



Sibling and peer victimization in childhood and adolescence[☆]



Corinna Jenkins Tucker^{a,*}, David Finkelhor^b, Heather Turner^b,
Anne M. Shattuck^b

^a Department of Family Studies, University of New Hampshire, Durham, NH 03824, USA

^b Department of Sociology, University of New Hampshire, Durham, NH 03824, USA

ARTICLE INFO

Article history:

Received 11 February 2014

Received in revised form 1 May 2014

Accepted 8 May 2014

Available online 2 June 2014

Keywords:

Adolescents

Aggression

Children

Siblings

Victimization

ABSTRACT

This study examined how victimizations by either a sibling or peer are linked to each other and to mental health in childhood and adolescence. The data were from the National Survey of Children's Exposure to Violence which includes a sample of children aged 3–9 ($N = 1,536$) and adolescents aged 10–17 ($N = 1,523$) gathered through telephone interviews. An adult caregiver (usually a parent) provided the information for children while self-reports were employed for adolescents. Fifteen percent of each age group reported victimization by both a sibling and peer. Victimization by a sibling alone was more common in childhood than adolescence. Victimization by a sibling was predictive of peer victimization. Children and adolescents victimized by both a sibling and peer reported the greatest mental distress. This work establishes that for some children and adolescents, victimization at the hands of other juveniles happens both at home and school. Programs should consider the role of siblings and target parents and siblings to encourage the development and maintenance of constructive sibling interactions.

© 2014 Elsevier Ltd. All rights reserved.

Introduction

Sibling and peer relationships figure prominently in children's and adolescents' daily experiences as important contexts of individual development. A significant body of research has documented the extent of peer victimization and its potential effects on mental health for children and adolescents. Though less likely to be recognized as harmful (Caspi, 2012), recent work also has documented the frequency and possible implications of sibling aggression for children's and adolescents' mental health (Tucker, Finkelhor, Turner, & Shattuck, 2013). Although sibling and peer victimization generally have been studied separately, children's and adolescents' experiences in these relationships do not occur in isolation from one another (Kramer & Kowal, 2005). To achieve a greater understanding of children's and adolescents' victimization experiences, examination of victimization within the context of both sibling and peer relationships is needed. Taken together, there may be patterns of victimization across these two relationships that have important connections to mental health. The current research builds on the limited research (Wolke & Skew, 2012) that has explored the overlap between adolescents' experiences of sibling

[☆] For the purposes of compliance with section 507 of Public Law 104–208 (Stevens Amendment), readers are advised that 100% of the funds for this program are derived from federal sources (this project was supported by grant 2006-JW-BX-0003 awarded by the Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, US Department of Justice) to the second and third author. The total amount of federal funding involved is \$2,709,912. Support was also provided by the Centers for Disease Control & Prevention through an interagency agreement with the Department of Justice. Points of view or opinions in this document are those of the authors and do not necessarily represent the official position or policies of the US Department of Justice or the CDC.

* Corresponding author.

and peer victimization with convenience samples (e.g., Bowers, Smith, & Binney, 1994; Duncan, 1999; Wolke & Samara, 2004). We employ a large nationally-representative sample to describe patterns of victimization across sibling and peer relationships in two age groups: childhood and adolescence. Relationships with siblings and peers are important contexts for development during these two periods and interactions with peers increase and assume greater significance as children age. We also investigate the links between patterns of sibling and peer victimization and mental health in childhood and adolescence.

Relationship experiences with siblings and peers are integrated within children's and adolescents' lives creating important connections between these two developmentally significant relationships. Theoretical and empirical work suggests, however, that there may be congruity and incongruity in experiences across these two relationships. Both attachment (Bowlby, 1973; Sroufe & Fleeson, 1988) and social learning theory (Bandura, 1973) predict congruity across these two relationships. A central tenet of attachment theory is that individuals develop internal working models of relationships based on their relationship with a central early attachment figure (usually a parent). This model then influences expectations and experiences individuals have with others. As such, children's and adolescents' relationships with siblings and peers are consistent with their internal working model and each other. From a social learning perspective, individuals learn ways of interacting with family members, in this case siblings, and these behaviors then are generalized to experiences with peers. Taken together, this theoretical work suggests that whether children and adolescents are victimized at home or not, they are likely to have a similar experience with peers. Some empirical work supports such a proposition. Wolke & Samara's (2004) work with Israeli adolescents showed that eight percent were victimized at home and at school. Duncan (1999) reported that of the 25% of American adolescents bullied at school, the majority also were victimized by a sibling at home. Though not focused on victimization, a small number of studies show that aggressive and conflictive behavior between siblings is associated with such behavior in peer relationships (e.g., Ensor, Jacobs, & Hughes, 2010; Patterson, 1986; Stormshak, Bellanti, & Bierman, 1996) and demonstrate some congruence across negative sibling and peer relationship experiences.

