20	21 - 25	26 - 30	>30	TOTAL	STUDENT	FACTORY	MECHANIC	LABOUR	DESPATCH	UNEMPLOYED	GOVERNMENT EMPLOYEES	OTHERS	TOTAL
BUKIT AMAN	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERLIS	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KEDAH	37	1	1	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
PULAU PINANG	60	1	1	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
PERAK	40	2	2	0	0	2	0	2	0	1	1	0	0	2	0	0	0	0	0	0	0	2	2
SELANGOR	25	10	10	10	0	0	0	10	0	9	1	0	0	10	0	0	0	0	0	1	0	9	10
KUALA LUMPUR	25	42	37	35	4	3	0	42	1	33	7	1	0	42	5	0	1	0	0	0	0	36	42
N. SEMBILAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MELAKA	282	32	32	25	5	2	0	32	0	22	10	0	0	32	5	3	2	5		2	1	14	32
JOHOR	93	8	7	7	0	1	0	8	0	2	6	0	0	8	1	0	0	0	0	4	0	3	8
PAHANG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERENGGANU	32	5	0	5	0	0	0	5	0	4	1	0	0	5	2	0	0	0	0	3	0	0	5
KELANTAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SABAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SARAWAK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	627	101	90	83	10	8	0	101	1	73	26	1	0	101	13	3	3	5	0	10	1	66	101

Sources of traffic police Bukit Aman Police Headquarters

Meanwhile during the year 2015, the number of operations carried out by the police authority stood at 627, the number of arrests involving 101 offenders and has a total of 90 accused in court. The total breakdown by the Malay race is a total of 33 persons, 10 Chinese and 8 Indian. Meanwhile the number of age categories ranging from 16 to 20 were the most which made up of a total of 73 person; the age categories of 21-25 consists of 26 person, while the breakdown of job categories also showed that mostly is made up of students of a total of 13 person, meanwhile unemployment was made up of 10 persons.

1.1.2 The Problems of Illegal Racing in Wilayah Iskandar, Johor.

The statistical review of the police authority operations carried out in the state of Johor and Wilayah Iskandar over the last two years shows an increased in the number of operations carried out. In 2015 there were 434 operations and in 2016 there were 722 operations, a total increase of 288 operations conducted by the police authority of the State of Johor. This involved 12,599 summonses for variety of offenses in 2016 with an increase of 3,021 by comparison to the statistics of summonses issued in 2015.

However, the total number of vehicles seized was 2,092 involving motorcycles in 2015 and 3,001 cases in 2016. While number of arrests for illegal racing was 129 in 2016, an increase of 92 compared to only 87 cases in 2015; involving drugs offence was 4 in 2016 and 9 in 2015; with 10 crime cases in 2016 and only 4 in 2015. Meanwhile the number who had been charged in courts pertaining to illegal racing is as much as 88 in 2016 against 54 in 2015, where the number of alleged illegal motorcycles racing at a rate one of every 45 persons in 2015, while in 2016 the rate has dropped to a total of every 64 persons.

In the context of the study, the scope involves the area of Malaysian Iskandar Johor which consists of five regions of Johor Bharu Selatan-JBS (Town Area), Johor Baharu Utara (Skudai) JBU, Sri Alam, Kulai and Iskandar Puteri with 205 number of police operations carried out in 2015 to 348 in 2016, an increase of 143 operations carried out. The total summons issued for illegal racing is 6,779 in 2015 and 7,596 in 2016, an increase of 817 summons, while the total arrests of 71 in 2015 and 125 persons were charged in courts in 2016. The total 41 court cases in 2015 and 125 cases in 2016. Table 1.3 shows the comparison of statistics of illegal race and street brutal operations between January to November 2015 and 2016 based on issuance of summons and vehicles impounded with motorcycles rated the highest.

Table 1.3
ILLEGAL RACE AND STREET BRUTAL OPERATION STATISTICS
COMPARISON OF JANUARY TO NOVEMBER 2015 AND 2016

DISTRICTS	TOTAL OF OPERATIONS		SUMMONS ISSUED		VEHICLES IMPOUNDED					
					MOTORCYCLES		MOTORCARS		OTHERS	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
JOHOR BAHRU SELATAN	183	280	6,235	5,963	1,094	1,003	89	91	0	0
SERI ALAM	7	21	163	262	33	77	0	0	0	0
JOHOR BAHRU UTARA	4	19	146	737	61	208	2	5	0	0
KULAI	11	16	235	539	20	74	0	39	0	0
ISKANDAR PUTERI	0	12	0	95	0	26	0	6	0	0
MUAR	71	122	1,290	2,374	194	414	10	36	0	3
TANGKAK	4	11	49	175	57	131	0	1	0	0
BATU PAHAT	91	122	649	994	341	409	9	15	0	0
KLUANG	7	31	19	194	20	161	1	3	0	0
SEGAMAT	19	34	287	558	94	187	1	4	0	0
KOTA TINGGI	16	23	106	193	44	103	0	1	0	1
PONTIAN	17	23	392	412	128	179	19	26	0	2
MERSING	4	8	7	103	6	29	0	0	0	1
TOTAL	434	722	9,578	12,599	2,092	3,001	131	227	0	7

Sources of Johor Contingent Police Headquarters

Statistics in Table 1.4 shows illegal race and street brutal operation statistics based on Road Transport Act 1987, Dangerous Drug Act and Crime Act by comparison for the period January to November 2015 and 2016. Violation of Road Transport Act by the motorcyclists rated the

