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# Bullying Among Young Adolescents: The Strong, the Weak, and the Troubled

Jaana Juvonen, PhD\*; Sandra Graham, PhD‡; and Mark A. Schuster, MD, PhD§¶

**ABSTRACT.** *Objectives.* Bullying and being bullied have been recognized as health problems for children because of their association with adjustment problems, including poor mental health and more extreme violent behavior. It is therefore important to understand how bullying and being bullied affect the well-being and adaptive functioning of youth. We sought to use multiple data sources to better understand the psychological and social problems exhibited by bullies, victims, and bully-victims.

*Design, Setting, and Participants.* Analysis of data from a community sample of 1985 mostly Latino and black 6th graders from 11 schools in predominantly low socioeconomic status urban communities (with a 79% response rate).

*Main Outcome Measures.* Peer reports of who bullies and who is victimized, self-reports of psychological distress, and peer and teacher reports of a range of adjustment problems.

*Results.* Twenty-two percent of the sample was classified as involved in bullying as perpetrators (7%), victims (9%), or both (6%). Compared with other students, these groups displayed school problems and difficulties getting along with classmates. Despite increased conduct problems, bullies were psychologically strongest and enjoyed high social standing among their classmates. In contrast, victims were emotionally distressed and socially marginalized among their classmates. Bully-victims were the most troubled group, displaying the highest level of conduct, school, and peer relationship problems.

*Conclusions.* To be able to intervene with bullying, it is important to recognize the unique problems of bullies, victims, and bully-victims. In addition to addressing these issues directly with their patients, pediatricians can recommend school-wide antibullying approaches that aim to change peer dynamics that support and maintain bullying. *Pediatrics* 2003;112:1231–1237; *bullying, youth, victims.*

**B**ullying and being victimized by bullies have been recognized recently as health problems for school children because of their association with a range of adjustment problems, including poor

mental health and violent behavior.<sup>1</sup> Large studies suggest that 20% to 30% of students are frequently involved in bullying as perpetrators and/or victims.<sup>2–6</sup> For example, in a nationally representative study of 6th- to 10th-grade US students ( $n = 15\,686$ ), 13% were identified as bullies, 11% as victims, and 6% as bully-victims (ie, bullies who also get bullied by others).<sup>5</sup>

Bullying includes a range of behaviors that result in an imbalance of power between the aggressor and the victim.<sup>7</sup> Such behaviors include not only physical aggression but also verbal harassment and public humiliation (eg, name-calling and spreading rumors). Indeed, emotional bullying by peers is especially a concern for youth,<sup>8</sup> and recent school shootings suggest that it is not physical abuse by peers but inability to cope with social ridicule and personal rejection that can fuel extreme outbursts of violence.<sup>9</sup>

Large-scale US studies on bullying and victimization have relied mainly on self-reports when identifying bully/victim groups and assessing their adjustment problems, and none that we know of have combined assessments from the perspective of youth, their peers, and their teachers. Studies that rely solely on self-reports suggest that bullies, victims, and bully-victims all share psychosocial adjustment difficulties such as depression and psychosomatic problems.<sup>2–4</sup> Despite showing a rather uniform picture of these 3 groups in some studies, other investigations have found differences: compared with victims, bullies are more likely to manifest defiant behavior<sup>4–6,9</sup> and negative attitudes toward school<sup>2,5</sup> and use drugs.<sup>5</sup> Victims, in turn, report feeling more insecure and lonely than bullies.<sup>2,10</sup> There is less information on bully-victims, although this group seems to display the most severe problems.<sup>2,4,5</sup> Understanding the characteristics of these groups is important for identification and intervention.

However, there is concern that youth involved in bullying may not accurately self-identify and that others, namely their classmates, would provide a more accurate assessment of who is involved in bullying, and their teachers can provide important information about their adjustment. Indeed, if only some youth accurately self-identify as bullies or victims, reports of their mental health could mislead efforts to develop interventions to address their needs.

