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Persistent versus Periodic Experiences of Social Victimization: Predictors of Adjustment

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Abstract

This study examined self-reports of social victimization and parent reports of adjustment for a sample followed from fourth through seventh grades. Different patterns of social victimization experiences were identified; of the 153 students (79 girls) with complete data, 24% reported chronic social victimization, 23% reported transient experiences of social victimization, and 53% reported being socially victimized at no more than one time point. We examined whether students who experienced persistent and periodic social victimization were at greater risk for internalizing problems than nonvictims. Persistently victimized children demonstrated continuously elevated levels of internalizing problems. Children who were not originally victimized by social aggression but became victimized with time did not demonstrate higher levels of internalizing problems than did nonvictims. Findings were mixed for those who escaped social victimization during this period.

Keywords

Social victimization; Indirect victimization; Relational victimization; Internalizing problems

Although many children and adolescents report being victimized by peers occasionally, approximately 10% endure extreme and incessant peer maltreatment (Hoover, Oliver, & Hazler, 1992; Nansel et al., 2001; Olweus, 1995; Perry, Kusel, Perry, 1988; Rigby & Slee, 1991). Experiences of peer victimization may take many forms including taunting, teasing, and even physical attacks (Haynie & Piquero, 2006; Roth, Coles, & Heimberg, 2002). In addition, some children are targeted by behaviors intended to harm their social status, relationships, or self-esteem. We refer to these types of experiences as social victimization (Galen & Underwood, 1997; Paquette & Underwood, 1999; Underwood, 2003). Examples of such behaviors include social exclusion, malicious gossip, and friendship manipulation. Researchers have used different terms such as indirect victimization (Lagerspetz, Bjorkqvist, & Peltonen, 1988; Miller & Vaillancourt, 2007; Owens, Shute, & Slee, 2000) and relational victimization (Crick & Bigbee, 1998; Crick, Casas, & Nelson, 2002) to refer to constructs similar to social victimization. For the current study, we adopted the term social victimization in order to acknowledge that these behaviors can take verbal as well as nonverbal forms (e.g., scornful glares, contemptuous facial expressions) and may be either direct or indirect in nature (Archer & Coyne, 2005). Social victimization, indirect victimization, and relational victimization are distinct but overlapping constructs, and although we recognize the distinctions between these terms, we use the term social victimization in our review of previous studies for ease of exposition.

Children and adolescents perceive socially aggressive acts as intentionally hurtful, and victimization by social aggression is associated with maladjustment (Crick & Bigbee, 1998; Paquette & Underwood, 1999; Sullivan, Farrell, & Kliewer, 2006). Some children emerge as victims of social aggression as early as preschool age (Crick, Casas, & Ku, 1999; Vaillancourt, Miller, Fagbemi, Cote, & Tremblay, 2007). Even though there may be some fluctuations in victimization status, some children remain chronically victimized throughout childhood and adolescence (Kochenderfer-Ladd & Wardrop, 2001; Kumpulainen, Rasanen, Henttonen, 1999; Scholte, Engels, Overbeek, de Kemp, & Haselager, 2007). The principal objectives of this longitudinal study are to identify groups of children who experience different patterns of social victimization and to examine adjustment differences between these groups.

Although a theoretical framework for understanding social victimization has yet to emerge, social victimization logically relates to the need to belong and have ongoing positive interactions with others who provide companionship and caring (Baumeister & Leary, 1995). The fundamental need to belong may explain why social exclusion is so distressing, and in studies with adults, has even been related to physical pain (MacDonald & Leary, 2005). In our evolutionary history, survival depended in part on involvement in social groups. This led to perceiving threats to relationships as akin to threats to safety. MacDonald and Leary (2005) suggest that threats to relationships “are partly mediated by the same system that processes physical pain because the pain system was already in place when social animals evolved adaptations for responding to social exclusion” (p. 202). Social exclusion remains a distressing experience, and such experiences may result in aggressive behavior toward others (Twenge, Baumeister, Tice, & Stucke, 2001) as well as self-defeating behavior (Twenge, Cantanes, & Baumeister, 2002). Needs for belongingness and intimacy may be especially strong during adolescence (Gottman & Mettetal, 1986; Sullivan, 1953).

