ORIGINAL ARTICLE

Victimization, loneliness, overt and relational violence at the school from a gender perspective

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KEYWORDS
Adolescence; Violent behavior at school; Victimization; Gender; Ex post facto study

Abstract This ex post facto study analyzes both the direct relationships between victimization and overt and relational violent behavior of students adolescents as the indirect relationships between these variables through the classroom environment, the loneliness, the nonconformist ideal reputation and transgression of social norms. The sample consisted of 1,795 adolescents (48% females) aged 11 to 18 years (M = 14.2, SD = 1.68). We used a structural equation model to analyze the effect of classroom environment and victimization in violent manifest and relational behavior. The results found that a direct positive relationship between victimization and relational violent behavior and a direct negative relationship between classroom environment and overt violent behavior. In addition, classroom environment and victimization were indirectly related to overt and relational violence through its relationship with loneliness, nonconformist ideal reputation and transgression of social norms. Multigroup analysis results indicated that the relationship between loneliness and relational violent behavior was significant for boys but not for girls. Finally, we discuss the results and their practical implications in the school context.

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PALABRAS CLAVE
Adolescencia; Conducta violenta en la escuela; Victimización;

Resumen Este estudio ex post facto analiza tanto las relaciones directas existentes entre la victimización y la conducta violenta manifiesta y relacional de adolescentes escolarizados como las relaciones indirectas entre esas variables a través del clima escolar, la soledad, la reputación ideal no conformista y la transgresión de normas sociales. La muestra está compuesta por 1,795 adolescentes (48% mujeres) de edades comprendidas entre 11 y 18 años (M = 14.2; SD = 1.68).

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DT = 1.68). Se utiliza un modelo de ecuaciones estructurales para analizar el efecto del clima escolar y la victimización en la conducta violenta manifiesta y relacional. Los resultados indican una relación directa y positiva entre la victimización y la conducta violenta relacional y una relación directa y negativa entre el clima escolar y la conducta violenta manifiesta. Además, el clima escolar y la victimización se relacionan indirectamente con la violencia manifiesta y relacional a través de sus relaciones con la soledad, la reputación ideal no conformista y la transgresión de normas sociales. Los resultados del análisis multigrupo indican que la relación entre la soledad y la conducta violenta relacional es significativa para los chicos pero no para las chicas. Finalmente, se discuten los resultados obtenidos y sus implicaciones prácticas en el contexto escolar.

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The term school violence refers to different types of adolescent behaviour at school: violence towards classmates, violence towards adults, damage to property, vandalism and bullying (Ortega-Ruiz, 2010). This study focuses on violence towards peers at school, that is to say, violence which involves the victimization of a student or group of students by another student or group. Victimization in school is defined as the experience of being subjected to physical, verbal and psychological violent behaviour by peers in the school context, particularly in spaces with little supervision from adults (Graham, 2006). School violence involves both overt violent behaviour in the form of hitting, insults or name calling, and relational violent behaviour through social exclusion, the spreading of rumours or the exclusion of victims from a group (Buelga, Mustitu, & Murgui, 2009; Little, Henrich, Jones, & Hawley, 2003).

The aggressor-victim dynamic is composed of an interpersonal relationship model with serious consequences for the psychosocial adjustment of victims (Guterman, Hahn, & Cameron, 2002). Numerous studies in the scientific literature show a strong relationship between victimization by peers and internalising problems such as strong feelings of loneliness, low self-esteem and high symptoms of depression (Hawker & Boulton, 2000), but very few studies have viewed victimization as a risk factor relating to externalising behaviour such as, for example, school violence.

Recent research has transferred the explanatory model developed by Emler and Reicher (2005) on the relationship between victimization and youth criminal and antisocial behaviour (Estévez, Jiménez, Moreno, & Mustitu, 2013) to the school context. According to the results of this study, adolescent victims of violence at school trust adults in authority to protect them. However, the law of silence which prevails among students as regards school violence means that often adults do not detect victims and are unable to offer them suitable protection (Cava, 2011). This can lead to the adolescents being disappointed by these adults, and also distrust the social norms and having a heightened perception of their loneliness (Estévez, Jiménez, & Moreno, 2011). Following the theory put forward by Emler and Reicher (2005), adolescents may try to use self-protection strategies such as seeking a reputation at school based on the transmission of a social image that is non-conformist, rebellious or anti-social, that is to say, a non-conformist social reputation. In order for this strategy to be efficient, adolescents often disobey social coexistence norms at school or become involved in overt and relational violent behaviour. This conduct towards their peers aimed at transmitting a message about themselves: I am also violent and I do not wish to be victimized.

