

ORIGINAL ARTICLE

Psychological traits underlying different killing methods among Malaysian male murderers

Mohammad Rahim KAMALUDDIN *BSc. (Hons)*, Nadiah Syariani MD. SHARIFF *BSc (Hons)*, *Siti NUR-FARLIZA* *MSc (Hons)*, **Azizah OTHMAN** *DPsych*, ***Khaidzir Hj. ISMAIL*** *PhD*, and Geshina Ayu MAT SAAT *PhD*.

*Forensic Sciences Programme, School of Health Sciences, Universiti Sains Malaysia, Kelantan, *Biostatistics and Research Methodology Unit, School of Medical Sciences, Health Campus, Universiti Sains Malaysia, Kelantan, **School of Medical Sciences, Universiti Sains Malaysia, Kelantan, and ***School of Psychology and Human Development Studies, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, Selangor, Malaysia*

Abstract

Murder is the most notorious crime that violates religious, social and cultural norms. Examining the types and number of different killing methods that used are pivotal in a murder case. However, the psychological traits underlying specific and multiple killing methods are still understudied. The present study attempts to fill this gap in knowledge by identifying the underlying psychological traits of different killing methods among Malaysian murderers. The study adapted an observational cross-sectional methodology using a guided self-administered questionnaire for data collection. The sampling frame consisted of 71 Malaysian male murderers from 11 Malaysian prisons who were selected using purposive sampling method. The participants were also asked to provide the types and number of different killing methods used to kill their respective victims. An independent sample t-test was performed to establish the mean score difference of psychological traits between the murderers who used single and multiple types of killing methods. Kruskal-Wallis tests were carried out to ascertain the psychological trait differences between specific types of killing methods. The results suggest that specific psychological traits underlie the type and number of different killing methods used during murder. The majority (88.7%) of murderers used a single method of killing. Multiple methods of killing was evident in 'premeditated' murder compared to 'passion' murder, and revenge was a common motive. Examples of multiple methods are combinations of stabbing and strangulation or slashing and physical force. An exception was premeditated murder committed with shooting, when it was usually a single method, attributed to the high lethality of firearms. Shooting was also notable when the motive was financial gain or related to drug dealing. Murderers who used multiple killing methods were more aggressive and sadistic than those who used a single killing method. Those who used multiple methods or slashing also displayed a higher level of minimisation traits. Despite its limitations, this study has provided some light on the underlying psychological traits of different killing methods which is useful in the field of criminology.

Keywords: Malaysia, murder, murderers, psychological traits, killing method

INTRODUCTION

In Malaysia, murder is constantly receiving attention from government agencies, policy makers, and the public. This is because it fosters high levels of anger, grief, and fear among Malaysians as well as portrays a negative image of an uncivil society. Murder incidents receive tremendous attention as the media has routinely

fuelled the public's fear by broadcasting incidents of murder and sensationalising facts.

The type of killing method that was used in a murder is one of the important aspects examined by forensic scientists and investigating officers as it helps to predict and direct the murder investigations. Specific killing methods are akin to a specific murderer's signature. Moreover,

type of killing methods, choice of weapon and targeted body parts tend to provide many clues associated with murder viz. apparent motive and determining the relationship between a murderer and a victim.¹

In countries where firearm legislation is less benevolent, gunshot homicides predominates.²⁻⁴ Deaths by blunt force and sharp force trauma, asphyxia, burning, and beating are more common in countries with more stringent laws on firearm ownership. For instance, stabbing and slashing methods are common killing methods in Malaysia⁵⁻⁶ and New Zealand.⁷

Killing partners by means of strangulation occur in substantial numbers of cases of attempted or completed spousal homicide of women.⁸ Most perpetrators had used their bare hands while other perpetrators used a ligature to ensure the death of the intended victim as a direct result of asphyxiation.⁹ Feminist scholars viewed killing as an extension of men's attempts in order to dominate and control their intimate partners since it is the ultimate and final restriction of one's freedom.¹⁰⁻¹¹

In murder involving children as victims, beating made up the majority of fatal mechanical injuries in the category of blunt force trauma.¹² Children's death due to physical abuse is characterized by repeated beatings for a long period of time, causing severe blunt trauma that may further cause bruises, fractures, ruptures of internal organs and life-threatening bleedings.¹³ The mechanisms for child beating are readily available in the form of superior adult physical force without the need of other weapon usage, for example, belt strap, iron, lighted cigarette and common household appliances.

