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Counselor Confirmation of Middle School Student Self-Reports of Bullying Victimization

School counselors frequently use self-report surveys to assess bullying despite little research on their accuracy. In this study, counselor follow-up interviews found that only 24 (56%) of 43 middle school students who self-identified as victims of bullying could be confirmed as actual victims. Other students described peer conflicts that did not constitute bullying, mismarked the survey, or reported previous bullying. Counselor judgments were supported by peer-nomination data and other survey responses indicative of victimization.

In recent years, bullying has become recognized as an important educational problem (Carney, 2008; Swearer, Espelage, Vaillancourt, & Hymel, 2010). Victims of bullying suffer increased rates of anxiety, depression, and related social and emotional problems (Haynie et al., 2001; Juvonen, Graham, & Schuster, 2003). They also exhibit higher rates of school avoidance, truancy, and academic difficulties (Rigby, 2003; Nansel, Haynie, & Simons-Morton, 2003; Whitted & Dupper, 2005). Bullying occurs at all grade levels, but middle schools appear to have especially high rates (Goldbaum, Craig, Pepler, & Connolly, 2007; Nansel et al., 2003). For example, according to data from the National Center for Education Statistics, 36% to 43% of middle school students reported being bullied at school during the school year (DeVoe & Bauer, 2010).

School counselors have become increasingly involved with bullying prevention efforts (Carney, 2008; Rigby, 2006; Young et al., 2009); however, their role in these interventions remains largely unstudied (Jacobsen & Bauman, 2007). A recent study called for school counselors to make greater use of student surveys as part of a comprehensive program to reduce bullying at the middle school level (Young et al., 2009). These authors noted that student surveys can serve as transformative tools to help raise awareness of bullying as a problem and guide the delivery of comprehensive services. In fact, schools that implement bullying prevention programs often rely on self-report surveys to assess their success (Chan, 2006; Fox & Boulton, 2005).

One important limitation, however, is that survey measures of bullying typically rely on anonymous student self-reports of victimization that are not confirmed by others. How can school authorities be certain that the levels of bullying reported by their students are accurate? Despite the widespread use of self-report surveys to measure bullying, little published research exists on the accuracy of this method (Branson & Cornell, 2009, Lee & Cornell, 2010; Furlong, Sharkey, Bates, & Smith, 2004; Leff, Power, & Goldstein, 2004). This article considers how students approach the task of completing a self-report survey on bullying.

SOURCES OF ERROR IN SELF-REPORT

Multiple potential sources of error exist in student self-reports of bullying. Foremost is the question of whether students understand the complex concept of bullying. According to general consensus, bullying involves both an intention to harm and a power imbalance between the bully and the victim (Furlong, Sharkey, Felix, Tanigawa, & Green, 2010; Olweus, Limber, & Mihalic, 1999). In order for students to self-report being victims, they have to understand the criteria for bullying, recognize bullying events, and distinguish the power differential involved in bullying from other forms of peer conflict (Cornell, 2006). An extraordinary range of behavior can constitute bullying. Bullying can include physically hurting an individual or threatening physical violence, as well as verbally ridiculing or taunting victims. Bullying can also involve excluding individuals from social groups and activities so that they feel rejected and isolated. Power differentials between students can be based on size, strength, intelligence, capability, or social status.

A second potential source of error is the student's conscientiousness in completing the survey. Some students may mark their surveys randomly or care-

lessly, while others may select extreme responses as a prank (Furlong et al., 2004). Student carelessness and/or unwillingness to provide truthful responses on self-report surveys can compromise surveys' validity and reliability by inflating estimates of low-prevalence events (Cornell & Loper, 1998; Cross & Newman-Gonchar, 2004). Cornell and Loper (1998) found that after screening invalid respondents in a sample of 10,909 secondary school students, self-reported fighting at school dropped from approximately 29% to 19%, drug use at school dropped from 25% to 15%, and carrying a knife at school dropped from 18% to 8%.

Survey measures of bullying typically rely on anonymous student self-reports of victimization that are not confirmed by others. How can school authorities be certain that the levels of bullying reported by their students are accurate?

