

## A Cross-National Perspective on Bullying

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Published online: 11 April 2009  
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**Abstract** Despite international recognition, few comparison studies examining bullying have been conducted due to methodological differences. Within the US, bullying studies are often conducted in isolation and no consistent prevalence rates have been established (Griffin and Gross in *Aggress Violent Behav* 9:379–400, 2004). The purpose of this study was to address some of the gaps in the literature, including conducting a direct comparison between American children and children in another English-speaking country (UK). Few differences between countries or sexes were found, which was contrary to previous studies. Our results were described as an initial step in cross-national comparisons and program implications were also illustrated.

**Keywords** Bullying · Peer-victimization · Cross-national · Comparison · Aggression

### Introduction

Prior to the late 1960's, investigators paid little attention to the phenomenon of *bullying*, or *peer-victimization*. Research in the area began with Olweus' work in Scandinavia, when he found that bullying affected approximately 15% of all students in Norway and Sweden, with approximately 9% of students reporting that they were victims of bullying

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and approximately 7% reporting that they bullied others (Olweus 1978, 1999a). The extent of bullying problems revealed in these initial studies sparked international research into the phenomenon. Large scale studies in non-Scandinavian countries revealed varying prevalence rates, including 42% of Italian elementary school students (Fonzi et al. 1999), 27% of British elementary school students (Whitney and Smith 1993), and 21.9% of Japanese elementary school students reported being victims of bullying. Prevalence estimates of children who bullied others varied in these studies as well, including 28% of Italian primary school students, 12% of British primary school students, and 52% of Japanese elementary school students reported bullying others. Despite decades of international research, bullying is a relatively new concept to the North American literature. A review of the research suggests a lack of consensus on the prevalence of bullying in the US. Figures vary widely dependent upon the definition used, methodology, and the applicable time frame (between 5 and 90% of students reporting they were victims of bullying; see Griffin and Gross 2004); although, some studies have suggested that the US has the highest reported prevalence for bullying in the world (e.g., Berthold and Hoover 2000; Hoover et al. 1993). Additionally, bullying tends to be subsumed under broader issues of school violence or aggression in the American literature and little attention is directed toward collecting sound data regarding the specific characteristics of bullying in America.

One issue that may contribute to the disparity in reported prevalence rates of bullying across studies is the difference in the types of behaviors being studied. Cross-culturally, researchers have identified two broad dimensions of aggressive behaviors: direct and indirect (Smith et al. 2002). *Direct* aggression is comprised of physically aggressive behaviors (e.g., hitting, kicking, pushing) and verbally aggressive behaviors (e.g., name-calling, taunting) directed at another individual. *Indirect* behaviors are characterized by third party involvement, in which the behaviors are more covert (e.g., gossiping, spreading rumors, excluding from a group; Björkqvist et al. 1992). Indirect forms of aggression have also been referred to as ‘social aggression’ or ‘relational bullying’ because the behaviors are focused primarily on harming interpersonal, peer relationships, and can affect acceptance in specific friend groups (Crick et al. 1999; Galen and Underwood 1997). Where bullying may differ from general aggression is related to an existing imbalance of power, either real or imagined, that the aggressive acts are intentional, and that they occur repeatedly (Horne et al. 2007; Olweus 1993). Indeed, bullying may be considered a subset of general aggression but the behaviors involved are relatively similar. Early bullying research focused primarily on direct behaviors, physical and verbal (Olweus 1978), and may have underestimated the severity of indirect behaviors (Smith et al. 2002). More recently, bullying studies have incorporated the assessment of indirect, as well as direct, aggressive behaviors and some broad conclusions have been made. For example, the notion that boys are more likely than girls to be bullies overall and that girls typically only aggress in an indirect/relational manner has been traditionally accepted among bullying and aggression researchers (see Salmivalli and Kaukiainen 2004). Despite these generalizations, empirical investigations into the relationship between type of behavior and constructs such as gender have been less than compelling. Although studies assessing direct victimization have shown that boys are typically identified as bullies (e.g., Olweus 1993), some researchers found that sex differences washed out when indirect aggression was assessed (see Bernstein and Watson 1997; Craig 1998; Underwood 2002).

