

Association between Self-control and Aggression: An Analysis among Low Socioeconomic Status Individuals in East Coast of Malaysia

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Abstract – Low socioeconomic status (Low SES) is often linked to aggressive and violent behaviour. However, there is a lack of studies in Malaysia that ascertain the relationship between Low SES, self-control and aggression. Therefore the aim of this present study was to identify the association between self-control and aggression levels among Low SES individuals. 140 adult Low SES males voluntarily participated in this quantitative study. A convenience sampling method was used to recruit the respondents in this study. The present study was an observational cross sectional study using self-administrated questionnaires carried out in the East Coast of Malaysia. Descriptive statistics and Pearson correlation test were employed for the purpose of analyses. The result evidenced statistically significant correlation between self-control and aggression levels ($r = 0.444$, 95% CI: 0.30, 0.57; $p < 0.001$). The findings of this study would provide some insights on the correlations of self-control and aggression among Low SES individuals from statistical and psychological perspectives.

Keywords: socioeconomic status, self-control, aggression, Malaysia

1. INTRODUCTION

According to the World Health Organization (2002), violence is defined as the intentional use of physical force or power to oneself or others, which may result in physical or psychological harm. Violence is a public health issue (Baxendale, Cross, & Johnston, 2012) capable of eroding and threatening the well-being of society (Krug et al., 2002). The media's portrayal of violence is alarming, and illustrates that violence has become a major concern across the world (Fajnzylber, Lederman, & Loayza, 2002).

As an effort to find possible steps to reduce violent incidences, many criminological studies were conducted to understand and explore violent activities in depth. Demographic factors as well as socioeconomic status (SES) seem to be the most widely studied constructs (Bradley & Corwyn, 2002). According to Fujishiro, Xu, and Gong (2011), SES is constructed of resources and status.

SES is also partially determined by the individual's occupation (MacIntyre, 1997). The common indicators to measure SES include family income, parental education and occupation (Bradley & Corwyn, 2002).

Over the years, the association between SES and violence has been widely documented. Previous studies (e.g., Braithwaite, 1981; Gelles, 1990; Rock, 2002; Reiner 2007; Hay & Forrest, 2009) had demonstrated a strong relationship between SES and violence, in which violence has been said to be concentrated among low SES communities and that SES may trigger violent activities. Recent work by Hong (2009) and Guerra et al. (2011) provided some evidence that violence perpetration is more prevalent among poor communities.

Since the literatures from developed countries indicated that aggression and violence is highly prevalent among lower SES individuals, there is a need to determine whether this is evident in Malaysia as it grows from developing to developed status. There is also a need to determine the underlying intrinsic factors for such a scenario. Although significant progress and efforts have been made, the causes of the high prevalence of violence among lower SES people are not fully understood. Several criminological, sociological, and psychological theories were formulated to support economic deprivation as a causal factor in explaining aggression and violent activities. Markowitz and Felson (1998) and Anderson (1999) for example investigated the relationship between the extrinsic factors in particular economic deprivation and poverty; and violent activities. A number of studies also indicated Low SES as an underlying condition for violent and aggressive behaviour (Bruce, 2004; Hishinuma et al., 2005). However, there are limited empirical studies on the intrinsic and behavioural aspects focusing on lower SES individuals in Malaysia, as an attempt to explain their participation in violent activities.

In order to shed some light on the intrinsic and behavioral aspects of lower SES people, the present study concentrates on two important intrinsic factors: self-control and aggression. The available evidence indicates that aggression has been of long-standing interest among social scientists (Piquero et al., 2012) especially in violence related studies. Early research on aggression has highlighted aggression as the basic ingredient of violent crime (Feshbach, 1964). Likewise, self-control seems to be an important concept in determining the likelihood of an individual's violent behaviour (Buker, 2011). According to Gottfredson and Hirschi (1990), self-control is the primary cause of violent behavior.

Violence is often viewed as the end-product of aggression (Huesmann & Miler, 1994; Anderson & Bushman, 2002) and is caused by low self-control (Gottfredson & Hirschi, 1990). A review by Mohammad Rahim Kamaluddin et al. (2015) also stated that aggression and self-control are underlying psycho-criminogenic traits for criminal behaviour. Early research on aggression highlighted aggression as the basic ingredient of violent crime (Feshbach, 1964). A study by Warren et al. (2002) established a significant relationship between aggression and antisocial behavior, which may lead a person to be involved in violent activities. A local study among prisoners also documented a significant relationship between self-control and aggressive behaviour (Mohammad Rahim Kamaluddin et al., 2016). Since both aggression and self-control seem to be important aspects of violent behavior, the present study aimed to determine the association between levels of aggression and self-control among Low SES individuals.