Table 1.4
ILLEGAL RACE AND STREET BRUTAL OPERATION STATISTICS
COMPARISON OF JANUARY TO NOVEMBER 2015 AND 2016

DISTRICT	ROAD TRANSPORT ACT 1987		DANGEROUS DRUG ACT		CRIMES ACT	
	2015	2016	2015	2016	2015	2016
JOHOR BAHRU SELATAN	70	117	9	1	4	0
SERI ALAM	0	4	0	0	0	0
JOHOR BAHRU UTARA	1	2	0	2	0	4
KULAI	0	0	0	0	0	0
ISKANDAR PUTERI	0	2	0	0	0	0
MUAR	3	0	0	0	0	0
TANGKAK	6	2	0	1	0	0
BATU PAHAT	1	2	0	0	0	2
KLUANG	5	0	0	0	0	0
SEGAMAT	0	0	0	0	0	0
KOTA TINGGI	1	0	0	0	0	0
PONTIAN	0	0	0	0	0	3
MERSING	0	0	0	0	0	1
TOTAL	87	129	9	4	4	10

NATIONS	2015	2016
MALAY	76	114
CHINESE	18	15
INDIAN	5	10
OTHERS	2	4
TOTAL	101	143

Sources of traffic police Johor Contingent Police Headquarters

Table 1.5 shows the statistics of the total and court charged of illegal race and street brutal by comparison of January to November 2015 and 2016 with motorcycles

rated the highest as vehicles involved.

Table 1.5
TOTAL AND COURT CHARGED (ILLEGAL RACE AND STREET BRUTAL)
SECTION 42 (1) 1987 COMPARISON OF JANUARY TO NOVEMBER 2015 AND 2016

DISTRICTS	PERSONS CHARGED		VEHICLES INVOLVED					
	2015	2016	2015			2016		
			M/CYCLES	M/CARS	OTHERS	M/CYCLES	M/CARS	OTHERS
JOHOR BAHRU SELATAN	41	77	32	7	0	57	8	0
SERI ALAM	0	4	0	0	0	4	0	0
JOHOR BAHRU UTARA	0	1	0	0	0	0	0	0
KULAI	0	0	0	0	0	0	0	0
ISKANDAR PUTERI	0	2	0	0	0	0	1	0
MUAR	0	0	0	0	0	0	0	0
TANGKAK	6	2	6	0	0	1	0	0
BATU PAHAT	1	2	1	0	0	2	0	0
KLUANG	5	0	5	0	0	0	0	0
SEGAMAT	0	0	0	0	0	0	0	0
KOTA TINGGI	0	0	0	0	0	0	0	0
PONTIAN	0	0	0	0	0	0	0	0
MERSING	1	0	1	0	0	0	0	0
TOTAL	54	88	45	7	0	64	9	0

Sources of traffic police Johor Contingent Police Headquarters

Table 1.6
TOTAL AND COURT CHARGED (ILLEGAL RACE AND STREET BRUTAL)
SECTION 42 (1) 1987 COMPARISON OF JANUARY TO DECEMBER 2016 and 2017

DISTRICTS	PERSONS CHARGED		VEHICLES INVOLVED					
	2016	2017	2016			2017		
			M/CYCLES	M/CARS	OTHERS	M/CYCLES	M/CARS	OTHERS
JOHOR BAHRU SELATAN	77	117	57	8	0	918	76	0
SERI ALAM	4	4	4	0	0	80	0	0
JOHOR BAHRU UTARA	1	6	0	0	0	225	3	0
ISKANDAR PUTERI	0	2	0	0	0	32	6	0
KULAI JAYA	2	0	0	1	0	126	39	0
MUAR	0	0	0	0	0	431	48	4
BATU PAHAT	2	0	2	0	0	391	17	1
KLUANG	0	0	0	0	0	155	6	0
SEGAMAT	0	0	0	0	0	186	4	0
KOTA TINGGI	0	0	0	0	0	99	1	1
PONTIAN	0	0	0	0	0	186	13	2
MERSING	0	0	0	0	0	29	0	0
LEDANG	0	0	0	0	0	148	0	1
TOTAL	88	129	64	9	0	3006	213	9

Sources of traffic police Johor Contingent Police Headquarters

The above statistics shows illegal racing activities a major issue in Malaysia as they are among the leading causes of death and injuries. Based on provisional data by the Royal Malaysian Police, there were a total of 489,606 accidents involving all types of vehicles across Malaysia from 2011-2018 with 6,193 deaths. Out of this total, there were 59,501 accidents and 1001 deaths involving all types of motor vehicles in the State of Johor from

2011 – 2018 (www.data.gov.my retrieved on 16 February 2020). Motorcyclists' riders are the most affected by road crashes. They represented 62% of all fatalities by comparison to car drivers and passengers represent 20% fatalities (OECD, Road Safety Annual Report, 2018). These motorcycles fatalities statistics may well include the illegal street racing as it has long been identified as a threat to civil society with significant social and economic impact and it threatens the lives of other road users and causes unnecessary nuisance to the public as it involves extreme speeding on open roadways. The Malaysian Highway Authority (LLM) reported that racing as a determining factor in 2018 in order to more accurately address fatal crashes involving illegal street racing.

The Malaysian Institute of Road Safety (MIROS) concluded that, compared with all deadly crashes, street racing fatal accidents were more likely to occur on urban roadways and with risky behaviour with numerous incidents reported in the media (Syarizal et.al., 2017). The Malaysia-Singapore Second Link in Johor became a popular place of illegal racing in the State of Johor. The Johor police authority and the Road Transport Department, with the highway operation PLUS Expressway, have launched major operations to crack down on illegal racing; a total of 3006 motorcycles were involved in these operations through out 2017. As shown in Table 1.5(a) the number of illegal motorcycle racing cases has increased tremendously. The seriousness of the problems of illegal motorcycle racing in the State of Johor which may be associated to the statistics of road accidents involving motorcycle riders in five areas of Wilayah Iskandar namely Johor Bahru Selatan; Seri Alam; Johor Bahru Utara; Kulai; and Iskandar Puteri.

