

## **Children's Perceptions of Their Teacher's Responses to Students' Peer Harassment**

### **Moderators of Victimization-Adjustment Linkages**

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Children's relational schemas have been found to account for, and moderate, links between peer victimization and psychosocial difficulties. The present study extends this research by examining whether children's mental representations of their teachers' responses to students' peer harassment moderate associations between peer victimization and internalizing distress and school avoidance. Data were collected from 264 children (124 boys and 140 girls) in the fourth, fifth, and sixth grades. A number of significant victimization  $\times$  perceived teacher response interactions emerged, although the nature of these moderated associations often varied by children's sex. For boys, victimization was associated with greater internalizing distress only when they viewed their teacher as advocating assertion, avoidance, or independent coping. In fact, perceiving teachers to use low levels of these strategies appeared to protect victimized boys from internalizing problems. In comparison, although girls similarly evidenced greater internalizing problems when they viewed the teacher as using these strategies, no evidence was found of a buffering effect at low levels of perceiving the teacher as advocating avoidance, assertion, or independent coping. The results highlight the role of perceptions of the teacher in explicating individual differences in adjustment problems associated with peer victimization.

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Data for this study were obtained from the Classroom Connections Project, a cross-sectional study of the social-cognitive and contextual factors associated with peer relationship quality in middle childhood. We express our appreciation to the Department of Psychology at North Dakota State University for funding this research. We are also extremely grateful to the children, teachers, and school administrators whose participation in this study made this research possible.

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*Merrill-Palmer Quarterly*, July 2010, Vol. 56, No. 3, pp. 333–360. Copyright © 2010 by Wayne State University Press, Detroit, MI 48201.

As has been noted in many of the articles in this special issue of *Merrill-Palmer Quarterly*, the negative consequences associated with peer victimization are well documented. Children who experience harassment and teasing from agemates are at heightened risk for internalizing difficulties, drug use, suicidal ideation, psychosomatic complaints, externalizing problems, interpersonal difficulties, and academic failure (Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2007; Ladd & Troop-Gordon, 2003; Nishina, Juvonen, & Witkow, 2005; Sourander et al., 2006; Sullivan, Farrell, & Kliewer, 2006). The negative effects of peer victimization are significant even after controlling for other forms of peer stress (e.g., peer rejection, friendlessness [Ladd, Kochenderfer, & Coleman, 1997; Ladd & Troop-Gordon, 2003]) and are more pronounced for those children who have a history of chronic peer harassment (Buhs, Ladd, & Herald, 2006; Kochenderfer-Ladd & Wardrop, 2001; Ladd & Troop-Gordon, 2003) or who have experienced multiple forms of peer abuse (e.g., relational and overt victimization [Prinstein, Boergers, & Vermberg, 2001]).

Investigators have noted, however, that the presence, nature, and severity of adjustment difficulties evidenced by victims of peer harassment vary considerably (Hoover, Oliver, & Hazler, 1992; Kochenderfer-Ladd & Skinner, 2002). Consequently, identifying the factors that account for, or moderate, the impact of peer harassment on children's socioemotional well-being has emerged as a prominent agenda in the peer victimization literature. For example, investigators focusing on children's interpersonal resources have found that having a supportive friend can protect victimized children from internalizing problems (Schmidt & Bagwell, 2007), academic difficulties (Schwartz, Gorman, Dodge, Pettit, & Bates, 2008), and continued peer harassment (Hodges, Boivin, Vitaro, & Bukowski, 1999). A number of social-cognitive processes have also been implicated. Children evidence greater internalizing problems when they blame themselves for harassment by peers (Graham & Juvonen, 1998), and associations between victimization and emotional disturbances are, in part, attributable to declines in self-esteem and perceived social competence (Ladd & Troop-Gordon, 2003; Troop-Gordon & Ladd, 2005). Peer victimization is also associated with more negative perceptions of one's peer group (e.g., schoolmates), leading to heightened internalizing and externalizing difficulties (Troop-Gordon & Ladd, 2005). Taken together, these findings suggest that children derive from their experiences mental schemas or knowledge structures that include self-representations and perceptions of others (see Baldwin, 1992). Moreover, in accordance with social-information-processing theories (e.g., see Dodge, 1993), if children develop adaptive mental representations of the self and others

(e.g., friends, teachers), associations between victimization and behavioral and emotional disturbances should be abated.

Despite the accumulating evidence that the actions of others can significantly reduce dysfunction caused by peer victimization, little is known regarding teachers' responses to students' peer victimization and children's perceptions of those responses. This reflects a major limitation in the literature. Much of children's peer victimization occurs on school grounds (Atlas & Pepler, 1998; Olweus, 1993), where teachers are the primary authority figures. Teachers intervene in a sizable minority of peer victimization episodes at school, approximately 15–35%, based on observational and student-report data (Craig, Pepler, & Atlas, 2000; Pepler, Craig, Ziegler, & Charach, 1994). Moreover, recent findings suggest that teachers vary in their handling of peer harassment (Goldstein, Arnold, Rosenberg, Stowe, & Ortiz, 2001; Mishna, Scarcello, Pepler, & Wiener, 2005; Yoon, 2004). For example, to prevent further harassment, teachers may take active steps, such as separating students, contacting parents, or reprimanding aggressors. Alternatively teachers may take a more passive role. For example, they may simply advise targeted children to avoid aggressive peers or to stand up for themselves, or they may tell children to cope with aggressive classmates on their own (Kochenderfer-Ladd & Pelletier, 2007).