In order to prevent this type of behaviour at school it is important to take the adolescents’ perception of the classroom environment into consideration. Adolescent perception of a positive climate in the classroom, that is, in which they are involved in the activities and tasks proposed in the classroom, perceive classmates as friends and have a positive perception of the teacher as an adult they can count on for reference and for help, is a key factor for the social adjustment of adolescents, prevents school violence and is an important source for the construction of their identity (Estévez & Emler, 2011; Wentzel, 2010). Conversely, adolescents victimized at school show a negative perception of the social climate in the classroom, feel unsatisfied with their life at school and feel less attached to school (Martínez, Povedano, Amador, & Moreno, 2012).

Another important aspect of the research on violence and school victimization is the gender of the adolescents. Scientific literature shows that boys are more overtly violent and suffer more overt victimization at school than girls (Card, Stucky, Sawalani, & Little, 2008). We could say that there is a general pattern which shows that boys and girls use relational violence in a similar way, despite the disparate research results (Card et al., 2008), although girls suffer more relational victimization than boys (Putallaz et al., 2007). In addition, girls who suffer victimization at school, both overt and relational, demonstrate greater feelings of loneliness and social anxiety than boys (Storch & Maslan-Warner, 2004).

The study of relational violence has not been fully taken into account in research when attempting to explain why some victims are also violent towards their classmates in the school context. However, it is highly probable that victimized students with a social and psychological profile characterised by high levels of loneliness and symptoms of depression and low self-esteem (Hunter, Boyle, & Warden, 2007) have greater involvement in relational
violent behaviour than in overt violent behaviour. Their involvement in more explicitly violent behaviour could lead to victimized adolescents being singled out, something that would not correspond to their psychosocial profile or to the implicit codes of the law of silence to which they are subject.

Using the above review of previous theory the first objective proposed in this research is the analysis of the relationship between victimization and classroom environment with overt and relational violent behaviour, taking the role that non-conformist social reputation and the transgression of social norms have in these relationships into account. The second objective of this study is the analysis of the relationships mentioned above relating to gender. As a result, the starting hypotheses are: (1) victimization has a direct and positive relationship with relational violent behaviour, but not with overt violent behaviour; (2) victimization has an indirect relationship with overt violent behaviour through its direct and positive relationship with loneliness and with the transgression of social norms; (3) the classroom environment, perceived as positive, is directly associated with less involvement in overt violent behaviour on the part of the adolescent, with fewer feelings of loneliness and a low non-conformist reputation; and (4) the relationships proposed in the theory model differ significantly depending on gender.

Method

Participants

1,821 adolescents from 9 schools (state and grant-aided) in western Andalusia (Spain) took part in this study. Rural and urban secondary schools in the provinces of Seville (4), Córdoba (2), Cádiz (2) and Huelva (1) were selected. The sample is representative of the Andalusian educational community which numbered 266,985 secondary students in the 2012-2013 academic year. A sample error of ±2.5%, a level of trust of 95% and a population variance of 0.50 were assumed. The size of the sample required was 1,528 students. The selection of participants was carried out using a multi-staged stratified random sample (Santos, Muñoz, Juez, & Cortiñas, 2003). The sample units were rural and city state and grant-aided schools in Andalusia. The strata were established by province and ownership. The definitive sample consisted of 1,795 adolescents of both genders (48% female) between 11 and 18 years old ($M = 14.2$; $SD = 1.68$) after excluding 26 students (1.45%) for the following reasons: acquiescence in responses (12); comprehension difficulties (foreign students) (7); voluntary abandonment of the research (3) and failure to obtain parental consent (4). The data lost through scales were obtained using the method of regression imputation. This method assumes that the rows of the data matrix constitute a random sample of a normal multivariate population (Medina & Galván, 2007).