Asphyxial deaths can be in such manners as strangulation, drowning and hanging.¹⁴⁻¹⁵ The manner of strangulation can be using a ligature or manual strength. However, asphyxial deaths are most commonly inflicted by using ligature compared to manual strangulation.¹⁵

A retrospective study in Turkey focusing on fire-related fatalities reported 9.7% of fire-homicidal death occurrences.¹⁶ These fire-homicidal deaths were further classified as: arson-related (1.1%), having traumatic reasons (7.8%), and unknown cause of death (0.8%).¹⁶ Homicidal burnings are commonly reported in India or South Africa¹⁷⁻¹⁸ but are comparatively rare in Europe, United States and Japan.¹⁹⁻²¹ Particularly, in India, spouse killings are often fire-related due to dowry harassment.²² This method of killing is usually disguised as kitchen accidents related to the use of kerosene and other

flammable agents as well as 'banking on' the flammable properties of garments worn and suicides.²³ In many cases of 'kitchen accidents', autopsies later revealed the unnatural death due to burns²⁴ resulting from injuries sustained from kitchen accidents,^{25,26} self-immolation²⁷ and domestic violence.^{25,28} However, most arsonist acts were post-mortem to homicides or other crimes (post-mortem burning). Studies showed that post-mortem burning was performed to conceal the death of most victims who were killed due to firearm injuries or strangulation.²⁹⁻³⁰

Although many investigations and evidences have been put forth to explain the potentially associated factors for different killing methods, the underlying psychological traits for different killing methods among the 'mentally fit' murderers have still remained underexplored, especially in the South-East Asian region. It is essential to shed some empirical perspectives on the underlying psychological traits of the murderers in the context of killing methods for investigative purposes.

The present study significantly differs from other studies as the information on killing method was obtained from the respective murderer rather than from autopsy reports, official statistics, newspapers, or legal reports. The findings that are generated in this study may provide new insights and inputs to criminologists, investigative psychologists, forensic pathologists, and crime scene analysts on the psychological profiling of murderers. It is anticipated that the results of this study would add substantial and contemporary knowledge to the criminological literature.

METHODOLOGY

The present study was an observational cross-sectional study that was conducted in 11 Malaysian prisons. A total number of 71 male murderers aged 21 years and older participated in this study. The selection of respondents was based on the predetermined selection criteria using purposive sampling method.

The quantitative research method has been applied as it is felt as the most ideal approach to achieve the aims of this study. The guided self-administered questionnaire: PsychoMechanical Questionnaire (PMQ) was used as a research tool to obtain information regarding the underlying psychological traits of different killing methods among male murderers. The participants were assured of anonymity and confidentiality in order to maintain the honesty and validity of their responses.

Measures

The PMQ consisted of mainly three sections. The content of the PMQ are as follows:

Socio-demographic section

This section was designed to establish the socio-demographic profiles of the participants. It included items on the participant's age, ethnicity, marital status, occupational and educational status.

Killing method profile section

Two questions were asked in this section. The first was on the number of different killing methods that were personally used in carrying out murder. Participants were required to tick either 'single' or 'multiple' type killing methods. Here, the usage of more than one type of killing method was considered as 'multiple' killing method (i.e.: combination of strangulation and stabbing). The second question was on the type of the killing method itself. The participants were asked to mention the specific type of killing method that was used in completing the murder of their respective victim (i.e.: shooting, stabbing, or strangulation).

Psychometric instruments section

Four Malay version psychometric instruments were used in this study: Zuckerman-Kuhlman-personality Questionnaire-50-Cross Culture (ZKPQ-M-40-CC), Aggression Questionnaire (AQ-M), Self-Control Scale (SCS-M) and "How I Think" Questionnaire (HIT-M). A psychometric validation study was completed prior to the usage of the above mentioned questionnaires in this current study. This validation process was done to ensure the viability and compatibility of the questionnaires to the Malaysian context.

The validation process involved: forward-backward translations and three forms of validity (content, face, and construct). In addition, the internal consistency of each psychometric instrument was calculated using Cronbach's Alpha method. Overall, the results were good and satisfactory. All the items in this section were answered using a five-point Likert scale ranging from 1 (not at all like me) to 5 (completely like me). The following subsections briefly explain the content and psychometric properties of each psychometric instrument.

