The Journal of Early Adolescence

http://jea.sagepub.com

Bullying and Stress in Early Adolescence: The Role of Coping and Social Support

Chiaki Konishi and Shelley Hymel

The online version of this article can be found at:
http://jea.sagepub.com/cgi/content/abstract/29/3/333

Additional services and information for *The Journal of Early Adolescence* can be found at:

Email Alerts: http://jea.sagepub.com/cgi/alerts

Subscriptions: http://jea.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations http://jea.sagepub.com/cgi/content/refs/29/3/333

Bullying and Stress in Early Adolescence

The Role of Coping and Social Support

Chiaki Konishi
Shelley Hymel
University of British Columbia

Prior research from Norway and Japan has demonstrated positive relationships between stress and bullying—The more stress students experience, the more they engage in bullying. The modest correlations, however, suggest that other variables may moderate the stress-bullying link, serving as protective factors that make such negative responses to stress less likely for some individuals. This study examined the stress-buffering roles of coping and social support in reducing the likelihood of bullying in response to stress. Students in Grades 5-7 (*N* = 312) completed questionnaires assessing stress levels (daily hassles, stressful events), coping strategies (active, avoidance, distraction, support seeking), social support (from peers, family, teachers), and bullying. Consistent with previous research, correlational analyses indicated that stress is significantly related to self-reported bullying but not to peer-assessed bullying. Regression analyses revealed that family support moderated and distraction coping amplified the stress-bullying relationship.

Keywords: bullying; stress; coping; social support; adolescence

Since the early 1980s, across countries, the public has become increasingly aware of the extent to which students experience peer bullying in school. The estimated rates of frequent bullying and victimization range from 10% to 30% in Australia (Peterson & Rigby, 1999), Canada (Craig, Peter, & Konarski, 1998; Hymel, Rocke Henderson, & Bonanno, 2005), England (Naylor & Cowie, 1999), Japan (Morita, Taki, Hata, Hoshino, & Iwai, 1999), and the United States (Nansel et al., 2001). Although comparisons are difficult given different definitions, samples, and reporting strategies, these findings clearly reveal that the number of students suffering from bullying is considerable in countries around the globe.

333

Bullying is a significant problem that affects a considerable number of children and that is associated with significant negative adjustment outcomes, both concurrently and in the long term (e.g., Boivin, Hymel, & Hodges, 2001; Farrington, 1993; Kaltiala-Heino, Rimpelä, Rantanen, & Rimpelä, 2000; Olweus, 1991; Rigby, 2000). Given the prevalence of bullying and its negative impact on both bullies and victims, it becomes important to understand the factors that contribute to both its maintenance and its reduction.

Taking the view of victims, some studies have considered bullying as a stressor (e.g., Rigby, 1998; Sharp, 1995). For example, Sharp reported that 34% of secondary students (13- to 16-year-olds) who had been victimized found being bullied stressful. From the perspective of the perpetrator, however, the relationship between stress and bullying behavior has received little attention, although some critical links have been proposed. Our examination of this potential link is derived in part from the frustration-aggression hypothesis initially put forward by Dollard and colleagues (Dollard, Doob, Miller, Mowrer, & Sears, 1939), who argued that frustration is the cause of aggression and aggression is the inevitable result of frustration. Later, they adopted a less extreme position arguing that aggression is only one of several possible responses to frustration (Miller, 1941). More recently, Lazarus and Folkman (1984) distinguished two ways of responding to stressful situations: One is through direct action, aiming at confronting problem events directly by trying to solve them, and the other is intended to deal with the emotions aroused by the stressful situations (Lazarus & Folkman, 1984). While some students can find adequate ways of reacting, other students may bully others as a way of reacting to an environment that they perceive as stressful. In a recent review of the stress literature (Grant, Compas, Thurm,

McMahon, & Gipson, 2004), it was reported that 53 out of 60 current, published studies have demonstrated a significant prospective association between stressors and a variety of psychological and behavioral problems, including aggression (e.g., Time 1 stressors predict Time 2 symptoms, controlling for Time 1 symptoms). In other words, reported stress was predictive of increases in symptoms over time. Consistent with these notions, we expected a similar association between stress and bullying, as a unique form of aggressive behavior. In fact, recent Norwegian and Japanese studies (Bru, Murberg, & Stephens, 2001; Okayasu & Takano, 2000; Taki, 1992) have demonstrated positive relationships between stress and bullying; that is, the more stress students experience, the more they engage in bullying others. However, the reported correlations between stress and bullying have been modest (rs = .12-.32), suggesting that not everyone engages in bullying behavior when stressed. Extending this research, the present study examined the links between stress and bullying as well as the potential stress-buffering roles of effective coping efforts and available social support as protective factors in reducing the likelihood of bullying in response to stress.

At least two studies to date have demonstrated variations in coping as a contributor to bullying behavior. Using self-report measures, both Andreou (2001) and Olafsen and Viemerö (2000) demonstrated individual differences in the strategies preadolescents (aged 9-12) used to cope with peer difficulties, specifically conflictual peer interactions (Andreou, 2001) and stressful encounters at school (Olafsen & Viemerö, 2000). Relative to their peers, children who bully (bullies and bullies/victims) were less likely to employ active/approach (problem-focused) coping strategies (Andreou, 2001), and bully/victims tended to use more self-distraction and aggressive coping strategies (Olafsen & Viemerö, 2000). Of interest in the present study, however, is whether use of particular coping strategies affects the stress-bullying relationship.

Relevant here is the research by Gonzales and colleagues (Gonzales, Tein, Sandler, & Friedman, 2001) examining the stress-buffering effects of coping on externalizing behavior among early adolescents (Grades 7-8). Gonzales et al. (2001) found that, among girls, both active (problem focused) coping and distraction coping (engaging in alternate activities to avoid the problem) moderated the relation between family stress and conduct problems. Girls who were stressed but who used more active coping and/or distraction coping were less likely to display conduct problems. Similarly, we hypothesized that students who bully others would report less use of active or problem-focused coping strategies generally, but that greater use of active/approach (problem-focused) coping and distraction

coping would moderate the relation between stress and bullying, with less bullying evident when such strategies are employed. Given evidence from Gonzales et al. showing that these stress-buffering effects were evident only among girls, gender differences were considered in all analyses.