Based on the above statistics, it is evident that the social problems resulting illegal motorcycle street racing has become a great challenge to the nation. The consequences of the youths involvement in illegal motorcycle racing if not seriously addressed will definitely

threaten the nation security and wellbeing. These youths are supposed to be the pillars for the economic strength of the nation but much of the efforts, funds and time are wasted into addressing the endless issues of illegal street racing. Despite of the various effort taken by the various authorities, reported cases of the illegal racing keep on increasing. Despite considerable media attention paid to illegal motorcycle street racing over the years, very few studies have been carried out to understand the planned behaviours and reasoned actions of the illegal racers involved in illegal motorcycle street racing behaviour.

As already noted, the available research (e.g. Jalilian et.al. 2015; Hedayati-Moghaddam et.al. 2015; Tahour-Soltani, 2015; Kann et.la. 2016; Graham et.la. 2018) among others, have suggested attitudes and behaviours and peer influence were among significant predictors of deviant and risky behaviours such as illegal street racing. The literature also suggests that attitudes, behaviours and peer influence were often associated with factors of self-esteem and demographic profiles of those involved.

1.1.3 The Attitude and Behaviours of the Illegal Motorcycle Street Racers

In Malaysia, illegal motorcycle street racing is a public concern about the involved adolescents and young adults' attitude and behaviour. Past studies on this issue reported being extremely concern about illegal street racing, and considered it as a threat to civil society (Rozmi et.al. 2016; Norhayati et.al. 2015; Noh Amit et.al. 2016; Zalmizy, 2020). It is possible that the increased attention to these attitude and behaviours by the public and by the police through strengthened legislation (and associated recording practices) is contributing to the apparent increase in the behaviour (Mohd Suhaimi et.al. 2018).

The attitude and behaviour of the Malaysian illegal motorcycle street racers may also have been facilitated by advances in telecommunications; for instance, involved persons can record their attitude and behaviour using mobile phoned or other picture or video recording

devices and post videos and photographs on public sebsites, which may influence public perceptions of prevalence, given greater visibility of their attitude and behaviour (Ramisetty-Mikler and Almakadma, 2016). Handphones were also used to notified peers easily of the presence of police surveillance.

Illegal motorcycle street racing and associate risky behaviour and nuisance riding behaviours normally involved adolescents and young adults of 14 to 27 years of age. It has been suggested that youngsters appear to be most associated with their attitude relating to the frequency of violation of traffic laws and risky driving and raced on the street without thinking of the fatal consequences (Ramisetty-Mikler and Almakadma, 2016). They raced in groups for 'fun of it' on public roads with modified motorcycles for higher speed or to increase the noise emitted by the exhaust, which do not meet standard specifications. In addition to racing, their attitude of weaving ("cilok") through moving traffic and perform dangerous motorcycle stunts such as "Weekang", "Superman", and "Willy" are among variation of dangerous stunts. These dangerous attitude and behaviours were performed to gain recognition, respect and attention among peers, spectators and friends of same interest (Rozmi et.al. 2016; Norhayati et.al 2015; Noh Amit et.al. 2016).

The illegal street racers' attitude is shaped by their perception towards risk. Many studies have suggested that adolescents' attitude towards risk may be associated with psychobiological development concerning the brain and hormonal levels and increased excitary dopamine that reacted to variations of emotions (Kusev et.al. 2017; Mehta et.al. 2015; Heilman et.al. 2015). This is true as the attitude of the Malaysian illegal racers' risk perception provide stimulation of thrill, sensation seeking, joy, happiness, elation and amusement of their exaggerated riding skills.

In past research, the illegal motorcycle street racers' attitude and behaviours were often being associated with low self-esteem and aggressive personality, driving in aggressive hostility and anger manner without much regards to the safety of other people. Aggressive hostility and anger are another form of emotional state that shaped the attitude of the illegal racers. According to Norhayati et.al. (2015), aggressive hostility and anger are potential explanatory factors for the developmental basis of risky riding behaviour due to hormones related to aggressiveness have a developmental trajectory that is similar to the trajectory of many types of reckless behaviour. Mehta et.al. (2015) explained the functions of testosterone and cortisol jointly modulate risk-taking in adolescents and young adults whereby testosterone which has been repeatedly found to be related to aggression and hostility.

The need for excitement, sensation, thrill, joy, amusement, elation and other adrenaline rush kind of riding leads to illegal motorcycle street racers organising illegal races for large groups of participants (Mohd Suhaimi et.al. 2018; Zalmizy, 2019 and 2020). Along with attracting the attention of outsiders and the opposite sex, the researchers argued that illegal motorcycle street racing forms an arena in which to test one's riding skills, past experience, good and powerful motorcycles and opportunity to get rewards for winning racing competition.

The impact of peer closeness greatly described the Malaysian illegal street racers' attitude and behaviour. Given the social attitude and behavioural nature of illegal motorcycle street racing, the relationship between peer association and risky behaviours were often a subject of research interest. It has been argued that peer networks and associations are especially significant for adolescent delinquency, as most young offenders have co-offenders (Reniers et.al.2016). Peer networks of illegal motorcycle street racing is based on their closeness, make joyful, share problems, give advice, give recognition and attention and give support when needed. Most importantly race on the street together. These contextual

factor contributing to their heightened tendency to make decision to get involve in risky behaviour. According to Zalmizy (2019), to the Malaysian 'Mat Rempit' the peer group is central in providing the catalyst for their introduction and continuation to illegal street racing and other risky behaviours. The literature also suggested that the influence of carriage of peer-aged pillion riders also may increase the tendency to race on the street.