Over time, children may integrate their teachers' reactions to peer victimization into their relational schemas. These mental knowledge structures are believed to guide stable patterns of intrapsychic (e.g., encoding of cues, interpretations and attributions for events, outcome expectations, affective reactions) and behavioral responses to social stimuli and, as such, have been linked to the development of long-term conduct and emotional difficulties (Hammen, 1992; Ladd & Troop-Gordon, 2003; Salmivalli, Ojanen, Haanpää, & Peets, 2005; Troop-Gordon & Ladd, 2005). Drawing on adult attachment (Bartholomew & Horowitz, 1991) and social-cognitive literatures (Baldwin, 1992; Rudolph, Hammen, & Burge, 1995; Safran, 1990), we propose that children may come to view their teacher, and adults more generally, as responding to peer victimization in ways that are (a) supportive and validating of the victim, (b) critical and rejecting of the victim, or (c) indifferent to the victim's maltreatment. More specifically, perceiving the teacher as engaging in active intervention efforts (e.g., reprimanding aggressors, separating students, contacting parents) may elicit a view of the teacher as empathetic and accepting of the victimized child, and the complementary perception that the victimized child is not at fault for the maltreatment. Such responses, therefore, may protect children from emotional and school maladjustment stemming from peer victimization. In comparison, perceived advocacy of avoidance and assertion may be

seen as criticism of the victim's failed attempts to cope effectively with aggressors, while advocacy of independent coping may be indicative of perceived teacher indifference. These passive responses by the teacher, therefore, may be associated with decreased feelings of support and heightened internal attributions for harassment, resulting in greater anxiety, depression, and school avoidance following peer victimization.

Accordingly, the objective of this investigation was to examine whether children's perceptions of their teacher's responses to peer victimization moderate links between peer harassment and emotional and school adjustment. Examining children's perceptions of their teacher's behavior reflects a substantial departure from previous studies, which have used observational or teacher self-report data to assess teachers' handling of victimization (e.g., Craig et al., 2000; Kochenderfer-Ladd & Pelletier, 2007; Troop & Ladd, 2002; Yoon, 2004). However, it was deemed important in this study to assess teachers' responses from the child's point of view. Although children's mental representations of their teacher's responses to peer harassment likely are derived, in part, from direct observations of their teacher's handling of peer harassment, their perceptions likely also reflect individual biases in their interpretations and memories of the teacher's behavior. In addition, teachers may respond differently to victimization, depending on the children involved, resulting in each student construing a unique mental representation of the teacher's behavior.

As this was the first investigation to examine children's perceptions of their teacher's responses to peer harassment, *a priori* hypotheses were necessarily somewhat speculative. However, a number of predictions were posited. Consistent with previous studies highlighting the salutary effects of supportive friendships for victimized children (Hodges et al., 1999; Schmidt & Bagwell, 2007), we propose that perceiving the teacher as using active response strategies (i.e., punishing aggressors, separating students, contacting parents) would minimize the victimization-maladjustment linkages because presumably children holding such perceptions would feel greater acceptance and concern from the teacher. Furthermore, as previous research has shown that teacher reprimand is associated with declines in students' peer aggression (Henry et al., 2000), children who perceive their teacher as actively trying to intercede in peer victimization may be more optimistic that their harassment will end, thus reducing the distress caused by peer victimization. In contrast, viewing the teacher as expecting children to handle aggressive peers independently may be associated with perceived teacher indifference to victims of peer harassment, and hopelessness regarding the likelihood that the harassment will discontinue, thereby amplifying links between victimization and maladjustment.

Also assessed were children's perceptions that their teacher tells students to walk away from and avoid aggressive peers (i.e., advocates avoidance) or that their teacher tells students to stand up to aggressors (i.e., advocates assertion). It could be argued that children, particularly those who are frequently victimized, interpret teachers' advice to avoid or stand up to aggressors as criticism of their ability to effectively stop their mistreatment or as evidence that teachers are unwilling to help them. Such interpretations could increase victimized children's feelings of rejection, incompetence, and helplessness. Moreover, although students report that nonchalance is an effective reaction to provocation from peers (Salmivalli, Karhunen, & Lagerspetz, 1996), and an assertive response style is related to less frequent peer harassment (Schwartz, Chang, & Farver, 2001; Schwartz, Dodge, & Coie, 1993), such responses may be ineffective for children frequently victimized by classmates. It is likely that, for these children, avoidance of aggressive peers leads to social isolation, feelings of marginalization, and disengagement from classroom and school activities. Moreover, if attempts at assertion are overly hostile, dysregulated, and ineffectual, reliance on assertive strategies may perpetuate, rather than deter, further peer abuse (Schwartz, Proctor, & Chien, 2001). Consequently, perceiving the teacher as advocating strategies that have proven to be ineffectual likely heightens the problems associated with peer victimization. Thus, it was hypothesized that victimization would be more strongly associated with emotional and school maladjustment when children perceived their teacher as advocating avoidance or assertion.

Finally, the extent to which perceptions of the teacher moderate links between peer victimization and adjustment may differ between boys and girls. Differences have been found in the forms of victimization to which boys and girls are exposed (Crick & Bigbee, 1998; Crick & Nelson, 2002), the goals they pursue when interacting with peers (Rose & Rudolph, 2006), and the coping mechanisms they employ in the face of peer harassment (Kochenderfer & Ladd, 1997; Salmivalli et al., 1996). Girls are more likely than boys to turn to others for support in response to peer stress (Ebata & Moos, 1994; Hunter, Boyle, & Warden, 2004) and maintain closer, less conflictual relationships with their teachers (Birch & Ladd, 1998; Hughes, Cavell, & Willson, 2001; Silver, Measelle, Armstrong, & Essex, 2005). Therefore, perceptions of the teacher may be a stronger moderator of victimization-dysfunction linkages for girls than for boys. Moreover, boys and girls may differ as to which perceptions moderate relations between victimization and maladjustment. Accordingly, children's sex was also tested as a potential moderating factor in the current study.

## Methods

### Participants

Participants for this study included 264 children (124 boys and 140 girls) in the fourth, fifth, and sixth grades from two elementary schools in a mid-sized city in the upper Midwestern United States ( $M$  age = 10.91;  $SD$  age = .93). Children were part of a larger study of the emotional, social-cognitive, and contextual correlates of peer aggression and victimization. At the beginning of the spring semester, the first author or an undergraduate research assistant briefly explained the purpose of the study to the children and asked them to take home a consent form for their parents or guardian to complete. They were further instructed to return the form to their classroom teachers. Of the children invited to participate, 530 (70.2%) received parental permission. The ethnicity distribution was as follows: 85.69% White, 5.73% Hispanic, 2.67% Native American, 1.34% African American, and 4.58% other or mixed ethnicity. Children came from primarily lower-class and middle-class families, with 24.15% qualifying for either reduced-price or free school lunches.