Several authors have considered social support to be an important resource to protect children and adolescents from the negative effects of stressful life experiences (Demaray, Malecki, Davidson, Hodgson, & Rebus, 2005; Garmezy, 1983; Johnson, 1986; Malecki & Demaray, 2002; Nestmann & Hurrelmann, 1994; Rutter, 1983; Seiffge-Krenke, 1995). Social support is generally measured by assessing individuals' perceptions about the degree of support they feel available to them from others. Empirically, previous studies have demonstrated the positive stress-buffering effects of social support. Indeed, greater levels of stress are associated with psychological and behavioral problems in individuals who report low levels of social support but not in individuals who report high levels of social support (DuBois, Felner, Brand, Adan, & Evans, 1992; Dubow & Tisak, 1989; Pryor-Brown & Cowen, 1989). Of interest in the present study was whether similar stress-buffering effects of social support would be evident with regard to bullying behavior as well. In fact, Bru et al. (2001) found that perceived social support was negatively correlated with pupil misbehavior (including bullying as well as other antisocial behaviors) among young adolescents. As well, Demaray and Malecki (2003) showed that bullies reported less parent support and teacher support than comparison students. Accordingly, we proposed that perceived social support would act as a buffer, moderating the relation between stress and bullying behavior in that students who indicated low levels of perceived social support would be more likely to demonstrate bullying behavior, whereas students who indicated high levels of perceived social support would be less likely to demonstrate bullying behavior when stressed.

Method

Participants

Students in Grades 5-7 (N = 387) from four elementary schools in Vancouver, British Columbia, Canada were recruited. Of these students, participants included 312 students (165 girls, 147 boys), ranging in age 9 to 13 years (M = 11.2), who had received parental consent and who themselves agreed to participate. The overall participation rate was 81%. Students from a variety of ethnic backgrounds were included: 64% Asian

Canadian, 16% White, 3% Indo-Canadian/East Indian, 3% Latin, 2% First Nations, 2% Black, and 10% Other (nonspecified or mixed).

Procedures

Students in fifth- though seventh-grade classrooms were asked to take home to their parents letters explaining the purpose and nature of research, requirements for consent, and acknowledging that students' responses would be considered confidential. Students were given the same information as part of the written and oral instructions for the survey. Students who received parental permission and who themselves agreed to participate were involved in a single group-testing session (50-60 minutes) during which the survey was administered in each classroom by at least two trained proctors (investigators and trained graduate students). Teachers remained in the classroom to oversee student discipline but were otherwise uninvolved. Prior to the administration of the survey, the study was reviewed and approved by the Behavioral Research Ethics Board at the University of British Columbia and the school district.

Measures

Demographic information. Participants were asked to provide information on their (a) gender, (b) birth date/age, (c) grade, and (d) ethnic background.

Bullying behavior. Both self-reports and peer assessments were used to assess bullying behavior, following recommendations in the literature (Juvonen, Nishina, & Graham, 2001; Pellegrini, 2001; Pellegrini & Bartini, 2000) and suggestions that peers may have difficulty identifying more subtle and less visible forms of bullying, while self-reports may underestimate bullying behavior (Pellegrini & Bartini, 2000; Perry, Kusel, & Perry, 1988). Self-reports were obtained using three items tapping different forms of bullying behavior—physical, verbal, and relational ("How often have you taken part in physically bullying another student?," "How often have you taken part in verbally bullying another student through insults or threats?," "How often have you taken part in bullying another student through exclusion, rumors, or making someone look bad?"). For each item, participants were asked to rate degree of bullying behavior in the past year on a 5-point Likert-type scale (*Not at all*, *Only a few times this year*, *Every month*, *Every week*, or *Many times a week*). A single, composite bullying score was computed by averaging responses across all three items, with higher scores indicating greater bullying behavior ($\alpha = .72$ for the present sample).

A single peer assessment item ("Who is a bully?") was used to evaluate peer perceptions of bullying. Participants were asked to identify classmates of both sexes who best fit the descriptor, with unlimited number of nominations accepted. Names of students who did not participate in this survey were removed from the lists of classmates. The number of nominations received from all peers were summed and standardized within class in order to permit comparisons across classrooms differing in size.[1] Higher scores reflected a greater percentage of peers identifying a student as a bully. This item was embedded with other peer assessment items tapping prosocial behavior, competitiveness, popularity, and victimization, although the other items were not utilized in the present study.

Stress. Both daily hassles and major stressful events have been identified as stressors that potentially can have negative effects on child and adolescent mental health, physical health, and social and psychological adjustment (for a review see Compas & Phares, 1991; Grant, Compas, & Stuhlmacher, 2003; Johnson, 1986; McMahon, Grant, Compas, Thurm, & Ey, 2003). Major stressful events include dramatic and severely taxing incidents that may occur infrequently (e.g., parents' divorce, death of family members; Compas, 1987; McMahon et al., 2003). Daily hassles (or minor events) represent another type of stressor and include "the irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment" (Kanner, Coyne, Schaefer, & Lazarus, 1981, p. 3). Although previous studies have shown that daily hassles are more strongly associated with psychological symptoms than major stressful events in adults (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Kanner et al., 1981) and youth (Compas, Davis, Forythe, & Wagner, 1987), both represent important stressors in one's life. Accordingly, both negative life events and daily hassles were evaluated as important sources of stress in the present study (Compas, 1987; Grant et al., 2003; Johnson, 1986). The Children's Hassles Scale (CHS; Kanner, Feldman, Weinberger, & Ford, 1987) was used to assess student daily hassles and the Major Event Inventory (Elwood, 1987) was used to assess major stressful events.

The Children's Hassles Scale is a 25-item, self-report measure consisting of day-to-day concerns of school-age children, with demonstrated internal consistency among similar age children (Cronbach's alpha = .87; Kanner et al., 1987). Participants were asked to rate whether they experienced each of the 25 different hassles (e.g., "My schoolwork was too hard.") within the past month on a 4-point Likert-type scale (1 = *didn't happen*, 2 = *didn't feel bad*, 3 = *felt sort of bad*, 4 = *felt very bad*). Ratings were

averaged across the 25 items to provide an overall index of daily hassles (α = .83 for the present sample), with higher scores indicating greater stressfulness of daily hassles experiences.

