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Multiple victimization experiences of urban elementary school students: Associations with psychosocial functioning and academic performance[☆]

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Abstract

Objective: This study explored the victimization experiences of urban elementary school students to determine whether subsets of youth emerged with similar victimization profiles (e.g., no victimization, multiple types of victimization). It also evaluated whether multiple victimization was associated with greater psychological distress and lower academic performance.

Methods: Participants were 689 fifth grade students from an urban, ethnically diverse school district in the Northeast. Youth completed self-report measures in school about bullying victimization, victimization in the home and community, and psychosocial functioning.

Results: Cluster analysis suggested the existence of three distinct youth profiles: those with minimal victimization, those victimized primarily by their peers, and those with multiple types of victimizations. As hypothesized, youth with multiple victimizations experienced more psychological distress and earned lower grades than their peers.

Conclusions: Findings highlight the heterogeneity of youth victimization experiences and their relations to functioning, and have implications for treatment planning among practitioners working with youth. © 2007 Elsevier Ltd. All rights reserved.

Keywords: Bullying; Child maltreatment; Multiple victimization

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Introduction

It is well established that a substantial number of youth are bullied by their peers at school, and that this victimization is associated with deleterious psychological and academic effects (Espelage & Holt, 2001; Kaltiala-Heino, Rimpelae, & Rantanen, 2001; Nansel et al., 2001; Rigby, 2003). Similarly, there is a large body of literature documenting the prevalence of familial and community victimization among children and its relation to distress and academic difficulties (Finkelhor & Browne, 1985; Garnefski & Arends, 1998; Horn & Trickett, 1998; Luster, Small, & Lower, 2002). However, little research has addressed simultaneously victimization profiles exist among youth, and linked profiles to psychological and academic functioning. Such research is essential for developing effective interventions for individual youth and school-based programs.

The current study extends research on multiple victimization by evaluating victimization profiles (i.e., patterns of victimization) among urban children and determining the extent to which multiple victimization is associated with heightened psychological distress and lower academic performance. Also, this investigation examines how multiple victimization relates to bullying involvement.

Youth victimization experiences

To date most investigations on youth victimization have studied the effects of singular forms of victimization. Research has consistently shown that victimization in any area is linked to harmful effects. For example, targets of bullying report more loneliness, greater school avoidance, more suicidal ideation, lower self-esteem, and more depression than their non-bullied peers (Hawker & Boulton, 2000; Kochenderfer & Ladd, 1996; Neary & Joseph, 1994; Olweus, 1992; Rigby, 2001). Similarly, child maltreatment has been linked to internalizing and externalizing problems including depression, psychological distress, school problems, running away, suicidal behaviors, substance abuse, and disordered eating (Harrison, Hoffmann, & Edwall, 1989; Kendall-Tackett, Williams, & Finkelhor, 1993; Luster & Small, 1997; Meyerson, Long, & Miranda, 2002). Finally, exposure to neighborhood violence has been associated with anxiety, depression, increased aggression, and lower school achievement (Horn & Trickett, 1998).

Despite strong evidence linking singular victimization experiences to deleterious outcomes, there is a growing recognition that focusing on only one type of victimization is problematic because it obscures potential influences of other types of victimization on individuals (Finkelhor, Ormrod, & Turner, 2007). Further, extant research suggests that experiencing multiple victimization heightens the likelihood of maladjustment among youth. For instance, within a sample of adolescent psychiatric patients, youth who had been physically and sexually abused experienced more severe symptoms of PTSD than youth who incurred only one type of abuse (Naar-King, Silvern, Ryan, & Sebring, 2002). Similarly, children who had experienced multiple types of family violence were at greater risk of internalizing and externalizing problems than children who had experienced one type of family violence (Sternberg, Baradaran, & Abbott, 2006). Finally, high school students who had experienced high levels of childhood sexual abuse, sexual harassment, and dating violence reported more psychological distress and a lower sense of school belonging than their non-victimized peers and peers with fewer victimization experiences (Holt & Espelage, 2003).

Additional research suggests that associations between singular forms of victimization and psychological functioning might not be as strong as they appear to be, but rather unassessed multiple victimization better accounts for these relations. For instance, in a nationally representative study of youth, Finkelhor and colleagues (Finkelhor, Ormrod, Turner, & Hamby, 2005) found that when poly-victimization (defined as experiencing four or more victimizations in the past year) was taken into account, relations between individual victimization forms and trauma were eliminated or significantly weakened. Similarly, we previously found the association between peer victimization and psychological distress was weakened once familial and community victimizations were taken into account (Holt, Finkelhor, & Kaufman Kantor, in press).

