

This article was downloaded by: [. Kathleen Nader]

On: 23 November 2011, At: 12:18

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journal of Child & Adolescent Trauma

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/wcat20>

Polyvictimization in Developmental Context

David Finkelhor^a, Anne Shattuck^a, Heather A. Turner^a, Richard Ormrod^a & Sherry L. Hamby^b

^a University of New Hampshire

^b Sewanee, the University of the South

Available online: 22 Nov 2011

To cite this article: David Finkelhor, Anne Shattuck, Heather A. Turner, Richard Ormrod & Sherry L. Hamby (2011): Polyvictimization in Developmental Context, *Journal of Child & Adolescent Trauma*, 4:4, 291-300

To link to this article: <http://dx.doi.org/10.1080/19361521.2011.610432>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Polyvictimization in Developmental Context

DAVID FINKELHOR,¹ ANNE SHATTUCK,¹
HEATHER A. TURNER,¹ RICHARD ORMROD,¹
AND SHERRY L. HAMBY²

¹University of New Hampshire

²Sewanee, the University of the South

Polyvictimization (i.e., exposure to multiple forms of victimization) appears highly correlated with indicators of traumatic stress in children. In this study, a national sample of children and youth were assessed for 36 different kinds of victimization using the Juvenile Victimization Questionnaire. Polyvictims were defined as the 10% of children experiencing the most different kinds of victimization in each of 4 developmental cohorts. The younger polyvictims had somewhat fewer victimizations overall, less sexual victimization, and more victimization at the hands of family members, particularly siblings. However, polyvictimization at every developmental level was strongly associated with distress symptoms. This study suggests the importance of assessing for and identifying polyvictims at all ages, including among preschoolers.

Keywords child abuse, bullying, sexual abuse, sexual assault, exposure to violence

There is a lengthy literature on child maltreatment and trauma, much of it focused on specific categories of victimization such as sexual abuse, physical abuse, or bullying. However, many children experience several of these different victimizations (Saunders, 2003). For one thing, the sheer frequency of victimizations in childhood suggests that some of these victimizations should overlap (Nishina & Juvonen, 2005). In addition, most victimizations seem to have common correlates, like family instability or neighborhood disorder. The clustering of victimizations among some high-risk individuals is a well-established finding in victimology (Outlaw, Ruback, & Britt, 2002; Saunders, 2003).

Using an instrument designed to assess a much more comprehensive range of childhood victimizations, the Juvenile Victimization Questionnaire (JVQ), our research has shown that exposure to multiple forms of victimization is actually the norm for victimized children even over as short a period as a single year (Finkelhor, Ormrod, & Turner, 2007a). Half of a national sample of youth ages 2–17 experienced two or more different kinds of victimization in a single year, and among victims, the median number of victimizations was three.

Victimizations accumulate in childhood for a variety of reasons. There are common risk factors for different kinds of victimization, both in children's environments (families and neighborhoods) as well as in their personal and behavioral characteristics. Theory also suggests that victimizations create vulnerability for other victimizations, through

Submitted June 8, 2010; revised September 8, 2010; accepted September 8, 2010.

Address correspondence to David Finkelhor, Crimes Against Children Research Center, University of New Hampshire, 126 Horton Social Science Center, 20 Academic Way, Durham, NH 03824. E-mail: david.finkelhor@unh.edu

mechanisms such as lowered self-esteem, learned helplessness, and distorted cognitions. These links are described by researchers such as Perry, Hodges, and Egan (2001), who have posited that cognitive schemas acquired in aggressive family interactions create a vulnerability for extrafamilial victimization.

The findings about accumulating victimizations draw attention to important conceptual and methodological problems in some of the research on child maltreatment and trauma. As mentioned, most studies in this field focus on only one kind of victimization like sexual abuse, bullying, or exposure to dating violence but then do not assess how many other kinds of victimization these narrowly categorized victims have also experienced. In efforts to look at associations between victimization and trauma, this can lead to a serious overestimation of the impact of individual victimization experiences, since the trauma may be explained by the other victimizations or the combination, rather than the individual victimization (Saunders, 2003; Turner, Finkelhor, & Ormrod, 2006, 2010).