The Major Event Inventory (Elwood, 1987) was used to evaluate each child's experiences with seven major stressful events. Previous research with similar age samples (Elwood, 1987) has demonstrated the psychometric adequacy of the scale, with internal consistency estimates of .60 and stability estimates (test-retest correlations) ranging from .53 to .84 over a 2-week period. Participants were asked to rate degree of stressfulness of each major life event in the past year on a 5-point Likert-type scale (1 = *has not happened*, 2 = *no trouble*, 3 = *bothersome*, 4 = *stressful*, 5 = *very stressful*) in terms of both when the even happened originally and how they feel about it now when they think about the event. An example of an item included in this scale is as follows: "My parents separated or got a divorce." These 14 ratings were subsequently averaged to compute an overall index of major stressful events (α = .75 for the present sample), with higher scores indicating greater levels of reported stress from major life events.

Coping. Participants' coping strategies were assessed using the Children's Coping Strategies Checklist (CCSC; Ayers, Sandler, West, & Roosa, 1996), a 45-item, self-report measure in which children reported how often they used each coping strategy to try to solve a problem or make themselves feel better. This scale assesses four coping dimensions: (a) active, (b) avoidance, (c) distraction, and (d) support seeking. Active coping includes strategies in which the person makes efforts either to change the situation or to think about it more positively. Avoidance coping includes strategies where the person simply avoids or stops thinking about the problem. Distraction coping refers to attempts to engage in an alternative activity (e.g., entertainment) to avoid thinking the problem. Support-seeking strategies involve others as resources to help in seeking solutions for the problem. Responses were indicated on a 4-point Likert-type scale (1 = *never* to 4 = *most of the time*). Internal consistency for each of these dimensions has been shown to be adequate in a previous sample (α = .90 for active, .70 for avoidance, .68 for distraction, and .85 for support seeking; Gonzales et al., 2001) and in the present sample (α = .87 for active, .76 for avoidance, .74 for distraction, and .70 for support seeking). Student responses to items included in each of the four children's coping strategies checklist subscales were averaged to create an overall (mean) index for each type of coping, with higher scores reflecting greater use of a particular coping style in each case.

Social support. Participants' perceived social support was measured using subscales from the Relational Provisions Loneliness Questionnaire (RPLQ; Thomson, 1989). This measure consists of four 7-item subscales that assess perceived social support from peers and family members, respectively, with regard to both intimacy (having people to go to with problem) and integration (having a group you can be with or do things with). Given arguments that intimacy subscale reflects an important component of social needs (e.g., Seiffge-Krenke, 1995) whereas the integration subscale reflects a facet of social affiliation rather than social support or needs, only the intimacy subscale was used in the present study, and was adapted to also assess perceived support from teachers, with similar items used across the three referents (e.g., "There is someone my age I can turn to" vs. "There is someone in my family I can turn to" vs. "There is a teacher I can turn to"). Research suggests that positive peer relations and peer support are related to positive social and emotional adjustment of children (e.g., Dunn & McGuire, 1992) and that family support is linked to optimal psychological and behavioral adjustment (e.g., Baumrind, 1991). Although school becomes an important social arena in which teachers are likely to be significant others for many children, the impact of teacher support on the psychological and behavioral adjustment of children has been less comprehensively studied. Accordingly, this study explored the role of social support from family, friends, and teachers separately.[2] Participants responded to each item on a 5-point Likert-type scale (*NO*, *no*, *sometimes*, *yes* or *YES*) reflecting the degree to which each statement was true for them. For each source, responses to relevant items were averaged to create overall indices of social support across peers, family members, and teachers. Higher scores reflected greater perceived social support in each case. Consistent with previous research, high internal consistency was obtained for all subscales (α = .87 for support from friends, .90 for support from family, and .90 for support from teachers).

Results

Preliminary Analyses

Correlational analyses were first conducted to assess the interrelations among the measures included in the study. As seen in Table 1, the relationship between the two different indices of stress (i.e., major stressful events and daily hassles) was reasonably high, $r(310)$ = .57, $p < .01$ (one-tailed), consistent with previous research (DuBois et al., 1992; Jose et al., 1998).

Table 1
Means, Standard Deviations, and Intercorrelations Among Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Composite stress	1.00											
2. Major stressful events	0.90**	1.00										
3. Daily hassles	0.87**	0.57**	1.00									
4. Peer assessment bullying nominations	0.03	0.05	–0.00	1.00								
5. Self-reported bullying	0.32**	0.28**	0.28**	0.23**	1.00							
6. Active coping	0.20**	0.21**	0.14**	–0.04	0.00	1.00						
7. Avoidance coping	0.32**	0.23**	0.34**	0.03	0.07	0.42**	1.00					
8. Distraction coping	0.12*	0.11*	0.10*	0.10*	0.13*	0.23**	0.29**	1.00				
9. Support seeking coping	0.19**	0.20**	0.13*	–0.07	–0.04	0.47**	0.30**	0.18**	1.00			
10. Friend support	0.06	0.10*	0.00	–0.04	–0.13*	0.29**	0.16**	0.16**	0.41**	1.00		
11. Family support	0.03	0.08	–0.05	–0.09	–0.28**	0.34**	0.18**	0.03	0.39**	0.36**	1.00	
12. Teacher support	0.10*	0.17**	–0.00	–0.01	–0.01	0.19**	0.06	0.04	0.33**	0.33**	0.40**	1.00
M	1.80	1.69	1.90	0.11	1.38	2.11	2.33	2.09	1.67	3.55	3.70	2.70
SD	0.44	0.53	0.45	0.15	0.48	0.56	0.62	0.57	0.51	1.03	1.05	1.06

*$p < .05$. **$p < .01$.

341

Nevertheless, separate analyses were conducted for both daily hassles and stressful life events to determine whether the relations between stress and bullying were consistent across these two conceptually distinct types of stress.

The composite self-report index of bullying and the single-item peer assessment of bullying were significantly but marginally related in the present sample, $r(310) = .23$, $p < .01$ (one-tailed). Consistent with prior research (Pellegrini & Bartini, 2000), the low magnitude of this correlation raises questions regarding whether these sources are tapping the same construct. Accordingly, separate analyses were conducted using peer and self-reported indices of bullying. Of primary interest, however, was the relationship between bullying and stress.

The Relationship Between Stress and Bullying

Analyses of entire sample. Contrary to expectations, results indicated that peer assessments of bullying were not significantly related to self-reported stress, regardless of the stress measure considered, $r(310) = .05$ with stressful life events and .00 with daily hassles (one-tailed correlations). Self-reported bullying, however, was significantly related to reported stress for both reported major stressful events and daily hassles, $r(310) = .28$, $p < .01$ (for both). Accordingly, analyses examining the moderating effect of coping and social support on the links between stress and bullying were conducted only for self-reported, not peer-assessed bullying.

