Predictors of Peer Victimization among Urban Youth
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Abstract
This study examined aggression and withdrawal as predictors of peer victimization. In addition, peer rejection was evaluated as both a moderator and mediator of these relations. The sample consisted of 1956 African-American, Hispanic, and White elementary school-aged boys and girls attending urban and inner-city schools that were classified as high or moderate disadvantage. Correlation and regression analyses revealed that aggression predicted both contemporaneous and longitudinal victimization by peers. This relation maintained across school disadvantage, ethnicity, age, and sex, and was mediated by rejection. Withdrawal, mediated by rejection, predicted victimization for fourth graders only; withdrawal also reduced risk for victimization for low rejected children. The implications for understanding the dynamics of childhood victimization and intervention are discussed.

Keywords: Peer victimization; aggressive behavior; social withdrawal; rejection

Approximately one child in ten is repeatedly and persistently victimized by peers, and many more children are victimized less severely (Olweus, 1978; Rigby & Slee, 1991). Not only does this result in immediate physical and/or psychological harm, but peer victimization during childhood may also portend future adjustment problems. Indeed, several recent studies have found that being victimized by peers places children at risk for experiencing a number of adjustment difficulties, including mental health problems, social problems, and school problems (Boivin & Hymel, 1997; Boivin, Hymel, & Bukowski, 1995; Hanish, 2000; Kochenderfer & Ladd, 1996; Ladd, Kochenderfer, & Coleman, 1997; Neary & Joseph, 1994; Olweus, 1993; Schwartz, McFadyen-Ketchum, Dodge, Petit, & Bates, 1998). Concern over these problematic outcomes has given rise to a number of efforts to prevent peer victimization, as seen in several recent anti-bullying programs (Olweus, 1992, 1994; Pepler, Craig, Ziegler, & Charach, 1994). Such interventions should be enhanced by a better understanding of who is most likely to be victimized, as well as the specific mechanisms through which bully/victim problems emerge within the peer context.

Building on Olweus’ (1978) description of victims as either ‘passive’ or ‘provocative,’ investigators have postulated two separate pathways for peer victimization (for a review, see Hodges & Perry, 1996). Passive victims are described as withdrawn,
anxious, and submissive. This type of victimized child is seen as an easy target who would be likely to submit to an aggressor’s demands, perhaps even reinforcing such behavior. In contrast, provocative victims are seen as aggressive, impulsive, and hostile children whose behavior is likely to annoy or irritate their peers. Several empirical studies have supported this conceptualization, and both aggressive and withdrawn behaviors have emerged as important correlates of victimization (Boivin & Hymel, 1997; Egan & Perry, 1998; Hodges, Malone, & Perry, 1997; Olson, 1992; Olweus, 1978; Schwartz, Dodge, & Coie, 1993).

Generalizing Peer Victimization Research to Understudied Populations

An important step is to extend this research to understudied populations. Much of the peer victimization research has been conducted with predominantly White, middle-class European or American children, with few studies examining peer victimization among children living in economically distressed urban areas with disproportionately higher rates of community violence, poverty, and other social problems. Yet it may be that the dynamics of peer victimization vary substantially in these settings. For example, ‘staying out of harm’s way’ is often cited as a coping mechanism for children exposed to high levels of community violence (Tolan, Guerra, & Montaini-Klovdahl, 1997). Ethnographic studies of children in violent neighborhoods often reveal how children try to ‘stay away from trouble’ and avoid ‘being at the wrong place at the wrong time’ (Gustin, Guerra, & Attar, in press). If such a coping mechanism protects children in these settings from being victimized, then we would expect that children who behave in unobtrusive ways (e.g., withdrawal) would be less likely to be victimized than those who exhibit more conspicuous behaviors (e.g., aggression). Thus, it is important to extend research examining the predictors of peer victimization to children living in neighborhoods where risk of victimization is greater.

Moreover, in our own recent study of peer victimization among African-American, Hispanic, and White urban elementary school children (Hanish & Guerra, 2000), we found that victimization was moderately high for African-American children, but only minimally stable over time, suggesting that African-American children experienced victimization by peers as a relatively untargeted and transient experience. Victimization risk was as high for White children as it was for African Americans; however, White children experienced being victimized as a much more stable and recurrent experience than did African-American children. In contrast, Hispanic children experienced lower rates of victimization than African-American or White children. However, when Hispanic children were victimized, they were moderately likely to be repeatedly victimized over time. Given these ethnic group differences in the prevalence and stability of peer victimization, it is important to determine whether individual predictors of victimization also vary by ethnicity. Few studies have examined this question directly. However, related research has shown that ethnicity moderates other aspects of peer relations, such as social status, with popularity experienced differently by African Americans and Whites (Rodkin, Farmer, Pearl, & Van Acker, 2000). Thus, examining whether aggression and withdrawal differentially predict victimization for children of various ethnic backgrounds is crucial for determining the generalizability of peer victimization models and for understanding risk processes among children of different ethnic groups.

It is also important to examine the extent to which these predictors of victimization are equally relevant for younger and older children and for boys and girls. Studies of
late elementary school-aged children have consistently shown that both aggressive behavior and social withdrawal are important risk factors for being victimized. For instance, Boivin and his colleagues (Boivin & Hymel, 1997; Boivin et al., 1995) demonstrated that aggressive behavior and social withdrawal predict being victimized for third through fifth graders. Similarly, in a series of studies of third through seventh grade children, Hodges and his colleagues (Hodges, Boivin, Vitaro, & Bukowski, 1999; Hodges et al., 1997; Hodges & Perry, 1999) found that externalizing behaviors (operationalized as aggressive, argumentative, and disruptive behavior, dishonesty, and a pushy peer entry style) and internalizing behaviors (operationalized as withdrawal, anxiety and depression, and a hovering peer entry style) predict victimization, concurrently and over time. In contrast, studies of younger children have established the predictive role of aggressive behavior, but have provided less evidence for the predictive role of withdrawal. Indeed, concurrent and prospective studies of first through third grade children have consistently found aggressive behaviors to predict victimization (Schwartz, Dodge et al., 1998; Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1999). Several studies of preschool and kindergarten-aged children have also shown that aggression is an important correlate of being victimized (Crick, Casas, & Ku, 1999; Kochenderfer & Ladd, 1996; Olson, 1992). In contrast, one study that examined internalizing problems (including withdrawal) as a predictor of victimization for young school-aged children found little relation (Schwartz et al., 1999). Further, a robust body of evidence suggests that withdrawal is an unlikely risk factor for victimization among early elementary school-aged children because young children are not skilled at recognizing this subtle behavior when it occurs and discriminating it from other social behaviors (Younger & Boyko, 1987; Younger, Schwartzman, & Ledingham, 1986). Thus, establishing the degree to which aggression and withdrawal predict victimization for younger versus older children is important to developing developmentally appropriate models of children’s peer victimization.