Therefore, we conducted a study that included all 3 perspectives: self-, peer, and teacher reports. Most importantly, we relied on classmates to report which

From the Departments of \*Psychology and ‡Education, ¶Department of Pediatrics, School of Medicine, and §Department of Health Services, School of Public Health, University of California, Los Angeles, California; and §Rand, Santa Monica, California.

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Reprint requests to (J.J.) Department of Psychology, University of California Los Angeles, Hilgard Ave, Los Angeles, CA 90095. E-mail: juvonen@psych.ucla.edu

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students were involved in bullying, because they have ample opportunities to observe peers' behavior in situations where bullying is most likely to take place (ie, when adult supervision is absent or minimal). Specifically, we used a labor-intensive peer nomination methodology that is rarely used in such large studies: each student provides confidential reports on which classmates bully others and which are victims of bullying. Individual nominations are then combined to determine the strength of reputations. Peer nominations have been found to be very reliable over time and predictive of a variety of developmental outcomes.<sup>11-13</sup> For example, one study showed that peer nominations for negative characteristics (such as those describing bullying) in 3rd grade predicted psychiatric problems 11 to 13 years later better than any other traditional predictors (eg, teacher ratings, self-reports, or achievement data).<sup>14</sup>

We used our data to compare self-reported psychological distress, peer-reported social adaptation, and teacher-rated adjustment of bullies, victims, bully-victims, and youth uninvolved in bullying. We also focused on a demographic population of students who are considered at risk for violence: youth in predominantly urban, low-income communities with a high representation of Latino and black youth.<sup>15</sup> With one exception, large-scale studies have not included these 2 racial/ethnic groups.<sup>5</sup> To our knowledge, the current study is the largest investigation on bullying and victimization among ethnically diverse urban adolescents.

## METHODS

### Study Design

We conducted a study of bullying among 6th-grade students in 11 public middle schools in the greater metropolitan area of Los Angeles. All the schools were in low-income communities and qualified for Title I compensatory education funds. Student eligibility for free or reduced-price lunch programs ranged from 47% to 87%. Three of the schools consisted primarily of black students, 3 were mostly Latino, and 5 had no majority group.

The study does not include students in special education, limited English proficiency, and gifted-student programs. Parental permission was required; consent forms were sent home with students in English and Spanish. The return rate for all schools was 78%; 90% of returned forms granted permission. Students provided assent. As part of the assent procedure, students were assured confidentiality.

The final sample consisted of 1985 students (mean age: 11.5 years, 46% male). The racial/ethnic distribution was 45% Latino, 26% black, 10% white, 11% Asian, and 8% other.

### Data Collection

Data were collected from 11 schools in 4 school districts split over the fall of 2000 and the fall of 2001. Research team members conducted the data collection. Self-administered student surveys took ~1 hour to complete. Teachers who had daily contact with a class rated students' social behavior and academic engagement. The survey and procedures were approved by the University of California Los Angeles Human Subjects Protection Committee and the school districts.

### Measures and Variables

#### *Bullies and Victims*

We classified youth involved in bullying with categories developed in prior studies.<sup>2,3,5</sup> We used peer nominations whereby students listed up to 4 classmates from a class roster who fit descriptions for bullying ("starts fights and pushes other kids

around," "puts down and makes fun of others," and "spreads nasty rumors about others") and victimization ("gets pushed around," "is put down or made fun of," and "about whom nasty rumors are spread"). The 3 bullying nominations received were strongly correlated (Cronbach's  $\alpha = 0.90$ ) and were therefore summed for each student. The same was true for the 3 victimization nominations ( $\alpha = 0.87$ ). The total nominations received for each then were standardized within classrooms. We used cutoff values from prior research to classify students into the bully/victim groups.<sup>16</sup> Students who fell 0.5 standard deviations above the sample mean on bully nominations and below the sample mean on victim nominations were classified as "bullies"; students whose victim nominations were 0.5 standard deviations above the sample mean and whose bully nominations fell below the mean were classified as "victims"; and students whose peer nominations for bullying and victimization were both 0.5 standard deviations above the mean were identified as "bully-victims." We identified nonaggressive, nonvictimized youth ("uninvolved") as those falling below the sample mean on both bully and victim nominations. The rest of the sample was classified as "borderline."