Analyses by gender. When separate correlational analyses were conducted for boys and girls, links between stress and self-reported bullying were as follows: major stressful events, rs = .37 versus .22, respectively, $p < .01$; and daily hassles, rs = .29 versus .28, respectively, $p < .01$. Of interest in subsequent analyses, then, was whether the hypothesized moderation effect was evident for boys and girls, when considered separately.

The Role of Coping in the Stress-Bullying Relationship

Following Baron and Kenny (1986), a series of regression analyses were used to test the hypothesis that use of particular coping strategies would moderate the relationship between stress and bullying, with moderation demonstrated by significant stress × coping interactions. Specifically, self-reported bullying behavior was used as the criterion variable and reported stress as the predictor, along with coping strategies. Separate analyses were

conducted for each of the four coping strategies (i.e., active coping, avoidance coping, distraction coping, and support seeking). There were three causal paths to be considered in testing the potential moderating effect of coping on the relationship between stress and bullying: (a) the impact of stress as a predictor (Path a), (b) the impact of coping strategies as a predictor (Path b), and (c) the interaction of these two as a predictor of bullying (Path c). According to Baron and Kenny, if the interaction is significant, the hypothesized moderator model is supported.

A series of four hierarchical multiple regression analyses were conducted (one for each coping strategy) for major stressful events and daily hassles separately, consistent with those suggested by Cohen, Cohen, West, and Aiken (2003) and used by others in similar studies (e.g., Dubow & Tisak, 1989; Gonzales et al., 2001). Before being entered into the regression analyses, predictor variables were centered (i.e., put in deviation form by subtracting their means from each observed score), as recommended by Aiken and West (1991) and Cohen et al. (2003), for interpretation of interactions (e.g., avoiding computational difficulties). First, major stressful events and, in turn, each of the four coping strategies (i.e., active, avoidance, distraction, or support seeking) were entered simultaneously in the first step of the regression(s) as predictors of bullying. In the second step, the interaction terms between the stress and coping variables were entered. For each regression analysis, R-square change (ΔR^2) was computed with statistical significance of the increment (i.e., F change: ΔF) to test whether there was a moderator effect (Pedhazur, 1997).

Following Aiken and West (1991), significant effects were calculated using simple slope analyses. Specifically, students' reports of each coping were used to separate participants into three groups using a mean ±1 standard deviation split, reflecting low, medium, and high levels of the particular coping strategy. The relation between major stressful events and bullying was then examined within each group. Operationally, the relation between the stress and bullying was estimated in the value of the coefficient (B) of stress (a predictor) at each level of a moderator (a particular coping strategy). By comparing the regression coefficients (Bs) that represent gradients of the regression lines across low, medium, and high levels of coping, we can see how the relation between the stress and bullying changes in accordance with different levels of coping used (Cohen et al., 2003; Pedhazur, 1997). Finally, simple slopes were plotted, producing a graphic display, to examine the nature of significant interactions. Similar regression procedures were conducted to evaluate these relations for daily hassles.

Analyses of entire sample. Of the four coping strategies, the interaction term obtained for distraction coping was the only one that was significantly associated with stress, but it was only for major stressful events, $\Delta F(1, 308)$ = 5.38, $p < .05$, and not for daily hassles. As a follow-up, simple slope analyses were conducted to test the significant relation between bullying and major stressful events as a function of different levels of distraction used. Results indicated that the relation between major stressful events and self-reported bullying was stronger for children who reported high levels of distraction coping relative to those who reported low levels of distraction coping (*B*s for low, medium, and high levels of distraction coping = .04, .24***, and .47***, respectively; *$p < .05$. **$p < .01$. ***$p < .001$). As shown in Figure 1, children who reported high use of distraction coping were more likely to bully at higher levels of stress but were less likely to bully when under low stress. The regression slope for low levels of distraction coping was not significantly different from zero, indicating that there was no significant relationship between major stressful events and bullying for low levels of distraction.

Analyses by gender. Finally, when separate regression analyses were conducted for boys and girls, distraction coping, again, was the only coping strategy that significantly interacted with stress but only for girls. The significant interaction term was found only with the major stressful events, $\Delta F(1, 161)$ = 4.19, $p < .05$, showing a pattern similar to that shown in Figure 1 (i.e., a crossover interaction). Specifically, at higher levels of stressful events, high distraction coping was related to higher bullying behavior among girls; however, at lower levels of stressful event, distraction coping appeared to predict fewer bullying behavior (*B*s for low, medium, and high levels of distraction coping = .01, .12, and .65**, respectively; *$p < .05$. **$p < .01$. ***$p < .001$). These relations were nonsignificant for boys. Again, for major stressful events, the regression slope for lower levels of distraction coping was not significantly different from zero, indicating that for low levels of distraction, there was no significant relationship between major stressful events and bullying among girls.

The Role of Social Support in the Stress-Bullying Relationship

Analyses of entire sample. Regression analyses were used to evaluate the hypothesized moderation of perceived social support on the stress-bullying relationships. Separate regressions were conducted for each of the three

Figure 1
Plotted Simple Slopes for the Relation of Bullying to Major
**Stressful Events at Three Levels of Distraction Coping**
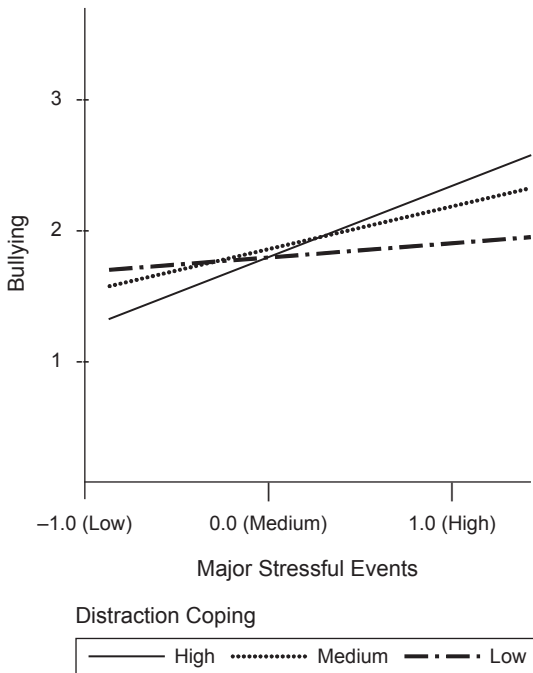
perceived social support subscales (i.e., perceived social support from friends, family, and teachers), with self-reported bullying behavior as the criterion variable and reported stress (i.e., major stressful events and daily hassles) and perceived social support (from family, peers, and teachers) as predictors. Results indicated significant interactions between perceived social support from family and both stress indices: major stressful events, $\Delta F(1, 308) = 6.86$, $p < .01$, and daily hassles, $\Delta F(1, 308) = 4.11$, $p < .05$. Significant interactions were not observed for perceived social support from friends or teachers. Thus, follow-up (i.e., simple slope) analyses were conducted to test the significant relation between bullying and the stress indices as a function of different levels of family support.