Numerous studies have examined sex differences in rates of victimization. Boys and girls experience different forms of victimization (i.e., physical, verbal, relational) at different rates, with boys most likely to be physically victimized and girls most likely to be relationally victimized (Crick & Bigbee, 1998). Less is known, however, about the degree to which boys and girls become victimized through different sets of socio-behavioral mechanisms. Some studies of the predictors of peer victimization have sampled boys only (e.g., Olson, 1992; Schwartz, Dodge et al., 1998; Schwartz et al., 1993). Other studies that have examined sex as a moderator have found few sex differences in predictors of victimization (Crick et al., 1999; Hodges et al., 1997; Hodges & Perry, 1999; Schwartz et al., 1999). Still, sex differences that have emerged have been inconsistent across studies. For instance, Schwartz and his colleagues (1999) found that attention problems were a stronger predictor of victimization for girls than for boys. On the other hand, Crick et al. (1999) found sex differences in the link between prosocial behavior and victimization, with prosocial behavior negatively predicting relational victimization for boys but not for girls. Thus, additional work is needed to further clarify whether and how sex moderates aggression and withdrawal in predicting victimization.

Examining the Role of Rejection

In addition, it is important to examine how the responses of children’s peers influence the impact of these individual factors. In particular, peer rejection has been singled
out as a potentially important determinant of peer victimization (Perry, Kusel, & Perry, 1988), and it has been associated with both aggressive behavior and social withdrawal (French, 1988). As Hodges and his colleagues have suggested (Hodges et al., 1997; Hodges & Perry, 1999), being rejected by peers increases children’s vulnerability to victimization because rejected children are less likely to have peers who will protect them by directly intervening in their victimization or by socially disapproving of their victimization. The specific role that peer rejection plays, however, remains to be clarified.

Some studies have found that rejection mediates the relation between behavior and victimization. For example, Olson (1992) observed preschool boys’ social interactions during an academic year. She found that boys who displayed high rates of aggressive behaviors at the beginning of the school year were more likely to be victimized by the end of the school year. This relation was mediated by peer rejection, with aggressive behavior leading to increased rates of rejection which, in turn, led to higher rates of victimization. Moreover, Schwartz et al. (1999) tested social preference as a mediator of the relation between behavior problems (operationalized as externalizing behaviors, attention problems, internalizing behaviors, and social problems) and victimization. They found support for this mediational model. Further, Boivin and his colleagues (Boivin & Hymel, 1997; Boivin et al., 1995) demonstrated that rejection mediated the predictive relation between social withdrawal and victimization. In contrast, findings from a series of studies by Hodges and his colleagues (Hodges et al., 1997; Hodges & Perry, 1999) suggest that rejection serves as a moderator. Specifically, they found that elementary school-aged children who displayed externalizing or internalizing problems and were rejected by peers were at increased risk for victimization when compared to children who displayed either externalizing or internalizing problems and were not rejected by peers.

Thus, extant evidence suggests that rejection may serve as both a mediator and a moderator. In disentangling these relations, it may be useful to consider the function of aggression and withdrawal in the peer context. The degree to which rejection mediates or moderates predictive relations may depend on peers’ perceptions of these behaviors, which may vary by age and setting. Children who exhibit behaviors that are interpreted by the peer group as deviant or objectionable are more likely to be rejected. In turn, these rejected children should be more likely to be victimized because few children in the peer group are willing to support and defend those who are at the bottom of the social hierarchy—these children may be seen as relatively acceptable targets by peers (Perry, Williard, & Perry, 1990). In contrast, when children exhibit behaviors that are not perceived by peers as atypical or unpleasant, it is unlikely that rejection will operate as a mediator. Instead, rejection may operate as a moderator. In these situations, behaviors, such as withdrawal, may predict victimization only when children are also rejected, making rejection a primary determinant of being victimized.

The Present Study

In the current study, predictors of peer victimization were examined in an ethnically diverse sample of elementary school-aged boys and girls from schools located in urban and inner city settings. Although all children attended schools in neighborhoods with high rates of poverty, violence, crime, and other social problems, we further distinguished school settings as high disadvantage and moderate disadvantage based on
overall levels of self-reported violence exposure, neighborhood crime rates, and socioeconomic indicators (e.g., percentage of children receiving free or reduced lunch), following procedures outlined in previous studies with this sample (Attar, Guerra, & Tolan, 1994; Metropolitan Area Child Study, 2000). The children were studied when they were initially in first and second or fourth grades, and they were followed over a two-year period.

Three principle questions guided this research. Do aggression and withdrawal predict current and future peer victimization among urban children? Are these relations moderated by school setting, ethnicity, grade, or sex? Does peer rejection function as a mediator or a moderator of these predictive relations?

First, we hypothesized that aggression would be related to both concurrent and subsequent victimization, and that this relation would not vary by school setting, ethnicity, grade or sex. Indeed, it is likely that aggressive behavior is annoying to all peers, and that aggressive children, by virtue of this behavior, single themselves out for subsequent retaliation. The robust pattern of findings linking aggression to victimization across numerous studies further supports this hypothesis (Boivin & Hymel, 1997; Crick et al., 1999; Hodges et al., 1999; Hodges et al., 1997; Hodges & Perry, 1999; Kochenderfer & Ladd, 1996; Olson, 1992; Schwartz, Dodge et al., 1998; Schwartz et al., 1999).

Second, we hypothesized that withdrawal would predict concurrent and subsequent victimization for older but not younger children and that this relation would not maintain, and might even reverse, for children attending high disadvantage schools. Previous research suggests that withdrawal is less salient among younger children because it is more difficult to observe (Younger & Boyko, 1987; Younger et al., 1986). Therefore, it is less likely that younger children will selectively victimize classmates who exhibit this behavior. Further, in high disadvantage schools with scarce resources, children might be more likely to compete for attention and other rewards and focus their aggression on competitors rather than children who remain relatively unnoticed—in some sense, withdrawal would be less salient in more disadvantaged and disorganized settings.

Third, we hypothesized that peer rejection would mediate rather than moderate the aggression-victimization relation. Consistent with Olson’s (1992) and Schwartz and colleagues’ (1999) studies, we expected that aggression would be annoying to peers regardless of age, sex, ethnicity, or school disadvantage. Such behavior should lead to increased peer rejection, which would, in turn, lead to increased peer victimization. We also predicted that rejection would mediate the withdrawal-victimization relation for older children who are more adept at discriminating social withdrawal as deviant (Younger & Boyko, 1987). Finally, we hypothesized that rejection would moderate the withdrawal-victimization relation for children from high disadvantage schools, with non-rejected and withdrawn children at lowest risk for victimization.