Social Victimization and Gender

Boys report encountering more physical victimization than girls, but there do not appear to be consistent gender differences in the frequency of social victimization (Crick & Grotpeter, 1996; Paquette & Underwood, 1999; Prinstein, Boergers, & Vernberg, 2001; Sullivan et al., 2006). Even though experiences of social victimization are hurtful to both genders, girls report feelings of greater distress following such episodes (Paquette & Underwood, 1999). Social aggression may be particularly upsetting for girls because of the close, intimate nature of female friendships (Lagerspetz et al., 1988; Maccoby, 1998). Further, girls tend to demonstrate greater interpersonal vulnerability to depression as evidenced by focusing on interpersonal concerns such as loss and abandonment (Crick et al., 2002; Leadbeater, Blatt, Quinlan, 1995).

Social Victimization and Adjustment

Social victimization has been linked to myriad forms of maladjustment, including depression. Elementary school students' self-reported levels of social victimization added unique information to the prediction of depression even after controlling for levels of overt victimization (Crick & Grotpeter, 1996). Similarly, high school students' self-reported levels of social victimization predicted depression above and beyond levels of overt victimization (Prinstein et al., 2001).

Social victimization is also positively correlated with social anxiety. Elementary school students' self-reported levels of social victimization predicted social anxiety and avoidance above and beyond overt victimization (Crick & Grotpeter, 1996). Likewise, experiences of social victimization in high school are positively associated with fear of negative evaluation and social avoidance (Storch, Brassard, Masia-Warner, 2003; Storch & Masia-Warner, 2004).

Furthermore, experiences of social victimization may also be related to somatic complaints. Although they did not specifically examine social victimization, Nishina and colleagues included socially aggressive behavior (i.e., spreading of rumors) in their conceptualization of peer maltreatment (Nishina, Juvonen, & Witkow, 2005). Self-reported experiences of peer victimization in the fall of sixth grade positively predicted physical symptoms (e.g., headache, upset stomach) in the spring of sixth grade. These results suggest that peer victimization may be a stressful experience that suppresses the immune system and results in poor health or that victimized youth may report more somatic complaints in order to miss school and avoid adverse peer experiences.

In sum, the studies discussed above suggest that social victimization is predictive of concurrent maladjustment. More work is needed to examine whether experiences of social victimization predict future maladjustment and whether persistent victimization poses greater risks than periodic victimization.

Longitudinal Examinations of Victimization

Several hypotheses have been offered to explain how different trajectories of peer victimization experiences affect adjustment (Kochenderfer-Ladd & Wardrop, 2001). The stability of peer victimization hypothesis posits that chronically victimized children maintain a high, constant level of maladjustment, and also acknowledges the possibility that the repeated stress of victimization may be accompanied by increasing maladjustment. The onset hypothesis suggests that individuals who were not originally victimized should display greater maladjustment following the initiation of victimization than those who remain nonvictims. Correspondingly, the cessation hypothesis suggests that children who were originally victimized but are no longer maltreated should no longer display maladjustment.

Several investigations have begun to examine these hypotheses. Experiences of social and overt victimization appear moderately stable over a one-year period during middle childhood (Dempsey, Fireman, & Wang, 2006; Schwartz, Gorman, Nakamoto, & Toblin, 2005). Victimization experiences also appear stable over longer time periods. In a 4-year longitudinal investigation, 34% of students who were victimized in fourth grade continued to be victimized in seventh grade (Paul & Cillessen, 2003). Similarly, in a six-year longitudinal study, 20% of youth victimized in second/third grade continued to be victimized in seventh/eighth grade (Schafer, Korn, Brodbeck, Wolke, & Schulz, 2005). The behavior of the victim appears to influence the stability of their victimization experiences; there is higher stability in victimization experiences for aggressive victims than passive victims (Hanish & Guerra, 2004; Kumpulainen et al., 1999).

Additionally, some longitudinal investigations have examined adjustment as a function of stability of victimization experiences. Scholte and colleagues (2007) classified participants in their three-year longitudinal investigation into one of four categories based on peer nominations during both childhood and adolescence: childhood only victims, adolescence only victims, stable victims, and non-involved. The childhood only victim group was better socially adjusted than both the adolescence only victim group and the stable victim group as assessed by peer nominations of liking and friendship during adolescence. The stable victim group did not appear to differ from those youth who were victimized only in adolescence (Scholte et al., 2007). In a similar investigation, Smith and colleagues (2004) classified participants in their two-year longitudinal study into four categories based on self-reported victimization at two time points: escaped victims, new victims, continuing victims, and nonvictims. The continuing victim group and the new victim group self-reported more emotional problems than did the nonvictim group (Smith, Talamelli, Cowie, Naylor, & Chauhan, 2004). In both of these investigations, individuals who were not previously victimized but were currently subject to

peer victimization demonstrated similar adjustment at the second time point to those who had been victimized at both time points. Individuals who were originally victimized but were no longer subject to such peer maltreatment did not appear to demonstrate adjustment difficulties at the second time point.