Multiple victimization in the context of bullying involvement

Given the current heightened awareness of bullying within schools, linking peer victimization to other types of victimization is an important endeavor for a number of reasons. For instance, although existing research has identified subgroups in bullying involvement, such as victims and bully-victims (Espelage & Holt, 2001; Nansel et al., 2001), little is known about whether these youth experience victimization in other areas. Does a group of peer victims exist who are not victimized outside of school, and another group of peer victims who are also victimized at home in the community? If such groups of youth exist, understanding differences in their psychosocial and academic functioning is critical for designing effective interventions. Similarly, it is important to determine whether bully-victims, in particular, experience victimization in other domains, since there is strong evidence that this is the highest risk group for negative outcomes (Kumpulainen, Rasanen, & Henttonen, 1998; Nansel, Haynie, & Simons-Morton, 2003; Nansel et al., 2001).

Because bullying interventions are already in place in many schools, schools represent a potential gateway for additional treatment for youth who have been victimized in more extensive ways beyond peer victimization. For instance, through the bullying intervention process educators and school counselors can identify children who have been victimized in multiple areas (e.g., through self-report surveys prior to the intervention), and then can assist children in seeking appropriate treatment.

Summary

Although many youth are victimized in multiple areas, there is not much information on victimization profiles or how these profiles are associated with psychosocial functioning. Therefore, we evaluated youth victimization experiences in the following domains: (1) peer victimization (physical and verbal), (2) conventional crime, (3) child maltreatment, (4) sexual victimization, and (5) witnessing/indirect victimization. We hypothesized that clusters of students would emerge with similar victimization histories, and that there would be a group of students who experienced multiple types of victimization. Further, we hypothesized that youth who reported multiple types of victimization would experience more psychological distress and lower grades in school than youth who reported fewer or no victimization experiences. Finally, exploratory analyses addressed how students' victimization profiles related to bully-victim status within the school setting (e.g., what percent of youth victimized in multiple areas were classified as bully-victims within schools).

Method

Participants

Participants were 689 5th grade students from 22 elementary schools in a large, Northeastern city. There were 333 (48.3%) girls and 347 (50.4%) boys; nine students did not report their gender (1.3%). Youth described themselves as White, non-Hispanic (30.6%), Portuguese (9.7%), Hispanic (9.0%), Black (8.0%), Native American (5.4%), Asian (4.6%), and Bi-racial or multi-racial (32.4%). The mean age for the sample was 10.83 (SD = .64) with children ranging from 10 to 12 years old. With respect to socio-economic status, the school district defines students as low income who meet at least one of the following criteria: eligible for free or reduced price lunch, recipient of the state's equivalent to Temporary Assistance for Needy Families (TANF), or eligible for food stamps. Fifty-four percent of students in the district were identified as low income.

With respect to the community in which the students lived, it is an urban environment with a population of approximately 100,000; 17% of residents live below the poverty line according to data derived by the US Census Bureau based on household size and number of children under 18 (e.g., for a family of four the poverty line is \$16,895). Crime statistics indicate that the violent crime rate in this community is approximately two times the national average.

Measures

Each participant completed a survey packet that included demographic items, a question about academic grades, and the four measures described below. Demographic questions asked about each student's sex, age, parents/guardians, and race/ethnicity. For race/ethnicity, participants were given six options, from which they could circle one or more response: African American (not Hispanic), Asian, White (not Hispanic), Hispanic, Native American, and "Other" (with a space to write in one or more racial/ethnic descriptor). Self-reported grades were obtained from students through the question: "What grades do you usually get in school?" There were nine possible response options (Mostly A's, A's & B's, Mostly C's, B's and C's, Mostly C's, C's and D's, Mostly D's, D's and F's, Mostly F's), with Mostly A's reflecting the highest grades and Mostly F's reflecting the lowest grades.

University of Illinois Victimization Scale. Peer victimization was assessed using the University of Illinois Victimization Scale (UIVS; Espelage & Holt, 2001), to which four additional items developed for this project were added to expand the scale. Researchers developed this scale based on interviews with middle school students, a review of the research literature on existing bullying measures, and extensive factor analytic investigations (Espelage, Bosworth, & Simon, 2000; Espelage, Holt, & Henkel, 2003). Students are asked how often they have experienced peer victimization in the past 30 days (e.g., "Other students called me names," "I got hit and pushed by other students"). The scale includes both physical and verbal manifestations of bullying. Response options include "Never," "1 or 2 times," "3 or 4 times," "5 or 6 times," and "7 or more times." Higher scores indicate more self-reported victimization.

