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## Bullying in schools and exposure to domestic violence<sup>☆</sup>

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### Abstract

**Objectives:** The study aimed to investigate the relationship between bullying and victimization in school and exposure to interparental violence in a nonclinical sample of Italian youngsters.

**Methods:** A cross-sectional study was conducted with a sample of 1059 Italian elementary and middle school students. Participants completed a self-report anonymous questionnaire measuring bullying and victimization and exposure to interparental violence. The questionnaire also included measures on parental child abuse and socio-demographic variables.

**Results:** Almost half of all boys and girls reported different types of bullying and victimization in the previous 3 months, with boys more involved than girls in bullying others. Exposure to interparental physical violence and direct bullying were significantly associated especially for girls: girls exposed to father's violence against the mother and those exposed to mother's violence against the father were among the most likely to bully directly others compared with girls who had not been exposed to any interparental violence. Hierarchical multiple regression analyses revealed that bullying and victimization were predicted by exposure to interparental violence, especially mother-to-father violence, over and above age, gender, and child abuse by the father.

**Conclusions:** Exposure to interparental violence is associated with bullying and victimization in school, even after controlling for direct child abuse. Violence within the family has detrimental effects on the child's behavior; schools, in this regard, can play a fundamental role in early detection of maladjustment. © 2003 Elsevier Science Ltd. All rights reserved.

*Keywords:* Bullying; Victimization; Exposure to domestic violence; Family violence; School behavior

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## Introduction

Bullying in school is a serious problem affecting between 7 and 35% of children and adolescents in Europe, United States, Canada, Australia, and Japan (Smith et al., 1999). Bullying has been extensively defined as any form of physical or psychological behavior repeatedly inflicted by a more powerful and stronger student (or group of students) towards another one perceived as weaker (Farrington, 1993).

Causes of bullying are multiple and are related to the individual, but also to the socio-family environment. Violent homes are among the highest risk factor for the development of antisocial behavior; bullying, in this regard, has been found to be associated with violence within the family context (Farrington, 1993). Longitudinal studies on pathways to delinquency have shown that youngsters who develop a deviant career are more likely to have parents who are abusive towards their partners, compared to those not exposed to interparental violence (Steinberg, 2000).

Bowers, Smith, and Binney (1994) also found that in England children who bully others or who are victimized at school have parents who tend to be violent to each other and also to them; cohesive families are those found least likely to report disruptive behaviors among children (Farrington, 1991).

A significant strong association between maladjustment and exposure to domestic violence was found also by the Canadian National Longitudinal Survey of Children and Youth (Dauvergne & Johnson, 2001) that showed that according to the mothers' accounts, children witnessing violence perpetuated by their partners were nearly three times as likely to be involved in physical aggression at school (fighting, bullying, or threatening others) compared to those who did not witness violence (28.1% vs. 11.3%) and over twice as likely to be involved in indirect aggression (nonphysical forms of aggression, such as rallying friends against someone, spreading gossip, excluding someone from a group, or setting up another child for punishment).

The only Italian research conducted so far on the relationship between bullying and parental rearing practices was conducted by Baldry and Farrington (1998, 2000) who found that bullies have authoritarian conflicting parents; no studies, however, have examined the relationship between exposure to domestic violence and bullying and victimization at school separately for boys and girls.

There is now clear evidence on the relationship between family violence and the development of aggressive and antisocial behavior in children living in these families (Widom, 1989). Children exposed to domestic violence are at higher risk of developing short- and long-term (negative) consequences, compared to those who are not exposed (Herrera & McCloskey, 2001; Kolbo, Blakely, & Engleman, 1996). At school they tend to be more aggressive, or even commit delinquent acts or else they are at risk of becoming victims of further abuse at school. Sternberg et al. (1993) found that abused children and those who were abused and who witnessed family violence were more likely than children in the control group to exhibit externalizing behavior, such as aggression towards peers (see also the review by Edleson, 1999). Girls show more internalizing problems, such as depression and anxiety (O'Keefe, 1994, 1995); girls are less likely to develop conduct disorders compared to boys (Fantuzzo, Boruch, Beriama, Atkins, & Marcus, 1997), but girls become more submissive and possible targets of bullying at school (Kerig, 1999; Widom, 2000).

According to the reviews conducted by Widom (1989, 2000) violence begets violence: up to 70% of violent adults have a history of violence, either as direct victims or as witnesses of interparental violence. Wilczenski et al. (1997) claims that being directly or indirectly victimized at home brings the child to ‘learn’ this behavior and signal to others that weakness has been learned and accepted as a stable personal trait. This explanation is in line with the ‘social learning theory’ of Bandura (1973) according to which it could be stated that children, especially girls, who witness their mothers being harassed, insulted, and beaten up by their partner, might learn that violence is a normal way of being treated; boys, on the other hand, might identify themselves with the (male) perpetrator and learn that violence is an acceptable way to respond to disagreements and become aggressive with weaker peers.

Poor family functioning and especially domestic violence might promote bullying in several ways (Rigby, 1996). Parents might show very little care for their children and not consider their feelings. As a consequence, a child develops a low empathy towards others. Badly functioning families might be characterized by a clear imbalance of power and aggression between members; children start to learn to dominate others and might even be encouraged in doing so (Baldry & Farrington, 1998). Domestic violence in this regard is relevant in explaining aggressive behavior among children as a learned behavior (Jaffe, Wolfe, & Wilson, 1990).

Unfortunately, most studies did not differentiate or control for children who were only exposed to violence from those who were both exposed and direct victims of abuse. In this respect, Edleson (1999) stresses the importance of controlling for or separating those children who are both exposed to domestic violence and directly abused from those who are only exposed because as Hughes, Parkinson, and Vargo (1989) found, only-exposed children develop fewer problems than the abused and exposed ones; very little is still known about how these two groups differ with regard to their involvement in bullying either as bullies or victims.

Most studies on the effects on children of interparental violence have been conducted with children recruited from shelters, looking mainly at father’s violence against the mother; very little has been investigated regarding the relationship of bullying and victimization in school and exposure to domestic violence with community, nonclinical samples of preadolescents by differentiating between father-to-mother and mother-to-father violence. A few excellent studies have been conducted so far with undergraduate college students assessing the relationship between bullying and victimization at school and child abuse (Duncan, 1999), or with middle and high school students measuring exposure to violence in the home and self-reported violent behavior (inter alia, Singer, Miller, Guo, Slovak, & Frierson, 1998; Song, Singer, & Anglin, 1998), but these are all retrospective. Even less is known about the Italian context; one of the few extensive studies on family violence in Italy was conducted by Bardi and Borgognini-Tarli (2001) examining parental child abuse, but no information were gathered on interparental violence or bullying.

The present study examines the relationship between exposure to domestic violence (separately for each parent) and the child’s behavior at school, such as bullying and victimization. We hypothesized that bullying and victimization were associated with interparental violence, and in particular that:

1. Children living with violent parents who use more direct forms of violence against each other (i.e., harming, hitting, throwing objects, compared to verbal abuse) are more likely

to be involved in direct bullying (i.e., physical bullying), whereas exposure to verbal insulting and threatening leads to more indirect types of bullying against peers;

2. According to the social learning theory and modeling process, girls exposed to father's violence against the mother are more likely to be victimized at school, whereas boys are more likely to bully others; in addition, we hypothesized that girls exposed to mother's violence against the father are more likely to be bullies themselves.

