

Dating Violence & Sexual Harassment Across the Bully-Victim Continuum Among Middle and High School Students

Dorothy L. Espelage · Melissa K. Holt

Received: 12 September 2005 / Accepted: 31 October 2005
© Springer Science+Business Media, Inc.

Abstract Associations among bullying, peer victimization, sexual harassment, and dating violence were examined among 684 middle and high school students. Cluster analysis of self-report measures revealed four distinct bully-victim subtypes: uninvolved, victims, bully-victims, and bullies. African-American students comprised the bully cluster more than White students, but did not report higher rates of dating violence or peer sexual harassment. Bully-victims reported significantly more physical dating violence victimization than members of all other groups, and more emotional abuse in dating relationships than uninvolved students and victims. Bully-victims and victims also reported the highest amount of peer sexual harassment. Anxiety/depression levels were highest among victims and bully-victims. Sexual harassment and dating violence experiences moderated the association between bully-victim subtype and anxiety/depression. That is, victims with the highest levels of sexual harassment and victims and bully-victims with the highest levels of dating violence reported the highest levels of anxiety/depression. Findings highlight the high-risk nature of the bully-victim

group and the importance of assessing multiple forms of victimization affecting youth.

One area of particular interest to practicing psychologists, scholars, and educators who develop school-based prevention programs is youth aggression and peer victimization. Longitudinal investigations have shown that childhood aggression is one of the best-known social predictors of future maladjustment (Parker and Asher, 1987). Students who are involved in aggressive acts either as victims (targets) or perpetrators are at-risk for developing potentially severe social, emotional, behavioral, and academic problems. A plethora of research has been conducted on peer victimization in the form of physical, verbal, and relational forms of aggression (see Juvonen and Graham, 2001 for a review), however, much less attention has been given to sexual harassment and dating violence victimization among adolescents. This current study addresses a major gap in the literature by investigating multiple forms of peer victimization among adolescents and their associations with anxiety/depression.

D. L. Espelage (✉)

Associate Professor, Department of Educational Psychology,
University of Illinois at Urbana-Champaign, Champaign, IL.
Research interests include youth aggression, victimization,
childhood sexual abuse, and eating disorders. 220A Education,
Champaign, IL 61820,
e-mail: espelage@uiuc.edu.

M. K. Holt

Melissa K. Holt, Research Scientist, Family Research Laboratory,
University of New Hampshire, Durham, NH. Research interests
include multiple victimization experiences, childhood sexual
abuse, and contextual influences of victimization. Crimes Against
Children Research Center University of New Hampshire 10 West
Edge Drive, Suite 106, Durham, NH 03824,
e-mail: Melissa.Holt@unh.edu.

Prevalence of bullying victimization & bully-victim subtypes

Research has documented the fact that children experience bullying differently, both in terms of behavioral patterns and psychosocial adjustment (Espelage and Holt, 2001; Espelage and Swearer, 2003; Schwartz *et al.*, 2001; Swearer *et al.*, 2001). Differences among children involved in bullying have been conceptualized through categorizing youth into one of four groups: (1) bullies, the children who frequently bully others but are never victims; (2) bully-victims, the children who bully others and are victimized themselves; (3) victims, children who are victimized but do not resort to aggression against others; and (4) controls, also uninvolved or no status,

children who have no significant history as aggressors or victims (Espelage and Holt, 2001). Although the majority of youth tend to be classified as uninvolved, there remains a substantial subset of adolescents considered to be bullies, bully-victims, or victims.

Specifically, in a nationally representative study of 6th–10th graders ($N = 15,686$), using self-report data 13% of the sample was categorized as bullies, 11% as victims, and 6% as bully-victims (Nansel *et al.*, 2001). When peer-, teacher-, and self-reports were used to classify a large sample of 6th graders ($N = 1,985$); the authors found 7% bullies, 9% victims, and 6% were bully-victims (Juvonen *et al.*, 2003). Both studies highlight the widespread nature of bullying involvement, and point to the need for additional research to address what differentiates youth in these three groups.

The discrimination between *bully* and *bully-victim* groups has aroused particular interest because these subgroups appear to display different patterns of aggression. Bullies exhibit a more goal-oriented aggression, entailing more control and planning. In contrast, the bully-victims tend to display a more impulsive aggression, manifesting poor regulation of affect and behavior, which is perceived as particularly aversive by their peers (Schwartz *et al.*, 2001). In addition, bully-victims are at greatest risk for social maladjustment and therefore, as will be examined in the current study, might be at-risk for victimization in other domains. Research has also reported that bully-victims tend to report more depression and anxiety than their peers (Swearer *et al.*, 2001) and are the most rejected group along the bully-victim spectrum (Warden and McKinnon, 2003). Thus, bully-victims might be particularly at-risk for being victimized in other interpersonal contexts. While this group is the subject of very little research, a number of theoretical arguments can be drawn from the general victimization literature that might explain the potential overlap across victimization experiences. These will be discussed after a brief discussion of the prevalence of sexual harassment and dating violence.

Prevalence of sexual harassment victimization

Two surveys conducted by American Association of University Women (American Association of University Women Educational Foundation, 1993, 2001), asked nationally representative samples of public school students about their experiences with sexual harassment at school. Sexual harassment was defined as “unwanted and unwelcome sexual behavior that interferes with your life. Sexual harassment is not behaviors that you like or want (for example wanted kissing, touching, or flirting).” (p. 2, American Association of University Women Educational Foundation, 2001). Results from both the 1993 AAUW and 2001 AAUW surveys revealed that sexual harassment was widespread among youth.

Specifically, eight in ten students (81%) had experienced some form of sexual harassment at some time during their school lives with six in 10 occasionally and 1/4 often experiencing sexual harassment. Seventy-percent experienced nonphysical sexual harassment at some point in their school lives, and more than 50% experienced it often or occasionally. Physical sexual harassment was reported by 58% of students as happening at some point in their school lives, and 32% experienced this form of sexual harassment often or occasionally. Forty-eight percent of students were upset when they experienced both forms of sexual harassment. Although these studies provided awareness about the problem of sexual harassment in our schools, much more work is needed in order to explicate how sexual harassment relates to other forms of victimization. For instance, are victims of sexual harassment also victims of bullying? This is an area not yet addressed in the literature that we will focus on in this study.

Prevalence of dating violence victimization

Dating violence is another form of interpersonal violence with high rates among youth (see Ely *et al.*, 2002 for a review). Studies suggest that between 10% (Roscoe and Callahan, 1985) and 55% (O’Keefe, 1998) of adolescents have been the targets of dating violence. Estimates tend to be the highest when emotional abuse is considered to constitute dating violence (Bookwala *et al.*, 1992). Research has indicated that less severe forms of physical violence (e.g., slapping) are more common than extreme forms (e.g., choking) (Roscoe and Callahan, 1985). To capture a range of dating violence victimization, both emotional and physical forms were assessed in this study.