Instruments

School Violence Scale (Little et al., 2003). This scale uses 24 items and a response range between 1 (strongly disagree) and 4 (strongly agree) to measure two types of violent behaviour in the school context: on the one hand Overt Violence (e.g. "I am a person who hits others"), in its Pure, Reactive and Instrumental forms, and on the other, Relational Violence (e.g. "When somebody annoys me I spread rumours about that person"), also in its Pure, Reactive and Instrumental forms. Cronbach’s alpha for the six dimensions in this study are .68, .78, .81, .60, .63 and .71 respectively. The reliability coefficients were .88 and .81 respectively for the subscales Overt and Relational Violent Behaviour in this study.

Peer Victimization Scale (based on the Multidimensional Victimization Scale by Mynard & Joseph, 2000). This scale uses 20 items and a response range between 1 (never) and 4 (often) to measure the frequency in the previous year of some of the victimization experiences described. The scale is structured into three factors: Relational Victimization, (e.g. "A classmate has told the others not to have anything to do with me"); Physical Victimization (e.g. "A classmate has hit or beaten me") and Verbal Victimization (e.g. "A classmate has insulted me"). Cronbach’s alpha in this study for this sample was .89, .66 and .87, respectively.

Spanish version of the Classroom Environment Scale (CES; Moos & Trickett, 1973) developed by Fernández-Ballesteros and Sierra (1989). Of the 90 items which form this scale, this study used the 30 from the aspect of Interpersonal Relations, considering this to be the most important for evaluating classroom environment, as well as for the aims of this research (Moreno, Povedano, Martínez, & Musitu, 2012). The answer choices are formulated as true or false and include three subscales: Involvement (e.g. "Students pay attention to what the teacher says"), Teacher support (e.g. "The teacher shows an interest in his or her students") and Affiliation (e.g. "Many friendships are formed in this class"). The reliability of the subscales (Cronbach’s alpha) in this research was of .63, .61 and .68, respectively.

Spanish version of the Loneliness Scale (UCLA Loneliness Scale; Russell, Peplau, & Cutrona, 1980), developed by Expósito and Moya (1993). This scale is composed of 20 items which evaluate the degree of loneliness of the adolescent (e.g. "How often do you feel you are missing company") with answers ranging from 1 (never) to 4 (always). In this research Cronbach’s alpha reliability coefficient was .88.

Dimension Non-conformist Ideal Reputation of the Social Reputation Scale (Carroll, Houghton, Hattie, & Durkin, 1999). This tool is composed of 7 items which evaluate the ideal reputation of the adolescent as an anti-social and non-conformist person on a scale of 4 alternative responses from 1 (never) to 4 (always) (e.g. "I would like the others to think I am tough"). Cronbach’s alpha of this subscale in this research was .80.

Dimension Positive Attitude towards the Transgression of Social Norms of the Scale of Attitudes towards Institutional Authority among Adolescents (AAI-A; Cava, Estévez, Buelga, & Musitu, 2013), composed of 4 items which evaluate the adolescent’s attitude towards non-compliance with norms in the school, with a response range between 1 (strongly disagree) and 4 (strongly agree) (e.g. "If you do not like a school norm the best thing you can do is forget about it"). Cronbach’s alpha obtained for this subscale in this research was .74.
Procedure

After obtaining the relevant institutional (School Administration) and parental permits (written documents signed by the parents giving their consent), trained researchers carried out the survey in the classroom during regular class times. It was made clear to the adolescents that participation in the research was voluntary, anonymous and required prior parental consent. The study met the ethical values required for research on human beings, respecting the basic principles included in the Helsinki Declaration (informed consent and a right to information, protection of personal data and guarantees of confidentiality, non-discrimination, gratuity and the option of abandoning the study in any of its phases).

Data analysis

Firstly, Pearson correlations were calculated between all the variables under study and the analysis of the differences of means according to gender (t test for independent samples). A structural equation model was then tested using the program EQS 6.0 (Bentler, 1995) to analyse the relationship between the variables. Robust estimators were used to determine the goodness of fit of the model and the statistical significance of the coefficients since the coefficient of the normalised estimator (112.1501 > 1.96) (Normalised Mardia Coefficient = 119.5591) shows that there is no multivariate normality. Finally, a multigroup analysis was carried out to check the structural invariance of the model depending on gender. To do so two models were compared: one with constrictions (which assumed that the relationships between variables are the same for boys and girls) and another without constrictions (which estimates all the coefficients in both groups). An expression by Satorra and Bentler (1994) which makes it possible to scale the statistical difference test was used to compare both nested models.