Method

Participants

Participants were 1956 Hispanic (42%), African-American (40%), and White (18%) boys and girls initially assessed in grade 1 (35%), grade 2 (31%) and grade 4 (33%). They were part of the initial three cohorts of the Metropolitan Area Child Study (MACS), a larger longitudinal development and prevention study (Guerra, Eron,
Huesmann, Tolan, & Van Acker, 1997; Huesmann et al., 1996). Overall, the parent permission rate for MACS participants is 86.6% (for a more detailed description of sample selection procedures, see Guerra, Huesmann, Tolan, Van Acker, and Eron, 1995). The MACS draws from fourteen urban elementary schools. Based on school and community indicators, these schools can be characterized as high disadvantage (e.g., an average of 61% of children receive free lunch) and moderate disadvantage (e.g., an average of 34% of children receive free lunch) schools. Rates of violent and other crimes in the communities where these schools are located are higher than national averages and are highest in communities with schools classified as high disadvantage.

A total of 1199 children were located and followed up two years later when they were in grades 3, 4, and 6. There were no differences between located and unlocated children in sex, $\chi^2(1) = 1.10$, n.s., or ethnicity, $\chi^2(2) = 5.13$, n.s. However, unlocated children were more likely to be first graders during the first assessment period, $\chi^2(4) = 14.20, p < .01$, and to attend highly disadvantaged schools, $\chi^2(1) = 24.48, p < .001$. In addition, unlocated children had slightly higher victimization scores, aggression scores, and withdrawal scores, $F(1, 1951) = 4.27, p < .05$, $F(1, 1749) = 10.09, p < .01$, and $F(1, 1749) = 9.07, p < .01$, respectively, than did located children.

**Procedures**

Victimization, rejection, aggressive behavior, and withdrawal were measured at Time 1 (when children were in grades 1, 2, and 4) and victimization was measured again at Time 2 (when children were in grades 3, 4, and 6). Peer ratings were used to assess victimization and rejection, and teacher ratings were used to assess aggressive behavior and withdrawal. All measures were collected during the late spring semester of each academic year to ensure that children and teachers would have substantial time to get to know each other. This assessment was embedded within a larger multi-method assessment of behavioral, social, and individual characteristics that does not bear directly on this paper. For the peer ratings completed by the children, measures were administered individually for children in grade 1, and in the classroom for children in grade 2 and above. In both individual and group administrations, all items were read aloud by a trained experimenter as the children followed along and marked their answers. An assistant was available to provide additional help to children who had any difficulties understanding the questions. A bilingual experimenter tested Spanish-speaking only children. Peer and teacher ratings used in the present study are described in turn.

**Measures**

**Peer ratings** Peer sociometric ratings were used to obtain measures of victimization and rejection. These procedures have repeatedly demonstrated reliability and validity in measuring social and behavioral constructs due to the aggregation of multiple items and multiple ratings in computing scores (Coie, Dodge, & Kupersmidt, 1990). A standard method described by Eron and his colleagues (Eron, Walder, & Lefkowitz, 1971) was used. Each child in a class received a booklet containing several pages on which randomized lists (separated by sex) of the names of all children in the class appeared. The children were asked to circle every name that fit the corresponding question (e.g., ‘Who are the children that get picked on by other kids?’). The experimenter paced the
children so that exactly the same amount of time was spent on each question. A child’s score on a scale was derived by taking the number of times the child was nominated by all other children on questions that fall on the scale and dividing by the total number of times a child could have been nominated. These peer nomination scores could range from 0 to 1.

The two-item Victimization Scale was drawn from the Modified Peer Nomination Inventory (Perry et al., 1988). These items were selected because they had high item-total correlations. One item addressed physical victimization (‘Who are the children other kids push and hit?’), and one item addressed more general victimization (‘Who are the children who get picked on by other kids?’). The two-item Rejection Scale relied on negative nominations assessing the extent to which children are disliked by a majority of their peer group. This scale was derived from previously used measures and has been shown to be reliable and valid across diverse samples (Eron et al., 1971; Huesmann, Eron, Guerra, & Crawshaw, 1994; Huesmann, Lagerspetz, & Eron, 1984). A sample rejection item was ‘Who are the children that you really don’t like?’ Both peer nomination scales had alpha coefficients greater than .80 in the present sample.

**Teacher ratings** Teacher ratings were used to measure aggressive behavior and withdrawal. Classroom teachers completed the Child Behavior Checklist-Teacher Report (CBCL-TRF), a measure with demonstrated reliability and validity (Achenbach, 1991). This measure asks teachers to respond to items using a three-point rating scale, ranging from not true (0) to very true (2), and scale scores are computed by summing teachers’ responses to the corresponding scale items.

In the present study, only scores on the Aggressive Behavior and Withdrawn Subscales were used. The Aggressive Behavior Subscale consists of 25 items, such as ‘this child gets in many fights’ and ‘this child argues a lot’. It has been used in numerous studies as an index of aggressive behavior and has been show to be valid (e.g., Emerson, Crowley, & Merrell, 1994; Frankel & Myatt, 1994). The Withdrawn Subscale is a 9-item subscale that contains items such as ‘this child is withdrawn, doesn’t get involved with others’, ‘this child would rather be alone than with others’, ‘this child is shy or timid’, and ‘this child is unhappy, sad, or depressed’. This measure operationalizes withdrawal as a broadband construct that reflects several aspects of withdrawal, including the passive-anxious, unsociable, and sad/depressed dimensions described by a number of researchers (e.g., Harrist, Zaia, Bates, Dodge, & Pettit, 1997; Rubin & Mills, 1988). Previous research has provided evidence for the validity of this subscale, showing that this measure is related in expected ways to other indices of withdrawal, social competence, and affect (e.g., Frankel & Myatt, 1994; Hoge & McKay, 1986). Moreover, this measure has been used in many studies of social withdrawal (e.g., Cantrell & Prinz, 1984; Schwartz et al., 1999). Both the Aggressive Behavior and Withdrawn Subscales had alpha coefficients greater than .80 in the present sample.

**Results**

Four sets of analyses were conducted. In the first set, we examined aggression and withdrawal as predictors of contemporaneous peer victimization. The second set of analyses assessed whether school setting, ethnicity, grade, and sex moderated these predictive relations. The third set of analyses examined whether rejection moderated or mediated relations between aggression and withdrawal and victimization. Finally, we examined these questions longitudinally, predicting Time 2 victimization from
Time 1 aggression and withdrawal after controlling for Time 1 victimization. An alpha level of .05 was used for interpreting all statistical tests.