As with any research that uses cutoff scores to categorize participants into groups, it is important to determine if specific cutoff values affect the findings. Therefore, we also conducted sensitivity analyses using different cutoffs.

#### *Self-Reported Psychological Distress*

We used 3 indicators of self-reported psychological distress. 1) *Depression* was measured with the 10-item Children's Depression Inventory Short Form.<sup>17</sup> For each of the 10 items, respondents were asked to choose the option that best described how they had been feeling during the past 2 weeks (eg, "I do most things right," "I do many things wrong," or "I do everything wrong"). Item scores (range: 0-2) were summed ( $\alpha = 0.80$ ). 2) *Social anxiety* was assessed with a combination of 2 subscales (12 items,  $\alpha = 0.82$ ) from the Social Anxiety Scale for Adolescents<sup>18</sup> measuring fear of negative evaluation (eg, "I worry about what others think of me") and social avoidance (eg, "I'm afraid to invite others to do things with me because they might say no"). Each of the 12 items were rated on a 5-point scale from "not at all" to "all the time." 3) A 16-item *loneliness* measure<sup>19</sup> (eg, "I feel alone" or "I have nobody to talk to") had a 5-point scale from "not true at all" to "always true." Scores were averaged ( $\alpha = 0.85$ ).

#### *Peer Reports of Adjustment*

Peer nominations were used to assess social adaptation within the peer group. Respondents nominated up to 4 classmates they considered the "coolest" kids in their class (indicating social status or rank) and up to 4 they did not like to hang out with (indicating avoidance). We included the question about social avoidance (also called peer rejection), because high social rank does not preclude classmates from avoiding a student. Nominations received were summed for each student and standardized within classroom.

#### *Teacher-Rated Adjustment*

Teachers with daily classroom contact rated students on behavior by using 11 interpersonal competence items with a 7-point scale with item-specific anchors (eg, "never sad" to "always sad").<sup>20</sup> These items yielded 3 subscales with 3 items each: internalizing problems (sad, worries, cries a lot;  $\alpha = 0.61$ ); conduct problems (starts fights, argues, gets in trouble;  $\alpha = 0.89$ ); and popularity (popular with boys, popular with girls, has lots of friends;  $\alpha = 0.79$ ).

Teachers also rated school engagement with 6 items from the Teacher Report of Engagement Questionnaire<sup>21</sup> (eg, "in my class this student concentrates on doing his/her work"). Ratings were on 4-point scales ("not at all characteristic of this student" to "very characteristic"). Item scores were averaged ( $\alpha = 0.89$ ). For the analyses, we reverse-coded this measure such that it indicates problems similar to most of the other variables; we relabeled it as disengagement from school.

### Statistical Methods

The differences among the bully/victim groups regarding psychosocial distress, social adjustment, and school engagement were analyzed by using analyses of variance with SPSS. Statistically

significant group differences ( $P < .01$ ) were followed up with pairwise comparisons (Tukey test, significant difference:  $P < .05$ ).

To facilitate the interpretation of group differences in measures from multiple informants and with different response scales, all the variables were converted into standard scores with a mean of 0 and standard deviation of 1. As standardized scores, the means portrayed in Figs 1, 2, and 3 can also be interpreted as percentiles: Values of 0 are at the 50th percentile; positive scores are above the 50th percentile; and negative scores are below the 50th percentile. Scores of 1 represent approximately the 85th percentile. The scales for  $y$  axes vary across self-, peer, and teacher reports to best depict the relative differences among the 5 groups within each data source.

