

PSYCHOLOGICAL TRAIT DIFFERENCES BETWEEN MURDERERS AND NON-CRIMINAL POPULATION: A COMPARATIVE QUANTITATIVE STUDY

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ABSTRACT

Psychological traits are often acknowledged as credible criminogenic markers in triggering criminal behaviour in a person. It has been documented that criminals do exhibit different sets of psychological traits when compared to normal individuals. With that in mind, the present study was conducted to identify the psychological trait differences between murderers and non-criminal population. For that purpose, the present study adapted observational cross-sectional research design which comprised of two groups; study and public groups. The study group consisted of 71 Malaysian male murderers while public group comprised of 300 adult males who have no prior criminal records (non-criminal population). A guided self-administered questionnaire was used for data collection. The questionnaire consisted of socio-demographic section and four Malay validated psychometric instruments: Zuckerman-Kuhlman Personality Questionnaire-40-Cross-Culture, Self-control Scale, Aggression Questionnaire and "How I Think" Questionnaire. An independent sample t-test was performed to establish the mean score difference of psychological traits between study and public groups. The findings showed that the mean scores of several psychological traits: Activity, Sociability, Impulsive Sensation Seeking, Physical Aggression and Anger; were significantly higher among study group compared to public group. The results were discussed in relation to contexts of criminology and forensic psychology.

Keywords: Criminology, Male murderer, Murder, Non-criminal population, Psychological traits

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1. INTRODUCTION

Research and knowledge regarding criminal behaviour are of vital interest to Malaysia's mission in building a safer nation. Such knowledge provides key risk factors and triggers for offending in order to implement sustainable solutions and risk-focussed proactive crime preventions. Over the years, the role of criminal psychological traits within an individual has received much attention among scholars from the fields of criminology and forensic psychology. Psychological traits are often addressed as credible criminogenic factors for a person to engage in crime and juvenile misconducts.

A large number of criminological literature have correlated the role of psychological traits with criminality (Mohammad Rahim Kamaluddin, Nadiah Syariani Md Shariff, Azizah Othman, Khaidzir Hj Ismail & Geshina Ayu Mat Saat, 2015). Along this line of thought, several psychological traits and variables were listed as possible predictors of criminality. Examples of psychological traits include criminal personality traits, aggression behaviour, poor self-control, and cognitive distortions which are capable of contributing towards criminal and deviant behaviour including murderous act.

Across the criminological literature, studies have shown that certain personality traits are highly associated with wide ranges of criminal personality. Few studies (Gleason, Jensen-Campbell & Richardson, 2004; Sharpe & Desai, 2001; Tremblay & Ewart, 2005) have reported that physical aggression in men and women is found to be associated with low agreeableness, low conscientiousness and high neuroticism. Meanwhile, Blackburn (1993) convincingly stated that high psychoticism scores reflect more serious and persistent offenders. Impulsive Sensation Seeking personality trait is also commonly associated with a wide range of trouble (Ireland & Archer, 2008) such as childhood conduct problems and prediction of adult criminality (Babinski, Hartsough, & Lambert, 1999), aggressive behavior (Fossati, Barrat, Borroni, Villa, Grazioli & Maffe, 2007), and non-psychopathic murder (Woodworth & Porter, 2002).

While personality traits are seen as potential elements in shaping criminal behaviour, self-control, on the other hand, it is considered as another important construct in determining the likelihood of an individual's violent behaviour (Buker, 2011). Such construct is perceived as an important element in criminological literature which plays a crucial role in the effort to understand various types of crime and juvenile misconduct committed by the inmates. In general, self-control is defined as "the tendency to avoid acts whose long term costs exceed their momentary advantages" (Hirschi & Gottfredson, 1994). Self-control is also

argued to be the single “most important individual difference cause of crime and delinquency” (Gottfredson, 2006).

Over the years, associations between self-control and crime have been widely documented. Growing body of literatures (Gottfredson & Hirschi, 1990; Pratt & Cullen, 2000; Hay & Forest, 2008; Simpson & Piquero, 2002; Payne, Higgins, & Blackwell, 2010) have evidently shown low self-control as a consistent and potential predictor of both criminal and deviant behaviour. Also, significant correlation was noted between low self-control and adult criminal and imprudent behaviour (Burton, Cullen, Evans, Alarid & Dunaway, 1998).

