Peer Attachment, Self-Efficacy and Aggression among Secondary School Adolescents in Selangor, Malaysia

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ABSTRACT

The present study investigated the relationships between peer attachment, self-efficacy and aggression among early adolescents. Furthermore, this study examined the mediating role of self-efficacy on the relationship between peers attachment and aggression among early adolescents. A total of 471 early adolescents aged 14 were selected from eight selected secondary schools in Selangor, Malaysia, recruited using multistage cluster sampling method. The questionnaires consisted of the revised version of the Inventory of Parent and Peer Attachment (IPPA), Self-Efficacy Questionnaire for Children (SEQ-C) and Reactive-Proactive Aggression Questionnaire (RPQ). The results revealed that there was significant negative relationships between peer attachment, self-efficacy and early adolescent’s aggression. Additionally, the result also showed that peer attachment had an indirect effect on aggression via self-efficacy. Evidently, the relationship between peer attachment and aggression among early adolescents was fully mediated by self-efficacy. Self-efficacy and peers attachment play important roles in the development of aggression among early adolescents. Practical recommendations are discussed and those factors should be taken into consideration to implement the interventions in curbing aggression among early adolescents in Malaysia.

Keywords: Aggression, early adolescents, peer attachment, self-efficacy

INTRODUCTION

Aggression is a matter of public health concern, particularly, aggression among adolescents (Werner & Crick, 2004). It is widely acknowledged to be a serious social problem (Devine et al., 2004), and probably the most common and noticeable problem among school adolescents (Werner &
Crick, 2004). It had received great attention from mental health associations, school authorities and media as it is frequently linked with maladjustment. According to Michaud (2009) and Sullivan et al. (2006), examples of adolescent’s aggression include, spreading of rumors, bullying and hitting.

Adolescence is a critical period of transition from childhood to adulthood. This transitional period can bring up new risks and new diverse experiences which relates to the world and individuals. The entire adolescence phase can be a very challenging stage in life for most adolescents due to the gradual onset of cognitive, social and emotional changes (Elias & Butler, 2005) which the interconnection between family (especially parental), peers and self-efficacy are crucial (Bandura et al., 1999). These changes may result in the increased vulnerability to emotional and behavioral problems (Oleszkowicz & Senejko, 2013), including delinquency, experimenting aggression as well as other behavior incompetency (Krahe & Moller, 2004).

The ability to cope with obstacles and challenges is crucial during failure to exercise self-efficacy could lead to negative consequences, for instance, substance abuse and low self-confidence (Tam et al., 2012). Therefore, adolescent’s self-belief in restraining themselves from engaging any misbehaviour is closely related to their level of self-efficacy. This ability not only affecting adolescent’s behaviours, but also has a major impact on their well-being. Self-efficacy defines as the beliefs in own selves to perform a particular behaviour and have control over a given event in lives. It plays a significant role when it comes to how individuals overcoming their difficulties and changes either from cognitive, emotional or physical aspects, and the motivation to attempt to solve the problem, regardless of whether the attempt is positive or negative.

Throughout adolescence, the level of dependency on parents will reduce while the level of attachment with peers will spike when it comes to attachment related functions, such as seeking for comfort when under pressure or stress (Allen, 2008; Hoeve et al., 2012), protection and support from peers. Peers serve as increasingly important and influential sources of attachment support in adolescent’s lives (Allen, 2008; Rubin et al., 2009; Hoeve et al., 2012). Positive emotional supports and care from the peers would encourage adolescents to embrace difficulties and challenges easier than those who are less attached with peers. The statement is in line with a study conducted by Laible et al. (2000), that revealed adolescents with higher peers attachment were the least aggressive and the most sympathetic towards their peers.

According to Bandura (1986), adolescent’s sense of self-efficacy is influenced by social factor, such as peers. It is highlighted in Social Cognitive Theory that personal/individual factor such as self-efficacy and environmental factor such as peer attachment are interrelated with individual’s behaviour. Individual’s behaviour is shaped by the environmental
factor and mediated through personal factor. As such, the peers, often regarded as a group of friends who share similar interests and values (Hazan & Shaver, 1994) serving as another major influence in the development of perceived self-efficacy as the individual gradually develops autonomy from parents. As the level of acceptance among a group of peers could be perceived as the level of self-worth for an individual (Robinson, 1995), while impoverished peer relationships could disrupt the efficacy beliefs in one’s mind. This would ultimately, cause forms of anti-social behaviour such as aggression. These beliefs are crucial in critical transitional stage of adolescence in order to help adolescents cope with stressful moments which ultimately, eliminate the chances of disruptive behaviour such as aggression.