Regardless of the type of dating violence experienced, it is often associated with negative emotional outcomes. Carlson’s (Carlson, 1987) review of the literature suggests that effects of victimization include feelings of confusion, anger, sadness, and diminished self-esteem. According to a study of 123 high school students conducted by Burcky and colleagues (Burcky *et al.*, 1988), 56% of victims indicated that although the incident(s) upset them there were no long-term effects, whereas 8% reported more long-standing emotional disturbance. As such, dating violence appears to have serious consequences. However, more research needs to be conducted to determine why some victims are more adversely affected than others. One possibility is that targets of dating violence who are also victimized in other domains experience the most deleterious outcomes; this hypothesis will be evaluated in this study. As is detailed below, theoretical and empirical evidence exists suggesting that victimization often co-occurs.

Multiple forms of victimization

Much of the extant literature on multiple victimization experiences among adolescents has focused on various forms of child maltreatment (Hibbard *et al.*, 1990) or has investigated whether victims of child maltreatment are also targets of peer victimization (Shields and Cicchetti, 2001). However, few studies have evaluated the co-occurrence of multiple types of peer victimization. The limited existing research in this area suggests that bullying victimization is associated with sexual harassment and dating violence victimization (Holt and Espelage, 2005), and that bullying perpetration is associated with being aggressive with dating partners (Connolly *et al.*, 2000). It is particularly important to assess multiple peer victimization among adolescents given evidence in the broader victimization literature that students who have experienced multiple forms of maltreatment report more psychological distress than their peers who have experienced singular victimization forms or have not incurred any victimization (Harned, 2000; Hibbard *et al.*, 1990; Holt and Espelage, 2003; Naar-King *et al.*, 2002).

Several theories have emerged in the literature to explain the potential association of bullying victimization and other forms of victimization among youth. The developmental victimology framework, for instance, suggests that many victimization types have similar risk factors (Finkelhor and Asdigian, 1996; Finkelhor and Dziuba-Leatherman, 1994; Finkelhor and Kendall-Tackett, 1997; Lagerspetz, 1982). Further, the framework indicates that experiencing victimization might increase vulnerability for future victimization. This fits with findings put forth by other scholars. For example, antecedents to being victimized by a peer in young childhood include nonassertive behavioral play styles (Schwartz *et al.*, 1993), and that once this victimization occurs then children develop certain behavioral and personality features that appear to increase the likelihood of future victimization. Victimization leads to peer rejection and social withdrawal and over time contribute to more victimization (Hodges and Perry, 1999).

Other explanations for why youth might experience multiple forms of victimization have also drawn from attribution theory, finding that peer victims often engage in self-blaming attributions (Graham and Juvonen, 1998). Eventually some victims develop an internalized self-schema through which other victimization experiences are attributed to flaws within him/her, self-blaming attributions are made, and psychological distress ensues (Graham and Juvonen, 1998). Similarly, the traumagenic dynamics model (Finkelhor and Browne, 1985) addresses coping mechanisms, and posits that the way in which sexually abused children experience and cope with their abuse helps to explain subsequent victimizations. It is also likely that the absence or presence of prior victimization experiences serve as stress buffering and stress exacerbating

effects. As such, it might be that having experienced multiple forms of victimization leads to increased stress levels and greater distress. Thus, in this study, history of sexual harassment and dating violence experiences were evaluated as moderators of the association between bully-victim subtypes and anxiety/depression (Rook, 1992, 1998). When bully victimization occurs, it is possible that a student's level of psychological anxiety/depression is buffered if they do not have a history of sexual harassment and dating violence, but exacerbated when they have a history of victimization in these domains.

Sex & race influences on victimization

This study also explored sex and race differences on victimization experiences and the impact of these demographic variables on the relations among bully-victim subtype, other forms of victimization, and anxiety/depression.

Bullying & victimization

In general, boys are more likely to engage in physical bullying than girls (Espelage *et al.*, 2000; McDermott, 1996); however, sex differences in verbal bullying are less consistent (Knight *et al.*, 2002). A few studies examined race/ethnicity differences across the bully-victim continuum, but more research is needed. Nansel *et al.* (2001) found that Hispanic youth reported bullying others only marginally more than White or Black students, whereas Black youth reported being bullied significantly more than Whites or Hispanics. In contrast, Graham and Juvonen (2002) found that African-Americans were more likely to be nominated as aggressive than Latino and multiethnic urban middle school students. Similarly, in a study using a multi-informant assessment approach (i.e., self, peer, and teacher), Black youth were most likely to be classified as bullies and bully-victims, while Whites were most likely to be classified as borderline (Juvonen *et al.*, 2003).

The dearth of literature on race/ethnicity and multiple forms of victimization led to the current study's focus on race/ethnicity differences.

Sexual harassment

In both AAUW surveys (1993, 2001), girls reported more sexual harassment experiences than boys. However, a significant increase from 1993 to 2001 in the number of boys experiencing sexual harassment occasionally (56% vs. 49%) or often (25% vs. 18%) was found. Girls at both assessments reported that others made sexual comments, jokes, gestures or looks toward them the most often (31%, 34%), which was following by being touched, grabbed, or pinched in a

sexual way (17%, 20%). These were also the most common for boys at both assessments, however, more boys reported having sexual comments, jokes, gestures or looks directed at them (53%, 48%) and being touched, grabbed, or pinched in a sexual way across the two time points (40%, 29%). In 2001, girls who experienced any kind of sexual harassment most often reported one-on-one, male to female harassment, while boys were most likely to be sexually harassed by one other girl or an all-female group. In terms of racial/ethnic differences, White boys were more likely than their African-American peers to have had someone pull off or down their clothing (21% vs. 10%). African-American girls were more likely than Hispanic and White girls to be touched, grabbed, or pinched in a sexual way (67%, 51%, 51%), to have had someone pull at their clothing in a sexual way (50%, 30%, 32%) and to be forced to kiss someone (28%, 18%, 15%). The current study will add to our understanding of sex and racial/ethnic differences in prevalence rates and correlates of sexual harassment.

Dating violence

Conflicting information exists with respect to differences in dating violence rates by sex and race. For example, in a study of 719 ethnically diverse high school students the rate of physical dating violence victimization did not differ for males and females (Malik *et al.*, 1997). Conversely, of the 207 high school students surveyed by Roscoe and Callahan (1985) significantly more females (65%) than males (35%) were the targets of violence. With respect to psychological abuse, a study of 37 adolescents in an alternative high school program revealed that males and females were victimized at approximately the same rate (James *et al.*, 2001). This contrasted Molidor's (Molidor, 1995) finding that males reported higher amounts of psychological abuse than females and Foshee's 1996 study where females experienced more psychological abuse than males did. Less research has explored dating violence victimization rates across ethnic/racial groups. In one study of 1,976 eighth and ninth grade students, results showed that White adolescents reported less non-sexual victimization than African-American adolescents (Foshee *et al.*, 1996). Another study of high school students revealed that African-American females were less frequently targets of dating violence than their Caucasian female peers (O'Keefe and Treister, 1998). This study will inform existing contradictory information on sex and racial/ethnic differences in dating violence victimization.

Summary

Again, the majority of the studies that have investigated sex and race in relation to these forms of victimization have been largely descriptive. Virtually none have considered these de-

mographic variables in inferential models where multiple predictors are considered. It could be that a descriptive approach overstates the influence of these variables. This study therefore is the first study to examine sex and race in more comprehensive models to understand how race and/or sex impact the association between experiences with sexual harassment and dating violence across bully-victim subtypes.

