

Aggression among School Children in Malaysia

Kong, L. L., Maria Chong, A. * and Samsilah, R.

Faculty of Educational Studies, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

ABSTRACT

This study aimed to investigate the level of aggression among primary school children in Malaysia. A total of 450 students aged 11 were randomly selected from nine schools in the Selangor State to participate in this study. Children Aggression Inventory (CAI) was administered to collect data from the respondents. The reliability of the CAI in this study was found to be high ($\alpha = 0.90$). The data obtained were analyzed using both descriptive and inferential statistics to address the research objectives. Findings from this study showed that the aggression level demonstrated by school children was moderate ($M = 2.18$, $SD = 0.392$). The highest mean score for aggressive behaviour exhibited by the children is hostility ($M = 1.88$, $SD = 0.37$), followed by anger ($M = 1.86$, $SD = 0.36$), verbal aggression ($M = 1.71$, $SD = 0.37$), indirect aggression ($M = 1.66$, $SD = 0.38$), and physical aggression ($M = 1.66$, $SD = 0.45$). Results also indicated a significant difference between the boys and girls in the mean scores of physical aggression [$t(443) = 6.034$, $p < 0.01$] and anger [$t(445.78) = -3.034$, $p < 0.01$]. Boys were found to be more aggressive than girls in terms of physical aggression while girls were found to be more aggressive than boys in terms of anger.

Keywords: Aggression, gender, school children

INTRODUCTION

Generally, aggression is defined as an aggressive act that intends to harm another person who is motivated to escape from

being harmed (Geen, 2001). Children nowadays are easily exposed to different types of violence and aggression from their environment, such as community, family, peers and media. As a consequence, the exposure to aggression and violence will increase the risk on the development of children's aggressive behaviour.

In the study of the development of children aggressive behaviour, children who

ARTICLE INFO

Article history:

Received: 13 January 2012

Accepted: 27 April 2012

E-mail addresses:

ashley.kll@gmail.com (Kong, L. L.), maria@educ.upm.edu.my

(Maria Chong, A.), samsilah@educ.upm.edu.my (Samsilah, R.)

* Corresponding author

show aggressive acts in the early childhood years are linked to criminal and delinquent behaviours in later adolescence and adulthood if it is left untreated (Christakis & Zimmerman, 2007). In the same line, Huesmann *et al.* (2002) also argue that the aggressive behaviour patterns at age eight are predictors of criminal, delinquent and antisocial behaviours over the next 22 years. Similarly, longitudinal studies have reported the continuity from early childhood aggression to early adolescents and adult aggression, criminality and antisocial behaviours (Moffitt *et al.*, 2001; Huesmann *et al.*, 2002; Thompson *et al.*, 2011). Hence, the development of aggressive behaviour from early childhood is greatly related to future mal-adjustment in adolescents and adulthood in the forms of continued aggression, conduct problems, juvenile delinquency and adult criminality.

Aggressive behaviour is said to lead to various negative outcomes such as academic failure, peer rejection, juvenile delinquency and continued aggression (Van Lier *et al.*, 2007). According to Abd. Wahad (2006), the early stages of juvenile delinquency can be detected in the form of rule-breaking such as truancy, smoking, drinking, suspension, shoplifting and vandalism. The absence of effective intervention to overcome the early childhood aggression problems can lead to serious criminal misconducts such as bullying, injury to others, rape, theft and murder in later life.

Past studies have revealed that aggressive behaviour among children is influenced by a number of factors including personal

characteristics such as gender (McGinley & Carlo, 2007; Lee *et al.*, 2007, Archer & Côté, 2005), emotional regulation ability (Marsee & Frick, 2007; Campos *et al.*, 2004; Romasz *et al.*, 2004), and environmental factors such as friendship (Bagwell & Coie, 2004; Hay, 2005; Soenens *et al.*, 2008) and media influences (Bushman & Huesmann 2006; Christakis & Zimmerman, 2007; Savage & Yancey, 2008). As children are not born violent, the origins and development of such behaviour need to be explored and described, to better understand this puzzling and disturbing phenomenon.

