FACTORS MALAYSIAN ADOLESCENTS ENGAGE IN ILLEGAL MOTORCYCLE STREET RACING: AN ANALYSIS OF THE RELATIONSHIP BETWEEN DEMOGRAPHIC PROFILES AND THEIR INTENTION

Mohd Roslan Mohd Tahir[1], Haziah Sa'ari[2]

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Abstract:

Most studies undertaken on adolescents and youths engaging in illegal motorcycle street racing behaviour were primarily focused on the socio-demographics and characteristics of the illegal racers. Limited studies attempted to examine the relationship between the racers' demographic profiles and their 'intention' to engage in the actual behaviour of street racing from psychological perspectives. This study aimed to examine the relationship between the demographic profiles and the 'intention' of the illegal racers from the perspectives of cognitive development, emotions and psychobiological development via the Theory of Planned Behaviour (TPB). This study used abusive parenting and traumatic experience as antecedents to the TPB theoretical framework. These two antecedents were linked to the 'intention' of the illegal racers to engage in illegal motorcycle street racing's actual behaviour. Attitude, subjective norm and perceived behaviour control of the TPB related to the illegal racers' psychological perspectives were used to ascertain whether abusive parenting and traumatic experience significantly influenced the respondents' 'intention' to engage in illegal motorcycle street racing behaviour. 261 illegal motorcycle street racers in Wilayah Iskandar, Johor, took part in this study. Interestingly, the quantitative and qualitative results contradict the claims made by several psychologists.

Keywords: Theory of Planned Behaviour, abusive parenting, traumatic experience, illegal motorcycle street racers, demographic factor

[1]Seri Alam Traffic Police Station, Bandar Seri Alam,Masai, Johor, Malaysia
[2]School of Information Science, College of Computing, Informatics and Media, Universiti Teknologi MARA (UiTM), Negeri Sembilan Branch, Rembau Campus, Negeri Sembilan, Malaysia.

Email: [1]jantananamela@yahoo.com, [2]azie.crystal2@gmail.com

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1. Introduction

The majority of past studies on adolescents and youths engaging in illegal motorcycle street racing focused on the adolescents and youths' socio-demographic characteristics and youths involved in risky driving behaviour. Studies carried out by Ismail (2006), Ismail and Ibrahim (2008), Wong (2011), Nurullah, Makol- Abdul, and Abd. Rahman (2012), Rozmi et al. (2015), and Noh et al. (2016) found that the majority of the illegal motorcycle street racers were Malay youngsters and youths.

According to Jackson and Knepper (2003), the sociological theories on crime and deviance can be categorized into macro and micro perspectives. The macro perspective stresses the importance of the environment in shaping human behaviour. Poverty, violence, education system, social pressure, social labelling, social isolation, authority surveillance, recreational facilities and mass media are among the environmental factors. These environmental factors are evident in the findings of a study on "Mat Rempits" by Nurullah, Makol-Abdul, and Abd. Rahman (2012). It implies that violations of law and offending behaviours are the outcomes of individual interaction associated with demographic profiles with pre-existing environmental conditions (Jackson and Knepper, 2003).

The literature suggests that a standard agreement exists that the motivational factors of illegal motorcycle street racing are significantly associated with individual demographic factors or profiles. Conversely, the micro perspective focuses on the role of socialization agents, such as peers and teachers and familial factors, such as family violence, parental conflict, parenting style, relationship with family members, social contact, and learned attitude that encourage the behaviour. A similar finding is evident in the study undertaken by Nurullah, Makol-Abdul, and Abd. Rahman (2012).

Researchers and related authorities have consistently emphasized illegal motorcycle racing due to the social problems caused by street racers. Nevertheless, empirical evidence measuring the intention of illegal motorcycle street racers is scarce before this study on illegal racers in Wilayah Iskandar. The Wilayah Iskandar case utilized an empirical-based TPB theoretical framework to measure the intention of illegal street racers engaging in illegal motorcycle street racing. The adopted approach is different from previous studies.