## Method

### *Participants*

The study was conducted with 1059 Italian children (48.5% girls and 51.5% boys) recruited from 10 different elementary and middle schools in the city and province of Rome. Their age ranged from 8 to 15 years, with an average of 11.2 years ( $SD = 1.45$ ).

The socio-economic status of the family was inferred by taking into account the occupation of the father and that of the mother. This method is not totally accurate to determine exact levels of socio-economic status of the family, but it provides a rough indication of it. According to this criterion, 26.3% of all students came from a low social class, 54.1% from a middle, and 19.6% from a high social class. Of all students, 89.4% had parents living together, in the remaining cases parents were separated or divorced; in 12 cases the father was dead.

### *Procedure*

In Italy there is no official ethical commission for the evaluation of research projects; researchers have specific ethical and deontological guidelines that they have to address when conducting studies especially if these are done with youngsters under age and if they are on sensitive topics. This specific study, however, because of the sensitive themes addressed was evaluated by an ad hoc ethical and research commission set up for the purpose of this study. The commission was formed by the representative of head of schools of the Ministry of Education, two representatives of the parents association, and two academics with expertise in the field of child abuse and child protection issues.

Twenty schools from different parts of Rome and province were first randomly selected; of these, only half agreed to take part in the study. With the help of the head of each school, parental written consent was obtained with a 'nonconsent' procedure. One week prior to the collection of data, students were given an envelope with a signed letter informing parents about the study and asking to sign the paper only if they did not agree that their child took part in the study. The letter assured about the anonymity of the questionnaire and the confidentiality of the study. Parents had to sign in the children's diary acknowledgment of receipt of the letter. Of all parents who read the letter (95%), no one returned the form signed. Only those students whose parents did read about the study could take part in the study.

On the day of the collection of data, students were approached in their own class by two psychologist research assistants who underwent an extensive 1-day training course conducted

by the author on ways of collecting sensitive data in a uniformed and standardized way and on ways of handling difficult situations they might encounter with vulnerable children.

Students were asked to sit separately so as to allow no conferring, talking, or helping when filling in the questionnaire. No time limit was imposed, and the average time to complete the questionnaire was about half an hour. Students had to write down the date, the class, and the name of the school, and provide their own answers by circling or crossing the box next to the option they chose. For elementary students, questions were read aloud to help those with reading problems; 8–10 years old were also helped by teachers with regard to the understanding of some of the questions and recalling some information about their parents, if needed. Older students read the questionnaires by themselves and help was provided only if required. After completing the questionnaire, each student had to seal it in a white envelope and place it in a box.

Students were assured of the anonymity and confidentiality of the answers provided, and they were told that all responses would be used for research purposes only. However, they were told that they could leave out the questions regarding the family if they did not feel like answering them and that they could talk to someone who could help them, if they wanted to, to seek support.

Thirty-two students (corresponding to approximately 3% of the total sample) left out most questions on domestic violence; it was not possible to establish whether these children might have represented extreme cases of domestic violence. In addition to these, a further three students showed a clear emotional reaction while completing the sensitive questions of the questionnaire; they were approached by a research assistant and were referred to the social worker of the school who provided them with support, and subsequently reported the cases because of suspected of abuse. The final sample consisted of 1024 children.

### *Measures*

*Bullying and victimization.* To measure the frequency of bullying and victimization, the Italian modified version (Genta, Menesini, Fonzi, Costabile, & Smith, 1996) of the original bullying questionnaire developed by Olweus (1993) was used. For the purpose of the present study, only questions measuring frequency of direct and indirect bullying and victimization were analyzed.

Students were asked to indicate how often they bullied others or were victimized in the previous 3 months. To measure ‘direct bullying’ students were asked how often they called nasty names, physically hurt, took belongings away, or threatened. ‘Indirect bullying’ included spreading rumors or not talking to someone on purpose. Respondents could choose one of the five following options for each of the six different types of bullying listed: ‘it never happened,’ ‘it happened once or twice,’ ‘it happened sometimes,’ ‘it happened once a week,’ or ‘it happened several times a week.’

Overall bullying was measured by adding the scores obtained from each of the six items measuring different types of bullying ( $\alpha = .70$ ). A principal component analysis revealed a single factor solution explaining 41.1% of the total variance.

To measure ‘Direct victimization’ students were asked how often they were called nasty names, were physically hurt, how often they had their belongings taken away, or were

threatened. 'Indirect victimization' included rumors spread, 'no would stay with me during recess time' (isolation), and no one would talk. Again, students could choose one of the five following options for each of the seven different types of victimization listed: 'it never happened,' 'it happened once or twice,' 'it happened sometimes,' 'it happened once a week,' or 'it happened several times a week.' Overall victimization was measured by adding together the scores of the seven items measuring different types of direct or indirect victimization ( $\alpha = .73$ ). A principal component analysis revealed a single factor solution explaining 38.5% of the total variance.

*Exposure to domestic violence.* Youngster's exposure to interparental violence was measured with a modified version of the Conflict Tactic Scale (CTS, Straus, 1979) adapted for Italian youngsters by Baldry (2003). The scale used consists of 10 items measuring different levels of violence between parents: 5 items refer to the violence of the father against the mother and the other 5 to the mother's violence against the father. Types of violence measured are: verbal (name calling), physical (hitting and throwing objects against the partner), and emotional (threatening), plus a general question measuring 'harm doing.' Answers could be given on a 5-point Likert scale ranging from 1 = 'never happened' to 5 = 'always happened.'

As indicated by Straus and Gelles (1990), nonclinical community samples are considered to report lower levels of extreme forms of violence. For this reason and for the scope of the present study, as well as for ethical caveats, more extreme forms of violence, such as 'threatening with a gun,' 'killing,' or 'sexual violence,' were not measured. This procedure might have altered the original properties of the scale; to check for the psychometric properties of the scale a principal component analysis was conducted on the 10 items. An Oblimin rotation, due to the correlation of the factors, confirmed a two factor solution: 'mother's violence against father,' and 'father's violence against mother.' Because the two items measuring mother-to-father and father-to-mother verbal abuse highly loaded on both factors ( $> .4$ ), they were excluded from the analyses. The final solution consists of a first factor measuring 'father-to-mother violence' (fvm) explaining 51.8% of the total variance, and a second one measuring 'mother-to-father violence' (mvf), explaining 15.1% of the total variance. All four items loading on the first factor were added together to obtain a new score (example items: 'Has your father ever hit your mother in some ways?'  $\alpha = .86$ ); the same procedure was used for the other four items loading in the second factor (example items: 'Has you mother ever threaten your father?'  $\alpha = .79$ ). The two new scales had scores ranging from 1 (no mvf or fvm reported, i.e., 'no exposure') to 5 (high exposure to mvf or fvm violence).

*Background variables.* Questions about gender, age, parents living together, and occupation of the father and the mother were also included in the questionnaire.

To check for direct abuse of the child by both parents, two additional questions measuring the child's account of harm by the mother or the father were included in the questionnaire. Respondents had to indicate on a 5-point scale, ranging from 'never happened' to 'always,' how often their fathers or mothers harmed them. Though this is not an extensive and fully reliable measure of child abuse, it was used an indicator of children's perception and account of harm inflicted by their parents.

### *Statistical analysis*

Descriptive analyses were first conducted for measuring the prevalence of bullying and victimization, overall and according to gender difference by using chi-square tests.