In testing this, we reported that when other victimizations were accounted for, the effect of individual victimizations declines substantially (Finkelhor et al., 2007a). Thus, even though as in many studies, our data have shown that a sexual victimization by itself is associated with psychological symptoms, when other victimizations were controlled, there was little contribution of sexual victimization alone. This would appear to imply that the polyvictimized youth were the ones with the trauma symptoms, while youth with just a single type of victimization had much less or in some cases no measureable trauma.

For these polyvictims, victimization may be better thought of as a condition rather than an event. Much of the literature on victimization impact grows out of traumatic stress theory (Finkelhor, 1988), which began with observations of rape victims (Burgess & Holmstrom, 1975). The prototypical traumatic victimization in this literature was a terrifying, unpredictable event occurring to an otherwise unsuspecting and unafflicted person. But the situation for many victimized children is not so much an individual traumatizing event but a pattern of ongoing and multiple victimizations (Clausen & Crittenden, 1991; Duncan, 1999a, 1999b; Perry et al., 2001). For such children, victimization may be better conceptualized as a condition. Assessing polyvictimization may be important for identifying this group for whom victimization has become a condition.

We have proposed the terms *polyvictim* and *polyvictimization* to flag this multiply victimized group of youth who experience so much victimization, including much serious victimization, and who manifest substantial traumatic symptomatology. Individuals with intersecting adversities and conditions have proven important to identify in other fields, such as substance abuse and mental health, where concepts such as dual diagnosis, comorbidity (Sacks, 2003), and polydrug use (Bower, 1985; Kaufman, 1977) have helped both clinicians and researchers.

Cumulative effects are relatively common in the research on stress, adversity, and psychopathology (Rutter, 1988). That is, stresses and adversities often combine and interact in important and different ways. Several mechanisms may explain such effects. For example, self-blame seems to be one important component of victimization trauma (Mannarino & Cohen, 1996). Children have a much harder time resisting this self-blame when they experience victimization from multiple sources. Another possibility is that because victimization is so common, children do not see themselves as stigmatized on this dimension, unless they are experiencing multiple sorts of victimization (Nishina & Juvonen, 2005).

An important finding from our previous work is that polyvictimization was associated with considerably more severe symptoms than repeated or chronic victimizations of the same sort (Finkelhor et al., 2007a). One interpretation could be that the generalization of self-blame or other inadequacy may be easier for children to make when victimizations

occur in more disparate contexts, in different ways and at the hands of more diverse categories of offenders.

One very widely cited example of the cumulative adversity or polyvictimization approach described here is the Adverse Childhood Experience (ACES) study (Felitti et al., 1998). This study confirmed that greater trauma is associated with greater numbers of childhood victimizations. Like a number of such approaches, however, this study cumulates victimizations from the entirety of childhood and gathers them retrospectively from adulthood recollection (or in some cases from late in adolescence). This approach has certain limitations. One is the possibility that selective recall might lead unhappy, distressed, or disadvantaged individuals to remember negative childhood experiences more readily or apply a more negative label to those experiences, creating an artificial association between distress and childhood adversity. Another limitation is the lack of perspective concerning the characteristics and mental health profiles of these individuals when assessed during childhood. Would such individuals show considerable cumulative adversity across childhood on a contemporaneous basis, or is it necessary to have the picture of their full childhood? Among other advantages, contemporary assessment would allow one to identify at-risk youth more quickly without having to wait for the completion of childhood. Such assessment might allow us to target interventions that may reduce the likelihood of long-term detrimental effects into adulthood. In the present study we look to see whether contemporary assessment of the accumulation of victimizations is effective in identifying distressed children, even at an early age.

Method

Sample

The National Survey of Children's Exposure to Violence (NatSCEV) was a telephone survey conducted from January–May 2008 on a nationally representative sample of 4,549 children ages 0–17 living in the contiguous United States. The present analysis is limited to the children ages 2 or older who comprised 4,046 participants from the entire sample. NatSCEV was designed to obtain 1-year and lifetime prevalence estimates of a wide range of childhood victimizations. Interviews with parents and youth were conducted over the phone by the employees of an experienced survey research firm.