Some findings that were relatively consistent across studies included the identification of different profiles of children involved in bullying. For example, passive victims are

the most common type of victim across bullying studies, although specific percentages vary by definition and methodology used (Austin and Joseph 1996; Griffin and Gross 2004; Hoover et al. 1993; Olweus 1978). Passive victims exhibit an anxious, insecure, withdrawn, and cautious profile (Carney and Merrell 2001; Olweus 1978). They tend to be rejected by peers, may be described as lonely, sensitive, possessing a low self-esteem, and may be at greater risk for internalizing disorders, such as anxiety and depression (Griffin and Gross 2004; Olweus 1993). Also identified as victims, a group of highly aggressive children display a different personality and behavior pattern from passive victims. “Provocative victims” typically comprise a small percentage of victims, but are repeatedly represented in the bullying literature (Olweus 1978, p. 138; Salmivalli and Nieminen 2002). These victims are chronically rejected and victimized by almost all of their peers, not just bullies (Carney and Merrell 2001). Furthermore, provocative victims tend to engage in high amounts of aggression towards others and appear to provoke some attacks (see Bernstein and Watson 1997), thereby are also categorized as bullies. In contrast to provocative victims, children identified as passive victims rarely aggress against other children, including bullies. If they do become aggressive, it generally is in response to chronic victimization, and appears reactive in nature (Salmivalli and Nieminen 2002). Olweus (1993) found that approximately 1.6% of children in his Norwegian sample were classified as provocative victims. Other figures vary, depending upon the definition for bullying and methodology, but generally the proportion of provocative victims was significantly lower than passive victims and this has limited other conclusions that can be drawn about this group of youngsters (Griffin and Gross 2004). As a highly rejected group, Griffin and Gross (2004) reported that provocative victims “may be at greater risk for more severe psychological and social difficulties than other victims” (Griffin and Gross 2004, p. 387).

At this point, direct comparisons incorporating the same methodology and definition of bullying are needed in order to determine the prevalence of bullying in the US as compared to other countries, as well as to decipher related trends such as sex-specific findings. Thus, the purpose of the current study was to begin to address some of these gaps in the literature. Specifically, we conducted a direct, cross-national comparison of bullying and victimization behaviors of children in the US and the UK that incorporated a consistent definition of both direct and indirect behaviors, across sexes and cultures. The UK was targeted as a comparison country given the lack of major language differences, relatively stable prevalence rates as found in the only major replication of Olweus’ initial Scandinavian anti-bullying campaign to date (Whitney and Smith 1993), and because the prevalence rates were more medial compared to other national studies in which bullying was studied (described earlier). For the current study, we hypothesized that more American children than English children would be classified as bullies and victims based on estimates in the literature suggesting that American prevalence rates may far exceed other national estimates. Additionally, we hypothesized that boys would be more likely than girls to be involved in bullying overall, as bullies and victims. We explored provocative victim status by country and sex, given the lack of consistent data in the literature on this group of children. Additionally, we hypothesized that boys would be more likely than girls to report being victims of all forms of direct bullying behaviors (i.e., physical, verbal, attacks on personal property); whereas, girls would be more likely than boys to report being victims of indirect bullying behaviors such as relational victimization. Type of victimization was also explored by country, although no specific hypotheses were made.

## Methods

Data for the current study were collected as part of a larger examination of a bullying intervention program conducted in elementary schools in the US and the UK. Institutional review board approval was obtained prior to the start of the study. The baseline assessment was conducted in the American schools in November, 2004 and in the English schools in April, 2005.