The UIVS was found to converge with peer nomination data (Espelage et al., 2003). In addition, the scale was not significantly correlated with the Illinois Bullying scale (r=.12), providing evidence of discriminant validity because it differentiated between bullying and victimization (Espelage et al., 2003). A Cronbach alpha coefficient of .89 was found for the current study.

University of Illinois Bully Scale. The nine-item University of Illinois Bully Scale (UIBS; Espelage & Holt, 2001) was used to assess bullying behavior including teasing, social exclusion, name-calling, and rumor spreading. Researchers developed this scale based on interviews with middle school students, a review of the research literature on existing bullying measures, and extensive factor analytic investigations (Espelage et al., 2000, 2003). Students were asked to indicate how often in the past 30 days they had engaged in each behavior (e.g., "I teased other students" and "I upset other students for the fun of it"). Response options included "Never," "1 or 2 times," "3 or 4 times," "5 or 6 times," and "7 or more times." Higher scores indicated more self-reported bullying behaviors.

Espelage and Holt (2001) found a Cronbach alpha coefficient of .87 and the Bullying Scale was found to be moderately correlated (r = .65) with the Youth Self-Report Aggression Scale (Achenbach, 1991), suggesting convergent validity. Further, the UIBS was found to converge with peer nomination data (Espelage et al., 2003). A Cronbach alpha coefficient of .86 for the UIBS was found for the current sample.

Juvenile Victimization Questionnaire. Participants completed the Juvenile Victimization Questionnaire (Hamby, Finkelhor, Ormrod, & Turner, 2004), a 33-item screener measure that assessed a broad range of victimization across five modules: Conventional crime (e.g., having something stolen), child maltreatment (e.g., being physically abused), peer and sibling victimization (e.g., being hit by other kids), sexual victimization (e.g., being forced to do something sexual), and witnessing and indirect victimization (e.g., witnessing domestic violence). Each question referred to a specific type of victimization (e.g., aggravated assault, dating violence), and respondents indicated whether or not it had occurred within the past year. It is important to note that child maltreatment items asked about both parental and potentially non-parental (i.e., the term "grown-up" was used in the question) perpetrators of physical abuse, emotional/psychological abuse, and neglect, differentiating this measure of child maltreatment from some other instruments in the field. The peer and sibling module was not used in analyses for this paper because peer victimization was evaluated more extensively through the UIVS.

With respect to scoring, it is possible to consider item-level responses or to compute dichotomous scores for each module (i.e., a score of "1" would indicate that at least one type of victimization within that module was reported). In this paper we used both scoring methods. National norms exist for this measure, and preliminary evidence exists for the questionnaire's construct validity and reliability (Finkelhor, Hamby, Ormrod, & Turner, 2005).

Psychological functioning. The 21 items from the anxious/depressed and withdrawn/depressed scales from the Youth Self-Report (Achenbach & Rescoria, 2001) were used to assess psychological functioning. For each of the items students indicated the degree to which particular statements applied to them (e.g., "I feel lonely," "I am nervous or tense"). Response options were "Not true," "Somewhat or sometimes true," and "Very true or often true." Higher scores indicated more psychological distress. National norms exist for this measure, and there is significant evidence for its reliability and validity in adolescent populations (Bennett & Bates, 1995; Visser, Van der Ende, Koot, & Verhulst, 1999). For instance, the 8-day test-retest reliability coefficient in a sample of nonreferred children was .84 for the anxious/depressed scale and .71 for the withdrawn/depressed scale (Achenbach & Rescoria, 2001). In this same sample, alpha coefficients were .74 for the anxious/withdrawn scale and .67 for the withdrawn/depressed scale. For multivariate models in the current study, anxious/depressed and withdrawn/depressed scores were combined into one *t* score reflecting psychological distress. The resulting coefficient alpha was .87.