Kochenderfer-Ladd and Wardrop (2001) assigned participants in their longitudinal investigation to sixteen different groups based on self-reported victimization at 4 different time points from kindergarten through third grade. Those children who were chronically victimized at all 4 time points demonstrated continuous loneliness and these feelings were not aggravated over time, however, they did become more socially dissatisfied. Children who were not originally victimized but became victimized during the 4-year period showed accompanying increases in loneliness and decreases in social satisfaction. Due to mixed results, no conclusions were drawn regarding children who were originally victimized but escaped victimization status.

Current Research

Although several studies have examined stability and change in victimization experiences over time, they do not differentiate social victimization from other types of peer maltreatment. Further, many of these studies have limited their analyses to outcomes of social adjustment. The current study is one of the first longitudinal investigations of the stability of social victimization during middle childhood and the transition to adolescence.

Children provided self-report information regarding their social victimization experiences and parents reported on their children's adjustment in 4th, 5th, 6th, and 7th grades. To examine how changes in social victimization status influenced adjustment, we conducted variable-centered and group-centered analyses. In terms of variable-centered analyses, we examined mean levels of reported social victimization at each time point as well as correlations between reported social victimization and adjustment. For group-centered analysis, we assigned, using latent class analysis, each participant to one of four groups based on his or her pattern of social victimization: the nonvictim group (not classified as a victim for at least 3 of the 4 time points), the decreaser group (not predominantly in either status but transitioned statuses and ended as nonvictims in seventh grade), the increaser group (not predominantly in either status but transitioned statuses and ended as victims in seventh grade), and the chronic group (classified as a victim for at least 3 of the 4 time points). Using hierarchical linear modeling, we examined whether there were group differences in trajectories of internalizing problems as a function of group membership.

In accord with the hypotheses of change in victimization status outlined by Kochenderfer-Ladd and Wardrop (2001), we first predicted that the chronic group would show elevated levels of maladjustment from the beginning of the study that would persist. Second, as predicted by the onset hypothesis, we expected that the increaser group would demonstrate low levels of internalizing problems at the beginning of the study, and that these problems would increase following experiences of social victimization. Third, as predicted by the cessation hypothesis, we expected that the decreaser group would demonstrate elevated levels of internalizing problems at the beginning of the study and that these problems would decrease as their experiences of social victimization subsided. We also hypothesized that female adolescents would demonstrate greater maladjustment than their male counterparts in response to social victimization experiences.

Method

Participants

Participants were enrolled in a 5-year longitudinal study on the precursors and outcomes of social aggression from the third through seventh grades. Children were originally recruited from elementary schools in a large suburban school district at the end of their third grade school year. The data presented here were collected in the children's 4th, 5th, 6th, and 7th grade years.

Participants included 153 children (79 girls) with complete social victimization data. Parent-reported child ethnicity was 58.2% European American, 16.3% Mexican American, 17.6% African American, and 7.9% other ethnicities. We collected data from 221 participants in 4th grade, 214 participants in 5th grade, 212 participants in sixth grade, and 191 participants in 7th grade, and there were no significant differences on victimization or adjustment measures ($ps > .1$) between those with partial and complete social victimization data.

Procedures

During the participants' third grade school year, researchers visited elementary school classrooms and sent consent forms home. Of the letters distributed, approximately 55% were returned with consent to participate for the duration of the study. This rate of consent is commensurate and even higher than many similar studies that report consent rates (Betan, Roberts, & McCluskey-Fawcett, 1995; Sifers, Warren, Puddy, & Roberts, 2002). However, our rate of consent is lower than that of many school-based studies of peer victimization (e.g., Schwartz et al., 2005), perhaps because we asked parents to consent to participate in a series of laboratory visits over the course of 5-years.

Once per year, approximately at the time of the child's birthday, participants and one of their parents (the parent most knowledgeable about the child's peer relationships) visited the lab to complete a series of observational tasks that were part of the larger longitudinal study. Parents and children also completed assessments of the child's adjustment and experiences with peers. This study includes two measures: the Revised Social Experience Questionnaire (Paquette & Underwood, 1999) and the Child Behavior Checklist (Achenbach & Rescorla, 2001).