DEFINITION OF AGGRESSIVE BEHAVIOUR

According to Geen (2001), aggression cannot be explained by a single definition because there are different kinds of aggressive behaviour. In fact, aggressive behaviour has different forms (e.g. physical, verbal, direct, indirect, displaced, passive, and active aggression) and functions (e.g. reactive and proactive aggression). The form of aggression means the way of an aggressive act is expressed, such as physical aggression versus verbal aggression, direct aggression versus indirect aggression, and active aggression versus passive aggression (Buss, 1961, as cited in Bushman & Huesmann, 2010). According to Richardson and Green (2006), a direct form of aggression involves face-to-face confrontation between the aggressor and the victim. It comprises of both physical and verbal aggression. Physical aggression involves behaviour such as harming others with physical

forces like fighting, hitting, kicking, biting, punching, scratching, stabbing, assaulting with weapon, or damaging other's property (Geen, 2001). Verbal aggression involves the use of words to harm others such as name calling, screaming, yelling, or cursing (Richardson & Green, 2006). On the other hand, indirect form of aggression involves delivering harm to another person without direct confrontation (Richardson & Green, 2006). It may be delivered either in physical or verbal form such as puncturing the tire of a person's car when he is not around or spreading rumours at someone's back (Richardson & Green, 2006). In addition, indirect form of aggression has similar concept with relational aggression. Relational aggression refers to a behaviour that can cause damage to another person's social relationships with others which involves social exclusion, ostracism, and threatening to end the friendship (Crick & Grotpeter, 1995).

Aggressive acts can also be explained through two underlying functions or motives - reactive aggression and proactive aggression (Card & Little, 2006; Fite, Stoppelbein, & Greening, 2009). The concept of reactive aggression can be explained by the frustration-aggression theory. From this perspective, reactive aggression refers to behaviour that is defensive, retaliatory, and actuated by a provocation such as attack or insult (Hubbard, McAuliffe, Morrow, & Romano, 2010). On the other hand, proactive aggression is defined as an aggressive act that is being motivated to reach a goal.

For instance, harming others, dominating, obtaining goods, asserting power, and assuring the approval of reference groups and other goals (Geen, 2001). The concept of proactive aggression can be explained through social learning theory (Bandura, 1963) which proposes that aggression is learned through observing and imitating the aggressive model and the whole processes is being controlled by rewards and punishments. Vitaro and Brendgen (2005) suggest that it is useful to distinguish between reactive and proactive aggression to understand childhood aggression. However, Bushman and Anderson (2001) suggest that it is impossible to distinguish between these two functions of aggression because they are highly correlated.

In this study, the forms of aggressive behaviour being investigated are physical aggression (Geen, 2001), verbal aggression (Richardson & Green, 2006), indirect aggression (Richardson & Green, 2006), anger (Ramírez & Andreu, 2006), and hostility (Buss & Perry, 1992). These dimensions of aggression were investigated as the aggression variables in this study. A brief description of these aggression dimensions are shown in Table 1.

THE DEVELOPMENT OF AGGRESSIVE BEHAVIOUR

Social Learning Theory (SLT)

According to social learning theory, aggressive behaviour is both learned through observation or imitation of a model and reinforced through reward and punishment contingencies (Bandura, 1973). According

TABLE 1
Description of the Aggression Dimensions

Aggression Dimensions	Description	Source
Physical Aggression	Harming others with physical forces like fighting, hitting, kicking, biting, punching, scratching, stabbing, and assaulting with weapon, or damaging another's property.	Geen, 2001
Verbal Aggression	Involves the use of words to harm others such as name calling, screaming, yelling, or cursing.	Richardson and Green, 2006
Indirect Aggression	Delivers harm to another person without direct confrontation.	Richardson and Green, 2006
Anger	Refers to feelings and attitudes, and represents the emotional or affective component of aggressive behaviour.	Ramírez and Andreu, 2006
Hostility	The attitude of resentment and suspicion towards others.	Buss and Perry, 1992