Although 530 children received permission to participate in all stages of this study, teachers in only 14 of the 28 participating classrooms granted permission for the collection of peer-report data. Consequently, peer-report data were collected on only 278 of the children. Analyses revealed no differences between children for whom peer-report data were collected and those for whom peer-report data were not collected with regard to gender, ethnicity, or any of the self-report variables used in this study. In addition, data from 14 children (2.6% of the original sample) were not included because of missing data on one or more variables, resulting in a final sample size of 264 children.

### Measures

*Perceived teacher response scale.* To assess students' perceptions of their teacher's responses to peer victimization, children were asked to complete the Perceived Teacher Response Scale (PTRS) created specifically for this study. The measure consists of 24 items asking children how often their teacher has used a particular tactic when he or she "has seen students picking on another kid." Items were derived from the Classroom Management Policy Questionnaire, a teacher self-report measure that assesses how teachers handle peer victimization (Kochenderfer-Ladd & Pelletier, 2007; Troop & Ladd, 2002). Specifically, children were asked how frequently their teacher used the following strategies in response to students' peer

harassment: (a) contact parents, (b) reprimand aggressors, (c) separate students, (d) advocate avoidance (i.e., tell children to walk away from or ignore aggressive peers), (e) advocate assertion (i.e., stand up to aggressors), and (f) independent coping (i.e., tell children to cope with aggressors on their own without adult assistance). Students rated each item on a scale of 1 (never), 2 (some of the time), 3 (half of the time), 4 (most of the time), and 5 (all of the time). As this is a new measure, the psychometric properties were examined as part of the study and are thus reported in the Results section.

*Peer ratings of victimization.* How frequently children were victimized was measured with three peer-rating items. For each item, children were asked to rate their classmates on a 3-point scale (1 = never; 2 = sometimes; 3 = a lot) as to how often they were generally ("picked on by other kids"), physically ("hit, pushed, or kicked"), and relationally ("gossiped about") victimized by peers. Children received a victimization score for each item by averaging the ratings they received from each participating classmate and standardizing this average rating within class and gender. A composite victimization score was computed by averaging the three item scores ( $\alpha = .81$ ).

*Psychological adjustment variables.* To assess children's psychological well-being, children were asked to complete measures of depression, anxiety, and loneliness at school. Depression was assessed with seven items from the Center for Epidemiological Studies—Depression Scale (CESDS; Radloff, 1991). Anxiety was measured with 11 items adapted from the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1978). Loneliness was measured with four items derived from Ladd, Kochenderfer, and Coleman's (1996) revision of the Cassidy and Asher (1992) Loneliness and School Satisfaction Questionnaire. Children rated each of the 22 items on a 5-point scale, with higher scores indicating more frequent feelings of sadness or anxiety. All of the scales had adequate internal reliability ( $\alpha = .72$ , .90, and .92, for the depression, anxiety, and loneliness items, respectively). Composite scores were calculated by averaging children's ratings across the items making up each scale. Due to the relatively high correlations among the three scales ( $r_s$  ranged from .55 to .68), the depression, anxiety, and loneliness scores were averaged to create a composite measure of internalizing distress ( $\alpha = .80$ ; see Table 1 for the mean, standard deviation, and range).

*School avoidance.* School avoidance was measured using five items from the school avoidance subscale of the School Liking and Avoidance Questionnaire (SLAQ; Ladd & Price, 1987). Children rated each item on a 5-point scale, with higher scores representing greater school avoidance.

**Table 1.** Intercorrelations and Descriptive Statistics for Children's Perceived Teacher Responses to Peer Victimization, Peer-Reported Victimization, Internalizing Distress, and School Avoidance

Variable	1	2	3	4	5	6	7	M	SD	Range
1. Contact parents	—							2.71	1.14	1–5
2. Independent coping	.17**	—						1.78	.84	1–4.75
3. Advocate avoidance	.29***	.43***	—					2.34	.91	1–5
4. Punish aggressor	.62***	.18**	.24***	—				2.57	.93	1–5
5. Advocate assertion	.36***	.49***	.55***	.28***	—			1.83	.75	1–4.67
6. Peer victimization	-.04	.08	.03	-.10	.03	—		.00	.80	-1.34 to 2.47
7. Internalizing distress	-.03	.15*	.09	.00	.15*	.20**	—	1.93	.71	1–4.45
8. School avoidance	.00	.13*	.15*	.02	.06	.03	.29***	2.69	1.13	1–5

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

These ratings were averaged across the five items to create a composite school avoidance score ( $\alpha = .83$ ; see Table 1 for means, standard deviations, and ranges.).

### *Procedure*

Data were collected in two, approximately 55-minute sessions. During the first session, children were asked to complete a series of 21 sociometric and peer-report items. During the second session, which took place approximately 2 weeks after the first session, children were asked to complete the self-report measures described earlier, as well as measures not used in this study. All measures were group administered in children's classrooms by the authors and/or 2–3 undergraduate research assistants. At the beginning of each session, children were read instructions as to how to complete each item, and, afterward, children were allowed to complete the measures at their own pace. Students who required additional assistance were read items individually by one of the research assistants, and research assistants made multiple attempts to collect data from children who were absent during the original data collection. At the end of each session, children were thanked for their participation, and all who had returned parental consent forms, including those whose parents had declined to consent, were given a small gift (e.g., a pencil). In addition, students' teachers were asked to complete a measure providing basic demographic information for all participating students, as well as measures not used in this study.