Another psychological trait that is often linked with criminality is aggressive behaviour. Aggression is described as an overt behaviour carried out intentionally to harm another person who is motivated to avoid the harm (Bushman & Huesmann, 2010). In social psychological terms, aggression can be defined as a psychological phenomenon which describes a broad category of behaviour which intends to harm another by means of physical or verbal attacks (Comer & Gould, 2011).

Early research on aggression highlighted aggression as the basic ingredient of violent crime (Feshbach, 1964). Since then, many theories have been created to determine how it contributes to violent behaviour. According to Buss (1961), aggression is characterised as the outcome of the links between emotions (anger), thoughts (hostility), and aggressive behaviour. Aggression is often assessed in relation to behavioural and conducts problems (Goodman & New, 2000). A study by Warren et al. (2002) established a significant relationship between aggression and antisocial behaviour, which may lead a person to be involved in violent activities such as murder. A number of local studies that have been done among criminal population have found aggression as one of the prevalent aspect and such aspect is highly associated with other psychocriminogenic markers like poor self-control and cognitive distortion (Mohammad Rahim Kamaluddin, Nadiah Syariani Md Shariff, Azizah Othman, Khaidzir Hj Ismail & Geshina Ayu Mat Saat, 2014; Mohammad Rahim Kamaluddin, Azizah Othman, Khaidzir Hj Ismail & Geshina Ayu Mat Saat, 2016).

Other than the aforementioned psychological traits, cognitive distortion is believed to act as the catalyst for wide ranges of aggressive and antisocial behaviour. According to Rohany Nasir, Zainah Ahmad Zamani, Rozainee Khairudin and Mohammad Rahim Kamaluddin (2016), cognitive distortion is conceptualized as rationalising attitudes and beliefs that served to neutralize potential empathy and guilt. Cognitive distortion is often perceived as a risk factor for antisocial and

violent behaviour. A growing body of literature (Barriga, Landau, Stinson, Liao & Gibbs, 2000; Palmer, 2007; Walters, 2002) have acknowledged the importance of cognitive distortion as a causal factor for wide ranges of externalizing behaviour problems such as delinquent, aggression and antisocial behaviour.

According to Rohany Nasir et al. (2016), cognitive distortion is defined as inaccurate or rationalizing attitudes, thoughts or beliefs concerning own or other's behaviour. It was suggested that excessive and regular use of cognitive distortion lead an individual to exhibit offender and antisocial behaviours (Liao, Barriga & Gibbs, 1998). A number of local studies have also documented cognitive distortion as an important psychological markers in contributing criminal behaviour among various forensic population such as murderers (Mohammad Rahim Kamaluddin, Nadiyah Syariani Md Shariff, Siti Nur-Farliza, Azizah Othman, Khaidzir Hj Ismail & Geshina Ayu Mat Saat, 2014), prostitutes (Rohany Nasir, Zainah Ahmad Zamani, Rozainee Khairudin, Rokiah Ismail, Fatimah Yusooff & ZM Lukman, 2011), and juvenile delinquents (Rohany Nasir, Zainah Ahmad Zamani, Rozainee Khairudin, & Latipun, 2010).

With this in mind, the present study intends to explore the psychological trait differences: personality traits, aggression behaviour, low self-control and cognitive distortion between murderers and non-criminal populations. Establishing psychological trait differences between these two groups are imperative and this in turn would shed some statistical evidence in order to establish a more reality-based understanding of why some Malaysians commit murder at least from the perspective of psychology. It is anticipated that findings from this study will provide a significant contribution to various settings, such as the counselling and rehabilitation practices in Malaysia.

2. METHODOLOGY

2.1 Study design and participants

The present study was an observational cross-sectional study using a guided self-administered questionnaires for data collection. The present study recruited two types of samples: murderers (study group) and non-criminal population (public group). The sampling frame of the study group takes into account all the male murderers from eleven prisons in Peninsular Malaysia who committed murder.

The study group samples consisted of 71 Malaysian male murderers aged twenty one and older who was selected using a purposive sampling method. The selection

of the sample was based on the predetermined selection criteria. Meanwhile, the public group consisted of adult males who have no criminal records. Prior to the recruitment of a respondent in the public group using a convenience sampling technique, the respondents were asked about previous criminal records and if there is any, the respondents were immediately excluded from this study.

Prior to this study, ethical and permission was granted by the Malaysian Department of Prisons and Human Ethical Committee of Universiti Sains Malaysia. The participation was on a volunteer basis and respondents were assured with secrecy and anonymity of their responses in order to maintain the honesty and validity of their responses. The participants were also informed regarding the disposal of the given information at the end of this study. Written and signed consents from the respondents were obtained prior to their participation.