### Participants

Participants were 194 elementary schoolchildren, aged 9–11 years with a mean age of 9.58 years ( $SD = 0.54$ ). There were 88 American students from two separate schools (Schools A and B) and 106 English students from three separate schools (Schools C, D, and E) who participated in the study. Participants' families socioeconomic (SES) status was not assessed, given that data were children's self-report. Additionally, participating schools were primarily those institutions whose administrators were willing to allow their student body to participate in research. However, a review of school and/or district/borough economic reports revealed that participating schools represented a range of socioeconomic circumstances. Specifically, approximately 86% of the student body of School A (American) were considered 'economically disadvantaged' according to the definition by the US Census Bureau (i.e., household income near or below the poverty line; United States Census Bureau 2009) and the school was located in a predominantly urban, low socioeconomic area, while approximately 43% of the student body of School B (American) could be considered 'economically disadvantaged' and the school was located in a rural and suburban locale. Upon examination of District Council reports for the three English schools, each were located in relatively distinct boroughs, such that School C (English) was a private Catholic school located in a historical village and the district ranked 315 out of 354 for the "least deprived districts in the UK (p. 15)" (Stratford-on-Avon District Council 2007). Schools D and E (English) were comparable to the other participating American schools such that School D featured in the 30% most economically disadvantaged area in the UK, with 13.5–19.6% of households earning below the lowest income bracket (i.e., approximately \$19,000 US) and School E was located a borough where only 7.4–9.4% of households earned below the lowest income bracket (Research Unit, Warwickshire County Council 2004).

Of the total sample, approximately equal numbers of boys ( $n = 91$ ) and girls ( $n = 92$ ) were assessed. Eleven students did not indicate their sex. Additionally, 133 participants described themselves White, non-Hispanic (68.6%), 10 as Asian (5.2%), 8 as African American (4.1%), 3 as Hispanic (1.5%), and 20 described themselves as other (10.3%). Twenty students did not indicate their ethnicity. Exclusion criteria for the current study included only those children who were identified by classroom teachers as unable to complete the assessments (e.g., developmentally disabled). Only one recruited child did not participate in the assessment because his parents requested that he not be involved in the study.

### Measures

*Definition.* With regard to non-victimized bullies, Olweus was the first researcher to examine the development of bully profiles, and he described them as having an "aggressive-reaction pattern" (Olweus 1999b, p. 18). His theory combines several factors, including the emotional responsiveness, attitude toward aggression, and means of

discipline by the primary caregivers, as well as the temperament of the child. Also, Olweus' definition of a bully includes the distinction between direct and indirect bullying behaviors, that a power imbalance exists (either physical, social, or otherwise), and the distinction between bullying versus two children getting into a fight or argument. In order to increase the comparability of the current study, a single definition for bullying was provided to all participants in both American and English schools. Because Olweus' definition for bullying was most widely researched, it was provided to participants both orally and in writing. The Olweus (1999b) revised definition for bullying was provided as follows:

We say a student is being bullied when another student, or a group of students, say nasty and unpleasant things to him or her. It is also bullying when a student is hit, kicked, threatened, locked inside a room, and things like that. These things may take place frequently and it is difficult for the student being bullied to defend himself or herself. It is also bullying when a student is teased repeatedly in a negative way. But it is *not* bullying when two students of about the same strength quarrel or fight (p. 31). Participants were asked if they had questions about the definition prior to completing the assessments and to the definition when responding to the assessment measures. In the American sample, on two occasions students asked the assessors what "quarreling" meant, and the assessors defined the word as "fighting".

*Demographic Questionnaire.* A demographic questionnaire was administered that assessed for age, ethnicity, and sex.

*Bullying-Behaviour Scale.* The Bullying-Behaviour Scale (BBS; Austin and Joseph 1996) is a six-item, self-report questionnaire used to identify children who are perpetrators of bullying others. The measure consists of forced-choice items. Half of the items refer to perpetrating overt bullying behaviors (e.g., hitting others, pushing others) and the remaining 3-items refer to perpetrating indirect bullying behaviors (e.g., calling names, laughing at others). The items consist of opposing statements along which students rate themselves (e.g., some children hit others versus other children do not hit others). Scores range from 1 (*really true for me*, indicating oneself as a child who does not bully) to 4 (*really true for me*, indicating oneself as a child who bullies), where higher scores are associated with higher levels of bullying behaviors. In order to examine psychometric properties, Austin and Joseph (1996) examined 425 children, aged 8–11 years, from five different elementary schools in Great Britain. Internal consistency was acceptable (Cronbach's  $\alpha = .82$ ). Austin and Joseph (1996) suggested a modest, mean cut-off score of 2.5 to classify children as bullies or non-bullies. Cronbach's  $\alpha$  for the current study was .79.