Previous studies had indicated that problems in attached with peers affect adolescent's self-efficacy, and lower level of self-efficacy predict behavioural problem, include aggression than those with higher level of peer attachment. Nonetheless, we are still seeing a lack of coherent, comprehensive and developmental study that attempts to examine the associations between peer attachment and aggression among adolescents which are mediated by self-efficacy. Thus, this study attempts to examine how personal/individual factor (self-efficacy) and environmental factor (peer attachment) combined to predict aggression in Malaysian young adolescent. In addition, this study also examined the mediating role of self-efficacy on the relationship between peer attachment and aggression.

METHODS
Sample and Procedures
The present study employed a quantitative research approach and correlational research design. The samples of this study consisted of 471 school-going early adolescents in Selangor, Malaysia. The target population is identified as early adolescents aged 14 years old. Age of respondents is specified in this study using 2 rationales. First, individuals aged 14 years old have been justified as early adolescent. Second, early adolescent are more likely than elementary school children to have problems of aggression. Most parents and teachers agree that early adolescent is a difficult time of life for them (Buchanan & Holmbeck, 1998) because adolescents start to have conflicts with parents and peers, disrupted by mood and other risk behaviours (Arnett, 1999).

Multistage cluster sampling method was applied in this study. Selection of a sample of lower secondary school had several steps. In Step 1, state of Selangor was allocated into three regions that are North, Centre, and South. Each of the regions had some districts, but only one zone and one district - Petaling district in Selangor was randomly selected. In Step 2, the schools were selected using simple random sampling and 8 out of 73 national secondary schools from the chosen districts were involved in the study. In Step 3, only one form, which was Form 2 was selected from each selected school. In the last step, from the list of selected schools, one class from Form Two was randomly selected. All of the Form 2 students from the selected class participated in this study.
Instrument

Participants completed a questionnaire comprising the Reactive-Proactive Aggression Questionnaire (RPQ: Raine et al., 2006), revised version of the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987) and Self-Efficacy Questionnaire for Children (SEQ-C) (Muris, 2001).

Aggression. Reactive-Proactive Aggression Questionnaire (RPQ: Raine et al., 2006) was used to measure adolescent’s aggressive behavior. This scale comprised 23 items with 3-point scale of 0 = Never, 1= Sometimes and 2= Always. Proactive aggression items (2, 4, 6, 9, 10, 12, 15, 17, 18, 20, 21, 23) and reactive items (1, 3, 5, 7, 8, 11, 13, 14, 16, 19, 22) are summated to form proactive and reactive scales. Proactive and reactive scale scores are summated to obtain total aggression scores.

The administration of the RPQ reported high internal consistency, with 0.86 for proactive regression, 0.84 for reactive aggression, and 0.90 for total aggression (Fung et al., 2009). The proactive-reactive scales on the RPQ yielded coefficient alphas of 0.74 and 0.78, respectively (Miller & Lynam, 2006). The Cronbach alpha of aggression in the present was 0.84.

Peer Attachment. The revised version of the Inventory of Parent and Peer Attachment (IPPA) by Armsden and Greenberg (1987) was utilized to measure the attachment relationship with peer among adolescents. The IPPA consists of 3 parts where each part consists of 25 items to access the adolescent’s attachment with their peer. It is a 5-point Likert scale with responses of 5 = Almost always or always true, 4 = Often true, 3 = Sometimes true, 2 = Not very often true, or 1 = Almost never or never true. Higher scores reflects higher attachment with peer. Examples of the items for peer included “I like to get my friend’s point of view on things I’m concerned about.” and “I can count on my friends when need to get something off my chest.” There are reverse-scoring the items for the peer figure, which are 4, 5, 9, 10, 11, 18, 22, 23. The internal consistency coefficients (ρ) for the peer attachment was satisfactory, which was 0.886. The Cronbach alpha of peer attachment in the present was 0.88.

Self-efficacy. The Self-Efficacy Questionnaire for Children (SEQ-C) (Muris, 2001) was used to assess and measure self-efficacy with three domains of self-efficacy. This 24-items scale is a shortened version and is based on the 37-items Perceived Self-Efficacy Scales by Bandura et al. (1999). The first subscale of the SEQ-C is academic self-efficacy (8 items), concerned with the perceived capability to control one’s own learning behavior, to excel in academic subjects and to fulfil academic expectations. The second subscale is social self-efficacy (8 items), refers to the self-perceived capability to be assertive and initiate and sustain good peer relationships. The last subscale is emotional self-efficacy (8 items), pertains to one’s self-perceived capability for coping with negative emotions.
The items of SEQ-C were rated on a 5-point Likert scale ranging from 1 = Not At All and 5 = Very Well. The scoring ranges from 24 to 120. Higher scores obtained reflected the higher the perceived self-efficacy a person will be. Total self-efficacy score can be computed by summing across all items. The internal consistency of the scale used is appropriate and all deemed in acceptable levels, as it scored 0.88 on Cronbach’s alpha for the total self-efficacy (Muris, 2001). The Cronbach alpha of self-efficacy in the present study is 0.87.

