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# Bullying: Are researchers and children/youth talking about the same thing?

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Given the rapid increase in studies of bullying and peer harassment among youth, it becomes important to understand just what is being researched. This study explored whether the themes that emerged from *children's* definitions of bullying were consistent with theoretical and methodological operationalizations within the research literature, and whether the provision of a definition when administering bullying experience items would lead to different prevalence rates in reported victimization and bullying. Students aged 8–18 ($N = 1767$) were randomly assigned to one of two conditions. In the first condition, students were provided with a standard bullying definition; in the second condition, students provided their own definition of bullying. Results indicated that students' definitions of bullying rarely included the three prominent definitional criteria typically endorsed by researchers: intentionality (1.7%), repetition (6%), and power imbalance (26%), although almost all students (92%) did emphasize negative behaviors in their definition. Younger children made more mention of physical aggression, general harassing behaviors, and verbal aggression in their definitions, whereas the theme of relational aggression was most prominent in the middle years and reported more by girls than boys. Finally, students who were given a definition of bullying reported being victimized less than students not provided with a definition. As well, boys who were given a definition of bullying tended to report higher levels of bullying than those not given a definition (marginal effect).

Key words: bullying; definitions; prevalence; randomized

As evident in literary classics such as Charles Dickens's *Oliver Twist* (1966/1839) and Thomas Hughes' *Tom Brown's School Days* (1892/1857), bullying has long been recognized as part of the human condition, particularly for children. Yet, despite long-standing recognition in works of fiction, bullying has only recently attracted the attention of researchers. In fact, the first study of the phenomenon was published only three decades ago in 1969 by school physician P.P. Heinemann (Olweus, 1999a), a study that was followed by extensive empirical inquiry during the 1970s and 1980s in Scandinavia lead by Dan Olweus (1978, 1993).

As with any new area of inquiry, issues arise concerning how best to operationalize the phenomenon under study, and a clear definition becomes critical for establishing validity. Indeed, in the absence of valid measurement, we cannot be sure of what construct is actually being assessed, lending considerable caution to interpreting incidence and prevalence rates and links to outcomes and interventions. Within the bullying literature, researchers have conceptualized bullying as a unique sub-category of aggression (Smith et al., 2002) characterized by *intentionality*, *repetition* and *imbalance of power*. According to Olweus' (1991, 1999a, 1999b) widely cited definition,

> "a person is being bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons. It is a negative action when someone intentionally inflicts, or attempts to inflict, injury or discomfort upon another . . .". (199b, p. 10)

Similarly, in Japan, bullying has been defined as "a type of aggressive behavior by which someone who holds a dominant position in a group-interaction process, by intentional or collective acts, causes mental and/or physical suffering to another inside a group" (Morita & Kiyonaga, 1994, p. 45; see also Morita, 1985). Although there is some consensus within the research literature regarding the three critical elements included in definitions of bullying (i.e., repetition, intentionality, power imbalance), these are not endorsed by all researchers. Some have argued that critical incidents/one-off experiences should also be considered bullying because of their negative long-term effects on the victim (Arora, 1996; Olweus, 1993; Randall, 1996). Of greater concern for the present study, however, is whether there is agreement between researchers' definitions and what *children themselves* emphasize in their conceptions of bullying.

So how do children conceptualize bullying? Several studies have shown that children, especially younger children, tend to equate bullying with direct physical aggression. Smith and Levan (1995) found that physical aggression was a major focus in six-year-olds' bullying definitions, with the typical response

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to the question, "What do you think bullying is?" being "you get hurt, they kick you and call you names" (p. 495). When Arora and Thompson (1987) provided 12–14-year-olds with a list of behaviors and had them indicate whether the items represented bullying, clear consensus was obtained for items such as "tried to kick me" and "tried to hit me," but items such as "called me names" and "took something off me" were endorsed by fewer than 30% of respondents. In a study by Boulton, Trueman, and Flemington (2002), students aged 11–12 and 14–15 were asked to indicate the extent to which they thought bullying behaviors were indeed bullying. High agreement (> 80%) was obtained for the items "hitting and pushing" and "threatening people" whereas low agreement (20.6%) was obtained for the item "leaving people out." Similarly, Smith, Madsen, and Moody (1999) found that the most frequently mentioned response by primary and secondary students to the question "What do you think bullying is?" described physically aggressive acts ("kicking," "hitting," "pushing," etc.). Smith et al. also found that older students' conceptions of bullying were broader than those of younger students, extending beyond the description of physical aggression to include more subtle forms of abuse such as peer exclusion and verbal aggression, although physical acts were still highly prevalent in their definitions. Although older students' definitions were more inclusive (see also Smith et al., 2002), it is important to note that students of any age rarely qualified their definition with respect to the three prominent definitional criteria: intentionality, power imbalance and repetition. For example, in a content analysis of 147 high school students' examples of mean teasing, bullying and sexual harassment, Land (2003) found that "repetition" was mentioned in less than half of the bullying examples provided.

Although several researchers have investigated children's conceptions of bullying (e.g., see Smith et al., 2002), none have formally examined how well children's conceptions of bullying map onto researchers' operationalizations. Accordingly, one purpose of the present study was to examine how children think about bullies in reference to the oft-cited definition advanced by Olweus (1991, 1999a, 1999b; see earlier). Specifically, we asked a large group of children from a broad age range (8–18) to provide a written response to the open-ended item, "A bully is. . . ." We hypothesized that, consistent with previous reports, children's definitions of bullying would not be qualified in terms of the three critical elements of intentionality, repetition and power imbalance, but instead would center on the theme of negative actions (e.g., "being mean").

A second goal in the present study was to examine themes that emerged in children's spontaneous definitions of bullying. Our expectations here followed from research on aggression, peer victimization and the development of social cognition. Given that physical aggression has been shown to decrease with age, whereas relational aggression has been shown to increase with age (see Tremblay & Nagin, 2005, and Vaillancourt, 2005, respectively, for reviews), we expected children's definitions of bullying to reflect this lived reality, with younger children's definitions of bullying centering on physical aggression, and older children more likely to express themes of relational aggression (e.g., peer exclusion, rumor spreading) in their bullying definitions since this type of aggression has been shown to reach a peak during this age period (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992).