**Correlations between Variables**

As an initial step, zero-order correlations between aggressive behavior, withdrawal, and rejection (measured at Time 1) and concurrent (measured at Time 1) and longitudinal (measured at Time 2) victimization were examined (see Table 1). Both aggression and rejection were moderately and significantly correlated with concurrent and subsequent peer victimization. Although withdrawal was also significantly correlated with victimization at Times 1 and 2, these relations were consistently weak.

**Aggression and Withdrawal as Predictors of Contemporaneous Peer Victimization**

To further explore the predictors of concurrent victimization, Time 1 aggression and withdrawal were included in a hierarchical regression predicting Time 1 victimization (see Table 2). School setting (moderate disadvantaged schools were the comparison group), dummy coded ethnicity (White was the comparison group), grade, (first and second grade was the comparison group), and sex (girl was the comparison group) were entered in the first step to control for their influence on victimization. Together, these demographic variables accounted for only 4% of the variance in concurrent peer victimization. School setting, ethnicity, and sex made significant unique contributions to victimization. Children in high disadvantage schools had higher victimization scores than children in moderate disadvantage schools, Whites had higher victimization scores than Hispanics, and boys had higher victimization scores than girls.

Time 1 aggression and withdrawal were centered and entered in the second step of the equation. The addition of these variables made a significant contribution to the model, explaining an additional 7% of the variance in concurrent peer victimization. As shown in Table 2, aggression positively and significantly predicted peer victimization, but withdrawal was unrelated to being victimized.

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Table 1. Pearson Product-Moment Correlations between Time 1 Predictors and Time 1 and Time 2 Peer Victimization

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tr>
<td>1. Time 1 Victimization</td>
<td>—</td>
<td></td>
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<td></td>
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<tr>
<td>2. Time 2 Victimization</td>
<td>.38***</td>
<td>—</td>
<td></td>
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<td>3. Time 1 Aggression</td>
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<td>.16***</td>
<td>—</td>
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<tr>
<td>4. Time 1 Withdrawal</td>
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<td>.07*</td>
<td>.36***</td>
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<tr>
<td>5. Time 1 Rejection</td>
<td>.61***</td>
<td>.36***</td>
<td>.43***</td>
<td>.18***</td>
<td>—</td>
</tr>
</tbody>
</table>

*Note: Analyses were conducted on a pairwise basis. Ns for analyses of Time 1 variables range from 1751 to 1953. Differences in sample size across these analyses are primarily a function of missing teacher-report data due to difficulties in obtaining teacher ratings from all teachers on all children. Missing data are distributed across all schools. Ns for longitudinal analyses range from 1073 to 1197.*

* *p < .05. **p < .01. ***p < .001.*
Predictors of Peer Victimization

School setting, ethnicity, grade, and sex as moderators of victimization risk. Correlations between aggression and victimization and withdrawal and victimization were conducted separately for boys and girls, for first and second graders and fourth graders, for African-Americans, Hispanics, and Whites, and for children in moderately and highly disadvantaged schools (see Table 3). Aggression was significantly correlated with concurrent victimization for children in all demographic groups. Correlations between withdrawal and victimization, however, were much less consistent, explaining the overall weak relation between these two variables. Withdrawal was positively related to concurrent victimization for fourth graders but not first and second graders, for boys but not girls, for children in moderate disadvantage but not high disadvantage schools, and for Whites and African Americans but not Hispanics.

Next, a third step in the hierarchical regression presented in Table 2 was added. Two-way interactions between each demographic variable and each predictor variable were entered into the model (see Table 2). The addition of these terms significantly increased the predictive utility of the model, \( F(10, 1726) = 5.94, p < .001 \). Adding the interaction terms accounted for an additional 3% of the variance in victimization.

As shown in Table 2, there were significant interactions between sex and aggression, between grade and withdrawal, between school setting and withdrawal, and between ethnicity and withdrawal. These interactions were interpreted using the pro-

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Table 2. Hierarchical Regression Predicting Time 1 Victimization from Time 1 Aggression and Withdrawal (N = 1744)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cumulative R²</th>
<th>ΔR²</th>
<th>β</th>
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<td>.04***</td>
<td>.07**</td>
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<td></td>
<td>-.04</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td>.09***</td>
</tr>
<tr>
<td>Step 2</td>
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<td>.07***</td>
<td>.22***</td>
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<tr>
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<td></td>
<td>.04</td>
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<tr>
<td>Withdrawal</td>
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<td>Step 3</td>
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<td>.03**</td>
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<td>-.08*</td>
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<td>.07</td>
</tr>
<tr>
<td>Hispanic * Withdrawal</td>
<td></td>
<td></td>
<td>-.15***</td>
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<tr>
<td>Afr. Amer. * Withdrawal</td>
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<td></td>
<td>-.03</td>
</tr>
<tr>
<td>Grade * Aggression</td>
<td></td>
<td></td>
<td>-.02</td>
</tr>
<tr>
<td>Grade * Withdrawal</td>
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<td></td>
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</tr>
<tr>
<td>Sex * Aggression</td>
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<td></td>
<td>.11**</td>
</tr>
<tr>
<td>Sex * Withdrawal</td>
<td></td>
<td></td>
<td>.03</td>
</tr>
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</table>

* \( p < .05 \). ** \( p < .01 \). *** \( p < .001 \).
cedures outlined by Aiken and West (1991). Significant interactions between the dummy coded demographic variables and the continuous predictor variables were evaluated by comparing the relations between the predictor variable of interest and victimization at each level of the demographic variable (i.e., boy and girl; older children and younger children; high and moderate disadvantage; African American, Hispanic, and White). In doing so, multiple sets of regression equations, differing with regard to which level of the demographic variable (e.g., boy or girl) served as the comparison, were computed to analyze each interaction. The regression coefficients for the lower order effect of the continuous predictor variable of interest (e.g., aggression) were then compared across regression equations.