Hypotheses

This study examined whether bully-victim subtypes among middle and high school students differed in their experiences of sexual harassment and dating violence. Given the well-documented literature that males score higher on bully measures, it was hypothesized that more males than females would be classified as bullies and bully-victims. Based on the limited research on race/ethnicity differences, it was hypothesized that African-American students would have greater representation in the bully and bully-victim subtypes and report more sexual harassment and dating violence victimization than White students. As peer victimization (especially name-calling) can take the form of sexual harassment, it was further hypothesized that bully-victims and victims would report more sexual harassment experiences as a target than uninvolved individuals. However, victims were not hypothesized to have more dating violence victimization experiences because it is expected that they are less likely to date than the other students. Explanatory models of multiple victimization supported our final hypothesis that sexual harassment victimization would moderate the association between bully-victim subtype and anxiety/depression. That is, bullies, victims, and bully-victims with greater sexual harassment experiences would report more anxiety/depression than group members with less sexual harassment experiences. A similar hypothesis was set forth for dating violence.

Method

Participants

Participants were 684 youth, including 369 (54%) middle school and 315 (46%) high school students. The middle school was located in a suburb of a large Midwestern city and the high school was located in a small Midwestern city. All students from these schools were invited to participate, and 100% of students whose parents agreed to their participation (see below) elected to complete the survey. There were 320 (47%) males and 364 (53%) females. With respect to race, respondents identified themselves as Caucasian, Non-Hispanic ($N = 415$; 60.7%) and African-American ($N = 269$; 34.3%). Of these students, 198 were seventh graders (28.9%), 171 were eighth graders (25.0%),

112 were ninth graders (16.4%), 21 were tenth graders (3.1%), 101 were eleventh graders (14.8%), and 81 were twelfth graders (11.8%). Few tenth grade students participated in the study because school policy was such that tenth graders do not typically enroll in physical education classes, the setting in which surveys were administered. The mean age for the sample was 14.50 ($SD = 1.97$). With respect to socio-economic status, although we did not collect this information directly from students, school-district records indicate that approximately 42% of middle school students and 43% of high school students were classified as low-income.

Procedure

Parental consent

Passive parental consent was used in this investigation to maximize participation. This form of consent was approved by the university institutional review board, by the school district's research coordinator, and by the school administrators. Parents of all students enrolled in physical education classes were sent letters informing them about the purpose of the study. Furthermore, parents were asked to sign the form and return it only if they were unwilling to have their child participate in the investigation; no forms were returned. In addition to passive parental consent, students were asked to consent to participate in the study through an informed consent form included in the questionnaire packet. All students who were present on the day of survey administration elected to participate.

Survey administration

Six trained research assistants, the primary researcher, and a faculty member collected data. At least two of these individuals administered surveys to each physical education class, which ranged in size from 25 to 50. 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 and asked to answer all questions honestly. Researchers were available to answer questions that emerged once students began responding to survey items. When students had completed the surveys they were given the opportunity to have their data removed from analyses if they had not carefully considered each question. Each participant was also 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 group in which one student won a \$10 gift certificate to a local mall. On average it took students approximately 45 min to complete the survey.

Measures

Each participant first completed a demographic questionnaire that included questions about his/her sex, age, grade, and race. For race, participants were given six options: African-American (not Hispanic), Asian, White (not Hispanic), Hispanic, Native American, and Other (with a space to write in the most appropriate racial descriptor such as bi-racial). Only White and African-American students were included in the analyses; students who identified as Asian, Hispanic, Native American, and Other ($n = 100$) were excluded from the analyses.

Students also completed items from the scales listed below. All scales were selected for their documented effective use in middle and high school populations and their strong psychometric properties. Because surveys were given to students' in groups, and in the case of middle school students were read aloud, scale order was not counterbalanced.

Self-reported bullying behavior

The nine-item University of Illinois Bully Scale (UIBS; (Espelage and 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; Espelage *et al.*, 2003). Students are asked to indicate how often in the past 30 days they have engaged in each behavior (e.g., "I teased other students" and "I upset other students for the fun of it"). Response options include "Never," "1 or 2 times," "3 or 4 times," "5 or 6 times," and "7 or more times." These response options allow for the assessment of the persistence of the bullying. Higher scores indicate more self-reported bullying behaviors. Espelage and Holt (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. This scale was also found to converge with peer nomination data (Espelage *et al.*, 2003). This scale was not significantly correlated with the Illinois Victimization Scale ($r = .12$), providing evidence of discriminant validity (Espelage *et al.*, 2003). A Cronbach alpha coefficient of .90 was found for the current sample.

Self-reported victimization

Victimization from peers was assessed using the University of Illinois Victimization Scale (UIVS; Espelage and Holt, 2001). Students are asked how often the following things have happened to them in the past 30 days (i.e., "Other students called me names", "Other students made fun of me,"

“Other students picked on me,” and “I got hit and pushed by other students”). 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. Further, the scale was found to converge with peer nomination data (Espelage *et al.*, 2003). As noted above, this scale was not significantly correlated with the Illinois Bullying scale ($r = .12$), providing evidence of discriminant validity (Espelage *et al.*, 2003). A Cronbach alpha coefficient of .86 was found for current study.

Peer sexual harassment

The AAUW Sexual Harassment Survey (American Association of University Women Educational Foundation, 1993) is a 14-item inventory designed to measure the frequency with which students are victimized by sexually harassing behaviors. Participants are asked to indicate how often other students engaged in particular behaviors aimed at the participant (e.g., made sexual comments, jokes, gestures, or looks) within the previous year. Items reflect verbal and physical harassment. Response options are “Not sure,” “Never,” “Rarely,” “Occasionally,” and “Often.” Coefficient alpha for this sample was .90. No additional validity or reliability information exists for this scale.

Physical victimization in dating relationships

The Victimization in Dating Relationships scale (Foshee, 1996) is an 18-item inventory designed to measure physically violent victimization within dating relationships. Participants are asked to indicate how often individuals they went on dates with engaged in particular behaviors (e.g., scratched me, kicked me) and are instructed to only count behaviors that their partners inflicted on them first. Violence inflicted due to self-defense therefore is not measured by the Victimization in Dating Relationships scale. There are four response options: “Never,” “1 to 3 times,” “4 to 9 times,” and “10 or more times.” For the current sample, the coefficient alpha was .94.

Emotional abuse in dating relationships

The Abusive Behavior Inventory (ABI; Shepard and Campbell, 1992) measures physical, emotional/psychological, and sexual abuse in dating relationships. Only the emotional abuse scale was used in this study. Nine items tapping a range of psychologically abusive behaviors (e.g., “How often has a dating partner said something to scare you?”) were administered. Response options ranged from “Never” (0) through “Often” (4), and participants were also given the opportunity to select ‘Not sure’ as a response. In the development sample, ABI items successfully differentiated individ-

uals in abusive and non-abusive relationships, providing support for the ABI’s criterion validity (Shepard and Campbell, 1992). The resulting alpha coefficient for the current study was .89.