We also expected that the definitions of older students (as compared with younger students) would more often refer to the internal or psychological qualities of bullies that bring about negative behaviors. This hypothesis was based on the idea that children's bullying conceptions are linked to their skills in "person perception" or the ways in which an individual thinks about or perceives others. Earlier, seminal research (Barenboim, 1981; Livesley & Bromley, 1973; Peevers & Secord, 1973) mapped out how children's conceptions of others developed systematically from early childhood into adolescence, as children begin to demonstrate an increasingly more advanced conceptual system, and move from concrete to abstract thought. Generally, young children's descriptions of others tended to focus on externally observable, concrete constructs such as behavior or appearance (from 2 to age 6–8), but by middle childhood descriptions shifted to more abstract, internal qualities and on dispositional characteristics. By later childhood/adolescence, children begin to describe others in terms of psychological qualities and internal personality characteristics and to spontaneously consider internal motives, attitudes and beliefs (that often must be inferred from behavior) when describing others.

Variations as a function of sex were also expected in children's definitions of bullying. Given evidence that males use and experience physical aggression more than females, and that females use and experience relational aggression as much if not more than males (Crick & Grotpeter, 1995; Lagerspetz, Bjorkqvist, & Peltonen, 1988), we expected girls' definitions to include more themes of relational aggression and boys' definitions to include more themes of physical aggression.

A final aim of the present study was to examine whether the provision of a definition would lead to differences in self-reported rates of bullying and victimization. When children answer questions about their experiences with bullying they likely are using their own working definition which, judging from previous research, may differ from that of researchers (Arora & Thompson, 1987; Smith & Levan, 1995; Smith et al., 1999). If so, then the provision of a definition may result in different prevalence rates, which has important implications for how results are interpreted, compared and addressed. Allocations of resources are often made on the basis of need, a need that should reflect true experiences and not an artifact of measurement.

The importance of providing students with a definition of bullying when soliciting reports of prevalence is highlighted by cross-national bullying research demonstrating considerable variations in the behaviors that constitute bullying, as reflected in the very words used to define bullying or harassment across languages and cultures. In a large-scale comparative study across 14 countries and 13 languages, Smith et al. (2002) found that children associated different behaviors with particular words used to convey the construct. For example, the Japanese term associated with "bullying," *ijime*, is primarily associated with verbal and relational harassment rather than with physical aggression or bullying (see also Morita, Soeda, Soeda, & Taki, 1999). By contrast, for the two Italian words associated with bullying, the term *violenza* appears to refer to physical bullying and aggression, whereas the term *prepotenza* refers more to social exclusion, verbal harassment and physical bullying. Providing a clear definition of bullying, including reference to the varied forms that such behavior can take, is critical for accurate and comparable estimates of prevalence. In this study, students were randomly given either a questionnaire in which *they provided* a definition and then completed a widely used survey of bullying experiences (Olweus, 1991) or

a questionnaire in which they *were given* a standard Olweus (1993)/Whitney and Smith (1993) definition of bullying and then completed the same bullying survey. Of interest was whether reported bullying and victimization rates differed across the two groups.

## Method

### Participants

Participants included 1767 (893 girls, 874 boys) predominately White students (approximately 14% of Asian and African descent) in grades 3–12 (age range: 8–18) from seven elementary schools (grades 3–8) and two secondary schools (grades 9–12) in a large single Catholic school district in southern Ontario that services a middle-class urban population.

### School structure

In Ontario, Catholic schools are organized into primary and secondary divisions with students in grades Junior Kindergarten (age 4) to grade 8 (age 13) housed together and students in grades 9 (age 14) to 12 (age 17) housed together. At the secondary level, students are assigned for the entire academic year to a homeroom, but proceed to their rotating subject classes (e.g., science) across the day, with about a 20% overlap in student composition with other classes. In the primary division, students remain in the same class with one teacher for the duration of the academic year. For school trips and assemblies and in classes in which two grade levels are combined, students in adjacent grade levels are often paired (e.g., grade 1–2, grade 3–4, etc.).

### Procedures and measure

In May of the school year, homeroom classes in participating schools (71 classes) were randomly assigned to one of two between-subject conditions. In the first condition, students were asked to read the following definition (modified slightly to reflect Canadian dialect):

> A student is being bullied, or picked on, when another student, or group of students, say nasty or unpleasant things to him or her. It is also bullying when a student is hit, kicked, threatened, locked inside a room, sent nasty notes, when people won't talk to them, and things like that. These things may happen a lot and it is difficult for the student to defend himself or herself. It is also bullying when a student is teased a lot in a nasty way. It is not bullying when two students of about the same strength have the odd (rare) argument or fight. (Whitney & Smith, 1993, p. 7)

Students were then asked to describe their experiences with bullying by completing two slightly modified self-report questions adapted from Olweus (1986, 1996) to tap students' own experiences bullying others ("How often have you bullied other students at school during the past week?") and being victimized by others ("How often have you been bullied at school during the past week?"). Responses were made on a 5-point, Likert scale including 0 "*none*", 1 "*once*", 2 "*twice*", 3 "*three or four times*", and 4 "*five times or more*". In the second condition, students were first asked to complete the sentence, "A bully is . . ." and were given three-quarters of a page to provide their own description and told not to worry about spelling or grammar in their responses. Following this, students in the second condition were asked to complete the same two self-report items tapping their experiences with bullying and victimization over the past week.

Note that although no formal manipulation check was performed, in large part because of the large number of classes being randomized, we did provide detailed instructions to teachers which included a verbal reminder to students in the "definition" condition to "be sure to carefully read over the definition provided before answering the questions in this survey."

### Coding procedures

Borrowing from research on children's conceptions of friendship, a content analysis was conducted on children's definitions of a bully (Bernt, 1981; Bigelow, 1977; Bigelow & LaGaipa, 1975; Tesch & Martin, 1983; Weiss, Smith, & Theeboom, 1996; Zarbatany, Ghesquiere, & Mohr, 1992). First, responses to the item, "A bully is . . .," were transcribed verbatim and checked for accuracy. Next, two independent raters, blind to the sex and grade of participants, segmented transcribed responses into thought (coding) units, each representing a total thought that stands on its own, be it a single word, clause or a complete sentence (Gottman, 1979; Newberry, Alexander, & Turner, 1991). These segmenting procedures were found to be highly reliable (96% inter-rater agreement), with disagreements settled with a third independent rater (also blind to sex and age of respondent).