*Peer-Victimisation Scale.* The Peer-Victimisation Scale (PVS; Neary and Joseph 1994) is a six-item, self-report questionnaire used to identify children who are victims of bullying. The measure consists of forced-choice items, where half of the items refer to being the victim of overt bullying behaviors (e.g., being hit or pushed). The remaining 3-items refer to being the victim of indirect bullying (e.g., being called names, being laughed at). The items consist of opposing statements along which students rate themselves (e.g., some children are teased by others versus other children are not teased by others). Scores range from 1 (*really true for me*, indicating oneself as a non-victim) to 4 (*really true for me*, indicating oneself as a victim), where higher scores are associated with higher levels of victimization. Neary and Joseph (1994) first assessed the psychometric properties of the instrument in a sample of 60 female, Irish students, aged 10–12 years. Students were also asked to nominate their classroom peers whom they felt were victims of bullying. They found that students who were self- and peer-nominated as victims scored significantly

higher than non-victims on the PVS ( $p < .001$ ). Internal consistency was acceptable (Cronbach's alpha = .83). In a replication study, Callaghan and Joseph (1995) assessed the PVS in a sample of 120 Irish children, aged 10–12 years, from two different schools, in an attempt to verify the internal reliability and convergent validity of the measure. Students who self-identified as victims scored significantly higher than non-victims ( $p < .001$ ), and students who were peer-nominated as victims scored significantly higher than non-victims ( $p < .001$ ). In a larger-scale study, Austin and Joseph (1996) assessed the PVS in a sample of 425 children, aged 8–11 years, from five different elementary schools. As with the BBS, a suggested mean score of 2.5 was used to classify children into victim or non-victim groups and the PVS was administered in its full form. Cronbach's alpha for the current study was .79.

*Multidimensional Peer-Victimization Scale.* The Multidimensional Peer-Victimization Scale (MPVS; Mynard et al. 2000) is a 16-item, self-report questionnaire used to discriminate between different types of bullying children may suffer. The scale consists of 4 factors, which were developed using principal components analysis of 45 original items (Mynard et al. 2000). The first factor (eigenvalue = 12.02) consists of 4-items related to physical victimization (e.g., “Punched me”), the second factor (eigenvalue = 1.37) consists of 4-items related to verbal victimization (e.g., “Called me names”), the third factor (eigenvalue = 2.38) consists of 4-items related to social manipulation (e.g., “Tried to make my friends turn against me”), and the fourth factor (eigenvalue = 1.26) consists of 4-items referring to attacks on property (e.g., “Tried to break something of mine”). Items are rated on a scale of 0 (not at all), 1 (once), or 2 (more than once), and factor scores can range from 0 to 8 and total scores can range from 0 to 32. Mynard et al. (2000) examined convergent validity by grouping students who were self-identified victims and nonvictims and administering the questionnaire. Results showed that victims scored significantly higher on all factors than nonvictims, and all comparisons were significant at the  $p < .001$  level. Because the PVS only broadly discriminates between overt and indirect bullying, the MPVS was incorporated as a multi-method assessment of different types of victimization. Cronbach's alpha for the current study was acceptable for all scales, and ranged from .73 (factor 4) to .85 (factor 1).

## Procedure

Prior to completing the assessments, parental consent and child assent were obtained, and the assent forms were presented both orally and in writing for the child participants. All children who were recruited for the study obtained consent, with the exception of one child (described earlier). Participating in the assessment was voluntary. The baseline assessment sessions for both countries were conducted by graduate students, who were assisting the principal investigator.