2. METHODS

The present study utilized an observational cross sectional study design using self-administered questionnaire as a method for data collection. The source population was the general male from Low SES. The sample for this study resided in East Coast of Malaysia. As an effort to represent Low SES criteria, the respondents were screened and confirmed for socio-economic status before their participation in this study. The present study focused on the adult males from the lower working class since this particular occupational grouping is often used as a marker for social stratification (Krieger, Williams, & Moss, 1997). As such, factory workers, security guards with lower positions, and construction workers were recruited in this study.

After considering the adequate sample size, the present study incorporated 140 adult respondents, aged eighteen and older. A convenience sampling method was used to recruit the respondents in this study. Self-administered questionnaires were used as a tool for data collection. Signed consent was obtained from the respondents prior to their involvement in the study. Throughout the questionnaire completion activity, the researchers were present to assist respondents who had poor literacy skills. The completion of the questionnaires averaged between 15 to 20 minutes for each respondent.

The distributed self-administered questionnaire consisted of three sections. Section one contained sociodemographic questions. This section gathered personal and sociodemographic information of the respondents which included age, ethnicity, marital status, occupation, income level, and highest level of education. Section two and three consisted of two psychometric instruments: Self Control Scale (SCS; Grasmick et al., 1993) and Aggression Questionnaire (AQ; Buss & Perry, 1992) respectively. Permission was obtained from the authors of both psychometric instruments before usage.

The SCS was developed to operationalize low self-control elements based on the General Theory of Crime by Gottfredson and Hirschi (1990). It is a 24-item attitudinal index, that measures six subscales of self-control: impulsivity, simple tasks, risk taking, physical activities, self-centeredness, and volatile temper. These 24 items are measured with a four-point Likert scale: (1= strongly agree, 2= agree, 3= not agree, and 4= strongly disagree). Since there is no reverse scoring applied for coding, higher scores indicate lower self-control of an individual. The internal consistency of this scale was 0.80 (Mohammad Rahim Kamaluddin et al., 2013).

Section three contained all items of Buss and Perry's (1992) AQ. The AQ has been acknowledged as a definitive screening instrument for aggression. This instrument contains 29 items which measure five subscales of aggression: physical aggression, verbal aggression, anger, and hostility. Items are answered on a five-point Likert-type scale ranging from 1 (not at all like me) to 5 (completely like me). Nine items indicate physical aggression, whereas five items were designed to indicate verbal aggression. Seven items represent anger and eight items represented hostility. The total internal reliability of the AQ is 0.89 (Buss & Perry, 1992).

The required information was compiled into a set of systematic and computerized data. The analysis of the compiled data was performed using IBM Statistical Package for Social Sciences (SPSS) version 23.0. Descriptive statistics were employed to summarize the demographic and socioeconomic information of the respondents as well as the mean score of each subscale of the self-control and aggression. A bivariate analysis of correlation was performed to determine the

association between the levels of self-control and aggression. This was followed by a correlation analyses between subscales of self-control against subscales of aggression. Before proceeding with the analysis, the normality of the data of both variables was checked with histogram-normal curve and box plot method. Since data for both variables were normally distributed, the Pearson correlation test was used.

3.0 FINDINGS AND DISCUSSION

Referring to the demographic information of the respondents as in Table 1, the majority (30.7%) of the respondents are from the age group of 20 to 29 years old. Most of the respondents were Malay (78.6%) and married (62.9%). As to the highest level of education, 64.3% of the respondents achieved upper secondary education (SPM). As shown in Table 1, the respondents were from the lower working class with the majority (40.0%) of the respondents were factory workers who earned a monthly income of between RM1001.00 to RM1500.00 (68.6%).