Results

Table 1 shows the correlations between variables as well as the means and standard deviations. The results show significant correlations between all the variables, and for this reason they were included in the calculation of the structural equation model. As regards gender, in the t test analysis we observed significant differences in the following variables: on the one hand the boys obtained higher scores than girls in verbal and physical victimization, non-conformist ideal reputation, transgression of social norms, the three aspects of overt violent behaviour and in the pure and instrumental relational violence aspects; on the other hand, girls received higher scores than boys in classroom environment, and in the aspects of help from the teacher and friendship.

Subsequently a structural equation model was tested with the program EQS 6.0 (Bentler, 1995) to analyse the relationship between the variables. The latent factors included in the model were: (1) Classroom environment, with three indicators or variables observed: Involvement, Affiliation and Teacher Support; (2) Victimization, with three indicators: Verbal Victimization, Physical Victimization and Relational Victimization; (3) Overt Violent Behaviour, with three indicators: Pure, Reactive and Instrumental; (4) Relational Violent Behaviour, with three indicators: Pure, Reactive and Instrumental. The variables observed included in the model were: (5) Loneliness; (6) Transgression of Social Norms; (7) Non-conformist Ideal Reputation. Table 2 shows the parameter estimates, the number of items loaded into each factor, the standard error and the associated probability for each variable observed for its corresponding factor. There are seven factors built from a single indicator and presenting a factor load with value 1 and error 0. Bearing in mind that the use of a single measure of global adjustment of the model is discouraged (Hu & Bentler, 1999), several indices were calculated. [S-B \chi^2 = 299.2430] (g.l. = 70, p < .001, CFI = .953, GFI = .97, NNFI = .95, AGFI = .95, RMR = .008 and RMSEA = .043 (.038, .048)]. Values above .95 for the CFI, GFI, NNFI and AGFI indices and values below .05 for RMR and RMSEA are indicative of a good fit (Hu & Bentler, 1999). The model calculated fitted the data well. This model explains 48% of relational violent behaviour.

Figure 1 shows the graphic representation of the final structural model with the standardised coefficients and their associated probability. The results showed different relationships of influence between victimization and the overt and relational violent behaviour of the adolescent. Victimization shows a direct and positive association with relational violent behaviour (\beta = .09; p<.001) and also an indirect association, as it shows a close positive relationship with loneliness (\beta = .22; p<.001) which in turn is directly and positively related with relational violent behaviour (\beta = .06; p<.001). Victimization does not present a direct association with overt violent behaviour, but does with indirect. Thus, victimization has a direct and positive relationship with loneliness (\beta = .22; p<.001) and the transgression of norms (\beta = .09; p<.001). In turn, loneliness shows a direct and positive relationship with the transgression of norms (\beta = .06; p<.05), a variable with a direct and positive relationship with overt violence (\beta = .36; p<.001). In addition, the classroom environment has a direct and negative link with victimization (\beta = -.34; p<.001), with loneliness (\beta = -.32; p<.001), with ideal reputation (\beta = -.18, p<.001) and with overt violence (\beta = -.12; p<.001). Finally, the ideal reputation has a direct and positive relationship both with overt and relational violence (\beta = .26; p<.001 and \beta = .06; p<.001, respectively).

Finally, as Table 3 shows, significant differences were found in the multigroup analysis for the non-constrained and constrained models \Delta \chi^2 (24, N = 1,741) = 141.23, p<.001. In order to determine which elements of the model generated these differences the results of the Lagrange Multiplier Test (ML) provided by the EQS were inspected. This test showed that both groups (boys and girls) differ in path: the association between relational violent behaviour and loneliness for boys is significant and positive (\beta = .012, p< .001), while it is not significant among girls (\beta = .027; n.s.). Once this constraint is released, the model is statistically equivalent for both groups \Delta \chi^2 (22, N = 1,741) = 131.37, p< .001.

Discussion

This study analysed both the direct relationships between victimization and the overt and relational violent behaviour
Table 1  Bivariate correlations between variables under study and t Student test by gender.