Empirical work also has shown that there is not a simple carry-over of experiences between sibling and peer relationships (Bowers et al., 1994; Duncan, 1999). Such incongruity could be reflective of that fact that individuals are not able to choose their siblings but may choose or be assigned to contexts with peers who have different characteristics and family experiences than their own and their siblings (Wolke & Samara, 2004). Evidence of variability in the connections between sibling and peer relationships suggests that there are multiple and unique patterns of association between these two relationships that are likely to reveal important group differences in mental health. Traditional approaches of studying relationships in isolation obscure and limit a fuller understanding of individuals' experiences. In the current study, we employ a more holistic approach to individuals' victimization experiences by employing a person-centered approach (Magnusson, 2003). A person-centered approach identifies groups of individuals who share similarities based on relations among specific variables (Magnusson, 2003). By grouping together individuals' victimization experiences, variability in patterns of victimization across sibling and peer relationships in childhood and adolescence is highlighted. There are four possible patterns of association between sibling and peer victimization: victimization in neither relationship, victimization in both relationships, victimization in sibling relationships only or victimization in peer relationships only. We expect that the prevalence of these patterns will differ between childhood and adolescence.

Most of the research on sibling victimization has focused on young children while the greatest proportion of work on peer victimization has included school-aged children (Perry, Hodges, & Egan, 2001). In the current study, we examine the patterns of sibling and peer victimization in two age groups expecting that the distribution of victimization across the four possibilities will likely reflect the differential importance of and involvement with siblings and peers in childhood and adolescence. With increasing age, children and adolescents spend more time with outside of the family and have greater interaction with peers. Reflecting this developmental trend, work has shown that sibling victimization peaks in childhood (Tucker, Finkelhor, Shattuck, & Turner, 2013) whereas peer victimization may increase with age and peak in adolescence (Finkelhor, Turner, & Ormrod, 2006; Turner, Finkelhor, Hamby, Shattuck, & Ormrod, 2011). However, despite decreased involvement as compared to childhood, siblings remain important figures in many adolescents' lives (McHale, Updegraff, & Whiteman, 2012) and a significant number of adolescents are victimized by their siblings (Tucker, Finkelhor, Shattuck, et al., 2013).

During childhood and adolescence, interactions with siblings and peers are a prominent part of individuals' experiences and likely make experiences in both relationships salient for mental health. Work on sibling and peer victimization has consistently shown that such experiences are linked to lower mental health (e.g., Boivin, Hymel, & Hodges, 2001; Finkelhor et al., 2006; Tucker, Finkelhor, Turner, et al., 2013). Studies that have examined sibling and peer bullying simultaneously have tended to focus on *perpetration*. These studies have shown that individuals who bully in both relationships have the lowest mental health compared to those who did not bully at all or who bullied in only one relationship context (Duncan, 1999; Wolke & Skew, 2012). No study has assessed the mental health of sibling and peer *victims* simultaneously, but in the current study, we expect that those children and adolescents who are victimized by their peers and siblings would report the lowest mental health of the four groups. We also hypothesize that victimization by either a sibling or peer would be associated with lower mental health than those children and adolescents who do not experience it in either relationship. However, the nature of the link between being victimized by a sibling versus a peer may change across these two age periods as the relative importance of these two relationships changes.

In summary, employing a person-centered approach (Magnusson, 2003), we describe the frequency of four possible patterns of sibling and peer victimization in childhood and adolescence using a nationally representative sample. We expect

to find differences in the frequency of sibling and peer victimization in childhood versus adolescence related to the increasing importance of peers in adolescence. We also explore whether being victimized by a sibling is predictive of peer victimization. Finally, we examine mental health differences in the four patterns of victimization expecting that those individuals who have experienced both sibling and peer victimization to report the greatest mental distress.

Method

Participants

The National Survey of Children's Exposure to Violence (NatSCEV) was designed to obtain incidence and prevalence estimates of a wide range of childhood victimizations in the contiguous United States (Finkelhor, Ormrod, Turner, & Hamby, 2011; Finkelhor, Turner, Ormrod, & Hamby, 2009; Hamby, Finkelhor, Turner, & Ormrod, 2010; Turner, Finkelhor, & Ormrod, 2010; Turner, Finkelhor, Ormrod, & Hamby, 2010). The primary foundation of the design was a nationwide sampling frame of residential telephone numbers from which a sample of telephone households was drawn by random digit dialing (RDD), a standard procedure for telephone interviews (Babbie, 2011). This nationally representative cross-section yielded 3,053 completed interviews. To ensure that the study included a sizeable proportion of minorities and low-income respondents for more accurate subgroup analyses, there was also an over-sampling of U.S. telephone exchanges that had a population of 70% or more of African American, Hispanic, or low-income households. Random digit dialing (RDD) employed with this second "over-sample" yielded 1,496 additional completed interviews for a total of 4,549 interviews with children aged one month to 17 years of age. Sample weights were applied to adjust for differential probability of selection due to (a) study design, (b) demographic variations in non-response, and (c) variations in within-household eligibility. Non-responses analysis with the current data found that respondents who refused to participate (or could not be reached), but for whom parent screener information was obtained, were not systematically different from respondents on victimization risk (details of the non-response analyses can be obtained from the authors).