- i. ZKPQ-M-40-CC: This instrument was the simplified original version of ZKPQ-50-CC which consisted of 50 items.³¹ 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 0.75.³²

- ii. SCS-M: SCS-M is a Malay version of the Self-Control Scale by Grasmick *et al.*³³ In this study, SCS-M was administered as a unidimensional scale which consisted of 18 items. The Cronbach's Alpha value was 0.80.³⁴
- iii. AQ-12-M: AQ-12 is the short version of the Aggression Questionnaire by Buss and Perry.³⁵ The AQ-12 consisted of 12 items³⁶ 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.
- iv. HIT-M: HIT-M is a Malay version of "How I Think" Questionnaire designed by Barriga *et al.*³⁷ 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. The internal consistency of HIT-M was 0.90.³⁸

Analyses protocol

The responses from completed PMQs were compiled into a set of systematic and computerized data. Analyses were performed using the Statistical Package for Social Sciences (SPSS) version 20.0. Descriptive statistics were generated to summarize the socio-demographic information of the respondents and killing method profiles.

In order to ascertain the underlying psychological traits of different killing methods, both parametric and non-parametric approaches were employed. The determination of either parametric or non-parametric was concluded based on the normality of data. The normality of data was screened using measure of skewness and kurtosis. In addition, Kolmogorov-Smirnov tests were also employed to confirm the normality of data.

Corresponding to the normality of data and number of groups, an Independent sample T-test was conducted to identify the mean difference between murderers who used single and multiple

type of killing methods. Kruskal-wallis test was used to identify the median differences on the psychological scores across specific types of killing methods.

RESULTS

Socio-demographic profile

Important information such as age, ethnicity, religion, marital, occupational and educational status of the participants were highlighted. The age of respondents during the commission of murder ranged from 21 to 64 years with a mean age of 29.9 years old (SD = 10.76). Respondents' ethnic backgrounds consisted of 40.8% Malay, 33.8% Indian, 23.9% Chinese, and 1.4% others. This is not reflective of the population distribution. A high proportion of respondents (46.5%) were single during the commission of murder, 33.8% were married, 15.5% were divorced and separated from their partners and the rest (4.2%) were widowers.

Prior to their conviction, most of the respondents were in semiskilled professions (59.2%) such as security guards, lorry drivers, laborers, and odd job workers. 12.7% of respondents had worked in clerical or skilled professions. 11.3% were self-employed and engaged in business at the time crime was committed. The remaining 11.3% were categorized as not working.

As to the highest level of education, 36.6% of the respondents achieved lower secondary education and 31.0% achieved upper secondary education. 25.4% completed primary education

after which they stopped formal education. 2.85% of respondents had pre-university education and 2.8% had diplomas. One respondent did not attend formal education.

Killing method profile

Most (88.7%) of the participants murdered their victim using a single method and the rest used multiple methods to kill their victims (Table 1). Here, the 'multiple methods of killings' is defined as the combination of two or more different types of killing methods, such as a combination of strangulation and stabbing. Table 2 shows the combination of killing method that was performed by eight participants and the type of murder that they had committed.

Table 1 shows that the majority of murders were performed using stabbing method (31.0%), followed by physical force (25.4%), and slashing (18.3%). These stabbing, physical force and slashing methods seemed to be the most common methods among Malaysian murderers. Other methods such as shooting, smothering, and strangulation seemed to be the least preferred methods used by the perpetrators in killing their victims. Multiple killing methods are observed among eight respondents where premeditated murder was the common type of murder among them (Table 2).

Psychological traits underlying different killing methods

The psychological traits underlying the number of different type of killing methods viz. single method ($n = 63$) and multiple methods ($n = 8$),

TABLE 1: Killing method profile of Malaysian male murderers ($n = 71$)

Variables	n (%)
Number of killing methods	
Single	63 (88.7)
Multiple	8 (11.3)
Method of killing	
Stabbing	22 (31.0)
Shooting	3 (4.2)
Slashing	13 (18.3)
Physical force	18 (25.4)
Smothering	1 (1.4)
Burning	2 (2.8)
Strangulation	3 (4.2)
Cut-up	1 (1.4)
Multiple methods	8 (11.3)