Measures

Child Report of Victimization—We used the Revised Social Experience Questionnaire (Paquette & Underwood, 1999) to obtain a measure of children's social victimization experiences. This self-report measure was adapted from the Social Experience Questionnaire (Crick & Grotpeter, 1996). This measure assesses the frequency with which children experience social victimization, overt victimization, and prosocial behavior from peers. Respondents indicate how frequently they experience each behavior on a Likert scale from 1 – *never* to 5 – *all the time*. Of interest to the current study was the social victimization subscale which includes the following seven items: (1) how often does another child make faces at you to hurt your feelings, (2) how often do other children leave you out on purpose when it is time to play or do an activity, (3) how often does another child roll their eyes or turn up their nose at you, (4) how often does a child who is mad at you try to get back at you by not letting you be in their group anymore, (5) how often does a classmate tell lies about you to make other children not like you anymore, (6) how often does another child say they won't like you unless you do what they want you to do, and (7) how often does a child try to keep others from liking you by saying mean things about you. In the current sample, the social aggression subscale demonstrated high reliability for each of the four assessment points, with Cronbach's alphas of .83, .85, .84, and .83 for the first, second, third, and fourth assessments respectively.

Formation of social victimization groups entailed a two-step process. First, we used latent class analysis to examine social victimization at each time point. Latent class analysis (Nylund, Bellmore, Nishina, & Graham, 2007; Reinke, Herman, Petras, & Jalongo, 2008) is a person-centered approach that creates groupings of individuals on the basis of common characteristics. We applied LCA using Mplus (Muthén & Muthén, 2007) to the seven items in the social victimization subscale at each time point in order to identify classes on the basis of response patterns. We then assigned children to social victimization groups based on their sequence of class assignments over the 4-time points.

LCA models of social victimization were examined in 4th, 5th, 6th, and 7th grades using the procedures outlined by Nylund and colleagues (2007). We first tested a one-class model, then a two-class model, and so forth at each time point. We examined the Bayesian Information Criterion (BIC) at each time point to determine which model best fit the data. For each grade level, the BIC was lowest for the three-class model, suggesting that this was the best-fitting model. Similarly to Nylund et al. (2007), we identified a highly victimized group, a sometimes victimized group, and a nonvictimized group at each time point. We graphically present only the fourth grade analyses for economy of space (see Figure 1). Given that Nylund and colleagues found that highly victimized and sometimes victimized children showed elevated levels of depression, we collapsed across these groups to form a victim group for our longitudinal analyses. We assigned children to a status of victim or nonvictim at each time point.

Similarly to the study by Kochenderfer-Ladd and Wardrop (2001), we assigned children to victimization groups based on their sequence of victim/nonvictim status over the 4-time points. Children who were not victimized for at least 3 of the 4 time points were assigned to the nonvictim group ($n = 81$). Children who were classified as victims for at least 3 of the 4 time points were assigned to the chronic group ($n = 37$). Those who were not predominantly in either status but transitioned statuses and ended as nonvictims in seventh grade were assigned to the decreaser group ($n = 21$). Those who were not predominantly in either status but transitioned statuses and ended as victims in seventh grade were assigned to the increaser group ($n = 14$).

Parent Report of Adjustment—Parents completed the Child Behavior Checklist (CBCL, Achenbach & Rescorla, 2001), which includes 120 items that assess specific problem behaviors using a three-point scale (0 = not true; 1 = somewhat or sometimes true; 2 = very true or often true). Of interest to the current study were the internalizing problems subscales: anxious depression, withdrawn depression, and somatic complaints. These subscales are internally consistent with Cronbach's alphas ranging from .78 to .84 (Achenbach & Rescorla, 2001).

Analytic Plan

Our plan of analyses was to use hierarchical linear modeling (HLM) to predict students' adjustment trajectories from social victimization group membership. We employed the HLM6 software (Raudenbush, Bryk, Cheong, & Congdon, 2004) for these analyses. We conducted three sets of parallel analyses to separately examine somatic complaints, anxious depression, and withdrawn depression.

Preliminary analyses were conducted to examine the effects of gender and to determine the polynomial specification of the model. There were no significant effects of gender in any of the preliminary analyses. Thus, this variable was not included in subsequent analyses. Preliminary analyses also indicated that a linear model best fit the data. All subsequent analyses use a linear model to examine growth in adjustment.

The level 1 model consisted of repeated measures of adjustment across fourth through seventh grades. Data were centered prior to analyses such that the intercept represented adjustment at

fourth grade, which was the first data collection time point. The level 1 model examines growth in adjustment as a function of grade and is expressed in the following equation

$$Y_{ti} = \pi_{0i} + \pi_{1i}(\text{grade}_{ti}) + e_{ti}$$

where y_{ti} is the i th person's adjustment at grade t ($t = 0$ represents fourth grade); π_{0i} is the intercept or adjustment at $t = 0$ (fourth grade) for the i th person; π_{1i} is the growth rate (slope) for the i th person over fourth through seventh grades; and e_{ti} is the error term.