Subsequently, to determine the association and the strength of the relationship between direct and indirect bullying and victimization and different forms of interparental violence, overall and separately for boys and girls, percentages of all bullies and victims were cross tabulated with those of exposure to interparental violence. Odds ratios were calculated because they are useful indexes to establish the likelihood of one event to occur over the other (happen or not happen) and unlike  $\chi^2$  they are not affected by the prevalence of the two variables (Fleiss, 1981), rather they assess whether children with certain characteristics (exposed to interparental violence) are more or less likely than children not exposed to be bullies or victims. Odds ratios significantly greater than 1.0 imply that this group of children is more likely to report this behavior. Items were here dichotomized to classify respondents either as ‘ever exposed to domestic violence’ (separately for each parent) or ‘not exposed.’

Subsequently, two hierarchical regression analyses were performed using as criterion variables the overall bullying and victimization scores. Hierarchical regression analyses are used to examine the relationship between a dependent variable (criterion variable: bullying or victimization) and a set of independent variables (predictor variables: exposure to interparental violence, socio-demographic variables, and parents harming the child). Hierarchical models determine, step by step, the independent contribution of each set of predictor variables on the criterion variable over and above the effect of the other independent variables entered first; each set of independent predicting variables are relevant for the model if they significantly increases the variance ( $\Delta R^2$ ). The number of steps and the procedure for entering the independent variables in a hierarchical model depend on the hypotheses to test; in the present study, a three-step model was adopted. The most relevant predicting variables (exposure to interparental violence) were entered in the model last to establish the extent to which bullying and victimization can be predicted by exposure to interparental violence, over and beyond socio-demographic variables and harming the child that were entered in the model first.

## **Results**

### *Bullying and victimization*

Table 1 shows the prevalence of bullying and victimization overall and with regard to gender differences. Students checking the different types of bullying or victimization ‘at least sometimes’ (including ‘once a week’ and ‘several times a week’) were scored as involved in that type of behavior; those checking ‘it happened once or twice’ or ‘it never happened’ were classified as ‘not involved.’ With this criterion, 48.3% of all students reported overall bullying others sometimes or more often in the previous 3 months. Boys reported bullying others significantly more often than girls for all types of bullying especially in the case of

Table 1  
Prevalence of bullying and victimization and gender comparisons

|   | All students<br>( <i>N</i> = 1026) | Girls<br>( <i>N</i> = 498) | Boys<br>( <i>N</i> = 528) | $\chi^2(1)$ |
|---|------------------------------------|----------------------------|---------------------------|-------------|
| Types of bullying   |                                    |                            |                           |             |
| 'I called someone nasty names'                            | 29.1                               | 20.1                       | 37.7                      | 34.80***    |
| 'I did not talk to someone on purpose'                    | 23.5                               | 23.9                       | 23.1                      | .09         |
| 'I physically hurt, for example, hit and kicked'          | 15.6                               | 6.4                        | 24.2                      | 61.82***    |
| 'I spread rumors about someone'                           | 9.9                                | 5.0                        | 14.6                      | 26.18***    |
| 'I threatened'  | 5.8                                | 2.2                        | 9.1                       | 22.32***    |
| 'I stole or ruined belongings'                            | 3.9                                | 1.6                        | 6.1                       | 13.68***    |
| Direct bullying   | 37.1                               | 23.3                       | 50.0                      | 77.99***    |
| Indirect bullying   | 28.8                               | 26.3                       | 31.3                      | 3.05        |
| Overall bullying  | 48.3                               | 58.5                       | 37.6                      | 45.14***    |
| Type of victimization                                     |                                    |                            |                           |             |
| 'I was called nasty names'                                | 36.5                               | 31.8                       | 40.8                      | 9.04**      |
| 'I had rumors spread about me'                            | 23.4                               | 21.7                       | 25.0                      | 1.57        |
| 'No one would stay with me<br>at recess time' (isolation) | 19.5                               | 18.3                       | 20.3                      | .30         |
| 'I had my belongings taken away'                          | 15.7                               | 15.3                       | 16.1                      | .13         |
| 'I was physically hurt (hit, kicked)'                     | 14.6                               | 11.6                       | 17.4                      | 6.79**      |
| 'No one would talk to me'                                 | 12.1                               | 14.3                       | 10.0                      | 4.34*       |
| 'I was threatened'  | 8.5                                | 5.2                        | 11.6                      | 13.24**     |
| Direct victimization                                      | 47.5                               | 40.4                       | 54.1                      | 19.07***    |
| Indirect victimization                                    | 37.4                               | 35.5                       | 39.2                      | 1.47        |
| Overall victimization                                     | 59.0                               | 64.6                       | 53.1                      | 13.91***    |

Notes: Comparisons are for boys and girls. 'Direct bullying' includes calling nasty names, physically hurting, taking belongings away, threatening. 'Indirect bullying' includes spreading rumors, not talking to someone on purpose. 'Direct victimization' includes called nasty names, physically hurt, belongings taken away, threatened. 'Indirect victimization' includes isolation, rumors spread, no one would talk. Percentages exceed 100 because students could check more than one type of bullying or victimization.

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

physical bullying and name calling. Gender differences emerged also with reference to indirect bullying, but only in the case of spreading rumors with boys more involved than girls (14.6% vs. 5%).

More than half of all students (59%) reported overall victimization at least sometimes in the previous 3 months. Gender differences showed that boys reported more episodes of direct victimization than girls, with the only exception of 'belongings taken away' that was evenly distributed between boys and girls. Girls reported higher prevalence of indirect victimization only for 'social exclusion' (14.3% vs. 10%); in all other cases no significant gender differences emerged.

### *Exposure to domestic violence*

As with most cases of (family) violence, results on exposure to domestic violence are positively skewed; meaning a low response rate for reported violence.

Of all students, 17.4% reported exposure to interparental physical or psychological violence; 13.9% of respondents reported overall fvm compared to 10.6% of mvf violence. Of all students exposed to fvm, 67.3% reported also mvf, compared to 7.6% where they did not. Of all youngsters reporting mvf, 51.1% had also the father that was violent towards the mother compared to 4% of cases where he was not ( $\chi^2 = 284.41$ ,  $df = 1$ ,  $p < .00001$ ).

Tables 2 and 3 show the proportion of bullies and victims exposed to different forms of interparental violence, overall and according to gender differences.

Results indicate that bullying others is associated with exposure to interparental violence especially with regard to direct bullying. Overall, bullies are 1.8 times as likely to be exposed to domestic violence than not exposed; in 60.8% of all cases of exposure to interparental violence children are bullies compared to 45.7% of nonviolent cases. Girls are more likely to be affected than boys even if the overall prevalence rate of bully boys is higher. Bully girls exposed to interparental violence are 3.5 as likely to be exposed to domestic violence than not exposed. When looking in more detail at the relationship between different types of bullying and interparental violence, it emerged that the most significant differences occurred in relation to direct bullying mainly for girls. For example, verbal abuse by the mother to the father is not significantly associated with indirect or direct bullying for boys or girls, but exposure to other forms of more severe types of violence is; the same applies for mother and father hitting each other, mother harming father, and father threatening mother. Girls exposed to these types of domestic violence are about 3 times more likely to be bullies than those not exposed and this holds true especially with regard to direct bullying. With regard to father harming the mother and mother threatening the father, both boys and girls are significantly more likely to be bullies. When looking at indirect forms of bullying, the only significant association found is with overall violence and mother violence against father for girls. A significant relationship emerged for mother threatening father, indicating that both boys and girls exposed to this type of violence are more likely to be involved in indirect bullying in school.