## Results

Baseline demographics were assessed for differences by country; specifically, sex and race differences were examined via chi-squares analyses. No significant differences were found with respect to sex in the American and English samples ( $n_{Boys} = 36$ ,  $n_{Girls} = 45$ ;  $n_{Boys} = 55$ ,  $n_{Girls} = 47$ , respectively). There were significant differences with respect to race,  $\chi^2(4, N = 174) = 37.31$ ,  $p < .001$ . Post hoc analyses revealed that more American

participants than English participants did not report their race on the demographic questionnaire. Table 1 presents differences by race.

In previous research bully/victim status has been analyzed as both continuous and categorical variables (e.g., Baldry and Farrington 2004; Klomek et al. 2007; Solberg et al. 2007), and both methods have strengths and weaknesses. For the current study we felt it would be beneficial to assess for potential sex differences using a continuous as well as a categorical model, given that cut-off scores may represent a more conservative estimate of the prevalence of bullies and victims. For example, in analyses using continuous variables, children could be considered lower or higher on the BBS (for identifying bullying behaviors; Austin and Joseph 1996) or PVS (for identifying victims; Neary and Joseph 1994) while only experiencing/perpetrating victimization on rare occasions, which does not fit the definitional criteria of bullying as a behavior that is repetitive or chronic. Thus, sex differences in bully and victim status were also examined via chi-square analyses when bullies and victims were categorized into groups based on their scores on the BBS and PVS. If participants scored at or above a 2.5 (suggested cut-off; Austin and Joseph 1996; Neary and Joseph 1994) on the BBS or PVS, they were coded as a ‘bully’ or ‘victim’, respectively. Provocative victims were identified by creating a variable whereby children who scored above the 2.5 cut-off score on both the BBS and PVS were coded as ‘1’ (provocative victims) and those children who were below the cut-off score on one or both measures was coded as ‘0’. Provocative victims comprised 10% ( $n = 20$ ) of the total sample. Provocative victim scores were excluded from analyses of bullies and victims and analyzed separately. Specifically, chi-square analyses were used to examine differences in provocative victim status by country ( $n_{\text{Eng}} = 12$ ,  $n_{\text{Amr}} = 8$ ) and sex ( $n_{\text{Boys}} = 12$ ,  $n_{\text{Girls}} = 8$ ), and no significant differences were found;  $\chi^2(1, N = 152) = 0.27$ ,  $p = \text{NS}$ ;  $\chi^2(1, N = 152) = 1.32$ ,  $p = \text{NS}$ , respectively.

In order to assess our hypotheses regarding differences in bully and victim status by country and sex, a two-way independent analysis of variance was used to compare total scores on the BBS and PVS. Participants who did not report their sex were excluded from the main analyses examining differences by sex; although, participants who did not report ethnicity were still included in the main analyses due to the predominantly Caucasian samples. With regard to bullies, contrary to our hypothesis there was not a significant main effect by country [ $F(1, 128) = 0.01$ ,  $p = .92$ ] or sex [ $F(1, 128) = 2.54$ ,  $p = .11$ ], nor was the interaction significant [ $F(1, 128) = 0.50$ ,  $p = .48$ ]. Additionally, there was not a significant main effect by country in reported victimization on the PVS [ $F(1, 122) = 2.35$ ,  $p = .13$ ]. There was not a significant main effect by sex in reported victimization [ $F(1, 122) = 0.19$ ,  $p = .67$ ], nor was the interaction significant [ $F(1, 122) = 1.39$ ,  $p = .24$ ]. Mean scores and standard deviations can be found in Table 2.