2.2 Measures

The guided self-administered questionnaire was used as a tool for data collection. The self-administered questionnaire consisted of mainly two sections. The first section contained items on socio-demography section while the later part consisted of four Malay validated psychometric instruments.

Section one: This section was to gather socio-demographic information of the respondents (study and public group). Basic socio-demographic information such as age, religion, ethnicity, marital status as well as their educational and occupational status were required in this section.

Section two: Section two consisted of four Malay validated psychometric instruments. The details of each psychometric instrument are as follows:

- i. ZKPQ-M-40-CC: This instrument is the simplified original version of ZKPQ-50-CC which consisted of 50 items (Aluja et al., 2006) to measure AFFM personality traits. However, only 40 items were included in the Malay version of ZKPQ as the outcome of the validation study. ZKPQ-M-40-CC assessed five types of personality traits: Activity (Act), Sociability (Sy), Aggressiveness-Hostility (Agg-Host), Impulsive Sensation Seeking (ImpSS), and Neuroticism-Anxiety (N-Anx). The overall internal consistency of ZKPQ-M-40-CC was 0.75 (Mohammad Rahim Kamaluddin, Nadiah Syariani Md Shariff & Geshina Ayu Mat Saat, 2013).
- ii. SCS-M: SCS-M is a Malay version of the Self-Control Scale by Grasmick et al. (1993). The SCS was developed to operationalize low self-control elements based on the General Theory of Crime by Gottfredson and Hirschi

- (1990). In this study, SCS-M was administered as a unidimensional scale which consisted of 18 items. The scales were reverse coded so that high scores indicate low self-control. The Cronbach's Alpha value was 0.80 (Mohammad Rahim Kamaluddin, Nadiah Syariani Md Shariff, Azizah Othman & Geshina Ayu Mat Saat, 2013).
- iii. AQ-12-M: AQ-12 is the short version of the Aggression Questionnaire by Buss and Perry (1992). The AQ-12 consisted of 12 items (Bryant & Smith, 2001) which measures four types of aggression: Physical aggression, Verbal aggression, Anger, and Hostility. Each subscale had three items. The internal consistency of AQ-12 for the Malaysian criminal population was 0.80 (Zaihairul Idrus, Nor Hafizah Nor Hamid & Geshina Ayu Mat Saat, 2012).
- iv. HIT-M: HIT-M is a Malay version of "How I Think" Questionnaire designed by Barriga et al. (2001). In this current study, HIT-M consisted of items which measure four subscales of self-serving cognitive distortion (SSCD): self-centered, blaming others, minimizing/mislabeling, and assuming the worst. Each subscale had six items respectively. The internal consistency of HIT-M was 0.90 (Mohammad Rahim Kamaluddin, Nadiah Syariani Md Shariff, Azizah Othman & Geshina Ayu Mat Saat, 2013b).

2.3 Analyses protocol

The required information was compiled into a set of systematic and computerized data. The analysis of the compiled data was performed using the Statistical Package for Social Sciences (SPSS) version 20.0. Descriptive statistics were employed to summarise the socio-demographics. Following this, Independent sample T-test was employed to identify the psychological scores differences between murderers and non-criminal populations.

3. RESULTS

3.1 Socio-demographic information

The basic socio-demographic information of the respondents was collected and presented in the form of descriptive data. Table 1 provides a summary of socio-demographic information of both groups.

Table 1: Socio-demographic profile of respondents

Variables	n (%)	
	Study group n = 71	Public group n = 300
Age group (years old)		
21-29	44 (62.0)	156 (52.0)
30-39	14 (19.7)	58 (19.3)
40-49	8 (11.3)	43 (14.3)
50-59	3 (4.2)	22 (7.3)
60-69	2 (2.8)	21 (7.0)
Ethnic		
Malay	29 (40.8)	168 (56.0)
Chinese	17 (23.9)	44 (44.7)
Indian	24 (33.8)	76 (25.3)
Others	1 (1.4)	12 (4.0)
Religion		
Islam	32 (45.1)	180 (60.0)
Buddha	16 (22.5)	44 (14.7)
Hindu	19 (26.8)	60 (20.0)
Christian	4 (5.6)	16 (5.3)
Marital status		
Single	33 (46.5)	208 (69.3)
Married	24 (33.8)	80 (26.7)
Divorced/separated	11 (15.5)	8 (2.7)
Widower	3 (4.2)	4 (1.3)
Occupational status		
Not working	8 (11.3)	92 (30.7)
Semiskilled	42 (59.2)	104 (34.7)
Clerical-skilled	9 (12.7)	36 (12.0)
Self-employed/business	8 (11.3)	40 (13.3)
Government servant	4 (5.6)	28 (9.3)
Educational status		
Never been to school	1 (1.4)	-
Primary education	18 (25.4)	-
Lower secondary education	26 (36.6)	20 (6.7)
Upper secondary education	22 (31.0)	156 (52.0)
Pre-university/matriculation	2 (2.8)	80 (2.7)
Diplomas and above	2 (2.8)	44 (14.7)