The current research focuses on 3,059 children and youth aged 3–17 years who had at least one sibling under age 18 living in the household at the time of the interview. The sample was approximately evenly divided across sex (51% male) and age. In terms of ethnicity, 58% of the children and youth were White, non-Hispanic followed by 20% Hispanic, any race, 16% Black, non-Hispanic, and 6% other race, non-Hispanic. Most of the children and youth were from two-parent households (64%) with the second largest group being from a single parent family (21%). The largest percentage had a parent with a bachelor's degree (40% versus 30% with a parent with some college and 30% with a parent with a high school degree or less).

Procedure

A short telephone interview was conducted by the employees of an experienced survey research firm with an adult caregiver (usually a parent) in each household to obtain family demographic information. One child was randomly selected from all eligible children living in a household by selecting the child with the most recent birthday. If the selected child was 10–17 years old, the main telephone interview was conducted with the child after parent/caregiver and child consent. If the selected child was under age 10, the interview was conducted with the caregiver who "is most familiar with the child's daily routine and experiences." A safety protocol was implemented to ensure confidentiality of responses and privacy during the interview. Telephone interviews have been shown to be perceived by respondents as more anonymous, less intimidating, and more private than in-person interviews (Acierno, Resnick, Kilpatrick, & Stark-Riemer, 2003; Taylor, 2002) and may yield greater disclosure of victimization events (Acierno et al., 2003). Comparison between proxy (i.e., parent) and self (i.e., child) reports with this instrument found no evidence of reporter bias (Finkelhor, Hamby, Ormrod, & Turner, 2005; Finkelhor, Ormrod, & Turner, 2009).

Respondents were promised complete confidentiality, and were paid \$20 for their participation. The interviews, averaging 45 min in length, were conducted in both English and Spanish. Two hundred and one (6%) of the interviews with the parents were done in Spanish. Nearly all of the youth age 10–17 chose to be interviewed in English. Respondents who disclosed a situation of serious threat or ongoing victimization were re-contacted by a clinical member of the research team trained in telephone crisis counseling whose responsibility was to stay in contact with the respondent until the situation was resolved.

Measures

Victimization. This survey used items from an enhanced version of the Juvenile Victimization Questionnaire (JVQ), an inventory of childhood victimization of a wide range of childhood victimizations (Finkelhor et al., 2011; Finkelhor, Ormrod, et al., 2009; Finkelhor, Turner, et al., 2009; Hamby et al., 2010; Turner, Finkelhor, & Ormrod, 2010; Turner, Finkelhor, Ormrod, & Hamby, 2010). The enhanced JVQ obtained reports on 48 forms of youth victimization covering five general areas of interest: conventional crime, maltreatment, victimization by peers and siblings, sexual victimization, and witnessing and indirect victimization (Finkelhor, Ormrod, Turner, & Hamby, 2005). Individual questions gathered information about each victimization, including characteristics of the perpetrator, whether the event occurred in the past year, and whether weapons were used or injury resulted.

For this study, two measures created from individual questions were constructed to capture whether children and adolescents experienced sibling- or peer-perpetrated victimization in the past year. We use the term victimization and not ‘bullying’ because in some definitions bullying has a fairly narrow scope limited to aggression that is repeated and in a relationship of power imbalance. We do not specifically measure these dimensions, so our operationalization includes bullying but also includes a somewhat broader range of peer and sibling victimizations than some researchers use (Finkelhor, Turner, & Hamby, 2012). Victimization included experiencing any incident of physical, property, or psychological aggression by either a sibling or peer. Physical victimization included being hit, beaten, or attacked with or without an object and whether or not injury resulted. Property victimization was defined as force used to take something away, something stolen, personal items broken or ruined on purpose. Finally, psychological victimization included feeling bad or scared after being called names, having mean things said, or being told they were not wanted around. The measures count only those experiences that occurred in the past year and, in the case of sibling victimization, that were perpetrated by a juvenile sibling residing in the same household as the selected child. If a child or adolescent was victimized in the past year, they were coded as 1 = yes and 0 = no. Respondents’ answers were coded separately for sibling and peer victimization.

Mental health. Mental health status was measured through the use of trauma symptom scores for the anger, depression, anxiety, dissociation, and post-traumatic stress scales of two closely related measures: the Trauma Symptom Checklist for Young Children (TSCYC; Briere et al., 2001), which was used in the caregiver interviews for children nine years old and younger, and the Trauma Symptoms Checklist for Children (TSCC; Briere, 1996), which was used with the 10–17 years old self-report interviews. For the purpose of this study the instruments were shortened for a total of 28 items in the TSCC and 25 items in the TSCYC. Reporters indicated how often they (or their children) experienced specific symptoms the past month on a four-point scale (0 = not at all to 4 = very often). Cronbach’s alpha for the TSCYC was .86 and for the TSCC was .93. Although the TSCC and TSCYC are designed to obtain measures for five subscales, the instruments are often used in their entirety (Becker-Blease, Turner, & Finkelhor, 2010; Milot, Ethier, St. Laurent, & Provost, 2010; Runyan et al., 2005). The item wording, however, differed for the two measures so the total score for the sample was created by summing all items of each measure and then standardizing and merging the standardized mental health scores for each age group. Higher scores indicate greater mental health distress.