With regard to victimization, there was a strong significant relationship between interparental violence and being victimized at school ( $\chi^2 = 12.04$ ,  $df = 1$ ,  $p < .0001$ ). Children exposed to domestic violence are more likely to be victims of bullying compared to those not exposed; in 71.0% of all cases of exposure to interparental violence students were victimized at school, compared to 56.9% of cases of no domestic violence reported. Higher significant associations were found for girls mainly regarding direct victimization and mother and father verbal violence, father's physical violence, interparental threatening, and mother throwing things against the father. Exposure to mother's physical violence against the father was not significantly associated with victimization, whereas father's physical violence was.

### *Multiple regression*

The three-step model of the hierarchical regression is presented in Table 4 and shows that socio-demographic variables alone accounted for 7.2% of the total variance of bullying

Table 2  
Proportion of children admitting bullying by exposure to different types of domestic violence

| Types of domestic violence             | Percent bullies ( <i>N</i> ) |                  |                   |                  |                  |                  |                  |                  |            |                  |
|--|------------------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------|------------------|
|  |                              | All bullying     |                   |                  | Direct           |                  |                  | Indirect         |            |                  |
|  |                              | Overall          | Boys              | Girls            | Overall          | Boys             | Girls            | Overall          | Boys       | Girls            |
| Overall domestic violence              | No                           | 45.7 (382)       | 57.3 (240)        | 33.2 (132)       | 34.0 (284)       | 48.2 (202)       | 18.7 (74)        | 27.8 (232)       | 31.0 (130) | 23.7 (94)        |
|  | Yes                          | 60.8 (107)       | 64.8 (59)         | 56.4 (44)        | 51.1 (90)        | 57.1 (52)        | 44.9 (35)        | 33.5 (59)        | 31.9 (29)  | 34.6 (27)        |
|  | OR                           | 1.8 <sup>a</sup> | 1.4               | 2.6 <sup>a</sup> | 2.0              | 1.4              | 3.5 <sup>a</sup> | 1.3              | 1.0        | 1.7 <sup>a</sup> |
| Overall mother violence against father | No                           | 45.5 (417)       | 56.5 (262)        | 33.7 (145)       | 34.2 (313)       | 47.6 (221)       | 19.6 (84)        | 27.5 (252)       | 30.4 (141) | 24.0 (103)       |
|  | Yes                          | 69.7 (76)        | 76.9 (40)         | 61.5 (32)        | 59.6 (65)        | 69.2 (36)        | 50.0 (26)        | 38.5 (42)        | 38.5 (20)  | 36.5 (19)        |
|  | OR                           | 2.7 <sup>a</sup> | 2.57 <sup>a</sup> | 3.1 <sup>a</sup> | 2.8 <sup>a</sup> | 2.5 <sup>a</sup> | 4.1 <sup>a</sup> | 1.6 <sup>a</sup> | 1.4        | 1.8 <sup>a</sup> |
| Overall father violence against mother | No                           | 46.7 (411)       | 57.5 (253)        | 34.7 (145)       | 34.9 (307)       | 48.6 (214)       | 19.9 (83)        | 28.1 (248)       | 30.9 (136) | 24.4 (102)       |
|  | Yes                          | 53.9 (86)        | 64.1 (50)         | 54.8 (34)        | 50.3 (73)        | 56.4 (44)        | 43.5 (27)        | 33.1 (48)        | 33.3 (26)  | 33.9 (21)        |
|  | OR                           | 1.7 <sup>a</sup> | 1.3               | 2.3 <sup>a</sup> | 1.9 <sup>a</sup> | 1.4              | 3.1 <sup>a</sup> | 1.3              | 1.1        | 1.6              |
| Mother verbal violence against father  | No                           | 46.7 (319)       | 57.3 (204)        | 35.0 (109)       | 35.0 (239)       | 47.8 (170)       | 20.6 (64)        | 28.6 (195)       | 31.7 (113) | 25.1 (78)        |
|  | Yes                          | 51.4 (183)       | 61.4 (102)        | 40.7 (72)        | 41.0 (146)       | 55.4 (92)        | 26.6 (47)        | 29.8 (106)       | 30.7 (51)  | 27.1 (48)        |
|  | OR                           | 1.2              | 1.2               | 1.3              | 1.3              | 1.4              | 1.4              | 1.1              | .9         | 1.1              |
| Father verbal violence against mother  | No                           | 45.6 (292)       | 55.1 (179)        | 35.9 (108)       | 33.6 (215)       | 45.5 (148)       | 21.0 (63)        | 27.8 (178)       | 30.5 (99)  | 25.2 (76)        |
|  | Yes                          | 53.2 (292)       | 64.3 (126)        | 39.7 (73)        | 43.3 (170)       | 57.7 (113)       | 26.6 (49)        | 30.8 (121)       | 32.7 (64)  | 26.6 (49)        |
|  | OR                           | 1.4 <sup>a</sup> | 1.5 <sup>a</sup>  | 1.2              | 1.5 <sup>a</sup> | 1.6 <sup>a</sup> | 1.1              | 1.1              | 1.1        | 1.1              |
| Mother hitting father                  | No                           | 47.7 (478)       | 58.3 (295)        | 36.2 (170)       | 36.4 (364)       | 49.8 (252)       | 21.7 (102)       | 28.7 (288)       | 31.4 (159) | 25.5 (76)        |
|  | Yes                          | 62.9 (22)        | 68.8 (11)         | 56.3 (9)         | 57.1 (20)        | 56.3 (9)         | 56.3 (9)         | 31.4 (11)        | 37.5 (6)   | 18.8 (3)         |
|  | OR                           | 1.8              | 1.6               | 2.2              | 2.3 <sup>a</sup> | 1.3              | 4.6 <sup>a</sup> | 1.1              | 1.3        | .7               |
| Father hitting mother                  | No                           | 47.1 (446)       | 57.8 (271)        | 35.8 (162)       | 35.6 (336)       | 49.0 (230)       | 21.3 (96)        | 28.5 (270)       | 30.7 (144) | 25.7 (116)       |
|  | Yes                          | 62.9 (22)        | 66.0 (35)         | 57.6 (19)        | 53.9 (48)        | 58.5 (31)        | 45.5 (15)        | 33.7 (30)        | 37.7 (20)  | 27.3 (9)         |
|  | OR                           | 1.9 <sup>a</sup> | 1.4               | 2.4 <sup>a</sup> | 2.1 <sup>a</sup> | 1.5              | 3.1 <sup>a</sup> | 1.3              | 1.4        | 1.1              |
| Mother harming father                  | No                           | 47.8 (475)       | 58.3 (293)        | 36.4 (169)       | 36.4 (361)       | 49.5 (249)       | 21.8 (101)       | 28.7 (285)       | 31.0 (156) | 25.9 (120)       |
|  | Yes                          | 61.9 (26)        | 72.2 (13)         | 50.0 (11)        | 54.8 (23)        | 66.7 (12)        | 45.5 (10)        | 33.3 (14)        | 44.4 (8)   | 18.2 (4)         |
|  | OR                           | 1.8              | 1.9               | 1.7              | 2.1 <sup>a</sup> | 2.0              | 3.0 <sup>a</sup> | 1.2              | 1.8        | .7               |