Sample households were drawn from a nationwide sampling frame of residential telephone numbers through random digit dialing (RDD). This nationally representative cross-section yielded 3,053 of the 4,549 completed interviews. To ensure that the study included an adequate number of minority and low-income respondents for more accurate subgroup analyses, there was also an oversampling of telephone exchanges that had high concentrations of African American, Hispanic, or low-income households. This second "oversample" yielded 1,496 of the completed interviews. Sample weights were generated to correct for disproportionate sampling procedures when combining the two samples. Additional information on sampling methods and procedures has been provided elsewhere (Finkelhor, Turner, Ormrod, & Hamby, 2009).

Procedure

A short interview was conducted with an adult caregiver 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. 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.” Caregivers were interviewed as proxies for this age group because of concerns about limited language and cognitive skills of young children and their ability to be recruited and participate in phone interviews. Also, such children are still at an age when parents tend to be well informed about their day-to-day experiences.

To maximize response rate, up to 13 telephone callbacks were made initially to select and contact a respondent, and up to 25 callbacks were made to complete the interview. Respondents were promised complete confidentiality and were paid \$20 for their participation. The interviews, averaging 45 minutes in length, were conducted in both English and Spanish. Two hundred seventy-nine of the interviews with the parents were conducted in Spanish. Nearly all of the adolescents from age 10–17 chose to be interviewed in English.

Respondents who disclosed a situation of serious threat or ongoing victimization were recontacted by a clinical member of the research team who was trained in telephone crisis counseling and whose responsibility it was to stay in contact with the respondent until the situation was resolved or brought to the attention of appropriate authorities. All procedures were authorized by the Institutional Review Board of the University of New Hampshire.

Response Rates and Nonresponse Analyses

The cooperation rate (number of households contacted that actually agreed to complete the survey) for the RDD cross-section portion of this survey ($n = 3,053$) was 71%, and the response rate based on American Association for Public Opinion Research (2004) standard guidelines was 54%. The rates associated with the oversample were somewhat lower at 63% and 43%, respectively. Given background trends in survey responses, the rates associated with this survey are quite good by current standards (Babbie, 2007; Keeter, Kennedy, Dimock, Best, & Craighill, 2006). Further, several recent studies have shown no strong association between response rates and response bias (Curtin, Presser, & Singer, 2000; Groves, 2006; Keeter, Miller, Kohut, Groves, & Presser, 2000; Merkle & Edelman, 2002). Indeed, extraordinary efforts to obtain higher response rates by persuading reluctant respondents to participate may actually add bias to survey responses (Biemer, 2001; Groves & Couper, 1998).

The weighting plan for the survey was a multistage sequential process of weighting the sample to correct for study design and demographic variations in nonresponse. Weights were applied to adjust for (a) differing probabilities of household selection, including the deliberate oversampling of Black, Hispanic, and low-income respondents, (b) variations in within-household selection probability due to differing numbers of household children, and (c) differences in sample proportions by gender, age, race/ethnicity, and income relative to Census Population Projections for 2008 of each strata (United States Census Bureau, 2008).

Measurement

Polyvictimization. The NatSCEV survey utilized an enhanced version of the Juvenile Victimization Questionnaire (JVQ), an inventory of childhood victimization (Finkelhor, Hamby, Ormrod, & Turner, 2005; Finkelhor, Ormrod, Turner, & Hamby, 2005a; Hamby, Finkelhor, Ormrod, & Turner, 2004). The enhanced JVQ obtains reports on 48 specific forms of youth victimization covering five general areas of interest: (a) conventional crime, (b) maltreatment, (c) victimization by peer and siblings, (d) sexual victimization, and

(e) witnessing and exposure to violence (Finkelhor, Ormrod, Turner, & Hamby, 2005b). A measure of past-year victimizations was constructed for each child using a subset of 36 out of the 48 victimization items by summing the number of different types of victimizations in this subset that the child had been exposed to in the previous year.