Demographic characteristics. Child and household information was obtained during the initial parent interview. Demographic measures included in these analyses were: *child’s gender*; *child’s age*; *child’s race/ethnicity* (coded into 4 groups: White non-Hispanic, Hispanic any race, Black non-Hispanic, and other race, non-Hispanic); and *parent education* for parent with the most education (high school or less, some college, or college graduate). Finally, a dummy variable was constructed to indicate whether the parent interview was conducted in Spanish (0 = no; 1 = yes) as a proxy of recentness of immigration to the US.

Results

Initially, we tested whether there were differences in victimization patterns in the two age groups. Using the full sample, we crossed reports of past year sibling and peer victimization to create four groups of sibling and peer victimization (sibling only, peer only, both, and neither). Fig. 1 shows the distribution of the four sibling and peer victimization groups across childhood and adolescence. The Chi-squared analysis was significant ($\chi^2 = 183.35$, $df = 3$, $p = .001$). Children were more likely than adolescents to be in the sibling victimization only group. By contrast, the older group was more like to be in the peer victimization only and the neither group. Children and adolescents were approximately equally likely to be in the both sibling and peer victimization group.

Based on these findings, for all further analyses, the sample was divided into 1,536 children (*Mean age* = 6.13, *SD* = 1.98; range 3–9 years old) and 1,523 adolescents (*Mean age* = 13.41, *SD* = 2.33; range 10–17 years old). Beginning with children,

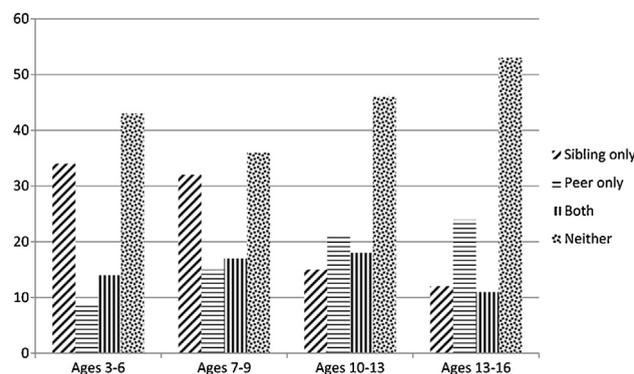


Fig. 1. Percent frequency of the four sibling and peer victimization groups across childhood and adolescence. Note: Within each developmental period (childhood and adolescence), there were no differences in victimization patterns among the subcategories of age.

Table 1
Logistic regression of sibling victimization predicting the likelihood of peer victimization in childhood and adolescence.

	Childhood		Adolescence	
	OR	95% CI	OR	95% CI
Parent education (1 = high school)				
Some college	.68*	.49–.95	1.32	.99–1.79
College degree	1.09	.80–1.48	.87	.65–1.18
Ethnicity (1 = white)				
Black	1.07	.76–1.50	1.24	.90–1.70
Hispanic, any race	.91	.64–1.29	.97	.67–1.40
Other or mixed	.82	.48–1.40	.81	.50–1.33
Lang. of interview (1 = English)				
Spanish	.20**	.07–.57	.74	.43–1.28
Child gender (1 = female)				
Male	.93	.74–1.18	.56***	.44–.71
Child maltreatment	3.08***	2.06–4.64	1.71***	1.23–2.35
Witness community violence	2.13***	1.55–2.92	2.50***	1.98–3.14
Witness family violence	1.16	.76–1.77	2.11***	1.51–2.97
Sibling victimization	1.41**	1.11–1.80	1.88***	1.47–2.42

* $p < .05$.

** $p < .01$.

*** $p < .001$.

15% had been victimized by both a sibling and peer in the past year while 40% were reported as having no victimization experiences in either relationship. A third of children had experienced only sibling victimization and 12% of children were the victim of peers but not a sibling. For adolescents, 15% had been victimized by both a sibling and peer in the past year, while 49% reported no victimization experiences in either relationship. Fourteen percent of adolescents reported being victimized by a sibling only and 22% experienced being a victim of peers but not a sibling.