Next, each segment was categorized into different "coding categories" by the same two independent raters. Following previous researchers (Agar, 1980; Merriam, 1998; Miles & Hubermann, 1994), the coding of children's bullying conceptions was conceptually driven, and developed a priori on the basis of previous research and theory in the area of bullying (Mynard & Joseph, 2000; Olweus, 1993; Rivers & Smith, 1994; Whitney & Smith, 1993). Coders were first asked to determine whether the three main definitional criteria for bullying that have been outlined by researchers (i.e., power imbalance, repetition, intentionality) were evident in children's spontaneously generated bullying definitions. As well, children's references to negative behavior were coded, as these figured prominently in Olweus' overarching construction of what defines bullying (1991; discussed earlier). Cohen's kappa across the four main definitional criteria was .91 and kappa values for each criterion are reported in Table 1. Coding disagreements were settled with a third independent rater (blind to sex and age of respondents).

Next, children's definitions of a bully were examined for specific behavioral features or characteristics suggested in researchers' definition. For example, according to the Whitney and Smith (1993) definition used in the present study (see also Olweus, 1993), bullying includes such behaviors as being mean to a person (*general harassing behavior*), calling people names (*verbal aggression*), spreading nasty rumors about someone or purposely excluding and isolating a person from social groups (*relational aggression*), as well as attacking someone physically (*physical aggression*). Children's definitions were coded for the presence/absence of each of these specific features. References to physical and personality characteristics of the bully and/or victim (yielding four coding categories) were also coded

**Table 1**
*Coding categories used for content analysis of students' bullying definitions*

| Category | Kappa | Examples | Direct quotes "A bully is . . ." |
|---|---|---|---|
| A. Power imbalance | .77 | bigger; older; more popular | ". . . someone older picking on somebody that is much smaller or younger than they are." |
| B. Repetition | .83 | happens all the time; always happens; | "Bullies are people who always pick on you and always make fun of you." |
| C. Intentionality | .94 | mean to do it; on purpose | "A bully hurts people on purpose." |
| D. Negative behavior | .98 | see categories 1–4 below | |
| 1. General harassing behavior | .88 | picks on; makes fun of; being mean | "A bully is a person who picks on another student." |
| 2. Verbal aggression | .92 | name calling; saying mean things to you | ". . . is a person that says not nice words"; ". . . someone who . . . says stuff to you when you walk down the halls." |
| 3. Relational aggression | .88 | spreads rumours; emotional abuse; leaves you out | ". . . a person that says to someone you can not play with us . . ."; ". . . They can also spread rumor about bad things too."; "someone who hurts someone else emotionally . . ." |
| 4. Physical aggression | .91 | hits; kicks; spits | "Someone who pushes, kicks, trips, and chocks." |
| 5. Physical characteristics of bullies | .80 | stronger; bigger; older | ". . . a person who is mean to other people and who are stronger then the other person." |
| 6. Personality characteristics of bullies | .92 | someone who is mean; has low self-esteem | ". . . someone who feels insecure about themselves so they take it out on other people . . ." |
| 7. Physical characteristics of victims | .91 | small; race/ethnicity descriptors; clothing | "A bully usually makes fun of skin color, race, the way they talk, walk, how they eat and what they eat." |
| 8. Personality characteristics of victims | .83 | low self-esteem; shy; won't stand up for themselves | ". . . someone who makes fun of those that he thinks is insecure . . ."; "A bully usually picks on those who are uncapable of sticking up for themselves." |

because of the stereotype that a bully is a big kid with low self-esteem who picks on weaker children and steals their lunch money (Vaillancourt, Hymel, & McDougall, 2003). A category "other" was included to capture themes that emerged that were not covered by the eight theoretically driven categories. It should be noted that the frequency of the "other" category was low (9% across participants) and no additional themes emerged from this category. Cohen's kappa for the eight coding categories was .96, ranging from .77 to .98 across individual categories (see Table 1). Coding disagreements were settled with a "blind" third independent rater. A total of 854 reports (approximately half of the sample) were available for coding and analysis.

In summary, children's bullying definitions were first coded for the presence/absence of references to *power imbalance*, *repetition*, *intentionality* and *negative behavior* and subsequently coded for the presence/absence of the following pre-determined categories: (1) *general harassing behavior*, (2) *verbal aggression*, (3) *relational aggression*, (4) *physical aggression*, (5) *physical characteristics of bullies*, (6) *personality characteristics of bullies*, (7) *physical characteristics of victims*, and (8) *personality characteristics of victims*.

## Results

### *To what extent do students' definitions of bullying map onto researcher definitions?*

Children's own definitions of bullying were evaluated using a series of multi-way frequency analyses (MFA), which test associations between multiple categorical variables by comparing observed and expected frequencies. Following Tabachnick and Fidell (2007), MFA was used as a non-parametric analysis of variance in which the criteria and features of bullying offered by children were conceptualized as dependent variables and sex and grade level were considered independent variables. Because our interest was not in establishing a model for each criteria and feature, we restricted our analyses to an examination of reliable variations in the particular features or criteria described by children as a function of sex and/or grade.

*Preliminary analyses.* For all analyses, we partitioned grade levels into pairs based on the organizational scheme of the schools, with 14% of participants in grades 3/4, 26% in grades 5/6, 18% in grades 7/8, 24% in grades 9/10 and 18% in grades

11/12. Not surprisingly, a preliminary chi-square analysis of the one-way association for grade was significant, $\chi^2(4, N = 854) = 43.26$, $p < .001$, indicating that there were more students in grades 5/6 and 9/10 than would be expected on the basis of chance. Given that the sample contained 49% boys and 51% girls, it was not surprising that these proportions did not deviate from what would be expected on the basis of chance. In contrast, a significant association between sex and grade, $\chi^2(4, N = 854) = 11.40$, $p = .02$, showed that, whereas the distribution for boys and girls was close to 50–50% for grades 3/4, 5/6, 7/8, and 9/10, there were fewer grade 11/12 boys (36%) and more grade 11/12 girls (64%) than would be expected on the basis of chance. Given our goal of examining variability in the presence/absence of various criteria/features as a function of Sex (boys, girls) and Grade (grades 3/4, 5/6, 7/8, 9/10, 11/12), we restrict our reports to those associations that involve a criterion or feature (one-way Feature, Feature × Sex, Feature × Grade, Feature × Sex × Grade).

*Overall criteria.* Only 1.7% of students spontaneously included the criterion of *intentionality* in their definitions of bullying. Given that a low frequency of observed responses is problematic in a chi-square analysis (producing observed and expected frequencies that are too low), *intentionality* was not included in an MFA examining associations with Sex and Grade. Almost 26% of students included the notion of *power imbalance* within their definition, but the majority did not, partial $\chi^2(1, N = 854) = 212.87$, $p < .0001$. These frequencies varied significantly as a function of grade level, partial $\chi^2(4, N = 854) = 33.45$, $p < .0001$. Approximately one-third of students in the three oldest grade subgroups (7/8, 9/10, 11/12) incorporated the concept of *power imbalance* in their definition (see Figure 1) although fewer students in grades 5/6 and 3/4 included *power imbalance* as a noteworthy part of being a bully. There was no significant two-way association involving sex and no reliable three-way interactions.