Procedure

Parental consent. Parents/guardians of all 5th grade students in the district were sent letters informing them about the purpose of the study, one of which was from researchers and one of which was from the Head of Student Services in the school district. If parents did not want their child to participate, they were asked to sign and return the form to the school; 6% of parents (n = 53) returned forms. At the beginning of each survey administration teachers removed students from the room if they were not allowed to participate, and researchers also reminded students that they should not complete the survey if their parents had returned a form. In addition to passive parental consent, students were asked to assent to participate in the project through a standardized assent form read to students prior to survey administration. Only one child did not choose to complete the survey.

Survey administration. Surveys were administered to students in classrooms of approximately 25 children. Two researchers were present at each survey administration. At the majority of survey administrations a school adjustment counselor was also present should any children feel distressed. Students were first informed about the general nature of the investigation. Next, researchers made certain that students were sitting far enough from one another to ensure confidentiality. Students were then given survey packets, each labeled with a participant ID number, and asked to answer all questions honestly. They were told that the surveys were confidential but that if the researchers thought they were in danger of serious harm (see below) researchers would notify a school adjustment counselor. Researchers maintained a password-protected file with a list linking student names to ID numbers for this purpose. One researcher read questions from the first two pages of the survey aloud to ensure that students understood how to complete the survey. After that, researchers were available to answer questions once students began responding to survey items. At the end of survey administration, participants were provided with a list of phone numbers to call (e.g., community counseling agencies) should they experience an emotional reaction to the questionnaires. Last, a raffle was held in each classroom in which one student won a \$10 gift certificate to a local store. Students who did not complete surveys also were eligible for this raffle. On average it took students approximately 40 min to complete the survey.

Reporting of abuse and suicidal ideation. Researchers are not mandated reporters of abuse in the state in which these data were collected. However, to ensure the safety of student participants four survey items were flagged as reportable items, three or which asked about sexual abuse and were consistent with legal definitions of child sexual abuse, and one of which inquired about suicidal ideation. If a participant endorsed one or more of these items, the student was referred to the school adjustment counselor for immediate follow-up. The University of New Hampshire's Institutional Review Board approved this reporting procedure, as did the Superintendent and Head of Student Services from the school district. Forty-six students (6.9%) were referred to school adjustment counselors for follow-up about suicidal ideation, and twenty students (2.9%) were referred for follow-up about sexual abuse.

Data analysis

We conducted a *k*-means cluster analysis using SPSS to determine whether groups of youth existed with similar victimization profiles. Cluster analysis produces groups based on similarities in scoring on designated measures. Total scores from the University of Illinois Victimization Scale (Espelage & Holt,

2001) and dichotomous modules scores from the Juvenile Victimization Questionnaire (Hamby et al., 2004) were included in this analysis. Only respondents who completed all these measures in their entirety were part of the cluster analysis (n = 649). We did not have a priori hypotheses as to how many clusters would emerge, and as such multiple solutions were evaluated; the three-cluster solution best fit the data and was the most interpretable.

Results

Cluster descriptions

The victimization scores for the three clusters ("Minimal victims," "Primarily peer victims," and "Multiple victims") are shown in Table 1. Cluster one, defined as the "Minimal victims" cluster, included the majority of students (n = 420; 65%). These students had the lowest scores on all victimization measures. Cluster two, characterized by scores approximately one-half a standard deviation above the mean on peer victimization (M = 9.22, SD = 2.71), was labeled the "Primarily peer victims" cluster (n = 162; 25%). Finally, cluster three was designated the "Multiple victims" group (n = 67; 10%). On average, members of this group had scores over two standard deviations above the mean on bullying victimization (M = 20.88; SD = 4.07), and scores almost one standard deviation above the mean on conventional crime (M = 2.43, SD = 1.96) and sexual victimization (M = .40, SD = .89).

Cluster demographics. Clusters were compared on gender, age, and living arrangements (Table 2). Given the large number of racial/ethnic groups represented in this sample, clusters were not compared with respect to race/ethnicity. There were no gender differences across clusters (p = ns). Boys and girls were equally represented in the "Minimal victim" and "Primarily peer victim" groups. Although there were more girls than boys in the "Multiple victim" group (56.1% vs. 43.9%) this difference was not statistically significant. Further, clusters did not differ by age, F(2, 646) = .54, ns, or with respect to living arrangements (p = ns). Specifically, the percentage of youth living in single parent homes did not differ significantly across clusters.