to Geen (2001), SLT suggests that a child develops a rudimentary knowledge of certain rules to conduct progressively in his everyday life based on his/her observation from numerous examples and consequences of aggressive acts in his environment (e.g. at school, at home and in the fantasy world of television programs, computer games and video games) (Geen, 2001). However, whether the child acts out and maintains the behaviour he has learned depends on the reward and punishment contingencies that he receives based on his behaviour (Geen, 2001). This implies that the child is more likely to behave aggressively if he experiences rewards from his aggressive acts. Eyal and Rubín (2003) suggested that when an aggressive act was repeatedly met with positive outcomes such as social approval or pleasantries, it would lead the child to act in the same way again in the future. For example, a child who desires

for pleasure or control is met with positive outcomes when he bullies smaller children or his friend, he is likely to exhibit the same action again in the future.

Bandura (1973) proposed that children did not just learn new behaviour through observation and imitation, but also made cognitive inferences according to their observation and imitation. These cognitive inferences will then lead to generalizations in their behaviour. For instance, children who observe violence in the family will not only increase the likelihood to behave aggressively but may also increase the belief that acting aggressive is acceptable. In short, the social learning theory explains the mechanisms leading to acquisition and performance of aggression in accordance with the principles of observational learning, learning through conditioning and direct experience.

Gender Differences in Aggressive Behaviour

Studies have provided evidences that there are gender differences in aggressive behaviour (McGinley & Carlo, 2007). According to Salzinger *et al.* (2008), boys were found more likely to demonstrate aggressive behaviour than girls. This finding was in line with Toblin *et al.* (2005) who found that boys are more likely to behave aggressively and they are more emotionally and behaviourally deregulated than girls (Schwartz, 2000).

In addition, Krahé (2000) suggested that gender differences in aggressive behaviour are dependent on the types of aggressive behaviour studied. In a study conducted by Lagerspetz and Björkqvist (1994), boys were engaged in direct aggression such as physical aggression more often than girls, while girls use indirect aggression such as gossiping and excluding others more often than boys.

Moreover, females tend to engage in pro-social behaviours by showing more perspective taking, empathy, sympathy, and nurturing than males, while males have been found to be more physically aggressive and engaged in more risky and instrumental forms of pro-social behaviours (Eisenberg, 2003; Carlo & Randall, 2002; Ostrov & Keating, 2004; Carlo *et al.*, 2003).

RESEARCH BACKGROUND

According to a study conducted by Lee *et al.* (2007) in Malaysia, 27.9% of secondary students involved in physical fights, 6.6% were injured in a fight, 5.9% carried a

weapon, 7.2% felt unsafe, 18.5% had their money stolen and 55.0% had their property stolen.

Some of the breaking news highlighted in the mass media has portrayed schools with students of misbehaving characters. Some even go to the extent of considering the case of misbehaviour as a criminal problem. For instance, eleven teenagers aged between 15 and 17 from a secondary school in Marang, Kuala Terengganu were arrested by police after attacking and assaulting a student from a religious school in the same district (*Utusan Malaysia*, 2011). In another incident, Zaman and Nadchatram (2007) reported that two secondary school students were afraid to go to school after they had experienced taunt and name calling from other students. The same thing happened to a 10 year-old boy who was feeling frustrated and hurt due to the incessant teasing directed to him by the older boys at school (Tee, 2009). All these cases have raised public concern about violence and aggressive behaviour among students in Malaysian schools.

From the theoretical aspect, it is noted that there are numerous literature in regard to children aggressive behaviour development especially in some Western countries such as Canada (Cote *et al.*, 2006), Finland (Kokko *et al.*, 2009), New Zealand (Donnellan *et al.*, 2005), United States (Kokko *et al.*, 2009; Campbell *et al.*, 2000) and Australia (Prior *et al.*, 2001). In Malaysia, most of the research was conducted to study bullying (Lee *et al.*, 2006; Rahimah & Rohani, 1997), but not aggressive behaviour among school

students. Thus, there is a gap in terms of the understanding of aggressive behaviour among school students. Hence, this study is warranted to determine the level and gender differences in relation to aggressive behaviour among Malaysian primary school children.