**Table 1** Sample size differences by race in American and English Samples

|                    | American | English |
|--------------------|----------|---------|
| White/non-Hispanic | 42       | 91      |
| Black              | 6        | 2       |
| Hispanic/Latino    | 3        | 0       |
| Asian              | 3        | 7       |
| Other              | 19       | 1       |
| Total***           | 73       | 101     |

\*\*\*  $p < .001$



**Table 2** Mean score differences by country and sex for bullies and victims

|                  | American                        | English                         |
|------------------|---------------------------------|---------------------------------|
| BBS <sup>a</sup> |                                 |                                 |
| Boys             | <i>n</i> = 25<br>2.33<br>(0.36) | <i>n</i> = 36<br>2.36<br>(0.31) |
| Girls            | <i>n</i> = 36<br>2.46<br>(0.38) | <i>n</i> = 35<br>2.41<br>(0.29) |
| PVS <sup>b</sup> |                                 |                                 |
| Boys             | <i>n</i> = 25<br>2.49<br>(0.31) | <i>n</i> = 34<br>2.33<br>(0.30) |
| Girls            | <i>n</i> = 36<br>2.40<br>(0.36) | <i>n</i> = 31<br>2.37<br>(0.35) |

Note: The values represent mean scores with standard deviations in parentheses

<sup>a</sup> Mean scores can range from 0 to 4, with higher scores indicating more bullying behaviors

<sup>b</sup> Mean scores can range from 0 to 4, with higher scores indicating more victimization

Bullying and victimization scores on the BBS and PVS were also examined categorically using chi-squares analyses, as described above, based on whether or not participants scored above a cut-off (2.5) on the BBS or PVS. No significant differences were found on the BBS between countries;  $\chi^2(1, N = 132) = 0.35, p = .56$ , or sex;  $\chi^2(1, N = 132) = 3.44, p = .06$ . Additionally, no significant differences were found on the PVS between countries;  $\chi^2(1, N = 126) = 1.84, p = .18$ , or sex;  $\chi^2(1, N = 126) = .16, p = .70$ .

The type of reported victimization was also assessed for differences by country and sex. Four scales of the MPVS (Mynard et al. 2000) were examined for differences, including physical victimization, verbal victimization, social/relational victimization, and attacks on property (as another form of direct victimization). Main effects by country were explored and a significant difference was found with respect to verbal victimization where English children reported more verbal victimization than American children [ $F(1, 146) = 15.48, p < .001$ ]. There were no other significant main effects by country. Also, as hypothesized there were main effects for sex such that boys were more likely than girls to report being the victims of physical bullying [ $F(1, 146) = 21.98, p < .05$ ] and girls were more likely than boys to report being the victim of social/relational bullying [ $F(1, 146) = 63.41, p < .01$ ]. The interaction between country and sex on the type of victimization was not significant. Scale scores and standard deviations can be found in Table 3.

## Discussion

The current study contributes to the existing literature on bullying and victimization in a number of ways. First, it provides an initial step in bringing together findings cross-nationally, given that bullying is an international phenomenon yet few studies have made direct comparisons given the methodological issues described previously. Some of the most compelling findings from our assessment of baseline data included the higher percentage of provocative victims (10%) than found in previous studies, as provocative victims typically comprise a much smaller sample than passive victims (see Griffin and



**Table 3** Mean score differences by country and sex for type of victimization on the MPVS

|                               | American                        | English                         |
|-------------------------------|---------------------------------|---------------------------------|
| <i>Direct victimization</i>   |                                 |                                 |
| Physical                      |                                 |                                 |
| Boys*                         | <i>n</i> = 31<br>1.82<br>(2.21) | <i>n</i> = 42<br>2.81<br>(2.68) |
| Girls                         | <i>n</i> = 38<br>1.38<br>(1.81) | <i>n</i> = 39<br>1.70<br>(2.03) |
| Verbal***                     |                                 |                                 |
| Boys                          | <i>n</i> = 31<br>2.47<br>(2.64) | <i>n</i> = 42<br>4.60<br>(2.49) |
| Girls                         | <i>n</i> = 38<br>2.54<br>(2.00) | <i>n</i> = 39<br>3.72<br>(3.00) |
| Attacks on prop               |                                 |                                 |
| Boys                          | <i>n</i> = 31<br>2.14<br>(2.39) | <i>n</i> = 42<br>2.08<br>(2.22) |
| Girls                         | <i>n</i> = 38<br>2.25<br>(2.39) | <i>n</i> = 38<br>2.39<br>(2.00) |
| <i>Indirect victimization</i> |                                 |                                 |
| Social/relational             |                                 |                                 |
| Boys                          | <i>n</i> = 31<br>2.39<br>(2.73) | <i>n</i> = 42<br>2.74<br>(2.30) |
| Girls**                       | <i>n</i> = 38<br>4.29<br>(2.31) | <i>n</i> = 39<br>3.45<br>(2.60) |