|                                  |     |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|----------------------------------|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Father harming mother            | No  | 47.3 (455)       | 57.0 (274)       | 36.6 (166)       | 35.4 (340)       | 47.8 (230)       | 21.6 (98)        | 28.2 (271)       | 29.9 (144)       | 25.6 (116)       |
|                                  | Yes | 63.4 (45)        | 79.5 (31)        | 45.2 (14)        | 60.6 (43)        | 76.9 (30)        | 41.9 (13)        | 39.4 (28)        | 51.3 (20)        | 25.8 (8)         |
|                                  | OR  | 1.9 <sup>a</sup> | 2.9 <sup>a</sup> | 1.4              | 2.8 <sup>a</sup> | 3.7 <sup>a</sup> | 2.6 <sup>a</sup> | 1.7 <sup>a</sup> | 2.5 <sup>a</sup> | 1.0              |
| Mother threatening father        | No  | 46.6 (455)       | 56.9 (280)       | 35.4 (163)       | 35.7 (348)       | 48.6 (239)       | 21.5 (99)        | 27.3 (267)       | 29.9 (147)       | 24.3 (112)       |
|                                  | Yes | 78.0 (46)        | 86.7 (26)        | 68.0 (17)        | 61.0 (36)        | 73.3 (22)        | 48.0 (12)        | 54.2 (32)        | 56.7 (17)        | 48.0 (12)        |
|                                  | OR  | 45 <sup>a</sup>  | 4.9 <sup>a</sup> | 3.9 <sup>a</sup> | 2.8 <sup>a</sup> | 2.9 <sup>a</sup> | 3.4 <sup>a</sup> | 3.1 <sup>a</sup> | 3.1 <sup>a</sup> | 2.9 <sup>a</sup> |
| Father threatening mother        | No  | 47.4 (458)       | 57.9 (282)       | 35.6 (162)       | 36.0 (348)       | 49.5 (241)       | 21.1 (96)        | 28.2 (273)       | 30.6 (149)       | 25.1 (114)       |
|                                  | Yes | 61.8 (42)        | 67.6 (23)        | 68.0 (18)        | 51.5 (35)        | 55.9 (19)        | 48.4 (15)        | 36.8 (25)        | 41.2 (14)        | 32.3 (10)        |
|                                  | OR  | 1.8 <sup>a</sup> | 1.5              | 2.5 <sup>a</sup> | 1.9 <sup>a</sup> | 1.3              | 3.5 <sup>a</sup> | 1.4              | 1.6              | 1.4              |
| Mother throwing things at father | No  | 47.0 (460)       | 57.7 (286)       | 35.7 (164)       | 35.8 (350)       | 49.0 (243)       | 21.6 (99)        | 28.0 (274)       | 31.0 (154)       | 24.3 (112)       |
|                                  | Yes | 69.8 (37)        | 76.0 (19)        | 58.3 (14)        | 58.5 (31)        | 68.0 (17)        | 45.8 (11)        | 43.4 (23)        | 36.0 (9)         | 45.8 (11)        |
|                                  | OR  | 2.7 <sup>a</sup> | 2.3              | 2.5 <sup>a</sup> | 2.5 <sup>a</sup> | 2.2              | 3.1 <sup>a</sup> | 2.0              | 1.2              | 2.6 <sup>a</sup> |
| Father throwing things at mother | No  | 47.9 (470)       | 57.7 (285)       | 37.0 (171)       | 36.4 (357)       | 49.2 (243)       | 22.3 (103)       | 28.7 (282)       | 30.8 (152)       | 26.0 (120)       |
|                                  | Yes | 57.7 (30)        | 75.0 (21)        | 38.1 (8)         | 50.0 (26)        | 64.3 (18)        | 33.3 (7)         | 30.8 (16)        | 42.9 (12)        | 14.3 (3)         |
|                                  | OR  | 1.5              | 2.2              | 1.1              | 1.7 <sup>a</sup> | 1.8              | 1.7              | 1.1              | 1.7              | .5               |

*Notes:* Data refer only to students who bullied (overall and according to gender differences). Bullying was measured by adding the different types of bullying. ‘Direct bullying’ includes calling nasty names, physically hurting, taking belongings away, threatening. ‘Indirect bullying’ includes spreading rumors, not talking to someone on purpose. Differences in *N*'s within categories are due to missing values. ‘Domestic violence’ excludes verbal violence, but includes threatening. All significance levels are Bonferroni corrected. OR = odds ratios.

<sup>a</sup>Odds ratio significantly >1.00 according to  $p < .05$ , two tail.

Table 3  
Proportion of children victimized by exposure to different types of domestic violence

| Types of domestic violence              |     | Percent victims (N) |            |                  |                  |            |                  |                  |                  |                  |
|---|-----|---------------------|------------|------------------|------------------|------------|------------------|------------------|------------------|------------------|
|   |     | All victimization   |            |                  | Direct           |            |                  | Indirect         |                  |                  |
|   |     | Overall             | Boys       | Girls            | Overall          | Boys       | Girls            | Overall          | Boys             | Girls            |
| Overall domestic violence               | No  | 56.9 (475)          | 63.7 (267) | 49.7 (197)       | 45.0 (376)       | 52.9 (222) | 36.4 (144)       | 34.9 (292)       | 37.5 (157)       | 31.7 (126)       |
|   | Yes | 71.0 (125)          | 70.3 (64)  | 71.8 (56)        | 60.2 (106)       | 59.3 (54)  | 60.3 (47)        | 52.3 (92)        | 50.5 (46)        | 55.1 (43)        |
|   | OR  | 1.9 <sup>a</sup>    | 1.3        | 2.6 <sup>a</sup> | 1.9 <sup>a</sup> | 1.3        | 2.6 <sup>a</sup> | 2.0 <sup>a</sup> | 1.7 <sup>a</sup> | 2.6 <sup>a</sup> |
| Overall mother violence against father  | No  | 57.4 (525)          | 64.2 (298) | 50.1 (215)       | 45.4 (416)       | 53.3 (248) | 36.6 (157)       | 36.0 (330)       | 39.0 (181)       | 32.6 (140)       |
|   | Yes | 72.5 (79)           | 71.2 (37)  | 73.1 (38)        | 64.2 (70)        | 61.5 (32)  | 65.4 (34)        | 50.5 (55)        | 44.2 (23)        | 55.8 (29)        |
|   | OR  | 2.0 <sup>a</sup>    | 1.4        | 2.7 <sup>a</sup> | 2.2 <sup>a</sup> | 1.4        | 3.3 <sup>a</sup> | 1.8 <sup>a</sup> | 1.2              | 2.6 <sup>a</sup> |
| Overall father violence against mother  | No  | 57.5 (506)          | 63.6 (280) | 50.8 (212)       | 45.7 (403)       | 52.6 (232) | 37.9 (158)       | 35.6 (314)       | 37.3 (164)       | 33.3 (139)       |
|   | Yes | 71.0 (103)          | 70.5 (55)  | 72.6 (45)        | 60.7 (88)        | 61.5 (48)  | 59.7 (37)        | 51.7 (75)        | 51.3 (40)        | 53.2 (33)        |
|   | OR  | 1.8 <sup>a</sup>    | 1.4        | 2.6 <sup>a</sup> | 1.8 <sup>a</sup> | 1.4        | 2.4 <sup>a</sup> | 1.9 <sup>a</sup> | 1.8 <sup>a</sup> | 2.3 <sup>a</sup> |
| Mother verbal violence against father   | No  | 57.2 (391)          | 64.0 (228) | 50.2 (156)       | 44.9 (307)       | 52.8 (188) | 36.3 (113)       | 38.7 (264)       | 42.1 (150)       | 34.7 (108)       |
|   | Yes | 62.3 (221)          | 66.3 (110) | 57.4 (101)       | 52.5 (187)       | 56.9 (95)  | 46.6 (82)        | 35.4 (126)       | 33.1 (55)        | 36.2 (64)        |
|   | OR  | 1.2                 | 1.1        | 1.3              | 1.4 <sup>a</sup> | 1.2        | 1.5 <sup>a</sup> | .9               | .7               | 1.1              |
| Father verbal violence against mother   | No  | 56.6 (362)          | 62.7 (203) | 50.5 (152)       | 44.3 (284)       | 51.4 (167) | 36.9 (111)       | 36.1 (231)       | 38.3 (124)       | 33.6 (101)       |
|   | Yes | 63.9 (251)          | 68.5 (135) | 57.9 (106)       | 53.9 (212)       | 59.4 (117) | 46.4 (85)        | 40.6 (160)       | 41.1 (81)        | 39.1 (72)        |
|   | OR  | 1.35 <sup>a</sup>   | 1.3        | 1.35             | 1.5 <sup>a</sup> | 1.4        | 1.5 <sup>a</sup> | 1.2              | 1.1              | 1.3              |
| Mother physical violence against father | No  | 58.9 (590)          | 64.8 (328) | 52.7 (247)       | 47.1 (472)       | 53.8 (273) | 39.4 (185)       | 37.4 (375)       | 39.5 (200)       | 34.9 (164)       |
|   | Yes | 60.0 (21)           | 62.5 (10)  | 56.3 (9)         | 60.0 (21)        | 62.5 (10)  | 56.3 (9)         | 42.9 (15)        | 37.5 (6)         | 43.8 (7)         |
|   | OR  | 1.0                 | .9         | 1.1              | 1.7              | 1.4        | 1.9              | 1.2              | .9               | 1.4              |
| Father physical violence against mother | No  | 57.8 (546)          | 63.5 (298) | 51.9 (234)       | 45.9 (434)       | 52.6 (247) | 38.6 (174)       | 36.4 (344)       | 38.0 (178)       | 34.3 (155)       |
|   | Yes | 74.2 (66)           | 73.6 (39)  | 72.7 (24)        | 66.3 (59)        | 66.0 (35)  | 63.6 (21)        | 53.9 (48)        | 52.8 (28)        | 54.5 (18)        |
|   | OR  | 2.1 <sup>a</sup>    | 1.6        | 2.5 <sup>a</sup> | 2.3 <sup>a</sup> | 1.7        | 2.8 <sup>a</sup> | 2.0 <sup>a</sup> | 1.8 <sup>a</sup> | 2.3 <sup>a</sup> |
| Mother harming father                   | No  | 58.8 (583)          | 65.0 (327) | 52.1 (241)       | 47.0 (467)       | 54.0 (272) | 39.1 (181)       | 37.4 (371)       | 39.8 (200)       | 34.3 (159)       |
|   | Yes | 66.7 (28)           | 61.1 (11)  | 68.2 (15)        | 61.9 (26)        | 61.1 (11)  | 59.1 (13)        | 47.6 (20)        | 33.3 (6)         | 59.1 (13)        |
|   | OR  | 1.4                 | .8         | 2.0              | 1.8              | 1.3        | 2.2              | 1.5              | .7               | 2.8 <sup>a</sup> |