3.2 Psychological Trait Differences

The mean scores of psychological traits between study group (murderers) and public group (non-criminal populations) were compared and analysed. Based on the analysis, the Independent sample t-test resulted in few statistical significant difference in the mean scores of psychological traits; Activity [$t(369) = 2.34, p < 0.05$], Sociability [$t(369) = 4.48, p < 0.001$], Impulsive Sensation Seeking [$t(369) = 2.83, p < 0.05$], Physical aggression [$t(369) = 2.59, p < 0.05$] and Anger [$t(369) = 2.39, p < 0.05$]. The results of the Independent t-test are displayed in Table 2.

Table 2: Comparison of mean scores of psychological traits between study and public groups

Measure	Mean (SD)	Mean difference (95% CI)	t-statistic ^a (df)	p-value
Activity	29.35 (5.66) ¹ 27.31 (4.87) ²	2.00 (0.32, 3.77)	2.34 (369)	0.020*
Sociability	26.54 (5.09) ¹ 22.93 (4.62) ²	3.60 (2.01, 5.19)	4.48 (369)	0.000**
Aggressiveness Hostility	20.80 (7.31) ¹ 19.31 (5.97) ²	1.50 (-0.69, 3.69)	1.35 (369)	0.179
Impulsive Sensation Seeking	21.65 (6.48) ¹ 18.77 (5.78) ²	2.87 (1.1, 0.87)	2.83 (369)	0.005*
Neuroticism Anxiety	17.96 (5.51) ¹ 17.76 (6.12) ²	0.20 (0.96, -1.70)	0.21 (369)	0.837
Self-control	49.28 (7.94) ¹ 51.35 (6.72) ²	-2.06 (1.22, -4.47)	-1.70 (369)	0.092
Total aggression	29.55 (8.59) ¹ 26.80 (9.46) ²	2.75 (-0.21, 5.71)	1.84 (369)	0.068
Physical aggression	7.77 (3.20) ¹ 6.48 (2.84) ²	1.29 (0.31, 2.28)	2.59 (369)	0.011*
Verbal aggression	6.24 (2.45) ¹ 6.52 (2.48) ²	-0.28 (-1.09, 0.53)	-0.69 (369)	0.493
Anger	8.10 (2.93) ¹ 6.97 (2.75) ²	1.13 (0.20, 2.05)	2.39 (369)	0.018*
Hostility	7.44 (2.92) ¹ 6.83 (2.95) ²	0.61 (-0.35, 1.57)	1.26 (369)	0.210
Total cognitive distortion	53.44 (15.74) ¹ 52.47 (19.40) ²	0.97 (2.92, -4.80)	0.33 (369)	0.740
Self-centered	12.58 (5.47) ¹ 12.31 (5.20) ²	0.27 (-1.48, 2.02)	0.31 (369)	0.760

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Blaming others	14.56 (5.74) ¹ 12.97 (5.39) ²	1.59 (-0.23, 3.41)	1.73 (369)	0.090
Minimisations	14.15 (5.09) ¹ 13.51 (5.07) ²	0.65 (0.84, -1.01)	0.77 (369)	0.442
Assuming worst	12.14 (4.72) ¹ 13.68 (5.16) ²	0.82 (-3.16, 0.82)	-1.88 (369)	0.063

Note: alndependent t-test was applied, 1 = study groups, 2 = control groups, number of subjects for Study = 71, Public = 300

4. DISCUSSION

The comparison of mean scores of psychological traits between study group (murderers) and public group (non-criminal population) was achieved using Independent sample T-tests. It is noteworthy to mention that the comparison of psychological traits between two groups do not suggest causality of relationship but statistically indicate the differences in mean scores of psychological traits between two groups. Such comparison will be very helpful for prevention and intervention efforts especially at the counselling and rehabilitation settings. For instance, identifying the psychological traits that showed significant differences between these two groups would instigate the counselling and clinical psychologists to develop new therapies or approaches that can ameliorate such traits. Besides that, the comparison of psychological traits between two groups would help to establish the baseline scores of a particular trait and such baseline scores may act as cut-off points for screening and monitoring high-risk individuals.