Anxiety/depression

The anxiety/depression scale from the Youth Self-Report (YRS; Achenbach, 1991) was used to assess psychological functioning. This scale consists of 16 self-report items and students are asked to indicate the degree to which particular statements apply to them (e.g., “I feel lonely,” “I am nervous or tense”). Response options are “Not true,” “Somewhat or sometimes true,” and “Very true or Often true.” Numerous studies have supported this instrument’s reliability and validity (Achenbach, 1991; Bennett and Bates, 1995; Visser *et al.*, 1999). A coefficient alpha coefficient was .90 for this study.

Results

Cluster analysis

We conducted a k -means cluster analysis using SPSS and SYSTAT to create bully-victim subtypes. Items from the University of Illinois Bully and Victimization Scales (Espelage and Holt, 2001) were input for these analyses. Based on literature supporting that typically four groups of youth exist with respect to bullying and victimization (bullies, victims, bully/victims, and neither bullies nor victims), we hypothesized that these four clusters would emerge. We first utilized Ward’s algorithm (Ward, 1963) to derive cluster solutions. This method minimizes the variance within clusters at each stage of grouping (Borgen and Barnett, 1987). Comparative studies have found that Ward’s method is one of the more effective cluster-analytic approaches (Borgen and Barnett, 1987). However, Ward’s method has also been criticized because of its tendencies to produce results that are heavily influenced by profile elevation (Aldenderfer and Blashfield, 1984), and yield clusters with relatively equivalent numbers of observations (Hair and Black, 2000). Consequently, the complete linkage method was also utilized. This method combines cases with the smallest maximum distance at each stage of the agglomeration (Borgen and Barnett, 1987; Hair and Black, 2000). Results of cluster analyses utilizing both of these methods suggested that a four cluster solution was appropriate for the data.

Following calculation of the cluster solution via these hierarchical methods, we re-analyzed the data utilizing a nonhierarchical clustering method, k -means iterative partitioning. This method requires that the number of clusters be specified in advance. Milligan (Milligan, 1980) has suggested that k -means clustering is an appropriate

follow-up analysis to hierarchical clustering techniques. Similarly, Kinder and his colleagues (Kinder *et al.*, 1991) recommend a two-stage approach in which both hierarchical and nonhierarchical methods are used.

Cluster descriptions

Cluster one, defined as the “Uninvolved” cluster, included the majority of students ($N = 400$; 58.5%). These students had both the lowest mean bullying ($M = 16.85$, $SD = 2.64$) and the lowest mean peer victimization ($M = 5.36$, $SD = 1.64$) scores. Cluster two, characterized by youth who scored nearly one standard deviation above the bullying mean ($M = 29.14$, $SD = 5.10$) and almost at the mean for victimization ($M = 6.48$, $SD = 2.29$), was labeled the “Bullies” cluster ($N = 102$; 15%). The fewest students ($N = 30$; 4.4%) were classified as members of Cluster three, identified as the “Bully-victims” group because on average their bullying scores ($M = 50.40$, $SD = 8.52$) were three standard deviations above the sample mean, and their victimization scores ($M = 8.30$, $SD = 4.08$) were approximately one-half a standard deviation above the sample mean. Finally, cluster four was designated the “Victims” group ($N = 92$; 14%); on average, members of this group had scores near the mean for bullying ($M = 23.38$, $SD = 6.11$) and almost two standard deviations above the mean for victimization ($M = 14.33$, $SD = 3.19$). Differences among clusters on bullying ($F(3, 620) = 756.17$, $p < .001$) and peer victimization ($F(3, 620) = 418.23$, $p < .001$) scores were statistically significant (See Table 1). Further, post-hoc tests revealed statistically significant differences between all cluster pairings. In particular, bully-victims reported more bullying behaviors than members of any other cluster, whereas victims revealed more peer victimization than youth in all other clusters.

In these models there also were significant interactions. For bullying behaviors, there was a significant interaction between cluster and race ($F(3, 608) = 3.06$, $p < .05$), however this effect was small ($\eta^2 = .02$). With respect to peer victimization, there was no statistically significant interaction between cluster by sex and cluster by race ($F(3, 719) = 3.66$, $p < .01$).

Cluster demographic characteristics. However, testing cluster differences on demographic characteristics using χ^2 analysis revealed statistically significant differences for sex ($\chi^2(3, N = 624) = 11.73$, $p < .01$), race ($\chi^2(3, N = 624) = 55.43$, $p < .01$), and school ($\chi^2(3, N = 719) = 35.6$, $p < .01$). With respect to sex, a greater percentage of females (69.7%) were in the uninvolved cluster than males (57.3%), whereas a greater percentage of males were in the three remaining groups (18.5% male vs. 14.6% female bullies; 6.8% male vs. 3.2% female bully-victims; 17.4% male vs. 12.5% female victims). In terms of race, our hypothesis was supported; more White than African-

American students were classified in the uninvolved group (72.7% White vs. 49.6% African-American), and a greater percentage of African-American youth comprised the bullies (28.4% African-American vs. 9.2% White) and bully-victim (8.6% African-American vs. 2.6% White) clusters. Conversely, although not a large difference, more White (15.6%) than African-American (13.4%) students were in the Victims cluster. Finally, a higher percentage of high school (74.8%) than middle school (55.5%) students were included in the uninvolved cluster. Middle school students were more representative than high school students in the bullies (22.3% vs. 9.0%), bully-victims (5.8% vs. 3.6%), and victims (16.5% vs. 12.6%) clusters.

Given that clusters differed by demographic characteristics, in subsequent analyses we included sex, race, and school in interaction terms.

Dating violence and sexual harassment victimization by cluster membership

We calculated three 4 (cluster) X 2 (sex) X 2 (race) ANOVAs to determine if mean scores on physical dating violence victimization, emotional abuse in dating relationships, and sexual harassment victimization differed across clusters.

First, the main effect for race was evaluated in order to test the hypothesis that African-American students would report more sexual harassment and dating violence victimization than White students. In contrast to the hypothesis, main effects for race were not significant for sexual harassment victimization ($F(1, 592) = 1.99$, $p > .05$; $\eta^2 = .003$), physical dating violence victimization ($F(1, 592) = .19$, $p > .05$; $\eta^2 = .000$), or emotional dating violence ($F(1, 592) = .72$, $p > .05$; $\eta^2 = .001$).

As hypothesized, statistically significant results emerged for physical dating violence victimization ($F(3, 592) = 18.38$, $p < .001$; $\eta^2 = .09$), suggesting that cluster membership was associated with dating violence experiences. Specifically, results indicated that individuals in the bully-victims cluster reported the most physical dating violence victimization, and that the mean of this group was significantly higher than the mean for any other cluster (See Table 2). Youth classified in the uninvolved cluster had physical dating violence victimization scores that were, on average, significantly lower than students in the bullies or bully-victims groups. Interaction terms for demographic characteristics (race, sex, school) by cluster were not statistically significant.