Note: Standard deviations are shown in parentheses

Scale scores can range from 0 to 8, with higher scores indicating higher victimization

\*  $p < .05$ , \*\*  $p < .01$ ,

\*\*\*  $p < .001$

Gross 2004). We classified provocative victims in the same manner as Austin and Joseph (1996) and Neary and Joseph (1994), although they found a slightly higher proportion of provocative victims in their larger, British samples. A recent study by Solberg et al. (2007) reviewed reported prevalence of provocative victims across past studies, as well as within two, large samples of Norwegian children and found a large range in reported rates. They also found a trend for provocative victims to be found in higher percentages among younger children (primary vs. secondary schools). These findings suggest that more studies are needed in order to determine an accurate prevalence of provocative victims in English-speaking populations and across cultures.

Other important findings from the current study were the relative *lack* of differences in the prevalence of bullies and victims between countries and sexes. Although some researchers posited that the prevalence of bullying in the US may be the highest in the world (e.g., Berthold and Hoover 2000; Bosworth et al. 1996; Hoover et al. 1993), our

findings provided an initial step in establishing more consistent estimates of bullies and victims in English-speaking samples. Of note, there was a significant difference by race in the American and English samples, which ultimately could change our findings related to the non-significant main effects for bullies/victims by country. However, further examination of our findings revealed that although more American than English participants failed to report their race on the demographic questionnaire, the samples from both countries were predominantly Caucasian (57.5% in American sample, 90% in English sample) with no other ethnic group representing a single, large percentage. Thus, it is unlikely that race was a significant contributing factor in the lack of differences between countries for bully and victim groups. For future studies, establishing prevalence rates will provide a baseline which intervention evaluations may target and may contribute to a better understanding of the scope of bullying and victimization problems as prevalence rates are established cross-culturally. As specific ethnic groups are examined cross-culturally, it will be important to discern whether or not prevalence rates differ in comparison with English-speaking samples, as significant differences may lead to a better understanding of the etiology of bullying and victimization problems.

Also, as stated, boys and girls were equally likely to report being bullies and victims. Although previous research found that boys were more likely than girls to be involved in bullying situations, or that sex differences reduced when assessing indirect aggression alone (e.g., Olweus 1993; Siann et al. 1994; Young and Sweeting 2004), our findings suggest that female bullies may be more prevalent than previously thought. In general, reports of female aggression appear to be on the rise in the US as well as other industrialized countries (Henington et al. 1998; Leschied et al. 2001). Burman et al. (1998) reported that more girls than ever before were involved in the British juvenile justice system, and in the US, girls account for approximately one-third of juvenile arrests while violent offenses among girls are becoming increasingly prevalent (e.g., Budnick and Shields-Fletcher 1998; Federal Bureau of Investigation 2001). Although these findings relate to aggression more generally, it is possible that our results reflect the overall trend in reported increases in aggression among girls.

Finally, boys were more likely than girls to report using direct bullying behaviors for physical aggression only. This finding was also somewhat contrary to our hypothesis, given the lack of sex differences on other direct forms of victimization such as verbal bullying and attacks on property. Consistent with the literature on indirect/relational aggression, however (e.g., Bjorkqvist et al. 1992; Crick et al. 1999; Crick and Grotpeter 1996), girls were more likely than boys to report being victimized indirectly. These findings, in combination with the higher proportion of girls involved in bullying, suggest that aggression among girls may not be fully understood and more research is needed to determine the nature of female aggression. Additionally, this study contributes to the literature on sex-specific themes and bullying such that our results are contrary to the notion of stereotypic 'boy' aggression and 'girl' aggression, given that girls were as likely as boys to be bullies and victims, as well as to report certain direct forms of victimization.