<table>
<thead>
<tr>
<th>Variables</th>
<th>M (SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
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<td>Verbal Victimization</td>
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<tr>
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<td>.65**</td>
<td>1</td>
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<tr>
<td>Relational Victimization</td>
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<td>.62**</td>
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<td></td>
<td>-.16**</td>
<td></td>
<td></td>
<td>-.18**</td>
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<td>-.19**</td>
<td></td>
<td></td>
<td>-.21**</td>
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<td>Teacher Support</td>
<td>1.65 (0.23)</td>
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<td>-.10**</td>
<td></td>
<td>-.12**</td>
<td>-.10**</td>
<td>.34**</td>
<td>.26**</td>
<td>1</td>
<td></td>
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<tr>
<td>Loneliness</td>
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<td>.29**</td>
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<td></td>
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<td></td>
<td>-.19**</td>
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<td>-.30**</td>
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<td>Non-conformist Ideal Reputation</td>
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<td>.10**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.11**</td>
<td></td>
<td>-.17**</td>
<td>-.26**</td>
<td>.13**</td>
<td>1</td>
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<tr>
<td>Transgression of Social Norms</td>
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<td>.11**</td>
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<td></td>
<td></td>
<td></td>
<td>-.16**</td>
<td>-.14**</td>
<td>-.28**</td>
<td>.09**</td>
<td>.39**</td>
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<tr>
<td>Pure Over Violence</td>
<td>1.37 (0.38)</td>
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<td></td>
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<td></td>
<td></td>
<td>-.17**</td>
<td></td>
<td>-.22**</td>
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<td>.17**</td>
<td>.44**</td>
<td>.40**</td>
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<td>Reactive Over Violence</td>
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<td></td>
<td>-.16**</td>
<td></td>
<td>-.13**</td>
<td>-.22**</td>
<td>.05</td>
<td>.36**</td>
<td>.40**</td>
<td>.59**</td>
<td>1</td>
</tr>
<tr>
<td>Instrumental Over Violence</td>
<td>1.18 (0.34)</td>
<td>.23**</td>
<td></td>
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<td></td>
<td>-.09**</td>
<td></td>
<td>-.16**</td>
<td>-.22**</td>
<td>.16**</td>
<td>.37**</td>
<td>.38**</td>
<td>.68**</td>
<td>.52**</td>
</tr>
<tr>
<td>Pure Relational Violence</td>
<td>1.34 (0.38)</td>
<td>.24**</td>
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<td>-.12**</td>
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<td>.23**</td>
<td>.27**</td>
<td>.28**</td>
<td>.53**</td>
<td>.36**</td>
</tr>
<tr>
<td>Reactive Relational Violence</td>
<td>1.91 (0.51)</td>
<td>.19**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>-.14**</td>
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<td>-.10**</td>
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<td>.19**</td>
<td>.32**</td>
<td>.38**</td>
<td>.37**</td>
</tr>
<tr>
<td>Instrumental Relational Violence</td>
<td>1.27 (0.39)</td>
<td>.22**</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>-.07**</td>
<td></td>
<td>-.14**</td>
<td>-.16**</td>
<td>.19**</td>
<td>.32**</td>
<td>.27**</td>
<td>.54**</td>
<td>.39**</td>
</tr>
<tr>
<td>M Boys/Girls (t Student value)</td>
<td>1.66/1.59</td>
<td>.24/1.44</td>
<td>1.43/1.41</td>
<td>1.67/1.7</td>
<td>1.66/1.68</td>
<td>1.84/1.81</td>
<td>1.57/1.39</td>
<td>1.75/1.56</td>
<td>1.45/1.3</td>
<td>1.89/1.52</td>
<td>1.25/1.11</td>
<td>1.39/1.29</td>
<td>1.93/1.9</td>
<td>1.33/1.2</td>
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<tr>
<td>1.33/1.2</td>
<td>(2.3)*</td>
<td>(5.5)**</td>
<td>(-1.7)</td>
<td>(1.9)</td>
<td>(-2.2)*</td>
<td>(1.3)</td>
<td>(7.8)**</td>
<td>(5.5)**</td>
<td>(8.1)**</td>
<td>(12.3)**</td>
<td>(8.2)**</td>
<td>(4.9)**</td>
<td>(1.1)</td>
<td>(6.4)**</td>
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Note: * p < .05, ** p < .01, *** p < .001.
of adolescents at school and the indirect relationships of these variables through classroom environment, loneliness, the non-conformist ideal reputation and the transgression of social norms. The results obtained show a direct relationship between victimization and relational violent behaviour, but not with overt violent behaviour, as the first hypothesis proposed. It is probable that victimized students, who present a psychosocial profile characterised by extreme feelings of loneliness, low self-esteem and clear symptoms of depression (Hawker & Boulton, 2000), have greater involvement in relational violent behaviour which is more subtle, anonymous and in line with their profile than in the more direct and explicit violent behaviour associated with overt violent behaviour.