Socio-demographic and behavioural characteristics of illegal motorcycle street racers in Malaysia have been the concern of researchers as well as these factors have an impact on their attitude and behaviour. Other than age, gender, socio-economic status, family background and structure such as marital disruption, abusive parentic and traumatic experience have also been associated with cognitive and adolescents' emotional states having an impact on their attitude and risky behaviour of 'Mat Rempit'.

Conclusively the caharacteristics of the Malaysian illegal motorcycle street racers consist of their attitude towards their mental outlook pertaining to risk perception, desire for recognition and attention. Their emotional state of seeking for thrill, sensation, joy, happiness, elation and amusement shaped their attitude towards aggressive hostility and anger which drove them to get involved in illegal street racing behaviour. Their peers have also played important role in influencing their street racing behaviour while low self-esteem and socio-demographic profiles also add on the variables that influenced their attitude and behaviours.

1.1.4 Road Safety Implications of Illegal Motorcycle Street Racing Behaviour

A number of specific potential harms caused by illegal street racing behaviours have been identitified other than a socially problematic group of behaviours (Mohd Suhaimi, 2018), including: road crashes; noise (from vehicles and crowds); vandalism and litter at racing

locations (including businesses where riders commonly gather); and loss of commercial revenue (if crowds obstruct or intimidated potential customers).

The crash risk is not limited to riders and piliient riders, as illegal street rcaes encourage spectators to stand near possibilly inexperienced riders and poorly maintained motorcycles, which is a potentially dangerous combination when standing only a few feet away from vehicles racing at highway speed (Ramisetty-Mikler and Almakadma, 2016). This occurance is alo problematic for spectators viewing superman stunts or wikang and other displays involving motorcycles losing traction with the road surface, as such motorcycles are out of control.

Although it is assumed by police, the genral public, and the media that illegal motorcycle street racing and associated behaviours pose a significant road safety risk, there is a need to support this claim with empirical evidence. There are a number of ways that the crash risk of illegal motorcycle racing behaviours could be quantified. Data are required regarding: the likelihood that illegal sreet racing contributes to crashing (i.e. the riskiness of the behaviour); the propotion of all crashes that involve street racing (i.e. the involvement of the behaviour in crashes); and, finally the general driving behaviour of riders who engageg in illegal racing (i.e. the general riskiness of involved riders).

1.1.5 Current Approaches to Dealing with Illegal Motorcycle Street Racing Behaviours

Traffic law is enforced at a state level in Malaysia by federal and state government police authority. In the past, police typically dealt with illegal street racing behaviours by attending meeting places and issuing vehicle defect notices or tickets for other public nuisance or traffic offences (The Star, 2018). The purpose of this practice was to discourage illegal street racers from meeting in public places.

However, there are problems confronting the police authority in dealing with the illegal street racing manners. There is lack of evidence of the road safety risk of illegal street racing and associated behaviours, which can attribute to a number of factors. First, illegal street racing and associated behaviours are difficult to identify in official datasets because not all of the prescribed illegal street racing offences have unique codes in police datasets. Furthermore illegal street racing are not specifies as factors that may have contributed to crashes on current reporting forms. In all Malaysian states, traffic laws to address illegal street racing behaviour were implemented in response to community complaints about the group of behaviours and the potential harms (Norhayati et.al. 2015; Noh Amit et.al. 2016).

In Malaysia illegal street racing comes under Section 42 (1) Road Traffic Act 1987 (Reckless and Dangerous Driving) 42. This law is enforced by organizing illegal races and street brutal operation by the police authority as explained in section 1.1.1. Among other sanctions imposed (including fines, demerit points, and licence disqualification), vehicles of drivers or riders charged under this legislation may be impounded immediately by police. The length of the impoundment period increases with repeat offenses within prescribed periods. The penalties are similar for drivers charged with repeat drink driving offences, as well as unlicensed driving and driving while disqualified offences. Internationally, vehicle impoundment programs such as in Australia, Canada, United Kingdom and the United States typically been applied to drink driving and driving while suspended or disqualified, although some jurisdictions have recently applied similar laws to illegal street racing (Batool and Carsten, 2017; Smith, 2016; Ramisetty-Mikler and Alamakadma, 2016; Mekonnen et.al. 2019).

To date, there is no evaluations of vehicle impoundment programs in Malaysian jurisdictions have been published, although some may be in progress. The published literature regarding the effectiveness of vehicle impoundment and forfeiture programs as

mentioned above is from the Canadian jurisdictions, the programs are generally designed to target repeat drink drivers and drivers who continue to drive while suspended or disqualified. As illegal street racing behaviours are just being treated as a road safety problem in need of a road safety solution in Malaysian jurisdictions, there is a need to better understand the road safety risks associated with this group of behaviours, and the effectiveness of current approaches to dealing with the problem. This thesis provides a better understanding of the attitude and behavioural intention of the illegal street racers in Wilayah Iskandar, and this report can be a source of reference by the police authority and other government authority in their attempts to organize deterrent programs in order to curb such risky behaviours.

1.2 PROBLEM STATEMENT

Studies investigating the motivational factors towards illegal motorcycle street racing behaviour have been reported by Mekonnen et.al. (2019), Batool and Carston (2017), Lund et.al. (2016), Ramisetty-Mikler and Almadkadm (2016). Whereas in Malaysia, illegal motorcycle street racing involving adolescents and youths were reported by past studies carried out by Mohd Nasir Nawawi (2018), Nazlin and Siti Zubaidah (2016), Rozmi et.al. (2015); Noh Amit et.al. (2016); Mohd Suhaimi et. al. (2018); and Norhayati (2015). Majority of studies were on the aspects of demographic factors, individual psychological factor of low self-esteem and the intention of motorcycle riders to engage in illegal motorcycle street racing behaviour.