A small number of students (approximately 6%) included the criterion of *repetition* in their definitions of a bully, which was significantly lower than the proportion of students who omitted *repetition*, partial $\chi^2(1, N = 854) = 807.40$, $p < .0001$. None of the boys in grade 3/4 made reference to *repetition*. Given that even one cell with an observed frequency of 0 is problematic in chi square analyses, grade 3/4 students were dropped from analyses involving Sex and Grade. Subsequent analyses revealed no significant associations of Sex, Grade or their interaction.

Finally, the majority of students (92%) included some mention of *negative behavior* in their definition of a bully, partial $\chi^2(1, N = 854) = 688.78$, $p < .0001$. The discrepancy between those who did and did not include *negative behavior* varied by Sex, with the difference being larger for girls (94 vs. 6%) than boys (89 vs. 11%), partial $\chi^2(1, N = 854) = 7.32$, $p = .006$, suggesting that boys were less likely to refer to *negative behavior*. The proportion of students whose definitions included reference to *negative behavior* also varied across grade level, partial $\chi^2(4, N = 854) = 16.16$, $p = .003$. From grades 3/4 to 7/8, a ratio of 95% theme-present to 5% theme-absent was relatively stable (see Figure 1). In contrast, the use of *negative behavior* decreased slightly for older students in grades 9/10 and 11/12 but was nevertheless a prominent feature. There was no significant three-way association of Sex, Grade and *negative behavior*.

*Specific behavioral features and characteristics.* As can be seen in Table 2, with the exception of *personality characteristics of the bully*, fewer participants than would be expected on the basis of chance included seven of the specific behavioral features and characteristics derived from the research literature in their definitions of bullying. For six of these features, less than 25% of participants spontaneously included a given characteristic in their definition.

It is important to note, however, that the presence or absence of many of these behavioral features varied by Grade. As shown in Table 2, significant two-way associations involving Grade were observed for *general harassment*, *physical aggression*, *relational aggression*, *verbal aggression*, and *physical characteristics of victims*. A marginally significant two-way association with Grade was noted for *personality characteristics of the bully*. An examination of proportions (see Figure 2) shows a common pattern for a number of the characteristics considered. References to *general harassment*, *physical*, *relational*, and *verbal aggression* declined after grade 7/8 and increased slightly in grade 11/12. By contrast, although a very small percentage of the youngest students included reference to the *physical characteristics of the victim* in their definition, approximately 1 in 5 students in all other grades included this theme. The most complicated pattern was observed for *personality characteristics of the bully* (marginally significant). Across

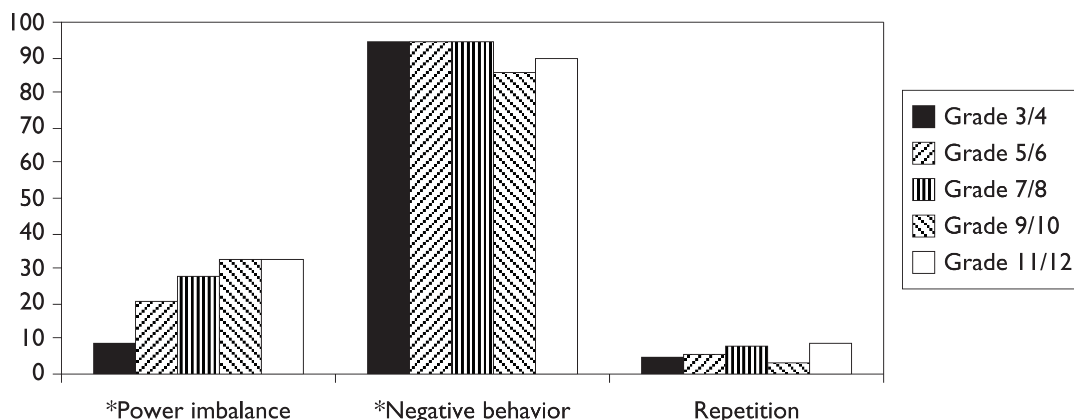


**Figure 1.** The proportion of students including researchers' bullying criteria in the definitions as a function of grade. *Note.* * denotes a statistically significant association involving Grade as reported in text.

**Table 2**
*The frequency of specific behavioral features and characteristics*

| | *Absent from definition* | *Present in definition* | *Feature partial* $\chi^2(1, N = 854)$ | *Feature × Sex partial* $\chi^2(1, N = 854)$ | *Feature × Grade – Partial* $\chi^2(4, N = 854)$ |
|---|---|---|---|---|---|
| Behavioral features and characteristics | % | % | | | |
| General harassment | 53.4 | 46.6 | 3.94 $p = .047$ | *ns* | 49.16 $p < .0001$ |
| Physical aggression | 75.7 | 24.3 | 249.53 $p < .0001$ | *ns* | 44.22 $p < .0001$ |
| Relational aggression | 87.4 | 12.6 | 524.02 $p < .0001$ | 15.47 $p < .0001$ | 16.83 $p = .002$ |
| Verbal aggression | 84.2 | 15.8 | 421.89 $p < .0001$ | 3.98 $p = .046$ | 45.03 $p < .0001$ |
| Physical characteristics of bully | 95.6 | 4.4 | 898.07 $p < .0001$ | *ns* | *ns* |
| Personality characteristics of bully | 48.2 | 51.8 | *ns* | 12.00 $p = .0005$ | 8.96 $p = .062$ |
| Physical characteristics of victim | 82.1 | 17.9 | 362.96 $p < .0001$ | 8.75 $p = .003$ | 25.91 $p < .0001$ |
| Personality characteristics of victim | 94.7 | 5.3 | 814.29 $p < .0001$ | 3.74 $p = .053$ | *ns* |

*ns*, not statistically significant.