Based on the results, it was apparent that there are several statistically significant differences in mean scores of psychological traits between these two groups. In terms of personality traits, three personality traits showed significant differences between those two groups. Although the study revealed unexpected findings, the results depict that murderers tend to be more active and sociable compared to normal adults. The mean scores of Activity and Sociability seemed to be higher among murderers compared to the public group.

According to Alternative Five Factor Model by Zuckerman (2002), active individuals are characterised as high energy people who lead an active and busy lifestyle. Besides that, these individuals tend to prefer challenging and hard tasks compared to simple tasks. Meanwhile, individuals with high scores on personality trait sociability are characterised as individuals who prefer social activities such as parties and social events.

These individuals also love to communicate and interact with surrounding people and tend to have many circles of friends. In addition, they also exhibit intolerance for social isolation (Zuckerman et al., 1993). Therefore, it can be safely concluded that murderers in this study are considered as being more active and sociable in nature compared to the public group.

In addition, compared to control group, murderers appear to have a higher prevalent of Impulsive Sensation Seeking (ImpSS) personality trait. This imposed a relevant discussion on the underlying personality trait that imposed the study group to engage in murderous act. Ideally, this trait reflects individuals with a lack of planning and the gratification for impulsive moments. Broadly, 'impulsivity' reflects to 'a tendency to act spontaneously and without deliberation' (Carver, 2005, p. 313).

Individuals with higher prevalent of ImpSS tend to act fast on impulse without thinking and have high desire for thrills and excitement and novelty seeking (Zuckerman, kuhlman, Joireman, Teta & Kraft, 1993). In other words, it involves experience seeking and a willingness to take risks just for the sake of risk. Furthermore, this trait explains the preference for unpredictable situations and friends (Zuckerman et al. 1993). This may eventually act as one of underlying trait for their murderous act.

The present findings is further supported by Pakes and Pakes (2009) where criminals tend to be thrill seekers and more impulsive than non-criminals. In addition, a meta-analysis conducted by Miller and Lynam (2001) revealed that difficulty of controlling impulses is one of the strong trait associated with antisocial trait such as criminal behaviour. Another fascinating finding is that there is significant differences in mean scores of Physical Aggression and Anger between murderers and public group. Elaborating more on this, murderers tend to have a higher level of Physical Aggression and Anger compared to public group. The significant higher levels of Physical Aggression and Anger may have put forth the murderers to engage in murder.

In the context of Aggression Model by Buss and Perry (1992), Physical Aggression represents the behavioural construct or motor components of aggressive behaviour. Such construct involves hurting and harming others which include causing injuries to the target (Maxwell, 2007). Meanwhile, Anger is the constituent of emotional component of aggression which is highly associated with negative internal state including cognitive and perceptual distortions. This eventually leads to physiological arousal and preparation of aggression (Buss & Perry, 1992).

Reflecting on the cognitive distortion aspect, there is no statistical significant differences noted between these two groups. Although local studies (e.g., Rohany Nasir et al. 2016) have supported cognitive distortion as an important predictor for criminal behaviour, there is not much differences in the mean score of cognitive distortion between study and public groups. Similarly, there is no statistical difference in terms of self-control level between two groups although Gottfredson and Hirschi (1990) argued that one of the great differences between criminals and non-criminals is the level of self-control.

The present findings, though not able to speak confidently whether these psychological traits affected the murderers' involvement into criminal or murderous behaviour, do suggest that these psychological factors may increase the likelihood of offending acts. The findings, therefore suggest new areas of exploration with regard to comparison of psychological traits between murderers and non-criminal population.

5. CONCLUSION

The findings of the current study provide empirical evidence for the types of psychological traits that influenced the murderous behaviour among Malaysian murderers. The present findings also offer an in-depth understanding on the differences of psychological traits between murderers and non-criminal population. In-depth understanding on the psychology of criminals is pivotal to hinder oneself from criminal and delinquent acts. This will be helpful as further steps can be taken in an attempt to diminish and alter such traits among children and youngsters. Finally, the results of this study add substantial knowledge to the field of criminology and forensic psychology.

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