Given the evidence for overlap of sibling and peer victimization in childhood and adolescence and our interest in sibling relationship experiences generalizing to peer relationships, we then tested whether victimization by a sibling was predictive of peer victimization using a hierarchical logistic regression analysis for each age group. We controlled for race/ethnicity, parents' education, child sex, and language used to conduct the interview. Also, to limit any confounds due to the impact of other types of victimizations (Finkelhor, Ormrod, & Turner, 2007), we controlled for participants' past year experiences of child maltreatment, and witnessing family and community violence collected as part of the JVQ measure. All controls were entered at the first step followed by sibling victimization in the second step. The logistic regressions predicting childhood and adolescent peer victimization in the past year (see Table 1) were significant (controls only: $\chi^2 = 108.14$, $df = 10$, $p = .001$; pseudo $R^2 = .10$, final model: $\chi^2 = 115.91$, $df = 11$, $p = .001$; pseudo $R^2 = .11$ for children; controls only: $\chi^2 = 196.68$, $df = 10$, $p = .001$; pseudo $R^2 = .17$, final model: $\chi^2 = 221.20$, $df = 11$, $p = .001$; pseudo $R^2 = .19$ for adolescents). In both age groups, the odds of reporting an incident of peer victimization were higher for children and adolescents who had been victimized by their sibling.

To examine mental health differences in the four patterns of sibling and peer victimization in each of the two age groups of interest, we employed two ANCOVAs (Table 2). Again, these models controlled for race/ethnicity, parents' education, child sex, and language used to conduct the interview and, to limit any confounds due to the impact of other types of victimizations (Finkelhor, Ormrod, & Turner, 2007), participants' past year experiences of child maltreatment, and witnessing family and community violence collected as part of the JVQ measure. Follow-up Tukey tests were conducted for significant victimization group effects. For children, analysis revealed a significant model ($F(10, 1493) = 49.42$, $p = .001$) and main effect for victimization group ($F(3, 1493) = 42.93$, $p = .001$). In this case, all of the group means are significantly different from one another and those children who experienced both sibling and peer victimization reported the greatest mental distress.

Table 2
Mental health scores of children and adolescents in the four sibling and peer victimization groups.^a

	N	Mean	SD	SE
Children (N = 1,536)				
Sibling only	506	.11	.97	.04
Peer only	178	.33	1.09	.07
Sibling and peer	238	.59	1.34	.06
Neither sibling nor peer	614	-.21	.84	.04
Adolescents (N = 1,523)				
Sibling only	211	.13	.92	.06
Peer only	334	.21	.97	.05
Sibling and peer	225	.38	.98	.06
Neither sibling nor peer	753	-.25	.83	.03

^a Higher mental health scores indicate greater distress. Means are adjusted for parent education level, race/ethnicity, language of the interview, child sex, child maltreatment, and witnessing family and community violence.

Although experiencing either sibling or peer victimization was linked to worse mental health compared to non-victims, the peer only group had significantly poorer mental health than the sibling only group.

Turning to findings for adolescents, the model ($F(10, 1478) = 49.54, p = .001$) and main effect for victimization group ($F(3, 1478) = 39.16, p = .001$) were significant. Each of the group means was significantly different from one another except that the sibling only group was not different from the peer only group. As expected, those adolescents who reported both sibling and peer victimization also reported the worst mental health of the four groups (see [Table 2](#)).

Discussion

We employed a person-centered approach to examine sibling and peer victimization experiences in a nationally representative sample of children and adolescents. Such an approach highlighted patterns of sibling and peer victimization in childhood and adolescence that otherwise would be obscured with a more traditional approaches to studying victimization that do not recognize the integration of these two relationships in individuals' lives for these two age groups. Our work confirmed that indeed there are groups of children and adolescents who have congruent and incongruent experiences across their sibling and peer relationships. Congruent experiences were more common (victimization in both or neither relationship) than incongruent experiences (victimization in either sibling or peer relationships) and our subsequent analyses showed that being victimized by a sibling was predictive of peer victimization in both childhood and adolescence. Our work also showed that victimization by siblings and peers either exclusively or in combination was linked to psychological distress. Confirming our hypothesis, the greatest distress was for the small group of children and adolescents who were victimized by both their siblings and peers.

A strength of this study is the examination of sibling and peer victimization in two age groups. During childhood and adolescence, sibling and peer relationships play an important role in individuals' development and mental health. As expected, likely because of the shifting developmental importance of peers with age, the distribution of individuals in the four victimization groups was somewhat different in childhood versus adolescence. The number of children who exclusively experienced sibling victimization was greater in childhood (33%) compared to adolescence (14%). Though the frequency of sibling aggression declines across childhood into adolescence, some work has shown that the seriousness of sibling victimization experiences increases. Adolescent sibling victimization experiences are more likely to include an injury or weapon than such experiences in childhood ([Tucker, Finkelhor, Shattuck, et al., 2013](#); [Tucker, Finkelhor, Turner, et al., 2013](#)). Adolescents (22%) were more likely than children (12%) to report victimization only by peers; a finding that possibly reflects children's greater involvement with intra-familial relationships and adolescents greater focus on peer relationships. Notably, the proportion of individuals victimized by both siblings and peers was equivalent in childhood and adolescence (15%). In both developmental periods, congruency across sibling and peer relationships in whether children and adolescents were victimized was more common than non-congruency. Future work could explore how individual characteristics such as temperament, personality, and genetics may play a role in whether children and adolescents' have congruent or incongruent sibling and peer interactions.