In the level 2 model, we predicted the level 1 growth parameters (intercept and slope) from student characteristics, specifically social victimization group membership. We used three dummy coded variables to represent the chronic, increaser, and decreaser groups; the reference group is the nonvictim group. The level 2 model examines adjustment trajectories as a function of these social victimization groups and is expressed by the following equations

$$\pi_{0i} = \beta_{00} + \beta_{01}(\text{chronic}_i) + \beta_{02}(\text{increaser}_i) + \beta_{03}(\text{decreaser}_i) + r_{0i}$$

$$\pi_{1i} = \beta_{10} + \beta_{11}(\text{chronic}_i) + \beta_{12}(\text{increaser}_i) + \beta_{13}(\text{decreaser}_i) + r_{1i}$$

where β_{0q} (q represents social victimization group membership) is the effect of social victimization group membership on the intercept; β_{1q} is the effect of social victimization group membership on the slope; and r_{0i} and r_{1i} are error terms.

We also ran the analyses without the social victimization groups variables in the grade equation. That is, we used the equation

$$\pi_{1i} = \beta_{10} + r_{1i}$$

For the sake of parsimony, we report results with the simplified model when the social victimizations groups variables were nonsignificant predictors of adjustment trajectories slopes. This was the case for anxious depression and withdrawn depression. We report the full model for somatic complaints, as there were differences in the grade equation as a function of social victimization group membership.

Results

Participants reported on experiences of social victimization and parents rated their children's adjustment in 4th, 5th, 6th, and 7th grades (see Tables 1 and 2 for descriptive statistics and correlations). In the following HLM analyses, we examine each of the internalizing problems subscales separately (see Table 3).

Somatic Complaints

HLM Level 1/Grade—The level 1 model examined trajectories of somatic complaints as a function of grade. The intercept was significant ($\beta_{00} = .95$, $p < .01$) indicating that the average intercept value (fourth grade somatic complaints score) for nonvictims was significantly

different from 0. The slope was nonsignificant ($\beta_{10} = -.05, p > .10$) indicating a relatively flat trajectory for somatic complaints.

HLM Level 2/Social Victimization Group Membership—The level 2 model examined whether social victimization group membership predicted variation in trajectories of somatic complaints. The chronic group had a significantly higher intercept than the nonvictim group ($\beta_{01} = .83, p < .05$); students in the chronic group demonstrated more somatic complaints in fourth grade than did students in the nonvictim group. The slope of the chronic group's trajectory of somatic complaints did not differ significantly from that of the nonvictim group ($\beta_{11} = -.07, p > .10$); thus the gap between students in the chronic group and nonvictim group remained constant across fourth through seventh grades (see Figure 2). The decreaser group also had a significantly higher intercept than did the nonvictim group ($\beta_{03} = 1.17, p < .01$); students in the decreaser group demonstrated a higher level of somatic complaints in fourth grade than did students in the nonvictim group. However, the slope of the decreaser group's trajectory of somatic complaints was negative and significantly different from that of the nonvictim group ($\beta_{13} = -.29, p < .05$); so while these students in the decreaser group started higher, they demonstrated a linear decrease in somatic complaints across fourth through seventh grades (see Figure 2). The somatic complaints trajectory for the increaser group did not significantly differ from that of the nonvictim group.

Anxious Depression

HLM Level 1/Grade—The level 1 model examined trajectories of anxious depression as a function of grade. The intercept was significant ($\beta_{00} = 2.35, p < .01$) indicating that the average intercept value for nonvictims (fourth grade anxious depression score) was significantly different from 0. The slope was also significant ($\beta_{10} = -.31, p < .01$) indicating that anxious depression decreased across fourth through seventh grades for nonvictims.

HLM Level 2/Social Victimization Group Membership—The level 2 model examined whether social victimization group membership predicted variation in the intercept of anxious depression. The chronic group had a significantly higher intercept than the nonvictim group ($\beta_{01} = 2.10, p < .01$); students in the chronic group demonstrated more symptoms of anxious depression in fourth grade than did students in the nonvictim group (see Figure 2). The intercept of the increaser and decreaser groups did not significantly differ from that of the nonvictim group.

Withdrawn Depression

HLM Level 1/Grade—The level 1 model examined trajectories of withdrawn depression as a function of grade. The intercept was significant ($\beta_{00} = 1.14, p < .01$) indicating that the average intercept value for nonvictims (fourth grade withdrawn depression score) was significantly different from 0. The slope was not significant ($\beta_{10} = -.02, p > .10$) indicating a relatively flat trajectory for withdrawn depression for nonvictims.