Results revealed that the positive relation between both stress indices (i.e., major stressful events and daily hassles) and overall bullying behavior was stronger for children who reported low levels of social support from family compared to children who reported high levels of social support from family (Bs for low, medium, and high levels of social support from family are .46**, .26***, and .14*, respectively, for major stressful events; 53**, .26***, and .15*, respectively, for daily hassles; *p < .05. **p < .01. ***p < .001). In other words, an increased major stressful events and daily hassles were associated with more bullying for those who reported low levels of perceived support from family relative to those who reported high levels of support. Family support seemed to serve as a buffer, decreasing the likelihood that major life events or daily hassles are associated with greater bullying among stressed children.

Analyses by gender. Finally, separate regression analyses were conducted for boys and girls. Results indicated that the moderation pattern of friend support was only evident for major stressful events, not daily hassles, and only for girls, not boys, $\Delta F(1, 161) = 4.29$, $p < .05$. The moderation pattern of family support was only evident for major stressful events for boys, $\Delta F(1, 143) = 4.25$, $p < .05$, whereas the moderation effect was only evident for daily hassles for girls, $\Delta F(1, 161) = 4.38$, $p < .05$. In other words, greater major stressful events were associated with more bullying for girls (not boys) who reported low levels of perceived support from friends relative to those who reported high levels of friend support (Bs for low, medium, and high levels of social support from friends = .75**, .18*, and –.01*, respectively; *p < .05. **p < .01. ***p < .001), whereas experiencing greater major stressful events was associated with more bullying for boys (not girls) who reported low levels of perceived support from family relative to those who reported high levels of family support (Bs for low, medium, and high levels of social support from family = .50**, .37***, and .21**, respectively; *p < .05. **p < .01. ***p < .001). Also, experiencing greater daily hassles was associated with more bullying only for girls (not boys) who reported low levels of perceived support from family relative to those who reported high levels of family support (Bs for low, medium, and high levels of social support from family = .58*, .21*, and .17*, respectively; *p < .05. **p < .01. ***p < .001). This pattern of relations was similar to that shown in Figure 2. These results provide qualified support for the hypothesized moderation effects of social support from friends and family for girls and the effects of social support from family for boys.

Figure 2
Plotted Simple Slopes for the Relation of Bullying to Major
Stressful Events at Three Levels of Family Support
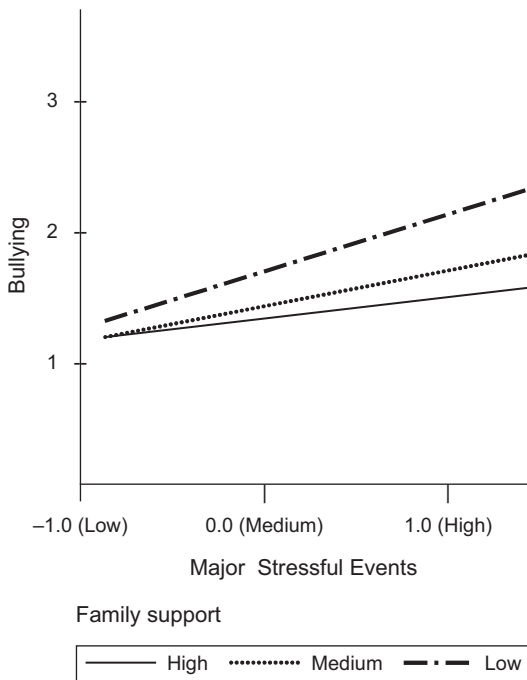
Discussion

The purpose of the present study was to explore three primary hypotheses. First, replicating previous research conducted in Norway and Japan (Bru et al., 2001; Okayasu & Takano, 2000; Taki, 1992), it was expected that the levels of stress children experience would be significantly but modestly related to their bullying behavior. Second, we hypothesized that use of active coping and distraction coping would moderate the positive relation between stress experiences and bullying behavior. Third, we expected that perceived social support would moderate the relation between stress and bullying. The results of the present investigation provided support for the significant but modest relation between stress and bullying behavior (i.e., the first hypothesis), provided qualified support for the moderation effect of

distraction (but not active) coping (i.e., the second hypothesis), and provided support for the moderation effect of social support from friends and family (i.e., the third hypothesis). Each hypothesis is considered below.

First, in terms of the relation between stress and bullying, there was indeed a significant, positive association between stress and self-reported bullying, and this was true for both major stressful events and daily hassles. Specifically, both boys and girls who reported high levels of stress (i.e., major stressful events or daily hassles) were more likely to report bullying behavior. However, as expected, the relation was modest, which suggests the influence of other factors in the relation between stress and bullying. In contrast, the relation between reported stress and peer assessments of bullying was not significant. Previous studies of stress and bullying (Bru et al., 2001; Okayasu & Takano, 2000; Taki, 1992) have been based solely on self-reports, raising concerns that the relations observed are primarily the result of shared method variance. However, given evidence that this relationship is observed consistently across countries despite variations in measures and samples, it may be a meaningful one. Moreover, it is important to recognize that peer assessments of bullying are likely based on long-standing reputations for such behavior (see Hymel, Wagner, & Butler, 1990) and as such may simply be less sensitive to variations in such behavior as a function of ongoing stress or significant life events.