Cross and Newman-Gonchar (2004) screened three different school surveys for the presence of inconsistent responses to items with the same content (e.g., answering "never" when asked at what age they joined a gang and "yes" to the question, "Have you ever belonged to a gang?") and extreme responses (e.g., claiming to have used LSD 20 or more times in the past 30 days). Dropping the 2.7-4.4% of surveys that had at least three inconsistent and/or extreme responses lowered self-reports of carrying a handgun at school from 3.2% to 0.1%, physically attacking or harming someone from 15.8% to 9.9%, and being physically attacked at school from 37.8% to 24.5%. In one school, the proportion of students who reported being bullied dropped from 45.7% to 25.0%, which is a reduction of more than 45%.

LIMITATIONS OF ANONYMOUS REPORTS

Most bullying surveys are administered on an anonymous basis. The widely used Olweus instrument was designed to be anonymous in an effort to allay student concerns about revealing their bully or victim status and encourage more truthful reporting (Solberg & Olweus, 2003). The disadvantage of this approach is that no independent means allow for verification of the student's status as a victim or bully. Consequently, little research using independent criteria has been possible with self-reports of bullying. Furthermore, anonymous methods do not permit school counselors to identify the victims and take appropriate action to help them.

Without the means to validate self-reports against any independent external criterion of truth, previous studies (e.g., Haynie et al., 2001; Solberg & Olweus, 2003) have relied on comparing self-reports with hypothesized correlates of bullying, such as low self-esteem or feelings of depression, to support the accuracy of these methods. Results from such studies are always confounded and inflated to an unknown degree by shared method variance, which is a well-known measurement problem in which score differences are produced by the measurement method rather than the actual constructs of interest (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Shared method variance can occur when two measures or scales drawn from one reporter (e.g., a student) are correlated with one another because of the consistency in how the reporter answers questions rather than an underlying relationship between the constructs being measured. For example, a student with a self-denigrating attitude may consistently endorse survey items with a negative response bias. Conversely, a defensive student may mark items on a self-report survey to minimize his or her victim status and deny that bullying is a problem at school (Cornell & Bandyopadhyay, 2010). In both of these cases, an apparent relationship between victimization and low self-esteem or depression simply represents student consistency in response patterns. Thus, studies that rely solely on correlations between survey results from the same source do not achieve the independence between predictor and criterion variables necessary to provide rigorous evidence of self-report accuracy.

SUPPORT FOR CONFIDENTIAL METHODS

Several studies contradict the assumption that an anonymous survey is needed in order for students to admit involvement in bullying (Chan, Myron, & Crawshaw, 2005; O'Malley, Johnston, Bachman, & Schulenberg, 2000). Chan and colleagues (2005) administered the School Life survey to two groups of randomly assigned classrooms of students: students in group 1 took the survey anonymously, and students in group 2 were instructed to write their names on the survey. Study results showed no statistically significant differences in rates of endorsement of behaviors that reflected bullying others and being victims of bullying (e.g., hitting, teasing, and lying about other students) between these two groups.

A second study, by O'Malley and colleagues (2000), suggests that an assurance of confidentiality may be sufficient to encourage reporting from youth. This nationwide study looked at the differences between anonymous and non-anonymous adolescent reporting of drug use and illegal behaviors (i.e., stealing and weapon carrying) on the Monitoring the Future survey. One group answered the survey anonymously. A comparison group was not assured of anonymity and was required to report names and addresses to researchers, but was told that their answers would be held in confidence. Results from this study showed little or no group differences in endorsement rates for sensitive information (O'Malley et al., 2000).

In their examination of the widely used Olweus Bully/Victim Questionnaire using confidential administration, Lee and Cornell (2010) found only

limited evidence of concurrent validity. Self-reported bullying of others was modestly correlated (r = .12) with peer nominations, while self-reported victimization correlated somewhat higher (r = .42) with peer nominations.

PURPOSE OF THE PRESENT STUDY

The School Climate Bullying Survey (SCBS; Cornell, 2010) is a self-report student survey used to assess the prevalence of bullying at school and related aspects of school climate (Bandyopadhyay, Cornell, & Konold, 2009). The SCBS uses a definition of bullying that was derived from the Olweus definition, but reworded to be shorter and easier to comprehend for American middle school students. In the middle school that was the site of this study, this instrument was routinely administered by school authorities on a confidential, but not anonymous, basis as part of their bullying prevention program. Surveys were administered using code numbers for each student so that changes in student bullying or victim status could be tracked over time and linked to other data sources. Using code numbers also made it possible for the school staff member in charge of the confidential key code to identify students who self-reported as being victims of bullying and provide their names to school counselors.

