Aggression Profiles of Incarcerated Malaysian Male Murderers

Profil Agresif Pembunuh Lelaki Malaysia yang telah Dipenjarakan

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ABSTRACT

Criminological and psychological researches have highlighted aggressive behavior as the basic ingredient of violent crime, including murder. Increased concerns about the rate of murder in Malaysia have called for studies examining aggression profiles of the Malaysian murderers. The present study intends to explore the aggression profiles of Malaysian male prisoners convicted of murder, utilizing Buss and Perry's Four Structure Aggression Model. A cross-sectional methodology was adapted as a research design of the present study. A guided self-administered questionnaire was distributed among 71 Malaysian male prisoners convicted of murder using purposive sampling method. The entire aggression profiles are assessed using Aggression Questionnaire-12 items (AQ-12). Descriptive item analyses were carried out to elicit the level of responses for each item in the AQ-12 while bivariate analyses were used to ascertain associations among aggression subscales. The aggression profiles indicated that the mean score of anger (8.10, SD = 2.93) was higher than other forms of aggression traits. The least mean score was noted for verbal aggression (6.24, SD = 2.45). Among the respondents, 54.9% of them scored above the mean score (8.10) for anger subscale. This was followed by 52.1% who scored above the mean score (7.77) for physical aggression subscale. The correlations among all the aggression subscales had indicated positive and significant associations which in turn, may enable it to be a platform to inspire other researches in this field. In conclusion, this ground-breaking study among male murderers has successfully explored aggression profiles using AQ-12.

Keywords: Violence; crime; criminal behavior; male murderers; murder

ABSTRAK

Kajian kriminologi dan psikologi telah mengutarakan tingkah laku agresif sebagai ramuan asas untuk jenayah kekerasan, termasuk pembunuhan. Peningkatan kadar pembunuhan di Malaysia yang membimbangkan telah menggesa keperluan kajian yang mengkaji profil agresif para pembunuh lelaki Malaysia. Kajian ini bertujuan untuk meneroka profil agresif banduan lelaki Malaysia yang disabitkan atas kesalahan membunuh, dengan menggunakan Struktur Model Agresif Buss dan Perry. Satu kaedah keratan rentas telah diguna pakai sebagai reka bentuk penyelidikan kajian ini. Soal selidik yang ditadbir sendiri secara panduan telah diedarkan kepada 71 banduan lelaki Malaysia yang disabitkan atas kesalahan membunuh dan para responden telah direkrut dengan menggunakan kaedah persampelan bertujuan. Profil agresif dinilai menggunakan alat ujian agresif (AQ-12). Analisis item deskriptif telah dijalankan bagi mendapatkan tahap respon untuk setiap item dalam AQ-12 manakala analisis bivariat telah digunakan untuk memastikan hubungan dalam kalangan skala kecil agresif. Profil agresif menunjukkan bahawa skor purata kemarahan (8.10, SD = 2.93) adalah lebih tinggi daripada bentuk agresif yang lain. Purata markah yang paling sedikit pula ditunjukkan oleh agresif lisan (6.24, SD = 2.45). Dalam kalangan responden, 54.9% daripadanya mendapat skor lebih daripada skor purata (8.10) untuk skala kemarahan. Ini diikuti dengan 52.1% responden yang mendapat skor lebih daripada skor purata (7.77) untuk skala agresif fizikal. Korelasi antara skala agresif telah menunjukkan hubungan yang positif dan signifikan di mana dapatan kajian ini boleh menjadi kajian asas untuk kajian-kajian yang akan datang dalam bidang ini. Kesimpulannya, kajian ini menjadi kajian pertama dalam kalangan pembunuh lelaki dalam menerokai profil agresif dengan menggunakan AQ-12.

Kata kunci: Keganasan; jenayah; tingkah laku jenayah; pembunuh lelaki; pembunuhan

INTRODUCTION

Murder is an unlawful act with the intention of killing a person. It is the most atrocious and notorious crime that violates religious, social and cultural norms. It is perceived as the highest form of violence in most cultures. The act of murder is extremely detrimental to the moral order and relationships within society. This fatal violence represents the most serious end of the spectrum of violent crime and according to Cao, Hou and Huang (2008), murder is the most heinous crime of all crimes monitored in the Crime Index.