RESEARCH OBJECTIVE

This study aimed to explore the level of aggression among primary school children in Malaysia. In addition to that, gender differences in relation to aggression among the subjects would also be determined. Based on the specific objectives stated above, the research questions addressed in this study are as follows:

1. What is the level of aggressive behaviour reported by the respondents?
2. Is there any gender difference in the aggressive behaviour between boys and girls?

METHODOLOGY

This study employed a cross sectional research approach. A total of 450 students aged 11 were selected from nine schools in three districts (Hulu Langat, Gombak, and Petaling Utama) in Selangor to participate in this study by using multistage cluster sampling. The sample comprised of 229 (50.9%) males and 221 (49.1%) females. Data collection involved the provision of directly administered questionnaire to the respondents.

Instrumentation

Children Aggression Inventory (CAI) was developed based on the definitions proposed by Geen (2001), Richardson and Green (2006), Ramírez and Andreu (2006), and Buss and Perry (1992) to assess the aggressive behaviour among the subjects. It is a self-report questionnaire that can be administered to children aged between 10-12 years old. This inventory is scored based on a three-point Likert scale. CAI consists of 38 items from five aggression dimensions, namely, physical aggression, verbal aggression, indirect aggression, anger, and hostility. CAI was translated into the Malay language before it was administered to the subjects. The scale was content validated by a panel of experts which comprised of three local psychologists. The reliability of the CAI in this study was found to be high ($\alpha = 0.90$). A brief description of the CAI is presented in Table 2.

A total score for the 38 items in CAI provide information on the overall level of aggression among the respondents. In addition, the total scores for each aggression dimension determine the level of aggression for that particular dimension. The level of aggression was determined by using a formula proposed by Zuria *et al.* (2004) such as maximum Likert scale (3) divided by median (2). Hence, the values for the three categories for the overall level of aggression and the five dimensions are High (2.34-3.00), Moderate (1.67-2.33), and Low (1.00-1.66).

TABLE 2
Description of the CAI Subscales

Subscales	Measured Aspects	Items
Physical Aggression No. Item: 9	Measures of the tendency to use physical force when expressing anger or aggression. (e.g.: Item 8: I beat people who challenge me.)	8, 10, 11, 17, 23, 24, 25, 27, 38
Verbal Aggression No. Item: 7	Measures the tendency to be verbally argumentative. (e.g.: Item 4: I fight when other people who disagree with me.)	1, 4, 6, 20, 26, 35, 36
Indirect Aggression No. Item: 7	Measures of the tendency to express anger in actions that avoid direct confrontation. (e.g.: Item 13: I spread rumours about people whom I do not like.)	13, 14, 15, 18, 30, 34, 37
Anger No. Item: 8	Measures anger related arousal and sense of control. (e.g.: Item 19: I will be upset when I did not get what I want.)	2, 3, 7, 12, 19, 22, 29, 32
Hostility No. Item: 7	Measures the feelings of resentment, suspicion and alienation. (e.g.: Item 28: At times, I think people are bad mouthing about me at the back.)	5, 9, 16, 21, 28, 31, 33

FINDINGS AND DISCUSSIONS

Level of Aggression among School Children

The findings in Table 3 indicate that most of the respondents demonstrated a moderate level of the overall aggression (N= 366, 81.30%). In particular, 18.50% (N= 83) of the respondents showed a high level of the overall measured aggression and only 1 respondent (0.20%) showed a low level of overall aggression in this study. This finding showed that majority of the respondents who participated in this study demonstrated a moderate level of aggressive behaviour.

The level of the respondents' aggression was further analysed based on each aggression dimension, such as physical aggression, verbal aggression, indirect aggression, anger and hostility. The results in Table 3 show that the aggression

levels displayed by the respondents were moderate for verbal aggression (52.70%), anger (56.0%), and hostility (63.60%). Meanwhile, physical aggression (60.90%) and indirect aggression (50.40%) were found to be low among the respondents.

This findings indicate that the primary school children in this study are moderately aggressive in their behaviour. The aggression dimensions involved are verbal aggression, anger and hostility. This phenomenon needs special attention as aggressive behaviour will lead to various negative outcomes, such as academic failure, peer rejection, juvenile delinquency and continued aggression (Van Lier *et al.*, 2007).