In a pilot study for this project, two school counselors conducted interviews with 19 students who identified themselves as victims of bullying at least once per week in the past month. The counselors reviewed with each student the reasons why he or she reported being bullied and compared the student's account to the definition of bullying used in the bullying prevention program and printed on the survey. The counselors determined that only 10 of the students could be confirmed as victims of bullying. Of the nine students who were not confirmed as victims of bullying, one student said he claimed to be a victim as a joke and two claimed to have marked the form incorrectly by mistake. Three students were judged to have been bullied, but not in the past 30 days as the question required. Three other students reported playful teasing among friends that the counselor judged to be behavior that did not meet the definition of bullying.

Based on the pilot findings, the authors decided to conduct a second study on a larger sample. The basic research question was, "Are students accurate when they self-report being a victim of bullying?" Secondarily, the study investigated whether the students confirmed by the counselors as victims differed from other students in some other indicators of victimization. The authors anticipated that these confirmed victims would differ in predictable ways from two other groups: (a) nonvictims (students who did not self-report being a victim) and (b) unconfirmed victims (students who self-reported being a victim, but who were not regarded as victims by counselors). Specifically, the authors hypothesized that confirmed victims should have more peer nominations as victims of bullying than either of the comparison groups. In this way, the judgment of the school counselors could be validated against the perceptions of the student's peers. An extensive body of research supports the judgment of peers in assessing emotional and behavioral characteristics of their classmates (Fox & Boulton, 2005; Weiss, Harris, & Catron, 2004). Studies have shown the validity of peer nomination for assessing peer aggression, involvement in bullying, and victimization (Cornell & Brockenbrough, 2004; Leff et al., 2004).

The authors also hypothesized that confirmed victims should differ from the comparison groups in their response to other survey items about bullying conditions at school. The expectation was that confirmed victims of bullying would be more likely than the comparison groups to endorse survey items that indicate that they had experienced specific types of bullying at school, such as physical or social bullying. The authors also expected confirmed victims to be more likely than the comparison groups to report that bullying occurs and is problematic at their school.

In order for students to self-report being victims, they have to understand the criteria for bullying, recognize bullying events, and distinguish the power differential involved in bullying from other forms of peer conflict.

METHODS

Participants

The sample for the current study consisted of 482 public middle school students who completed a bullying survey. The sample included 255 (53%) boys and 223 (47%) girls, including 155 (32%) sixth graders, 170 (36%) seventh graders, and 153 (32%) eighth graders. Of the participants, 278 (58%) students identified themselves as Caucasian, 83 (17%) as African American, 48 (10%) as Hispanic, 22 (5%) as Asian, and 48 (10%) as Other. Participants ranged from 11 to 15 years of age with a mean age of 12 years. The school drew its enrollment from a predominantly suburban community with 39% of its students eligible for a free or reduced price meal. Out of these 482 middle school participants, 309 (64%) reported not having been bullied in the past 30 days, and 130 (27%) reported being bullied once or twice.

In completing the survey, 43 (8%) students identified themselves as being bullied at least once per week in the past month. This subsample of students consisted of 25 (60%) boys and 17 (40%) girls, including 17 (40%) sixth graders, 15 (35%) seventh graders, and 11 (25%) eighth graders. Of these respondents, 26 (60%) students identified themselves as Caucasian, five (12%) as African American, three (7%) as Hispanic, five (12%) as Asian, and four

(9%) as Other. These students ranged from 11 to 14 years of age with a mean age of 12 years.

School counselors conducted follow-up interviews with these 43 middle school students. They determined that two of these students had been victims of bullying prior to the timeframe of the survey question; these cases were set aside from further analysis because they could not be clearly placed in one of the study's two contrasting groups. The remaining 41 students were divided into two groups: counselor confirmed (n = 24) and unconfirmed (n = 17) victims. The confirmed victims consisted of 14 (58%) boys and 10 (42%) girls, including 11 (46%) in grade six, nine (38%) in grade seven, and four (17%) in grade eight. Of these students, 16 (67%) identified themselves as Caucasian, three (13%) as African American, one (4%) as Hispanic, three (12%) as Asian, and one (4%) as Other. The unconfirmed victims consisted of nine (53%) boys and eight (47%) girls, including five (29%) in grade six, five (29%) in grade seven, and seven (41%) in grade eight. Of the unconfirmed group, nine (53%) identified themselves as Caucasian, two (12%) as African American, two (12%) as Hispanic, two (12%) as Asian, and two (11%) as Other. Thirteen of these students were found to be involved in peer conflict that was not bullying (such as a disagreement with a friend) and four claimed to have marked the survey in error. In a preliminary analysis, the 24 students confirmed as victims were compared to the 17 students not confirmed as victims in race (Minority versus Caucasian); this analysis was not statistically significant, χ^2 (1, 41) = 0.79.