Analyses revealed that aggression significantly predicted concurrent victimization for both boys ($b = .36$, $p < .001$) and girls ($b = .22$, $p < .001$), but it was a stronger predictor for boys. Furthermore, withdrawal increased fourth graders’ risk for being victimized ($b = .21$, $p < .001$), but did not affect first and second graders’ risk for being victimized ($b = .04$, n.s.). Tests of the school setting by withdrawal and ethnicity by withdrawal interactions, however, added little to the interpretation of effects. There was a trend for withdrawal to be negatively related to victimization in high risk settings ($b = -.07$, n.s.) and positively related in moderate risk settings ($b = .04$, n.s.), but the effect sizes were small and neither effect reached significance. Further, in contrast to findings produced by correlations, these analyses suggested that withdrawal decreased Hispanics’ victimization risk ($b = -.23$, $p < .001$), but did not affect African Americans’ ($b = -.01$, n.s.) or Whites’ ($b = .04$, n.s.) risk. Comparison of beta weights and correlation coefficients, however, revealed that aggression was causing a suppression effect in the relation between withdrawal and victimization for Hispanic children. That is, the zero-order correlation between withdrawal and victimization was near zero for Hispanics (see Table 3). Once aggression was controlled, however, a significant relation between withdrawal and victimization was obtained ($r = -.17$, $p < .001$). This suppressor effect was not evident for African-American or White children. Because suppressor effects may be, but are not always, spurious (see Collins &

<table>
<thead>
<tr>
<th>Group</th>
<th>Aggression</th>
<th>Withdrawal</th>
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<tbody>
<tr>
<td>Boys</td>
<td>.36***</td>
<td>.12***</td>
</tr>
<tr>
<td>Girls</td>
<td>.19***</td>
<td>.02</td>
</tr>
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<td>.31***</td>
<td>.02</td>
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<tr>
<td>Fourth Graders</td>
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<tr>
<td>African Americans</td>
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<td>.36***</td>
<td>-.02</td>
</tr>
<tr>
<td>Whites</td>
<td>.28***</td>
<td>.16**</td>
</tr>
<tr>
<td>Moderate Disadvantage</td>
<td>.30***</td>
<td>.12***</td>
</tr>
<tr>
<td>High Disadvantage</td>
<td>.30***</td>
<td>.02</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
Predictors of Peer Victimization

Schmidt, 1997), they must be interpreted very cautiously until verified by additional research.

In sum, aggression positively predicted victimization for all children, although the relation was somewhat stronger for boys than for girls. The findings were less consistent for withdrawal. Overall, withdrawal played little role in predicting victimization. For fourth graders, however, being withdrawn was an important contributor to being victimized.

Rejection as a moderator. To evaluate rejection as a moderator of aggression, an interaction term for the aggression by rejection effect was added to a hierarchical regression predicting concurrent victimization from demographics, aggression, and rejection. The addition of the interaction term did not account for additional variance above the 40% accounted for by the main effects terms ($\Delta R^2 = .00, F[1, 1735] = .63, \text{n.s.}$), and the interaction term was nonsignificant ($\beta = -.02, \text{n.s.}$), indicating that rejection did not moderate the aggression-victimization relation. Because sex moderated the predictive relation between aggression and victimization, this analysis was also conducted separately for boys and girls. Findings were identical. Rejection did not moderate the aggression-victimization relation for either boys ($\beta = -.02, \text{n.s.}$) or for girls ($\beta = -.02, \text{n.s.}$).

Similar procedures were followed to test rejection as a moderator of withdrawal. An interaction term for the withdrawal by rejection effect made a minimal, but statistically significant, contribution to a model containing main effects terms for demographics, withdrawal, and rejection ($\Delta R^2 = .00, F[1, 1735] = 5.69, p < .05, \beta = .05$). This interaction was interpreted as suggested by Aiken and West (1991). Rejection was re-scaled to represent low (i.e., one standard deviation below the mean) and high (i.e., one standard deviation above the mean) levels. The relation between withdrawal and victimization was then tested at each level of rejection. Findings demonstrated that withdrawal was unrelated to victimization at high levels of rejection ($\beta = -.01, \text{n.s.}$), but being withdrawn decreased children’s risk of being victimized at low levels of rejection ($\beta = -.09, p < .01$).

As discussed above, there was one group of children for whom withdrawal significantly predicted victimization. These were the fourth graders. Therefore, we also evaluated the moderation hypothesis separately for this group of children. The addition of a rejection by withdrawal interaction term to a model containing main effects terms for demographics, withdrawal, and rejection did not account for additional variance in predicting concurrent victimization, $\Delta R^2 = .00, F(1, 609) = 2.13, \text{n.s.}$, and the interaction term was not significant, $\beta = .06, \text{n.s.}$ Thus, the relation between withdrawal and victimization operated differently for the oldest children in this sample than for all others; for this group, rejection did not moderate the relation between withdrawal and victimization.

Rejection as a mediator. Kenny and colleagues’ (Baron & Kenny, 1986; Kenny, Kashy, & Bolger, 1998) procedure was used to test for mediation. According to this procedure, three conditions must be met for mediation to exist. First, the independent variable (i.e., aggression or withdrawal) must be correlated with the dependent variable (i.e., victimization). Second, the independent variable must also be correlated with the mediator (i.e., rejection). Third, after controlling for the variance attributable to the independent variable, the mediator must uniquely predict the dependent variable, and it must reduce the effect of the independent variable on the dependent variable.

Examination of correlation coefficients indicated that the first and second conditions were met for aggression. As shown in Table 1, Time 1 aggression was signifi-
cantly correlated with Time 1 victimization and with Time 1 rejection. LISREL 8 (Jöreskog & Sörbom, 1996) was then used to test the final condition necessary for mediation. A path model with aggression and withdrawal as exogenous variables predicting victimization and with rejection mediating the relation between aggression and victimization provided a good fit to the data, $\chi^2(1) = 1.49, p = .22$, RMSEA = .01, Standardized RMR = .01. As shown in Figure 1, rejection mediated the relation between aggression and victimization; the indirect effect of aggression on victimization was .25, and the direct effect was .07.

Because sex moderated the predictive relation between aggression and victimization, this mediational relation was tested across sex, as well. These analyses demonstrated that the mediational relationship operated somewhat differently for girls and for boys. Aggression was correlated with victimization ($r = .19, p < .001$ and $r = .36, p < .001$ for girls and boys respectively) and rejection ($r = .36, p < .001$ and $r = .44, p < .001$ for girls and boys, respectively) for both sexes. Thus, the first two conditions necessary for mediation were met for both girls and boys. For girls, rejection completely mediated the relation between aggression and victimization. The indirect effect of aggression on victimization was .21, $p < .001$; the direct effect was nonsignificant at .01. For boys, however, rejection partially mediated the relation between aggression and victimization; aggression had an indirect effect on victimization of .24 and a direct effect of .12 (both significant at $p < .001$).

In testing the mediational hypothesis for withdrawal, we again began by examining the relation between withdrawal and victimization. As shown in Table 1, these variables were significantly correlated, but their relationship was very weak ($r = .08, p < .05$); withdrawal accounted for less than 1% of the variance in victimization ($r^2 = .006$). Moreover, as shown in Table 2, withdrawal did not make a unique contribution to predicting victimization. Thus, we conservatively assumed that the first condition of mediation was not met. However, given the significant interaction between
grade and withdrawal (see Table 2), we evaluated the mediational hypothesis for older children.