## RESULTS

### Classification of Bully/Victim Groups

Students were classified as bullies (7%), bully-victims (6%), victims (9%), borderline (22%), or uninvolved (56%) (Table 1). Boys were twice as likely as girls to be classified as bullies (10% vs 5%), >3 times as likely to be classified as bully-victims (10% vs 3%), and almost twice as likely to be classified as victims (12% vs 7%; Table 1).

Type of involvement also varied by race/ethnicity (Table 1). Black and other youth were most likely and Asian least likely to be classified as bullies (11% and 10% vs 3%, respectively). Other and white were more likely and Latino least likely to be classified as victims (13% and 12% vs 7%, respectively). Black youth were most likely to be classified as bully-victims (10%).

### Self-Reported Psychological Distress

Significant differences appeared on all psychological adjustment indicators, with bullies reporting the lowest and victims reporting the highest levels of depression, social anxiety, and loneliness (Fig 1). Bully-victims generally fell in between, with elevated levels of depression and loneliness but average levels of social anxiety.

### Peer-Rated Adjustment

Bullies were regarded as the highest and victims the lowest in social status (Fig 2). However, classmates avoided both bullies and victims and especially bully-victims more than they avoided other classmates.

### Teacher-Rated School Engagement and Social Adjustment

The 5 groups also showed differences in teacher ratings of school engagement and social adjustment

(Fig 3). Consistent with peer nominations (Pearson  $r = 0.37$ ;  $P < .001$  between teacher ratings of popularity and peer nominations of social status), teacher ratings indicated that bullies were most popular and victims were least popular. Teachers also rated victims as displaying more internalizing problems (eg, sadness or anxiety) than bullies or bully-victims (but not more than the uninvolved). Teachers ranked bully-victims as manifesting by far the most and uninvolved students the least conduct problems. All 3 groups of students involved with bullying, especially bully-victims, were rated as more disengaged in school than their classmates.

### Multivariate Analyses

Multivariate analyses of covariance predicting each of the measures of self-, peer-, and teacher-rated adjustment by controlling for gender and race/ethnicity differences were conducted. The results were essentially identical to the bivariate analyses.

### Sensitivity Analyses

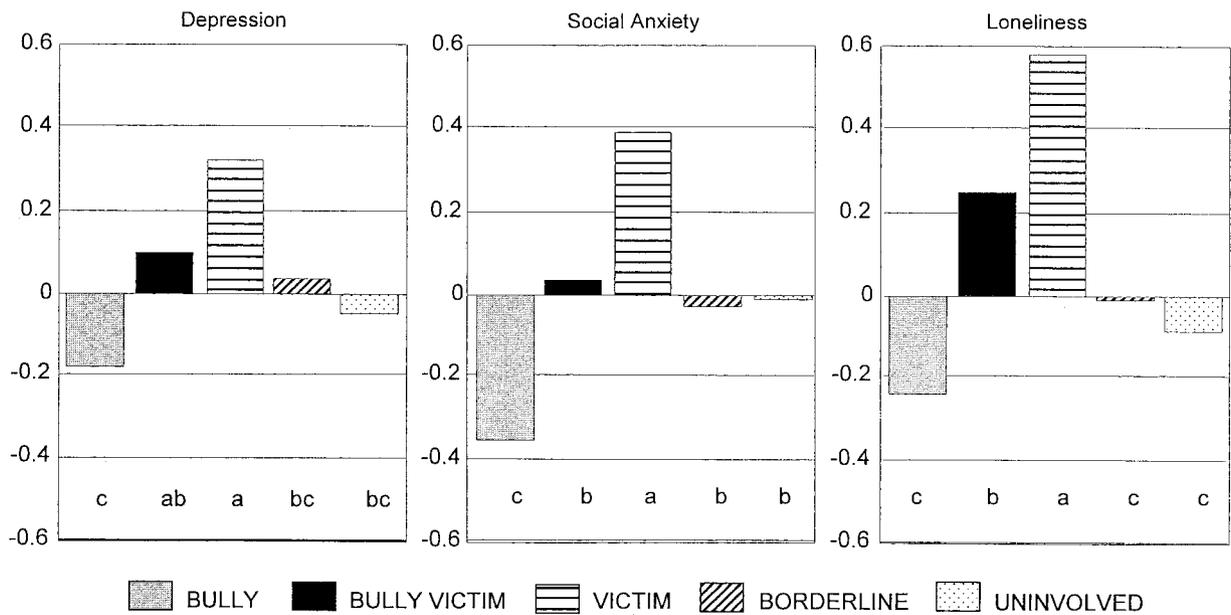
We conducted 2 sets of sensitivity analyses by changing the 0.5 cutoff for the standard deviation above the mean cutoff to 0.75 and 1.00, respectively. Although these modifications necessarily identified smaller groups more intensely involved in bullying, the pattern of differences across the 5 groups was the same for all analyses with no evidence of the findings being dependent on the specific cutoff criterion.