|                                  |     |                  |            |                  |                  |            |                  |                  |            |                  |
|----------------------------------|-----|------------------|------------|------------------|------------------|------------|------------------|------------------|------------|------------------|
| Father harming mother            | No  | 58.3 (560)       | 63.8 (307) | 52.1 (236)       | 47.0 (452)       | 53.1 (256) | 39.7 (180)       | 36.7 (353)       | 38.5 (185) | 34.1 (155)       |
|                                  | Yes | 71.8 (51)        | 76.9 (30)  | 67.7 (21)        | 57.7 (41)        | 66.7 (26)  | 48.4 (15)        | 52.1 (37)        | 51.3 (20)  | 54.8 (17)        |
|                                  | OR  | 1.8 <sup>a</sup> | 1.9        | 1.9              | 1.5              | 1.8        | 1.4              | 1.9 <sup>a</sup> | 1.7        | 2.3 <sup>a</sup> |
| Mother threatening father        | No  | 58.2 (568)       | 64.0 (315) | 52.0 (239)       | 46.4 (453)       | 53.3 (263) | 38.5 (177)       | 36.6 (358)       | 38.4 (189) | 34.3 (158)       |
|                                  | Yes | 72.9 (43)        | 76.7 (23)  | 68.0 (17)        | 67.8 (40)        | 66.7 (20)  | 68.0 (17)        | 54.2 (32)        | 53.3 (16)  | 56.0 (14)        |
|                                  | OR  | 1.9 <sup>a</sup> | 1.8        | 1.9              | 2.4 <sup>a</sup> | 1.7        | 3.4 <sup>a</sup> | 2.0 <sup>a</sup> | 1.8        | 2.4              |
| Father threatening mother        | No  | 58.3 (563)       | 64.3 (313) | 51.8 (235)       | 46.3 (448)       | 53.1 (259) | 38.5 (175)       | 36.7 (355)       | 38.6 (188) | 34.1 (155)       |
|                                  | Yes | 69.1 (47)        | 67.6 (23)  | 71.0 (22)        | 64.7 (44)        | 64.7 (22)  | 64.5 (20)        | 51.5 (35)        | 50.0 (17)  | 54.8 (17)        |
|                                  | OR  | 1.6              | 1.2        | 2.3 <sup>a</sup> | 2.1 <sup>a</sup> | 1.6        | 2.9 <sup>a</sup> | 1.8 <sup>a</sup> | 1.6        | 2.4 <sup>a</sup> |
| Mother throwing things at father | No  | 58.3 (570)       | 64.9 (322) | 51.4 (236)       | 46.7 (457)       | 54.1 (269) | 38.6 (177)       | 36.9 (361)       | 39.3 (195) | 34.1 (157)       |
|                                  | Yes | 75.5 (40)        | 68.0 (17)  | 79.2 (19)        | 66.0 (35)        | 60.0 (15)  | 66.7 (16)        | 49.1 (26)        | 40.0 (10)  | 54.2 (13)        |
|                                  | OR  | 2.2 <sup>a</sup> | 1.1        | 3.6 <sup>a</sup> | 2.2 <sup>a</sup> | 1.3        | 3.2 <sup>a</sup> | 1.6              | 1.0        | 2.3 <sup>a</sup> |
| Father throwing things at mother | No  | 58.6 (574)       | 64.2 (317) | 52.5 (242)       | 47.1 (462)       | 53.1 (263) | 40.1 (185)       | 37.2 (365)       | 38.9 (192) | 34.8 (161)       |
|                                  | Yes | 71.2 (37)        | 71.4 (20)  | 71.4 (15)        | 59.6 (31)        | 67.9 (19)  | 47.6 (10)        | 50.0 (26)        | 50.0 (14)  | 52.4 (11)        |
|                                  | OR  | 1.7              | 1.4        | 2.3              | 1.6              | 1.9        | 1.3              | 1.7              | 1.6        | 2.0              |

*Notes:* Data refer only to all victimized students (overall and according to gender differences). Victimization was measured by adding different types of victimization. ‘Direct victimization’ includes called nasty names, physically hurt, belongings taken away, threatened. ‘Indirect victimization’ includes being rejected, rumors spread, no one would talk. Differences in *N*’s within categories are due to missing values. ‘Domestic violence’ excludes verbal violence, but includes threatening. All significance levels are Bonferroni corrected. OR = odds ratios.

