

Aggression in Schools: Psychosocial Outcomes of Bullying Among Indian Adolescents

Prahbhjot Malhi · Bhavneet Bharti · Manjit Sidhu

Received: 26 November 2013 / Accepted: 12 February 2014 / Published online: 23 March 2014
© Dr. K C Chaudhuri Foundation 2014

Abstract

Objectives To examine the prevalence of school bullying and to investigate the behavioral, emotional, socio-economic and demographic correlates of bullying behaviors among Indian school going adolescents.

Methods Self-reports on bullying involvement were collected from 9th to 10th class students ($N=209$; Mean=14.82 y, SD=0.96) from Government and Private schools of a north Indian city. Four groups of adolescents were identified: bullies, victims, bully-victims, and non-involved students. The self concept of the child was measured by the Indian adaptation of the Piers Harris Children's Self Concept Scale (CSCS) and emotional and behavioral difficulties by the Youth self report measure of the Strengths and Difficulties Questionnaire.

Results The overall prevalence of any kind of bullying behavior was 53 %. One-fifth (19.2 %) of the children were victims of bullying. Boys were more likely to be bully-victims (27.9 %) and girls were more likely to be victims (21.6 %). Bullying status was significantly related to the total self concept scores of the students ($F=5.12$, $P=0.002$). Victimized adolescents reported the lowest self concept scores. Bully-victims had a higher risk for conduct problems and hyperactivity and were the most likely to have academic difficulties. Bullies had relatively better school grades and high self esteem but had higher risk for hyperactivity and conduct problems as compared to controls.

Conclusions Bullying and victimization was widespread among the Indian school going youth. Given the concurrent psychosocial adjustment problems associated with bullying,

there is an urgent need for developing intervention programs and sensitizing school personnel.

Keywords Bullying · Aggression · Emotional problems · Behavioral difficulties · Adolescents

Introduction

Research on bullying has been conducted all over the world, however, little is known about bullying in the schools of India. Bullying is defined as the use of power and aggression repeated over a time period which is intended to harm, cause distress or control another. Bullying entails a relationship in which there is an imbalance in strength of power between the parties involved [1]. Direct bullying can include physical aggression (hitting, kicking) and verbal aggression (insults, harassment, threats). Covert or indirect bullying is also termed relational victimization is the manipulation of social relationships to hurt (gossiping, spreading rumors) or socially exclude the individual being victimized [1, 2].

Several countries have compared the prevalence of bullying by country and sex. Involvement in bullying has varied from a low of 5 to a high of 54 % across countries [3, 4]. The most frequent type of bullying reported is teasing and name calling, followed by hitting and kicking and other threats. Physical bullying is more common among boys than girls [1, 2, 4]. Boys are more likely to be perpetrators while girls are more likely to be victims [4] and experience indirect forms of bullying such as teasing [5]. Girls tend to use more indirect and subtle forms of harassment, including rumor spreading and social exclusion [5, 6]. Evidence indicates that chronic bullying and peer victimization can lead to a host of adverse psychosocial outcomes, including behavioral difficulties, loneliness, depression, poor academic performance, school avoidance, poor self esteem, psychosomatic complaints, and

P. Malhi (✉) · B. Bharti
Department of Pediatrics, Post Graduated Institute of Medical Education and Research, Chandigarh 160012, India
e-mail: pmalhi18@hotmail.com

M. Sidhu
Department of Psychology, MCM DAV College for Women, Chandigarh 160036, India

suicidal ideations [2, 7–12]. Bullying in childhood has long term adverse consequences and is documented to be a significant predictor of violence; poor health, wealth, and social-relationship outcomes in adulthood [13, 14].

Thus far, the large majority of studies on school bullying have been conducted in the majority world, whereas data from Asian countries, in general, and India, in particular remains limited. Few studies which have focused on overt aggression among school going Indian adolescents have found that violence is common among school children [15, 16]. Since adolescence is a critical time for developing a stable identity and social relationships difficulties with peer relationships, such as bullying, can have long term impact upon well being. Keeping this in view, the present study aimed to examine the prevalence of bullying and its behavioural, emotional, socio-economic and demographic correlates among Indian school going adolescents.