For fourth graders, withdrawal was correlated with victimization ($r = .17, p < .001$) and rejection ($r = .22, p < .001$). Withdrawal and aggression were included in a path model as predictors of victimization, and rejection was included as a mediator of the relation between withdrawal and victimization. The model fit the data poorly, $\chi^2(1) = 70.90, p < .001$, RMSEA = .34, Standardized RMR = .11. These findings were evaluated in two ways. First, we examined the direct and indirect effects of withdrawal on victimization. This revealed that rejection completely mediated the relation between withdrawal and victimization for fourth graders, with an indirect effect of .12, $p < .001$ and a nonsignificant direct effect of .01. Second, we added a suggested pathway between aggression and rejection, producing a saturated model, and again examined the direct and indirect effects of withdrawal on victimization. After controlling for the influence of aggression on rejection, the indirect relation between withdrawal and victimization approached significance (with an indirect effect of .07, $p < .10$ and a nonsignificant direct effect of .01).

**Aggression and Withdrawal as Predictors of Longitudinal Peer Victimization**

Analyses were also conducted to evaluate aggression and withdrawal as predictors of increases in victimization over a two-year period. As shown in Table 1, Time 1 aggression was moderately and significantly correlated with Time 2 victimization, and Time 1 withdrawal was weakly, but significantly, correlated with Time 2 victimization. To further examine these relations, we conducted a hierarchical regression in which we controlled for the influence of demographic variables and the stability of victimization. Demographic variables were entered on the first step. Then, centered Time 1 victimization was entered on the second step to control for prior levels of victimization. Centered Time 1 aggression and withdrawal were entered on the third step, and interactions with sex, grade, ethnicity, and school setting were entered on the fourth step (see Table 4).

Together, the demographic variables accounted for 7% of the variance in Time 2 victimization. Ethnicity, grade, and sex each predicted Time 2 victimization, with Whites, younger children, and boys more likely to be victimized. Time 1 victimization accounted for an additional 12% of the variance in Time 2 victimization. Time 1 aggression and withdrawal added minimally to the model, explaining less than 1% of the variance. Nevertheless, aggression significantly predicted later victimization. In addition, although withdrawal did not predict a two-year change in victimization for the sample as a whole, it marginally predicted increased victimization for a subgroup of children. Aiken and West’s (1991) procedure was used to examine a significant interaction between withdrawal and grade. Findings revealed a nonsignificant trend toward a positive relation between withdrawal and later victimization for older children ($\beta = .11$, n.s.) but not for younger children ($\beta = -.05$, n.s.).

**Rejection as a Moderator and Mediator of Longitudinal Peer Victimization**

Tests of the moderation hypothesis revealed that rejection did not moderate the longitudinal relation between aggression and victimization ($\beta = -.05$, n.s.). Similarly, rejection did not moderate the longitudinal relation between withdrawal and victimization ($\beta = .05$, n.s.). We also examined rejection as moderator of withdrawal for fourth
graders. Again, there was no interaction between withdrawal and rejection in predicting later victimization for the oldest children in this sample ($\beta = .02$, n.s.).

The correlation coefficients reported in Table 1 and the regression coefficients reported in Table 4 demonstrated that aggression, but not withdrawal, was associated with later victimization. Thus, the first condition necessary for mediation was met only for aggression. As shown in Table 1, the second condition was also met; aggression was significantly correlated with rejection. Using LISREL, we tested a path model in which Time 1 victimization, aggression, and withdrawal served as exogenous variables predicting Time 2 victimization and Time 1 rejection mediated the relation between Time 1 aggression and Time 2 victimization. This model did not fit the data well, $\chi^2(2) = 377.26, p < .001$, RMSEA = .42, Standardized RMR = .13. We did, however, examine the direct and indirect effects of aggression on later victimization. Rejection completely mediated the relation between aggression and victimization, with an indirect effect of .08, $p < .001$ and a nonsignificant direct effect of .00. We added a suggested pathway between Time 1 victimization and rejection, substantially improving the fit of the model, $\chi^2(1) = 3.71, p < .05$, RMSEA = .05, Standardized RMR = .01 (see Figure 2 for final model). In this model, rejection completely medi-

### Table 4. Hierarchical Regression Predicting Time 2 Victimization from Time 1 Aggression and Withdrawal, Controlling for Time 1 Victimization (N = 1068)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cumulative $R^2$</th>
<th>$\Delta R^2$</th>
<th>$\beta$</th>
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<tr>
<td>Step 1</td>
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<td></td>
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<tr>
<td>School Setting</td>
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<td>.07***</td>
<td>-.06</td>
</tr>
<tr>
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<td></td>
<td>-.22***</td>
</tr>
<tr>
<td>Ethnicity (African American)</td>
<td></td>
<td></td>
<td>-.21***</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td>-.06*</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td>.08**</td>
</tr>
<tr>
<td>Step 2</td>
<td>.20***</td>
<td>.12***</td>
<td>.33***</td>
</tr>
<tr>
<td>Victimization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>.20***</td>
<td>.00</td>
<td>.19*</td>
</tr>
<tr>
<td>Aggression</td>
<td></td>
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<tr>
<td>Withdrawal</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td>.22***</td>
<td>.01*</td>
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</tr>
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<td></td>
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</tr>
<tr>
<td>Setting * Withdrawal</td>
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<td></td>
<td>-.06</td>
</tr>
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<td></td>
<td>-.03</td>
</tr>
<tr>
<td>Hispanic * Withdrawal</td>
<td></td>
<td></td>
<td>-.01</td>
</tr>
<tr>
<td>Afr. Amer. * Aggression</td>
<td></td>
<td></td>
<td>-.11</td>
</tr>
<tr>
<td>Afr. Amer. * Withdrawal</td>
<td></td>
<td></td>
<td>.04</td>
</tr>
<tr>
<td>Grade * Aggression</td>
<td></td>
<td></td>
<td>-.07</td>
</tr>
<tr>
<td>Grade * Withdrawal</td>
<td></td>
<td></td>
<td>.11*</td>
</tr>
<tr>
<td>Sex * Aggression</td>
<td></td>
<td></td>
<td>.04</td>
</tr>
<tr>
<td>Sex * Withdrawal</td>
<td></td>
<td></td>
<td>.03</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
ated the aggression-victimization relation, with an indirect effect of .05, \( p < .001 \) and a direct effect of .00. In addition, this model showed that the stability between Time 1 victimization and Time 2 victimization was partially mediated by rejection. The indirect effect of early victimization on later victimization was .09, \( p < .001 \) and the direct effect was .28, \( p < .001 \).

