Psychosocial adjustment in aggressors, pure victims and aggressive victims at school

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The present study examined differences among four categories of adolescents – aggressors, pure victims, aggressive victims, and students not involved in behavioural or victimization problems at school – with respect to self-esteem, depressive symptomatology, perceived stress, feeling of loneliness, and a general measure of satisfaction with life. Participants were 1319 adolescents aged from 11 to 16 years old (47% male) and drawn from seven state secondary schools in Valencia (Spain). Analyses of variance revealed significant differences between the four categories of students. Thus, adolescents not involved showed general better psychosocial adjustment; they had higher levels of self-esteem and satisfaction with life, and lower levels of depressive symptomatology, perceived stress and feeling of loneliness. The scores for this group were equivalent to those of aggressors with respect to self-esteem, depressive symptomatology and loneliness. However, aggressors perceived more stress and expressed less satisfaction with life, as did the other two groups, namely pure victims and aggressive victims. Victims reported the strongest feelings of loneliness.

Key words: Aggressor, victim, aggressive victim, school violence, psychosocial adjustment.

Tiempo en Español. En el presente estudio se examinan las diferencias entre cuatro categorías de adolescentes –agresores, víctimas puras, víctimas agresivas y estudiantes no implicados en problemas comportamentales o de victimización en la escuela– en relación con la autoestima, la sintomatología depresiva, el estrés percibido, el sentimiento de soledad, y una medida general de satisfacción con la vida. Los participantes fueron 1.319 adolescentes con edades comprendidas entre los 11 y los 16 años (47% chicos) y escolarizados en siete centros públicos de enseñanza secundaria ubicados en Valencia (España). Los análisis de varianza indicaron la existencia de diferencias significativas entre las cuatro categorías de estudiantes. Así, los adolescentes no implicados mostraron un mejor ajuste psicosocial general: niveles más elevados de autoestima y satisfacción con la vida y niveles inferiores de sintomatología depresiva, estrés percibido y sentimiento de soledad. Las puntuaciones en este grupo fueron equivalentes a aquellas obtenidas por los agresores con respecto a la autoestima, la sintomatología depresiva y la soledad. Sin embargo, los agresores percibieron más estrés y expresaron menor satisfacción con sus vidas, como así también hicieron los otros dos grupos, a saber: víctimas puras y víctimas agresivas. Las víctimas mostraron los niveles más elevados de sentimiento de soledad.

Palabras clave: Agresor, víctima, víctima agresiva, violencia escolar, ajuste psicosocial.

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Most of the research focused on victimization at school has repeatedly shown how victimized students exhibit serious psychosomatic symptoms and poor psychological adjustment (Alsaker & Olweus, 1992; Juvonen, Nishina, & Graham, 2000; Kupersmidt, Coie, & Dodge, 1990). For instance, recent studies have documented that depressive symptomatology and psychological distress are common in adolescents experiencing victimization (Estévez, Musitu, & Herrero, 2005; Guterman, Hahm, & Cameron, 2002; Sweeting, Young, West, & Der, 2006; Kumpulainen, Rääänen, & Puura, 2001). Likewise, victimized students normally display low levels of self-esteem (Austin & Joseph, 1996; Estévez, Martínez, & Musitu, 2006; Olweus, 1998) and greater feelings of loneliness (Kochenderfer & Ladd, 1996; Storch & Masia-Warner, 2004).

Previous research analysing psychosocial adjustment in violent students at school, however, indicates that there is scarcely any correspondence between violent behaviour and psychological problems in the adolescent period (Angold & Costello, 1993). Thus, for example, depressive symptoms and violent behaviour have only been found to co-occur in about 5% to 8% of adolescents (Garnefski & Diekstra, 1997; Ge, Best, Conger, & Simons, 1996). Results regarding self-esteem in aggressors are even more controversial: some authors suggest that these adolescents show lower levels of self-esteem in comparison with those not involved in such behavioural problems (Mynard & Joseph, 1997; O’Moore, 1997), while others report that violent adolescents often obtain high scores on measures of this construct (Olweus, 1998; Rigby & Slee, 1992), and particularly on measures of social self-esteem when compared to victims, especially aggressive victims (Andreou, 2000).

One possible explanation of this fact is that violent behaviour at this stage of life may be normative and even beneficial for social adjustment in some adolescents (Little, Brauner, Jones, Nock & Hawley, 2003). As Hawley and Vaughn (2003) report, aggressive students are often central figures in their peer group and tend to enjoy, therefore, some benefits of social inclusion, which may translate into positive self-perceptions and emotional adjustment. In the current research we examine and compare self-perception and psychosocial adjustment in both violent adolescents and victims of school violence in a Spanish sample, with the aim of better delimiting differences between these groups. The findings may have relevant practical implications for the development of school programs aimed at preventing and reducing violence in educational settings.