The survey includes a peer nomination section that allows students to write the names of any classmates who are victims of bullying. The number of nominations a student receives is used as an indicator of his or her victim status.

The researchers also selected a nonvictim group from the 304 students who identified themselves as not having been bullied in the past month. The nonvictim comparison group was randomly selected to match the 24 confirmed victims on both gender and grade because bullying research has consistently report gender and age differences in rates of bullying victimization (Finkelhor, Turner, Ormrod, Hamby, Kracke, 2009; Wang, Iannotti, & Nansel 2009). The nonvictim group consisted of 14 (58%) boys and 10 (42%) girls, including 11 (46%) sixth graders, nine (38%) seventh graders, and four (17%) eighth graders. In this group, 12 (50%) identified themselves as Caucasian, five (21%) as African American, five (21%) as Hispanic, zero as Asian, and two (8%) as Other. In a preliminary analysis, the 24 students confirmed as victims were compared to the 24 nonvictim students in race (Minority versus Caucasian); this analysis was not statistically significant, χ^2 (1, 48) = 1.37.

Measures

The School Climate Bullying Scale (SCBS; Cornell, 2010) is a 45-item self-report instrument used to examine the extent and nature of bullying problems in school. A series of studies support its reliability and validity. The items used as self-reports of bullying in the SCBS have been found to correspond with independent measures obtained from peer nominations and teacher nominations (Branson & Cornell, 2009; Cornell & Brockenbrough, 2004). The SCBS produced estimates of the prevalence of bullying victimization and bullying others that are similar to the Olweus Bullying Victimization Questionnaire (Cornell, 2010). Studies also correlated self-reports of victimization with depression, negative perceptions of school, and lower academic performance, whereas self-reports of bullying others were correlated with aggressive attitudes, discipline referrals, and suspensions from school (Branson & Cornell, 2009). Exploratory and confirmatory factor analyses in a large middle school sample (n = 2,111) supported the three SCBS school climate scales; a companion study using an independent sample of 7,318 ninth grade students found that these scales were predictive of teacher reports of bullying and teasing, teacher reports of student help-seeking behaviors, teacher reports of gang-related violence, and school records of suspensions and expulsions (Bandyopadhyay et al., 2009).

Self-report of bullying victimization. The SCBS contains a definition of bullying that was derived from Olweus and colleagues (Olweus et al., 1999; Solberg & Olweus, 2003):

> Bullying is defined as the use of one's strength or status to injure, threaten, or humiliate another person. Bullying can be physical, verbal, or social. It is *not* bullying when two students of about the same strength argue or fight.

After presenting this definition, the SCBS asks participants whether they have been bullied at school in the past month, with follow-up questions about physical, verbal, social, or cyber bullying. Each form of bullying is also defined. Students were considered to be victims of bullying if they endorsed that they had been a victim of bullying at least once per week, which has been previously identified as a suitable cutoff point for classifying students as victims (Solberg & Olweus, 2003). The SCBS has a parallel series of questions about bullying others and some other questions about school climate not included in this study.

Bullying prevalence items. The SCBS asks students, "Does bullying take place anywhere at school?" Students can respond either yes or no to this question. A second item reads "Bullying is a problem at this school." Students were given four responses choices for this item: *strongly disagree, disagree, agree*, and *strongly agree*. For the purposes of this study, students who chose *strongly disagree* or *disagree* were

combined into one category and those who chose *agree* or *strongly agree* were combined into another category, creating a dichotomous variable.

Peer nomination. Finally, the survey includes a peer nomination section that allows students to write the names of any classmates who are victims of bullying. The number of nominations a student receives is used as an indicator of his or her victim status. A number of researchers have used this method to supplement self-report in assessing the prevalence of bullying at school (Fox & Boulton, 2005). Two studies (Branson & Cornell, 2009; Cornell & Brockenbrough, 2004) found small but statistically significant correlations between self-report and peer nominations among middle school students taking the SCBS.