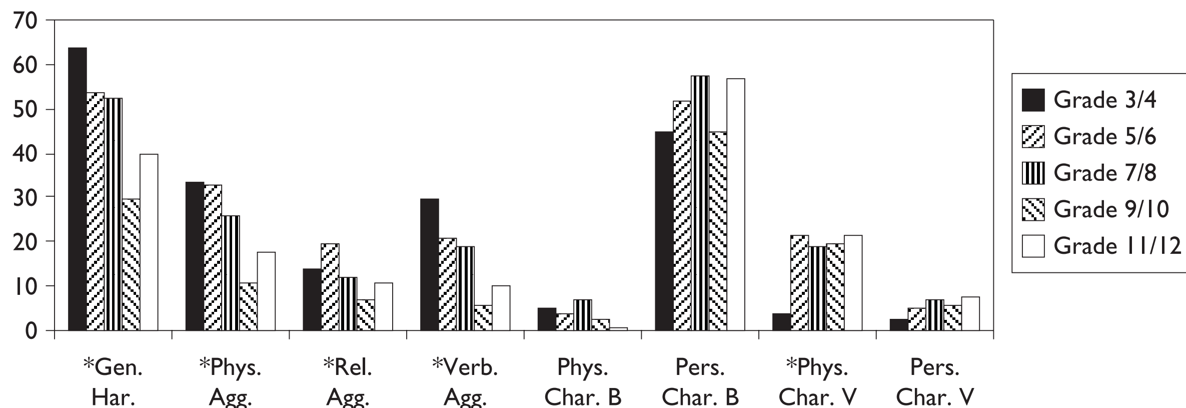


**Figure 2.** The proportion of students including specific behavioral features in their definitions as a function of grade. *Note*. * denotes a statistically significant two-way association involving Grade reported in Table 2.

all students, there was roughly an even split between those who did and did not talk about *personality characteristics of the bully*. Students in the older grade levels (7/8, 11/12), however, were more likely to define bullying with reference to *personality characteristics*. In the other grades (3/4, 9/10), reference to *personality characteristics* were less common.

Four significant two-way associations involving Sex of Respondent were observed (Table 2 and Figure 3), including relational aggression, verbal aggression, personality characteristics of the bully, and physical characteristics of the victim. The presence/absence of one other feature, personality characteristics of the victim, was marginally associated with Sex. Reference to acts of relational and verbal aggression, personality characteristics of the bully and the physical characteristics of the victim were more common for girls than boys. Finally, girls, but not boys, tended to include personality characteristics of the victim in their definitions. No significant three-way associations were observed for any of the behavioral features.

## *Does providing a definition of bullying lead to differences in self-reported experience?*

On the 5-point frequency scale student reports of being bullied weekly were fairly infrequent ($M = 0.050$, $SD = 1.04$) as were the reports of bullying others weekly ($M = 0.40$, $SD = 0.87$). Overall, 24% of students reported *being bullied* at least once each week. Among these students, 11% reported experiencing one bullying episode, 5% were bullied twice, 4% were bullied three or four times, and 4% were bullied five or more times each week. Overall, 20% of students reported *bullying others* each week. Specifically, 11% of students reporting bullying others once each week, 4% bullied others twice, 2% bullied

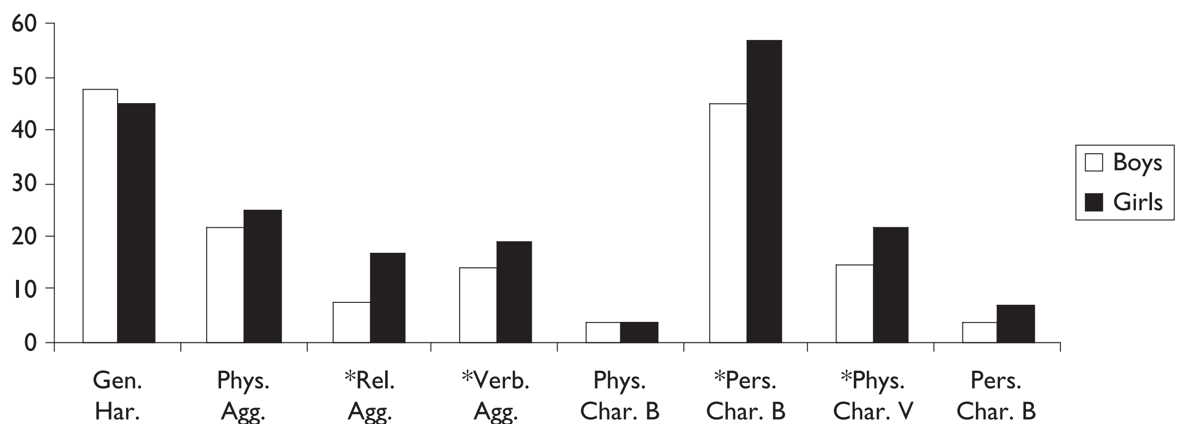


**Figure 3.** The proportion of students including specific behavioral features in their definitions as a function of sex. *Note.* * denotes a statistically significant association involving Sex as reported in text.

others three or four times, and 3% bullied other students five or more times in a one-week period.

To examine whether self-reports of "being bullied" and "bullying others" varied as a function of the sex and grade of the respondent as well as the manipulation of a bullying definition (present or absent in the questionnaire), a series of 2 (Sex) × 5 (Grade: 3/4, 5/6, 7/8, 9/10, 11/12) × 2 (Definition present/absent) analyses of variance were conducted, with reported weekly rates of victimization and bullying serving as dependent measures.

*Self-reports of victimization.* Results of the ANOVA for reported victimization revealed significant main effects for Sex, $F(1,1686) = 5.71$, $p = .017$, Grade, $F(4,1686) = 30.46$, $p < .0001$, and Definition, $F(1,1686) = 3.94$, $p = .047$, with no significant two- or three-way interactions. An inspection of the means (see Table 3) revealed that boys reported greater weekly victimization than girls, and that students who were first given a definition of bullying reported less victimization as compared with students who provided their own definition before responding to self-report questions about their experience. A Tukey post-hoc test showed that students in grade 3/4 reported the highest frequency of victimization, followed by grade 5/6 students, then students in grades 7/8, and 9/10, who did not differ from each other. The oldest students (grade 11/12) reported the lowest rates of weekly victimization.

*Self-reports of bullying.* Results of the ANOVA involving reports of bullying others on a weekly basis showed a significant main effect for Sex, $F(1,1686) = 37.14$, $p < .0001$, as well as a marginally significant main effect for Definition, $F(1,1686) = 3.14$, $p = .077$ and a marginally significant interaction, Sex × Definition, $F(1,1686) = 3.68$, $p = .055$. No other main effects or interactions were significant. In general, boys reported bullying others more frequently each week as compared with girls, and students presented with a definition tended to report higher rates of bullying than students who were not given a definition. These overall differences were qualified by the marginal interaction of Sex and Definition. For girls, the presence or absence of a definition did not appear to influence self-reports of bullying others, $t(864) = .43$, $p =$ *ns*. In contrast, boys who saw a definition reported bullying others more frequently ($M = 0.59$, $SD = 1.11$) as compared with boys who did not see definition ($M = 0.41$, $SD = 0.95$), $t(794) = -2.43$, $p = .015$.