The TPB theoretical framework contains the crucial and critical constructs or variables to measure the illegal racers' behavioural intention in engaging with the actual illegal motorcycle street racing behaviour. Before this study, there was no empirical-based theoretical framework used for studying and measuring illegal motorcycle street racers' 'intention' in the Malaysian context when this paper was written.

2. Methodology

Theoretical Framework

Ajzen (1991) developed the TPB as the theoretical framework supporting this study. The TPB proposed that the individual behaviour's intention is influenced by attitude, subjective norm and perceived behavior control. TPB constructs, namely attitude, subjective norm, and perceived behaviour control, measure motivational factors, such as mental outlook, emotion, efforts, and external influencing factors (i.e. resources) that drive the individual's intention to perform the actual behaviour. The domains of attitude for this study were chosen from the theories proposed by Erikson (1963), Brown and Larson (2009), and Steinberg (2010) that consisted of mental outlook (desire for recognition, desire for attention and risk perception) and emotion (amusement, elation and anger). Peer proximity influence, family members, peer risk-taking and lover were chosen as the components of the subject norm from the literature review. Contrastingly, the construct of perceived behavioural control is made up of resources, past experiences and rewards. Demographic factors or profiles are not a part of the original TPB construct developed by Ajzen (1991). The demographic factors were added from the literature as antecedents to ascertain whether they significantly influence the behavioural intention, attitude, subjective norm and perceived behaviour control on intentional behaviour. It is a suitable way to validate constructs found in the literature as risk-taking behaviours, such as illegal racing, have been associated with various demographic, parental, social, and environmental factors. Previous studies highlighted that family socioeconomic status and structure might influence risk-taking behaviours (Krohn, Skinner, Massey, & Akers, 1985; Graves & Hines, 1997; Vaaranen & Wieloch, 2002; Cooper, Wood, Orcutt, & Albino, 2003; Vingilis & Smart, 2009).

Data Analysis

The demographic factors provided a foundation for discussing the individual illegal street racers' profiles in this study. The original demographic factors measure items rarely measured in past studies within the Malaysian context. Family closeness, parent-child interaction, committed parents, protective parents, abusive parents,

traumatic experiences, religious and civic involvement, concern for others and romantic relationships are among the original demographic factors. Nonetheless, only two original measurement items, namely abusive parenting and traumatic experience, remained after the measurement items were analyzed using confirmatory factor analysis (CFA) and blindfolding predictive relevance (Q2). The other items were excluded due to insufficient precision in reflecting the parent construct. Abusive parenting and traumatic experience were retained attributable to their uni-dimensional features and tight cluster to the demographic factor construct. Other demographic factors variables' relationship with intention to engage in illegal motorcycle street racing behaviour was based on the independent t-test and analysis of variance (ANOVA).

3. Result

This study found that illegal motorcycle street racers in Wilayah Iskandar are middle and late adolescents and youths, most of whom were youths aged 20 to 24 (41.4%). Late adolescents aged 17 to 19 made up 21.8%, whereas those aged 28 to 35 comprised 16.1%. Subsequently, youths aged 25 to 27 comprise 10% of the total, while middle adolescents aged 14 to 16 (5.4%). Those above 36 years old were 2.7%, whereas another 2.7% did not specify their age. The current study also identified that illegal male racers are disproportionately represented in this risky behaviour. Most of them are typically young unmarried Malay males (73.9%). The gender was skewed to 219 males (83.9 %) and only nine females (3.4%). The Malay Bumiputera were the majority of respondents, with 90.8%, compared to Indian (3.1%) and Chinese (2.3%). This study also discovered that racers from other races also participated in this risky behaviour. However, current and past studies identified the Malay as predominant in motorcycle street racing. Most of the illegal street racers were skilled workers tertiary educated with lower employment levels despite the respondents' sample displaying diverse socio-economic profiles.

