Research Note

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Teachers' and Students' Reports of Physical and Indirect Bullying

Relatively few studies focus on the measurement of bullying (Pellegrini, 2004). Methods typically used include student self-reports and teacher surveys; however, the consistency between student and teacher reports of bullying has received little attention. Some research suggests that reporting sources may be interchangeable (Macklam, 2003; Pellegrini, 2001). This notion, however, has little empirical support. To ensure the accuracy of studies, it is important to clarify the concordance between varied informants' reports of bullying behaviors.

Bullying is defined as repetitive aggression exerted against an individual who is unable to defend himself or herself (Olweus, 1996). Bullying can be physical (e.g., hitting), which is visible and more common among boys than girls (Crick & Grotpeter, 1995; Lagerspetz, Bjorqvist, & Peltonen, 1988). These behaviors are considered more socially acceptable for boys and can be used as a show of domination. Indirect bullying, in contrast, describes gossiping, exclusion, and other forms of social manipulation, which are subtle, and common among girls (Crick & Grotpeter; Lagerspetz et al.). Rather than directly attack a targeted child, negative and exclusionary messages about the targeted child are circulated among peers. This form of bullying attacks the social structures that are valued most within the female peer group: close relationships (Craig & Pepler, 2003). To examine the validity of teacher and student reports of both types of bullying, we examined whether these reports are more similar for physical than for indirect bullying. This is based on the premise that teachers are more likely to be aware of overt, rather than covert, aggression.

Method

Participants and Procedure

We randomly selected elementary schools in the public school board in a major Canadian city. Teachers who agreed to participate received parental/guardian consent forms to distribute to their students. Of the 328 students who received these forms, 150 students returned them signed for a response rate of 46%.

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From the 150 students, 120 were randomly selected to obtain a similar number of male and female students in each class up to a maximum of 10 students per class. This limit was established to manage the amount of time required from teachers. Fourteen teachers from 10 classes (two classes had an extra teacher) provided ratings of bullying and social skills on 120 students in grades 4 to 6. Twelve teachers were female (86%), and two (14%) were male. The Olweus Bullying Questionnaire (1996), which took approximately 20 minutes to complete, was administered to the students in class, and then teachers completed their version of the questionnaire.

Instruments

Items from the Olweus Bully/Victim Questionnaire (Olweus, 1996) were used to obtain teacher and student reports of bullying. It contains a definition of bullying that teachers and students read before completing the items. Items are rated on a Likert scale according to the frequency of a variety of bullying behaviors (i.e., *It hasn't happened in the past couple of months* [1] to *several times each week* [5]). Evidence of validity was obtained from high correlations between self-report items and peer ratings (e.g., .40 and .60, Olweus, 1991).

Exploratory principal component analyses were performed to examine the underlying factor structure of this questionnaire using teacher and selfreported responses. The rotated solution for the teacher reports indicated the presence of two components accounting for 65% of the variance. Three items loaded highly (ranging from .78 to .84) on the first factor consisting of indirect bullying behaviors, and two items loaded highly (.63 and .68) on a factor that measures physical bullying. These highly loaded teacher items comprised a meaningful model of bullying: one that is consistent with research that delineates physical and indirect forms of bullying (Crick & Grotpeter, 1995; Lagerspetz et al., 1988). For the student reports, two components were also obtained, accounting for 69% of the variance. Two items, which were consistent with the definition of physical bullying, loaded highly on the first factor (.77 and .78), and three items loaded moderately (.15 to .45) on a factor that measures indirect bullying. Total scores were calculated for each respondent based on the items that loaded on each bullying factor, thereby forming the respective scales.

Results and Discussion

Descriptive information for bullying is shown in Table 1. Because 14 teachers provided ratings on 120 students (creating dependence in the observations), dummy variables were created for teachers and used as covariates in the subsequent analyses.

To determine the concordance between teacher reports and student selfreports of physical and indirect bullying, two Pearson product-moment correlations were calculated. For physical bullying, the correlation between teacher reports and student self-reports was r=.51, p<.01. For indirect bullying, the correlation between teacher reports and student self-reports was r=.33, p<.01. These results suggest that agreement is higher between teacher and student perspectives on more overt physical bullying as opposed to covert indirect bullying behaviors.

Ν	Mean	SD	Skewness	Kurtosis
120	1.42	.87	2.62	6.96
120	1.54	.86	1.93	2.46
120	1.33	.73	3.11	11.00
120	1.54	.87	2.46	6.70
	N 120 120 120 120	N Mean 120 1.42 120 1.54 120 1.33 120 1.54	N Mean SD 120 1.42 .87 120 1.54 .86 120 1.33 .73 120 1.54 .87	N Mean SD Skewness 120 1.42 .87 2.62 120 1.54 .86 1.93 120 1.33 .73 3.11 120 1.54 .87 2.46

Table 1 Means, Standard Deviations, Skewness, and Kurtosis Values of Variables

Note. The factor-derived dependent variables were converted to a 5-point scale by dividing the sum by the number of items comprising each factor. A high value indicates a high frequency of bullying.

By its nature, physical bullying is more conspicuous than indirect bullying, so it seems logical that teachers and students would converge on reports of this more visible behavior. Indirect bullying, however, occurs among many peers who facilitate the bullying by spreading rumors, agreeing to exclude someone from the group, and so forth. This type of involvement in bullying seems difficult for teachers to catch as the behaviors are subversive. It may be difficult for a teacher to identify perpetrators among a group, particularly if most group members also participate to some extent. In addition, differentiating aggressive and non-aggressive behaviors may not always be possible. Actions such as talking about someone may or may not constitute a form of gossip, and the intent of this action may not be obvious to an onlooker.

These findings suggest that convergence between teachers' and students' reports of bullying are low to moderate. The consistency between the two informant groups in this study also varied as a function of the type of bullying. It is suggested that bullying be studied in its multiple forms to allow the exploration of informant differences across varying bullying behaviors.

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