Examples of individual items include robbery, assault with a weapon, peer or sibling assault, neglect by caregiver, bullying, sexual assault, sexual harassment, living in an area with shooting or other violence, and witnessing or exposure to family violence, among others. Specific wording for all of the JVQ victimization screeners is available elsewhere (Finkelhor et al., 2009, Appendix 1).

The present analysis was limited to victimizations that occurred in the past year. A measure of past-year victimizations was constructed for each child by summing the number of different types of victimizations that the child had been exposed to in the previous year out of a total of 36 possible types. Children who had been exposed to particularly large numbers of different kinds of victimizations were designated as polyvictims. These polyvictims comprised the approximately 10% of children in each of the four age groups who had experienced the highest numbers of victimizations. Since the total number of victimization types that children are exposed to tends to increase with age, the threshold for polyvictimization varied by age group. For 2- to 5-year-olds, polyvictims had experienced five or more kinds of victimizations in the past year. Among 6- to 9-year-olds, the number was six or more; 10- to 13-year-olds, seven or more; and 14- to 17-year-olds, eight or more.

Aggregate Victimization Types. Individual victimization screeners in NatSCEV represent variations on several general classes of victimizations. For this study, screeners were grouped into seven general classes in order to assess the mix of victimization types experienced by developmental stage. The seven aggregate victimization types were: (a) physical assault, (b) property crime, (c) maltreatment, (d) bullying, (e) sexual victimization, (f) witnessing family violence, and (g) exposure to community violence.

Demographics. Child and household characteristics were collected during the initial parent interview. Measures used in this study included the child's sex, age (four groups: 2–5, 6–9, 10–13, or 14–17), race and Hispanic ethnicity (four groups: White, non-Hispanic; Black, non-Hispanic; other race, non-Hispanic; and Hispanic, any race), and socioeconomic status (SES) based on household income and parent education. Also used was a measure of the child's family structure, which assigned the child to one of four categories based on the relationship of adults with whom he or she lived: (a) two biological or adoptive parents, (b) one parent and a stepparent or unmarried partner, (c) one single parent, or (d) another adult including foster parents.

Family Adversity. Respondents were asked a series of questions to determine whether they or their families had experienced certain adverse life events in the past year. "Yes" responses to any of the 15 adversity items were summed to obtain a total score of past-year adversity for each child. Some examples of adversity items include serious illness of the child or his or her parent, experiencing a natural disaster, being homeless, or having a parent lose a job.

Trauma Symptoms. The NatSCEV survey includes shortened versions of the anger, depression, anxiety, and dissociation scales of two closely related measures: the Trauma Symptoms Checklist for Children (TSCC; Briere, 1996), which was used in the self-report interviews of 10- to 17-year-olds, and the Trauma Symptom Checklist for Young

Children (TSCYC; Briere et al., 2001), which was used in the caregiver interviews for 2- to 9-year-olds. Respondents were asked to indicate how often they (or their children) had experienced each symptom within the past month. An aggregate trauma symptom score for each age group (2- to 9-year-olds and 10- to 17-year-olds) was created by summing all item responses for the three scales. A unified trauma symptom score for all children in the sample was then constructed by merging the standardized trauma scores for each age group. The TSCC and TSCYC have shown very good reliability and validity in both population-based and clinical samples (Briere, 1996; Briere et al., 2001). In this study, the alpha coefficient was .93 for the TSCC and .86 for the TSCYC.

Data Analysis

The goals of this analysis were to assess the characteristics of past-year polyvictims by developmental stage and to determine if the victimization profiles of polyvictims differed by developmental stage. Chi-square tests, one-way analysis of variance, and *t* tests were used to compare developmental groups on demographic characteristics, trauma symptom scores, rates of polyvictimization by demographic group, and the mix of aggregate victimization types by age group. Analysis of covariance and ordinary least squares regression were used to evaluate the relationship between number of victimizations, past-year adversity, and demographic characteristics and the dependent variable of trauma symptom scores.