<sup>a</sup> Odds ratio significantly >1.00 according to  $p < .05$ , two tail.

Table 4

Hierarchical multiple regression for exposure to interparental violence predicting bullying and victimization controlling for socio-demographic variables and parental child abuse

| Predictor variable      | Bullying |              |         |         |                    | Victimization |              |         |       |                    |
|-------------------------|----------|--------------|---------|---------|--------------------|---------------|--------------|---------|-------|--------------------|
|                         | $R^2$    | $\Delta R^2$ | $\beta$ | $B$     | $F$ model ( $df$ ) | $R^2$         | $\Delta R^2$ | $\beta$ | $B$   | $F$ model ( $df$ ) |
| Step 1                  | .072     | .072*        |         |         | 17.97** (4,919)    | .019          | .019*        |         |       | 4.46* (4,921)      |
| SES                     |          |              | -.058   | -.276   |                    |               |              | -.083*  | -.533 |                    |
| Parents living together |          |              | -.003   | -.031   |                    |               |              | -.029   | -.412 |                    |
| Gender                  |          |              | -.250*  | -1.593* |                    |               |              | -.092*  | -.794 |                    |
| Age                     |          |              | .070*   | .152    |                    |               |              | .046    | -.137 |                    |
| Step 2                  | .117     | .045*        |         |         | 20.38** (6,917)    | .063          | .044*        |         |       | 10.38** (4,921)    |
| SES                     |          |              | -.056   | -.265   |                    |               |              | -.079*  | -.512 |                    |
| Parents living together |          |              | .003    | .031    |                    |               |              | .023    | -.327 |                    |
| Gender                  |          |              | -.213*  | -1.356* |                    |               |              | -.056   | -.486 |                    |
| Age                     |          |              | .084*   | .183    |                    |               |              | .034    | -.091 |                    |
| Father abusing child    |          |              | .169*   | .622    |                    |               |              | .150*   | -.327 |                    |
| Mother abusing child    |          |              | .062    | .225    |                    |               |              | .082    | -.512 |                    |
| Step 3                  | .140     | .023*        |         |         | 18.69** (8,915)    | .072          | .088*        |         |       | 8.88** (8,917)     |
| SES                     |          |              | -.057   | -.272   |                    |               |              | -.076*  | -.091 |                    |
| Parents living together |          |              | .031    | .323    |                    |               |              | .000    | .045  |                    |
| Gender                  |          |              | -.223*  | -1.421  |                    |               |              | -.063*  | .747  |                    |
| Age                     |          |              | .082*   | .180    |                    |               |              | .035    | -.105 |                    |
| Father abusing child    |          |              | .167*   | .102    |                    |               |              | .123*   | .614  |                    |
| Mother abusing child    |          |              | .028    | .616    |                    |               |              | .078    | .385  |                    |
| fvm                     |          |              | -.025   | -.213   |                    |               |              | .036    | .414  |                    |
| mvf                     |          |              | .169*   | 2.228   |                    |               |              | .075*   | 1.332 |                    |

Notes:  $N$ 's differences are due to missing values. fvm = father-to-mother violence, mvf = mother-to-father violence. fvm and mvf exclude verbal violence. Gender is coded: 0 = boys, 1 = girls; negative  $\beta$ 's are in the direction of being a boy. SES is coded: 1 = low, 2 = middle, 3 = high; negative  $\beta$ 's are in the direction of having a lower SES.

\*  $p < .05$ .

\*\*  $p < .01$ .

(though only two were statistically significant: gender,  $\beta = -.22$ ,  $p < .0001$ —meaning being a boy, and age,  $\beta = .08$ ,  $p < .01$ —meaning being older). In the second step of the analysis, parental child abuse was added in the model (though only child abuse by the father was significant,  $\beta = .17$ ,  $p < .0001$ ), significantly increasing the variance of bullying ( $\Delta R^2 = .045$ ,  $F_{\text{change}(2,923)} = 23.46$ ,  $p < .0001$ ). Finally, in the last step of the model, interparental violence was entered significantly increasing the variance of the final model ( $\Delta R^2 = .023$ ,  $F_{\text{change}(2,921)} = 12.15$ ,  $p < .0001$ ), though only mother's violence against father was statistically significant ( $\beta = .17$ ,  $p < .0001$ ). The full model accounted for 14% of the total variance of bullying ( $F_{(8,921)} = 18.69$ ,  $p < .0001$ ).

With regard to victimization, the same procedure was used. Socio-demographic variables were entered in the model first and they accounted for 1.9% of the total variance (though only two were statistically significant: SES,  $\beta = -.07$ ,  $p < .01$ —meaning belonging to a lower social class and gender,  $\beta = -.06$ ,  $p < .05$ —meaning being a boy). In the second step, parental child abuse was added in the model (though only child abuse by the father was significant,  $\beta = .12$ ,  $p < .01$ ), significantly increasing the variability of victimization ( $\Delta R^2 = .044$ ,  $F_{\text{change}(2,921)} = 21.81$ ,  $p < .0001$ ). Finally, in the last step of the model, interparental violence was added significantly increasing variance in victimization ( $\Delta R^2 = .008$ ,  $F_{\text{change}(2,919)} = 4.12$ ,  $p < .05$ ), though only mother violence against the father was statistically significant ( $\beta = .07$ ,  $p < .05$ ). The full model accounted for 7.2% of the total variance for victimization ( $F_{(8,919)} = 8.88$ ,  $p < .0001$ ).

## Discussion

The present study examined the relationship between bullying and victimization at school and exposure to interparental violence at home in a community sample of nonclinical Italian youngsters. Results indicate that bullying and victimization are associated with domestic violence, though exposure to domestic violence does not per se fully predict behavior at school, especially in the case of boys. A father harming the child was found to be a risk factor for both bullying and victimization as well as being a boy rather than a girl.

Half of all students recruited for the study have been involved in some type of bullying or victimization either sometimes or more often in a period of 3 months, confirming once more that bullying and victimization in Italy is a widespread phenomenon (Baldry & Farrington, 1998; Genta et al., 1996). Gender differences for bullying were even more evident: all types of direct bullying, but also 'spreading rumors,' were significantly more often reported by boys than by girls. Boys were more likely to report direct physical aggression with the intent of causing physical harm, threats, or verbal aggression.

With regard to victimization, as previously reported by Baldry and Farrington (1999) and Lagerspetz, Bjorkqvist, and Peltonen (1988), boys reported higher levels of direct victimization compared to girls especially in the case of 'threatened' and 'physically hurt,' but also being 'called nasty names.' Girls more often than boys reported that no one would talk to them which is in line with findings from Owens, Shute, and Slee (2000) who indicated that girls are more likely to inflict indirect forms of aggression with the intent of psychologically harming, even if this gender difference is not incredibly high.

Of all students, 17.4% reported exposure to interparental violence. The prevalence of fvm was significantly higher than mother's violence towards the father throughout all forms of violence. It was not possible to establish if mother-to-father violence is self-defense retaliation or initiated violence.

If we were to use these data to estimate, on the basis of the year 2000 Italian census, the extent of exposure to domestic violence in Italy according to the children's accounts provided in this study, we would find that almost 2.5 million of 8- to 15-year-old youngsters have been exposed to some kind of interparental violence. In particular, just over 800,000 of all youngsters (400,000 girls and 417,000 boys) would have been exposed to more serious forms of physical violence or threats; these data do not differ much from those found by Haj-Yahia (2001).