Table 1. Summary of demographic information of the respondents (n = 140)

| Demographic information | n (%) |
|-----------------------------------|------------|
| Age group (Years) | |
| Less than 19 | 4 (2.9) |
| 20-29 | 43 (30.7) |
| 30-39 | 36 (25.7) |
| 40-49 | 41 (29.3) |
| More than 50 | 16 (11.4) |
| Ethnicity | |
| Malay | 110 (78.6) |
| Chinese | 8 (5.7) |
| Indian | 22 (15.7) |
| Marital status | |
| Single | 42 (30.0) |
| Married | 88 (62.9) |
| Divorcee | 6 (4.2) |
| Widower | 4 (2.9) |
| Highest education level | |
| Primary | 12 (8.6) |
| Lower Secondary (PMR) | 38 (27.1) |
| Upper Secondary (SPM) | 90 (64.3) |
| Types of occupation | |
| Security guards with low position | 40 (28.6) |
| Factory workers | 56 (40.0) |
| Construction workers | 44 (31.4) |
| Monthly income | |
| Less than RM 500.00 | 18 (12.9) |
| RM 501.00-RM 1000.00 | 26 (18.5) |
| RM 1001.00-RM 1500.00 | 96 (68.6) |

As in the both Table 2 and Table 3, the mean score and standard deviation are calculated for each subscale of the SCS and AQ. The mean score for physical activities is higher ($M = 11.04$) compared to the other subscales as in Table 2. However, it should be noted that, the mean score for impulsivity ($M = 10.31$), simple tasks ($M = 10.27$), and volatile temper ($M = 10.18$) is considered higher compared to risk taking ($M = 9.39$) and self-centeredness ($M = 9.24$).

Table 2. Mean score (M) and standard deviation (SD) of the subscales of self-control scale.

| Subscales | M (SD) |
|--------------------------|--------------|
| Impulsivity | 10.31 (2.21) |
| Simple Tasks (ST) | 10.27 (2.22) |
| Risk Taking (RT) | 9.39 (2.66) |
| Physical Activities (PA) | 11.04 (2.22) |
| Self-Centeredness (SC) | 9.24 (1.78) |
| Volatile Temper (VT) | 10.18 (2.45) |

Table 3. Mean score (M) and standard deviation (SD) of the subscales of aggression questionnaire.

| Subscales | M (SD) |
|--------------------------|--------------|
| Verbal Aggression (VA) | 13.63 (4.16) |
| Hostility | 20.99 (6.73) |
| Anger | 15.06 (5.84) |
| Physical Aggression (PA) | 18.27 (7.95) |

In order to predict the association between the overall level of self-control and aggression, the Pearson correlation test was performed. As depicted by table 4, the obtained p value is < 0.001 which shows there was a significant, positive and a fair correlation between the self-control level and the aggression level ($r = 0.44$, $p < 0.001$) with 95% confidence interval (0.30, 0.57). In order to determine which subscales of self-control correlated the most with subscales of aggression, Pearson correlation was again performed to test the correlation among the subscales of self-control and aggression.

Table 4. Correlation between overall level of self-control and aggression.

| | Self Control |
|------------|--------------|
| Aggression | 0.444** |

** Correlation is significant at the 0.01 level (2-tailed)

Table 5 illustrates the correlation between subscales of self-control and the subscales of aggression. Based on the analyses, it was observed that not all the subscales of self-control were correlated with subscales of aggression. Among the subscales of self-control, 'simple tasks' and 'volatile temper' appeared to be positively correlated with all the subscales of aggression. The highest value of positive correlation coefficient (r), was observed between subscales of 'simple tasks' and 'anger' ($r = 0.435$, $p < 0.01$), followed by between 'simple tasks' and 'hostility' ($r = 0.391$, $p < 0.01$).

Table 5. Correlation between the subscales of self-control with subscales of aggression.

| | | Subscales of Self Control | | | | | |
|-------------------------------|-----------|---------------------------|----------------|---------------|---------------|---------------|----------------|
| | | Impulsivity | ST | RT | PA | SC | VT |
| Subscales of Aggression | VA | 0.216 | 0.360 | 0.198 | 0.259 | 0.211 | 0.367 |
| | | 0.070 | 0.002** | 0.099 | 0.029* | 0.077 | 0.002** |
| | Hostility | 0.294 | 0.391 | 0.272 | 0.303 | 0.226 | 0.314 |
| | | 0.013* | 0.001** | 0.022* | 0.010* | 0.058 | 0.008** |
| | Anger | 0.170 | 0.435 | 0.199 | 0.228 | 0.267 | 0.282 |
| | | 0.155 | 0.001** | 0.097 | 0.056 | 0.024* | 0.017* |
| | PA | 0.134 | 0.312 | 0.120 | 0.179 | 0.129 | 0.299 |
| | | 0.267 | 0.008** | 0.317 | 0.135 | 0.284 | 0.011* |