Gender Differences in Aggressive Behaviour

A comparison between boys and girls in terms of aggressive behaviour was done by

TABLE 3
The Distribution of the Mean Score for Aggression

	Mean Score	Std. Deviation	Frequency	Percentage (%)
Overall Aggression	2.18	0.39		
Low (1.00-1.66)			1	0.20
Moderate (1.67-2.33)			366	81.30
High (2.34-3.00)			83	18.50
Physical Aggression	1.66	0.45		
Low (1.00-1.66)			274	60.90
Moderate (1.67-2.33)			125	27.80
High (2.34-3.00)			51	11.30
Verbal Aggression	1.71	0.37		
Low (1.00-1.66)			192	42.70
Moderate (1.67-2.33)			237	52.70
High (2.34-3.00)			21	4.70
Indirect Aggression	1.66	0.38		
Low (1.00-1.66)			227	50.40
Moderate (1.67-2.33)			205	45.60
High (2.34-3.00)			18	4.00
Anger	1.86	0.36		
Low (1.00-1.66)			146	32.40
Moderate (1.67-2.33)			252	56.00
High (2.34-3.00)			52	11.60
Hostility	1.88	0.37		
Low (1.00-1.66)			118	26.20
Moderate (1.67-2.33)			286	63.60
High (2.34-3.00)			46	10.20

performing independent-samples t-test on the mean aggression scores obtained. The results from Table 4 indicated that there was no significant difference in the mean overall aggression score between boys and girls. This finding supported the suggestion by Krahé (2000) that gender differences in

aggressive behaviour are dependent on the types of aggressive behaviour studied. The findings showed that there was a significant difference between them in the mean scores of physical aggression [$t(443) = 6.034, p < 0.01$] and anger [$t(445.78) = -3.034, p < 0.01$]. This shows that boys exhibit more

TABLE 4
T-test on Aggressive Behaviour between Boys and Girls

Variables	n	<i>M</i>	<i>SD</i>	t-value	Sig. (2 tailed)
Overall Aggression					
Boys	229	1.756	0.311	1.938	0.053
Girls	221	1.701	0.291		
Physical Aggression					
Boys	229	1.779	0.459	6.034	0.000
Girls	221	1.534	0.399		
Verbal Aggression					
Boys	229	1.739	0.378	1.763	0.079
Girls	221	1.678	0.349		
Anger					
Boys	229	1.808	0.347	-3.034	0.003
Girls	221	1.909	0.359		
Hostility					
Boys	229	1.859	0.369	-1.177	0.240
Girls	221	1.901	0.377		

Note: *M*= Mean; *SD*= Standard Deviation; Sig.= Significance.

physical aggression ($M= 1.779$, $SD= 0.459$) as compared to girls ($M= 1.534$, $SD= 0.399$). On the other hand, girls exhibit more anger ($M= 1.909$, $SD= 0.359$) as compared to boys ($M= 1.808$, $SD= 0.347$).

This research findings have highlighted gender differences in relation to the type of aggressive behaviour rather than the overall aggressive tendency. This finding support the study by Ronen, Rahav, and Moldawsky (2007) who found that students reported no significant gender differences in the overall aggression tendencies among children. This study also supports the previous research with regards to gender

differences for the aggression dimensions. For example, gender differences were found in the studies by Lagerspetz and Björkqvist (1994), Bettencourt and Miller (1996), Xing *et al.* (2011), Bradshaw *et al.* (2009), Baillargeon *et al.* (2007), as well as Zimmer-Gembeck *et al.* (2005) for direct and physical aggression dimensions. They have found that boys displayed more direct aggression such as physical aggression compared to girls, while girls tended to display more indirect aggression such as gossiping and excluding others.

CONCLUSION

Consequently, this study is able to provide fruitful information about the aggression level among primary school children in Malaysia. The results from this study revealed that school children in Malaysia are moderately aggressive in their behaviour. The types of aggression involved are verbal aggression, anger and hostility. Boys were found to be more aggressive than girls physically while girls showed more aggression in term of anger as compared to boys. Having an enhanced understanding of the aggression level demonstrated by school children in this study, it is suggested that appropriate intervention programmes, such as parent training programme, child-focused programme, community-based programme, and mental health treatment to be designed and implemented to reduce the level of aggression among school children. By doing so, it is anticipated that incidents of delinquent and bullying can be minimized or inhibited.