Similar findings resulted when considering emotional abuse in dating relationships by cluster membership, and again, cluster membership was related to experiencing emotional abuse ($F(3, 592) = 14.01$, $p < .001$; $\eta^2 = .07$). As shown in Table 2, students in the bully-victims cluster reported the most emotional abuse victimization in dating

Table 1 Bullying and peer victimization scores by cluster membership

	Uninvolved (N = 400)		Bullies (N = 102)		Victims (N = 92)		Bully-victims (N = 30)		ANOVA	η^2
	M	SD	M	SD	M	SD	M	SD		
Bullying	16.85 ^a	2.64	29.14 ^a	5.10	23.38 ^a	6.11	50.40 ^a	8.52	<i>F</i> (3, 620)756.17*	0.79
Scores by gender									<i>F</i> (3, 608)1.57	0.008
Males	17.28	2.89	29.35	5.50	24.33	6.39	50.32	8.37		
Females	16.57	2.44	28.94	4.69	22.30	5.67	50.55	9.20		
Scores by race									<i>F</i> (3, 608)*3.06	0.02
White	16.67	2.66	29.72	4.70	22.57	6.28	51.10	5.99		
African-American	17.30	2.55	28.83	5.31	24.96	5.55	50.05	9.66		
Peer victimization	5.36 ^b	1.64	6.48 ^b	2.29	14.33 ^b	3.19	8.30 ^b	4.08	<i>F</i> (3, 620)418.23*	0.67
Scores by gender									<i>F</i> (3, 608)2.45	0.01
Males	5.26	1.57	6.85	2.55	14.71	3.30	8.79	4.39		
Females	5.43	1.68	6.10	1.95	13.88	3.04	7.45	3.50		
Scores by race									<i>F</i> (3, 608)1.49	0.01
White	5.00	1.68	7.19	2.39	14.70	3.29	8.80	5.05		
African-American	5.25	1.54	6.09	2.16	13.58	2.90	8.05	3.62		

^aBullying mean is significantly different from all other groups, *p* < .01.

^bVictimization mean is significantly different from all other groups, *p* < .01.

p* < .01, *p* < .05

relationships, and the mean for this group was significantly higher than means for the uninvolved and victims clusters. As hypothesized, members of the victims group reported the least emotional abuse in dating relationships. Interaction terms between sex, race, school, and cluster were not statistically significant.

Finally, we evaluated the degree to which students from each cluster reported different amounts of peer sexual harassment victimization, and the overall model was statistically significant (*F* (3, 592) = 13.20, *p* < .001; η^2 = .06). As with the other forms of victimization described above, bully-victims tended to experience the most peer sexual harassment, at a significantly higher level than members of any other cluster (Table 2). Additionally, in support of our hy-

pothesis, youths in the victims cluster reported significantly more peer sexual harassment victimization than uninvolved students but did not differ significantly from bullies. Interaction terms between sex, race, school, and cluster were not statistically significant.

Anxiety/depression profiles by cluster membership

We next compared clusters on anxiety/depression using a 4 (cluster) X 2 (sex) X 2 (race) ANOVA. Results were consistent with previous research and indicated that clusters differed significantly on anxiety/depression scores (*F* (3, 592) = 22.15, *p* < .001; η^2 = .10) (Table 2). Uninvolved youth reported the least anxiety/depression, with significant

Table 2 Dating violence, sexual harassment victimization, and anxiety/depression by cluster membership

	Uninvolved (N = 400)		Bullies (N = 102)		Victims (N = 92)		Bully-victims (N = 30)		ANOVA	
	M	SD	M	SD	M	SD	M	SD	<i>F</i> (3, 592)	η^2
Physical dating violence	1.30 ^{a,c}	3.66	3.50 ^{a,e}	5.59	2.42 ^f	4.66	7.93 ^{c,e,f}	12.18	18.38*	0.09
Emotional abuse	2.97 ^{a,c}	4.61	4.84 ^a	4.85	4.73 ^f	6.17	7.13 ^{c,f}	6.85	14.01*	0.07
Peer sexual harassment	3.65 ^{a,b,c}	5.42	7.38 ^{a,e}	7.47	6.22 ^{b,f}	6.79	11.27 ^{c,e,f}	12.18	13.20*	0.06
Anxiety/depression	4.81 ^{a,b,c}	5.42	6.41 ^{a,d,e}	6.02	10.74 ^{b,d}	7.65	9.34 ^{c,e}	7.96	22.15*	0.10

^aMeans for uninvolved and bullies are significantly different, *p* < .01.

^bMeans for uninvolved and victims are significantly different, *p* < .01.

^cMeans for uninvolved and bully-victims are significantly different, *p* < .01.

^dMeans for bullies and victims are significantly different, *p* < .01.

^eMeans for bullies and bully-victims are significantly different, *p* < .01.

^fMeans for victims and bully-victims are significantly different, *p* < .01.

**p* < .001.

lower means on average than members of any other group. Conversely, victims and bully-victims revealed the most anxiety/depression when compared to uninvolved and bullies. No interaction terms were statistically significant.

Sexual harassment as a moderator between bully-victim subtype & anxiety/depression

A regression analysis was conducted to evaluate the hypothesis that sexual harassment experiences moderate the relation between bully-victim subtypes and the dependent variable of anxiety/depression. For these analyses, total scores on the AAUW sexual harassment scale were converted to a categorical variable with three levels (low, moderate, high) using a tertial split. Bully-victim subtype, sexual harassment categorical variable, sex, race, and school were independent variables in a 4 (cluster) X 3 (sexual harassment level) X 2 (sex) X 2 (race) ANOVA with anxiety/depression as the dependent variable. ANOVA was used over regression in order to prevent the use of dummy variables for the cluster variable. Significant interactions were plotted following Aiken and West (1991) guidelines using ModGraph (Jose, 2003). A significant bully-victim subtype by sexual harassment interaction was found for anxiety/depression and means for each group are plotted in Fig. 1. As hypothesized, bully-victims and victims with the highest levels of sexual harassment reported the highest levels of anxiety/depression. No interactions with sex, race, or school were significant.

Dating violence as a moderator between bully-victim subtype & anxiety/depression

A final set of analyses evaluated the hypothesis that dating violence would moderate between bully-victim subtype and the dependent variable of anxiety/depression. For these analyses, emotional and physical forms of dating violence were collapsed in order to limit the number of tests conducted. Total scores on this composite were converted to a categorical variable with three levels (low, moderate, high) using a tertial split. Bully-victim subtype, dating violence categorical variable, sex, race, and school were independent variables in a 4 (cluster) X 3 (dating violence level) X 2 (sex) X 2 (race) ANOVA with anxiety/depression as the dependent variable. A significant bully-victim subtype by dating violence composite interaction was found for anxiety/depression and means for each group are plotted in Fig. 2. The hypothesis that victims and bully-victims with more dating violence experiences would report more anxiety/depression was partially supported. Bully-victims with the lowest levels of dating violence had the lowest self-reported anxiety/depression scores. However, victims and bully-victims with moderate and high levels of dating vio-

lence had some of the highest anxiety/depression scores in the sample.