Hypothesis Tested on Abusive Parenting and Traumatic Experience Effect on the TPB Constructs

Research Hypothesis 1 (H1): Demographic factors significantly influence the racers' intention on their actual behaviour to engage in illegal motorcycle street racing. The results showed that H1 is not supported. The analysis indicated that demographic factors (abusive parenting and traumatic experience) had a minimal positive effect on illegal racers' intention to engage in illegal motorcycle street racing. The path coefficient t-value of 0.787 is far less than 1.645. Nevertheless, the minimal positive effect was statistically insignificant, indicating that this hypothesized effect is not evidenced.

Research Hypothesis 2 (H2): Demographic factors significantly influence the racers' attitude (mental outlook) to engage in illegal motorcycle street racing. The analysis indicated that demographic factors (abusive parenting and traumatic experience) strongly affect illegal racers' attitude (mental outlook) to engage in illegal motorcycle street racing, with a path coefficient t-value of 1.975, more significant than 1.645. The measure of the positive effect was statistically significant ($p < 0.05$). Hence, H2 is supported.

Research Hypothesis 3 (H3): Demographic factors significantly influence their attitude (emotion) to affect their intention to engage in illegal motorcycle street racing. The result demonstrated that H3 is not supported. The analysis indicated that demographic factors had a minimal positive effect on illegal racers' attitudes (emotions) influencing their intention to engage in illegal motorcycle street racing. The path coefficient t-value of 0.787 was lower than 1.645. However, the minimal positive effect was statistically insignificant, indicating that this hypothesized effect is not evidenced.

Research Hypothesis 4 (H4): The illegal racers' demographic factors significantly influence their subjective norm on their intention to engage in illegal motorcycle street racing. The result found that H4 is not supported. The analysis indicated that demographic factors had a minimal effect on illegal racers' subjective norms in influencing their intention to engage in illegal motorcycle street racing. The path coefficient t-value of 0.344 was less than 1.645. This measurement effect was statistically insignificant, proving that this hypothesized effect is not evidenced.

Research Hypothesis 5 (H5): The illegal racers' demographic factors significantly influence their perceived behaviour control on their intention to engage in illegal motorcycle street racing. The analysis demonstrated that demographic factors had a strong positive effect on illegal racers' perceived behaviour control on their intention to engage in illegal motorcycle street racing. The path coefficient t-value of 2.321 was more significant than 1.645. The measure of the positive effect was statistically significant ($p < 0.01$). The result indicated that H5 is supported. Relationship between Demographic Variables with Intention to Engage in Illegal Motorcycle Street Racing

Gender, Age, Ethnicity, Education and Intention to Race Differences across demographic variables and intention to engage in illegal motorcycle street racing among the respondents were analyzed using structural equation modelling (SEM). Table 1 displays an independent sample t-test and ANOVA results between several demographic variables and intention to engage in illegal racing behaviour. An independent sample t-test was undertaken between gender and intention-to-race behaviour. The results showed no significant difference between males and females concerning the intention to race behaviour. No significant difference could be observed for age, ethnicity and education level. In summary, the intention to race behaviour remains constant irrespective of age group, ethnicity or education level.

Table 1. Gender, Age, Ethnicity, Education and Racing Intention Behaviour

Variables	F / t and p-value	Responses	Freq	Mean	Std. Deviation
Gender	t (226) = -0.110, p = 0.912	Male	219	4.3543	6.66863
		Female	9	4.6000	.83066
Age	F (6, 254) = 0.728, p = 0.059	14-16	14	4.8000	1.89574
		17-19	57	4.4807	1.48942
		20-24	108	3.9463	1.68326
		25-27	26	4.2231	1.87389
		28-35	42	5.7810	14.88163
		36 and above	7	1.5143	.50143
		Missing Value	7	4.9429	1.21499
Ethnicity	F (4, 256) = 0.115, p = 0.977	Malay (Bumiputera)	237	4.3899	6.42246
		Chinese	6	3.6000	1.69706
		Indian	8	5.0500	2.11322
		Non-Malay (Bumiputera)	5	3.4000	2.00499
		Missing value	5	5.4400	1.05262
Education	F (4, 256) = 0.735, P = 0.569	Primary School	3	4.5333	2.15716
		Secondary School	161	4.0745	1.80912
		College	64	5.4719	12.01282
		University	23	3.4696	1.80162
		Missing Value	10	4.7000	1.11255

Marital Status, Current Occupation, Monthly Income, Residence and Intention to Race

A similar ANOVA test was undertaken on another four demographic variables: marital status, current occupation, monthly income, and residence, against racing intention behaviour. Table 2 suggest that no significant difference was observed across different marital status, current occupation, monthly income and location of residence concerning their racing intention behaviour.