RECOMMENDATIONS

As this study employed a cross-sectional research approach, the developmental factors such as maturation could not be accounted for. Hence, it is suggested that longitudinal approach to be utilized in future research to overcome this shortcoming. In addition, this study employed quantitative research approach in collecting and analyzing data. The data and information obtained from this study were limited because these were obtained based on the structured instrument. Hence, both qualitative and

quantitative approaches should be utilised in the future research to enrich and enhance the understanding of the relationships among the variables concerned. Meanwhile, demographic factors such as family socio-economy status, parents' marital status and academic achievement can also be taken into account in the study of children aggression in any future research.

REFERENCES

- Abd Wahad, K. (2006). Juveniles on remand: Trends and practices in Malaysia. *United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders* (pp. 196-208). Fuchu: Tokyo.
- Archer, J., & Côté, S. (2005). Sex differences in aggressive behaviour: A developmental and evolutionary perspective. In R.E. Tremblay, W.W. Hartup & J. Archer (Eds.), *Developmental origins of aggression* (pp. 425-443). New York: Guilford Press.
- Bagwell, C. L., & Coie, J. D. (2004). The best friendships of aggressive boys: Relationship quality, conflict management, and rule-breaking behaviour. *Journal of Experimental Child Psychology*, 88(1), 5-24.
- Baillargeon, R. H., Zoccolillo, M., Keenan, K., Côté, S., Pérusse, D, Wu, H., Boivin, M., & Tremblay, R. E. (2007). Gender differences in physical aggression: A prospective population-based survey of children before and after 2 years of age. *Developmental Psychology*, 43(1), 13-26.
- Bandura, A. (1963). The role of imitation in personality development. *The Journal of Nursery Education*, 18(3), 1-9.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice-Hall.

- Bettencourt, B. A., & Miller, N. (1996). Gender differences in aggression as a function of provocation: A meta-analysis. *Psychological Bulletin*, 119(3), 422-447.
- Bradshaw, C.P., Rodgers, C. R. R., Ghandour, L. A., & Garbarino, J. (2009). Social-cognitive mediators of the association between community violence exposure and aggressive behaviour. *School Psychology Quarterly*, 24(3), 199-210.
- Bushman, B. J., & Anderson, C. A. (2001). Is it time to pull the plug on the hostile versus instrumental aggression dichotomy? *Psychological Review*, 108, 273-279.
- Bushman, B. J., & Huesmann, L. R. (2010). Aggression. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th Ed.) (Ch. 23, pp. 833-863). New York: John Wiley & Sons.
- Buss, H. A., & Perry, M. (1992). The aggression questionnaire. *Journal of Personality and Social Psychology*, 63(3), 452-459.
- Campbell, S. B., Shaw, D. S., & Gilliom, M. (2000). Early externalizing behaviour problems: Toddlers and pre-schools at risk for later maladjustment. *Development and Psychopathology*, 12, 467-488.
- Campos, J. J., Frankel, C. B., & Camras, L. (2004). On the nature of emotion regulation. *Child Development*, 75, 377-394.
- Card, N. A., & Little, T. D. (2006). Proactive and reactive aggression in childhood and adolescence: A meta-analysis of differential relations with psychological adjustment. *International Journal of Behavioral Development*, 30(5), 466-480.
- Carlo, G., Hausmann, A., Christiansen, S., & Randall, B. A. (2003). Sociocognitive and behavioral correlates of a measure of prosocial tendencies for adolescents. *Journal of Early Adolescence*, 23(1), 107-134.
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for late adolescents. *Journal of Youth Adolescence*, 31, 31-44.
- Christakis, D., & Zimmerman, F. (2007). Violent television viewing during preschool is associated with antisocial behavior during school age. *Journal of the American Academy of Pediatrics*, 120(5), 993-999.
- Cote, S., Vaillancourt, T., LeBlanc, J., Nagin, D. W., & Tremblay, R. E. (2006). The development of physical aggression from toddlerhood to pre-adolescence: A nation-wide longitudinal study of Canadian children. *Journal of Abnormal Child Psychology*, 34(1), 71-85.
- Crick, N., & Grotpeter, J. (1995). Relational aggression, gender, and social psychological adjustment. *Child Development*, 66, 710-722.
- Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., Moffit, T. E., & Caspi, A. (2005). Low self-esteem is related to aggression, antisocial behaviour, and delinquency. *American Psychological Society*, 16(4), 328-335.
- Eisenberg, N. (2003). Prosocial behavior, empathy, and sympathy. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, & K. A. Moore (Eds.) *Wellbeing: Positive development across the life course* (pp. 253-265). Erlbaum: Mahwah.
- Eyal, K., & Rubin, A. M. (2003). Viewer aggression and homophily: Identification, and parasocial relationships with television characters. *Journal of Broadcasting and Electronic Media*, 47(1), 77-98.
- Fite, P. J., Stoppelbein, L., & Greening, L. (2009). Proactive and reactive aggression in a child psychiatric inpatient population. *Journal of Clinical Child & Adolescent Psychology*, 38(2), 199-205.
- Geen, R. G. (2001). *Human aggression* (2nd Ed.). Buckingham: Open University Press.