Results

We identified the most victimized children (the polyvictims) in each of four developmental groups (2–5, 6–9, 10–13, and 14–17) as the top 10% of the distribution in each group with the most different kinds of victimization in the past year. Because older children have somewhat more victimizations, this meant that the threshold for polyvictims was five or more for the 2- to 5-year-olds, six or more for 6- to 9-year-olds, seven or more for 10- to 13-year-olds, and eight or more for 14- to 17-year-olds.

The polyvictimization profiles for the four developmental groups differed somewhat (see Table 1). A substantially larger portion of the victimizations for the 2- to 5-year-olds (73%) and 6- to 9-year-olds (55%) was comprised of family member perpetrators, compared to 10- to 13-year-olds (32%) or 14- to 17-year-olds (30%). Somewhat more of the perpetrators against both the youngest and oldest groups were adults compared to the 6- to 9-year-olds. Older polyvictims had more physical assaults, sexual victimizations, and exposure to community violence. However, 14- to 17-year-old polyvictims had less bullying.

There were also some demographic differences among the polyvictims from the different age groups (see Table 2). The gender proportions were similar across all age groups; however, Black 10- to 13-year-olds had particularly elevated rates, and 14- to 17-year-old polyvictims had significantly lower SES. Polyvictim rates were generally lowest for children living with two biological parents. This was true for all age groups, and none of the differences between groups were significant.

Polyvictim children in all four age groups had high levels of other adversities such as illnesses, accidents, and family problems. The absolute level of additional adversities in the past year, however, was higher for the older two groups (2.46 and 2.57 for 10- to 13-year-olds and 14- to 17-year-olds, respectively) than the younger two groups (1.58 and 1.49 for the 2- to 5-year-olds and 6- to 9-year-olds). The association of polyvictimization

Table 1
Victimization profile of past-year polyvictims by age group

(n)	2 to 5 (93)	6 to 9 (71)	10 to 13 (85)	14 to 17 (119)
Polyvictim threshold (# past-year screeners)	5	6	7	8
Mean percentage of past-year victimizations by family perpetrator	73 ^{b,c,d}	55 ^{c,d}	32	30
Mean percentage of past-year victimizations by adult perpetrator	31 ^b	19 ^d	24	35
Percent of polyvictims experiencing any victimization type in past year:				
Any physical assault	54 ^{c,d}	66 ^{c,d}	85	86
Any property crime	77	90	85	90
Any maltreatment	43	34	52	55
Any bullying	74	88 ^d	77 ^d	57
Any sexual victimization	5 ^{c,d}	12 ^{c,d}	41	55
Any witnessing family violence	47	42	45	52
Any exposure to community violence	64 ^{c,d}	62 ^{c,d}	90	85

Note. Group differences, $p < .05$.

^aDiffers from 2–5. ^bDiffers from 6–9. ^cDiffers from 10–13. ^dDiffers from 14–17.

with trauma symptoms was strong for all four groups in bivariate as well as in multivariate analyses, controlling for gender, ethnicity, family structure, SES, and other adversities. The standardized betas for polyvictimization were .48 for 2- to 5-year-olds, .40 for the 6- to 9-year-olds, .48 for the 10- to 13-year-olds, and .43 for the 14- to 17-year-olds (all significant $p < .001$).

Discussion

The results of this study suggest that groups of children with high-victimization rates can be identified across the spectrum of childhood from age 2 to age 17, and that, although the numbers are lower and the assortment of victimization types is somewhat different for younger children, the key dynamics are similar for all age groups. The highly victimized children in each age group are considerably more likely to be distressed and have higher levels of other adversities.

Older polyvictim children are exposed to more victimizations overall, more sexual victimizations, and more victimizations at the hands of nonfamily members as they move out into the world. However, younger polyvictim children or those in the equivalent upper range of the victimization distribution for their age group are just as distressed. High levels of victimization predict distress for all age groups.