The second hypothesis of the present study examined the potential stress-buffering effects of coping on the observed stress-bullying link. Specifically, based on Gonzales et al.'s (2001) research on conduct problems, we expected that greater use of active coping (i.e., efforts either to change the situation or to think about it more positively) or distraction coping (i.e., attempts to engage in an alternative activity to avoid thinking the problem) would moderate the relation between stress and bullying behavior, with less bullying evident when such strategies are employed. Results of the present study failed to demonstrate the hypothesized impact of active coping strategies, but it did reveal the remarkable but complicated effect of distraction coping on the stress-bullying link. Specifically, children who relied extensively on use of distraction coping were more likely to bully when under stress. For children who did not rely on distraction coping, stress levels did not appear to influence reported bullying. This pattern was predominantly evident among girls, not boys. Gonzales et al. also found that the moderating effect of stress (on acting-out behavior–conduct disorder) was evident only for girls.

Interesting is the fact that the hypothesized moderation pattern of distraction coping was observed only for major life events, but not for daily

hassles, despite evidence that daily hassles have been found to be more strongly related to psychological symptoms than major stressful events in both adults (DeLongis et al., 1982; Kanner et al., 1981) and youth (Compas et al., 1987). One possibility here is that, within the school context, daily hassles are fairly consistent over time and therefore do not differentially affect bullying in the same way as significant life events. Another possibility, however, is that bullying behavior itself influences the child's experience of daily hassles (e.g., perhaps adding to concerns over retaliation or getting into trouble with teachers) and reduces children's options for support especially from peers who fear they may be the next victims. The present findings certainly underscore the need to consider both types of stressors in research on stress and coping.

Previous research (i.e., Gonzales et al., 2001) showed a classic stress-buffering effect whereby the effects of stress (major stressful events) were mitigated by effective coping, specifically distraction coping (as well as active coping). In contrast, the use of distraction coping in the present study was associated with more bullying under high stress. The discrepancy between Gonzales et al.'s study and the present study might be attributable to differences in the nature of the outcome measures examined across studies (i.e., bullying vs. general conduct problems). Moreover, Gonzales et al. conducted their study in inner-city schools located in a high-stress urban context, which may reflect generally higher levels of stress overall than in the present sample, which was taken from urban and suburban but middle-class school contexts. Further research is needed to determine the generalizability of these findings and to consider why these patterns are evident primarily for girls and not boys.

Nevertheless, results of the present study suggest that considerable caution must be exercised in helping children find effective ways to cope with stress. Indeed, in this study, for children who experience high levels of stress due to major stressful events, high use of distraction coping appeared to be associated with greater bullying. This finding runs counter to the previous research with adults (e.g., Blanchard-Fields & Irion, 1988) showing that emotion-focused coping, including distraction, appears to be particularly helpful in response to uncontrollable stressors. Although it is not clear in the present study whether children perceived being bullied as controllable or uncontrollable, these findings underscore the need to examine the efficacy of particular coping strategies with children.

Earlier research by Gonzales et al. (2001) demonstrated the stress-buffering effect of active coping on conduct problems. Specifically, they found that active coping moderated the positive relation between family

stress and conduct problems for girls. Extending this research to bullying, a unique form of aggressive behavior, a similar pattern of moderation was anticipated in the present study but was not confirmed. Use of active coping strategies had no moderating effect on the link between stress and bullying. Conduct disorder and bullying share broad characteristics of aggressive behavior, but they reflect very different behavioral challenges that may affect the impact of active coping on these different outcome variables. Future research is needed to understand the differential processes that may be operating in each case.

Finally, the findings of the present study contributes to our theoretical understanding of how and under what conditions social support may protect children from the negative effects of stress on bullying behavior. Results of the present study demonstrated that social support, particularly those students who perceived the availability of their family members, was effective in reducing the likelihood that stress (especially major stressful events) would lead to increased bullying. Earlier studies have demonstrated the stress-buffering effects of social support on school adjustment problems (Dubow & Tisak, 1989; Pryor-Brown & Cowen, 1989). These studies showed that perceived social support from friends or family moderated the positive relation between major stressful events and teacher-rated school problems. In the present study, perceived support from family appeared to serve as a buffer, reducing the likelihood that stress leads to bullying among highly stressed children. This was true for both major stressful events and daily hassles, when the different types of stressors were considered separately.

Overall, these findings suggest that social support from family could be one resource protecting children from the negative effects of stress on bullying behavior. It may be speculated that feelings of love, intimacy, trust, and security within family help reduce bullying behavior in the face of major stressful events and daily hassles by, perhaps, enhancing children's self-esteem or self-worth. In fact, Harter (1988) found that social acceptance by parents and peers were important contributors to self-worth. Further, previous studies on bullying (e.g., Dueholm, 1999; Smith, 1999) have indicated links between low self-esteem and bullying behavior.

Is the buffering effect of social support similar for boys and girls? Results of the present study suggest that it may not be. For girls, perceived support from friends moderated the stress-bullying relationship when stress emanated from major stressful events, but it was perceived family support that moderated the stress-bullying relationship when stress emanated from daily hassles. For boys, perceived family support moderated the stress-bullying relationship in response to major stressful events. Previous research

(Kochenderfer-Ladd & Skinner, 2002) found that social support seeking did not appear to be beneficial for boys, although seeking assistance was helpful for girls. This may explain why friend and family support buffered the stress-bullying link for girls in the present study while only family support moderated the stress-bullying relationship for boys, suggesting that perceived social support may not be a buffer and it may not matter whether support is available if children do not intend to access it, particularly for boys. Thus, different types of social support serve as protective factors in children's lives, depending on gender and the type of stress experienced. Further research is needed to investigate whether these findings can be replicated. The results, however, underscore the importance of paying attention to the contribution of friend support in facilitating positive behavioral outcomes in relation to major stressful events for girls and the contribution of family support in facilitating positive behavioral outcomes in relation to major stressful events for boys and in relation to daily hassles for girls.

The results of the present study replicated previous findings that stress could contribute to the likelihood of bullying behavior (Bru et al., 2001; Okayasu & Takano, 2000; Taki, 1992). However, the present results also suggest factors that can serve to protect children from such effects. When establishing or implementing an antibullying program, it may be worthwhile for families and schools to consider the issues of these risk and protective factors to be included in such a program. While it is important to underscore the correlational nature of the present findings, they do suggest possible protective factors that might help children to minimize the likelihood of bullying under conditions of stress, including the potential buffering effect of social support, especially from family and friends. At the same time, the present results suggest that considerable caution should be exercised in helping children find effective ways to cope with stress. For example, the present results demonstrate that at least one form of coping, distraction, may be a risk factor under high stress conditions. Moreover, results of the present study, or lack thereof, also raise questions about whether particular coping strategies (e.g., active coping) are equally effective in all situations. Future research is needed to examine whether strategies used to cope vary depending on situations.