TABLE 2: Combination of killing methods and type of murder ($n = 8$)

Respondents	Initial method	Subsequent method	Type of murder
1	Slashing	Strangulation	Premeditated
2	Slashing	Physical force	Premeditated
3	Stabbing	Physical force	Passion
4	Stabbing	Strangulation	Premeditated
5	Physical force	Strangulation	Premeditated
6	Stabbing	Strangulation	Premeditated
7	Stabbing	Burning while alive	Premeditated
8	Stabbing	Burning while alive	Premeditated

were analyzed using Independent-sample-t-test. This resulted in several significant results: Agg-Host [$t(69) = -2.31, p = 0.02$], overall aggression [$t(69) = -2.77, p = 0.01$], and overall SSCD [$t(69) = -2.40, p = 0.02$]. In addition, highly significant results were noted at the level of 0.001 for mean scores of physical aggression [$t(69) = -3.08$] and verbal aggression [$t(69) = -3.68$]. There were no significant differences in mean scores for other psychological measures. These results are displayed in Table 3 below.

Kruskal-Wallis tests were conducted to test the significant median differences in psychological variables across nine types of killing methods (stabbing, shooting, slashing, physical force, smothering, burning, strangulation, cut-up, multiple methods). The Kruskal-Wallis test indicated significant differences for verbal aggression [$\chi^2(8) = 16.25, p = 0.039$] and minimisations [$\chi^2(8) = 16.04, p < 0.042$]. No other significant differences were observed. The outputs of Kruskal-Wallis test are presented in Table 4 below.

Due to the initial significant findings in Table 3, median comparisons for verbal aggression and minimisations across nine types of killing methods were performed [Table 5]. In the verbal aggression variable, the median for multiple methods (10.00, IqR 2.75) seemed to be higher than other types of killing methods. As for the minimisations variable, the median for multiple methods (17.50, IqR 7.00) and slashing (16.00, IqR 6.50) are higher than other types of killing methods.

DISCUSSION

Based on the killing method profiles of murderers, the majority of the murderers used a single method of killing and very few of them used multiple killing methods. As can be

seen in Table 2, the use of multiple methods of killing was evident in 'premeditated' murder compared to 'passion' murder. Revenge was the common motive when multiple methods of killing were involved. In the use of multiple types of killing methods, murderers are likely to combine slashing and strangulation or stabbing and physical force. In respect of this, the use of multiple methods may indicate the premeditation element in which the murderers planned a number of killing methods to ensure the death of a victim.

These above findings do not apply when premeditated murder is committed with shooting in which there was no combination of killing methods, meaning that premeditated murder via shooting is a single method of killing among Malaysian murderers. This is likely attributed to the high lethality of firearms. The usage of a single killing method, especially shooting; is often observed in instrumental murder which is performed for some form of benefit, like financial gain or to establish power over gang territory.

In respect of this, expressive murder can be defined as murder that was committed as a result of expression, volatile emotions, and psychological states.³⁹ Emotional states like anger, frustration, and hostility are said to lead an individual to perform expressive murders. Taking the contrary view, instrumental murders are performed for some benefits such as financial gain, power, and wealth status³⁹. This assertion was supported by Morall⁴⁰ in which instrumental motivation is intended to obtain a gain for the offender, either in terms of material or social status. Examples of instrumental motives are desire for financial gain, control over the victim, and rape-cum murder.

With regards to type of killing, stabbing using knives was the most common among the Malaysian murderers. Stabbing using knives

TABLE 3: Comparison of psychological mean scores between single and multiple killing methods