Material and Methods

This study was part of a larger project which examined the academic achievement correlates of adolescents. A total of 209 adolescents (Boys=53.4 %) studying in grade 9th and 10th aged 13 to 16 y (Mean=14.82, SD=0.96) were recruited from Government and Private schools of Chandigarh, a city in north India. The study was approved by the Institute Ethics committee. Written informed consent was taken from all students. Consent was also taken from the Principals of the schools surveyed. Parents were sent information about the project and no parent refused permission for their child to be included in the study. The sample size of 202 was calculated based upon the expected prevalence of 25 % bullying in our population, allowing a 5 % of precision error with a confidence level of 90 %.

Students were asked four questions to assess whether they were bullies: “Have you hit, kicked, pushed, or shoved another student; called other students names or made fun of, or teased him or her in a hurtful way; spread lies about other students; extorted money or things from other students”? All responses were recorded on a three point scale: “never/rarely,” “sometimes” (once or twice in a month), “usually/always” (several times in a month). The student was classified as a bully if the respondent chose “sometimes,” “usually/always”. Physical or direct victimization was measured by one question “have you been hit, kicked, pushed, or shoved around by another student at school?” Verbal victimization was assessed by the question: “have you been called names, made fun of, or teased in a hurtful way?” Relational bullying was measured by the question; “have other students told lies or spread false rumors about you and tried to make others dislike you?” Finally, material victimization was measured by the question “whether your money or things been taken away from you or

damaged in some ways?” The student was classified as a victim if the respondent chose “sometimes,” “usually/always” on any one of the above question. Students who reported being victimized were asked additional questions related to the place of bullying; number of children who bullied them; who were the children who bullied them; whether they had reported it; and whether the school or parents had intervened. Students who met the criteria for being both a bully and victim were classified as bully-victims. This measure of bullying perpetration and categorization of bullying at a frequency of “sometimes” or greater has been used in several previous studies [17]. Children who did not meet the criteria for either bullies or victims were classified as controls and served as the comparison group.

Self esteem was measured by the Indian adaptation of the Piers Harris Children’s Self Concept Scale (CSCS) [18]. It consists of 80 statements to which one has to respond “Yes” or “No”. Responses are coded in a manner that higher scores indicate a more positive self concept. The scale yields a total score and six sub scale scores: behavior; intellectual and school status; physical appearance; anxiety; popularity; and happiness–satisfaction.

The Youth self report measure (11–17 y) of the Strengths and Difficulties Questionnaire (SDQ) was used to assess emotional and behavioral difficulties [19]. It consists of 25 statements which are categorized into five subscales: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and pro-social behavior. Students have to respond on a three point scale “not true”, “somewhat true” or “certainly true” on the basis of their behavior in last 6 mo. A total difficulties behavior score is computed by combining all scales except the pro-social behaviour scale.

Students’ grades were collected from report cards from school teachers and the total marks obtained in the last examination were converted to Z scores. Students were categorized into three groups: “below average” (scoring -0.66 SD below mean); average (scores between ± 0.66 SD) and “above average” (academic scores $+0.66$ SD above mean).

The revised Kuppaswamy socio-economic status scale was used to assess the socio-economic status of the family [20].

Results

The overall prevalence of any kind of bullying behavior was 53 %. Out of the 209 students, nearly one-fifth (19.2 %) were victims of bullying. Sixteen percent reported being victims of direct bullying and had been physically assaulted in schools several times in a month. Name calling, rumor spreading, and forcibly taking money were reported by 33.7 %, 12.5 % and 7.2 % of the adolescents, respectively. Most of the peer victimization took place at schools in the classroom when the teacher was not present (73.6 %), during the recess period

Table 1 Prevalence of bullying and victimization by demographic, socio-economic characteristics and academic functioning

	Bully	Victim	Bully-victim	Control	χ^2	Significance
Sex						
Boys	17.1 (19)	17.1 (19)	27.9 (31)	37.8 (42)	14.10	0.003
Girls	8.2 (8)	21.6 (21)	12.4 (12)	57.7 (56)		
Age						
<14 y	2.3 (1)	20.9 (9)	11.6 (5)	65.1 (28)	13.30	0.039
14–15	15.2 (12)	21.5 (17)	26.6 (21)	36.7 (29)		
>15 y	16.3 (14)	16.3 (14)	19.8 (17)	47.7 (41)		
SES						
Low	13.3 (19)	21.7 (30)	21.7 (26)	45.7 (63)	2.69	0.848
Middle	11.8 (6)	15.7 (8)	15.7 (12)	49.0 (25)		
High	10.5 (2)	10.5(2)	10.5 (5)	52.6 (10)		
Academic achievement						
Below average	18.5 (5)	27.5 (11)	37.2 (16)	14.3 (14)	13.10	0.041
Average	63.0 (17)	42.4 (17)	48.8 (21)	57.1 (56)		
Above average	18.5 (5)	30.0 (12)	14.0 (6)	28.6 (28)		