## Discussion

The main objectives of this study were to examine: (1) how well children's conceptions of bullying map onto those endorsed in the research literature; (2) the themes that emerge from children's spontaneous definitions of a bully across a wide age range (8–18 years); and (3) whether the provision of a definition of bullying would lead to differences in self-reported

**Table 3**
*Variations in reports of being bullied and bullying others on a weekly basis*

| | *Sex* | | *Definition* | | *Grade* | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Boys* | *Girls* | *Present* | *Absent* | *3/4* | *5/6* | *7/8* | *9/10* | *11/12* |
| Being bullied | | | | | | | | | |
| *M* | .56 | .42* | .43 | .54* | $.97_a$ | $.68_b$ | $.44_c$ | $.34_c$ | $.14_d$*** |
| *SD* | 1.14 | .93 | 1.00 | 1.07 | 1.34 | 1.14 | .96 | .93 | .56 |
| Bullying others | | | | | | | | | |
| *M* | .50 | .23*** | .40 | .32† | .31 | .32 | .36 | .43 | .34 |
| *SD* | 1.03 | .65 | .92 | .83 | .79 | .79 | .83 | .98 | .87 |

***$p < .001$; *$p < .05$; †$p < .10$; for post-hoc involving Grade. Means not sharing subscripts differ at $p < .05$.

rates of bullying and victimization. The results supported most of our initial hypotheses.

With regard to the overlap between student and research definitions of a bully/bullying, we found that the three main criteria articulated by researchers as being integral to the construct and operational definition of bullying were rarely mentioned in children's definitions. Indeed, only 1.7% of children spontaneously mentioned intentionality in their bullying definition, and repetition was mentioned by fewer than 6% of students. The notion of power imbalance figured more prominently in children's definitions, but was only mentioned spontaneously by 26% of students, with older students incorporating this concept into their definitions of a bully more often than younger students. Thus, although researchers emphasize these criteria in distinguishing bullying from other forms of aggression, students who represent one of the primary sources of information in bullying research do not, underscoring the need for researchers to clearly spell out criteria and assumptions about what is being measured when soliciting information from students.

In terms of the content of student definitions of a bully, the vast majority of students in the present study (92%) did include reference to negative (aggressive) behaviors. This was particularly true for boys and younger children and may simply reflect children's lived experiences. Ample evidence shows that younger children report being bullied more than older children (Boulton & Underwood, 1992; Rigby, 1999; Rivers & Smith, 1994; Roland, 1989; Smith et al., 1999; Solberg & Olweus, 2003; Whitney & Smith, 1993) and that boys are bullied more often than girls (Austin & Joseph, 1996; Boulton & Underwood, 1992; Kumpulainen et al., 1998; Rigby, 2000; Rigby & Slee, 1999; Roland, 2002; Solberg & Olweus, 2003).

How do children characterize bullies? When we examined the specific themes emerging from children's definitions of a bully, we found that general harassment appeared in almost half of the definitions, with nearly one in every four students including reference to physical aggression and a smaller number of students (13–16%) including reference to relational and verbal aggression. More than half of the sample (51.8%) referred to personality characteristics of the bully, owing perhaps to task demands. Indeed, in this study, children were asked to define "a bully" not "bullying." This choice of wording was purposeful because, although humans are extremely efficient at categorization, we have more difficulty describing the necessary and sufficient conditions for category membership. Said differently, people have an easier time describing people than phenomena. Thus, asking students to describe what "a bully is" was considered easier than asking them to describe "bullying," ensuring that the task was relatively simple, even for younger participants. Nevertheless, almost all of students described "a bully" in terms of their *behavior*.

With regard to the type of negative (aggressive) behavior emphasized in children's definitions of a bully, results confirmed hypotheses that younger children, in comparison with older children, made more mention of physical aggression in their definitions of bullying (e.g., 33% of grade 3/4 students as compared with 11% of grade 9/10 students) and that, in general, the themes of general harassing behavior and physical, verbal, and relational aggression tended to decrease with age. Also consistent with hypotheses, reference to relational aggression was most prominent in the middle years, with more grade 5/6 students (20%) mentioning relational aggression than students in other grade levels. Consistent with evidence that physical aggression generally decreases with age (see Tremblay & Côté, 2005; Tremblay & Nagin, 2005, for reviews), older children were less likely to include reference to physical aggression.

The observed age differences in children's bullying definitions may be due to some unknown factor that is influencing their responses such as motivation, achievement or verbosity. However, it is also likely that the age differences reflect developmental changes in children's understanding of bullying behavior. Cross-cultural research by Smith et al. (2002) has shown that children's interpretations of the words used to describe "bullying" become more differentiated with age. These authors found that 8-year-olds distinguished aggressive and nonaggressive interactions, but did not always distinguish different forms of aggression, whereas 14-year-olds were able to distinguish not only aggressive from non-aggressive interactions, but also physical aggression, physical bullying, verbal harassment, and social exclusion. Similarly, children in the present study demonstrated more differentiated conceptions of bullying with age. Observed sex differences were also consistent with predictions, with more girls mentioning relational aggression than boys. Taken together, these findings suggest that children's bullying definitions likely reflect their personal experiences with aggression and the form of aggression that is most salient to them as a function of both sex and age.

A final aim of the present study was to examine the effects of providing a definition of bullying on reported prevalence rates. Results demonstrated that students who were given a definition reported being victimized less than students not provided with a definition. By contrast, for boys, but not girls, students who were given a definition tended to report bullying others more than boys who were not provided with a definition. These findings raise methodological questions regarding the common practice of providing children with a definition of bullying when examining student reports of its prevalence. Although the accurate quantification of occurrences (incidence) and frequencies (prevalence) of disease in the general population is an important tenet of epidemiological research (McMahon & Trichopoulos, 1996), the same cannot be said for psychological or educational research. In fact, Solberg and Olweus (2003, p. 240) argue that "poor adherence to the basic meaning of the concept of prevalence" in the bullying literature has contributed to large variability in its estimate. Given that accurate prevalence rates are critical for planning treatment and for prevention, further research is needed to determine whether variations in reported prevalence as a function of methodological issues such as provision of a definition of bullying are associated with differential accuracy. Given that bullying behavior is often a matter of interpretation, this becomes particularly challenging.