Malaysia, which is considered as one of the most rapidly developing countries in the Southeast Asia region is facing few challenges including fluctuating rate of violent murder incidents. Despite harsh punishments and high number of occurrences every year, the nature and extent of murder are getting more severe and becoming increasingly complex as evidenced by the number of gruesome murders within Malaysia. It can be perceived that the degree of murder in Malaysia is alarming and eye-catching. This is evident through gruesome accounts of murders that are featured as news headlines in local media over recent years.

In Malaysia, the murder rate and other violent crimes constitutes one of the biggest social ills and poses a great challenge to eradicate. The prevalence of murder in Malaysia is worrisome as it fosters a) public fear, distrust, anger, and perceptual errors, and b) causes grief among family members and friends of the murdered victim. While there are many studies from outside Asia, murder studies in South-East Asia are fairly rare. In addition, based on a 15 year literature search, there is almost no literature available on Malaysian murders and murderers. This is surprising, given the degree of violence perpetrated against victims, the consequences of murder to the victim's family and friends, and the attention given by the mass media and local non-government organizations.

A review by Azlina (2010) had reported that around 150 local studies were conducted related to social problems until the year 2000, mostly focusing on prevalence and typology of such problems. Researches focusing on serious crimes such as murder and robbery are still insufficient in Malaysia (Azlina 2010). It is interesting to note that, in the past decade, none of the criminological research was devoted to study the issue of murder and murderers in Malaysia, despite the advances

in forensics and criminal investigation. This may be partly due to the higher prevalence rates of less serious crimes and difficulty in obtaining access to murderers and victim's family members. As a consequence, scholars, law enforcement agencies, and the public know relatively little about murderous behaviors and their antecedents from a localized criminological perspective.

References regarding murder are often adopted from western countries and fitted into the Malaysian context. This is inappropriate due to differences in culture and social norms. Applying non-localized explanations to a local phenomenon raises validity and reliability concerns. These subsequently, negatively influence and impact any crime prevention initiative.

In order to address this scarcity, the focus of this present study is to explore the aggressive traits of male prisoners who have been convicted of murder. Aggressive traits were examined as there is a large body of literature that provides support for aggressive traits as basic ingredients of violent crime like murder, assault and battery. In sociopsychological terms, aggression can be defined as a psychological phenomenon which describes a broad category of intentional behavior of causing harm to another by means of physical or verbal attacks (Comer & Gould 2011). Previous studies (Berkowitz 1993; Huesmann & Miller 1994) defined aggression as a behavior directed towards someone or something, either physical or verbal (Delva-Tauili'ili 1995), and the result of aggression is personal injury or destruction of property.

Early research on aggression highlighted aggression as the basic ingredient of violent crime (Feshbach 1964). The findings from the accumulated literatures (Berkowitz 1993; Huesmann & Miller 1994; Delva-Tauili'ili 1995; Anderson & Bushman 2002) indicate aggression as a behavior which leads to violence. In addition, Anderson and Bushman (2002) had claimed violence as aggression that has extreme harm, including death as its goal. Ultimately, violent crimes like murder and homicide are often addressed as the product of aggression (Feshbach 1964; Huesmann & Miler 1994; Anderson & Bushman 2002).

Aggressive behavior seems to be the outcome of the frustration due to hindrances in goal attainment (Berkowitz 1990). In the neurobiological perspective, aggression has been linked with high levels of testosterone and low levels of certain

neurotransmitters such as serotonin (Dabbs, Riad & Chance 2001). Aggression has also been linked to genetics (Citrome & Volavka 2003; Ferguson & Beaver 2009) and social learning (Landsford 2012). Other predisposing factors for aggression include fetal environment, obstetric complications, the rearing environment, biological factors, and psychiatric disorders like substance abuse, psychosis, depression, and personality disorders (Citrome & Volavka 2003).

Recently, a study conducted by Mohammad Rahim et al. (2014a) among Malaysian murderers has provided statistical evidence on the role of personality traits as important predictors of aggressive behavior. Besides that, a study by Saralah Devi (2010) confirmed the relationship between aggression and other variables such as depression and ability change which is largely linked with criminality. Furthermore, significant associations between personality traits and aggression were also noted among Malay adult male inmates in Malaysia (Mohammad Rahim Kamaluddin et al. 2014b). Another study conducted by Mohammad Rahim et al. (2016) evidenced a significant correlation between low self-control and aggression among Malaysian male prisoners. Although Ferguson et al. (2008) evidenced that personality factors are more critical than environmental factors in developing aggressive traits in an individual, it was argued that there is no single factor credible enough to determine the root of aggression (Rappaport & Thomas 2004). The current consensus is that aggression is multi-determined (Sarchiapone et al. 2009).