2					
	Total sample (n = 649) M (SD)	$\begin{array}{c} \text{Minimal victims} \\ (n = 420) \\ M (SD) \end{array}$	Primarily peer victims $(n = 162)$ M (SD)	Multiple victims (n = 67) M (SD)	
UIVS					
Peer victimization	5.88 (6.53)	1.97 ^a (1.88)	9.54 ^b (2.71)	20.88 (4.07)	
JVQ					
Conventional crime victimization	1.13 (1.52)	0.66 ^a (1.06)	1.88 ^b (1.76)	2.43 (1.96)	
Child maltreatment	0.26 (0.63)	0.12^{a} (0.47)	0.52 (0.84)	0.52 (0.76)	
Sexual victimization	0.10 (0.40)	0.04 ^a (0.21)	0.14 ^b (0.42)	0.40 (0.89)	
Witnessing and indirect victimization	0.73 (1.19)	0.52 ^a (0.99)	1.14 (1.39)	1.07 (1.48)	

 Table 1

 Mean victimization scores by cluster membership

^a Mean score for minimal victims is significantly lower than mean scores for primarily peer and multiple victims.

^b Mean scores for primarily peer victims are significantly lower than mean scores for multiple victims.

	Total sample $(n = 649)$	Victimization cluster membership		
		$\frac{\text{Minimal victims}}{(n=420)}$	Primarily peer victims $(n = 162)$	Multiple victims $(n=67)$
Demographic				
Male (%)	51%	50.1%	49.7%	43.9%
Child age (mean, years)	10.83 (0.63)	10.85 (0.63)	10.81 (0.66)	10.78 (0.65)
Single parent family (%)	26.0%	27.4%	26.8%	18.0%
JVQ total score (mean)	3.05 (3.67)	1.81 ^a (2.52)	5.03 (4.01)	6.06 (4.91)
Any sexual victimization (%) ^c	7.2%	3.1%	11.7%	22.4%
Psychological distress (mean)	56.27 (6.92)	54.24 ^a (5.33)	59.09 ^b (7.00)	62.15 (9.47)
Suicidal ideation (%) ^c	18.2%	10.5%	31.6%	28.6%
Bully-victims (%) ^c	7.8%	0%	13.6%	43.3%
Self-reported grades ^c				
A's and B's (%)	41.8%	45.6%	37.9%	30.3%

Table 2

Characteristics of minimal victir	ns, primarily peer	victims, an	d multiple victims
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^a Mean score for minimal victims is significantly lower than mean scores for primarily peer and multiple victims.

^b Mean score for primarily peer victims is significantly lower than mean scores for minimal and multiple victims.

^c Chi-square is statistically significant.

JVQ scores by cluster. Groups were compared on total JVQ scores, and results indicated that there were statistically significant group differences, F(2, 646) = 89.13, p < .01 (see Table 2). "Minimal victims" endorsed an average of two JVQ items (M = 1.81, SD = 2.52), indicating that these participants had experienced two victimizations within the past year. This rate was significantly lower than rates for the other two groups. Specifically, youth in the "Primarily peer victims" category endorsed five JVQ items on average (M = 5.03, SD = 4.01) and "Multiple victims" endorsed six JVQ items (M = 6.06, SD = 4.91) on average.

JVQ score distributions were also examined for each group to evaluate distribution differences, with JVQ total scores computed at the 25th, 50th, and 75th percentile. Among "Minimal victims" the 25th percentile reflected a score of 0 (i.e., 0 victimizations), the 50th percentile reflected a score of 1 (i.e., one victimization), and the 75th percentile reflected a score of 3 (i.e., three victimizations). Conversely, for "Primarily peer" victims the 25th, 50th, and 75th percentile scores were, respectively: 2, 4, and 7. Among "Multiple victims" the 25th percentile reflected a score of 2, the 50th percentile reflected a score of 5, and the 7th percentile reflected a score of 9.

Finally, rates of sexual victimization, as measured by the JVQ, were compared across groups (Table 2). This provides another indicator of victimization severity. Among "Multiple victims" 22.4% (n=15) reported at least one incident of sexual victimization within the past year compared to 11.7% (n=19) of "Primarily peer victims" and 3.1% (n=13) of "Minimal victims" (p<.01).

Group differences on psychosocial and academic functioning

Consistent with hypotheses, youth in the "Multiple victim" group reported the most psychological distress. As shown in Table 2, "Multiple victims" had the highest psychological distress *t* scores. As

expected, respondents classified as "Minimal victims" reported the least psychological distress. With respect to suicidal ideation, the percentages of "Primarily peer victims" and "Multiple victims" with suicidal ideation were significantly higher than the percentage of "Minimal victims."