As regards the second hypothesis, an indirect relationship could be observed between victimization and overt violent behaviour, through the relationships with loneliness and the transgression of social norms. It is feasible that the feelings of loneliness and isolation suffered by victimized students involve some mistrust in figures of authority and the mechanisms for prevention and intervention established to prevent cases of violence in the school context. One form of expressing this unease and frustration is the transgression of social norms designed by adults to improve coexistence in the school which are seen by adolescents as lacking in efficiency (Estévez et al., 2011). Therefore, once the social norms showing the acceptable limits of behaviour at school have been transgressed adolescents could become more involved in overt violent behaviour (Buelga et al., 2009).

A result worth noting is that a classroom environment which adolescents perceive as positive could serve to protect against overt violent behaviour in the classroom, just as suggested in the third hypothesis. This effect can be attributed to the fact that in a classroom with a good social climate students have few, if any, stimuli prompting them to
become involved in explicit and direct behaviour and disrupt the good climate created by everyone (Moreno et al., 2012). In addition, it seems that a good classroom environment suppresses student interest in non-conformist reputation and avoids the perception of loneliness by adolescents. Thus, in the relationships observed in the model it is stressed that when victims distrust the support and guidance that may be provided by teachers and classmates and perceive the classroom environment as negative, they are more likely to opt for dysfunctional responses (overt and relational violence) than functional ones such as dialogue and communication (Jiménez, Estévez, del Moral, & Povedano, 2011).

Finally, the differences in gender found in the magnitude of the variables identified confirm the results from earlier studies (Estévez, Povedano, Jiménez, & Musitu, 2012; Hong & Espelage, 2012). However, our results show that the structural model only varies in one of the paths proposed: the relationship between loneliness and relational violent behaviour is significant and positive for boys, but not for girls. For victimized girls with strong feelings of loneliness, involvement in violent behaviour would not act as a buffer for these feelings, while it would for boys (Baron & Kenny, 1986). Thus, the absence of psychosocial skills among victimized boys who are also violent could encourage a choice of strategies which are more subtle and coherent with their profile (Povedano, Estévez, Martinez, & Monreal, 2012) such as relational violence, when they attempt to defend themselves or respond to this stressor.

The results obtained in this research also have major practical implications. The subtlety of relational violent behaviour in the classroom and the law of silence which reigns for victims of school violence may prevent adults from being aware of the situation of these students. It seems essential to work on this line so that adolescents suffering victimization at school do not feel alone, let down and exposed to this abuse and forced to adopt self-protection measures. More fitting responses from adolescents and, essentially, the avoidance of victimization situations could be encouraged by the implementation in schools of specific workshops for teachers and psychopedagogical support teams to recognize the signs - very subtle at times - which make it possible for them to detect victimization situations early on and to be provided with the tools to tackle violent situations in the classroom. Moreover, a good climate in the classroom encouraged by teachers appears to be a factor for protection from violence in school and the consensus of norms in the classrooms may be one way to achieve this (Álvarez, Dobarro, Rodriguez, Núñez, & Álvarez, 2013).

To sum up, this study provides new information on the victims who use relational violence to defend themselves from their peers at school. However, our research does have some limitations such as taking the gender of adolescents but not the construction of gender into account as a variable. This study was developed using gender analysis as an analytical tool (Stewart & McDermott, 2004), examining gendered variables such as victimization and the violent behaviour at school of adolescents. In addition, this is a transversal design and it is not possible to establish causal relationships. Initial research on victims who are also violent at school suggests that although this is a limited-sized group these adolescents are in a high-risk situation. Future research will focus further on this line examining other major factors such as family, peers, and the individual characteristics of these adolescents (Cerezo, Méndez, & Ato, 2013; Sobral, Villar, Gómez, Romero, & Luengo, 2013). Our results show that when we attempt to explain why some victims use violence to defend themselves at school, relational violent behaviour, their perception of the classroom environment, gender, and feelings of loneliness are important psychosocial variables.

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### References


Victimization, loneliness, overt and relational violence at the school from a gender perspective