According to Buss (1961), aggression is characterized as the outcome of the links between emotions (anger), thoughts (hostility), and aggressive behavior. One of the models that have been explicitly used in criminological studies is the Aggression Model (AM) by Buss and Perry (1992), a four structure model which describes the dispositional sub-traits of aggression. The four types of aggression are: physical aggression, verbal aggression, anger, and hostility (Buss & Perry 1992).

The strong theoretical foundation of these four types of aggression as a global conceptualization of aggression is well-evidenced in many violence-related literatures (Buss 1961; Buss & Perry 1992; Harris 1995). The wide usage of AM subsequently leads the current researchers to explore the aggression profile of Malaysian prisoners who are convicted of murder using Buss and Perry's AM. According to AM, both physical and verbal aggression reflects the instrumental component of aggression which is usually conceived as a premeditated means of obtaining some goals and to harm the victim. These physical and verbal aggressions are also labeled as the motor component of aggression. The facet of physical aggression consists of kicking, beating, and hurting (Trninic, Barancic, & Nazor 2008). Examples of verbal aggression include shouting, threatening, and insulting others (Trninic, Barancic & Nazor 2008).

In addition, anger implies the physiological activation and reflects the emotional component of aggression. According to AM, this emotional component of aggression is usually conceived as impulsive, thoughtlessness and driven by anger. This emotional component of aggression is said to be the result of perceived provocation which in turn motivates criminals to harm the target. The fourth type covered in the AM is hostility. Hostility reflects the cognitive component of aggression which involves negative feelings such as ill feelings, opposition and injustice. Hostility is viewed as a perceived threat or insult which differentiates it from instrumental aggression. In AM, anger often acts as a psychological bridge which connects both instrumental and cognitive components (Buss & Perry 1992).

Since a variety of mechanisms linking aggression and violent behavior have been proposed, the present study is aimed at exploring the aggression profile of male prisoners who are convicted of murder. Furthermore, the present research is carried out as an approach to combat against crime as 'crime' is amongst the National Key Result Area (NKRA) being focused on in the Government Transformation Programme (GTP). The NKRA Reducing Crime initiative is led by the Ministry of Home Affairs (MoHA). Among the pertinent issues raised in NKRA Reducing Crime are the process of combating crime, crime prevention, crime tracking and arrest, trial of offenders as well as prison and rehabilitation efforts (Official Portal of MoHA 2013).

In order to achieve the above mentioned aims, research and knowledge regarding crime and criminal behavior are considered vital elements. Such knowledge provides key risk factors and triggers for offending in order to implement sustainable solutions and risk-focused preventions.

Therefore, it is anticipated that the present study would be one key research in addressing murder and murderers' behavior parallel to the aim of NKRA Reducing Crime. With that in mind, the present study assesses the aggression profile utilizing the Aggression Model by Buss and Perry (1992). It is anticipated that the findings of this study may provide some valuable input on the aggression profiles of Malaysian male murderers and also act as groundwork and reference for other researchers in criminology and forensic psychology fields.

METHODS

STUDY DESIGN AND RESPONDENTS

The present study adapted a cross-sectional methodology using a guided self-administered questionnaire for data collection. The sampling frame consisted of 71 Malaysian male prisoners convicted of murder (under section 300 of Malaysian Penal Code) aged 21 and older. The respondents were selected using non-probability sampling method which was purposive sampling method. Due to access restraints and the level of risk and dangerousness of this vulnerable group, the selection of respondents were made by the prison authorities. The type of sampling was also selected to assure the safety of the researchers and prevent any possible opportunities to escape and perpetration of violence by the inmates. Though this type of sampling method appears to be judgmental rather than based on probability, the researchers had no choice since the issue of safety and security needed to be prioritized

Since not all murderers can be included as the sample for this study, a careful selection of samples is important to ensure that the sample selected will be representative of the population to be studied. A series of inclusion and exclusion criteria were developed for the respondents. Some of the inclusion criteria were: Malaysian prisoners from the selected prisons charged for murder under section 300 (Penal Code Act 574 2013), adult male murderers with age range between 21 and 65 years old, not diagnosed with any mental illness and consented to participate in the study. Incarcerated murderers who were deemed as aggressive and dangerous and inmates charged under Section 299 (culpable homicide not amounting to murder) were excluded.