Finally, the present study distinguishes pure victims from aggressive victims. Pure victims are generally characterized as being submissive and passive, while
aggressive victims are, in contrast, prone to hostile behaviour (Schwartz, Proctor & Chien, 2001). However, although researchers have argued that aggressive victims are a theoretically distinct subgroup of students, relatively little is known about whether they present a different psychosocial profile. For this reason, differences among pure victims, aggressive victims and aggressors are also investigated in this research. In particular, we aimed to analyse psychosocial adjustment in the following four groups of adolescents: aggressors, victims, aggressive victims, and students not involved in behavioural or victimization problems at school. The indicators of psychosocial adjustment that we considered were: self-esteem, depressive symptomatology, perceived stress, feeling of loneliness, and a general measure of satisfaction with life.

METHOD

Participants
Participants in the study were 1319 adolescents attending secondary education in seven state schools in Valencia. Ages ranged from 11 to 16 (mean age 13.7; s.d. 1.6); 47% were boys and 53% were girls. The sample was split into three categories: aggressor (n = 223), victim (n = 212), and aggressive victim (n = 104). The category “aggressor” was established on the basis of scores above the 75th percentile on the School Violence Scale; the category “pure victim” on the basis of scores above the 75th percentile on the Peer Victimization Scale; the category “aggressive victim” was defined in terms of the combination of these scores. Finally, we placed into a fourth category 780 adolescents who displayed neither behavioural nor victimization problems at school. This last category was labelled “not involved”.

Procedure
After pre-contacts were made with several state schools selected at random in Valencia, seven schools finally participated in the study based primarily on their availability and the willingness of staff to collaborate in the investigation. Following initial contact with head teachers, all teaching staff were informed of the objectives of the study during a two-hour presentation. In parallel, a letter describing the study was sent to the parents requesting that they indicate in writing if they did not wish their child to participate (1% of parents exercised this option). Participants anonymously filled out the scales during a regular class period, lasting approximately one hour. All measures were translated using English-Spanish bidirectional translation and were administered within each classroom on the same day.
Instruments

School Violence Scale (adapted from Little et al., 2003). On this scale, adolescents indicated the frequency with which they had engaged in 24 deviant and violent behaviours at school over the last 12 months, on a five-point scale (0 = I don’t want to share this information, 1 = never, 4 = many times). Approximately 7% of respondents chose the “0” response for some items; these were excluded from the analyses. Principal component analysis indicated a three factor structure underlying responses on this scale: the first factor (31.72% of variance) was defined by ten items referring to overt violence (e.g., “I’m the type of person who hits, kicks, or punches others”), the second factor (22.67% of variance) was defined by seven items referring to relational violence (e.g., “If other have hurt me, I often try to keep them from being in my group of friends”), and the third factor (19.64% variance) was defined by seven items referring to instrumental violence (e.g., “I often start fights to get what I want”). Cronbach alphas for these subscales in the current sample were .82, .73, and .78 respectively.

Peer Victimization Scale (adapted from Mynard and Joseph, 2000). This scale consisted of 20 items, each rated on four-point scales (1 = never, 4 = many times) and referring to victimization at school. Principal component analysis revealed a three-factor structure: the first factor (35.74% of variance) was defined by seven items referring to overt physical victimization (e.g., “Some classmates have hit me”), the second factor (21.71% of variance) was defined by seven items referring to overt verbal victimization (e.g. “Some classmates have insulted me”), and the third factor (18.54% variance) was defined by six items referring to relational victimization (e.g., “Some classmates have spread rumours about me so that nobody associates with me”). Cronbach alphas for these subscales in the current sample were .89, .71, and .70 respectively.

Rosenberg Self-esteem Scale (Rosenberg, 1965, 1989). This scale is composed of 10 items answered on a four point scale (1 = I strongly agree, 4 = I strongly disagree) that provides a general measure of global self-esteem (e.g. “I feel that I'm a person of worth, at least on an equal basis with others”, “I take a positive attitude towards myself”). Internal consistency in the present study was .78.

Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). This instrument consists of 5 items rated in a four-point scale (1 = I strongly agree, 4 = I strongly disagree) that provides a general measure of subjective well-being and life satisfaction (e.g. “I am satisfied with life”, “If I could live my life over, I would change almost nothing”). Cronbach alpha for this scale in the current sample was .81.
Center of Epidemiological Studies Depression Scale (Radloff, 1977). The CESD is a 20-item scale which evaluates the presence of depressive symptomatology including the following dimensions: depressed mood, positive affect, somatic and retarded activity, and interpersonal distress. It also provides a general measure of depressive mood, which was used in this study (e.g., “I felt depressed”, “I was bothered by things that usually don’t bother me”). Responses are rated on a four-point scale (1 = never, 4 = always). Cronbach’s reliability for this scale in the present study was .90.

Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983). The PSS is a 10-item scale which measures the degree to which respondents appraise situations as stressful within the last month (e.g., “In the last month, how often have you found that you could not cope with all the things that you have to do?”, “how often have you been upset because of something that happened unexpectedly?”) on a five-point scale (1 = never, 5 = very often). Coefficient alpha a in the current sample for this scale was .82.

UCLA Loneliness Scale (Russell, 1996). The UCLA is a 20-item scale that was developed to assess subjective feelings of loneliness and social isolation (e.g., “How often do you feel completely alone?”, “How often do you feel as if nobody really understands you?”). Items are rated on a four-point scale (1 = never, 4 = often). Alpha coefficient for this scale was .90.

RESULTS

Analyses of variance were conducted to examine differences among aggressors, pure victims, aggressive victims, and adolescents not involved, with respect to psychosocial adjustment. Due to the existence of sharply unequal cell sizes, the Brown and Forsythe (1974) robust estimator to account for the violation of homogeneity of variances was used for the calculation of the F in the ANOVAs. When significant differences among groups were observed, the post hoc Tamhane test was applied to differences between particular groups with respect to the dependent variables considered. This test is suitable for pairwise contrasts when unequal variances are assumed, which was the case in the present study. Table 1 shows the means, standard deviations, ANOVA results and Tamhane test for the four groups analysed.

Results obtained confirmed the existence of significant differences among groups with regard to the five variables examined. Regarding global self-esteem
(F_{3, 1319} = 16.81, p < .001) aggressive adolescents and those not involved in behavioural or victimization problems showed higher levels in this measure when compared to the groups of victims and aggressive victims. With reference to satisfaction with life (F_{3, 1319} = 18.80, p < .001) adolescents not involved scored significantly higher than any other group: there were no significant differences among aggressors, victims, and aggressive victims, all reporting being less satisfied with their lives in general.

**Table 1.** Means, standard deviations (in parenthesis), ANOVA results and Tamhane Test

<table>
<thead>
<tr>
<th></th>
<th>Aggressors</th>
<th>Pure Victims</th>
<th>Aggressive Victims</th>
<th>Not involved</th>
<th>F_{3, 1319}</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Self-esteem</strong></td>
<td>29.81 (4.50)(^a)</td>
<td>28.00 (5.21)(^b)</td>
<td>28.11 (5.19)(^b)</td>
<td>30.46 (4.55)(^a)</td>
<td>16.81 (***)</td>
</tr>
<tr>
<td><strong>Satisfaction with Life</strong></td>
<td>39.20 (8.33)(^b)</td>
<td>38.73 (7.89)(^b)</td>
<td>38.41 (8.07)(^b)</td>
<td>43.13 (6.89)(^a)</td>
<td>18.80 (***)</td>
</tr>
<tr>
<td><strong>Depressive Symptomatology</strong></td>
<td>15.03 (3.87)(^b)</td>
<td>16.18 (4.60)(^a)</td>
<td>16.17 (4.15)(^a)</td>
<td>14.18 (4.05)(^b)</td>
<td>16.76 (***)</td>
</tr>
<tr>
<td><strong>Perceived Stress</strong></td>
<td>24.02 (4.02)(^a)</td>
<td>24.06 (4.45)(^a)</td>
<td>24.18 (4.14)(^a)</td>
<td>21.33 (4.22)(^b)</td>
<td>11.38 (***)</td>
</tr>
<tr>
<td><strong>Loneliness</strong></td>
<td>37.82 (7.96)(^c)</td>
<td>42.56 (10.39)(^a)</td>
<td>40.68 (8.18)(^b)</td>
<td>37.11 (7.93)(^c)</td>
<td>22.04 (***)</td>
</tr>
</tbody>
</table>

Tamhane Test: \(a = 0.05\); \(a > b > c\)

\(***\) \(p < .001\)

As far as depressive symptomatology is concerned (F_{3, 1319} = 16.76, p < .001), the highest scores were observed in the groups of pure victims and aggressive victims, compared to aggressors and adolescents not involved; the difference between the latter two groups was not significant. As regards perceived stress (F_{3, 1319} = 11.38, p < .001) the three groups of adolescents involved in behavioural and victimization problems reported higher levels; those not involved perceived less stress in their daily life. Finally, the group of pure victims expressed, overall, the greatest feeling of loneliness (F_{3, 1319} = 22.04, p < .001), followed by the group of aggressive victims. Aggressors and adolescents not involved had similarly lower levels with respect to this variable.