There are several limitations in the present study that must be noted. The design of this study was correlational, with all variables assessed at one point in time, precluding statements regarding temporal or causal relationships among the variables. For example, it is still not clear whether stress leads to bullying or bullying leads to stress, at least with regard to daily hassles. By examining variations over several points in time, we would be able

to see how bullying changes as a function of different levels of stress experienced. Also, by experimentally manipulating independent variables such as stress, we may be able to better evaluate the effects of stress on bullying behaviors. Accordingly, longitudinal and experimental studies are needed to address the causal relations between stress and bullying behavior as well as to identify mechanisms in which protective factors exert their stress-reducing influence on bullying behavior. In addition, the use of a single item of bullying in the peer assessment (i.e., "Who bullies others?") may represent another limitation, resulting in underestimations of the phenomenon. Adding more concrete items that depict different forms of bullying may be necessary to reduce underestimations in peer assessments. Finally, we must acknowledge the large number of regression analyses performed and the possibility that some of significant results may represent chance findings. Despite these limitations, however, the present study sheds new light on a unique contribution to our understanding of bullying in that there may be possible risk and protective factors that families and schools might consider in helping children to minimize the likelihood of bullying.

Notes

1. Class sizes varied from 10 to 29 participants, representing at least 62.1% of students in each class.

2. Justification for the separate consideration of peer, family, and teacher support also comes from evidence that these three areas of perceived social support were only moderately interrelated in the present sample (see Table 1).

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions.* Newbury Park, CA: Sage.

Andreou, E. (2001). Bully/victim problems and their association with coping behavior in conflictual peer interventions among school-age children. *Educational Psychology, 21*, 59-66.

Ayers, T. S., Sandler, I. N., West, S. G., & Roosa, M. W. (1996). A dispositional and situational assessment of children's coping: Testing alternative models of coping. *Journal of Personality, 64*, 923-958.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence, 11*, 56-95.

Blanchard-Fields, F., & Irion, J. C. (1988). Coping strategies from the perspective of two developmental markers: Age and social reasoning. *Journal of Genetic Psychology, 149*, 141-151.

Boivin, M., Hymel, S., & Hodges, E. V. E. (2001). Toward a process view of peer rejection and harassment. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of vulnerable and victimized* (pp. 265-309). New York: Guilford Press.

Bru, E., Murberg, T. A., & Stephens, P. (2001). Social support, negative life events and pupil misbehaviour among young Norwegian adolescents. *Journal of Adolescence, 24*, 715-727.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.

Compas, B. E. (1987). Stress and life events during childhood and adolescence. *Clinical Psychology Review, 7*, 275-302.

Compas, B. E., Davis, G. E., Forythe, C. J., & Wagner, B. M. (1987). Assessment of major and daily stressful events during adolescence: The Adolescent Perceived Events Scale. *Journal of Consulting and Clinical Psychology, 55*, 534-541.

Compas, B. E., & Phares, V. (1991). Stress during childhood and adolescence: Sources of risk and vulnerability. In M. Cummings, A. L. Greene, & K. Karraker (Eds.), *Life-span developmental psychology: Perspectives on stress and coping* (pp. 111-129). Hillsdale, NJ: Erlbaum.

Craig, W. M., Peter, R. D., & Konarski, R. (1998). *Bullying and victimization among Canadian school children.* Applied Research Branch Strategic Policy, Human Resources Development Canada.

DeLongis, A., Coyne, J. C., Dakof, G., Folkman, S., & Lazarus, R. S. (1982). Relationship of daily hassles, uplifts, and major life events to health status. *Health Psychology, 1*, 119-136.

Demaray, M. K., & Malecki, C. K. (2003). Perceptions of the frequency and importance of social support by students classified as victims, bullies, and bully/victims in urban middle school. *School Psychology Review, 32*, 471-489.

Demaray, M. K., Malecki, C. K., Davidson, L. M., Hodgson, K. K., & Rebus, P. J. (2005). The relationship between social support and student adjustment: A longitudinal analysis. *Psychology in the Schools, 42*, 691-706.

Dollard, J., Doob, L. W., Miller, N. E., Mowrer, O. H., & Sears, R. R. (1939). *Frustration and aggression.* New Haven, CT: Yale University Press.

DuBois, D. L., Felner, R. D., Brand, S., Adan, A. M., & Evans, E. G. (1992). A prospective study of life stress, social support, and adaptation in early adolescence. *Child Development, 63*, 542-557.

Dubow, E. F., & Tisak, J. (1989). The relation between stressful life events and adjustment in elementary school children: The role of social support and social problem-solving skills. *Child Development, 60*, 1412-1423.

Dueholm, N. (1999). Denmark. 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. 49-55). London: Routledge.

Dunn, J., & McGuire, S. (1992). Sibling and peer relationships in childhood. *Journal of Child Psychology and Psychiatry, 33*, 67-105.

Elwood, S. W. (1987). Stressor and coping response inventories for children. *Psychological Reports, 60*, 931-947.

Farrington, D. P. (1993). Understanding and preventing bullying. In M. Tonry (Ed.), *Crime and Justice* (Vol. 17, pp. 381-458). Chicago: University of Chicago Press.

Garmezy, N. (1983). Stress of childhood. In N. Garmezy & M. Rutter (Eds.), *Stress, coping, and development in children* (pp. 43-84). New York: McGraw-Hill.

Gonzales, N. A., Tein, J., Sandler, I. N., & Friedman, R. J. (2001). On the limits of coping: Interaction between stress and coping for inner-city adolescents. *Journal of Adolescent Research, 16*, 372-395.

Grant, K. E., Compas, B. E., & Stuhlmacher, A. F. (2003). Stressors and child and adolescent psychopathology: Moving from makers to mechanisms of risk. *Psychological Bulletin, 129*, 447-466.

Grant, K. E., Compas, B. E., Thurm, A. E., McMahon, S. D., & Gipson, P. Y. (2004). Stressors and child and adolescent psychopathology: Measurement issues and prospective effects. *Journal of Clinical Child and Adolescent Psychology, 33*, 412-425.

Harter, S. (1988). Causes, correlates and the functional role of global self-worth: A life span perspective. In J. Kolligian & R. Sternberg (Eds.), *Perceptions of competence and incompetence across the life span* (pp. 67-100)*.* New Haven, CT: Yale University Press.