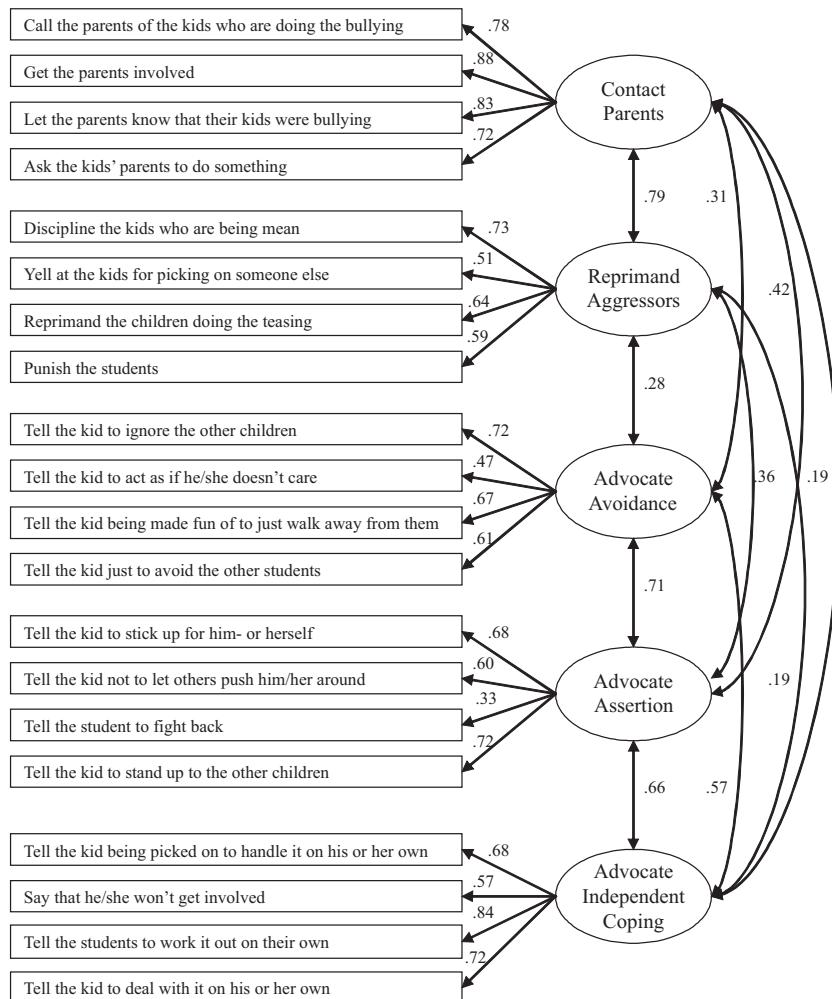
## **Results**

### *Factor Analysis of the Perceived Teacher Response Scale*

Exploratory and confirmatory factor analyses were used to determine the underlying structure of the PTRS. An initial exploratory factor analysis yielded five factors with eigenvalues greater than 1. The four items written to assess how often the teacher separates aggressors from their victims did not load on a separate factor but rather cross-loaded (i.e., loadings  $\geq .32$ ; see Tabachnick & Fidell, 2007) on one or more of the factors representing contacting children's parents, punishing aggressors, and advocating avoidance. To create conceptually distinct subscales, a second factor analysis was performed with these four items removed. The second exploratory analysis also yielded five factors with eigenvalues greater than 1.

We next conducted a series of confirmatory factor analyses using Mplus software (Muthén & Muthén, 2007). Based on the pattern of factor

loadings derived from the exploratory factor analysis, we assessed two-, three-, and five-factor solutions. As the models tested were nonnested, the Bayesian Information Criterion (BIC) was used to compare the three models, with a smaller BIC indicating better fit (Schwarz, 1978; Singer & Willett, 2003). The BIC suggested that a five-factor solution best reflected the underlying structure of the PTRS (BIC = 15268.34, 15167.50, and 15119.33, for the two-, three-, and five-factor models, respectively). Moreover, the five-factor model, presented in Figure 1, fit the data well



**Figure 1.** Confirmatory factor analysis of the Perceived Teacher Response Scale (PTRS).

( $\chi^2[158, N = 264] = 262.94$ , comparative fit index = .94, root mean square error of approximation = .050, standardized root mean square residual = .061).

Composite scores for each of the five PTRS subscales were computed by averaging children's ratings across the items making up each subscale. Internal reliability for each subscale was adequate, with  $\alpha = .88, .80, .71, .70$ , and  $.65$ , for the contact parents, independent coping, advocate avoidance, punish aggressors, and advocate assertion items, respectively.

### *Descriptive Statistics, Bivariate Correlations, and Sex Differences*

Means, standard deviations, and ranges for each of the study variables are listed in Table 1, as are intercorrelations between the variables. Although children's PTRS scores were slightly, positively skewed, suggesting that, on average, children viewed their teacher as using these responses rarely rather than frequently, there was significant variance in each of the composite variables. The correlations between the PTRS scores ranged from low to moderate with the largest correlations emerging between the two strategies representing active teacher intervention (i.e., contact parents and reprimand aggressors) and the three strategies representing more passive responses (i.e., advocate avoidance, advocate assertion, and independent coping). As the correlations were not substantially large in magnitude, and we did not want to preclude the possibility of finding strategy-specific associations, the decision was made to examine the five PTRS scores separately.

Although no significant associations emerged between how frequently children were victimized and how they thought their teacher responded to peer harassment, significant, but modest, correlations emerged between three of the perceived teacher responses and children's emotional and school adjustment. Perceiving the teacher as advocating independent coping was positively correlated with internalizing problems and school avoidance. Believing the teacher advocates avoidance was related to greater school avoidance, and perceiving the teacher as advocating assertion was associated with greater internalizing distress.

Independent-samples *t* tests revealed that boys ( $M = 1.89, SD = .93$ ) were more likely than girls ( $M = 1.68, SD = .75$ ) ( $t[262] = 2.02, p < .05$ ) to report that their teachers expected students to use independent coping when victimized by peers. Moreover, girls reported greater internalizing distress ( $M = 2.03, SD = .76$ ) than boys ( $M = 1.81, SD = .63$ ) ( $t[262] = -2.49, p < .05$ ), whereas boys indicated greater school avoidance ( $M = 2.98, SD = 1.18$ ) than girls ( $M = 2.44, SD = 1.03$ ) ( $t[262] = 3.95, p < .001$ ).

*Perceived Teacher Responses as Moderators of Victimization-Adjustment Linkages*

To determine whether associations between victimization and adjustment are moderated by children's perceptions of how their teacher responds to peer harassment, two series of regressions were conducted. Internalizing distress and school avoidance served as the criterion variables. Predictors included peer victimization, sex (coded as 0 = boy, 1 = girl), one of the five PTRS variables, and all two-way and three-way interactions. PTRS scores and peer victimization were mean centered prior to the creation of interaction terms and inclusion in the regression analyses. When significant interactions emerged, simple slopes were plotted and tested at 1 *SD* above and below the mean on the PTRS variable (Aiken & West, 1991; Preacher, Curran, & Bauer, 2006).