**Discussion**

The present investigation was designed to examine whether aggressive and withdrawn behaviors predict concurrent and subsequent peer victimization and whether these predictive relations are mediated or moderated by rejection. Analyses also examined differences in these relations across school context, ethnicity, developmental level, and sex. The findings supported a relation between aggressive behavior and victimization by peers. This relation maintained across school context, ethnicity, age, and sex, and was mediated by rejection. The relations between withdrawal and victimization were more complicated. Withdrawal, mediated by rejection, predicted victimization for fourth graders, though it did not operate as a risk factor for other children. In fact, when rejection was low, it reduced the risk for victimization for the sample as a whole. Both variables exerted greater influence as contemporaneous predictors, although aggression significantly contributed to the prediction of victimization two years later. These findings are discussed in terms of their implications for understanding the dynamics of childhood victimization and for intervention.
Aggression as a Predictor of Peer Victimization

Our findings demonstrated that aggression predicts contemporaneous victimization. This relation occurred regardless of school context, ethnicity, age, or sex, although it was slightly stronger for boys than for girls. Aggression also predicted being victimized two years later, although the longitudinal effects were weaker. These findings support and extend previous research. Several studies of predominantly White, middle-class, school-aged boys and girls have shown that some victimized children display high levels of aggression and that aggressive behavior is predictive of being victimized (Hodges et al., 1999; Hodges et al., 1997; Olson, 1992; Olweus, 1978; Schwartz, Dodge et al., 1998; Schwartz et al., 1999). The present research strengthens these findings and demonstrates that they are relevant for ethnically diverse and economically disadvantaged populations as well. The aggression-victimization relation appears to be relatively robust and generalizable across samples. Extant research suggests that this relation operates, at least in part, by a tendency for victimized children to interpret others’ behaviors as hostile and to respond with reactive aggression, an angry and retaliatory response which is predictive of peer rejection and continued victimization (Kochenderfer & Ladd, 1997; Olson, 1992; Schwartz, Dodge et al., 1998). Indeed, in the present study, the relation between aggression and victimization was mediated by rejection.

Withdrawal as a Predictor of Peer Victimization

In contrast to the significant and consistent findings obtained for aggression, the overall relation between withdrawal and victimization was weak, with withdrawal actually reducing the risk for victimization at low levels of rejection. Withdrawal predicted victimization for fourth grade children only. The findings regarding the withdrawal-victimization relations, however, should be interpreted in light of measurement procedures. Withdrawal was measured using the TRF (Achenbach, 1991), a widely used assessment tool that relies on teacher ratings. Teacher ratings of withdrawal, however, are moderately, but not perfectly, related to peer and observational assessments; hence, teachers may not accurately characterize the precise nature of children's social interactions (Hymel & Rubin, 1985). In addition, one of the difficulties in drawing conclusions about the role of social withdrawal is that it has been operationally defined in a multitude of ways, reflecting the heterogeneity of this construct. In the present study, it was operationalized using the TRF (Achenbach, 1991), which characterizes withdrawal as a broad-band construct. As such, it contains items that reflect the passive-anxious dimension of withdrawal that Rubin and his colleagues (Rubin, 1993; Rubin & Mills, 1988) have highlighted, but it also contains items that reflect other dimensions of withdrawal, such as the unsociable and sad/depressed subtypes (Harrist et al., 1997). Thus, the present findings must be interpreted as reflecting a global conceptualization of withdrawal-related behaviors, rather than as reflecting passive-anxious withdrawal or any other specific subtype of withdrawal.

Despite these measurement issues, the present findings for fourth grade children were remarkably similar to findings obtained in similar studies of mid to late elementary school-aged children. In the present study, withdrawal positively predicted victimization for fourth graders, and this relation was predominantly mediated by rejection. That is, children who exhibited social withdrawal were disliked by their peers, which placed them at risk for being victimized. These findings are consistent...
with findings for third through fifth grade children in two recent studies reported by Boivin and colleagues (Boivin & Hymel, 1997; Boivin et al., 1995). In these studies, withdrawal, which was operationally defined as reticent social behavior and measured using peer reports, predicted victimization by peers, and this relation was mediated by social status. Moreover, other studies of late elementary school children (i.e., third through seventh graders) have obtained similar results using a combination of peer-reported items measuring inhibited social behavior, anxiety and depression, and a hovering peer entry style as a predictor of victimization (Hodges et al., 1997; Hodges & Perry, 1999). Taken together, these consistencies support the validity of the present findings.

For first and second graders, however, withdrawal was unrelated to victimization. This is also consistent with previous research that has shown that internalizing behaviors, as measured by the TRF Withdrawn, Anxious/Depressed, and Social Problems subscales, did not predict victimization by peers for kindergarten and first grade children (Schwartz et al., 1999). This developmental difference may reflect social-cognitive developments that influence children’s ability to attend to and encode withdrawn behaviors. Early elementary school-aged children are less sensitive than late elementary school-aged children to peers’ withdrawn behaviors, as evidenced by developmental increases in children’s ability to recall descriptions of hypothetical peers’ withdrawn behaviors and to discriminate withdrawal from other social behaviors (Younger & Boyko, 1987; Younger et al., 1986). Thus, for younger children, social withdrawal is less salient, and therefore, less potentially stigmatizing, than it is for older children. Instead, other more conspicuous behaviors, such as submissively giving in to peers’ demands, seem to be important predictors of victimization for young children (Schwartz et al., 1993). In fact, related research suggests that children who submit when provoked are perceived by their peers as easy targets (Perry et al., 1990).

Furthermore, in partial support of our hypothesis, withdrawal marginally, but not significantly, predicted reduced victimization for children in high disadvantage schools and increased victimization for children in moderate disadvantage schools. This finding provides some support for the idea that not getting involved with others might be an adaptive strategy in economically deprived settings that are relatively unstable and dangerous. That is, in these contexts, keeping to oneself may go unnoticed and/or ignored. Thus, the child who doesn’t participate in the peer culture, rather than being seen as an easy target, may simply not be seen at all. These findings, however, may be underestimated by a restricted range in school contexts. All children in this sample attended schools struggling with issues of poverty and violence, and variability in school setting was minimized. Thus, these findings underscore the need for future research to thoroughly explore how withdrawal is related to victimization for distinct subgroups of children.

Together, these results imply that the relation between withdrawal and victimization is a complex one. Extant research suggests that the social evaluation of withdrawal varies by sex and by culture (see discussion in Rubin & Stewart, 1996). Thus, being withdrawn may increase victimization risk for some children, have no effect on victimization risk for others, and, for others, it may actually decrease the likelihood of being victimized by peers. In support of this, we found that correlations between withdrawal and victimization were stronger for some groups of children than for others, with clear age differences, marginal school setting differences, and no clearly interpretable sex or ethnicity differences.
In sum, these results support existing findings, and, at the same time, raise important issues regarding these relations that remain to be clarified. As discussed above, withdrawal may be operationalized in many different ways; it is a global construct that consists of several distinct subsets of behaviors that have slightly different forms and functions within the peer group (e.g., Harrist et al., 1997). Indeed, the various subtypes of withdrawal are associated with different patterns of social competencies, with children who are actively isolated by their peers showing the most disturbed social skills and relations (Harrist et al., 1997). The contribution of each of these different sets of behaviors to victimization, however, has not been systematically examined. Future research will be crucial to elucidate the relations between specific forms of withdrawal and peer victimization and to assess variations in these relations for children of different ages, of different ethnic backgrounds, and in different settings.