Procedure

The SCBS was administered in a public middle school in a suburban school district in central Virginia. This middle school had an established schoolwide prevention effort using the Olweus Bullying Prevention Program (OBPP; Olweus et al., 1999), an internationally recognized program designed to reduce bullying through coordinated interventions at the school-wide, classroom, and individual levels. Schools using the OBPP adopt school-wide rules against bullying with appropriate consequences for bullying behaviors. At the classroom level, teachers reinforce these rules and work to increase student knowledge and empathy regarding bullying. At the individual level, counselors work one on one with students identified as victims or bullies.

All students in attendance on the day of the survey administration took the SCBS as part of the school's effort to monitor its bullying prevention program. All surveys were completed in classrooms under teacher supervision following a standard set of instructions. Surveys were administered on a confidential, but not anonymous, basis using code numbers to protect student confidentiality. Because the school administered the survey confidentially as a routine part of the school's bullying prevention program, the school did not obtain signed parental consent for the survey. However, the school notified parents of the bullying prevention program and parents were contacted routinely when their child was seen for counseling at school. Parents had the right to refuse permission for their child to complete the survey or to participate in counseling. Each year only a few parents refuse permission.

Researchers compiled a list of the code numbers of students who self-reported being a victim of persistent bullying (once per week or more) in the past month. The school staff member in charge of the confidential code key used this list to identify these students and provided their names to two school counselors.

Each counselor conducted follow-up interviews with one-half of the students to confirm their victim status and provide them with support and guidance as deemed appropriate. Both participating counselors had received formal training in the Olweus program and had at least five years experience in bullying prevention, including numerous interviews with students involved in bullying. The counselors worked together in the program and established consensus on their interviewing approach.

To facilitate this process, the counselors used a standard form for reporting interview results that reminded them of the definition of bullying. Prior to coding data for this study, inter-rater reliability between the two middle school counselors was tested to establish consistency in their classification of self-reported victims using four categories: victims of bullying, past (but not current) victims of bullying, involved in peer conflict that is not bullying, and nonvictims. The researchers identified 20 case examples that reflected the range of cases described by the counselors. Each counselor was asked to make an independent assessment of the 20 cases in order to measure their agreement. The counselors obtained 100% agreement in these cases.

Data Analyses

The nonvictim comparison group was randomly selected from the pool of participants who identified themselves as not being victims of bullying in the past month. Nonvictims were matched to the confirmed victims on both gender and grade. To create the matched dataset, all confirmed victims were broken into six subgroups by gender and grade (male sixth graders, etc.). The control nonvictims were similarly divided into six subgroups by gender and grade. Researchers then used Statistical Package for the Social Sciences (SPSS) Version 15.0 to randomly select controls to match the confirmed victims in each subgroup. The unconfirmed victim group was comprised of all students who were interviewed by counselors but could not be confirmed as victims of bullying. This included students who claimed to have marked the survey in error and those who described being involved in peer conflict rather than bullying.

Separate analyses were conducted in order to identify differences between confirmed victims and each of the two comparison groups. With the p value set at .05, one-tailed paired t-tests were conducted to compare confirmed victims to nonvictims and regular t-tests compared confirmed and unconfirmed victims. The first comparisons tested whether confirmed victims of bullying accrued more peer nominations as victims of bullying than nonvictims and unconfirmed victims of bullying. Second, the groups were compared on four questions of the SCBS asking whether students have been physically,

These findings suggest that results from self-report surveys should be interpreted with caution, particularly when extrapolating school-wide rates of bullying from such measures.

Table 1. Comparisons of Confirmed Victims with Nonvictims and Unconfirmed Victims