Based on the literature on illegal motorcycle street racing in Malaysia, yields few published studies that have focused on the broader group of illegal street behaviours. Thus, there are a number of research opportunities to explore in the Malaysian context that can contribute not only on to the local but also the international road safety literature regarding illegal street racing and associated risky behaviours. This could be use as reference by the police and other law enforcement authority for road safety countermeasure programs as there

is a need to justify the use of traffic policing resources with objective evidence of the road safety implications of illegal motorcycle street racing behaviours.

While section 2.1.2 describes the availability of studies on this issue, it is limited to studies on traffic violation, road rage, violation of social norms, speeding, driving recklessly and aggressively and sensational seeking. Studies in the Malaysian context particularly may not reflect the detail exploration of attitude and behaviours of the illegal motorcycle street racers which is considered important to gain understanding of the issues from the perspective of behavioural, attitudinal and social deviant studies in order to curb the problems.

A number of specific potential harms caused by illegal street racing behaviours have been identified other than a socially problematic group of behaviours (Mohd Suhaimi, 2018), including: road crashes; noise (from vehicles and crowds); vandalism and litter at racing locations (including businesses where riders commonly gather); and loss of commercial revenue (if crowds obstruct or intimidated potential customers).

The crash risk is not limited to riders and pillion riders, as illegal street racing encourages spectators to stand near possibly inexperienced riders and poorly maintained motorcycles, which is a potentially dangerous combination when standing only a few feet away from vehicles racing at highway speed (Ramisetty-Mikler and Almakadma, 2016). This occurrence is also problematic for spectators viewing stuntman stunts or wakang and other displays involving motorcycles losing traction with the road surface, as such motorcycles are out of control.

Although it is assumed by police, the general public, and the media that illegal motorcycle street racing and associated behaviours pose a significant road safety risk, there is a need to support this claim with empirical evidence. There are a number of ways that the crash risk of illegal motorcycle racing behaviours could be quantified. Data are required

regarding: the likelihood that illegal street racing contributes to crashing (i.e. the riskiness of the behaviour); the proportion of all crashes that involve street racing (i.e. the involvement of the behaviour in crashes); and, finally the general driving behaviour of riders who engage in illegal racing (i.e. the general riskiness of involved riders).

A better understanding of the road safety implications of illegal motorcycle street racing attitude and behaviours can be used to inform the development of public and offender publication materials that can be used in conjunction with programs organised by the police and law enforcement authority to change drivers' behaviours and attitude, and justify the use of such a severe penalty. Consequently, there is a need to conduct research addressing these gaps in knowledge regarding illegal motorcycle street racers' attitude and behaviours to deal with the long standing problem in Malaysia. Such research can improve understanding of the group attitude and behaviours, and also inform road safety policy and practice.

There are a number of ways of exploring the issues of attitude and behaviours of the illegal motorcycle street racers that rarely being explored by the previous studies in the Malaysian context. Firstly, researchers can consider using a well established behavioural theories and secondly, researchers may use other related theories such as the Social Deviant Theory in order to explore the illegal motorcycle street racers attitude and behaviours which are the root cause of the problem.

1.3 THEORETICAL FRAMEWORK FOR THE STUDY

Although it was not the aim of this study to test or compare the utility of particular theories in explaining or predicting illegal motorcycle street racing behaviour, there are a number of benefits of theoretically driven approaches. Specifically, such approaches can

provide and support the understanding of the underlying factors contributing to attitude and behaviour, and facilitate the design and evaluation of countermeasure.

This study adopted a multi-disciplinary approach to the exploration of illegal street racing attitude and behaviours, drawing on psychological cognitive self-regulation theory and Deviance Theory of Social Learning. The theoretical perspective adopted were expanded Theory of Planned Behaviour (Ajzen, 1985) and Deviance Theory of Social Learning (Akers, 1990). These theories were selected to facilitate the understanding of the psychological and non-psychological factors associated with the attitude and behaviours for the racers' reasoned actions and to guide a better understanding of the root cause of the behavioural problems of the illegal motorcycle street racers.

The theory of planned behaviour developed by Ajzen (1985) postulates three conceptually independent determinants of intention. The first is the attitude toward the behaviour and refers to the degree to which a person has a favorable or unfavourable evaluation or appraisal of the behaviour in question. The second predictor is a social factor termed subjective norm; it refers to the perceived social pressure to perform or not to perform the behaviour. The third antecedent of intention is the degree of perceived behavioural control which refers to the perceived ease or difficulty of performing the behaviour and it is assumed to reflect past experience as well as anticipated impediments and obstacles. As a general rule, the more favorable the attitude and subjective norm with respect to a behaviour, and the greater the perceived behavioural control, the stronger should be an individual's intention to perform the behaviour under consideration. According to Ajzen (1985) the relative importance of attitude, subjective norm, and perceived behavioural control in the prediction of intention is expected to vary across behaviours and situations. Thus, in some applications it may be found that only attitudes have a significant impact on intentions, in others that

attitudes and perceived behavioural control are sufficient to account for intentions, and in still others that all three predictors make independent contributions.

On the other hand Akers' Deviant Theory of Social Learning was developed with a particular emphasis on explaining deviant behaviour, and draws on both sociological and psychological theoretical concepts (Akers, 1977). His theory posits that behaviour is developed and maintained by an individual observing models of the behaviour (imitation), association with significant others that the person perceives approves (or does not disapprove) of the behaviour (differential association), perceiving more positive than negative consequences to occur (differential reinforcement), and holding positive attitudes and beliefs towards the behaviour (definitions) (Akers, 1998).