## DISCUSSION

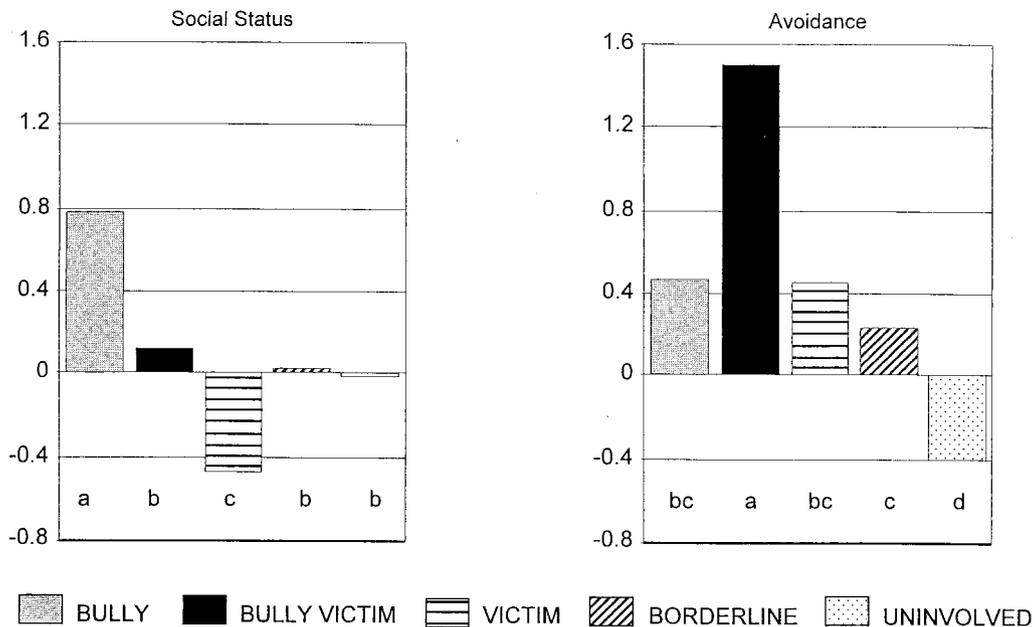
Among youth involved in bullying in a community sample of ethnically diverse middle school students, we found that bullies manifest the fewest number of adjustment problems. Specifically, bullies are psychologically stronger than classmates not involved in bullying, and they enjoy high social status among their classmates (although the classmates tend to avoid their company). Victims, on the other hand, suffer not only emotional distress but also social marginalization (ie, classmates avoid them, and they have low social status). Finally, those who both bully and get bullied (ie, bully-victims) are especially troubled. They are by far the most socially ostracized by their peers, most likely to display conduct problems, and least engaged in school, and they also report elevated levels of depression and loneliness.