Discussion

Results from this investigation support previous findings that adolescents can be grouped into four bully-victim subtypes and that students involved in bullying in any capacity experience more anxiety/depression than uninvolved students. Moreover, this research extends previous work on bullying through identifying that bully-victims are at greatest risk for dating violence and peer sexual harassment victimization. This study also documented that sexual harassment and dating violence serve as moderators between bully-victim subtypes and anxiety/depression. A detailed discussion of all findings follows.

Bully-victim subtypes

Consistent with previous research (Juvonen *et al.*, 2003; Nansel *et al.*, 2001), four subtypes of bully-victims emerged: bullies, victims, bully-victims, and uninvolved students. Of the adolescents surveyed, the majority (58.5%) were classified as uninvolved, 15% were identified as bullies, 14% were considered victims, and 4.4% were categorized as bully-victims. These rates are in line with other investigations of middle and high school youth (Juvonen *et al.*, 2003; Nansel *et al.*, 2001). A greater percentage of males comprised the bully, bully-victim, and victim groups, whereas more females than males were considered uninvolved. This follows existing research suggesting that boys engage in more bullying than girls (Espelage *et al.*, 2000; McDermott, 1996). As hypothesized, more African-American than White students were in the bully and bully-victim groups, which is consistent with Juvonen, Graham, and Schuster (Juvonen *et al.*, 2003). The dearth of previous research along these lines prevents us from understanding why these differences emerged. It could simply be that the assessment of bullying in this study might be tapping normative types of peer group interactions and expressiveness among African-American youth (Kochman, 1990).

Dating violence and sexual harassment victimization by bully-victim subtype

This study is one of the first to explore the extent to which peer victimization in one domain—in this case, the bullying continuum—is related to peer victimization in other domains—in this case, dating violence and peer sexual harassment. Consistent with hypotheses, bully-victims reported more physical dating violence and peer sexual harassment than members of any other group, and more emotional abuse

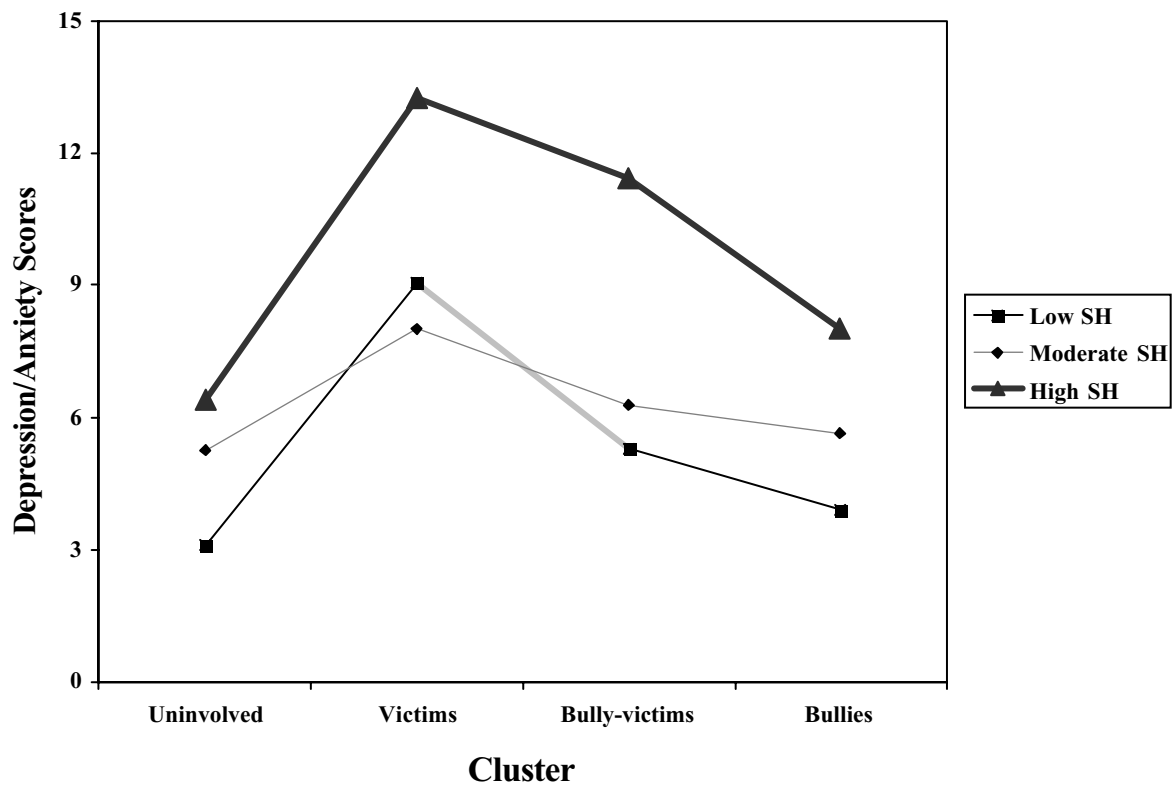


Fig. 1 Sexual harassment moderates relation between bully-victim subtype & anxiety/depression

in dating relationships than uninvolved students and victims. Given that bully-victims have already been identified as a particularly high-risk group (Kumpulainen *et al.*, 1998; Nansel *et al.*, 2003; Nansel *et al.*, 2001), this adds additional evidence that bully-victims are a critical group to target in in-

tervention efforts. In particular, it is important to discern why bully-victims are at heightened risk for victimization in other peer domains. It might be that peer victimization is only one component of bully-victims' victimization experiences, and that they have also experienced other intra- and extra-familial

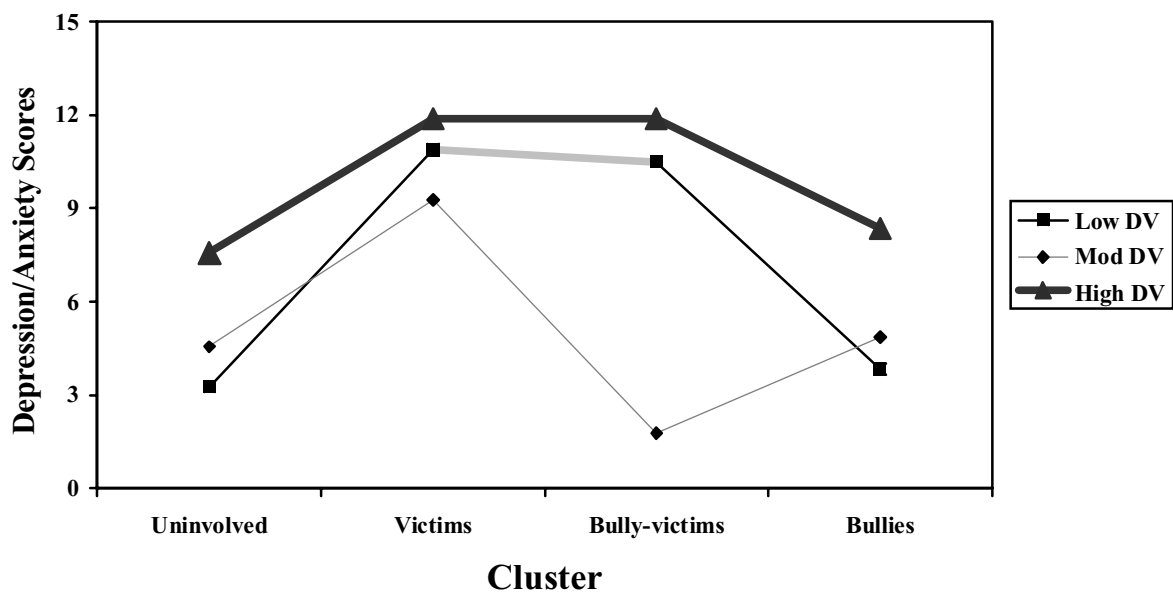


Fig. 2 Dating violence moderates relation between bully-victim subtype & anxiety/depression

victimization. If this is the case, their re-victimization might be examined in light of models exploring common risk factors of victimization, such as the developmental victimology framework (Finkelhor and Dzuiba-Leatherman, 1994; Finkelhor and Kendall-Tackett, 1997) or theories focused on how effects of an initial victimization lead to subsequent peer victimization and perpetration.