- Gustafson, R. (1989). Frustration and successful vs. unsuccessful aggression: A test of Berkowitz' Completion Hypothesis. *Aggressive Behavior*, 15, 5-12.
- Hay, D. F. (2005). *Early peer relations and their impact on children's development*. Encyclopaedia on Early Childhood Development: Centre of Excellence for Early Childhood Development.
- Hubbard, J. A., McAuliffe, M. D., Morrow, M. T., & Romano, L. J. (2010). Reactive and proactive in childhood and adolescence: Precursors, outcomes, processes, experiences, and measurement. *Journal of Personality*, 78(1), 95-118.
- Huesmann, L. R., Eron, L. D., & Dubow, E. F. (2002). Childhood predictors of adult criminality: Are all the risk factors reflected in childhood aggressiveness? *Criminal Behaviour and Mental Health*, 12, 185-208.
- Kokko, K., Pulkkinen, L., Huesmann, L. R., Dubow, E. F., & Boxer, P. (2009). Intensity of aggression in childhood as a predictor of different forms of adult aggression: A two-country (Finland and United States) Analysis. *Journal of Research in Adolescence*, 19(1), 9-34.
- Krahé, B. (2001). *The social psychology of aggression*. Hove: Psychology Press.
- Lagerspetz, K. M. J., & Björkqvist, K. (1994). Indirect aggression in boys and girls. In L.R. Huesmann (Ed.) *Aggressive behaviour: Current perspectives* (pp. 131-150). New York: Plenum Press.
- Lee, L. K., Chen, P. C. Y., Lee, K. K., & Kaur, J. (2007). Violence-related behaviours among Malaysian adolescents: A cross sectional survey among secondary school students in Negeri Sembilan. *Annals Academy of Medicine*, 36(3), 169-174.
- Marsee, M. A., & Frick, P. J. (2007). Exploring the distinction between reactive and proactive aggression in sample of detained girls. *Journal of Abnormal Child Psychology*, 35, 969-981.
- McGinley, M., & Carlo, G. (2007). Two sides of the same coin? The relations between prosocial and physically aggressive Behaviours. *Journal of Youth Adolescence*, 36(3), 337-349.
- Moffitt, T. E., Caspi, A., Rutter, M., & Silva, P. A. (2001). Sex differences in antisocial behaviour: Conduct disorder, delinquency, and violence in the Dunedin Longitudinal Study. *Journal of Youth Adolescence*, 36(6), 673-684.
- Ostrov, J. M., & Keating, C. F. (2004). Gender differences in preschool aggression during free play and structured interactions: An observational study. *Social Development*, 13, 255-277.
- Prior, M., Sanson, A., Smart, D., & Oberklaid, F. (2001). *Pathways from infancy to adolescence: Australian temperament project, 1983-2000*. Melbourne: Australian Institute of Family Studies.
- Rahimah, H. A., & Norani, M. S. (1997). Bullying and violence in the Malaysian school. In T. Ohsako, *Violence at school: Global issues and interventions* (pp. 57-71). Switzerland: United Nation Education.
- Ramirez, J. M., & Andreu, J. M. (2006). Aggression and some related psychological constructs (Anger, hostility, and impulsivity. Some comments from a research project). *Neuroscience and Biobehavioral Reviews*, 30, 276-291.
- Richardson, D. S., & Green, L. R. (2006). Direct and indirect aggression: Relationships as social context. *Journal of Applied Social Psychology*, 36(10), 2492-2508.
- Romasz, T. E., Kantor, J. H., & Elias, M. J. (2004). Implementation and evaluation of urban school-wide social-emotional learning programs. *Evaluation and Program Planning*, 27, 89-103.
- Ronen, T., Rahav, G., & Moldawsky, A. (2007). Aggressive behavior among Israeli elementary