Measure	Mean (SD)	Mean difference (95% CI)	t-statistic ^a (df)	p-value
Activity	29.13 (5.77) ¹ 31.13 (4.64) ²	-2.00 (-6.24, 2.24)	-0.94 (69)	0.35
Sociability	26.49 (4.69) ¹ 26.88 (7.97) ²	-0.38 (-4.22, 3.45)	-0.20 (69)	0.84
Agg-Host	20.11 (7.22) ¹ 26.25 (5.82) ²	-6.14 (-11.45, -0.83)	-2.31 (69)	0.02**
ImpSS	21.40 (6.72) ¹ 23.63 (3.81) ²	-2.33 (-7.08, 2.63)	-0.92 (69)	0.36
N-Anx	17.98 (5.66) ¹ 17.75 (4.40) ²	0.23 (-3.92, 4.39)	0.11 (69)	0.91
Self-control	49.19 (8.06) ¹ 50.00 (7.45) ²	-0.81 (-6.80, 5.18)	-2.70 (69)	0.79
Overall aggression	28.59 (8.17) ¹ 37.13 (8.51) ²	-8.54 (-14.68, -2.39)	-2.77 (69)	0.01**
Physical aggression	7.38 (3.10) ¹ 10.88 (2.16) ²	-3.49 (-5.76, -1.23)	-3.08 (69)	0.00**
Verbal aggression	5.89 (2.20) ¹ 9.00(2.67) ²	-3.11 (-4.80, -1.42)	-3.68 (69)	0.00**
Anger	8.02 (2.96) ¹ 8.75 (2.71) ²	-0.73 (-2.94, 1.47)	-0.67 (69)	0.51
Hostility	7.30 (2.87) ¹ 8.50 (3.30) ²	-1.20 (-3.38, 0.98)	-1.10 (69)	0.28
Overall SSCD	51.89 (15.80) ¹ 65.63 (8.78) ²	-13.74 (-25.14, -2.33)	-2.40 (69)	0.02**
Self-centered	12.10 (5.40) ¹ 16.38 (4.75) ²	-4.28 (-8.28, -0.28)	-2.14 (69)	0.04
Blaming others	14.25 (5.82) ¹ 17.00 (4.69) ²	-2.75 (-7.02, 1.53)	-1.28 (69)	0.21
Minimisations	13.70 (5.10) ¹ 17.75 (3.41) ²	-4.05 (-7.76, -0.34)	-2.18 (69)	0.33
Assuming worst	11.84 (4.61) ¹ 14.50 (5.29) ²	-2.66 (-6.16, 0.85)	-1.513 (69)	0.14

Note: ^aIndependent t-test was applied, ¹single killing method, ²multiple killing method, number of subjects for Single killing method = 63, Multiple killing method = 8

was noted in both instrumental and expressive murders due to the easy availability of knives. Physical force was more common in expressive and instrumental-expressive murder. Examples of physical force include beating and kicking using blunt weapons. Using continual physical force was also evident among child murders and abuse-cum-murders. In addition, youths tend to prefer physical force compared to their older counterparts in committing murder.

Slashing is also another common method of killing which is prevalent in expressive and instrumental-expressive murder. In most

instances, slashing using machete (*parangs*) were common during retaliation and gang-fights involving acquaintances and strangers. The prevalent use of stabbing and slashing methods may be associated with the widespread availability of sharp weapons. The present findings are similar to previous national studies by Bhupinder *et al.*⁵ and Kumar *et al.*⁶ and are in line with the findings of other studies in India⁴¹⁻⁴² and Hong Kong.⁴³

In countries with more restrictive gun ownership, such as Malaysia, India, New Zealand, and Finland, stabbing using knives

TABLE 4: Distribution of psychological variables across types of methods of killing (n = 71)

Null hypothesis (H_0)	p-value
The distribution of Activity is the same across types of MoK	0.144
The distribution of Sociability is the same across types of MoK	0.868
The distribution of Agg-Host is the same across types of MoK	0.278
The distribution of ImpSS is the same across types of MoK	0.212
The distribution of N-Anx is the same across types of MoK	0.507
The distribution of overall Aggression is the same across types of MoK	0.129
The distribution of physical aggression is the same across types of MoK	0.067
The distribution of verbal aggression is the same across types of MoK	0.039*
The distribution of anger is the same across types of MoK	0.293
The distribution of hostility is the same across types of MoK	0.277
The distribution of low self-control is the same across types of MoK	0.336
The distribution of overall SSCD is the same across types of MoK	0.297
The distribution of self-centered is the same across types of MoK	0.273
The distribution of blaming others is the same across types of MoK	0.528
The distribution of minimisations is the same across types of MoK	0.042*
The distribution of assuming the worst is the same across types of MoK	0.578

Note: *Significant at $p < 0.05$ (null hypothesis is rejected), MoK = Method of Killings

featured prominently compared to shooting methods with firearms as the tool of violence.^{7,42,44} Among the Malaysian murderers, shooting using firearm was noted in two cases in which the

motive of murder was financial gain. The use of firearm was also noted in one instrumental-expressive murder during drug dealing.