In attempting to understand why these different methodological approaches yield somewhat different data on victimization and, to a lesser extent, bullying in childhood and adolescent populations, we consider two well-established psychological constructs: "belonging as a basic human need" (Baumeister & Leary, 1995), and the "fundamental attribution error" (Ross, 1977). First, according to Baumeister and Leary (1995), the need to belong is a fundamental human motivation. As humans, we spend much of our time preoccupied about our interactions with others, and much of our energy directed toward forming and maintaining positive social ties.

This type of vigilance about social relations is described as a human's "sociometer" which closely monitors and attends to the reactions of others (Leary, 2001). Some individuals have been found to be "highly sensitive to indications of disinterest, disapproval, and disassociation" (Leary, 2001, p. 4; see also Baumeister & Leary, 1995). With regard to student reports of bullying and victimization, such over-concern or hyper-vigilance would be expected to translate into higher perceptions of peer victimization, especially when reports are not guided by a specific definition of what constitutes bullying, because *any* difficult interpersonal interaction would be highly salient and readily included into one's working definition of "being bullied." A clear definition of bullying, by contrast, should challenge this type of over-inclusive schema and lead to more conservative estimates of peer abuse. Our findings, indicating lower reported rates of victimization when students began with a definition than when they did not, are consistent with these arguments.

By contrast, when reporting one's own abuse of others (i.e., reported bullying), the opposite pattern might be expected, owing in part to what social psychologists refer to as the "fundamental attribution error" (Ross, 1977), or the tendency toward negative biases in interpreting the *behaviors of others*, while holding positive biases about one's *own behaviors*. Specifically, the behaviors of others are more often presumed to reflect the inherent personality characteristics (e.g., "She acts mean because she is mean"), whereas one's own behavior is more often presumed to be reflective of the situation (e.g., "I acted mean because I was tired"). When students are not provided with a definition of bullying, these general biases should translate into a narrow or under-inclusive thinking about what constitutes one's own bullying of others, ultimately leading to lower self-reports of bullying behavior. In the present study, boys who were given a definition of bullying tended to report higher levels of bullying than those not given a definition, although this effect was marginal and not found for girls. Future research is needed to understand why girls might be less affected by this tendency than boys.

The current study raises important measurement questions regarding the assessment of bullying among school-aged children. Interestingly, children and youth's definition of bullying differed from that of researchers' with respect to salient features. Whereas researchers typically emphasize repetition, power imbalance and intentionality in their definitions, students tended to focus primarily on negative actions and rarely mentioned these three definitional criteria. Using an experimental design we also found that the provision (or not) of a definition was related to students' self-reports of peer victimization and to a lesser extent bullying behavior. Providing a definition of bullying likely increases precision in measurement by making it clear what is being measured. By contrast, when no definition is provided, students' responses are based on their personal understanding of bullying and researchers cannot be sure just what participants report on. In light of the present results, it is no longer tenable to assume that students' spontaneous definition is in keeping with that purported by the research field. As stated at the outset of this article, a clear definition of the phenomenon under study is critical for establishing validity. This point holds true not only for self-reports, but also for peer, teacher and parent reports. Research by Smith et al. (2002) demonstrates that there are significant cultural differences regarding the meaning of bullying (e.g., Japan vs. Italy). Perhaps we have not fully appreciated that, even within a specific cultural reference group like Canada, variability is also introduced when the term bullying is not clarified a priori.

## References


Agar, M.H. (1980). *The professional stranger: An informal introduction to ethnography*. New York: Academic Press.

Arora, C.M.J. (1996). Defining bullying: Towards a clearer general understanding and more effective intervention strategies. *School Psychology International*, *17*, 317–329.

Arora, C.M.J., & Thompson, D.A. (1987). Defining bullying for a secondary school. *Educational & Child Psychology*, *4*, 110–120.

Austin, S., & Joseph, S. (1996). Assessment of bully/victim problems in 8 to 11 year-olds. *British Journal of Educational Psychology*, *66*, 447–456.

Barenboim, C. (1981). The development of person perception in childhood and adolescence: From behavioral comparisons to psychological constructs to psychological comparisons. *Child Development*, *52*, 129–144.

Baumeister, R.F., & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529.

Bernt, T.J. (1981). Relations between social cognition, nonsocial cognition and social behavior: The case of friendship. In J.H. Flavell & L. Ross (Eds.), *Social cognitive development: Frontiers and possible futures* (pp. 176–199). Cambridge, UK: Cambridge University Press.

Bigelow, B.J. (1977). Children's friendship expectations: A cognitive–developmental study. *Child Development*, *48*, 246–253.

Bigelow, B.J., & LaGaipa, J.J. (1975). Children's written descriptions of friendship: A multidimensional analysis. *Developmental Psychology*, *11*, 857–858.

Bjorkqvist, K., Lagerspetz, K., & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior*, *18*, 117–127.

Boulton, M.J., Trueman, M., & Flemington, I. (2002). Associations between secondary school pupils' definitions of bullying, attitudes towards bullying, and tendencies to engage in bullying: Age and sex differences. *Educational Studies*, *28*, 353–370.

Boulton, M.J., & Underwood, K. (1992). Bully/victim problems among middle school children. *British Journal of Educational Psychology*, *62*, 73–87.

Crick, N.R., & Grotpeter, J.K. (1995). Relational aggression, gender and social–psychological adjustment. *Child Development*, *66*, 710–722.

Dickens, C. (1966). *The adventures of Oliver Twist*. London: Oxford University Press (original work published 1839).

Gottman, J.M. (1979). Detecting cyclicity in social interaction. *Psychological Bulletin*, *86*, 338–348.

Hughes, T. (1892). *Tom Brown's School Days* (6th ed.). London: Macmillan (original work published 1857).

Jiang, X.L., & Cillessen, A.H.N. (2005). Stability of continuous measures of sociometric status: A meta-analysis. *Developmental Review*, *25*, 1–25.

Kumpulainen, K., Rasanen, E., Henttonen, I., Almqvist, F., Linna, S.-L., Moilanen, I., Piha, J., Puura, K., & Tamminen, T. (1998). Bullying and psychiatric symptoms among elementary school aged children. *Child Abuse & Neglect*, *22*, 705–717.

Lagerspetz, K.M.J., Bjorkqvist, K., & Peltonen, T. (1988). Is indirect aggression typical of females? Gender differences in aggressiveness in 11 to 12-year-old children. *Aggressive Behavior*, *14*, 403–414.