Table 2. Marital Status, Current Occupation, Monthly Income, Residence and Intention to Race

Variables	F and p-value	Responses	Freq	Mean	Std.Deviation
Marital Status	F (3, 257) = 0.229, p = 0.876	Never Married	193	4.2902	1.63311
		Married	56	4.8964	12.96945
		Separated / Divorced	5	4.4000	1.81659
		Missing Value	7	3.2000	1.60831
Current Occupation	F (5, 255) = 0.135, p = 0.984	Professional &Managerial	27	3.5259	1.81035
		Skilled Worker	96	4.5333	9.90603

		Unskilled Worker	42	4.3143	1.88920
		Unemployed	31	4.6000	1.46969
		Students	59	4.5458	1.69333
		Missing Value	6	4.0333	1.22257
Monthly Income (RM)	F (3, 257) = 0.249, p = 0.862	500 and below	48	4.3875	1.65615
		501 to 1000	37	3.9189	1.77918
		Above 1001	134	4.3134	8.44789
		Missing Value	42	5.0714	1.16017
Residence	F (3, 257) = 0.154, p = 0.927	With parents	158	4.3076	1.65104
		With own family	74	4.7541	11.28716
		With friends	28	3.9071	1.63977
		Missing Value	1	4.8000	0.0009

Locality, Parents' Marital Status, Household Income, Father's Education and Intention to Race

The ANOVA test results that compared diverse locality, parent marital status, household income and father's education against racing intention behaviour also an almost consistent result. No significant difference could be observed in the results. The details of the results are displayed in Table 3 below.

Table 3. Locality, Parent Marital Status, Household Income, Father's Education and Intentional Behaviour

Variables	**F and p-value**	**Responses**	**Freq**	**Mean**	**Std. Deviation**
Locality	F (2, 258) = 0.470,	Urban	194	4.6082	7.05363
	p = 0.626	Rural	62	3.7419	1.65495
		Missing Value	5	4.1200	1.81439
Parent	F (2, 258) = 0.273,	Married	227	4.5022	6.55880
Marital	p = 0.761	Separated /Divorced	12	3.6500	1.35948
Status		Missing Value	22	3.6727	1.62193
Household	F (4, 256) = 0.865,	1000 and below	47	3.9277	1.77785
Income	p = 0.485	1001- 2000	71	5.3718	11.39921
		2001 - 3000	78	4.4821	1.84445
		3001 and above	36	3.2722	1.90827
		Missing Value	29	3.9034	1.42189
Father's	F (5, 255) = 0.135,	No formal schooling	10	3.8800	1.89315
Education	p =0.933	Primary school	27	3.8000	1.56598
		Secondary school	162	4.0037	1.88363
		College	28	4.4357	1.48279
		University	20	4.4400	1.30037
		Missing Value	14	3.8286	1.13098

4. Discussion of Findings

Relationship between Abusive Parenting and Traumatic Experience with the TPB Constructs