Victims also reported more peer sexual harassment than uninvolved students, which was consistent with expectations, but contrary to hypotheses, they also reported more dating violence victimization than uninvolved youth. This suggests that victims might be dating at similar rates as other youth, and that their pattern of school victimization extends beyond the school environment to other interpersonal relationships. This has interesting implications for considering how victims are characterized. Presumably when targeted at school by bullies, victims often are not friends with their perpetrator. This fits with the profile of a victim who tends to have few friends (Hodges *et al.*, 1997). However, in the context of dating relationships one would assume there is at least a friendship between the two parties, and as such the dynamic is different. Is it that targets of bullies seek out dating partners who are likely to victimize them? Further research is needed to clarify the relation between being victimized at school and on dates.

Anxiety/depression by bully-victim subtype

As hypothesized, bully-victim status was related to psychological functioning. Specifically, uninvolved students reported the least anxiety/depression, adding additional support to the wide body of literature concluding that uninvolved students tend to be better adjusted than bullies, victims, or bully-victims (Schwartz, 2000; Swearer *et al.*, 2001). Furthermore, victims and bully-victims had the highest anxiety/depression levels. However, unlike findings from some previous research (Schwartz, 2000; Swearer *et al.*, 2001), although bullies reported less anxiety/depression than the victim clusters. It might be important in future investigations to assess anxiety and depression separately in order to compare findings to Swearer and colleagues, where bullies had the highest levels of depression (Swearer *et al.*, 2001).

Moderating effects of sexual harassment and dating violence

Results supported our hypothesis that sexual harassment moderates the association between bully-victim status and anxiety/depression, and partially supported our hypothesis that dating violence moderates this relation. Specifically, bully-victims and victims who had experienced high levels of sexual harassment victimization reported more anxiety/depression than their counterparts who had experienced

low or moderate levels of sexual harassment victimization. This finding is consistent with extant research on multiple victimization suggesting that adolescents who have experienced victimization in multiple domains experience more psychological distress than youth who have experienced singular or no victimization (Hibbard *et al.*, 1990; Holt and Espelage, 2003; Hughes *et al.*, 1989; Naar-King *et al.*, 2002)

One potential explanation for the exacerbating effect of sexual harassment and dating violence on the association between bully-victim subtype and anxiety/depression could be derived from attribution theory. Attribution style refers to how people tend to explain the causes of their own and other's behavior (Aronson *et al.*, 2002). Attributions tend to vary along three dimensions: locus, stability, and controllability. Locus is whether the cause is internal or external to the person, stability refers to whether the cause is stable or unstable over time, and controllability refers to whether or not a cause can be controlled by the person (Weiner, 1986). Graham and Juvonen (Graham and Juvonen, 2001) provided middle school students with two scenarios of hypothetical incidents of victimization and found students who were victims of peer victimization (bullying) endorsed significantly more characterological self-blaming attributions compared to nonvictims in response to imagined incidents of harassment. These authors did not, however, consider how these attributions might have been shaped by other victimization experiences. Studies in the future on the effect of multiple victimization experiences should consider the role of attributions.

Limitations & implications

Despite its efforts to examine multiple victimization experiences, this study is cross-sectional in nature and therefore inferences about causality cannot be made. As such, it was not possible to discern whether victimized students experienced anxiety/depression as a consequence of their victimization or whether these outcomes are reflect baseline functioning prior to victimization. Longitudinal investigations are needed to address this issue. In addition, only one outcome was assessed whereas victimization likely affects myriad factors. For instance, salient outcomes of dating violence that have at times been shown to differ for boys and girls, such as injury rates (e.g., Foshee, 1996), were not considered. Finally, adolescent dating violence is often reciprocal in nature, and future studies should attempt to assess the role of self-defense or abuse within the dyadic relationship.

This study adds to a growing literature on children and adolescents that have experienced multiple forms of victimization. In the victimization literature, these children are referred to poly-victims and have been neglected in child victimization trauma theories (Finkelhor, Ormrod, and Turner, under review). This study examined the overlap among bullying victimization, sexual harassment, and dating

violence and provides initial support for the co-occurrence of different forms of victimization. These findings indicate that clinicians that obtain referrals for students who are involved in bully-victim episodes should conduct a thorough assessment of victimization experiences. Clinicians should also target personality and behavioral factors that might place an individual child at-risk for subsequent victimization.