Data Analysis
Data were gathered and analyzed using “Statistical Package for the Social Science” (SPSS software version 20.0) to describe the variables and to investigate the relationship between peer attachment, self-efficacy and aggression among early adolescents. In this study, descriptive statistic was conducted to analyze respondent’s personal backgrounds information. Pearson Product-Moment Correlation is used to test the correlation between peer attachment, self-efficacy and aggression among early adolescents. A series of simple linear regression was conducted to investigate the mediation effect of self-efficacy on the relationship between peer attachment and early adolescent’s aggression.

RESULTS
Personal Background of Respondents
Table 1 displays the frequency distribution of personal background of the respondents which include gender and ethnic. The majority of the respondents 54.1% (n=255) were females while 45.9% (n=216) were males, giving a total of 471 respondents. Of the total sample, the ethnic composition of the sample were 51.2% (n=241) Chinese, 33.8% (n=159) Malay, 12.1% (n=57) Indian and 3.0% (n=14) were from other ethnic backgrounds.

Table 1
<table>
<thead>
<tr>
<th>Variable</th>
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<th>(%)</th>
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<tbody>
<tr>
<td>Gender</td>
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<tr>
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<tr>
<td>Female</td>
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<tr>
<td>Chinese</td>
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<td>51.2</td>
</tr>
<tr>
<td>Indian</td>
<td>57</td>
<td>12.1</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: S.D=Standard Deviation

Peer Attachment, Self-Efficacy and Aggression
Table 2 presents the means, standard deviations, and inter-correlations for all study variables in this study. All of the variables were correlated with each other. By referring to Table 2, both peer attachment \( r = -0.173, p < 0.001 \) and self-efficacy \( r = -0.229, p < 0.001 \) had significant negative relationship with aggression. This finding indicated that early adolescents, who had high attached with peers, and reported high self-efficacy were more likely to be less engaging in aggressive acts than those low attached with peers and low self-efficacy.
Self-efficacy as a Mediator

Multiple regression analysis was carried out to examine the effect of peer attachment on aggression through the mediator of self-efficacy. There are few steps need to be established before conducting the mediation analysis. These steps include (1) predictor must have a significant relationship with outcome variable, (2) predictor had significantly relationship with mediator, (3) mediator had significant relationship with outcome variable, (4) The predictors and the mediator were treated as the predictors of the outcome variable. Steps of regression analysis were displayed in Table 3.

As depicted in Table 3, peer attachment (B = -0.063, SE = 0.017, t = -3.805, p < 0.001) and self-efficacy (B = -0.100, SE = 0.020, t = -5.105, p < 0.001) independently predict aggression. Higher levels of peer attachment and self-efficacy contributed to lower level of aggression among early adolescents. Peer attachment (B =0.269, SE =0.036, t = 7.394, p <0.001) also significantly predicted self-efficacy. High level of peer attachment enhanced efficacy beliefs of early adolescents. In step 4, the regression coefficient of peer attachment to early adolescents’ aggression (path c’) reduced and turned to non-significant (B= -0.040, SE=0.017, t=-2.337, p =0.014). Thus, this finding indicated that self-efficacy fully mediated the relationship between peer attachment and early adolescents’ aggression. The mediation effect was further tested with Sobel test and this test (Z =-4.155, p < 0.001) supported the fully mediation.
effect of self-efficacy on the relationship between peer attachment and aggression. Results indicated that peer attachment indirectly influence aggression through self-efficacy. Full mediational model is shown in Figure 1.

\[ \text{Peers} \rightarrow \text{Self-efficacy} \rightarrow \text{Aggression} \]

**DISCUSSION**

The primary goal of the present study was to examine the relationships between peer attachment, self-efficacy and aggression in a sample of Malaysia’s early adolescents.

From Table 2, the finding found that peer attachment was significantly related to early adolescent’s aggression. The result of this study was in line with past research (Laible et al., 2000), which denoted that in adolescents, who with the higher attached with peers were less involved in aggressive acts and are more sympathetic to their peers. Card et al. (2008) highlighted that the relationship between aggression and poor peer relation was strong where children who impersonally rejected by peers were frequently become ostracized and attempted to act aggressively (Leary et al., 2006).

During adolescence, individuals are more depending on their peer groups for approval and social validation rather than depending on their families. Adolescents spent most of the time with their peers and on some of the issues, their peer’s opinions are more important than their parent’s opinions (Masten et al., 2009). Peer relationships have high social influences on adolescent’s behaviour. Besides, peers play significant role, particularly when in the transition period of adolescence to adulthood (Cui et al., 2010; Kok et al., 2011). Thus, adolescents who having high level of peer attachment tend to involve less in aggressive acts. However, more study is needed to find the role of peer attachment with self-report aggression.