**Correlation is significant at 0.01 level (2-tailed), * Correlation is significant at 0.05 level (2-tailed)

Based on the findings of the present study, it was observed that higher mean score was obtained for the subscale physical activity ($M = 11.04$) and impulsivity ($M = 10.31$) for self-control. This suggests that the samples in this study exhibit a higher level in physically activity and impulsivity compared to other constructs. It is parallel to the prediction of General Theory of Crime (GTC) by Gottfredson and Hirschi (1990), in which individuals who are lacking of self-control tend to be physically active and impulsive. One of the factors may associate with the highest mean score on physical activity is the nature of their occupation, which requires much physical movement than mental activity. As stated by Buker (2011), socioeconomic conditions tend to affect the formation of self-control (Buker, 2011) which can be observed among respondents in this study.

According to the mean score tabulated for each subscale for aggression, it was observed that the mean score is relatively way higher for hostility ($M = 20.99$) and physical aggression ($M = 18.27$) compared to the other subscales; verbal aggression ($M = 13.63$) and anger ($M = 15.06$). As such, it is concluded that samples are more hostile and physically aggressive than other aggressive subscales. This is in keeping with previous literature (Gelles, 1990; Straus & Gelles, 1990) which had proposed violence towards intimate partner and punishment of children with physical force are prevalent among people from lower SES

4.0 CONCLUSION

The present study provides some evidence for the significant relationship between levels of self-control and aggression among people from lower SES. The present study had several limitations. Since the respondents of this study are selected based on a convenience sampling method, hence the results cannot be generalized to the overall population of lower SES. As for future direction, it will be vital to recruit respondents using a random sampling which may provide a better result to infer the whole population of lower SES. In addition, a comparison study is essential to compare the mean differences in self-control and aggression among individuals from lower SES and higher SES. It is important to take note that the present study is not intended to generalise or label the Low SES individuals as aggressive and self-control, but, to provide some insights on the associations between self-control and aggression among Low SES individuals. Thus, caution is needed in interpreting the results of this study. Despite this, the present study had successfully correlated both variables in an effort to determine the intrinsic aspects of Low SES

individuals in Malaysia. The major finding of the present study is that the overall levels of self-control level and aggression were found to be significantly associated among lower SES individuals. Further analysis evidenced that there were positive, significant, and fair correlations between the various subscales of self-control and aggression.