Bullying and victimization are complex phenomena. The significant association found between interparental violence and bullying, especially direct forms of bullying, could be explained according to the social learning modeling theory of Bandura (1973). Results seem to suggest that with regard to bullying and victimization, exposure to interparental violence negatively affects more girls than boys, though no direct comparisons were performed. Similar results were reported by Herrera and McCloskey (2001) who found, in their study assessing the risk of juvenile delinquency, that witnessing marital violence predicted overall offending for both boys and girls.

For boys, the proportion of those who are bullies, but not exposed to interparental violence, is similar to that of those boys who are bullies and exposed, though some significant differences were found with regard to boys exposed to mother violence against father, father harming mother, and mother threatening father. Exposure of boys to some kind of interparental violence is associated with bullying. When studying possible risk factor for bullying other variables, such as peer pressure and group norms, might play an important role and should be taken into account (Emler & Reicher, 1995; Salmivalli, Lagerspetz, Bjorkqvist, Osterdan, & Kaukiainen, 1996).

When examining the results for victimization, the significant association found with interparental violence is more likely to be an indirect one. Victimization at school could be an indicator of maladjustment associated with interparental violence that could lead to lowered self-esteem, depression, or fear. Exposure to interparental violence may reduce a child's capacity of being assertive when victimized at school; the vicious cycle of victimization starts at home and continues at school.

Both models for bullying and victimization showed that exposure to parental violence (mother's violence against father) significantly predicts bullying and victimization, over and beyond age, gender, and parental harming the child. The three-step models, however, predicted bullying better than victimization, accounting for a larger amount of the total variance, though in both cases only part of the total variance of bullying and victimization was explained by interparental violence. Parental behavior clearly has an impact on the child's peer relations at school, but are not sufficient to explain the whole phenomenon. Next to family violence, other dimensions related to the family or the social context (such as parental styles or the school ethos, attitudes towards bullying, and the peer group pressure) might predict bullying (Baldry & Farrington, 1998; Rigby, 1996; Smith & Myron-Wilson, 1998).

This study has some limitations. It was not possible to establish the exact direction of the relationship between bullying and victimization in school and exposure to family violence

because the study was correlational in its nature. However, it is very unlikely that bullying and victimization have any causal effect on domestic violence; instead, in accordance with a social learning model and the cycle of violence frame, they can be thought of as a (negative) reaction of the violence suffered at home.

Measures of bullying and victimization and interparental domestic violence were based only on the self-report questionnaire completed by children. Ideally, data should have been gathered also from other sources, such as parents. With this information, we could establish the level of the correlation between their accounts and children's. Also other sources, such as child protection agencies, could provide useful information; however, asking children directly about their experiences is among the most reliable method to disclose any form of victimization or antisocial behavior (O'Brien, John, Margolin, & Erel, 1994). Because it was not possible to establish whether those students who were left out of the study due to missing data on the measure of domestic violence were among those experiencing more extreme forms of violence and since the sample used in this study was not randomly selected, caution should be used when generalizing results.

Another limit of this study was in relation to the measure adopted for parental child abuse that was limited to one single measure asking about parental harm inflicted to the child. This measure can provide a measure of the perception of parental harm, but it can lead to include several negative experiences that might only be partly related to abuse. Further studies should use more extensive and reliable measurers of child abuse.

Findings from the present studies could help in the development of prevention strategies in schools to address bullying and victimization in a broader frame by adopting the 'cycle of violence' theoretical model (Widom, 1989). According to this model, bullying and juvenile antisocial behavior are associated with family violence; early intervention at school can help young children change their antisocial and aggressive behaviors and learn other ways to interact with peers. Schools can promote a supportive environment where problematic children can be helped to express their anger in a constructive rather than destructive way (Kumpulainen & Räsänen, 2000). Social workers, welfare agencies for the protection of children, school advisors, and counselors should work together to create an intervention and prevention plan that is broad in its aims and perspectives (O'Brien, 2001).

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## Résumé

**Objectifs:** L'étude vise à examiner le rapport entre le phénomène de la "malmenance" dans les écoles et l'exposition à la violence domestique dans un cadre non médical et parmi un groupe de jeunes des écoles primaires et secondaires.

**Méthodes:** Une enquête d'ensemble a été conduite sur un exemplaire de 1059 étudiants italiens des écoles primaires et secondaires. Les participants ont rempli un questionnaire personnel et anonyme qui évalue le phénomène de "malmenance" dans les écoles ainsi que l'exposition à la violence du père sur la mère et l'exposition à la violence de la mère vis à vis du père. Le questionnaire comprenait aussi une évaluation des abus en famille sur les mineurs et les variantes démographiques.

**Résultats:** Les résultats indiquent que presque la moitié des garçons et filles sont concernés par la le phénomène de la "malmenance" à l'école; des différences de genres émergent en relation avec les différents types de "malmenance," les garçons sont les plus concernés. Quant à la violence domestique, les résultats indiquent qu'il y a une forte association entre la violence physique en famille et le phénomène de la "malmenance" de nature physique, surtout chez les filles. De multiples études statistiques révèlent que les différents types de "malmenance" s'expliquent par l'exposition à la violence en famille, en particulier la violence de la mère sur le père au de-là des facteurs attribués à l'âge, genre, et abus du père sur les enfants.

**Conclusion:** L'exposition à la violence domestique est associée à l'externer et intérioriser les problèmes dans les écoles, ceci même après avoir considéré les abus directs sur les enfants. Les filles exposées à une forte violence du père sur la mère sont parmi celles qui ont le plus de chance d'exercer des faits de violence sur les autres en comparaison avec celles qui ne subissent pas ces violences, même si les différences de genre, en général, indiquent que les garçons ont plus de chance d'exercer la "malmenance" ou d'être des victimes par rapport aux filles. Ces résultats sont importants pour mettre en oeuvre des programmes d'intervention qui puissent prévenir et réduire le phénomène de la "malmenance" dans les écoles en s'adressant aussi à la violence en famille.

## Resumen

**Objetivo:** El presente estudio se propone investigar en un grupo de jóvenes de la escuela primaria y media la relación existente entre el maltrato entre compañeros en ámbito escolar y la exposición a situaciones de violencia doméstica.

**Método:** Un estudio cruzado fue conducido con una muestra de 1059 estudiantes de escuelas primarias y medias. Los participantes debían responder a un cuestionario anónimo para medir el maltrato entre compañeros en relación a la violencia intrafamiliar del padre sobre la madre o viceversa. El cuestionario incluía además variables relativas al abuso infantil y a las diversas situaciones socio-económicas.

**Resultados:** Los resultados obtenidos indican que la mitad del total de niños están involucrados en diversas situaciones de maltrato entre pares. Con respecto a la violencia doméstica los resultados indican que hay una asociación entre la violencia doméstica y las actitudes de maltrato entre compañeros, en modo particular en las niñas. Múltiples análisis estadísticos revelan que incide en modo especial la violencia de la madre sobre el padre por encima de la varianza estadística atribuida a la edad, el género y el abuso infantil paterno.

**Conclusiones:** La exposición a la violencia doméstica se asocia a problemas de maltrato entre compañeros en la escuela, dejando de lado aquellos casos en que se ha indagado el efecto del abuso. Las niñas expuestas a la violencia del padre sobre la madre son más susceptibles al maltrato respecto a aquellas que no han vivido esa experiencia; las diferencias de género indican que los varones tienen más fácilmente conductas de maltrato respecto de las mujeres. Los resultados se discuten en relación a las políticas de intervención y de prevención.