Land, D. (2003). Teasing apart secondary students' conceptualizations of peer teasing, bullying and sexual harassment. *School Psychology International*, *24*, 147–165.

Leary, M. (2001). Toward a conceptualization of interpersonal rejection. In M. Leary (Ed.), *Interpersonal rejection* (pp. 3–20). New York: Oxford University Press.

Livesley, W.J., & Bromley, D.B. (1973). *Person perception in childhood and adolescence*. New York: Wiley.

McMahon, B., & Trichopoulos, D. (1996). *Epidemiology principles and methods* (2nd ed.). New York: Little, Brown.

Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.

Miles, M.B., & Hubermann, A.M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: SAGE.

Morita, Y. (Ed.) (1985). *Ijime shuudann no kouzou ni kannsuru shakaigakuteki kennkyuu* [Sociological study on the structure of ijime/bullying group]. Osaka, Japan: Osaka City University.

Morita, Y., & Kiyonaga, K. (1994). *Ijime: Kyoushitsu no yamai* [Ijime/bullying: Ailing classrooms]. Tokyo: Kaneko Shobou.

Morita, Y., Soeda, H., Soeda, K., & Taki, M. (1999). Japan. In P.K. Smith, Y. Morita, J. Junger-Tas, D. Olweus, R. Catalano, & P. Slee (Eds.), *The nature of school bullying: A cross-national perspective* (pp. 309–323). London: Routledge.

Mynard, H., & Joseph, S. (2000). Development of the multidimensional peer–victimization scale. *Aggressive Behavior*, *26*, 169–178.

Newberry, A.M., Alexander, J.F., & Turner, C.W. (1991). Gender as a process variable in family therapy. *Journal of Family Psychology*, *5*, 158–175.

Olweus, D. (1978). *Aggression in the schools: Bullies and whipping boys*. London: Hemisphere.

Olweus, D. (1986). *Mobbing*. Stockholm: Liber [in Swedish].

Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. In D.J. Pepler & K.H. Rubin (Eds.), *The development and treatment of aggression* (pp. 411–448). Hillsdale, NJ: Erlbaum.

Olweus, D. (1993). *Bullying at school*. Cambridge, UK: Blackwell.

Olweus, D. (1996). Bullying at school: Knowledge base and an effective intervention program. In C.F. Ferris & T. Grisso (Eds.), Understanding aggressive behaviour in children. *Annals of the New York Academy of Sciences*, *794*, 265–276.

Olweus, D. (1999a). Norway. In P.K. Smith, Y. Morita, J. Junger-Tas, D. Olweus, R. Catalano, & P. Slee (Eds.), *The nature of school bullying: A cross-national perspective* (pp. 28–48). London: Routledge.

Olweus, D. (1999b). Sweden. In P.K. Smith, Y. Morita, J. Junger-Tas, D. Olweus, R. Catalano, & P. Slee (Eds.), *The nature of school bullying: A cross-national perspective* (pp. 7–27). London: Routledge.

Peevers, B.H., & Secord, P.E. (1973). Developmental changes in attribution of descriptive concepts to persons. *Journal of Personality and Social Psychology*, *56*, 354–363.

Randall, P. (1996). *A community approach to bullying*. Stoke-on-Trent, UK: Trentham Books.

Rigby, K. (1999). Peer victimization at school and the health of secondary students. *British Journal of Educational Psychology*, *69*, 95–104.

Rigby, K. (2000). Effects of peer victimization in schools and perceived social support on adolescent well-being. *Journal of Adolescence*, *23*, 57–68.

Rigby, K., & Slee, P. (1999). Suicidal ideation among adolescent school children, involvement in bully–victim problems and perceived social support. *Suicide and Life-Threatening Behavior*, *29*, 119–130.

Rivers, I., & Smith, P.K. (1994). Types of bullying behavior and their correlates. *Aggressive Behavior*, *20*, 359–368.

Roland, E. (1989). Bullying: The Scandinavian research tradition. In D.P. Tattum & D.A. Lane (Eds.), *Bullying in schools* (pp. 21–32). Stoke-on-Trent, UK: Trentham Books.

Roland, E. (2002). Aggression, depression, and bullying others. *Aggressive Behavior*, *28*, 198–206.

Ross, L. (1977). The intuitive psychologist and his shortcomings. *Advances in Experimental Social Psychology*, *10*, 174–220.

Smith, P.K., Cowie, H., Olafsson, R.F., Liefooghe, A.P.D., Almeida, A., Araki, H., et al. (2002). Definitions of bullying: A comparison of terms used, and age and gender differences, in a fourteen-country international comparison. *Child Development*, *73*, 1119–1133.

Smith, P.K., & Levan, S. (1995). Perceptions and experiences of bullying in younger pupils. *British Journal of Educational Psychology*, *65*, 489–500.

Smith, P.K., Madsen, K.C., & Moody, J.C. (1999). What causes the age decline in reports of being bullied at school? Towards a developmental analysis of risks of being bullied. *Educational Research*, *41*, 267–285.

Solberg, M.E., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior*, *29*, 239–268.

Tabachnick, B.G., & Fidell, L.S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education.

Tesch, S.A., & Martin, R.R. (1983). Friendship concepts of young adults in two age groups. *The Journal of Psychology*, *115*, 7–12.

Tremblay, R.E., & Côté, S. (2005). The developmental origins of aggression: Where are we going? In R.E. Tremblay, W.W. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp. 447–464). New York: Guilford Press.

Tremblay, R.E., & Nagin, D.S. (2005). The developmental origins of physical aggression in humans. In R.E. Tremblay, W.W. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp. 83–106). New York: Guilford Press.

Vaillancourt, T. (2005). Indirect aggression among humans: Social construct or evolutionary adaptation? In R.E. Tremblay, W.H. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp. 158–177). New York: Guilford Press.

Vaillancourt, T., Hymel, S., & McDougall, P. (2003). Bullying is power: Implications for school-based intervention strategies. *Journal of Applied School Psychology*, *19*, 157–176.

Weiss, M.R., Smith, A.L., & Theeboom, M. (1996). "That's what friends are for": Children's and teenagers' perceptions of peer relationships in the sport domain. *Journal of Sport & Exercise Psychology*, *18*, 347–379.

Whitney, I., & Smith, P.K. (1993). A survey of the nature and extent of bullying in junior/middle and secondary schools. *Educational Research*, *35*, 3–25.

Zarbatany, L., Ghesquiere, K., & Mohr, K. (1992). A context perspective on early adolescents' friendship expectations. *Journal of Early Adolescence*, *12*, 111–126.