	Confirmed Victims (N = 24) Mean (SD)	Nonvictims (N = 24) Mean (SD)	Unconfirmed Victims (N = 17) Mean (SD)	Confirmed vs. Nonvictims			Confirmed vs. Unconfirmed		
				t (df)	p	d	t (df)	P	d
Total Peer Nominations	3.92 (6.11)	.54 (1.06)	.76 (1.2)	2.71 (23)	.006*	.77	-2.09 (39)	.021*	.72
Physically Bullied	.21 (.42)	.04 (.20)	.06 (.24)	1.70 (23)	.052	-	-1.33 (39)	.096	-
Verbally Bullied	.79 (.42)	.00 (.00)	.59 (.51)	9.35 (23)	<.001*	2.69	-1.4 (39)	.083	-
Socially Bullied	.42 (.50)	.04 (.20)	.41 (.51)	3.19 (23)	.002*	.99	-.03 (39)	.488	-
Cyber Bullying	.04 (.20)	.00 (.00)	.12 (.33)	1.00 (23)	.164	-	.91 (39)	.185	-
"Does bullying take place anywhere at school?"[1]	1.00 (.00)	.50 (.51)	.88 (.33)	4.80 (23)	<.001*	1.38	-1.74 (39)	.044*	.51
"Bullying is a problem at this school."[1]	.96 (.20)	.21 (.42)	.47 (.51)	8.31 (23)	<.001*	2.29	-4.22 (39)	<.001*	1.25

Note. *One-tailed significance reported at the .05 level; Total Peer Nominations are the number of nominations students received; d is Cohen's (1988) measure of effect size.
[1]Survey items were re-coded 0 for disagree and 1 for agree.

verbally, socially, or cyber bullied in the past month. Groups were also compared on the SCBS items "Does bullying take place anywhere at school?" and "Bullying is a problem at this school."

Effect sizes using Cohen's d were calculated for all statistically significant group comparisons. This measure of effect size reflects the magnitude of the group difference in standard deviation units. For example, a d value of .5 means that members of one group are approximately one-half standard deviation different than members of the other group using the pooled standard deviation for the two groups. No empirically established criteria exist for evaluating the size of an effect, but Cohen (1988) recommended use of three arbitrary cut-offs: "small" d = .2, "medium" d = .5, and "large" d = .8.

RESULTS

Confirmed Victims Versus Nonvictims

Based on paired t-tests (see Table 1), confirmed victims received significantly more peer nominations than their matched control counterparts, t (23) = 2.71, p = .01, Cohen's d = .77. Notably, 13 of 24 confirmed victims received three or more peer nominations, with one student receiving as many as 29 nominations. In contrast, 20 of the 24 nonvictims received no nominations, three received a single nomination, and only one received three nominations.

Confirmed victims were significantly more likely than nonvictims to endorse being verbally and socially bullied on the SCBS, but the two groups did not differ significantly in their reports of being physically or cyber bullied. Confirmed victims were more likely than nonvictims to answer affirmatively to the item "Does bullying take place anywhere at school?" Confirmed victims were also more likely than nonvictims to answer affirmatively to the item "Bullying is a problem at this school." Overall, five of the seven t-tests comparing these two groups of students were statistically significant at the .05 level. (Because of the limited statistical power in this relatively small sample, the authors did not adjust the p level by the method of Bonferroni to rule out the possibility that approximately 5% of a series of statistical comparisons could be statistically significant at the .05 level by chance. Nevertheless, if the p value was adjusted by the Bonferroni method to be set at approximately .007, all of these comparisons would remain statistically significant.)

Confirmed Victims Versus Unconfirmed Victims

Another series of seven t-tests compared the confirmed victims of bullying with the 17 students who marked themselves as victims of bullying on the survey but were not confirmed as victims by the school

counselors (see Table 1). Confirmed victims received more peer nominations as victims than unconfirmed victims, t (39) = -2.09), p = .04, Cohen's d = .72. Eleven of the 17 unconfirmed victims received 0 nominations, two received a single nomination, one received two nominations, and only three received three nominations.

Comparisons between confirmed and unconfirmed victims using t-tests revealed no significant differences between how often these student groups reported being physically, verbally, socially, or cyber bullied. Confirmed victims were significantly more likely than unconfirmed victims to answer affirmatively to the items "Does bullying take place anywhere at school?" and "Bullying is a problem at this school." (If these seven comparisons were adjusted by the method of Bonferroni, one of these three results would remain statistically significant.)

DISCUSSION

Results from this study indicate that only about half (56%) of the 43 students who self-reported being victims of bullying could be confirmed by counselor interview. Although no definitive or unequivocal standard of proof exists to determine whether a student is actually a victim of bullying, counselor judgments represent a practical standard that is likely to be used in schools. These findings suggest that results from self-report surveys should be interpreted with caution, particularly when extrapolating school-wide rates of bullying from such measures. A number of factors may compromise accurate self-report of victimization. Students may misconstrue ordinary peer conflict as bullying because they fail to recognize a power imbalance between victims and bullies. Other students may correctly identify bullying, but overlook the timeframe for survey questions (in this study, "in the past 30 days"). A few students may simply mark the survey incorrectly, either by mistake or as a prank. As a result, the number of students who are actually victims of bullying may be over-estimated.