The main theoretical framework, which incorporated the TPB and the Deviant Theory of Social Learning for this study are discussed in more detail in Chapter Two.

1.4 THE MIXED METHOD MODEL OF THE STUDY

This study adopts the principle of pragmatism as the research paradigm. Creswell (2018) claimed that the principle of pragmatism is a direct approach to the purpose and nature of the research questions posed. This research method allows researchers to address the questions that did not sit entirely comfortably in quantitative or qualitative approach to the design and the various methods that have a variety of purposes. Creswell (2018) further explains that in reality, the majority of decisions on whether to adopt a quantitative or qualitative approach to the design and the various methods that have a variety of purposes. The pragmatic paradigm is a set of beliefs and the model of a mixed approach of compounds is based on the rejection of forced choice between positivism and constructivism post (Creswell, 2018).

The pragmatism paradigm was applied in this study and the quantitative and qualitative research approaches were employed sequentially or by mixed method. The

quantitative method is suitable for addressing questions of what, whereas the qualitative method is more appropriate for answering the how and why things occur (Creswell, 2018). The use of mixed methods in this study has enhanced the strengths and reduced weaknesses of both approaches. Creswell further explains that using mixed methods in the same study minimizes potential limitations. By using quantitative methods in this study, the researcher was able to test several hypotheses based on Ajzen's TPB - testing the relationship of attitude, subjective norm and the perceived behaviour control with the intention of the illegal motorcycle street racers to race illegally on the street. Whereas, Akers' Deviant Theory of Social Learning enabled the researcher to explore in detail of the racers' deviant behaviour in an attempt to identify the most impactful significant predictor of the respondents' intention to engage in illegal motorcycle street racing. The mixed method employed in this study, enabled the use of multidisciplinary approach to the utilization of theoretical perspectives to understand the illegal motorcycle street racers' group behaviours based on Creswell's explanatory sequential methods. The Creswell's mixed method model is detailed out in Chapter Three.

1.5 THE OBJECTIVES OF THE STUDY

The objectives of this study which emerged from the literature review, problem statements and questions pertaining to illegal motorcycle street racing behaviour at Wilayah Iskandar, Johor is divided into the quantitative and qualitative objectives.

1.5.1 The Quantitative Objectives

1.5.1.1 Pertaining to the relationship of illegal racers' Attitude and Behaviour with their intention to engage in illegal motorcycle street racing behaviour based on the TPB.

- To determine whether ‘attitude’ have influenced illegal racers’ behavioural intention to engage in illegal motorcycle street racing behaviour.
- To determine whether ‘subjective norms’ have influenced illegal racers’ behavioural intention to engage in illegal motorcycle street racing behaviour.
- To determine whether ‘perceived behaviour control’ have influenced illegal racers’ behavioural intention to engage in illegal motorcycle street racing behaviour.

1.5.1.2 Pertaining to the relationship of illegal racers’ Attitude and Behaviour with their Self-Esteem based on the TPB.

- To determine whether low self-esteem significantly influenced illegal motorcycle street racers’ attitude and behavioural intention to engage in illegal street racing behaviour.

1.5.1.3 Pertaining to the relationship of illegal racers’ Attitude and Behaviour with their Demographic Profiles based on the TPB.

- To determine whether demographic profiles (Abusive Parenting and Traumatic Experience) significantly influenced illegal motorcycle street racers’ attitude and behavioural intention to engage in illegal street racing behaviour.

1.5.2 The Qualitative Objectives

1.5.2.1 Pertaining to the relationship of illegal racers’ Attitude and Behaviour with their Self-Esteem based on the TPB and Deviant Theory of Social Learning.

- To determine how low self-esteem significantly influenced illegal motorcycle street racers’ attitude and behavioural intention to engage in illegal street racing behaviour.

1.5.2.2 Pertaining to the relationship of illegal racers' Attitude and Behaviour with their Demographic Profiles based on the TPB and Deviant Theory of Social Learning.

- To determine how demographic profiles (Abusive Parenting and Traumatic Experience) significantly influenced illegal motorcycle street racers' attitude and behavioural intention to engage in illegal street racing behaviour.

1.5.2.3 Pertaining to the most significant impactful drive of the Attitude and Behaviour on the Intention of the illegal racers' to engage in illegal motorcycle street racing based on TPB and Deviant Theory of Social Learning.

- To ascertain which and how these factors have become the most significant impactful drive on the Attitude and Behaviour of the illegal racers to engage in illegal motorcycle street racing.

1.6 THE RESEARCH QUESTIONS OF THE STUDY

1.6.1 Research Questions for Quantitative Objectives

The objectives of the study will be addressed through the following research questions:

1.6.1.1 Pertaining to Attitude and Behavioural Intention of illegal motorcycle street racers' 'attitude', 'subjective norms' and 'perceived behaviour control':

- Does illegal racers' 'attitude' influence their behavioural intention to engage in illegal motorcycle street racing behaviour?
- Does illegal racers' 'subjective norms' influence their behavioural intention to engage in illegal motorcycle street racing behaviour?

- Does illegal racers' 'perceived behaviour control' influence their behavioural intention to engage in illegal motorcycle street racing behaviour?

1.6.1.2 Pertaining to relationship between Attitude and Behaviour of illegal racers' with their Low Self-Esteem:

- Does low self-esteem significantly influence illegal racers' attitude and behavioural intention to engage in illegal motorcycle street racing behaviour?

1.6.1.3 Pertaining to the relationship between Attitude and Behaviour of illegal motorcycle street racers with their Demographic Profiles:

- Does demographic profile (Abusive Parenting and Traumatic Experience) of the illegal racers significantly influencing their attitude and behavioural intention to engage in illegal motorcycle street racing behaviour?