SES Socio-economic status

(41.4 %), in the hallways (33.3 %) and playgrounds (32 %). Majority (85.2 %) were bullied by their classmates. A small minority (3.8 %) of the victimized pupils had reported the bullying, primarily to their parents (34.8 %) or teachers (29.9 %). Thirteen percent of children reported being bullies. Calling names and threatening (89.9 %) was the most common reported bullying tactics used followed by physical bullying (25.9 %). Taking money or items from other children was reported by only a small minority (2.3 %). Nearly one-fifth (20.7 %) of the students reported being bully-victims. Victims of bullying (40 %) were significantly more likely to be afraid of coming to school as compared to other students ($\chi^2=8.38, P=0.039$).

Table 1 presents the frequencies of various forms of bullying and victimization by sex, age, socio-economic status, and academic achievement. Chi-square test showed an effect of gender on group membership. Male students were twice as likely as girls to be classified as bullies (17.1 % vs. 8.2 %) and 2.25 times as likely to be classified as bully-victims (27.9 %

vs. 12.4 %) (Fig. 1). Moreover, boys were 6.58 times more likely to be victims of physical bullying as compared to girls ($\chi^2=19.85, P=0.000$). Girls, on the other hand, were 1.26 times more likely to be classified as victims (21.6 % vs. 17.1 %). There were, however, no significant differences by sex on relational, material, and verbal victimization. Boys were primarily bullied by boys whereas girls were bullied by both boys and girls. Bullying did not decline with age ($\chi^2=13.30, P=0.039$) and older children were 7.08 times more likely to be perpetrators of bullying. No significant differences emerged between groups with respect to socio-economic status ($\chi^2=2.69, P=0.848$).

Significant effect for bullying status and academic achievement was found ($\chi^2=13.10, P=0.041$). Bully-victims were the most likely to have academic functioning difficulties, while the controls and bullies had relatively better school grades. Figure 2 presents the standardized means of academic scores for the four groups of students.

Significant differences emerged on the psychosocial outcome measures by bullying status. Table 2 presents the results

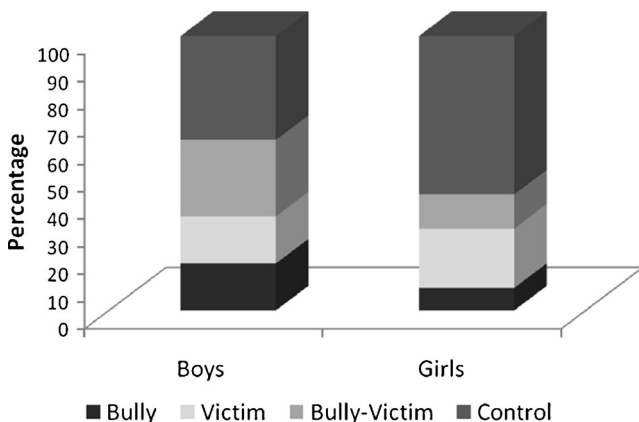


Fig. 1 Prevalence of bullying and victimization by gender



Fig. 2 Group means on standardized scores on total marks obtained

Table 2 Comparative means and standard deviations (in parenthesis) on self concept scale and its domains by group status

	Bully	Victim	Bully-victim	Control	F ratio	Significance
Behavior	13.85	13.00	12.65	13.69	3.65	0.014
Intellectual and school status	13.81	13.28	13.23	14.37	2.29	0.080
Physical appearance	8.63	7.74	8.19	8.58	1.13	0.332
Anxiety	9.70	7.85	8.65	9.26	5.32	0.002
Popularity	9.56	8.38	8.14	9.18	4.73	0.003
Happiness	6.22	6.18	5.77	6.34	3.24	0.023
Total self concept scores	61.74	56.44	56.33	61.68	5.12	0.002

for self concept and the standardized total self concept scores by bullying group, respectively. Bullying status was significantly related to the total self concept scores ($F=5.12$, $P=0.002$). Victimized adolescents reported the lowest scores on total self concept and on the sub scale of anxiety ($F=5.32$, $P=0.002$), while the bully-victims had the lowest scores on behavior ($F=3.65$, $P=0.014$), popularity ($F=4.73$, $P=0.003$), and happiness ($F=3.24$, $P=0.023$). It is noteworthy that the controls and bullies had relatively higher self concept scores and no differences between these two groups emerged on any of its sub scales or overall score.