The social context and the function of peer-relationships among children may provide some conceptualization for our findings. For example, it is possible that disruptive or aggressive girls may experience more negative fall-out from their peers than boys. Therefore, girls who bully may be more likely than boys to be rejected by their peer group (Pepler et al. 1998). Peer rejection, in turn, is a strong predictor of escalating and chronic

antisocial behavior and psychosocial maladjustment (Coie et al. 1995; Schwartz et al. 1997), thus creating a vicious cycle of rejection and aggression. This may be particularly salient among girls for whom previous research has demonstrated the relative importance and influence of peer-relationships (e.g., Cross and Madson 1997; Hay and Ashman 2003; Ma and Huebner 2008).

A related explanation for the current findings on sex may involve the normalizing of aggression, which is not a new concept in the aggression literature in general (e.g., Aye Maung 1995; Glover et al. 2000). With regard to female aggression, attitudes about bullying and aggression may be changing such that girls are engaging in and/or reporting aggression more so than in the past because it is viewed as being more acceptable and “routinized” (Phillips 2003, p. 720). As found by Phillips (2003), bullying behaviors in particular, as opposed to other aggressive behaviors, may be more likely to be legitimized and permissible by children (as opposed to adults). This may be especially true for girls because of the importance of peer-acceptance/rejection, mentioned previously, and the lengths to which one is justified in going to make/keep friends. In sum, theories related to the impact of the social context among boys and girls and bullying behaviors will be important to examine in future studies.

### Program Implications

Findings from the current study may also have implications on the assessment of bullying behaviors and the development of intervention programs. The current study was an initial step in determining prevalence across cultural contexts for what appears to be an international phenomenon. Beyond replication of these findings, future studies will also need to examine bullying across more dissimilar cultural contexts (e.g., English-speakers and non-English speakers) in order to determine relevant themes and how those may inform intervention programs. Additionally, it will be important for clinicians and school personnel to be cognizant of the notion that, in English-speaking samples, both boys and girls may be capable of certain types of bullying. This is especially true given that boys and girls may perpetrate all types of bullying behaviors, even those that are less likely to be seen as ‘typical’ of male or female behavior (e.g., girls and boys may be equally likely to destroy another child’s property).

### Limitations

There were some limitations to the current study that should be discussed. For example, only self-report methods were used in the current study. Although self-report measures may be the most simple, time- and cost-efficient method of measuring bullying behavior for researchers, few studies incorporate multiple methods of measurement, which may reduce the reliability of the conclusions that can be drawn from study results. Utilizing multiple methods was beyond the scope and resources of the current study; however, future studies should employ multiple methods of assessment to obtain a more comprehensive understanding of bullying problems in schools. Additionally, because this study was a first attempt at demonstrating prevalence of bullying among American children as compared to children from other English-speaking countries, it is unclear whether the findings are representative of our specific sample or if similar results would be found with a larger sample and/or across more diverse cultural contexts.

## Conclusions

Previous research has determined that bullying is an international problem; however, studies were often conducted in isolation, particularly within the US, despite the global pervasiveness of the phenomenon. The current study provides an initial step towards bridging the gaps and methodological problems that have traditionally made comparisons difficult across studies and cultures. Our results call into question previously held theories related to the prevalence of bullying among American children and sex-specific themes in bullying and victimization. Of course, replication of the current study on a broader level is needed to determine if our findings are representative of the majority of children in the US, as compared other English-speaking countries. As trends are established, it will be important for future studies to expand comparisons across cultures, sexes, and age-groups in order to determine similarities and differences among groups and inform program development.

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