TABLE 5: Median comparisons for verbal aggression and minimisations across nine types of killing methods

Measure	Groups	n	Median (IqR)	X ² - statistics ^a (df)	p-value
Verbal aggression	Stabbing	22	5.00 (4.25)	16.25 (8)	0.039
	Shooting	3	5.00 (-)		
	Strangulation	3	-		
	Physical force	18	5.50 (3.25)		
	Slashing	13	7.00 (3.00)		
	Smothering	1	-		
	Cut-up	1	-		
	Fire	2	4.50 (-)		
	Multiple methods	8	10.00 (2.75)		
Minimisations	Stabbing	22	11.50 (6.75)	16.04 (8)	0.042
	Shooting	3	13.00 (-)		
	Strangulation	3	14.00 (-)		
	Physical force	18	15.50 (7.75)		
	Slashing	13	16.00 (6.50)		
	Smothering	1	-		
	Cut-up	1	-		
	Fire	2	8.50 (-)		
	Multiple methods	8	17.50 (7.00)		

^aKruskal-Wallis Test, verbal aggression is constant when methods of killing = strangulation, smothering, and cut-up. Minimisations is constant when methods of killing = cut-up and fire. These have been omitted.

As indicated by Table 3, there are significant differences between murderers who used single and multiple killing methods in terms of Aggressiveness-Hostility personality trait, overall aggression, physical aggression, verbal aggression, and overall self-serving cognitive distortion. In general, murderers who used multiple killing methods are likely more aggressive and sadistic than murderers who used a single killing method. These findings further support the general characterisation of aggressive individuals who are described as being violent in nature and exhibit antisocial behaviors.^{45,46}

The findings of this present study also suggest that there is a significant difference in verbal aggression and minimisations across types of killing methods used in murder. Based on median comparisons, murderers who used multiple methods tend to be verbally aggressive and display minimisation traits. In addition, individuals who used slashing killing method also display high level of minimisation traits.

Minimisation traits include reducing negative behavioral outcomes by rationalizing misdeeds as causing no real harm, acceptable, or referring to others with belittling or dehumanizing labels.³⁷ According to the SSCD Model by Barriga *et al.*,³⁷ minimisations trait is a form of secondary cognitive distortions which are perceived as pre or post-transgression rationalizations. These rationalizations neutralize conscience, reduce stress, empathy, and guilty feelings.⁴⁷

In addition, this form of cognitive distortion protects self-image when a person displays or exhibits antisocial behaviour or deviant characteristics.^{37,48} Such form of cognitive distortion may influence the murderers to use multiple methods. This bears more research in future.

Limitations

The present study is unique in Malaysia and South-East Asia as it explores the underlying psychological traits on different killing methods among Malaysian male murderers. While the present study only recruited 71 murderers as the samples of the study, it was not the intention of this study to generalise the whole murderers' population in Malaysia. Rather, it was a ground-breaking study which intends to explore the influence of psychological traits of different killing methods among the sample of Malaysian male murderers.

Readers must also take note that, the use of number of killing methods may also be influenced

by other factors such as availability of weapons at the scene of murder, the failed outcome (death) of the first killing method, sudden appearance of potential witness, and many more. Despite these limitations, the present study successfully provide some light on the underlying psychological traits of different killing methods among a sample of 71 convicted Malaysian male murderers.

Conclusion

In conclusion, the results of the present study suggest that specific psychological traits underlie the type and number of different killing methods used during murder. Empirical assessment of psychological traits on different killing methods seem to be useful and beneficial as it provides valuable information in the profiling of unknown offenders. Furthermore, findings of this study may benefit many investigative personnel in carrying out their duties. As such, the results of this study add substantial knowledge to the field of criminology.

ACKNOWLEDGEMENTS

The authors would like to express their sincerest gratitude and thanks to Universiti Sains Malaysia and the USM Vice Chancellor Award Programme for supporting this study. Appreciation is also extended to the Malaysia Department of Prisons for allowing the researchers to conduct this study. The authors also thank Kpj Dato' Alzafray Mohamed Alnassif and TKPj Supri Hashim for their support and encouragement. Authors would also like to thank Professor Ramayah Thurasamy from Universiti Sains Malaysia for his valuable statistical consultation and all the participants for their participation and cooperation in making this study successful.

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