The present study was carried out in 11 prisons within Peninsular Malaysia. The selection of the prisons was made by the Prison Department of Malaysia. Prior to the data collection, the ethical approval and permissions were granted by the Malaysian Department of Prisons and the Human Ethical Committee of Universiti Sains Malaysia. The participation was on voluntary basis and the anonymity and confidentiality of their responses were assured and maintained. Proper instructions were given verbally and in writing to the respondents before the administration of the questionnaire. Respondents were given copies of the participant information sheet and participant consent form. Respondents were also informed that they could choose not to participate in this study. Respondents indicated their agreement to participate in the present study by signing a consent form. All the respondents understood the reasons and significance of the study. The researchers made stringent efforts to safeguard confidentiality and anonymity of all data in which all the information were kept confidential and respondents were number coded and kept anonymous.

MEASURES

The present study was conducted using a guided self-administered questionnaire. The questionnaire consisted of two sections: socio-demography of respondents and a validated Malay psychometric instrument: Aggression Questionnaire-12-items. The contents of the questionnaire are as follows:

SOCIO-DEMOGRAPHIC SECTION

This section was designed to identify the socio-demographic profiles of the respondents. It included items on participant's age, ethnicity, religion, marital status, occupation and educational status. The marital and occupational status was based on prior to incarceration.

PSYCHOMETRIC INSTRUMENT

AQ-12: 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 (physical expression of anger), verbal aggression (argumentative and hostile language),

anger (agitation and sense of control), and hostility (resentment, social isolation and paranoia). This instrument contains items which measure a respondent's self-perceived levels of aggression.

The emergence of a short version of AQ 12-item is considered a great gift to the world of social science as it consists of fewer items (Bryant & Smith 2001). The four-factor structure was replicated in various samples of adults (Bryant & Smith 2001) and adolescents (Ang 2007). In fact, Bryant and Smith (2001) claimed that the AQ 12-item demonstrated to be superior psychometric properties compared to the original version. Based on this assertion, the present study measured levels of aggression among the murderers using AQ 12-item.

Each subscale had three items and each item was answered on a five-point Likert type scale ranging from one (not at all like me) to 5 (completely like me). The internal consistency of Malay AQ-12 for the Malaysian criminal population was 0.80 (Zaihairul Idrus, Nor Hafizah Nor Hamid & Geshina Ayu Mat Saat 2012).

ANALYSES PROTOCOLS

The analysis of the present study proceeded along two directions. The first line of analysis was descriptive analysis focusing on item level analyses for each aggression items. This was followed by the mean score of each subscale of aggression.

Descriptive analyses were carried out to illustrate the distribution of aggression scores among the respondents and its statistics were presented using mean and standard deviation (SD) values. The mean was used to illustrate the central tendency while SD was used to show the spread and dispersion of the scores.

The second line of analysis examined the correlations among the aggression subscales. In this respect, the associations between the subscales were established using the Pearson correlation coefficient test. The Pearson correlation coefficient test was performed due to the normal distribution of the scores which was checked using measure of skewness and the Kolmogrov-Smirnov Test.

The responses from collected questionnaires were compiled into a set of systematic and computerized data. Analyses were performed using the Statistical Package for Social Sciences (IBM SPSS) version 20.0. Descriptive statistics and inferential statistics were employed to achieve the purpose of the study.

RESULTS AND DISCUSSION

SOCIO-DEMOGRAPHIC PROFILE

The basic socio-demographic information of the respondents was collected and presented in the form of descriptive data. Table 1 below provides a summary of respondents' socio-demographic information. The age of respondents during commission of murder ranged from 21 to 64 years old with a mean age of 29.94 years (SD = 10.76). Ethnic backgrounds of these respondents consisted of 40.8% Malay, 33.8% Indian, 23.9% Chinese, and 1.4% others. With regards to religion, the majority (45.1%) of the respondents were Muslims, followed by Hindu (26.8%), Buddhist (22.5%) and only 5.6% were Christians.

