Differences in anger, aggression, bullying among adolescents in different self-esteem groups

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Abstract

The purpose of the study was to compare anger, aggression and bullying among adolescents in three self-esteem groups. Rosenberg self-esteem scale and Buss & Perry aggression questionnaire were used for the study. Bullying was measured with questions related to it. 575 adolescents participated in the study. Results showed that the scores of physical aggression, anger, hostility and bullying victims were significantly higher in the lowest self-esteem group compared with middle and high self-esteem groups among girls. It was found that the scores of anger were significantly higher in the lowest self-esteem group compared with middle and high self-esteem groups among boys. The scores of hostility were significantly higher in the lowest self-esteem group compared with other two groups among boys. Also, the hostility was significantly higher in middle self-esteem group compared with the highest self-esteem group among boys. The scores of bullying victims were significantly higher in the lowest self-esteem group compared with the highest self-esteem group among boys.

Keywords: Anger, aggression, bullying, self-esteem, adolescence.

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1. Introduction

The time between childhood and adulthood—adolescence—is a period characterised by learning, adaptation and alteration. It is an important time for youth because of numerous physical, emotional and intellectual changes. Many problems may occur during this period. The management of these difficulties may impact adolescents' wellbeing and their future lives (Kristensson & Ohlund, 2005; Lowth, 2015; Tilindiene, 2006). One of the most important issues, which occurs during adolescence, is the experience of anger. Some adolescents seem to coast through all of this, however, others find themselves in a significant challenge (Lowth, 2015). Research studies show that anger-related problems (e.g., verbal and physical aggression, violence) are some of the most common reasons that adolescents are being referred for mental health services (Blake & Hamrin, 2007). There are three ways of anger management: expression, suppression and calming (Hussian & Sharma, 2014). Though anger is common and a natural human emotional reaction, inappropriate anger management strategy may impact a lot of problems for both oneself and others (Charlesworth, 2008).

Anger is often triggered by other difficult feelings such as frustration or sadness and can be a means of deflecting or avoiding these emotions. The emotion of anger is related to psychological and cognitive problems such as depression and anxiety (Hussian & Sharma, 2014; Lowth, 2015). Furthermore, anger is associated with family dysfunction, aggression, violence, drug abuse, educational deterioration, suicide attempts, loneliness, eating disorder, isolation, criminality, cyberbullying and traditional bullying (Aricak & Ozbay, 2016; Dapelo, Surguladze, Morris & Tchanturia, 2016; Lowth, 2015; Nichols, Mahadeo, Bryant & Botvin, 2008; Tanrikulu & Campbell, 2015). Bullying is a goal-oriented aggression: the purpose of bullying is to harm another person, who is not able to fight back against him/her. The reason for bullying is to become dominant over the others or preserve the solidity of a group at school. An individual or a group of perpetrators usually use physical, psychological, social and verbal aggression repeatedly. Nevertheless, bullying and aggressive behaviour can be the result of various factors; researchers state that uncontrolled anger is one of the most common variables related to such behaviour. Bullying behaviour can be viewed as an act of anger expression like aggressive behaviour (Hussian & Sharma, 2014; Normantaite & Perminas, 2013). Therefore, anger, aggression and bullying were involved in this research.

Considering the facts of the analysis made by Health Behaviour in School-Aged Children, World Health Organization, and researchers in Lithuania and around the World, bullying is a huge problem in schools (Drasute, Drasutis & Kukucionyte, 2011). Therefore, bullying at school is recognised as a global phenomenon that strongly affects adolescent and his environment. It was found that adolescents in Baltic countries reported higher rates of bullying and victimisation compared with 40 different countries (Craig et al., 2009). However, bullying is one of the most frequent problems in Lithuania compared with other countries. The situation of bullying was analysed in Latvia and Lithuania. The results showed that being a victim, bully or bully/victim was reported by 30.1% adolescents in Latvia and 52.3% in Lithuania with the highest proportion reporting being a victim (Gobina, Zaborskis, Pudule, Kalnins & Villerusa, 2008). Involvement of boys in all three categories of bullying combined (i.e., bullying others, being bullied and being both a bully and a victim) was 45.2% in Lithuania. Among girls, the prevalence of involvement in bullying was 35.8% in Lithuania (Craig et al., 2009).