Conceptual and statistical considerations led to the decision to examine each of the PTRS subscales separately. The primary objective of this study was to examine whether children's perceptions of their teacher's use of specific strategies moderated victimization-adjustment linkages. A multivariate approach testing the unique contributions of individual PTRS scores may have masked important moderated effects, and consistent patterns across PTRS variables may have been misattributed to a single PTRS score. Moreover, as the focus was on moderated associations, the inclusion of all main and interaction terms in a single analysis would have led to an onerous number of predictors and increased problems with multicollinearity.

An additional consideration was the hierarchical nature of the data set and the possible need for a multilevel approach to data analysis. Accordingly, we examined the intraclass correlation coefficient (ICC) for each of the PTRS subscales to determine the percentage of variance in children's perceptions of their teacher that could be attributed to differences across classrooms. The ICC also served as a measure of the extent to which children in the same classroom held similar perceptions of their teacher (Snijders & Bosker, 1999). ICCs were calculated by using hierarchical linear modeling (HLM) software (Bryk & Raudenbush, 1992). Moderate ICCs emerged for each of the PTRS subscales (ICCs = .15, .24, .05, .14, and .07, for contacts parents, independent coping, advocate avoidance, reprimand aggressors, and advocate assertion, respectively). The ICCs were .00 and .01 for internalizing distress and school avoidance, respectively, suggesting that differences in adjustment were not a function of classroom averages on the subscales of the PTRS. However, given the hierarchical structure of the data set, each of the regression equations was also run using HLM software. The pattern of

findings was identical to those obtained with multiple regression, even after controlling for classroom levels of each perceived teacher response. For simplicity, results from the multiple regressions are presented here.

Table 2 presents findings from the regression analyses in which internalizing distress and school avoidance were predicted by peer victimization, sex, and children's perceptions of their teacher's responses to peer victimization. A pattern emerged across the analyses such that peer victimization was positively associated with internalizing distress but not school avoidance, and girls evidenced greater internalizing distress but less school avoidance in comparison to boys.

Perceiving the teacher as contacting parents did not moderate associations between peer victimization and either internalizing distress or school

**Table 2.** Regressions Predicting Adjustment From Perceived Teacher Responses to Victimization

Predictor	Internalizing distress		School avoidance	
	R <sup>2</sup>	β	R <sup>2</sup>	β
Contact parents				
Peer victimization		.20**		-.04
Sex		.14**		-.25†
Contacts parents		.05		.01
Contact parents × sex		-.08		.02
Peer victimization × sex		-.01		.11
Contact parents × peer victimization		-.10		-.11
Contact parents × peer victimization × sex		-.06		.04
Reprimand aggressors				
Peer victimization	.07***		.08***	
Sex		.15**		-.23†
Reprimand aggressors		.07		.04
Reprimand aggressors × sex		-.07		-.01
Peer victimization × sex		.01		.12
Reprimand aggressors × peer victimization		-.10		-.19**
Reprimand × peer victimization × sex		.02		.14

(continued)

**Table 2.** (continued)

Predictor	Internalizing distress		School avoidance	
	R <sup>2</sup>	β	R <sup>2</sup>	β
Advocate avoidance				
Peer victimization		.13†		.11†
Sex			.19**	-.05
Advocate avoidance			.16***	-.24†
Advocate avoidance × sex			.30†	.26***
Peer victimization × sex		.03	-.27***	-.20**
Advocate avoidance × peer victimization		.14		.10
Advocate avoidance × peer victimization × sex		-.19**		.02
Advocate assertion				
Peer victimization		.11†		.08***
Sex			.16*	-.06
Advocate assertion			.16***	-.24†
Advocate assertion × sex			.23***	.13
Peer victimization × sex		.12		-.13
Advocate assertion × peer victimization		.03	-.16*	.01
Advocate assertion × peer victimization × sex		-.19**		.07
Independent coping				
Peer victimization		.13†		.09***
Sex			.11	-.05
Independent coping			.18***	-.23†
Independent coping × sex			.23***	.19**
Peer victimization × sex		.11		-.13
Independent coping × peer victimization		.06	-.13	.12
Independent coping × peer victimization × sex		.13	-.07	.08
-.23***				

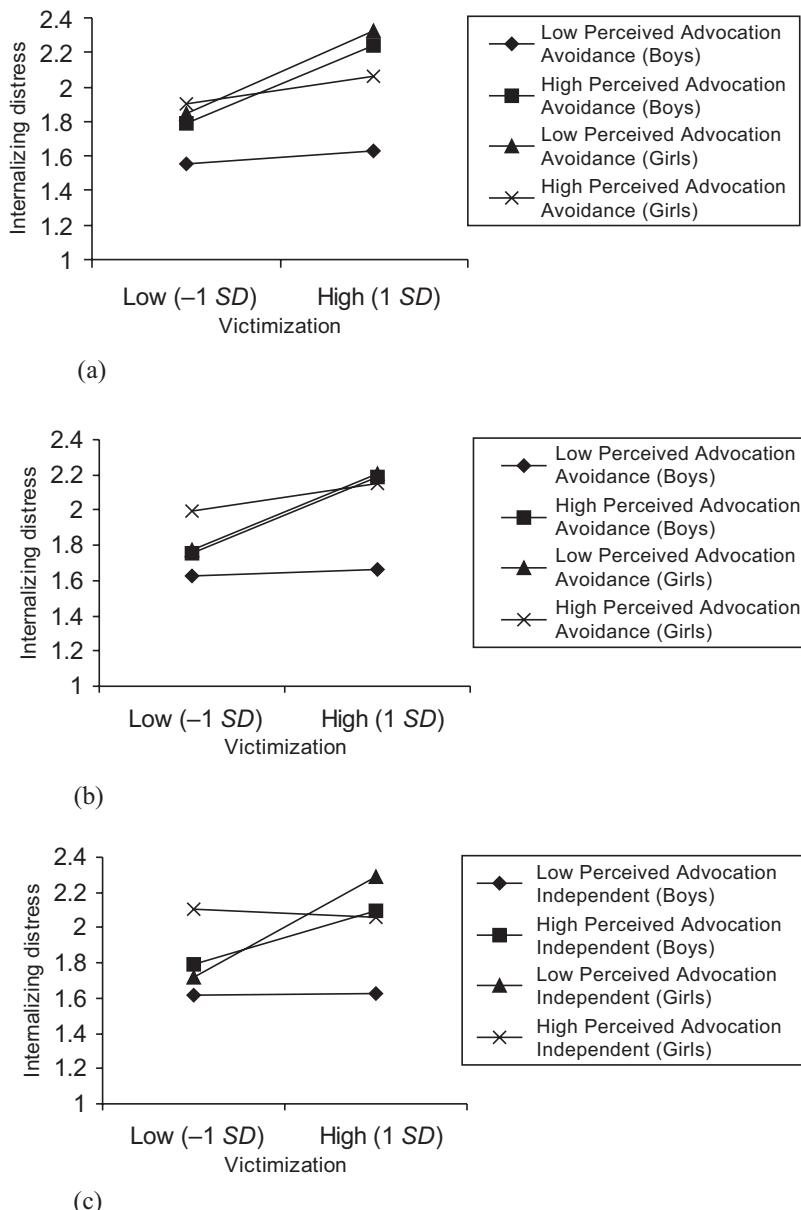
Note. The *df* for each regression equation was 256.