A high proportion of respondents (46.5%) were still single during the commission of murder, 33.8% were married, 15.5% were divorced and separated from their partners and the remaining 4.2% were widowers. As to the highest level of education, 36.6% of the respondents achieved lower secondary education (Form 1 – Form 3) and 31.0% of them achieved upper secondary education (Form 4 – Form 5). 25.4% completed primary education and a small percentage of respondents had pre-university education (2.8%), diplomas and above (2.8%). Only one respondent was not formally educated.

Prior to their conviction, most of the respondents had semiskilled professions (59.2%) such as security guards, lorry drivers, laborers, and odd job workers. Meanwhile, 12.7% had worked in clerical or skilled professions. 11.3% of respondents were considered not working. The same proportion was observed for respondents who were self-employed and engaged in business (11.3%). Four respondents seemed to be former government employees.

TABLE 1. Socio-Demographic Profile of Malaysian
Male Prisoners Convicted of Murder

Variables	n (%)
Age group (years old)	
21 – 29	44 (62.0)
30 – 39	14 (19.7)
40 – 49	8 (11.3)
50 – 59	3 (4.2)
60 – 69	2 (2.8)
Ethnic	
Malay	29 (40.8)
Chinese	17 (23.9)
Indian	24 (33.8)
Others	1 (1.4)
Religion	
Islam	32 (45.1)
Buddha	16 (22.5)
Hindu	19 (26.8)
Christian	4 (5.6)

Marital status	
Single	33 (46.5%)
Married	24 (33.8)
Divorced/separated	11 (15.5)
Widower	3 (4.2)
Educational status	
Never been to school	1 (1.4)
Primary education	18 (25.4)
Lower secondary education	26 (36.6)
Upper secondary education	22 (31.0)
Pre-university/ matriculation	2 (2.8)
Diplomas and above	2 (2.8)
Occupational status	
Not working	8 (11.3)
Semiskilled	42 (59.2)
Clerical-skilled	9 (12.7)
Self-employed/ business	8 (11.3)
Government servant	4 (5.6)

DESCRIPTIVE ITEM LEVEL ANALYSES

The descriptive item level analyses of each aggression item consisted of frequency distribution, mean and standard deviation (SD) for each item.

The main purpose of this descriptive item level analysis for each item in AQ-12 was to elicit the degree of responses among the respondents. The descriptive item level analyses are summarized in Table 2.

TABLE 2. Frequency Distribution, Mean, and Standard Deviation of Items in AQ-12

	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean[a]	SD
Physical aggression							
1. Given enough provocation, I may hit another person	29.6	15.5	16.9	22.5	15.5	2.79	1.47
2. There are people who pushed me so far that we came to blows	21.1	23.9	15.5	22.5	16.9	2.90	1.42
3. I have threatened people I know	42.3	28.2	12.7	12.7	4.2	2.08	1.20
Verbal aggression							
4. I often find myself disagreeing with people	28.2	28.2	35.2	8.5	-	2.24	0.96
5. I can't help getting into arguments when people disagree with me	49.3	31.0	14.1	4.2	1.4	1.77	0.94
6. My friends say that I'm somewhat argumentative	36.6	26.8	21.1	8.5	7.0	2.22	1.23
Anger							
7. I flare up quickly but get over it quickly	11.3	16.9	15.5	28.2	28.2	3.45	1.36
8. Sometimes I fly off the handle for no good reason	50.7	23.9	9.9	12.7	2.8	1.93	1.18
9. I have trouble controlling my temper	26.8	22.5	14.1	25.4	11.3	2.72	1.40
Hostility							
10. At times I feel I have gotten a raw deal out of life	32.4	31.0	16.9	8.5	11.3	2.35	1.32
11. Other people always seem to get the breaks	22.5	32.4	22.5	11.3	11.3	2.56	1.27
12. I wonder why sometimes I feel so bitter about things	28.2	29.6	15.5	15.5	11.3	2.52	1.35

SD = Strongly Disagree, D = Disagree, N = Neither agree nor disagree, A = Agree, SA = Strongly Agree; [a]On a 1-5 scale, a high score reflects the intensity of aggressive behaviour.

For the item analysis of entire aggression scale, the mean scores ranged from 1.77 to 3.45 on a five-point Likert scale (refer Table 2). The highest mean score was observed for item 7 (3.45) which falls under anger subscale. About 56.6% of respondents agreed and strongly agreed to the content of item 7.