Self-efficacy has significant relationship with aggression among early adolescents in this study. This showed that early adolescents who have high efficacy on themselves are less likely to be involved in aggressive behavior. The results of the study is in line with past study by Willemse (2008), which denoted that there was a significant negative relationship between self-efficacy and anger. This revealed that high self-efficacy were correlated to the decreases of anger. Adolescents with high self-efficacious are more likely to establish sense of control over their anger will more likely to respond provocation in a better way and positive outcomes are achievable, such as constructive discussions and reasoning (Nocentini et al., 2013).

According to Bandura (1995), individual with higher level of self-efficacy tend to interpret information accurately than those with low self-efficacy. They will interpret the obstacles as a challenging task, and structuring situations in order
to accomplish the task successfully. Also, a study conducted by Singh and Bussey (2009), supported with their findings that there was a link between self-efficacy beliefs and lower level of externalizing behaviors in youth. Additionally, Bandura et al. (2003) emphasized the role of perceived self-regulatory efficacy in regulating the negative affect, for instance peer pressure on developmental outcomes, for example, prosocial behaviour, antisocial and well-being. This can be said that sense of efficacy serves as a buffer against the peer pressure which may pursue them to involve in detrimental activities.

Moreover, the finding indicated that self-efficacy fully mediates the relationship between peer attachment and early adolescent’s aggression. This result of full mediation indicated that peers attachment influence aggression among early adolescents predominantly through the way they coping with stressful events. In the stage of adolescence, the importance of peer attachment increases, where adolescents can rely on peers and replace parental attachment for supports and encouragements in the face difficulties and challenges (Armsden & Greenberg, 1987). The findings of this study highlighted the significance of peers-adolescent attachment and self-efficacy in inhibiting adolescent’s aggression. Additionally, Caprara, Regalia and Bandura, (2002), denoted that self-efficacy beliefs could serve as a role in counteracting peer pressure from involving in aggressive behavior as well as impeding delinquency by nurturing prosocial behavior among adolescents (Bandura et al. 1999).

Overall, the present study provided some insights regarding the contribution of peers attachment and self-efficacy in explaining aggression among Malaysia’s early adolescents. The finding of this study demonstrated the significance of attachment relationships with peers and higher self-efficacy in manipulating adolescent’s aggression. A conclusion can be made that self-efficacy serves as a significant role of mediator in explaining how attachment with peers influence on aggression among early adolescents.

CONCLUSION

In summary, aggression is considered as a growing social problem where therapists and other professionals like teachers and parents as well, should understand the root causes of aggression in order to prevent early adolescents in engaging aggressive acts. Programs targeting at early youth, young adolescents and young adults should concern on enhancing their self-efficacy as well as their attachment relationship with peers. Consequently, aggression or bullying case in Malaysia might be reduced. Moreover, early adolescents who have high self-efficacious are tend to have good adaptation and good in making judgment than those who with lower level of self-efficacy. According to Bandura (1977), efficacy beliefs help individual believe and have faith on their own abilities in order to strive better life in the meantime motivate them to accomplish desirable outcomes and succeed in life.
Recommendations

There are few of recommendations that should be addressed in this study. First, the sample of this research was merely on school-going early adolescents aged 14 years old in secondary school in Selangor state, Malaysia. The life challenges faced by early adolescents (10 – 14 years old) as they enter to puberty and transition into late adolescents (15-19 years old) might be different from the perspective of physical, psychological, sociocultural and cognitive. Thus, the sample of this study is not representative of the entire population of adolescents (secondary school students) in Malaysia. In future study, researcher may include expanding the age range of school adolescents, either from primary school or secondary school. Both of these groups can be compared in order to have a holistic view on adolescent’s aggression. This is because the trend of developmental aggressive behaviour among children and adolescents and consequences may be different. In addition, only national government school was recruited for the study, thus it may limit the extent of findings generalization to other types of secondary schools in Malaysia.

Secondly, this study concerns in the form of causality regarding to aggression among early adolescents. The instruments were administered to respondents for a short period of time and it is difficult for them to determine the cause and effect relationship between the variables studied. Longitudinal study or mixed method would be advantageous to establish the causality between variables.

Furthermore, finding of the study relied solely on the early adolescent’s self-report measures who recall their attachment relationships with peers, which might not able to yield accurate information regarding attachment relationship. This may introduce potential problems of common method biases into the data, particularly under-reporting social unacceptable behavior, which is aggression. Longitudinal studies with larger sample size may represent the targeted population more precisely and provide relevant data from the third party, for instance, parent or teacher that better elucidate the relationships among the variables.

ACKNOWLEDGEMENTS

Authors would like to thank all of the study participants for their cooperation in the present study.

REFERENCES