The current study adds to the very limited research that has examined the frequency with which children and adolescents are victimized at home and at school. The percent of individuals from our nationally representative sample reporting victimization by both siblings and peers fits within the range (8–29%) reported by other studies in either childhood ([Bowers et al., 1994](#)) and adolescence ([Duncan, 1999](#); [Wolke & Samara, 2004](#)) with convenience samples. Future work could include a more nuanced approach to the study of sibling and peer victimization patterns. One idea is to explore the seriousness of sibling and peer victimization through a count of the number of episodes a child or adolescent experiences in a given year. Although we were not able to assess chronicity of sibling and peer victimization in the current study, other work suggests its importance when assessing victimization ([Finkelhor, Ormrod, et al., 2009](#); [Finkelhor, Turner, et al., 2009](#)). Another idea is to have the victim rate the seriousness of the victimization.

This is the first study that, in addition to reporting descriptive information on sibling and peer victimization, has demonstrated that, net of other experiences of victimization, sibling victimization is predictive of peer victimization in childhood and adolescence. Family members often serve as models of relationship interactions that are enacted by children and adolescents with their siblings and with their friends ([Kramer and Gottman, 1992](#)). Further, it is in the sibling relationship where individuals learn about conflict strategies, management and resolution styles that are then generalized to peer relationships ([Ensor et al., 2010](#); [Patterson, 1986](#)). For some children, sibling relationship dynamics are important in explaining the nature of their peer interactions. While not the focus of the current paper, it is possible that peer victimization experiences are predictive of similar experiences with siblings and unmeasured third variables that may account for this relationship such as child aggressiveness could be thoroughly explored in future work. Future research also could examine the longitudinal linkages between the sibling relationship as a formative context for peer victimization experiences across childhood and adolescence. Such work could even be expanded to examine the relationship between sibling and romantic partner victimization in adolescence and emerging adulthood. Previous cross-sectional work has shown similarities between adolescents' conflict styles in sibling and romantic partner relationships ([Reese-Weber & Kahn, 2005](#)).

The importance of sibling and peer relationships in children's and adolescents' lives makes the nature these relationship experiences salient for mental health. Supporting our hypothesis, children and adolescents victimized by both siblings and peers in the last year had the greatest mental distress compared to those victimized in either relationship or in neither relationship. Other studies of either peer or sibling victimization have demonstrated its connections to lower mental health

(e.g., Finkelhor et al., 2006; Wolke & Samara, 2004) but the current study is one of the first to show these connections. Our work is cross-sectional, however, and we cannot be sure whether mental health difficulties lead to children's and adolescents' sibling and peer victimization experiences or the effects are bi-directional. Either way, we can assert that those children and adolescents who have these experiences in their sibling and peer relationships are a concerning group.

We expected that the change in the relative importance of siblings and peers across childhood and adolescence would be reflected in the links between victimization by a sibling versus a peer and mental distress. Specifically, we thought that children exclusively victimized by siblings would report lower mental health than children only victimized by peers. In addition, we expected an opposite pattern for adolescents. The findings, however, showed that children exclusively victimized by peers had greater mental distress than did those children victimized by only siblings. Such a finding could be related to the difference in the frequency and acceptability of aggression in sibling versus peer relationships (Tucker, Finkelhor, Shattuck, et al., 2013; Tucker, Finkelhor, Turner, et al., 2013; Finkelhor et al., 2006) and the fact that peer relationships, for children, generally are a 'new' relationship characterized by more insecurities and unknowns. Our results also showed that adolescents victimized by either siblings or peers had similar levels of mental distress. As evidenced in previous studies, despite decreased involvement in adolescence as compared to childhood, adolescents' relationships with siblings remain very important in their lives (e.g., Buhrmester, 1992; Tucker, McHale, & Crouter, 2008) and perhaps have similar effects on mental health functioning as peer do with regard to victimization. Our findings should be replicated with information on victimization experiences and mental health provided by multiple reporters. Our study was limited by a single reporter and the evident relationships in this study could be inflated due to shared method variance.

The current study highlights the frequency and importance of considering the overlap of sibling and peer victimization for children's and adolescents' mental distress. The results also provide preliminary support for the notion that sibling victimization is predictive of peer victimization for children and adolescents. Our findings have practical implications and suggest that preventative intervention efforts aimed at reducing sibling and peer victimization should target parents and siblings to encourage the development and maintenance of constructive sibling interactions. For some children and adolescents, this may provide protection from peer victimization. In sum, children's and adolescents' victimization by other juveniles often happens at both home and at school. Given the developmental importance of sibling and peer relationships for well-being, programs aimed at the reduction of bullying and victimization should consider whether such behavior is happening at home as well as in school.