HLM Level 2/Social Victimization Group Membership—The level 2 model examined whether social victimization group membership predicted variation in the intercept of withdrawn depression. The chronic group had a significantly higher intercept than the nonvictim group ($\beta_{01} = .63, p < .05$); students in the chronic group demonstrated more symptoms of withdrawn depression in fourth grade than did students in the nonvictim group (see Figure 2). The intercept of the increaser and decreaser groups did not significantly differ from that of the nonvictim group.

Discussion

Overall, these results support the predictions that social victimization is linked to maladjustment and that persistently victimized children have chronic difficulties. As has been found in previous studies, our variable-centered analyses clearly showed that social victimization is associated with internalizing problems, both concurrently and longitudinally. Social victimization was concurrently related to specific syndromes that have been found to be associated with victimization in previous studies, specifically, anxious depression (as was found for social victimization by Crick & Grotpeter, 1996; Prinstein et al., 2001; Storch et al., 2003, Storch & Masia-Warner, 2004) and somatic complaints (as was found for general victimization by Nishina et al., 2005). Social victimization was also longitudinally related to adjustment difficulties. Fourth grade social victimization related to parents' reports of seventh graders' anxious depression, withdrawn depression, and somatic complaints.

Findings from this and previous studies consistently suggest that social victimization is positively related to maladjustment. However, it is important to note that causality cannot be determined from these results. Certainly the pain of experiencing social aggression by school peers can cause psychological distress, particularly during this developmental period when children are desperate to fit in with the same gender peer group (Gottman & Mettetal, 1986), and when victims may be forced to spend seven solid hours per day in close proximity to those who are tormenting them. However, it is also possible that having internalizing problems leads to victimization because children with these problems might make vulnerable targets for bullies who want to pick on those least likely to retaliate.

The primary goal of this study was to move beyond variable-centered analyses to compare the adjustment of individuals who followed different patterns of social victimization from grades four through seven. Because this is one of the first studies to specifically examine social victimization across 4-years from late childhood through early adolescence, it is important to consider what proportions of children were socially victimized. According to children's self-reports, 53% of our sample was classified in the nonvictim group. This proportion seems generally consistent with results from other studies of stability of general victimization across shorter time periods: 68% of 3rd – 5th graders reported never being victimized across one year (Dempsey et al., 2006) and 43% of 13 – 15-year-olds reported never being victimized from ages 13 – 15 (Smith et al., 2004).

Our results clearly showed instability in social victimization; 23% reported transient victimization during this developmental period: 14% of the sample was in the decreaser group and 9% of the sample was in the increaser group. This finding seems hopeful and confirms results of earlier work showing that children victimized at one developmental period are not guaranteed to be chronically victimized (Dempsey et al., 2006; Kochenderfer-Ladd & Wardrop, 2001; Scholte et al., 2007; Smith et al., 2004).

Persistent social victimization across all 4-years was reported by 24% of the children in this sample. This proportion is higher than the 4% of stable victims found in the Kochenderfer-Ladd and Wardrop (2001) study with children followed from kindergarten through third grade. One reason for the lower proportion in the Kochenderfer-Ladd and Wardrop (2001) study may be that a larger number become stable victims as children mature, because bullies begin to focus more on specific individuals (Pellegrini & Bartini, 2000), perhaps as they realize which peers are least likely to retaliate (Perry, Perry, & Boldizar, 1990).

Our results highlighted the importance of considering social victimization in addition to physical victimization. As was predicted, the chronically socially victimized subgroup showed elevated levels of maladjustment that persisted across time. However, the chronically socially victimized group did not experience increases in parent-reported problems as a result of

continuing victimization. This result is consistent with the life event model (Dohrenwend & Dohrenwend, 1981) supported by the results of Kochenderfer-Ladd and Wardrop (2001) with younger children, that the beginning of peer victimization is traumatic enough to contribute to maladjustment, and that continued victimization was not related to increased problems. Our findings are also consistent with those from previous studies of general victimization among adolescents showing that persistence of victimization is related to maladjustment across time (Scholte et al., 2007; Smith et al., 2004).

The results of this study provide mixed support for the cessation hypothesis for social victimization. The decreaser group followed a decreasing trajectory of somatic complaints; this group experienced a decline in somatic complaints over the 4-year period. However, the decreaser group did not demonstrate lessening symptoms of anxious depression or withdrawn depression. Support for the cessation hypothesis was also mixed in Kochenderfer-Ladd and Wardrop's (2001) long-term longitudinal study of general victimization; only some of the decreaser subgroups showed improvement in loneliness and decreaser groups remained high on social dissatisfaction even after victimization had declined.