1.6.2 Research Questions for Qualitative Objectives

1.6.2.1 Pertaining to relationship between Attitude and Behaviour of illegal racers' with their Low Self-Esteem:

- How does low self-esteem of the illegal racers' influence their attitude and behavioural intention to engage in illegal motorcycle street racing behaviour?

1.6.2.2 Pertaining to the relationship between Attitude and Behaviour of illegal motorcycle street racers with their Demographic Profiles:

- How does demographic profiles (Abusive Parenting and Traumatic Experience) influence their attitude and behavioural intention to engage in illegal motorcycle street racing behaviour?

1.6.2.3 Pertaining to the most significant impactful drive of the Attitude and Behaviour on the Intention of the illegal racers' to engage in illegal motorcycle street racing based on TPB and Deviant Theory of Social Learning.

- Which factors and how these factors have become the most significant impactful drive in influencing the attitude and behaviour of illegal street racers to intentionally engage in illegal motorcycle street racing behaviour?

1.7 THE SCOPE OF THE STUDY

The study main focused was on illegal motorcycle racers in Malaysia particularly in Iskandar Malaysia, the State of Johor. Iskandar Malaysia is the fastest growing region of Johor involving five districts of Johor Bahru Selatan (JBS); the Town Area Johor Bharu Utara JBU (Skudai); Sri Alam, Kulai; and Iskandar Puteri. The targets of the study were those who engaged in illegal motorcycle street racing only. The study was based on the Theory of Planned Behaviour (Ajzen, 1991) and Deviant Theory of Social Learning (Akers, 1990).

The results of the first phase of the study may be able to generalize the behaviour of illegal motorcycle racers in the nation as the analysis may lead to the prediction and conformation or deconfirmation of the research questions of the study. Quantitative and qualitative data were used to answer all the four main research questions and objectives of the study.

1.8 SIGNIFICANCE OF THE STUDY

The research findings are significant in terms of the following aspects:

1.8.1 Using TPB and Deviant Theory of Social Learning to measure illegal racers' Attitude and Behavioural intention to engage in illegal motorcycle street racing behaviour

The relevant contributions to knowledge development pertains to the utilisation of the theoretical framework and the development of its comprehensive extension of the original TPB. This study utilised an empirical-based theoretical framework of TPB and Deviant Theory of Social Learning for measuring the attitude and behavioural intention of illegal street racers who engaged in illegal motorcycle street racing behaviour in Wilayah Iskandar, Johor. The theoretical framework of TPB and Deviant Theory of Social Learning contains the necessary and critical constructs or variables for measuring the attitude and behavioural intention of the illegal racers to engage in the actual illegal motorcycle street racing behaviour. Prior to the conduct of this study there has yet any empirical-based theoretical framework which was used for studying and measuring illegal motorcycle street racers' attitude and behavioural intention in the Malaysian context in time of writing. Studies examining the association between attitude and behaviour of risky riding of 'Mat Rempit' from psychological perspective have never been conducted and warrant further investigation.

The novel part of this study is that it has successfully applied the TPB and extended it by dimensionalizing the concepts of attitude, subjective norms and perceived behaviour control into several dimensions. This can be assumed as the most significant contribution of a comprehensive extension of TPB established as this study has extended the original TPB in a comprehensive manner.

The findings of this study in using the TPB and Deviant Theory of Social Learning theoretical framework would be of interest to researchers focusing on this topic. It can be used for studying illegal motorcycle street racing behaviour not only in Malaysia but also in other countries. In addition, there may be also some interest in validating the finding of this study in other setting and environment such as in other Southeast Asian countries and the Middle Eastern countries and other developed and developing countries.

1.8.2 Empirical Evidence

Prior to this study, empirical evidence measuring attitude and behavioural intention of illegal motorcycle street racers is very limited despite the consistent emphasis on the social problems caused by the street racers by researchers and the related authorities. In the same light, empirical evidence linking the intention of the illegal motorcycle street racers and their behavioural beliefs, normative beliefs and control beliefs is almost non-existent and is not easily available in the Malaysian context. To this effect, this study further enriches the literature on illegal motorcycle street racing behaviour. The findings of this study may assist both researchers and the related Malaysian authorities to further understand the behavioural intention of the illegal motorcycle street racers.

1.8.3 Academic contribution of this study

Based on the theoretical framework of TPB and Deviant Theory of Social Learning, this study have undergone various stages of assessment and validation such as pre-testing, pilot testing and reliability measurement in order to establish a valid extension of the original TPB. In addition this study have utilised qualitative data which past studies have never attempted to use the naturalist approach and theoretical framework of Deviant Theory of Social Learning. The qualitative and quantitative instruments developed and used in this study can be used in future research by those interested to conduct studies pertaining to the issues of street racing. Based on the outcomes of the assessment, the required plans may be organised by the relevant authorities to curb matters pertaining to the involvement of those in illegal street racing behaviour.

1.9 LIMITATION OF THE STUDY

There were certain limitations of this study that need to be recognized namely limitations of the research design and the research instrument.

The primary limitations associated with the research design may be linked to constraints associated with the sample/sample frame and the selected level of analysis. One source of concern may be the decision to sample only the related illegal motorcycle street racers situated in Wilayah Iskandar, Johor to represent the target population for quantitative and qualitative data collection activity. To address this concern, it should be noted that the majority of the constructs and their measurement items have been sourced from studies from Australia and European countries and that these have since been validated in additional studies internationally.