- school students and associated emotional/behavioral problems and self-control. *School Psychology Quarterly*, 22(3), 407-431.
- Salzinger, S., Rosario, M., Feldman, R. S., & Ng-Mak, D. S. (2008). Aggressive behaviour in response to violence exposure: Is it adaptive for middle-school children? *Journal of Community Psychology*, 36(8), 1008-1025.
- Savage, J., & Yancey, C. (2008). The effects of media violence exposure on criminal aggression: A Meta-Analysis. *Criminal Justice and Behavior*, 35(6), 772-791.
- Schwartz, D. (2000). Subtypes of victims and aggressors in children's peer groups. *Journal of Abnormal Child Psychology*, 28(2), 181-192.
- Soenens, B., Vansteenkiste, M., Goossens, L., Duriez, B., & Niemiec, C. P. (2008). The intervening role of relational aggression between psychological control and friendship quality. *Journal of Social Development*, 17(3), 661-681.
- Tee, S. E. (2009). *Keeping children safe from bullies in Malaysia*. Retrieved April 4, 2010, from http://www.unicef.org/protection/malaysia_50269.html.
- Thompson, R., Tabone, J. K., Litrownik, A. J., Briggs, E. C., Hussey, J. M., English, D. J., & Dubowitz, H. (2011). Early Adolescent Risk Behavior Outcomes of Childhood Externalizing Behavioral Trajectories. *Journal of Early Adolescence*, 31(2), 234-257.
- Toblin, R. L., Schwartz, D., Gorman, A. H., & Abou-ezzeddine, T. (2005). Social cognitive and behavioral attributes of aggressive victims of bullying. *Applied Developmental Psychology*, 26(3), 329-346.
- Van Lier, P., Vitaro, F., & Eisner, M. (2007). Preventing aggressive and violent behavior: using prevention programs to study the role of peer dynamics in maladjustment problems. *European Journal on Criminal Policy and Research*, 13(3-4), 277-296.
- Vitaro, F., & Brendgen, M. (2005). Proactive and reactive aggression: A developmental perspective. In R. E. Tremblay, W. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp. 178-201). New York: Guilford Press.
- Xing, X., Wang, M., Zhang, Q., He, X., & Zhang, W. (2011). Gender differences in the reciprocal relationships between parental physical aggression and children's externalizing problem behavior in China. *Journal of Family Psychology*, 25(5), 699-708.
- Zaman, D. & Nadchatram, I. (2007). *Fighting the bullies with education and skills*. Retrieved on April 4, 2010, from http://www.unicef.org/malaysia/protection_6945.html.
- Zimmer-Gembeck, M. J., Geiger, T. C., & Crick, N. R. (2005). Relational and physical aggression, prosocial behavior, and peer relations: Gender moderation and bidirectional associations. *The Journal of Early Adolescence*, 25, 421-452.
- Zuria, M., Noriah, M. I., & Syafrimen, S. (2004). Penyesuaian akademik, sosial, dan emosi pelajar-pelajar di kampus. *Jurnal Personalia Pelajar*, 6, 1-16.