Table 3 and Fig. 3 present the results for strength and difficulties scores and standardized total difficulties scores by bullying group, respectively. Compared with control students, victims had a significantly higher risk for emotional problems, hyperactivity, and conduct problems. Bully-victims had a higher risk for conduct problems and hyperactivity as compared to controls. Finally, bullies had higher risk for hyperactivity and conduct problems as compared to control students. Interestingly, there were no differences between the groups on the sub scale of peer problems. Behaviorally, the bully-victims were the most impaired group.

Discussion

The study utilized a cross-sectional design to examine the prevalence of school bullying and to investigate the behavioral, emotional, socio-economic and demographic correlates of bullying behaviors among Indian school going adolescents. The prevalence of any kind of bullying behavior was 53 % which is among the highest reported from any country. For

instance, Nansel et al. reported that involvement in bullying varied dramatically across 25 European countries, ranging from 9 to 54 %, with the lowest rates being reported from Sweden and England and the highest rates from Lithuania, Greenland and Germany [3]. The few studies available from developing countries on bullying have reported extremely high prevalence rates of bullying [12, 21]. For example, Chen and Astor reported that 68 % of the junior high school students surveyed in Taiwan were involved as perpetrators in at least one type of violent behavior [21]. The prevalence rates indicate that bullying and being bullied among adolescents is not uncommon in Indian schools and the rates are as high, if not higher, as reported from the developed countries.

Consistent with findings from Western studies, the present results also show that the male students engaged in aggressive behavior at significantly higher rates than females. In a cross national comparative study of 40 countries, estimates of bullying were higher for boys and ranged from 8.6 to 45.2 %, and among girls the rates ranged from 4.8 to 35.8 % [4]. The present results support previous studies that physical bullying and direct aggression is more common among boys while rates of victimization are higher for girls than boys across countries [2, 4, 6, 7]. However, the authors did not find that teasing and exclusion was more often associated with girls' behavior as has been found in other studies [2]. It is noteworthy that in a large meta-analysis, gender differences in social aggression were not found to be marked [6]. Possibly, gender differences may be less clear for social than physical aggression among adolescents [22].

Significant differences emerged between the four groups of students on the psychosocial outcome measures. Victims of bullying were emotionally distressed and reported the highest

Table 3 Comparative means and standard deviations (in parenthesis) on strength and difficulties self report scores by group status

	Bully	Victim	Bully-victim	Control	F ratio	Significance
Emotional symptoms	2.27	4.13	3.23	2.89	5.18	0.002
Conduct problems	3.62	3.69	4.26	2.74	6.29	0.000
Hyperactivity	2.73	2.67	3.00	1.81	6.49	0.000
Peer problems	2.35	2.72	2.72	2.18	1.21	0.307
Prosocial behavior	8.38	7.92	8.23	8.60	1.73	0.163
Total difficulties	10.69	13.18	13.28	9.60	8.80	0.000

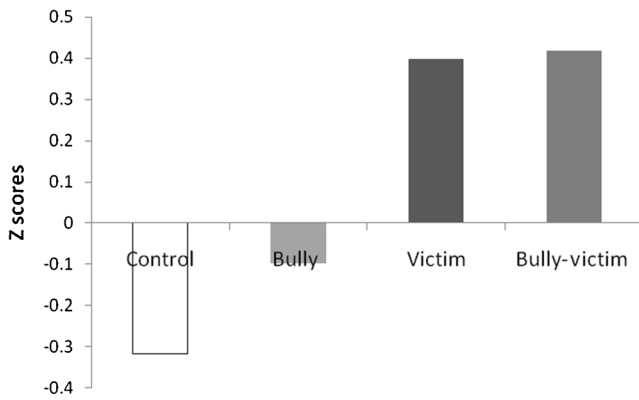


Fig. 3 Group means on standardized scores of total difficulties scores on SDQ

number of emotional symptoms on the SDQ. They also reported poor self concept scores which were significantly lower than the scores of the noninvolved children and the perpetrators of bullying. Research indicates that adolescents who are victims of bullying often experience higher rates of psychosocial problems as compared to neutral peers including elevated levels of social isolation, depression, anxiety, and increased self-harm behaviors and suicidal ideations [10, 11]. Victims also reported feeling fearful at school and as a result may start to avoid school [7, 9]. Avoidance behaviors can adversely impact academic achievement and lead to further exacerbation of being victimized.