These findings clearly require replications on larger and more diverse samples and using a variety of self-report instruments; nevertheless, they have important practical implications. National studies of bullying are used to make policy implications and guide research efforts (e.g., Wang et al., 2009, DeVoe & Bauer, 2010), but their estimates of the prevalence of bullying could be inflated by student reporting inaccuracies. Similarly, surveys conducted by counselors to guide intervention efforts in their schools might yield exaggerated results. Moreover, efforts to evaluate the effectiveness of bullying prevention programs typically rely on student self-report. Use of a measure that contains high rates of inaccurate reporting might obscure real reductions in bullying and lead school authorities to conclude that their efforts are not effective (Cornell & Bandyopadhyay, 2010).

These study results highlight the importance of validating self-reports against independent criteria. Bullying researchers have voiced concerns regarding potential methodological problems in the measurement of bullying victimization (Furlong et al., 2010; Graham, Bellmore, & Juvonen, 2003; Juvonen, Nishina, & Graham, 2001). These authorities call for the use of multi-method, multi-informant methods to assess the prevalence of bullying victimization. To the knowledge of the authors, the present study is the first to examine the accuracy of self-reported bullying victimization with counselor interviews as an external criterion.

The current study used peer nominations as an additional external criterion to check counselor judgments about whether a student was a victim of bullying. Students confirmed as victims by the counselors had an average of 3.9 peer nominations, compared to 0.5 for nonvictims and 0.8 for unconfirmed victims. These averages seem sufficiently discrepant to reflect a meaningful difference between groups in the number of nominations the students received. The effect sizes for the statistically significant differences—d = .77 for confirmed versus nonvictims, and .72 for confirmed versus unconfirmed victims—represent a medium-sized effect according to Cohen's criteria (1988).

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Peer nominations are not a perfect criterion of victim status because students might be unaware that a classmate is being bullied or they might misconstrue peer conflict between students of comparable strength or status as bullying. However, the virtue of peer report is that information is based on multiple observers, which should produce a more reliable overall measure (Pellegrini, 2001). Several studies have argued for the use of both self-report and peer report to identify victims of bullying, since bullying can be hard to identify and both provide information in some cases that might not be available with the other method (Branson & Cornell, 2009; Graham et al., 2003; Juvonen et al., 2001).

As hypothesized, students whom counselors classified as victims of bullying were consistent in their self-report of bullying throughout the SCBS. They were more likely than nonvictims to report having experienced specific types of bullying at school, and more likely than nonvictims or unconfirmed self-reporters of victimization to report that bullying took place at school and was a problem. The effect sizes for these statistically significant group comparisons ranged from medium (> .5) to large (> .8) in magnitude (Cohen, 1988), indicating that the differences are quite substantial. The largest effect sizes

were obtained in comparing the counselor-confirmed victims with the nonvictims. For example, nearly all of the counselor-confirmed victims agreed that "Bullying is a problem at this school" (mean .96), whereas fewer than a quarter of the nonvictims endorsed this view (mean .21), generating an effect size of 2.29. In contrast, nearly half (mean .47) of the unconfirmed self-reporters of victimization agreed that "bullying is a problem at this school," with an effect size of 1.25. These consistent group differences support the counselors' judgment that the confirmed victims are genuine victims of bullying. The counselors did not have access to the student surveys and were unaware of how students responded to these survey items.

Even when counselors determine that a case does not involve bullying, the student's report may still merit counselor attention.... Bullying surveys might be regarded as identifying a broader category of peer relations problems.

Study Limitations and Directions for Future Study

This study is limited by a small sample from a single middle school in central Virginia, so replicating this study on a larger scale in multiple sites would be valuable. All students in this study were participating in an ongoing bullying prevention program through their school, so a similar evaluation in schools that do not have a bullying prevention program is needed. The researchers found noteworthy the fact that so many students misidentified themselves as victims of bullying even though the school had a well-established bullying prevention program in which all students were taught about the concept of bullying.