**TABLE 1.** Percentage of 6th Grade Students Identified as Bullies, Bully-Victims, Victims, Borderline, and Uninvolved (by Demographic Characteristics)

|                      | Bully (%) | Bully-Victims (%) | Victim (%) | Borderline (%) | Uninvolved (%) |
|----------------------|-----------|-------------------|------------|----------------|----------------|
| Total ( $n = 1985$ ) | 7         | 6                 | 9          | 22             | 56             |
| Gender               |           |                   |            |                |                |
| Boys ( $n = 904$ )   | 10        | 10                | 12         | 24             | 44             |
| Girls ( $n = 1081$ ) | 5         | 3                 | 7          | 19             | 66             |
| Race/ethnicity       |           |                   |            |                |                |
| Latino ( $n = 910$ ) | 6         | 5                 | 7          | 21             | 61             |
| Black ( $n = 511$ )  | 11        | 10                | 10         | 23             | 46             |
| Asian ( $n = 212$ )  | 3         | 5                 | 10         | 20             | 62             |
| White ( $n = 188$ )  | 6         | 6                 | 12         | 21             | 55             |
| Other ( $n = 164$ )  | 10        | 4                 | 13         | 22             | 51             |



**Fig 1.** Group means on standardized scores of self-reported psychological distress. The y axis indicates standardized scores with the mean of 0 (that represents approximately the 50th percentile of the sample) and a standard deviation of 1. Positive values indicate groups means greater than the 50th percentile, whereas negative values indicate group means less than the 50th percentile of the sample. The letter subscripts on the bottom of the figures indicate pairwise group similarities and differences. Groups sharing letter subscripts do not differ significantly from one another, whereas those that do not share a subscript differ from one another ( $P < 0.05$ ).



**Fig 2.** Group means on standardized scores of peer-reported social adjustment problems.

Our findings about bullies are distinct from the findings in some studies that have reported that bullies tend to be depressed and have psychological distress.<sup>2-4</sup> However, these studies have depended on self-reports of being a bully, and it is unlikely that bullies as a group provide accurate self-reports of how they treat others. Instead, we used the well-validated peer nomination method to collect reports from classmates about the roles students play. This approach provided identification of bullies (and victims) based on a consensus of a large group of students who know and observe all students in a class.

Whereas prior studies had the unexpected finding of a fairly uniform psychological and social picture of bullies and victims,<sup>2-4</sup> we found that despite some common characteristics (eg, school disengagement problems), these groups are distinct, which has implications for identifying them and intervening. For example, although prior studies could be interpreted as indicating a need to focus on depression in addressing the needs of bullies, this approach may be useful only for the subset most likely to self-identify, not for those who do not admit to bullying.