Next, rates of youth in each cluster categorized as bully-victims were compared. First, students were classified as bully-victims based on peer victimization and perpetration scores taken from the UIVS and UIBS respectively (Holt et al., in press). Specifically, bully-victims were students who had scores in the top 25th percentile on both bullying perpetration and victimization measures. Then, χ^2 analyses were conducted to determine rates of youth in each cluster by bully-victim group membership. Whereas 0% of "Minimal victims" were bully-victims, 13.6% of "Primarily peer victims" and 43.3% of "Multiple victims" were classified as bully-victims (p < .01).

As hypothesized, there were statistically significant differences between groups on self-reported grades, χ^2 (2, 635) = 10.05, p < .05. Specifically, the group with the highest percentage of youth earning A's and B's was the "Minimal victims" group.

Discussion

The current study is one of the first to examine victimization profiles among youth and to explore how these profiles are associated with psychosocial and academic functioning. Results suggest the existence of three distinct youth profiles: those with minimal victimization, those victimized primarily by their peers, and those with multiple types of victimizations. In addition, youth with multiple victimizations experience more psychological distress and earn lower grades than their peers.

Victimization profiles

To date, few studies have examined simultaneously youth victimization experiences across multiple areas or evaluated the extent to which distinct victimization profiles exist among youth. This study adds to the literature by exploring youth victimization experiences in three primary areas: peer, family, and community victimization. Three distinct youth victimization profiles emerged. The majority of students were classified as "Minimal victims," and these youth reported the least peer, family, and community victimization. One quarter of the sample was in the "Primarily peer victims" group. These were students who reported more peer victimization than minimally victimized students, but did not have substantial victimization experiences in other areas. Finally, 10% of youth reported multiple victimization types, particularly peer, conventional crime, and sexual victimization. Accordingly, this group was designated the "Multiple victims" group.

Youth with multiple victimization experiences reported higher levels of peer victimization than youth victimized primarily by peers. In addition, sexual victimization across groups was compared to provide another index of victimization severity, and results showed that 22% of students with multiple victimization experiences were sexually victimized in the past year. The rate of sexual victimization among youth with multiple victimization experiences was much higher than rates for youth with minimal or primarily peer victimizations. These differences in sexual victimization rates parallel findings from other studies showing higher rates of sexual victimization among youth classified as multiple or polyvictims (Finkelhor, Ormrod, et al., 2005). Multiple victims are clearly a group of youth with significant victimization histories that need to be addressed.

Psychosocial and academic correlates of victimization profiles

Youth with multiple victimization experiences emerged as the group with the most significant psychological and academic problems, adding to previous literature showing greater maladjustment among youth who incur more than one type of victimization (Appleyard, Egeland, Van Dulmen, & Sroufe, 2005; Holt & Espelage, 2003; Hughes, Honore, Parkinson, & Vargo, 1989; Naar-King et al., 2002; Sternberg et al., 2006). Specifically, individuals with multiple victimizations reported more psychological distress than their peers and reported lower grades on average. Although youth who suffered primarily peer victimization reported more psychological distress than youth with minimal victimization experiences, they did not evidence as many academic problems as children with multiple victimization experiences. Accordingly, although peer victimization was associated with deleterious effects, multiple victimization substantially heightened an individual's risk of poor psychological and academic functioning. Finally, rates of suicidal ideation were high for both youth victimized primarily by peers and victimized across multiple areas; approximately one in three students in each of these groups reported significant suicidal ideation, suggesting that this is a critical area to address in counseling and school-based violence prevention programs.

Youth with multiple victimization experiences also appear to experience significant social difficulties in school, as evidenced by the high percentage of children in this group who also were classified as bully-victims within the school context. Nearly half the youth with multiple victimizations were categorized as bully-victims, suggesting that these are youth who are victimized significantly in school, their communities, and their homes, and who also perpetrate aggressive acts on peers at school. This is one of the first studies to find such an association, and this information adds to the literature on youth classified as bully-victims. The directionality of these associations, however, is not clear. It might be that because of their extensive victimization histories children who experience multiple victimization choose at some point to act out and aggress towards others. Or, it might be that this group of youth has inherent tendencies toward aggression and that this aggression provokes others and results in victimization. Future research should attempt to delineate more specifically youth pathways to victimization and aggression.