Zaborskis and Vareikiene (2015) had found that the high prevalence rate of bullying among students in schools encourages to take actions for immediate targeted bullying prevention in Lithuanian schools. Valiune (2014) found out that it was important to analyse personal variables for intervention effectiveness. Personality variables predicted greater anger-related problems (Bettencourt, Talley, Benjamin & Valentine, 2006). One of those variables could have been self-esteem because it is one of the most important concepts during adolescence (Arslan, 2009). Self-esteem is
usually described as a person’s evaluation of themselves or their attitudes towards themselves (Walker & Knauer, 2011).

Various findings have engendered debate regarding the relationship between self-esteem and anger-related problems like aggression, bullying and hostility (Eftimie & Ionescu, 2010; Turner & White, 2015; Yavuzer, Karatas, Civilidag & Gundogdu, 2014). The relationship between self-esteem, anger, hostility and aggression had been a controversial topic. The research found that negative self-esteem was related to aggression and bullying (Erhabor, 2013; Garofalo, Holden, Zeigler-Hill & Velotti, 2016). It was explained that aggression and bullying behaviour are signs of low self-esteem. This view suggests that individuals with low self-esteem behave aggressively, in order to increase their own self-esteem (Yavuzer et al., 2014). Also, it was found that better relationships were related to higher positive self-esteem and lower negative self-esteem (Sarkova et al., 2014). Aggressive adolescents usually are less popular among peers; therefore, it correlates with lower self-esteem. However, other scientists suggested that high self-esteem combined with other personal variables predicts an aggression (Bushman et al., 2009). Adolescent with high self-esteem may choose to protect themselves by acting aggressively towards people who do not agree with their evaluations. In addition, while self-esteem of arrogant adolescent increases, their anger experiences and anger expressions increases as well (Yavuzer et al., 2014). Therefore, according to these controversial findings, it can be hypothesised that both higher and lower self-esteem are related to anger-related problems.

Self-esteem can be measured in the continuum, and according to previous findings, it is important to compare anger, aggression and bullying differences between three different levels of self-esteem among adolescent. It is possible that lower and higher self-esteem is connected to anger-related problems. Therefore, the purpose of this study is to compare anger, aggression and bullying among adolescents in three self-esteem groups.

2. Methods

2.1. Sample

The Sample consisted of 575 adolescents (281 girls and 294 boys), age range 13–17, (average age was 15 years and 2 months, SD = 1.1) from Kaunas city in Lithuania.

2.2. Procedure

Research was conducted after the consent of parents and school principals was signed. Students participated anonymously and on a voluntary basis. Part of the questionnaires was filled in classrooms and another part was sent to adolescents via school e-mails. Administration of the questionnaire was not time-limited.

2.3. Instruments

The Rosenberg’s self-esteem scale (1965) was used to identify levels of student global feeling of self-worth or self-acceptance. This scale consisted of 10 questions based on four-point Likert scale: 1 = strongly agree, 2 = agree, 3 = disagree and 4 = strongly disagree. The total possible score obtained the scale ranged from 0 to 40. Higher scores indicate higher self-esteem (Koruklu, 2015). The Cronbach Alpha reliability of the scale was 0.845 in the current study.

The aggression questionnaire was developed by Buss and Perry, the Lithuanian version of the aggression questionnaire scale was prepared by Normantaite and Perminas (2009). The scale consisted of five-point Likert scale responses and 29 items. The questionnaire consisted of four subscales: physical aggression, verbal aggression, anger and hostility. Each item was rated on a five-
point Likert scale that ranges from 1—strongly disagree to 5—strongly agree. Higher scores on the scale items demonstrated higher levels of aggression. The Cronbach Alpha reliability of the physical aggression subscale within the present study was 0.718; of the verbal aggression subscale—0.602; of the anger subscale—0.713; of the hostility subscale—0.825.

Bullying was measured by the questions like: How often have you been bullied by other students during the last month? How often have you bullied someone during the last month? Respondents could choose one answer from five answers possibility: never; 1–2 times per month; 2–3 times per month; 1 time per week; several times per week.