To sum up, our results indicate that the group of not involved adolescents had better psychosocial adjustment: higher self-esteem and greater satisfaction with life, together with lower levels of depressive symptomatology, perceived stress and feeling of loneliness. The scores for self-esteem, depressive symptomatology and loneliness of these adolescents were similar to those of the aggressor group. However, aggressors expressed less satisfaction with life and more perceived stress, as did the other two groups, namely pure victims and aggressive victims. Pure victims reported the greatest feelings of loneliness.
DISCUSSION

The present study aimed to analyse psychosocial adjustment in aggressors, pure victims, aggressive victims, and students who do not participate in violent acts at school and who are not victimized by their peers. Findings showed significant differences among these groups with regard to the five indicators considered. Firstly, our results suggested that non-involved adolescents have better psychological adjustment; in this study they had the highest scores for global self-esteem and satisfaction with life, and the lowest scores on the negative indicators of adjustment. Considering the other three groups of students in conjunction, victims and especially aggressive victims displayed more serious psychological adjustment problems than aggressors. Although all three groups perceived a higher level of stress in their daily life than students not involved, aggressors had a more positive attitude towards themselves, fewer symptoms of depression and lower scores for loneliness in comparison to both groups of victims of school violence. The findings obtained in the present research with Spanish adolescents are in line with those found in other countries documenting that aggressive adolescents are normally characterised by medium or even high self-esteem (Olweus, 1998; Rigby & Slee, 1992), and that depression is not common among violent adolescents (Ge et al., 1996).

Antisocial and violent behaviour in adolescence can on many occasions be the expression of a strong desire to be socially recognize as popular, powerful and rebellious (Rodríguez, 2004). These adolescents are more likely to develop friendships with others that are similar to them in values, attitudes and behaviours, in their search for this social recognition (Vitaro, Brengen & Tremblay, 2000). They usually have, therefore, a set of friends who admire and support them, with the consequent positive influence on their self-perception and emotional adjustment (Hawley & Vaugin, 2003). As our results also indicated in this sense, aggression was not correlated with depression or feelings of loneliness; on the contrary, with respect to these variables, these adolescents did not consistently differ from students not involved. The case of both groups of victims was completely different. They reported greater feeling of loneliness, particularly the pure victims. Our findings are consistent with those obtained by Eslea et al. (2003), who found that victims, and especially pure victims, reported having fewer friends and feeling more isolated in the school context.

Finally, it is worth noting that the three groups of students involved in behavioural or victimization problems, namely aggressors, pure victims, and aggressive victims, expressed less satisfaction with their lives than adolescents not involved. Some recent studies have documented this association with respect to victims of school violence.
(Flouri & Buchanan, 2002; Sun & Tao, 2005) and aggressors (MacDonald, Piquero, Valois & Zullig, 2005). In the present research we also confirmed this pattern for aggressive victims. In the case of victims, their low satisfaction with life is consistent with their negative self-perception, their social isolation, and the depressive symptoms that many of them develop. In the case of aggressors, and taking into consideration results from the current and previous studies, the findings suggest that others factors -apart from self-esteem, depression and loneliness- may be affecting their psychological adjustment, since they regard their lives as unsatisfactory. Family and other school variables should be taken into account to shed a clearer light on this issue.

In conclusion, we consider that this paper contributes to our understanding of differences between groups of adolescents involved in violence and victimization problems in educational settings. Delimiting such differences has relevant and practical implications that should be considered in the designed of policies the purpose of which is to prevent or reduce levels of violence within schools. We agree with Rigby’s (2001) recommendation of creating group-specific intervention and prevention programs. Thus, our results suggest that interventions to develop self-esteem and reduce feeling of loneliness would probably be more effective when working with victims than with aggressors; all, however, could profit from programs focused on improving general satisfaction with their lives (probably with the collaboration of families, teachers and peers).

Nevertheless, we acknowledge the following limitations. Reliance on self-report data creates vulnerability to response bias that could have an impact upon the validity and generalizability of the study findings. However, comparisons with data from independent sources such as parents (Fisher, Evans, Muller & Lombard, 2004; Ritakallio, Kaltiala-Heino, Kivivuori & Rimpelä, 2005), does support the reliability of self-report measures of violent and antisocial behaviours in adolescence. It should additionally be noted that the present study used a cross-sectional design, which means we must be cautious about making causal inference on the basis of the data available.

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REFERENCIAS