The existence of a group of youth victimized primarily by peers also warrants additional attention. As previous research has indicated, for some youth, victimization in the family and community is associated with greater difficulties in peer relationships and a greater likelihood of being targeted by bullies (Jacobsen & Straker, 1982; Schwartz & Proctor, 2000). However, findings from the current study highlight that there is a group of youth for whom victimization at school is not linked to other victimization types. Therefore, there appear to be different pathways to peer victimization, and it is likely that the pathway of children victimized primarily by peers differs significantly from the pathway of youth victimized in multiple areas.

Limitations

This study was cross-sectional in nature, and, therefore, inferences cannot be made about causality or directionality. Another limitation was that respondents were youth from only one school district, and, therefore, findings might not generalize to all fifth graders in the United States. Similarly, students whose parents did not want them to participate in the project might be different from their peers in ways that could have influenced study findings. A final study limitation was that all measures were self-report, which potentially introduced a bias.

Implications for intervention

These findings have implications for clinicians working with individual youth and for broader schoolbased interventions. For instance, results suggest that the treatment needs of youth who experience multiple victimizations would differ from those of youth who experience primarily peer victimization. Whereas clinicians in the school environment might treat those children victimized primarily by peers effectively, it is likely that youth with multiple victimization experiences would require more extensive individual clinical intervention including work outside the school context. Further, social workers might become part of a treatment team for children who have experienced multiple victimizations to help address and work to change familial and community environments that promote victimization. Also, the findings certainly highlight the need to assess children for victimization experiences outside as well as within the school environment. Those concerned with developing curricula and designing prevention programs for bullying may also need to recognize the importance of including content that covers forms of victimization beyond school bullying.

Conclusion

Findings from this investigation suggest the need for more comprehensive assessments of victimization among youth. Such assessments will allow for better treatment and intervention for victimized youth, whether their victimizations are primarily in the peer context or span multiple areas. Similarly, future research on youth victimization should, when possible, address broader ranges of victimization rather than focus on solely one area, such as bullying or child maltreatment. This will result in an increased understanding of the complex interplay among victimizations, and will provide information on ways in which to potentially prevent some youth from becoming multiple victims.

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References

- Achenbach, T. M. (1991). Integrative guide for the 1991 CBCL/4-18, YSR, and TRF profiles. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T., & Rescoria, L. (2001). *Manual for the ASEBA school-age forms & profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- Appleyard, K., Egeland, B., Van Dulmen, M. H. M., & Sroufe, L. A. (2005). When more is not better: The role of cumulative risk in child behavior outcomes. *Journal of Child Psychology and Psychiatry*, *46*, 235–245.
- Baldry, A. C. (2003). Bullying in schools and exposure to domestic violence. Child Abuse & Neglect, 27, 713–732.
- Bennett, D. S., & Bates, J. E. (1995). Prospective models of depressive symptoms in early adolescence: Attributional style, stress, and support. *Journal of Early Adolescence*, 15, 299–315.
- Espelage, D. L., Bosworth, K., & Simon, T. R. (2000). Examining the social context of bullying behaviors in early adolescence. *Journal of Counseling and Development*, 78, 326–333.