Our findings do not support the onset hypothesis; the increaser group did not demonstrate a linear increase in internalizing problems. Children in the increaser group were not predominantly in either status but transitioned statuses and ended as victims in seventh grade. Social victimization may be slightly less deleterious if it happens later in development following an earlier period of positive social interactions. Although the increaser group did not exhibit elevated levels of internalizing problems in seventh grade, it is possible that this group may demonstrate future adjustment difficulties.

The results of this study offered little support for the hypothesis that girls would show greater maladjustment than boys in response to social victimization. Preliminary analyses revealed no significant main effects or interactions for gender. Although many have suggested that girls may be more adversely affected by social victimization (e.g., Crick et al., 2002; Leadbeater et al., 1995), several studies have not found gender differences (e.g., Crick & Grotpeter, 1996; Prinstein et al., 2001; Storch et al., 2003; Sullivan et al., 2006). Based on their findings with a diverse sample of high school students, Prinstein and colleagues (2001) asserted that social victimization "is troubling to many adolescents regardless of sex" (p. 488); the results of the current study support this conclusion.

Similar to previous studies of general victimization (e.g., Camodeca, Goossens, Terwogt, & Schuengel, 2002; Sweeting, Young, West, Der, 2006), the mean level of social victimization decreased with development for the sample overall. This encouraging result might imply that the levels of social exclusion, malicious gossip, and friendship manipulation are declining in the peer group as children mature, perhaps because children's increasing cognitive sophistication allows them to take the perspective of others and to recognize the pain caused by hurtful behavior. However, it could also be possible that whereas most children experience declining victimization, peer victimization may increase for a few, perhaps those who are chronically victimized across time. Just as physically aggressive bullies may begin to focus their attention on fewer victims in the early elementary years (Ladd & Kochenderfer-Ladd, 2002) as they learn which peers are easy targets and unlikely to retaliate (Perry et al., 1990), social aggressors may focus their energy on a smaller number of children as they get older and determine which victims can be targeted without negative consequences.

All of these results must be interpreted in light of methodological limitations. This study relied on self-reports of social victimization, which may be biased by children's pre-existing adjustment problems as well as by children's differing perceptions of what counts as peer harassment, abilities to remember victimization experiences, and openness to sharing negative

experiences on questionnaires (Ladd & Kochenderfer-Ladd, 2002; La Greca, 1990). Thus, it is important to note that the current study is examining children's perceptions of social victimization, which may be overestimates or underestimates of their actual experiences. Previous research comparing multiple informants has found that some children self-report victimization although their peers do not identify them as victims, and alternatively, that some individuals may be identified as victims by their peers although they do not report experiencing victimization (Graham, Bellmore, & Juvonen, 2003). Still, children themselves may be most aware of their own peer maltreatment, perhaps especially for behaviors as subtle and difficult to observe as social aggression. Another limitation is that 4 consecutive years of self-report data on victimization were available only for a subset of the sample. However, those with partial and complete data did not significantly differ in terms of victimization or adjustment. A third possible shortcoming is that we relied on parents' reports of maladjustment on the Child Behavior Checklist. Although this well-validated measure has strong psychometric properties and assesses a broad range of problems, parents may not be the most valid reporters, particularly of children's internalizing difficulties.

There are also limitations associated with our analytic plan. We assigned children to social victimization groups, and in so doing we looked at social victimization across time as a categorical variable. Alternative approaches such as cross-panel analyses could have provided additional information such as the examination of transactional relations between social victimization and internalizing problems. However, we believe that examining the proportions of children who are socially victimized during middle childhood and the transition to adolescence is an important step in learning more about social victimization during this developmental period. Another potential limitation was the small cell sizes of some groups. Nonetheless, this in and of itself is interesting information about the course of social victimization and is consistent with other studies, which have also found that some patterns of victimization are extremely rare (Kochenderfer-Ladd & Wardrop, 2001).

Despite these limitations, this study also had important strengths. This was the first longitudinal study of social victimization to follow children over 4 consecutive years during late middle childhood and early adolescence. This was also the first longer term study to examine social victimization specifically, disentangled from other forms of victimization. Because children reported on victimization and parents reported on adjustment, the relations found are not subject to concerns about shared method variance. In this study, both variable-centered and person-centered analyses suggested that social victimization relates to maladjustment and that persistent social victimization relates to chronic problems.