A second potential limitation of the research design was that it focused on a single Malay cultural group and / or lacked group level variable (s) capable of reflecting and measuring possible differences between groups within regional area such as cross-level or multilevel conceptualizations of the research model's constructs. As such, the research design did not explore the social cultural context constructs at the different group of the Malaysian racial and religion components nor did it explore the differences in the perceived behaviours of motorcycle riders involved in illegal racings between groups (Malay, Chinese and Indian) within the regional areas of Wilayah Iskandar, Johor. To do so would have to require additional complexity such as selecting theoretically appropriate methods to conceptualize and measure multilevel constructs, and utilizing a different approach to analysing the resulting multilevel models. Future research could further explore the impact of group attitude and behavioural intention to get involved in illegal motorcycles racings not only in Wilayah Iskandar, Johor but in other parts of Malaysia.

1.10 DEFINITION OF TERMS

1.10.1 Conceptual Definition

i) Intentions

Intentions capture capture the motivational factors that influence a behaviour; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behaviour. As a general rule, the stronger the intention to engage in a behaviour, the more likely should be its performance. a behavioural intention can find expression in behaviour only if the behaviour in question is under volitional control, i.e., if

the person can decide at will to perform or not perform the behaviour. (Ajzen, 1991).

ii) Attitude

Refers to the degree to which a person has a favorable or unfavourable evaluation or appraisal of the behaviour in question (Ajzen, 1991).

iii) Subjective Norm

It refers to the perceived social pressure to perform or not to perform the behaviour (Ajzen, 1991).

iv) Perceived Behaviour Control

Refers to the perceived ease or difficulty of performing the behaviour and it is assumed to reflect past experience as well as anticipated impediments and obstacles (Ajzen, 1991).

v) Differential Association

Refers to interaction and identity with different groups. These groups provide the social environments for the behaviour to take place (Akers, 1990).

vi) Imitation

Refers to the overall exposure to people (models) who engage in a particular behaviour (Akers, 1990).

vii) Differential Reinforcement

Refers to anticipated balance of rewards and punishments for a particular behaviour and alternatives (Akers, 1990).

viii) Definitions

Refers to personal attitudes towards a particular behaviour and alternatives (Akers, 1990).

1.10.2 Operational Definition

i) Illegal racing

Section 42 (1) Road Traffic Act 1987 (Reckless and dangerous driving) 42. (1) Any person who drives a motor vehicle on a road recklessly or at a speed or in a manner which having regard to all the circumstances (including the nature, condition and size of the road and the amount of traffic which is or might be expected to be on the road) is dangerous to the public.

In this study, illegal racing is referred to racing on a low-powered motorcycle by illegal racers on public roads in a risky, reckless and dangerous manner that endanger other users of the public roads. This motorcycle illegal racing in Malaysia is considered against the law under Section 42 of Road Traffic Act 1987.

ii) “Mat Rempit”

Youngsters using low-powered motorcycles who are involved in illegal racing which may involves betting, propagates activities in own group, has set an informal structure, have their own subcultures and action propagates harm and disturb public order (Rozmi et.al., 2015, 2016; Norhayati et.al 2015; Noh Amit et.al. 2016; Mohd Suhaimi et.al. 2018; and Zalmizy, 2019).

iii) Adolescents

Adolescents (from Latin word, meaning ‘to grow’) is a transitional stage of physical and psychological development that generally accours during the period from puberty to legal adulthood (age of majority). A young person in the process of developing from a child into an adult (Cambridge English Dictionary).

In this study adolescent is being referred to definition by the American Psychological Association (2002): early adolescence (approximately 9-13 years of age); middle adolescence (approximately 14-16 years of age); and late adolescence (approximately 17-19 years of age).

iv) Youths

In this study, the researcher adopted the definition of youths by UNESCO (www.unesco.org) as those persons between the ages of 20 to 24 years or above 19 years old and ends at 35 years old who are engaged in illegal motorcycle street racing during the undertaking of the study in five regions (Johor Bahru Selatan, Johor Bahru Utara, Seri Alam, Kulai and Iskandar Puteri) of Wilayah Iskandar.

v) Wilayah Iskandar, Johor

In this study Wilayah Iskandar in the State of Johor consisted of five regional areas of Johor Bahru Selatan, Johor Bahru Utara, Seri Alam, Kulai and Iskandar Puteri.

1.11 STRUCTURE OF THESIS

This thesis is organized into five (5) chapters. The first Chapter has discussed the background of the study, problem statement, research questions, research objectives, scope of the study, and significance of the study, limitation of the study and definition of terms. Chapter Two presents the literature review of the study and the theoretical framework that was developed to gather quantitative data in the first phase of the study. Chapter Three provides a detail account of the research methodology employed. Chapter Four presents the findings of the quantitative and qualitative data analysis of the first and second phase of the study to address all the research questions and objectives, and for testing the research hypothesis and the findings of the qualitative data analysis of the face-to-face interviews to support the findings of the quantitative data. Lastly, Chapter Five provides the discussion, recommendation and suggestion for future research.

1.12 CONCLUDING REMARKS

This chapter has devoted to identifying and setting the parameters for the study. The four research questions are then introduced. These questions lay the foundation for the four research objectives which seek to identify those factors, and once identified, determine the relative importance of those factors in association to the attitude, behaviours and intention of illegal racers to engage in illegal motorcycle street racing from the lenses of psychologically and criminologically-oriented perspectives.

This chapter also includes the various statistics pertaining to statistical evidences on illegal motorcycle racing in Wilayah Iskandar, Johor and gaps of past studies on illegal motorcycle street racing behaviours that provide the background, problem statement, mixed method model brief, research framework and justification for conducting the study and

pertinent to an understanding of the illegal motorcycle street racers' attitude and behavioural intention of the racers and illegal motorcycle street racing phenomenon in Malaysia generally and in Wilayah Iskandar, Johor specifically.