It must be noted that low self worth may both be a cause and a result of being bullied and weaken victims' position in the peer hierarchy and make them more prone to be bullied. In this context, it may be noted that a meta-analysis of 18 longitudinal studies found that internalizing problems function as both antecedents and consequences of peer victimization and these reciprocal influences may trigger a vicious cycle of victimization and increasing the risk for chronic targeting and psychosocial difficulties over time [23].

The bullies, on the other hand, were more likely to report more hyperactive and conduct problems than the controls. It appears that bullies are more likely to display externalizing rather than internalizing problems as compared to noninvolved children [1, 3, 8, 24]. The high self concept and lack of psychosocial distress displayed by the bullies can be understood in light of findings that bullies are often perceived as popular and "cool" by their peers, and are motivated to denigrate others students in order to attain a dominant social position [25, 26]. Moreover, adolescents may envy the bully's aggressive and tough attitude [27].

The bully-victims were the most impaired group and showed elevated symptoms of both internalizing and externalizing problems and academic difficulties. Previous research indicates that bully-victims have a unique risk profile and are most vulnerable to both concurrent and long term mental health problems [2, 25, 28]. Research in Asia have

noted an association between poor school engagement and school violence and suggested that Asian students as compared to Western students are more reactive to poor academic performance [29]. In fact, violence in school can also be viewed as reactions to frustration and failure over academic performance [30, 31].

The present study has a number of strengths. It is the first study to have examined bullying and victimization in relation to self reported self concept and emotional and behavioral problems among school going adolescents in India. The present findings revealed that in general the behavioral profiles of bullies and victims in India are similar to those reported in studies from developed countries. Limitations of the study include its cross sectional design which makes inferences about causality difficult. Moreover, the authors have used only self-report measures for assessing psychosocial outcome; supplementing this information from other sources such as from parents and teachers would have been useful.

Bullying and victimization is a universal phenomenon and widespread among Indian youth. The present findings underscore the need for understanding peer conflict, as perpetrating and experiencing repetitive aggression at the hands of classmates' leads to a host of adverse behavioral and psychosocial outcomes. Bullying intervention programs which emphasize improving academic performance and self-esteem may help to attenuate some of the psychological distress that victims experience at school. The current findings point to the urgent need to educate the school authorities, mental health personnel, and community at large regarding school violence and design intervention programs which help in reducing the wide spread prevalence of bullying. Interventions are also needed to help pediatricians recognize early signs of peer violence and take preventive actions to address school aggression.

Contributions PM: Designed the study, analyzed the data, wrote the paper and will act as guarantor for the paper; BB: Helped in the designing of the study and data analysis; MS: Collected the data, did the literature search, and assisted in writing of the manuscript.

Conflict of Interest None.

Role of Funding Source None.

References

1. Olweus D. *Bullying at school: What we know and what we can do?* Oxford: Blackwell Science; 1993.
2. Nansel TR, Overpeck M, Pilla RS, Ruan WJ, Simons-Morton B, Scheidt P. Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *JAMA*. 2001;285:2094–100.
3. Nansel TR, Craig W, Overpeck MD, Saluja G, Ruan WJ, The Health Behavior in School-aged Children Bullying Analyses Working