References

- Acierno, R., Resnick, H., Kilpatrick, D. G., & Stark-Riemer, W. (2003). Assessing elder victimization – Demonstration of a methodology. *Social Psychiatry and Psychiatric Epidemiology*, 38, 644–653. <http://dx.doi.org/10.1007/s00127-003-0686-4>
- Babbie, E. (2011). *The basics of social research*. Belmont, CA: Wadsworth.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Oxford, England: Prentice-Hall.
- Becker-Blease, K., Turner, H., & Finkelhor, D. (2010). Disasters, victimization, and children's mental health. *Child Development*, 84, 1040–1052. <http://dx.doi.org/10.1111/j.1467-8624.2010.01453.x>
- Boivin, M., Hymel, S., & Hodges, E. V. E. (2001). Toward a process view of peer rejection and harassment. In J. Juvonen, & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 265–289). New York, NY, US: Guilford Press.
- Bowers, L., Smith, P. K., & Binney, V. A. (1994). Perceived family relationships of bullies, victims, and bully/victim problems at school. *Journal of Social and Personal Relationships*, 11, 215–232.
- Bowlby, J. (1973). *Attachment and loss. Vol. 2: Separation, anxiety, and anger*. New York: Basic Books.
- Briere, J., Johnson, K., Bissada, A., Damon, L., Crouch, J., Gil, E., Hanson, R., & Ernst, V. (2001). The trauma symptom checklist for young children (TSCYC): Reliability and association with abuse exposure in a multi-site study. *Child Abuse & Neglect*, 25, 1001–1014. [http://dx.doi.org/10.1016/S0145-2134\(01\)00253-8](http://dx.doi.org/10.1016/S0145-2134(01)00253-8)
- Briere, J. (1996). *Trauma Symptoms Checklist for Children (TSCC): Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Buhrmester, D. (1992). The developmental courses of sibling and peer relationships. In F. Boer, & J. Dunn (Eds.), *Children's sibling relationships: Developmental and clinical issues* (pp. 19–40). Hillsdale, NJ: Lawrence Erlbaum.
- Caspi, J. (2012). *Sibling aggression: Assessment and treatment*. New York, NY: Springer Publishing Co.
- Duncan, R. D. (1999). Peer and sibling aggression: An investigation of intra- and extra-familial bullying. *Journal of Interpersonal Violence*, 14, 871–886. <http://dx.doi.org/10.1177/088626099014008005>
- Ensor, R. M., Jacobs, A., & Hughes, C. L. (2010). Trajectories of antisocial behaviour towards siblings predict antisocial behaviour toward peers. *Journal of Child Psychology and Psychiatry*, 51, 1208–1216. <http://dx.doi.org/10.1111/j.1469-7610.2010.02276.x>
- Finkelhor, D., Hamby, S. L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse & Neglect*, 29(4), 383–412. <http://dx.doi.org/10.1016/j.chiabu.2004.11.001>
- Finkelhor, D., Ormrod, R., & Turner, H. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse & Neglect*, 31, 7–26.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2009). Lifetime assessment of poly-victimization in a national sample of children and youth. *Child Abuse & Neglect*, 33(7), 403–411. <http://dx.doi.org/10.1016/j.chiabu.2008.09.012>
- Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. L. (2005). The victimization of children and youth: A comprehensive, national survey. *Child Maltreatment*, 10(1), 5–25. <http://dx.doi.org/10.1177/1077559505275470>
- Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. (2011). School, police, and medical authority involvement with children who have experienced victimization. *Archive of Pediatric & Adolescent Medicine*, 165(1), 9–15. <http://dx.doi.org/10.1001/archpediatrics.2010.240>
- Finkelhor, D., Turner, H., & Hamby, S. (2012). Let's prevent peer victimization, not just bullying. *Child Abuse & Neglect*, 36, 271–274. <http://dx.doi.org/10.1016/j.chiabu.2011.12.001>
- Finkelhor, D., Turner, H., & Ormrod, R. (2006). Kid's stuff: The nature and impact of peer and sibling violence on younger and older children. *Child Abuse & Neglect*, 30(12), 1401–1421. <http://dx.doi.org/10.1016/j.chiabu.2006.06.006>
- Finkelhor, D., Turner, H., Ormrod, R., & Hamby, S. L. (2009). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics*, 124(5), 1411–1423. <http://dx.doi.org/10.1542/peds.2009-0467>
- Hamby, S., Finkelhor, D., Turner, H., & Ormrod, R. (2010). The overlap of witnessing partner violence with child maltreatment and other victimizations in a nationally representative survey of youth. *Child Abuse & Neglect*, 34(10), 734–741. <http://dx.doi.org/10.1016/j.chiabu.2010.03.001>
- Kramer, L., & Gottman, J. M. (1992). Becoming a sibling: "With a little help from my friends". *Developmental Psychology*, 28, 685–699. doi:0012-1649/92.