\**p* < .10. \*\**p* < .05. \*\*\**p* < .01. †*p* < .001.

avoidance. In addition, the extent to which children perceived their teacher as reprimanding aggressors did not moderate links between peer victimization and internalizing problems. However, a significant interaction between perceiving the teacher as reprimanding aggressors and peer victimization emerged for school avoidance. Tests of simple slopes revealed that, at low levels of perceiving the teacher as reprimanding aggressors, victimization was not related to school avoidance ( $b = .20$ ,  $t[256] = 1.09$ ,  $p = ns$ ). At high levels of viewing the teacher as reprimanding aggressors, a negative association between victimization and school avoidance approached significance ( $b = -.34$ ,  $t[256] = 1.82$ ,  $p = .07$ ).

A pattern emerged such that associations between peer victimization and internalizing distress were moderated by the children's sex and the extent to which they saw their teacher as advocating avoidance, assertion, and independent coping. Plots of these interactions are presented in Figure 2, and simple slopes were tested at 1 *SD* above and below the mean for the PTRS predictor by using procedures outlined by Curran and colleagues (Bauer & Curran, 2005; Preacher et al., 2006). As can be seen in Figure 2a, at low levels of perceiving the teacher as advocating avoidance, boys were predicted to evidence relatively low levels of internalizing problems regardless of how frequently they were victimized by peers ( $b = .05$ ,  $t[256] = .43$ ,  $p = ns$ ). However, at high levels of seeing the teacher as advocating avoidance, victimization was positively associated with internalizing distress ( $b = .28$ ,  $t[256] = 2.57$ ,  $p < .05$ ). The opposite pattern emerged for girls. Victimization was positively related to internalizing distress at low levels of perceiving the teacher as advocating avoidance ( $b = .30$ ,  $t[256] = 3.09$ ,  $p < .01$ ) but was not predictive of internalizing problems at high levels of perceived advocacy of avoidance ( $b = .10$ ,  $t[256] = 1.03$ ,  $p = ns$ ).

A similar pattern emerged in the prediction of internalizing distress from peer victimization and perceiving the teacher as advocating assertion. As can be seen in Figure 2b, for boys, at low levels of seeing the teacher as advocating assertion, victimization was not predictive of greater internalizing distress ( $b = .02$ ,  $t[256] = .25$ ,  $p = ns$ ). Rather, seeing the teacher as not advocating assertion was associated with low levels of internalizing problems regardless of the extent to which boys were victimized by peers. However, victimization was associated with greater levels of internalizing distress at high levels of seeing the teacher as advocating assertion ( $b = .27$ ,  $t[256] = 2.67$ ,  $p < .01$ ). For girls, peer victimization was positively associated with internalizing distress at low levels of perceiving the teacher as advocating assertion ( $b = .27$ ,  $t[2.80]$ ,  $p < .01$ ). However, victimization was not predictive of internalizing distress at relatively high levels of perceiving the teacher as advocating assertion ( $b = .10$ ,  $t[256] = .98$ ,  $p = ns$ ). Rather,



**Figure 2.** Plots of the interactions between peer victimization, sex, and the Perceived Teacher Response Scale (PTRS) advocate avoidance, advocate assertion, and advocate independent coping responses: (a) perceived teacher's advocacy of avoidance, (b) perceived teacher's advocacy of assertion, and (c) perceived teacher's advocacy of independent coping.

at high levels of seeing the teacher as advocating assertion, girls were predicted to have relatively high levels of internalizing problems regardless of how victimized they were.

Finally, tests of simple slopes for the three-way interaction between peer victimization, sex, and perceiving the teacher as advocating independent coping revealed that, as was the case for advocation of avoidance and assertion, at low levels of seeing the teacher as advocating independent coping, victimization was not predictive of internalizing distress for boys ( $b = .01, t[256] = .07, p = ns$ ) (see Figure 2c). Rather, at low levels of seeing the teacher as advocating independent coping, boys were predicted to show relatively little internalizing distress regardless of their exposure to peer victimization. However, when perceptions of the teacher as advocating independent coping were high, peer victimization was significantly, positively associated with internalizing problems ( $b = .19, t[256] = 2.52, p < .01$ ). For girls, peer victimization was not related to internalizing distress at high levels of seeing the teacher as advocating independent coping ( $b = -.03, t[256] = -.27, p = ns$ ). More specifically, girls were predicted to evidence relatively high levels of internalizing difficulties when they viewed their teacher as advocating independent coping regardless of how frequently, or infrequently, they were victimized by peers. Peer victimization, for girls, was significantly predictive of internalizing distress, however, when perceptions of the teacher as advocating independent coping were low ( $b = .36, t[256] = 3.75, p < .001$ ).