Some might have predicted that younger children would be less affected by victimization, because more of their victimizations include bullying and sibling assaults at the hands of equivalently young children, episodes that parents and school officials tend to view as less serious. But the findings here are not consistent with such a supposition. A question we cannot answer in this study, however, is whether younger children may be better able to escape continuing high levels of victimization. In earlier studies, polyvictimization was shown to have considerable stability, with over half of polyvictims in one year continuing

Table 2
Past-Year polyvictimization by demographic characteristics by age group

(n)	% Polyvictims			
	2 to 5 (1047)	6 to 9 (904)	10 to 13 (920)	14 to 17 (1175)
Percent of all children in each group who are polyvictims				
Male	11	8	10	10
Female	10	8	9	9
Race and ethnicity				
White, non-Hispanic	12	10	8	8
Black, non-Hispanic	14	7	19 ^a	15
Other race, non-Hispanic	10	5	13	10
Hispanic, any race	5	5	4	10
Socioeconomic status*				
Low	12	7	9	10
Average	11	8	11	11
High	8	9	3	4
Household parent structure				
Two parents	7	7	7	6
Parent and stepparent or unmarried partner	17	11	10	16
Single parent	17	9	13	14
Other adult	24	13	16	13

*Low: 1 or more standard deviation below sample mean SES; Average: within 1 standard deviation of mean SES; High: 1 or more standard deviation above mean.

^aDiffers from 6–9, $p < .05$.

to polyvictimization in a second or third year (Finkelhor, Ormrod, & Turner, 2007b). This would suggest that a considerable portion of the younger polyvictims will continue to be polyvictims as they get older. This is likely to be true even if it is easier for younger polyvictims to escape from this condition.

Whatever the trajectory, however, there is good justification based on these data to identify and intervene with polyvictims at a young age. This highly victimized group has both substantial distress and higher levels of other adversity. They would appear to be in need of mental health services to deal with distress as well as to help develop skills to protect themselves from additional victimization. If early polyvictimization does tend to persist across developmental stages, intervention at this early stage may be a good strategy for protecting children from later victimization as well.

Acknowledgment

For the purposes of compliance with Section 507 of PL 104-208 (the “Stevens Amendment”), readers are advised that 100% of the funds for this program are derived from federal sources (this project was supported by Grant Nos. 2006-JW-BX-0003 and 2009-JW-BX-0018 awarded by the Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, U.S. Department of

Justice). The total amount of federal funding involved is \$2,848,809. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

References

- American Association for Public Opinion Research. (2004). *Standard definitions: Final dispositions of case codes and outcome rates for surveys* (3rd ed.). Lenexa, KS: Author.
- Babbie, E. (2007). *The practice of social research* (11th ed.). Belmont, CA: Wadsworth.
- Biemer, P. P. (2001). Nonresponse bias and measurement bias in a comparison of face to face and telephone interviewing. *Journal of Official Statistics*, 17, 295–320.
- Bower, B. (1985). Multiple drug use: A dangerous trend. *Science News*, 128(1), 6.
- Briere, J. (1996). *Trauma Symptoms Checklist for Children (TSCC): Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Briere, J., Johnson, K., Bissada, A., Damon, L., Crouch, J., Gil, E., et al. (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.
- Burgess, A. W., & Holmstrom, L. L. (1975). *Rape: Victims of crisis*. Bowie, MD: R. J. Brady.
- Clausen, A. H., & Crittenden, P. M. (1991). Physical and psychological maltreatment: Relations among types of maltreatment. *Child Abuse & Neglect*, 15, 5–18.
- Curtin, R., Presser, S., & Singer, E. (2000). The effects of response rate changes on the index of consumer sentiment. *Public Opinion Quarterly*, 64, 413–428.
- Duncan, R. D. (1999a). Maltreatment by parents and peers: The relationship between child abuse, bully victimization, and psychological distress. *Child Maltreatment*, 4, 45–55.
- Duncan, R. D. (1999b). Peer and sibling aggression: An investigation of intra- and extra-familial bullying. *Journal of Interpersonal Violence*, 14, 871–886.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventative Medicine*, 14(4), 245–258.
- Finkelhor, D. (1988). The trauma of child sexual abuse: Two models. In G. Wyatt & G. J. Powell (Eds.), *The lasting effects of child sexual abuse* (pp. 61–82). Newbury Park, CA: Sage Publications.
- Finkelhor, D., Hamby, S. L., Ormrod, R. K., & Turner, H. A. (2005). The JVQ: Reliability, validity, and national norms. *Child Abuse & Neglect*, 29(4), 383–412.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007a). Polyvictimization: A neglected component in child victimization trauma. *Child Abuse & Neglect*, 31, 7–26.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007b). Revictimization patterns in a national longitudinal sample of children and youth. *Child Abuse & Neglect*, 31(5), 479–502.
- Finkelhor, D., Ormrod, R. K., Turner, H. A., & Hamby, S. L. (2005a). Measuring polyvictimization using the JVQ. *Child Abuse & Neglect*, 29(11), 1297–1312.
- Finkelhor, D., Ormrod, R. K., Turner, H. A., & Hamby, S. L. (2005b). The victimization of children and youth: A comprehensive, national survey. *Child Maltreatment*, 10(1), 5–25.
- Finkelhor, D., Turner, H. A., Ormrod, R., & Hamby, S. L. (2009). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics*, 124(5), 1–13.
- Groves, R. M. (2006). Nonresponse rates and nonresponse bias in household surveys. *Public Opinion Quarterly*, 70(5), 646–675.
- Groves, R. M., & Couper, M. P. (1998). *Nonresponse in household surveys*. New York: John Wiley and Sons.
- Hamby, S. L., Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2004). *The Juvenile Victimization Questionnaire (JVQ): Administration and scoring manual*. Durham, NH: Crimes Against Children Research Center.