References

- Achenbach TM (1991) Manual for the Youth Self-Report and 1991 Profile
- Aldenderfer MS, Blashfield RK (1984) Cluster analysis. Newbury park. Sage Publications, California
- American Association of University Women Educational Foundation (1993) Hostile hallways: The AAUW survey on sexual harassment in America's schools (No. 923012). Harris/Scholastic Research, Washington, DC
- American Association of University Women Educational Foundation (2001) Hostile hallways: Sexual harassment and bullying in schools. Harris/Scholastic Research, Washington, DC
- Aronson E, Wilson TD, Akert RM (2002) Social psychology, 4th edn. Prentice Hall
- Bennett DS, Bates JE (1995) Prospective models of depressive symptoms in early adolescence: Attributional style, stress, and support. *J Early Adolesc* 15:299–315
- Bookwala J, Frieze IH, Smith C, Ryan K (1992) Predictors of dating violence: A multivariate analysis. *Violence Vict* 7:297–309
- Borgen FH, Barnett DC (1987) Applying cluster analysis in counseling psychology research. *J Couns Psychol* 34(4):456–468
- Burcky W, Reuterman N, Kopsky S (1988) Dating violence among high school students. *Sch Couns* 35:353–358
- Carlson BE (1987) Dating violence: A research review and comparison with spouse abuse. *Soc Casework: J. Contemp Soc Work* 16–23
- Connolly J, Pepler D, Craig W, and Taradash A (2000) Dating experiences of bullies in early adolescence. *Child Maltreat* 5(4):299–310
- Espelage DL, Bosworth K, Simon TR (2000) Examining the social context of bullying behaviors in early adolescence. *J Couns Dev* 78(3):326–333
- Espelage DL, Holt MK (2001) Bullying and victimization during early adolescence: Peer influences and psychosocial correlates. In: Geffner R, Loring M (eds) *Bullying behaviors: Current issues, research, and interventions*. The Haworth Press, Binghamton, NY
- Espelage DL, Holt MK, Henkel RR (2003) Examination of peer-group contextual effects on aggression during early adolescence. *Child Dev* 74(1):205–220
- Finkelhor D, Asdigian NL (1996) Risk factors for youth victimization: Beyond a lifestyles/routine activities theory approach. *Violence Vict* 11:3–20
- Finkelhor D, Browne A (1985) The traumatic impact of child sexual abuse: A conceptualization. *Am J Orthopsychiatry* 55:530–541
- Finkelhor D, Dziuba-Leatherman J (1994) Children as victims of violence: A national survey. *Pediatrics* 94(4):413–420
- Finkelhor D, Kendall-Tackett K (1997) A developmental perspective on the childhood impact of crime, abuse, & violent victimization. In: Cicchetti D, Toth S (eds) *Developmental perspectives on trauma: Theory, research, and intervention*. University of Rochester Press, New York, pp 1–32
- Foshee VA (1996) Gender differences in adolescent dating abuse: Prevalence, types, and injuries. *Health Educ Res: Theory Pract* 11:275–286
- Foshee VA, Linder GF, Bauman CE, Langwick SA (1996) The safe dates project: Theoretical basis, evaluation, design, and selected baseline findings. *Am J Prev Med* 12:39–47
- Graham S, Juvonen J (2001) An attributional approach to peer victimization. In: Graham S (ed) *Peer harassment in school: The plight of the vulnerable and victimized*. Guilford Press, pp 49–72
- Hair JFJ, Black WC (2000) Cluster analysis. In: Yarnold P. R (ed) *Reading and understanding MORE multivariate statistics*. American Psychological Association, pp 147–205
- Harned MS (2000) The extent and impact of repeated and multiple victimization. Paper presented at the 72nd Annual Meeting of the Midwestern Psychological Association, Chicago, IL
- Hibbard RA, Ingersoll GM, Orr DP (1990) Behavioral risk, emotional risk, and child abuse among adolescents in a nonclinical setting. *Pediatrics* 86:896–901
- Hodges EVE, Malone MJ, Perry DG (1997) Individual risk and social risk as interacting determinants of victimization in the peer group. *Dev Psychol* 33(6):1032–1039
- Holt M, Espelage D (2005) Peer victimization among adolescents: A preliminary perspective on the co-occurrence of sexual harassment, dating violence, and bullying victimization. In: Kendall-Tackett K, Giacomoni S (eds) *Victimization of children and youth: Patterns of abuse, response strategies*. Civic Research Institute, Kingston, NJ, pp 13.11–13.16
- Holt MK, Espelage DL (2003) A cluster analytic investigation of victimization among high school students: Are profiles differentially associated with psychological symptoms and school belonging? In: Elias MJ, Zins JE (eds) *Bullying, peer harassment, and victimization in the schools: the next generation of prevention*. The Haworth Press, Inc., New York, pp 81–98
- Hughes HM, Honore M, Parkinson D, Vargo M (1989) Witnessing spouse abuse and experiencing physical abuse: A “double whammy”? *J Fam Violence* 4(2):197–209
- James WH, West C, Deters KE, Armijo E (2001) Youth dating violence. *Adolescence* 35:455–465
- Juvonen J, Graham S, Schuster MA (2003) Bullying among young adolescents: The strong, the weak, and the troubled. *Pediatrics* 112(6): 1231–1237
- Kinder BN, Curtiss G, Kalichman S (1991) Cluster analyses of headache-patient MMPI scores: A cross-validation., *Psychological Assessment*. American Psychological Assn., Vol. 3, pp 226–231
- Kumpulainen K, Rasanen E, Henttonen I (1998) Children involved in bullying: Psychological disturbance and the persistence of the involvement. *Child Abuse Negl* 23:1253–1262
- Lagerspetz KM (1982) Group aggression among school children in three schools. *Scand J Psychol* 23:45–52
- Malik S, Sorenson SB, Aneshensel CS (1997) Community and dating violence among adolescents: Perpetration and victimization. *J Adolesc Health* 21:291–302
- McDermott PA (1996) A nationwide study of developmental and gender prevalence for psychopathology in childhood and adolescence. *J Abnorm Child Psychol*. Kluwer Academic Publishers, vol. 24, pp 53–66
- Milligan GW (1980) An examination of the effect of six types of error perturbation on fifteen clustering algorithms. *Psychometrika* 45(3):325–342
- Molidor CE (1995) Gender differences of psychological abuse in high school dating relationships. *Child Adolesc Soc Work J* 12:119–134
- Naar-King S, Silvern L, Ryan V, Sebring D (2002) Type and severity of abuse as predictors of psychiatric symptoms in adolescence. *J Fam Violence* 17(2): 133–149
- Nansel TR, Haynie DL, Simons-Morton BG (2003) The association of bullying and victimization with middle school adjustment. *J Appl Sch Psychol* 19(45–61)

- Nansel TR, Overpeck M, Pilla RS, Ruan WJ, Simons-Morton BG, Scheidt P (2001) Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *J Am Med Assoc* 285:2094–2100
- O’Keefe M (1998) Factors mediating the link between witnessing interparental violence and dating violence. *J Fam Violence* 13:39–57
- O’Keefe M, Treister L (1998) Victims of dating violence among high school students: Are the predictors different for males and females? *Violence Against Women* 4(2):195–223
- Parker JG, Asher SR (1987) Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychol Bull* 102(3):357–389
- Rook KS (1992) Detrimental aspects of social relationships: Taking stock of an emerging literature. In: Baumann U (ed) *Meaning and measurement of social support*. Hemisphere Publishing Corp., pp 157–169
- Rook KS (1998) Investigating the positive and negative sides of personal relationships: Through a lens darkly? In: Cupach WR (ed) *Dark side of close relationships*. Lawrence Erlbaum Associates, Publishers, pp 369–393
- Roscoe B, Callahan JE (1985) Adolescents’ self-report of violence in families and dating relations. *Adolescence* 20:545–553
- Schwartz D (2000) Subtypes of victims and aggressors in children’s peer groups. *J Abnorm Child Psychol* 28(2): 181–192
- Shields A, Cicchetti D (2001) Parental maltreatment and emotion dysregulation as risk factors for bullying and victimization in middle childhood. *J Clin Child Psychol* 30(3): 349–363
- Swearer SM, Song SY, Cary PT (2001) Psychosocial correlates in bullying and victimization: The relationship between depression, anxiety, and bully/victim status. In: Geffner RA, and Loring M (eds) *Bullying behavior: Current issues, research, and interventions*. Haworth Maltreatment and Trauma Press/The Haworth Press, Inc., Binghamton, NY, pp 95–121
- Visser JH, Van Der Ende J, Koot HM, Verhulst FC (1999) Continuity of psychopathology in youths referred to mental health services. *J Am Acad Child Adolesc Psychiatry* 38:1560–1568
- Ward JH (1963) Hierarchical grouping to optimize an objective function. *J Am Stat Assoc* 58:236–244
- Weiner B (1986) *An attributional theory of motivation and emotion*. Guilford Press, New York