Based on the content of item 7, the majority of respondents can be characterized as anger driven individuals as the respondents felt that they easily get angry or agitated, but once they express their anger in the form of aggressive actions, they are quick to cool down. This may predispose them to engage in aggressive acts such as killing others due to the volatile level of anger in a very short time period once provoked by a perceived trigger.

The second highest mean score was observed for item 2 (2.90). The content of item 2 reflects the physical aggression trait in which 39.4% of respondents agreed and strongly agreed that they tend to get in fights upon being hurt. This trait may become a good indicator to elicit the involvement of the respondents in fights, gang-fights, retaliation, and physical aggression which eventually lead to murderous acts.

Similarly, the third highest mean score was also observed for physical aggression item 1. The mean score of item 1 was 2.79. Based on the item analysis of item 1, 38.0% of respondents indicated agreement and strong agreement for item 1. This indicates 38.0% of respondents are likely to hit and get into physical fights if challenged. Having such traits may act as a catalyst for respondents to engage in violent acts like assault and murder.

In contrast, the lowest mean score was documented for item 5 (1.77). The content of item 5 reflects verbal aggression domain. Only 5.6% of respondents either agree or strongly agree. This shows that the majority of respondents have the least involvement in verbal arguments and aggression. Collectively, the mean score of item analyses of verbal aggression items ranged from 1.77 to 2.24 which is the lowest range of values compared to other aggression subscales.

DESCRIPTIVE MEAN SCORES

The distribution of scores of AQ-12 showed that the mean score of anger (8.10, SD = 2.93) was higher than other aggression subscales. This was followed by the mean score of physical aggression (7.77, SD = 3.20). The mean score of hostility and verbal aggression are 7.44 (SD = 2.92) and 6.24 (SD = 2.45)

respectively. These mean scores are important as it may serve as cutting points for other studies. The difference in mean scores among subscales is also an important distinction in aggression profiles of Malaysian male murderers.

In addition, descriptive statistics were also used to determine the descriptive scores and prevalence of each aggression subscale among the respondents. Here, the scores equal to or higher than the mean score were considered high for the particular psychological measure or traits (Cohen, Kamarck & Mermelstein 1983). This form of measurement is evident in several recent criminological studies (Mohammad Rahim et al. 2014c; Nurul Hazrina 2013). This type of measurement seems to be useful when there is no cut-off score for a particular measure or subscale in a psychometric instrument.

Based on the number of respondents who obtained equal or more than the mean scores for aggression subscales, anger and physical aggression are most prevalent among murderers. With due respect to the prevalence of aggression trait, 54.9% of the respondents scored equal or above the mean score of anger subscale suggesting a higher prevalence of such aggression domain among the sample of murderers (Table 3). According to Buss and Perry (1992), anger implies the physiological activation and reflects the emotional component of aggression. According to AM, this emotional component of aggression is usually conceived as impulsive, thoughtless and driven by anger. It is said to be the result of perceived provocation which motivates to harm the target including killing acts (Buss & Perry 1992).

The next prevalent trait was physical aggression. Among the respondents, 52.1% of them scored equal or above the mean score which was considerably high. In this context, physical aggression reflects the instrumental component of aggression which was usually conceived as a premeditated means of obtaining some goals and to harm the victim. The facet of physical aggression consists of kicking, beating, and hurting (Buss & Perry 1992). The higher prevalence of physical aggression trait may suggest the likelihood of the murderers to be involved in murderous act.

Based on the results in Table 3, the least prevalent trait was observed for verbal aggression. Here, 40.8% of the respondents obtained a score equal or above the mean score of verbal aggression. Collectively, the descriptive results

in Table 3 suggest that Malaysian murderers have high tendency to exhibit anger and physical aggression characteristics compared to other forms of aggression subscales.