Overall, these findings are discouraging in that persistent social victimization is linked to maladjustment. However, these results also provide reason for hope in that children who manage to escape social victimization seem to have similar adjustment to nonvictims. Understanding why some children experience periodic versus persistent social victimization could be useful in guiding intervention. Several previous studies have compared characteristics of children who transition out of general victimization to those who do not. For a large sample of 3rd – 5th graders, boys' escaping victimization was related to increases in prosocial behavior, and girls' transitioning out of victimization was linked to decreases in impulsivity and in social aggression (Dempsey et al., 2006). Young adolescents who escaped general victimization across a two-year period reported more often telling someone about victimization experiences, and getting new friends than children who were consistently victimized (Smith et al., 2004). Clues to guide intervention may also come from research on coping with victimization. In a study that examined coping strategies as moderators of the relation between victimization and adjustment for 4th graders, victimized girls who sought social support experienced fewer social problems, whereas victimized boys who sought social support had lower peer preference (Kochenderfer-Ladd & Skinner, 2002). Interventions to help children escape social

victimization or cope optimally with experiences of subtle peer maltreatment may have to be sophisticated and tailored to the gender and the individual characteristics of the child. Some children manage to escape social victimization, and understanding why and how they accomplish this could guide the development of effective interventions so that fewer children are chronically victimized and suffer persistent adjustment problems.

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Figure 1.

Conditional item probability profile plot for three-class model for fourth grade.

Note: LCA was applied to the seven item social victimization subscale data at each time point.

We identified a highly victimized group, a sometimes victimized group, and a nonvictimized group at each time point, but we only present the results from the fourth grade analysis for economy of space.

Figure 2a.

Figure 2b.

Figure 2c.

Figure 2.

Figure 2a. Chronic, deceiver, and nonvictim groups: Somatic complaints.

Figure 2b. Chronic and nonvictim groups: Anxious depression.

Figure 2c. Chronic and nonvictim groups: Withdrawn depression.

Table 1

Social Victimization: Stability Coefficients

Social Victimization	M	SD	Year 1	Year 2	Year 3
Year 1	2.04	.76			
Year 2	1.83	.67	.48**		
Year 3	1.70	.66	.55**	.56**	
Year 4	1.63	.56	.42**	.42**	.36**

** Correlation is significant at the .01 level

* Correlation is significant at the .05 level

Table 2
Social Victimization and Adjustment: Correlations and Descriptive Statistics

Social Victimization	Year 1			Year 2			Year 3			Year 4		
	AnxDep	WthDep	SomCom	AnxDep	WthDep	SomCom	AnxDep	WthDep	SomCom	AnxDep	WthDep	SomCom
Year 1	.35**	.22**	.20*	.30**	.15 ^t	.32**	.34**	.17*	.23**	.25**	.17*	.20*
Year 2				.37**	.16*	.22**	.35**	.13	.19*	.32**	.11	.12
Year 3							.35**	.15 ^t	.16*	.33**	.09	.06
Year 4										.17*	.02	.14 ^t
<i>M</i>	3.08	1.35	1.37	2.78	1.37	1.19	2.39	1.28	1.16	2.19	1.33	1.04
<i>SD</i>	2.71	1.80	1.88	2.82	1.73	1.73	2.56	1.74	1.62	2.64	1.84	1.46

** Correlation is significant at the .01 level

* Correlation is significant at the .05 level

^t Correlation is significant at the .10 level

Table 3
Social Victimization Groups as Predictors of Adjustment Trajectories

	Somatic Complaints			Anxious Depression			Withdrawn Depression		
	Coefficient	SE	t ratio	Coefficient	SE	t ratio	Coefficient	SE	t ratio
Model for initial status, π_0									
Mean initial status, β_{00}	.95	.19	5.05**	2.35	.26	9.19**	1.14	.17	6.58**
Chronic, β_{01}	.83	.33	2.48*	2.10	.41	5.07**	.63	.28	2.23*
Increaser, β_{02}	.56	.48	1.15	1.02	.61	1.69	.06	.41	.15
Decreaser, β_{03}	1.17	.41	2.85**	.82	.51	1.60	.46	.35	1.32
Model for linear change, π_1									
Mean change rate, β_{10}	-.05	.06	-.75	-.31	.07	-4.82**	-.02	.05	-.39
Chronic, β_{11}	-.07	.11	-.59						
Increaser, β_{12}	-.08	.16	-.49						
Decreaser, β_{13}	-.29	.14	-2.11*						

** significant at the .01 level

* significant at the .05 level