- Espelage, D. L., & Holt, M. K. (2001). Bullying and victimization during early adolescence: Peer influences and psychosocial correlates. In R. Geffner & M. Loring (Eds.), *Bullying behaviors: Current issues, research, and interventions* (pp. 123–142). Binghampton, NY: The Haworth Press.
- Espelage, D. L., Holt, M. K., & Henkel, R. R. (2003). Examination of peer-group contextual effects on aggression during early adolescence. *Child Development*, 74, 205–220.
- Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. *American Journal of Orthopsychiatry*, 55, 530–541.
- Finkelhor, D., Hamby, S. L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse & Neglect*, 29, 383–412.
- Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. L. (2005). Measuring poly-victimization using the Juvenile Victimization Questionnaire. *Child Abuse & Neglect*, 29, 1297–1312.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse and Neglect*, 31, 7–26.
- Garnefski, N., & Arends, E. (1998). Sexual abuse and adolescent maladjustment: Differences between male and female victims. *Journal of Adolescence*, 21, 99–107.
- Hamby, S. L., Finkelhor, D., Ormrod, R., & Turner, H. (2004). The Juvenile Victimization Questionnaire (JVQ): Child self-report version. Durham, NH: Crimes Against Children Research Center.
- Harrison, P. A., Hoffmann, N. G., & Edwall, G. E. (1989). Sexual abuse correlates: Similarities between male and female adolescents in chemical dependency treatment. *Journal of Adolescent Research*, 4, 385–399.
- Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41, 441–455.
- Holt, M. K., & Espelage, D. L. (2003). A cluster analytic investigation of victimization among high school students: Are profiles differentially associated with psychological symptoms and school belonging? In M. J. Elias & J. E. Zins (Eds.), *Bullying, peer harassment, and victimization in the schools: The next generation of prevention* (pp. 81–98). New York: The Haworth Press, Inc.
- Holt, M. K., Finkelhor, D., & Kaufman Kantor, G. (in press). Hidden victimization in bullying assessment. *Journal of School Psychology*.
- Horn, J. L., & Trickett, P. K. (1998). Community violence and child development: A review of the research. In P. K. Trickett & C. J. Schellenbach (Eds.), *Violence against children in the family and the community* (pp. 103–138). Washington, DC: American Psychological Association.
- Hughes, H. M., Honore, M., Parkinson, D., & Vargo, M. (1989). Witnessing spouse abuse and experiencing physical abuse: A "double whammy"? *Journal of Family Violence*, 4(2), 197–209.
- Jacobsen, R. S., & Straker, G. (1982). Peer group interaction of physically abused children. Child Abuse & Neglect, 6, 321-327.
- Kaltiala-Heino, R., Rimpelae, M., & Rantanen, P. (2001). Bullying at school: An indicator for adolescents at risk for mental disorders. *Journal of Adolescence*, 23, 661–674.
- Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin*, 113, 164–180.
- Kochenderfer, B. J., & Ladd, G. W. (1996). Peer victimization: Cause or consequence of school maladjustment? *Child Development*, 67, 1305–1317.
- Kumpulainen, K., Rasanen, E., & Henttonen, I. (1998). Children involved in bullying: Psychological disturbance and the persistence of the involvement. *Child Abuse & Neglect*, 23, 1253–1262.
- Luster, T., & Small, S. A. (1997). Sexual abuse history and problems in adolescence: Exploring the effects of moderating variables. *Journal of Marriage and the Family*, 59, 131–142.
- Luster, T., Small, S. A., & Lower, R. (2002). The correlates of abuse and witnessing abuse among adolescents. *Journal of Interpersonal Violence*, 17, 1323–1340.
- Meyerson, L. A., Long, P. L., & Miranda, R. (2002). The influence of childhood sexual abuse, physical abuse, family environment, and gender on the psychological adjustment of adolescents. *Child Abuse & Neglect*, 26, 387–405.
- Naar-King, S., Silvern, L., Ryan, V., & Sebring, D. (2002). Type and severity of abuse as predictors of psychiatric symptoms in adolescence. *Journal of Family Violence*, 17, 133–149.
- Nansel, T. R., Haynie, D. L., & Simons-Morton, B. G. (2003). The association of bullying and victimization with middle school adjustment. *Journal of Applied School Psychology*, 19, 45–61.

- Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B. G., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association*, 285, 2094–2100.
- Neary, A., & Joseph, S. (1994). Peer victimization and its relation to self-concept and depression among schoolgirls. *Personality* and Individual Differences, 16, 183–186.
- Olweus, D. (1992). Bullying among schoolchildren: Intervention and prevention. In R. D. Peters, R. J. McMahon, & V. L. Quinse (Eds.), *Aggression and violence throughout the life span* (pp. 100–125). London: Sage Publications.
- Rigby, K. (2001). Health consequences of bullying and its prevention in schools. In J. Juvonen & S. Graham (Eds.), Peer harassment in school: The plight of the vulnerable and victimized (pp. 310–331). New York: Guilford Press.
- Rigby, K. (2003). Consequences of bullying in school. Canadian Journal of Psychiatry, 48, 583-590.
- Schwartz, D., & Proctor, L. J. (2000). Community violence exposure and children's social adjustment in the school group: The mediating roles of emotional regulation and social cognition. *Journal of Consulting & Clinical Psychology*, 68, 670–683.
- Sternberg, K. J., Baradaran, L. P., & Abbott, C. B. (2006). Type of violence, age, and gender differences in the effects of family violence on children's behavior problems: A mega-analysis. *Developmental Review*, 26, 89–112.
- Visser, J. J., Van der Ende, J., Koot, H. M., & Verhulst, F. C. (1999). Continuity of psychopathology in youth referred to mental health services. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1560–1568.