Although the use of peer nominations to classify

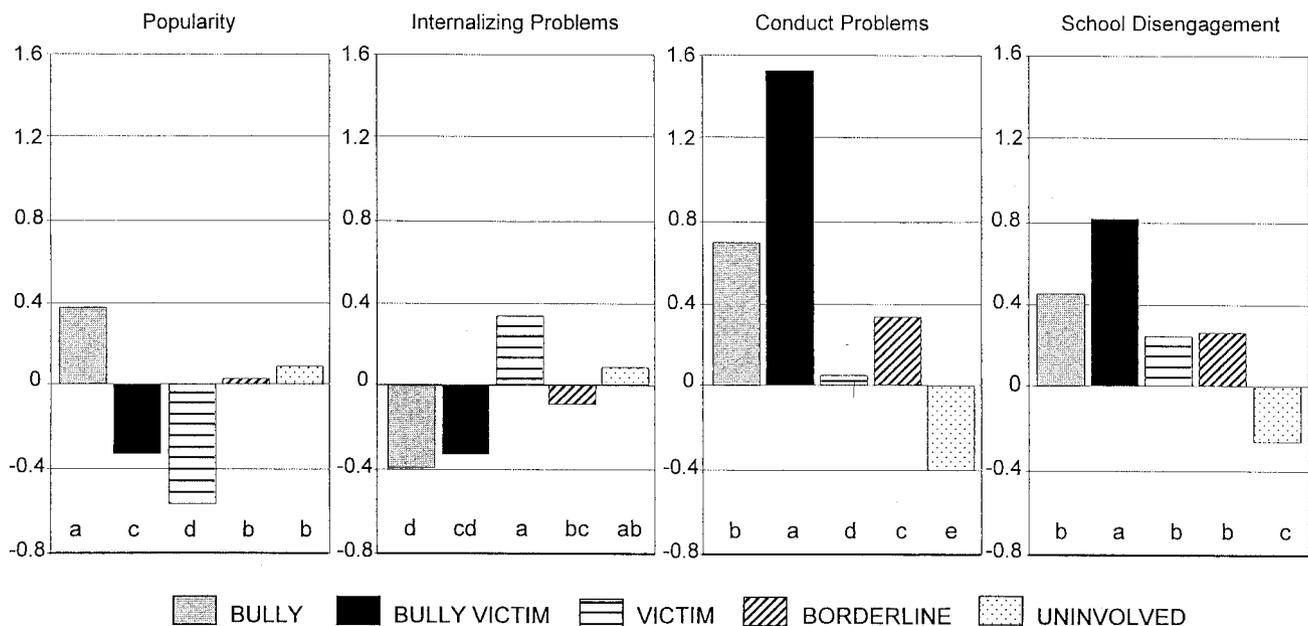


Fig 3. Group means on standardized scores of teacher-rated social adjustment problems.

youth into bully, victim, and bully-victim groups is a strength of the study, there can be biases in the manner respondents identify classmates as bullies or victims. Who is reported as a bully or victim may be determined not only by individuals' behavior but also by the biases of the observer.<sup>22</sup> For example, the behaviors of 2 classmates acting in the same way may be reported differently by other students depending on the implicit stereotype associated with the 2 students' social category (eg, race or gender). Future studies are needed to help us better understand the conditions under which racial and gender biases are most likely to emerge. How such biases may influence adolescent behavior, psychological well-being, and school functioning is another question for future research.

The superior mental health (lack of psychological stress) of bullies documented in the current study can in part be understood in light of the social prestige that they enjoy among their classmates. Developmental research shows that in early adolescence, social status is one of the strongest predictors of positive self-views and psychological well-being.<sup>23,24</sup> Hence, it is likely that teenaged bullies do not feel depressed, anxious, or lonely because they have high social status within their peer collective. It is nevertheless important to keep in mind that, despite bullies' high social status, classmates would rather not spend time with them. Thus, it may be that the social prestige of bullies is motivated in part by fear.

Regardless of the reasons behind the favorable social ranking of bullies, the high status imposes a challenge for addressing bullying problems. When bullies are considered the "coolest," bullying behavior is encouraged. This finding underscores the importance of addressing bullying as a systemic problem that involves the whole peer collective. Comprehensive, school-wide antibullying programs<sup>25,26</sup> aim to change peer dynamics that encourage and maintain bullying by raising the awareness of how bystanders

contribute to the problem of bullying.<sup>27</sup> Perspective-taking exercises (including videotaped vignettes of typical incidents) depict the way in which bystanders encourage bullies. These same exercises may be useful for increasing empathy for victims such that students become more conscious of the plight of the victim.<sup>28</sup>

The current findings indicate that groups of teens who report elevated psychological distress are the same ones who others report as having trouble fitting in or being accepted by their peers. This finding underscores the importance of also understanding the social plight of victims: they are not only targeted by bullies but also ostracized by many of their classmates. To address the adjustment difficulties of victims, it may be that psychological services that focus solely on the emotional problems are inadequate; efforts to deal with the social issues are also needed. This means that clinicians working outside of the school, who might be most qualified to provide such individually focused psychological services, may have limited capacity to intervene. The lack of connections between clinicians, who see youth outside of school, and teachers and other school staff, who see youth in school, is a problem that complicates interventions. One of the challenges with bullying among school children therefore is to try to build and maintain links between clinicians and school staff.