TABLE 3. Descriptive Scores of Aggression Domains of the Respondents

Psychological profiles	Mean (SD)	Frequency ≥ mean score n (%)
Aggression	29.55 (8.59)	37 (52.1)
Physical aggression	7.77 (3.20)	37 (52.1)
Verbal aggression	6.24 (2.45)	29 (40.8)
Anger	8.10 (2.93)	39 (54.9)
Hostility	7.44 (2.92)	31 (43.7)

CORRELATIONS AMONG AGGRESSION SUBSCALES

In order to ascertain the association between aggression subscales among Malaysian murderers, Pearson correlation coefficient was employed. The result of association is summarized in Table 4. All the findings herein evidenced positive and significant associations among the aggression subscales in the sample of male prisoners convicted of murder. The correlation value among aggression subscales ranged from 0.24 to 0.54. Based on Table 4, the highest value of correlation was observed for two pairs: physical aggression – anger (r = 0.54, p<0.001) and verbal aggression – anger (r = 0.54, p<0.001). This was followed by physical aggression – verbal aggression pair (r = 0.45, p<0.001). The least correlation value was noted for anger and hostility pair (r = 0.24, p<0.05). The entire results tabulated in Table 4 indicate each aggression trait as having a positive association with each other. In other words, it appeared that having aggression trait will also exhibit other forms of aggression traits, at least in the Malaysian context.

TABLE 4. Pearson Correlation Coefficients between Aggression Subscales

Measures	(1)	(2)	(3)	(4)
(1) Physical aggression	1.00			
(2) Verbal aggression	0.45**	1.00		
(3) Anger	0.54**	0.54**	1.00	
(4) Hostility	0.34**	0.36**	0.24*	1.00

Note: *p<0.05, **p<0.001

IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

The emergence of aggression profile may provide valuable information to educators, counselors, psychotherapists, and criminologists which is vital to ameliorate criminal aggressive traits among at-risk individuals via various prevention, intervention and rehabilitation efforts. Additionally, the mean scores that are derived from this study can act as baseline scores for screening purposes especially for civil competencies, employee recruitment as well as identification of at-risk individuals. Furthermore, individuals who scored similar scores with murderers can be channeled for counseling aid.

The present study is also expected to contribute meaningfully to the Malaysia Prisons Department where it can be referred as a standard research methodology for psychosocial identification of the inmates. Additionally, the scores obtained by the murderers serve as a ceiling benchmark when profiling and scoring other types of criminals, most notably violent and sexual offenders. By identifying the differences in aggression level and pattern, a specific rehabilitation module focusing on aggression can be designed in order to cater different types of criminals.

Another important implication of the findings herein is the identification of types of aggression that underlie a predisposition toward violent behavior. By understanding an individual's aggression type and triggers for the manifestation of that type of behavior, it may be possible to educate the public and individuals to watch out for triggers and better manage aggressive tendencies. In this manner, it is likely that violent acts may be reduced. Finally, these profile findings and similar profiling endeavors provide tangible institutionalized initiatives in achieving NKRA goals for a safer nation.

The present study had several limitations. Since the present study recruited the respondents using purposive sampling method, the results cannot be generalized to the overall population of Malaysian male prisoners who have been convicted of murder. Another limitation of the present study is the nature of this study; it relies heavily on self-reported information from the respondents themselves. Therefore, the result of the present research must be interpreted with acknowledged limitations.

For future recommendations, generating aggression profiles utilizing longitudinal research design would be vital to monitor the aggression traits of the murderers over certain period of time. Employing such research design would contribute to more fascinating and informative results since murderers have been incarcerated in prisons for a long term. Another recommendation would be applying a holistic research approach to generate aggression profiles. The holistic research approach may include triangulation of data using psychometric assessments, in-depth interviews and clinical observations. Despite these limitations and recommendations, the present study had successfully contributed valuable input on aggression profiles of male prisoners convicted of murder.

CONCLUSION

This first national study of this kind was based on a purposive sample of 71 Malaysian male prisoners who were convicted of murder (murderers). It was not the intention of this study to examine the total population of murderers in Malaysia. Rather, it was a ground-breaking study which intended to explore the aggression profiles of Malaysian male prisoners who were convicted of murder. The present study documented anger and physical aggression as major aggression forms among the sample of murderers compared to hostility and verbal aggression subscales. The correlations indicated positive and significant association among all the aggression subscales.

The emergence of aggression profile of Malaysian male murderers increases the knowledge repertoire of criminal justice personnel in carrying out their duties and offers an opportunity to the public to expand their knowledge on murder prevention strategies which is vital for crime prevention efforts in ensuring a safer society. It is expected that the present research would inspire further research in this area. The findings of this research add substantial knowledge in the fields of criminology, victimology and psychology especially in the Malaysian context. In summary, the present study successfully established the aggression profile of Malaysian male prisoners who were convicted of murder utilizing Four Structure Aggression Model by Buss and Perry (1992).

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