Although perceptions of the teacher as advocating avoidance, assertion, or independent coping did not moderate the links between peer victimization and school avoidance, two main effects revealed that perceiving the teacher as advocating avoidance or independent coping was positively related to greater school avoidance. The former result was qualified by a significant advocate avoidance  $\times$  sex interaction. Seeing the teacher as advocating avoidance was predictive of greater school avoidance for boys ( $b = .32, t[256] = 3.06, p < .01$ ) but was not associated with school avoidance for girls ( $b = -.02, t[256] = -.08, p = ns$ ).

## Discussion

From a larger, theoretical perspective, the findings from this study provide support for the premise that the extent to which victimization is associated with psychopathology depends, in part, on children's mental representations of others. Given the unique and prominent role that teachers play within the social ecologies of classrooms and schools, children's expectations regarding their teacher's responses to incidents of peer harassment

were the focus of the current investigation. As predicted, these perceptions moderated linkages between harassment and internalizing distress and school avoidance. However, the nature of these associations often varied for boys and girls. For boys, victimization was predictive of greater internalizing problems only when they perceived their teacher as encouraging victims to engage in independent coping and to respond to aggressive peers with avoidance or assertion. For girls, relations between victimization and emotional dysfunction were significant only when they perceived their teacher as rarely engaging in these more passive responses to peer victimization. Taken together, these findings underscore the need to consider children's internal representations of their social experiences, as well as sex-specific relational and social cognitive processes, when investigating the emotional correlates of peer victimization.

Psychometric assessments of the PTRS confirmed that children distinguish among at least five teacher reactions to students' harassment of schoolmates. However, moderate to strong correlations among the subscales of contacts parents and reprimands aggressors, and among the subscales of avoidance, assertion, and independent coping, suggest that children mentally distinguish between those teacher responses that reflect active attempts to prevent further mistreatment of a targeted student, potentially communicating greater concern and acceptance of the victimized child, and those teacher responses that reflect more passive teacher reactions, potentially indicating disregard or indifference to the victimized child. Further support for this distinction can be found in the findings relating children's PTRS scores with their emotional and school adjustment. Only perceptions of the teacher as responding in a more passive manner significantly moderated victimization-adjustment linkages. These strategies are notable in that they are self-referent to the child and consequently encompass perceptions of the teacher's expectations for the child during situations of peer harassment. Low self-esteem has been found to be a significant moderator of the link between victimization and internalizing symptomology among boys (Grills & Ollendick, 2002), and negative self-perceptions serve to mediate associations between peer harassment and emotional distress (Boivin & Hymel, 1997; Graham & Juvonen, 1998; Ladd & Troop-Gordon, 2003; Troop-Gordon & Ladd, 2005). Thus, links between perceptions of the teacher as responding more passively (by advocating avoidance, assertion, or independent coping) and victimization-related maladjustment may be due, in part, to the implications those expectations have for children's own feelings of self-efficacy for coping with peer harassment and their ability to obtain needed teacher support and help with handling aggressive peers.

This can be seen most clearly in the pattern of moderated associations

found for boys. Victimization was predictive of internalizing distress for boys only when they viewed their teacher as advocating avoidance, assertion, or independent coping. Boys tend to value dominance and control within peer contexts (Chung & Asher, 1996; Jarvinen & Nicholls, 1996; for a review, see Rose & Rudolph, 2006) and may perceive that others, including teachers, expect them to be able to independently handle challenging, and even threatening, peer encounters. This agentic orientation may serve boys well when they are able to fend off aggressors adeptly and maintain a relatively high status within their peer networks. However, for boys who are incapable of responding to aggression effectively and experience repeated maltreatment from agemates, perceptions that the teacher places the onus of responsibility on students for handling victimization may be associated with a sense of personal failure and, therefore, with feelings of anxiety, depression, and social isolation. Boys also may feel less supported by teachers who they view as advocating independent coping. Consistent with this notion is the finding that victimization is more strongly associated with internalizing distress among boys who report low levels of teacher support than among boys who perceive greater support from the teacher (Davidson & Demaray, 2007). Furthermore, victimized boys who see their teacher as advocating independent coping may attempt to deal with aggressive peers on their own rather than seek their teacher's assistance. Their attempts to cope independently may be dysregulated and ineffectual (Schwartz, Proctor, et al., 2001), and may perpetuate, rather than deter, their mistreatment leading to increased emotional distress.

In comparison to boys, girls place greater value on social harmony, prosociality, and relationship maintenance when interacting with others (for a review, see Rose & Rudolph, 2006). These qualities are reflected not only in girls' peer relationships but also in their relationships with teachers. For example, teachers report having closer ties with their female students than with their male students (Birch & Ladd, 1998; Hughes et al., 2001; Silver et al., 2005). Girls also maintain closer proximity to the teacher than do boys, particularly when interacting in same-sex peer groups (Fabes, Martin, & Hanish, 2003). As a consequence, when mistreated by schoolmates, girls may come to expect active intervention from teachers. Moreover, assertion and avoidance run counter to girls' motivation to resolve conflicts amicably and maintain interpersonal ties with others (Benenson & Benaroch, 1998; Murphy & Eisenberg, 2002; Rose & Asher, 1999). Therefore, perceiving the teacher as encouraging avoidance or assertion may be linked to greater depression and anxiety among girls, who prefer strategies that are conducive to maintaining satisfying peer relationships when coping with conflictual and aversive peer encounters (Rose & Rudolph, 2006).

Unlike boys, however, victimization was not related to internalizing distress when girls saw their teacher as responding more passively to peer victimization. Rather, peer victimization was linked to victimization only when girls reported that their teacher rarely responded to peer victimization with advice to avoid or stand up to aggressors and to handle the situation on their own. Plots of the interactions elucidate these somewhat unexpected findings. Girls' internalizing scores were predicted to be high when they viewed their teacher as engaging in more passive responses, regardless of how often they were victimized by peers. This finding is consistent with the notion that girls fare worse when they anticipate little active intervention on the part of the teacher. It was only when girls did not hold these perceptions that their victimization scores were related to internalizing problems. It would seem then that while perceiving the teacher as responding more passively to peer victimization may place girls at risk for greater internalizing distress, low levels of these perceptions do not protect girls from experiencing heightened levels of depression and anxiety when victimized by peers.