The demographical factors were analyzed through SEM by examining the TPB constructs to discuss illegal racers' illegal racing behaviour mechanism. The inferential statistics' findings via SEM show that demographic factors, namely abusive parenting and traumatic experience, do not directly influence the respondents' intention to engage in illegal street racing behaviour for H1 testing. Hence, H1 is not supported. The inferential statistics demonstrated that abusive parenting and traumatic experience indirectly influence the respondents' intention to race illegally through attitude, subjective norm and perceived behaviour control. The hypothesis testing data for H1 demonstrated that abusive parenting and traumatic experience have no direct influence on illegal racers' intention to engage in illegal street

racing. Contrastingly, the analysis of H2 revealed that both abusive parenting and traumatic experience positively affect illegal racers' attitudes (mental outlook: desire for recognition, attention and risk perception) to influence their intention to racing behaviour. Nevertheless, the hypothesized effect of H3 does not show evidence between abusive parenting and traumatic experience with attitude (emotion: amusement, elation and anger) in influencing the illegal racers' intention to engage in the actual racing behaviour. Similarly, SEM analysis on H4 identified that abusive parenting and traumatic experience did not positively affect illegal racers' subject norm (peer proximity influence, family members, peer risk-taking, and lover). The demographical factors were insignificant in influencing their intention to engage in illegal motorcycle street racing. Nevertheless, H5 testing revealed a positive effect between abusive parenting and traumatic experience on illegal racers' perceived behaviour control (resources: past experiences and rewards) in influencing their intention to engage in illegal racing behaviour. The findings demonstrated that perceived behaviour control is the strongest predictor of intention consistent with the original TPB proposition. The qualitative data supported the quantitative findings by revealing that the majority (12 of them) of the informants believed they were not abused or traumatized during their childhood. Most survey respondents in the study's first phase and the 12 informants interviewed in the second phase are contrary to expectations within the Erikson theory and inconsistent with previous studies (McEwen, 2007; Kana, Keller, Cherkassky, Minshew, & Just, 2009). According to Erikson (1963), harmful early life experiences, such as childhood trauma and stress, significantly impact adolescents' and youths' behaviour. Nevertheless, these experiences influence adolescents' andyouths' responses to stress, their emotional regulation, and their ability's strength to control impulses and reasoning (McEwen, 2007). Childhood trauma and stress, including abuse and witnessing violence, disrupt the stress response system, resulting in impaired prefrontal cortex development (Harvard University, n.d.). In addition, traumatic experiences may alter the brain structure by impairing cognitive abilities and increasing the risk of misbehaviour (Kana et al., 2009). Nonetheless, Erikson's theory and the situation explained by Harvard University (n.d.), McEwen (2007), and Kana et al. (2009) were only applicable and valid in the case of qualitative data narrated by three cases, namely INF#5, INF#7 and INF#11. The respondents revealed that they experienced abusive parenting and traumatic experience. Hence, it could be implied that abusive parenting and traumatic experience may influence their intention to engage in illegal motorcycle street racing for these three informants. In contrast, a similar conclusion is inapplicable to other informants. Other factors, such as peer influence and personal satisfaction, may promote street racing behaviour. Conclusively, abusive parenting and traumatic experience toward illegal motorcycle street racing intention were unable to predict their intention to engage in risky behaviour, specifically illegal motorcycle street racing. However, the TPB constructs of attitude (mental outlook) and perceived behaviour control have demonstrated the link between demographic factors with the illegal racers' intention and their actual behaviour of street racing. The Non-Significant Difference of the Various Demographic Factors towards Intention to Engage in Illegal Street Racing Behaviour The non-significant difference in the various demographic factors towards the intention of illegal racers to engage in illegal street racing behaviour corroborates with Noh et al. (2016) findings. Noh et al. (2016) indicated a non-significant relationship between age groups, educational, parental background and other demographic factors, such as sensation seeking, impulsivity and self-esteem of the youths engaged in illegal motorcycle street racing behaviour. Rozmi et al. (2015) also revealed no significant relationship between age groups and other demographic factors with aggression and risky riding among illegal motorcycle street racers. Similarly, Wong (2011)asserted that there were no significant differences in ethnicity, age, monthly income, locality and parents' marital status of respondents and their actual behaviour in illegal street racing. Additionally, Ansari and Haque (2005) concluded that peers might strongly influence adolescents and youths involved in either excellent or harmful activities, such as illegal motorcycle street racing, regardless of differences in demographic profiles.

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