- Kramer, L., & Kowal, A. K. (2005). Sibling relationship quality from birth to adolescence: The enduring contributions of friends. *Journal of Family Psychology*, 19, 503–511. <http://dx.doi.org/10.1037/0893-3200.19.4.503>
- Magnusson, D. (2003). The person approach: Concepts, measurement models, and research strategy. *New Directions for Child and Adolescent Development*, 101, 3–23. <http://dx.doi.org/10.1002/cd.79>
- McHale, S. M., Updegraff, K. A., & Whiteman, S. D. (2012). Sibling relationships and influences in childhood and adolescence. *Journal of Marriage and Family*, 74, 913–930. <http://dx.doi.org/10.1111/j.1741-3737.2012.01011.x>
- Milot, T., Ethier, L., St. Laurent, D., & Provost, M. A. (2010). The role of trauma symptoms in the development of behavioral problems in maltreated preschoolers. *Child Abuse & Neglect*, 34, 225–234. <http://dx.doi.org/10.1177/1077559510379153>
- Patterson, G. R. (1986). The contribution of siblings to training for fighting: A microsocial analysis. In J. Block, D. Olweus, & M. Radke-Yarrow (Eds.), *Development of antisocial and prosocial behavior* (pp. 235–261). New York: Academic Press.
- Perry, D. G., Hodges, E. V. E., & Egan, S. K. (2001). Determinants of chronic victimization by peers. In J. Juvonen, & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable & victimized* (pp. 73–104). New York: Guilford Press.
- Reese-Weber, M., & Kahn, J. H. (2005). Familial predictors of sibling and romantic partner conflict resolution: Comparing late adolescents from intact and divorced families. *Journal of Adolescence*, 28, 479–493. <http://dx.doi.org/10.1016/j.adolescence.2004.09.004>
- Runyan, D., Cox, C., Dubowitz, H., Newton, R. R., Upadhyaya, M., Kotch, J. B., Leeb, R. T., Everson, M. D., & Knight, E. D. (2005). Describing maltreatment: Do child protective service reports and research definitions agree? *Child Abuse & Neglect*, 29, 461–477. <http://dx.doi.org/10.1016/j.chiabu.2004.06.015>
- Sroufe, L. A., & Fleeson, J. (1988). The coherence of family relationships. In R. A. Hinde, & J. Stevenson-Hinde (Eds.), *Relationships within families: Mutual influences* (pp. 27–47). Oxford, England: Clarendon Press.
- Stormshak, E. A., Bellanti, C. J., & Bierman, K. L. (1996). The quality of sibling relationships and the development of social competence and behavioral control in aggressive children. *Developmental Psychology*, 32(1), 79–89. <http://dx.doi.org/10.1037/0012-1649.32.1.79>
- Taylor, A. (2002). I'll call you back on my mobile: A critique of the telephone interview with adolescent boys. *Westminster Studies in Education*, 25, 19–34.
- Tucker, C. J., Finkelhor, D., Shattuck, A., & Turner, H. (2013). Prevalence and correlates of sibling victimization types. *Child Abuse & Neglect*, 37, 213–223. <http://dx.doi.org/10.1016/j.chiabu.2013.01.006>
- Tucker, C. J., Finkelhor, D., Turner, H., & Shattuck, A. (2013). Association of sibling aggression with child and adolescent mental health. *Pediatrics*, 132, 79–84. <http://dx.doi.org/10.1542/peds.2012-3801>
- Tucker, C. J., McHale, S. M., & Crouter, A. C. (2008). Links between older and younger adolescent siblings' adjustment: The moderating role of shared activities. *International Journal of Behavioral Development*, 32, 152–160. <http://dx.doi.org/10.1177/0165025407087214>
- Turner, H. A., Finkelhor, D., & Ormrod, R. (2010). Poly-victimization in a national sample of children and youth. *American Journal of Preventive Medicine*, 38(3), 323–330. <http://dx.doi.org/10.1016/j.amepre.2009.11.012>
- Turner, H. A., Finkelhor, D., Ormrod, R., & Hamby, S. L. (2010). Infant victimization in a nationally representative sample. *Pediatrics*, 126(1), 44–52. <http://dx.doi.org/10.1542/peds.2009-2526>
- Turner, H. A., Finkelhor, D., Hamby, S. L., Shattuck, A., & Ormrod, R. K. (2011). Specifying type and location of peer victimization in a national sample of children and youth. *Journal of Youth and Adolescence*, 40, 1052–1067. <http://dx.doi.org/10.1007/s10964-011-9639-5>
- Wolke, D., & Samara, M. M. (2004). Bullied by siblings: Association with peer victimization and behavior problems in Israeli lower secondary school children. *Journal of Child Psychology and Psychiatry*, 45, 1015–1029. <http://dx.doi.org/10.1111/j.1469-7610.2004.t01-1-00293.x>
- Wolke, D., & Skew, A. J. (2012). Bullying among siblings. *International Journal of Adolescent Medicine and Health*, 24, 17–25. <http://dx.doi.org/10.1515/ijamh.2012.004>