Furthermore, that girls evidenced greater internalizing distress when they saw their teacher as advocating avoidance, assertion, or independent coping in response to peer victimization, regardless of whether they were frequently targeted for victimization, suggests that perceptions of the teacher's reactions to peer victimization may have implications for all children, including those children who are infrequently victimized by peers. Indeed, it is not only the victims who are impacted by peer harassment. Being witness to peer victimization places children at heightened risk for anxiety and can moderate the impact of future mistreatment from peers (Nishina & Juvonen, 2005). Furthermore, a child may become engaged in peer harassment in a number of capacities, including as a defender of the victim, a reinforcer of the bully, or simply as an onlooker (Salmivalli, 2001). Consequently, most, if not all, children likely develop representations of their teacher's handling of peer victimization. Indeed, although perceptions of the teacher did not moderate links between peer victimization and school avoidance, children were more likely to avoid school if they saw their teacher as advocating independent coping, and boys reported avoiding school more when they perceived the teacher as encouraging victims to stay away from aggressive peers. Such perceptions may reflect a generalized, negative view of the teacher and school context, which may lead to greater school maladjustment regardless of victimization history (Davis, 2003; Zimmer-Gembeck, Chipuer, Hanisch, Creed, & McGregor, 2006).

There was little evidence that perceptions of the teacher as engaging in more active responses to peer victimization (i.e., contacting parents,

reprimanding aggressors) moderated links between peer victimization and emotional or school well-being. Although a negative relation was found between peer victimization and school avoidance when children viewed their teacher as punishing aggressive classmates, this finding should be interpreted with caution as the results only approached traditional levels of statistical significance. Nevertheless, we also should not be quick to conclude that perceptions of the teacher's active efforts to stop peer harassment have no bearing on children's adjustment. Henry et al. (2000) found that aggressive behavior decreases in elementary school classrooms when teachers reprimand acts of aggression and peers sanction classmates who mistreat others. Expectations that the teacher will reprimand aggressive behavior might prevent children from engaging in peer harassment, but, for victimized children, negative self-attributions and perceptions of others persist, leading to continued emotional and school maladjustment (Ladd & Troop-Gordon, 2003). Further research is needed to investigate whether expectations that teachers will actively intervene on behalf of victims are associated with children's social and behavioral adjustment, if not their psychological health.

It should be noted that the cross-sectional nature of this study prohibits drawing conclusions regarding the direction of effects. While children's victimization schema may impact their emotional adjustment, it is equally plausible that heightened levels of depression and anxiety lead to biases in perceptions of the teacher's reactions to peer harassment. Emotional states can significantly influence encoding and interpretation of social information (Lemerise & Arsenio, 2000), and internalizing symptoms may contribute to the construal of negative relational schemas (Rudolph, Hammen, & Burge, 1997). For example, feelings of depression and isolation in combination with peer victimization may trigger self-doubt among boys, including perceptions that they are not living up to other's expectations as to how one should cope effectively with bullying. Similarly, internalizing distress might elicit from girls feelings of a lack of support from adults, including teachers. It is less clear, however, why emotionally distressed, victimized girls would be less likely to view their teacher as responding passively to peer victimization than do girls who are emotionally healthy and infrequently harassed by peers. Furthermore, the nonsignificant associations between peer victimization and perceptions of the teacher suggest that it is not the case that being victimized leads to particular expectations regarding teachers' responses to peer harassment. Rather, the relations found here likely reflect bidirectional influences between the child's mental representations of the teacher and the child's emotional adjustment. Associations also may have been due, in part, to shared method variance (i.e., the use of self-reports to assess perceptions of

the teacher and adjustment). Therefore, future longitudinal studies in which victimization, perceptions of the teacher, and mental health are tracked simultaneously, and assessed using multiple methods, will be necessary to illuminate the exact nature of these associations.

Although the findings from this study suggest that the PTRS is a valid instrument for assessing children's mental representations of their teacher's behaviors, the extent to which children's knowledge structures moderate trajectories of psychosocial development may depend not only on their content but also on their depth and appropriateness (Burks, Dodge, Price, & Laird, 1999). Using open-ended questions to assess children's perceptions of teachers' victimization-related responses might reveal important differences in the complexity and appropriateness of the perceptions held by children. A more textured examination of children's views of their teacher's handling of peer victimization also would allow for the identification of those teacher strategies not studied here that might moderate associations between victimization and children's psychosocial well-being. Moreover, although the focus of the current study was peer victimization, mental representations of the teacher likely also moderate associations between aggression, psychopathology, and school adjustment, a possibility that should be addressed in subsequent research. Indeed, as children who are identified as both aggressors and victims of harassment may be particularly at risk for emotional and school maladjustment (Schwartz, 2000), it will be important to examine how perceptions of the teacher impact the severity of difficulties experienced by these youth.

There are two reasons for being cautious when considering potential applications of these findings. First, as this is the first study, to our knowledge, in which children's perceptions of their teacher's responses to peer victimization have been examined, these results need to be replicated and further research should be conducted to understand more fully the role these perceptions play in children's development. Second, the basis for children's perceptions of their teacher is unclear. The moderate ICCs suggest that there is some overlap in the perceptions held by students within the same classroom. However, such overlap may reflect a shared history that preceded exposure to the current teacher. Moreover, the majority of the variance was found at the child level, suggesting that children's perceptions of their teacher are not veridical accounts of their teacher's behavior. Therefore, recommendations regarding how teachers should handle incidents of peer harassment should not be based on the findings from this study. The results do suggest, however, that children's perceptions of their teacher may be symptomatic of underlying emotional distress. Teachers and counselors working with peer-victimized children may wish to inquire

as to how these students believe their teacher handles peer victimization and how they feel about their teacher's reactions.

In conclusion, by showing that children's perceptions of the teacher significantly moderate links between exposure to peer harassment and internalizing distress, the current study adds to the literature on the consequences of peer victimization and the role of relational schemas in the development of psychopathology. Although the results varied somewhat between boys and girls, children evidenced greater maladjustment when they perceived their teacher as encouraging students to handle acts of aggression on their own or to respond to aggressive peers with avoidance or assertion. Indeed, for boys, victimization was associated with internalizing distress only when they held these views of their teacher. Future research should address the basis on which children derive their perceptions of their teacher and whether such perceptions are contributing factors to, or by-products of, emotional and school maladjustment.

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