REFERENCES

- [1] Anderson, E. (1999). *Code of the street: decency, violence, and the moral life of the inner city*. New York: W.W. Norton.
- [2] Baxendale, Cross, & Johnston (2012). A review of the evidence on the relationship between gender and adolescents' involvement in violent behavior, *Aggression and Violent Behavior*, 17, 297–310.
- [3] Bradley, R. H., & Corwyn, R. F. (2000). Moderating effect of perceived amount of family conflict on the relation between home environmental processes and the well-being of adolescents. *Journal of Family Psychology*, 14(3), 349–364.
- [4] Bruce, M. A. (2004). Inequality and adolescent violence: An exploration of community, family and individual factors. *Journal of the National Medical Association*, 96(4), 486–495.
- [5] Buker, H. (2011). Formation of self-control: Gottfredson and Hirschi's general theory of crime and beyond. *Aggression and Violent Behavior*, 16, 265–276.
- [6] Buss, A.H., & Perry, M.P. (1992). The Aggression Questionnaire. *Journal of Personality and Social Psychology*, 63, 452–459.
- [7] Fajnzylber, Lederman, & Loayza, 2002. What causes violent crime? *European Economic Review*, 46, 1323-1357.
- [8] Feshbach, S. (1964). The function of aggression and the regulation of aggressive drive. *Psychological Review*, 71, 257-272.
- [9] Fujishiro, K., Xu, J., & Gong, F. (2011). What does "occupation" represent as an indicator of socioeconomic status?: Exploring occupational prestige and health. *Social Science and Medicine*, 71, 2100-2107.
- [10] Gelles, R. J. (1990). Domestic criminal violence. In N. A. Weiner, M. A. Zahn, & R. J. Sagi (Eds.), *Violence: patterns, causes and public policy* (pp. 106–122). New York: Harcourt, Brace, Jovanovich.
- [11] Goodman, M., & New, A., (2000). Impulsive aggression in Borderline Personality Disorder. *Current Psychiatry Report*, 2, 56-61.
- [12] Gottfredson, M. & Hirschi, T. (1990). *A General Theory of Crime*. Stanford, CA: Stanford University Press.
- [13] Grasmick, H. G., Tittle, C. R., Bursik, R. J., Jr., & Arneklev, B. J. (1993). Testing the core empirical implications of Gottfredson and Hirschi's general theory of crime. *Journal of Research in Crime and Delinquency*, 30, 5-29.
- [14] Guerra, N. G., Hammons, A. J., & Clutter, M. (2011). Culture, families, and children's aggression: findings from Jamaica, Japan, and Latinos in the United States. In X. Chen, & K. H. Rubin (Eds.), *Socioemotional development in cultural context* (pp. 281–304). New York, NY US: Guilford Press.
- [15] Hay, C., & Forrest, W. (2009) The implications of family poverty for a pattern of persistent offending. In: Savage J (ed.), *The Development of Persistent Criminality*. Oxford: Oxford University Press.
- [16] Hishinuma, E. S., Johnson, R. C., Kim, S. P., Nishimura, S. T., Makini, G. K., Andrade, N. N., et al. (2005). Prevalence and correlates of misconduct among ethnically diverse adolescents of Native Hawaiian/part-Hawaiian and non-Hawaiian ancestry. *The International Journal of Social Psychiatry*, 51(3), 242–258.
- [17] Hong, J. S. (2009). Feasibility of the Olweus bullying prevention program in low-income schools. *Journal of School Violence*, 8, 81–97.
- [18] Krieger, N., D.R. Williams, & E. Moss (1997). Measuring social class in U.S. public health research: Concepts, methodologies and guidelines. *Annual Review of Public Health*, 18, 341-378.
- [19] Krug, E G., Dahlberg, L.L., Mercy, J.A., Zwi, A.B. & Lozano, R. (eds). (2002). *World report on violence and health*. Geneva: World Health Organization.
- [20] MacIntyre, S. (1997). The black report and beyond: what are the issues? *Social Science & Medicine*, 44, 723- 745.
- [21] Markowitz, F. E., & Felson, R. B. (1998). Social-demographic differences in attitudes and violence. *Criminology*, 36, 117–138.
- [22] Mohammad Rahim Kamaluddin, Nadiyah Syariani MS, & Geshina Ayu MS (2013). A unidimensional scale for self-control within Malaysian settings. *Educ Med J*, 5(4), e60-6.

- [23] Mohammad Rahim Kamaluddin., Shariff, N. S., Othman, A., Ismail, K. H., & Ayu, G. (2015). Linking Psychological Traits with Criminal Behaviour: A Review. *ASEAN Journal of Psychiatry*.
- [24] Mohammad Rahim Kamaluddin, Nadiah Syariani Md. Sharif, Azizah Othman, Khaidzir Ismail. & Geshina Ayu Mat Saat. (2016). Associations between low self-control and aggression among Malaysian male prisoners. *ASEAN Journal of Psychiatry*. 17 (1), 79-86.
- [24] Piquero, Carriaga, Diamond, Kazemian, & Farrington. (2012). Stability in aggression revisited, *aggression and violent behavior*, 17, 365-372
- [25] Reiner, R. (2007). Political economy, crime, and criminal justice". In M. Maguire, R. Morgan, and R. Reiner. (eds). *The Oxford Handbook of Criminology*. (4th ed). Oxford: Oxford University Press.
- [26] Rock, P. (2002). Sociological theories of crime", in M. Maguire, R. Morgan, and R.Reiner (eds). *The Oxford Handbook of Criminology*. (3rd ed). Oxford: Oxford University Press. Pp. 51-82.
- [27] Straus, M. A., & Gelles, R. J. (1990). *Physical violence in American families: risk factors and adaptations to violence in 8,145 families*. New Brunswick, NJ: Transaction.
- [28] World Health Organization (2002), World Health Organization (2002). *World report on violence and health*. Geneva,Switzerland.