The Role of Peer Rejection

As predicted, rejection operated as both a mediator and a moderator. Indeed, rejection mediated the relation between aggressive behavior and victimization, suggesting that there is an elaborate interplay between the behaviors that victimized children exhibit, peers’ perceptions of these behaviors, and peers’ victimizing actions. Thus, it was primarily peers’ reactions to and interpretations of aggression as undesirable, rather than aggressive behavior per se, that led to victimization. As suggested by Hodges and his colleagues (Hodges & Perry, 1999), this may occur because peers fail to protect disliked children from their attackers. Studies of children who act as bystanders in peer victimization interactions support this interpretation (Salmivalli, Huttunen, & Lagerspetz, 1997; Salmivalli, Lagerspetz, Bjorkqvist, Osterman, & Kaukininen, 1996). This finding points to the need to examine children’s victimization by peers within the context of a broader array of peer interactions. Recent efforts to do so have shown that friendships and social networks, as well as rejection, influence who is most likely to be victimized (Hanish & Henke, 1999; Hodges et al., 1997; Hodges et al., 1999; Ladd et al., 1997; Salmivalli et al., 1997).

It is important to note, however, that slightly different patterns of mediation were obtained for girls and boys. For girls, rejection fully mediated the aggression-victimization relation; for boys, rejection partially mediated this relation. Thus, peers disliked girls who exhibited aggressive behavior and were more likely to direct attacks towards them because of their decreased social status. For girls, this was the central process through which aggression predicted victimization. Though this process was central for boys as well, it was not the sole process through which aggression was related to victimization. Aggression also predicted victimization directly. This may reflect the ‘provocative’ nature of aggressive behavior that Olweus (1978) described in his sample of early adolescent boys. That is, perhaps peers victimize aggressive boys, in part, because their behavior is irritating and annoying, thereby provoking attack. Coupled with extensive research that suggests that girls and boys experience peer interactions in different ways (Maccoby, 1999), these findings emphasize the importance of examining sex differences in peer victimization processes.

Similar findings of mediation were obtained for the withdrawal-victimization relation for fourth graders. Being withdrawn did not directly predict victimization for these children. Instead, fourth graders rejected their withdrawn peers, relegating them to the bottom of the social hierarchy. Being disliked by the dominant peer group, then, was a direct contributor to being victimized. Finding that rejection acts as a mediator of
social behaviors emphasizes the idea that peers’ perceptions of and responses to children’s social behaviors are a powerful determinant of peer victimization.

Although rejection mediated the relation between withdrawal and victimization for a subgroup of children, rejection moderated this relation for the sample as a whole. Consistent with our hypothesis, children who were withdrawn but not rejected by their peers were less likely to be victimized, rather than more likely to be victimized. Not only does this finding provide valuable insight into the processes through which withdrawal functions for some children, it further highlights the role of rejection in contributing to peer victimization. Being rejected can increase the likelihood of being victimized; being non-rejected can decrease the likelihood of being victimized, particularly when children are withdrawn and less likely to be noticed by peers. Children’s perceptions and beliefs influence their decisions to engage in bullying behavior as well as their decisions about whom to victimize (Guerra, Huesmann, & Hanish, 1995; Perry et al., 1990; Slaby & Guerra, 1988).

Implications for Intervention

These findings have important implications for designing interventions. Interventions to reduce peer victimization may be best conceptualized as multi-level. On the one hand, children who exhibit behaviors, such as aggression, that their peers perceive as irritating and deviant are at elevated risk for being victimized. These children may benefit from an intervention that is designed to teach them more effective ways of interacting with peers, thereby reducing their risk of being victimized. Such interventions have typically produced small to modest effects, reducing individuals’ aggressive behavior and increasing their social acceptance and prosocial behavior (e.g., Lochman, Coie, Underwood, & Terry, 1993). Although their effect on victimization has not been specifically tested, it is likely that the resultant improvements in behavior and social status produce concomitant reductions in victimization for participating children.

Such an individualized approach, however, is unlikely to have a substantial effect on overall rates of victimization within the classroom because it places the responsibility for change on victimized children, despite the fact that peers are actively engaging in victimizing behaviors. Thus, efforts to intervene should also include a component that targets victimization-related processes at the level of the entire peer group. Moreover, intervention research has highlighted the importance of focusing interventions on modifying relevant mediators of problem behaviors, demonstrating that such an approach is most likely to be effective in changing problem behaviors (Dunka, Roosa, Michaels, & Suh, 1995; Pillow et al., 1991). Applying this principle to victimization interventions, it is crucial that interventions target the patterns of acceptance and rejection that exist among members of the peer group, teaching children in classrooms to assist and support others rather than rejecting and victimizing those who act differently. In doing so, it is important to increase children’s sensitivity to diversity among their classmates and enhance their acceptance of peers who display different characteristics. It is also important to create classroom and peer climates that encourage cooperative and respectful, rather than competitive and disparaging, interactions. Intervention programs that have adopted this ideal have demonstrated success (Kellam & Rebok, 1992; Olweus, 1992, 1994).

In sum, some children exhibit behaviors that put them at elevated risk for being victimized by their peers. However, peers’ perceptions, rather than individual behaviors,
are critical determinants of who gets victimized. Many researchers in this field have begun to develop contextual models of this phenomenon, and continued research in this area is crucial to fully understand peer victimization. Moreover, attempts to intervene must target the peer group factors that contribute to this behavior.

References


Notes

1. Correlations by ethnicity remained significant even after controlling for such potentially confounding variables as SES and the ethnic composition of the schools, \( r = .28, p < .001 \) for African Americans, \( r = .30, p < .001 \) for Hispanics, and \( r = .15, p < .05 \) for Whites.

2. After controlling for relevant confounding variables (i.e., SES and the ethnic composition of schools), the relation between withdrawal and victimization remained significant for African Americans only, \( r = .13, p < .01 \). The correlation for Whites was reduced to \( r = .09, \) n.s., and the correlation for Hispanics was \( r = -.06, \) n.s.

3. This finding was still evident even after conducting follow-up analyses that controlled for the possible confounding effects of SES and the ethnic composition of schools (\( \beta = -.25, p < .001 \) for Hispanic children, \( \beta = .03, \) n.s. for African-American children, and \( \beta = .06, \) n.s. for White children).

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