Hayden Thomson, L. K. H. (1989). *The development of the Relational Provision Loneliness Questionnaire for Children.* Unpublished doctoral dissertation, University of Waterloo, Ontario, Canada.

Hymel, S., Rocke Henderson, N. R., & Bonanno, R. A. (2005). Moral disengagement: A framework for understanding bullying among adolescents. *Journal of Social Sciences, 8*, 1-11.

Hymel, S., Wagner, E., & Butler, L. J. (1990). Reputational bias: View from the peer group. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 156-186). New York: Cambridge University Press.

Johnson, J. H. (1986). *Life events as stressors in childhood and adolescence.* Beverly Hills, CA: Sage.

Jose, P. E., D'Anna, C. A., Cafasso, L. L., Bryant, F. B., Chiker, V., Gein, N., et al. (1998). Stress and coping among Russian and American early adolescents. *Developmental Psychology, 34*, 757-769.

Juvonen, J., Nishina, A., & Graham, S. (2001). Self-views versus peer perceptions of victim status among early adolescents. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 105-124). New York: Guilford Press.

Kaltiala-Heino, R., Rimpelä, M., Rantanen, P., & Rimpelä, A. (2000). Bullying at school: An indicator of adolescents at risk for mental disorders. *Journal of Adolescence, 23*, 661-674.

Kanner, A. D., Coyne, J. C., Schaefer, C., & Lazarus, R. S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine, 4*, 1-39.

Kanner, A. D., Feldman, S. S., Weinberger, D. A., & Ford, M. E. (1987). Uplifts, hassles, and adaptational outcomes in early adolescents. *Journal of Early Adolescence, 7*, 371-394.

Kochenderfer-Ladd, B., & Skinner, K. (2002). Children's coping strategies: Moderators of the effects of peer victimization? *Developmental Psychology, 38*, 267-278.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* New York: Springer.

Malecki, C. K., & Demaray, M. K. (2002). What types of support do they need? Investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *School Psychology Quarterly, 18*, 231-252.

McMahon, S. D., Grant, K. E., Compas, B. E., Thurm, A. E., & Ey, S. (2003). Stress and psychopathology in children and adolescents: Is there evidence of specificity? *Journal of Child Psychology and Psychiatry, 44*, 107-133.

Miller, N. E. (1941). The frustration-aggression hypothesis. *Psychological Review, 48*, 337-342.

Morita, Y., Taki, M., Hata, M., Hoshino, S., & Iwai, Y. (1999). *Nihon no ijime: Yobo taiou ni ikasu deta shuu* [Bullying of Japan: Data for prevention and intervention]. Tokyo: Kaneko Shobo.

Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among U.S. youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association, 285*, 2094-2100.

Naylor, P., & Cowie, H. (1999). The effectiveness of peer support systems in challenging school bullying: The perspectives and experiences of teachers and pupils. *Journal of Adolescence, 22*, 467-479.

Nestmann, F., & Hurrelmann, K. (1994). Child and adolescent research as a challenge and opportunity for social support theory, measurement, and intervention: And vice versa. In F. Nestman & K. Hurrelmann (Eds.), *Social networks and social support in childhood and adolescence* (pp. 1-22). Berlin: de Gruyter.

Okayasu, T., & Takano, I. (2000). Psychological stress of victims and bullies in junior high school. *Japanese Journal of Educational Psychology, 48*, 410-421.

Olafsen, R. M., & Viemerö, V. (2000). Bully/victim problems and coping with stress in school among 10- to 12-year-old pupils in Åland, Finland. *Aggressive Behavior, 26*, 57-65.

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

Pedhazur, E. J. (1997). *Multiple regression in behavioral research: Explanation and prediction* (3rd ed.). Orlando, FL: Harcourt Brace.

Pellegrini, A. D. (2001). Sampling instances of victimization in middle school: A methodological comparison. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 125-144). New York: Guilford Press.

Pellegrini, A. D., & Bartini, M. (2000). An empirical comparison of methods of sampling aggression and victimization in school settings. *Journal of Educational Psychology, 92*, 360-366.

Perry, D. G., Kusel, S. J., & Perry, L. C. (1988). Victims of peer aggression. *Developmental Psychology, 24*, 807-814.

Peterson, L., & Rigby, K. (1999). Countering bullying at an Australian secondary school with students as helpers. *Journal of Adolescence, 22*, 481-492.

Pryor-Brown, L., & Cowen, E. L. (1989). Stressful life events, support, and children's school adjustment. *Journal of Clinical Psychology, 18*, 214-220.

Rigby, K. (1998). Peer victimization at school and the health of secondary students. *British Journal of Educational Psychology, 22*(2), 28-34.

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

Rutter, M. (1983). Stress, coping, and development: Some issues and some questions. In N. Garmezy & M. Rutter (Eds.), *Stress, coping, and development in children* (pp. 1-42). New York: McGraw-Hill.

Seiffge-Krenke, I. (1995). *Stress, coping, and relationships in Adolescence*. Mahwah, NJ: Lawrence Erlbaum Associates.

Sharp, S. (1995). How much does bullying hurt? The effects of bullying on the personal well-being and educational progress of secondary aged students. *Educational Child Psychology, 12*, 81-88.

Smith, P. K. (1999). The UK and Ireland. 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. 68-127). London: Routledge.

Taki, M. (1992). Ijime koui no hassei youin ni kansuru jisshouteki kenkyu [Empirical research in investigation of causal factors of bullying behavior]. *Kyoiku Shakaigaku Kenkyu, 50*, 366-388.

Chiaki Konishi is a doctoral candidate in the Department of Educational and Counselling Psychology, and Special Education at the University of British Columbia. Her research interests include understanding of the role of attachment, peer and student-teacher relationships, and cultural contexts on children and adolescents' social-emotional development, with additional interests in methodological and statistical issues.

Shelley Hymel is a professor in the Faculty of Education at the University of British Columbia (UBC), teaching in the areas of human development in education and school psychology with a unique, year-long graduate level practicum course on social-emotional learning in schools, a first of its kind in North America. Her research addresses the interface of social and academic development, and she works regularly with children and youth experiencing social difficulties and with schools that want to address the social side of learning. She currently serves on the executive committees for the UBC Human Early Learning Partnership as well as PREVNet, a new initiative from the Canadian National Centers of Excellence for promoting relationships and eliminating violence. She has published extensively in the area of social development and peer relations both nationally and internationally.