- Kaufman, E. (1977). Polydrug abuse or multidrug misuse: It's here to stay. *British Journal of Addiction*, 72(4), 339–348.
- Keeter, S., Kennedy, C., Dimock, M., Best, J., & Craighill, P. (2006). Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey. *Public Opinion Quarterly*, 70(5), 759–779.
- Keeter, S., Miller, C., Kohut, A., Groves, R. M., & Presser, S. (2000). Consequences of reducing nonresponse in a national telephone survey. *Public Opinion Quarterly*, 64, 125–148.
- Mannarino, A. P., & Cohen, J. A. (1996). Abuse-related attributions and perceptions, general attributions, and locus of control in sexually abused girls. *Journal of Interpersonal Violence*, 11(2), 162–180.
- Merkle, D., & Edelman, M. (2002). Nonresponse in exit polls: A comprehensive analysis. In R. M. Groves, D. A. Dillman, J. L. Eltinge, & R. J. A. Little (Eds.), *Survey nonresponse* (pp. 343–358). New York: Wiley.
- Nishina, A., & Juvonen, J. (2005). Daily reports of witnessing and experiencing peer harassment in middle school. *Child Development*, 76(2), 435–450.
- Outlaw, M., Ruback, B., & Britt, C. (2002). Repeat and multiple victimizations: The role of individual and contextual factors. *Violence and Victims*, 17(2), 187–204.
- Perry, D. G., Hodges, E. V. E., & Egan, S. K. (2001). Determinants of chronic victimization by peers: A review and new model of family influence. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 73–104). New York: Guilford Press.
- Rutter, M. (1988). Epidemiological approaches to developmental psychopathology. *Archives of General Psychiatry*, 45, 486–495.
- Sacks, S. (2003). Co-occurring substance use and mental disorders in offenders: Approaches, findings, and recommendations. *Federal Probation*, 67(2), 32–40.
- Saunders, B. E. (2003). Understanding children exposed to violence: Toward an integration of overlapping fields. *Journal of Interpersonal Violence*, 18(4), 356–376.
- Turner, H. A., Finkelhor, D., & Ormrod, R. K. (2006). The effects of lifetime victimization on the mental health of children & adolescents. *Social Science & Medicine*, 62(1), 13–27.
- Turner, H. A., Finkelhor, D., & Ormrod, R. K. (2010). Poly-victimization in a national sample of children & youth. *American Journal of Preventive Medicine*, 38(3), 323–330.
- United States Census Bureau. (2008). *2008 national population projections*. Retrieved from <http://www.census.gov/population/www/projections/2008projections.html>