Compared with bullies and victims, the bully-victim group seems to have the worst of both worlds and a unique risk profile. Their high levels of social avoidance, conduct problems, and school difficulties suggest that they are a particularly high-risk group.<sup>25</sup> Indeed, previous research indicates that bully-victims are most vulnerable to both concurrent and subsequent psychiatric disorders.<sup>4</sup> Victims who bully others also best fit the profiles of seriously violent offenders. For example, a recent in-depth case analysis of 37 intended and conducted school shootings revealed that ~2/3 of the alleged perpetrators

had been bullied by their peers, and most of them also displayed signs of violent ideation (eg, self-destructive thoughts and interest in violent games and films).<sup>8</sup>

Although our cross-sectional data do not show whether adjustment problems cause bullying or victimization, or vice versa, or whether some other characteristic such as underlying psychopathology causes both, other studies have suggested that there are long-term implications. Several longitudinal studies suggest that bullying is a risk factor for subsequent conduct problems including violent behavior<sup>28,29</sup> and that victimization is predictive of not only current but also subsequent mental health problems.<sup>10</sup>

Bullying does not affect just those directly involved, but it can affect all youth who witness bullying. In a recent national survey, the highest percentage (68%) of 12- to 15-year-old children rated teasing and bullying as a "big problem" for people their age.<sup>30</sup> In light of such statistics, it is clear that problems associated with bullying and victimization are not problems affecting only a small proportion of youth. Moreover, based on the current findings, it seems that problems associated with bullying are likely to cut across race/ethnicity, socioeconomic status, and culture.

As recommended by the American Medical Association,<sup>31</sup> pediatricians, school psychologists, and other clinicians need additional information about bullies, victims, and their associated health problems. Because young adolescents are reluctant to talk about bullying, health professionals might at times detect symptoms of bullying and victimization before the youth's role in bullying becomes known. However, symptoms may be spotted more easily for some of the groups (ie, bully-victims) than for others. For example, we found that victims manifest quiet signs of psychological distress that may not be detected easily by teachers. Despite the relatively high self-reports of psychological distress, teachers did not rate victims as having significantly more internalizing problems than students who are uninvolved in bullying. Hence, public-awareness campaigns that not only inform professionals and parents about bullying but also encourage youth to speak out about their problems are needed.

Teachers play a key role in preventing and intervening with bullying at school, yet they receive little if any help or training in how to effectively deal with such problems. They lack information, and they are reluctant to intervene when they witness bullying. Although teachers have the benefit of understanding the social context of bullying, they do not necessarily know how to best use this knowledge to intervene. In school settings, bullying and victimization are often considered as personal problems of individual youth rather than problems requiring a collective response. Therefore, it is essential 1) to educate teachers about ways in which schools can alter social norms toward bullying, 2) to assist them to intervene effectively with incidents of bullying, and 3) to work together with clinicians to deal with the symptoms of bullying and victimization.

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## DO LECTURERS NEED TO RESEARCH?

“The Higher Education Funding Council for England has released plans to concentrate money for research by removing it from all but the most highly rated departments. Overall funding increased by about 30% in the last settlement. But 16 societies—including the British Medical Association, the Royal Society and the Royal Geographical Society—as well as the university establishment have made a joint appeal to the Government to reverse its plans, says *The Times Higher Education Supplement* (THES) (September 5). ‘Scholars of the highest caliber are found across the sector and in all regions, in departments small and large,’ Rita Gardner, director of the Royal Geographical Society, said. Michael Hyland, professor of health psychology at the University of Plymouth, said there was a question mark over the higher education establishment’s assumption that teaching and research are inextricably linked. ‘Research-active staff argue that they are more up-to-date. But this can be achieved through scholarship rather than active research . . . and the content of most undergraduate courses is at least a few years old,’ he said. The THES’s lead editorial pointed out that the Government’s position rests on the fact that no clear evidence of a link between teaching and research has been produced.”

Do lecturers need to research? *The Times – London*. September 9, 2003

Noted by JFL, MD

## **Bullying Among Young Adolescents: The Strong, the Weak, and the Troubled**

Jaana Juvonen, Sandra Graham and Mark A. Schuster

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