3. Results

The one-way analysis of variance (ANOVA) and post hoc analyses were used for comparison of three groups, i.e., students who had low self-esteem, middle self-esteem and high self-esteem. Comparison of physical aggression, verbal aggression, anger, hostility, bullying victims and bullies among girls is shown in Table 1. Comparison of physical aggression, verbal aggression, anger, hostility, bullying victims and bullies among boys is showed in Table 2.

| Table 1. Differences in anger, aggression, bullying among girls in different self-esteem groups |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Variable                        | Low    | SD     | Middle | SD     | High   | SD     | F(2.291) | p      | Turkey’s HSD |
| Physical aggression             | 20.7   | 6.4    | 18.7   | 5.3    | 18.6   | 5.8    | 4.1      | 0.017  | 1 > 2, 3 |
| Verbal aggression               | 14.4   | 3.8    | 13.5   | 3.7    | 14.0   | 4.0    | 1.5      | 0.223  | 1, 2, 3 |
| Anger                           | 19.9   | 6.0    | 17.5   | 4.7    | 17.0   | 5.4    | 8.3      | 0.001  | 1 > 2, 3 |
| Hostility                       | 23.2   | 5.9    | 18.9   | 6.5    | 16.8   | 6.1    | 27.9     | 0.001  | 1 > 2, 3 |
| Bullies                         | 1.7    | 1.1    | 1.7    | 1.0    | 1.6    | 1.0    | 0.469    | 0.629  | 1, 2, 3 |
| Bullying victims                | 1.9    | 1.2    | 1.4    | 0.8    | 1.2    | 1.0    | 15.1     | 0.001  | 1 > 2, 3 |

There were statistically significant differences between groups as determined by one-way ANOVA in physical aggression ($F_{(2.291)} = 4.1, p = 0.017$), anger ($F_{(2.291)} = 8.3, p = 0.001$), hostility ($F_{(2.291)} = 27.9, p = 0.001$) and bullying victims ($F_{(2.291)} = 15.1, p = 0.001$) scales among girls. A Tukey post-hoc test revealed that the scores of physical aggression, anger, hostility and bullying victims were significantly higher in lowest self-esteem group compared with middle and high self-esteem groups.

There were no statistically significant differences in verbal aggression and bullies’ scales among girls.

There were statistically significant differences between groups as determined by one-way ANOVA in anger ($F_{(2.278)} = 10.670, p = 0.001$), hostility ($F_{(2.278)} = 12.880, p = 0.001$) and bullying victims ($F_{(2.278)} = 4.553, p = 0.011$) scales among boys. A Tukey post-hoc test revealed that the scores of anger were significantly higher in lowest self-esteem group and middle self-esteem group compared with the highest self-esteem group.

A Tukey post-hoc test revealed that the scores of hostility were statistically higher in lowest self-esteem group compared with middle and highest self-esteem groups. Also, a Tukey post-hoc test revealed that the scores of hostility were significantly higher in middle self-esteem group compared with the highest self-esteem group.
Table 2. Differences in anger, aggression and bullying among boys in different self-esteem groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low</th>
<th>SD</th>
<th>Middle</th>
<th>SD</th>
<th>High</th>
<th>SD</th>
<th>F(2.278)</th>
<th>p</th>
<th>Turkey’s HSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical aggression</td>
<td>23.0</td>
<td>7.3</td>
<td>22.9</td>
<td>6.1</td>
<td>21.3</td>
<td>6.9</td>
<td>1.874</td>
<td>0.155</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Verbal aggression</td>
<td>13.7</td>
<td>4.6</td>
<td>13.5</td>
<td>3.5</td>
<td>13.2</td>
<td>4.6</td>
<td>0.381</td>
<td>0.683</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Anger</td>
<td>18.4</td>
<td>5.5</td>
<td>16.8</td>
<td>4.8</td>
<td>14.9</td>
<td>5.1</td>
<td>10.670</td>
<td>0.001</td>
<td>1, 2 &gt; 3</td>
</tr>
<tr>
<td>Hostility</td>
<td>21.2</td>
<td>8.1</td>
<td>18.6</td>
<td>5.5</td>
<td>15.9</td>
<td>7.3</td>
<td>12.880</td>
<td>0.001</td>
<td>1 &gt; 2 &gt; 3</td>
</tr>
<tr>
<td>Bullies</td>
<td>2.2</td>
<td>1.5</td>
<td>2.0</td>
<td>1.3</td>
<td>2.1</td>
<td>1.4</td>
<td>0.357</td>
<td>0.700</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Bullying victims</td>
<td>2.0</td>
<td>1.4</td>
<td>1.6</td>
<td>1.1</td>
<td>1.5</td>
<td>1.2</td>
<td>4.553</td>
<td>0.011</td>
<td>1 &gt; 3</td>
</tr>
</tbody>
</table>