- Group. Cross-national consistency in the relationship between bullying behaviors and psychosocial adjustment. *Arch Pediatr Adolesc Med.* 2004;158:730–6.
4. Craig W, Harel-Fish Y, Fogel-Grinvald H, Dostaler S, Hetland J, Simons-Morton B, et al; HBSC violence & injuries prevention focus group, HBSC bullying writing group. A cross-national profile of bullying and victimization among adolescents in 40 countries. *Int J Public Health.* 2009;54:216–24.
 5. Carbone-Lopez K, Esbensen FA, Brick BT. Correlates and consequences of peer victimization: Gender differences in direct and indirect forms of bullying. *Youth Violence Juv Justice.* 2010;8:332–50.
 6. Card NA, Stucky BD, Sawalani GM, Little TD. Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Dev.* 2008;79:1185–229.
 7. Storch EA, Brassard MR, Masia-Warner CL. The relationship of peer victimization to social anxiety and loneliness in adolescence. *Child Study J.* 2003;33:1–18.
 8. Gini G. Associations between bullying behaviour, psychosomatic complaints, emotional and behavioural problems. *J Paediatr Child Health.* 2008;44:492–7.
 9. Hutzell KL, Payne AA. The impact of bullying victimization on school avoidance. *Youth Violence Juv Justice.* 2012;10:370–85.
 10. Sinclair KR, Cole DA, Dukewich T, Felton J, Weitlauf AS, Maxwell MA, et al. Impact of physical and relational peer victimization on depressive cognitions in children and adolescents. *J Clin Child Adolesc Psychol.* 2012;41:570–83.
 11. Borowsky IW, Taliaferro LA, McMorris BJ. Suicidal thinking and behavior among youth involved in verbal and social bullying: Risk and protective factors. *J Adolesc Health.* 2013;53:S4–12.
 12. Brito CC, Oliveira MT. Bullying and self-esteem in adolescents from public schools. *J Pediatr (Rio J).* 2013;89:601–7.
 13. Ttofi MM, Farrington DP, Friedrich Lösel F. School bullying as a predictor of violence later in life: A systematic review and meta-analysis of prospective longitudinal studies. *Aggress Violent Behav.* 2012;17:405–18.
 14. Wolke D, Copeland WE, Angold A, Costello EJ. Impact of bullying in childhood on adult health, wealth, crime, and social outcomes. *Psychol Sci.* 2013;24:1958–70.
 15. Khatri P, Kupersmidt JB. Aggression, peer victimization, and social relationships among Indian youth. *Int J Behav Dev.* 2003;27:87–95.
 16. Bowker JC, Ostrov JM, Raja R. Relational and overt aggression in urban India: Associations with peer relations and best friends' aggression. *Int J Behav Dev.* 2012;36:107–16.
 17. Shetgiri R, Lin H, Flores G. Trends in risk and protective factors for child bullying perpetration in the United States. *Child Psychiatry Hum Dev.* 2013;44:89–104.
 18. Ahluwalia SP. Children's self concept scale. Agra: National Psychological Corporation; 1986.
 19. Goodman R. The strengths and difficulties questionnaire: A research note. *J Child Psychol Psychiatry.* 1997;38:581–6.
 20. Kumar N, Shekhar C, Kumar P, Kundu AS. Kuppuswamy socioeconomic scale—updating for 2007. *Indian J Pediatr.* 2007;74:1131–2.
 21. Chen JK, Astor RA. School violence in Taiwan: Examining how western risk factors predict school violence in an Asian culture. *J Interpers Violence.* 2010;25:1388–410.
 22. Archer J, Coyne SM. An integrated review of indirect, relational, and social aggression. *Personal Soc Psychol Rev.* 2005;9:212–30.
 23. Reijntjes A, Kamphuis JH, Prinzie P, Telch MJ. Peer victimization and internalizing problems in children: a meta-analysis of longitudinal studies. *Child Abuse Negl.* 2010;34:244–52.
 24. Fanti KA, Kimonis ER. Bullying and victimization: the role of conduct problems and psychopathic traits. *J Res Adolesc.* 2012;22:617–31.
 25. Juvonen J, Graham S, Schuster MA. Bullying among young adolescents: The strong, the weak, and the troubled. *Pediatrics.* 2003;112:1231–7.
 26. Olthof T, Goossens FA, Vermande MM, Aleva EA, van der Meulen M. Bullying as strategic behavior: Relations with desired and acquired dominance in the peer group. *J Sch Psychol.* 2011;49:339–59.
 27. Caravita S, DiBlasio P, Salmivalli C. Unique and interactive effects of empathy and social status on involvement in bullying. *Soc Dev.* 2009;18:140–63.
 28. Yen C-F, Huang M-F, Young SK, Wang P-W, Tang T-C, Yeh Y-C, et al. Association between types of involvement in school bullying and different dimensions of anxiety symptoms and the moderating effects of age and gender in Taiwanese adolescents. *Child Abuse Negl.* 2013;37:263–72.
 29. Ando M, Asakura T, Simons-Morton B. Psychosocial influences on physical, verbal, and indirect bullying among Japanese early adolescents. *J Early Adolesc.* 2005;25:268–97.
 30. Nakamoto J, Schwartz D. Is peer victimization associated with academic achievement? A meta-analytic review. *Soc Dev.* 2009;19:221–42.
 31. Storm IF, Thoresen S, Wentzel-Larsen T, Dyb G. Violence, bullying and academic achievement: A study of 15-year-old adolescents and their school environment. *Child Abuse Negl.* 2013;37:243–51.