A second limitation is that, although this study design allowed for the identification of students who falsely self-identified as victims (false positives), it did not include identification or assessment of students who failed to self-report as victims (false negatives). In order to determine both the false positive and false negative rate, counselors would need to interview every student in the school, which was not practical in the present study. Further studies are needed to determine the accuracy of self-reports of bullying; this study can be regarded as evidence that such studies are needed. Examining student knowledge of bullying also would be helpful to see how their understanding of the definition and types of bullying affects self-report accuracy. A basic question is, how can educational efforts improve the accuracy of bullying surveys?

A third limitation of this study is that it relies on counselors as a criterion of truth although their judgments may not be completely accurate. Some students may not give counselors accurate or complete information in their follow-up interviews. With no absolute criterion of truth for bullying, the accumulation of evidence across sources is needed. In practical school settings, it likely will be the judgment of school counselors or other school authorities that determines whether bullying has occurred.

Recommendations for Counselors

School counselors play an important role in behavioral management at school. Carney (2008) suggested that counselors look for symptoms of trauma, such as avoidance and patterned responses to stress (e.g. nightmares) in victims of bullying. School counselors may not recognize the seriousness of some forms of bullying, such as relational or social bullying (Jacobsen & Bauman, 2007). Research indicates that counselors are most effective in their efforts to prevent bullying when they have had specific training (Jacobsen & Bauman, 2007). The authors experience in this middle school, which has implemented a schoolwide bullying prevention program for nearly 10 years, is that counselors can be quite effective in identifying and working with victims. The counselors lead a schoolwide educational program designed to teach all students about bullying and to establish schoolwide expectations and rules that target bullying behaviors. All students become familiar with basic concepts of bullying and understand that school authorities will take action when bullying is identified.

Bullying is rarely observed directly by school staff; therefore, encouraging students to seek help for themselves or for their peers when bullying occurs is important. Especially important is explaining to students the difference between seeking help to prevent someone from being hurt and snitching on someone for personal gain. Even if students are not comfortable coming forward personally, they are often willing to seek help for their friends or classmates whom they see being bullied.

The authors believe that the use of a confidential self-report survey that includes a peer nomination is especially helpful in identifying victims of bullying (Branson & Cornell, 2009; Cornell & Bandyopadhyay, 2010). Students may find it less objectionable to identify victims of bullying than to identify classmates who are bullying others. In recent years, other schools in the area of this middle school have adopted the practice of adding a peer nomination section to their bullying surveys. The counselors in these schools have reported to the authors that few students complain about the peer nomination form and that some students spontaneously identify peers who are bullying others in an open-ended comments section of the form.

Counselors should not assume that a student who self-reports being bullied is actually a victim. As these results demonstrate, even in a school with an established bullying prevention program, some students misconstrue other forms of peer conflict as bullying or simply mark the survey in error. Similarly, students who are identified as victims by peer nomination cannot be presumed to be victims without some inquiry. Counselors must approach

the subject of bullying with students in a careful and supportive manner. The interview should be conducted in a private location and every effort should be made to help the student feel comfortable acknowledging a sensitive problem. Counselors in the studied school routinely broach the topic of bullying by asking the student if he or she recalls taking the school survey and asking whether he or she has observed bullying at school. The counselor reviews the definition of bullying, including the fact that bullying can take different forms and involves a power imbalance. The question of whether one party has dominance or power over the other is critical to the determination of bullying, and this may be the source of some misunderstanding by the student.

Even when counselors determine that a case does not involve bullying, the student's report may still merit counselor attention. The researchers found that many students were not victims of bullying, but were engaged in some other kind of peer conflict, often an argument with a friend, that was troubling to them. From this perspective, bullying surveys might be regarded as identifying a broader category of peer relations problems.

Students will sometimes deny being bullied because of shame or embarrassment, or perhaps because of fear of retaliation by the bully. Counselors may need to reassure such students, review possible courses of action to stop bullying, and offer support in working through the practical problems of dealing with a bullying situation. Students may not be comfortable using the term "bullying" but could describe episodes of teasing or harassment that constitute bullying. Using the student's own language and gaining an understanding of what has taken place is more important than insisting on applying the bullying label.

Perhaps the most important factor in convincing students to report bullying is a shift in school culture that opposes bullying and emphasizes support for others. When students observe that school counselors, teachers, and all staff members take the problem of bullying seriously and work persistently to address it, they are more willing to seek help for it (Eliot, Cornell, Gregory, & Fan, in press; Unnever & Cornell, 2003, 2004). ▮

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