A Tukey post-hoc test revealed that the scores of bullying victims were statistically higher in lowest self-esteem group compared with highest self-esteem groups.

There were no significant differences in physical aggression, verbal aggression and bullies’ scales among boys.

4. Discussion

The purpose of the study was to compare anger, aggression and bullying among adolescents in three self-esteem groups. Results of this study showed that anger, hostility and bullying victims were significantly higher in the lowest self-esteem group compared with highest self-esteem group among girls and boys. Previous research studies found similar results (Rentzsch, Schroder-Abe & Schutz, 2015; Taylor, Davis-Kean & Malanchuk, 2007). It could be explained by the assumption that adolescents with low self-esteem behave aggressively in order to increase their own self-esteem (Yavuzer et al., 2014). Also, adolescents with low self-esteem may exhibit hostile tendencies because of the feelings of envy, especially in highly competitive contexts (Rentzsch et al., 2015). School is a quite competitive environment and students spend a great part of their day in school or taking school-related activities. Therefore, school programmes that deal with adolescent anger related problems such as hostility, bullying victims and poor self-esteem must be underlined.

It was found that physical aggression was significantly higher in the lowest self-esteem group compared with middle and high self-esteem groups among girls but not among boys. Other researchers found that adolescents who had high self-esteem showed lower aggression compared to those who had low self-esteem (Morsunbul, 2015; Turner & White, 2015). However, those findings were found for both boys and girls. The results of this study could be explained by gender differences. The differences among gender increase in physical aggression and a decrease in hostility and anger (Morsunbul, 2015). The research found that scores of physical aggression were higher for boys compared with girls (Archer, 2004; Krahe & Busching, 2014). Some previous findings showed that adolescents select peers with similar physical aggression level as friends (Dijkstra, Berger & Lindenberg, 2011). Therefore, aggressive boys find friends more easily than girls. Aggressive girls usually are less popular among peers, thus unpopularity among peers relates to lower self-esteem. According to the findings, girls with low self-esteem level use physical aggression more often and this behaviour may maintain low self-esteem.

Results of this study did not show the differences in verbal aggression scores among boys and girls in different groups of self-esteem. It could be explained that adolescents start to use verbal aggression more often than physical aggression (Fares, Ramirez, Cabrera, Lozano & Salas, 2011). Hence, verbal
aggression becomes a quite common behaviour among adolescents despite the levels of self-esteem. Also, there is an assumption that high self-esteem does not promote aggression itself for most adolescents (Taylor et al., 2007). The results of this study did not show the differences in bullies’ scores among boys and girls in different groups of self-esteem as well. Several studies have shown that bullies, victims and not involved in bullying children may differ in their levels of self-esteem. Victims usually have lower levels of self-esteem than bullies (Seixas, Coelho & Nicholas-Fischer, 2013).

The present study has some limitations. A major limitation of this study is the cross-sectional study design. As a consequence, it was not possible to draw firm conclusions about causality. A longitudinal study design could help to understand the changes in anger-related problems in three different self-esteem groups. Another limitation is that participants of this study were students from only one city of Lithuania. The differences between anger-related problems of adolescents with different self-esteem levels adequately describe the present cohort (a birth cohort in Kaunas), but the cultural context in which these outcomes were observed should be taken into consideration while interpreting and generalising the results. For example, it is possible that differences in the anger-related problems between various cultures could affect any differences in self-esteem groups in one particular culture. Final limitation concerns the nature of the data collected, i.e., all measures were self-reports.

References


