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The Lifetime Prevalence of Child Sexual Abuse and Sexual Assault Assessed in Late Adolescence

 David Finkelhor, Ph.D.^{a,*}, Anne Shattuck, M.A.^a, Heather A. Turner, Ph.D.^a, and Sherry L. Hamby, Ph.D.^b
^aCrimes against Children Research Center, University of New Hampshire, Durham, New Hampshire^bLife Paths Research Program, Department of Psychology, Sewanee, The University of the South, Sewanee, Tennessee

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 A B S T R A C T

Purpose: To estimate the likelihood that a recent cohort of children would be exposed to sexual abuse and sexual assault by age 17 in the United States.

Methods: This analysis draws on three very similarly designed national telephone surveys of youth in 2003, 2008, and 2011, resulting in a pooled sample of 708 17-year-olds, 781 15-year-olds, and 804 16-year-olds.

Results: The lifetime experience of 17-year-olds with sexual abuse and sexual assault was 26.6% (95% confidence interval [CI] 19.8–33.5) for girls and 5.1% (95% CI 2.6–7.6) for boys. The lifetime experience with sexual abuse and sexual assault at the hands of adult perpetrators exclusively was 11.2% (95% CI 6.4–16.1) for females and 1.9% (95% CI .5–3.4) for males. For females, considerable risk for sexual abuse and assault was concentrated in late adolescence, as the rate rose from 16.8% (95% CI 11.5–22.2) for 15-year-old females to 26.6% (95% CI 19.8–33.5) for 17-year-old females. For males, it rose from 4.3% (95% CI 1.9–6.8) at 15 years to 5.1% (2.6–7.6) at 17 years.

Conclusions: Self-report surveys in late adolescence reveal high rates of lifetime experience with sexual abuse and sexual assault at the hands of both adults and peers. Because of high continuing victimization during the late teen years, assessments are most complete when conducted among the oldest youth.

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 IMPLICATIONS AND CONTRIBUTION

Epidemiologists' efforts to accurately track the rate of lifetime sexual abuse and assault in childhood through population surveys need to include the full inventory for 17-year-olds, break down findings between juvenile and adult perpetrators, and make clear when they are including both kinds of perpetrators in their definition of sexual abuse.

One of the most durable and widely cited statistics in publications about child maltreatment is the likelihood that a child will be sexually abused in the course of their childhood. A commonly cited statistic is "one in 4 girls and one in 6 boys" [1]. The better efforts to arrive at some scientific consensus on this estimate have used meta-analyses such as those by Bolen and

Scannapieco [2] (20% for girls and 7% for boys) or Gorey and Leslie [3] (12%–17% for girls and 5%–8% for boys) for the United States and for the international scene by Stoltenborgh et al. [4] (18.0% for girls and 7.6% for boys) and Pereda et al. [5] (19.7% for girls and 7.9% for boys).

These estimates are mostly based on studies of adult retrospective accounts of childhood experiences, meaning that they are recollections of events that happened many years earlier.

However, in recent years, to make estimates more contemporary, studies have turned to youth surveys, as summarized in the meta-analysis by Barth et al. [6] (15% for girls and 8% for boys). These studies have generally still measured lifetime (as opposed to past year) experience but have promoted their estimates as more up-to-date. The studies have succeeded in gaining

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* Address correspondence to: David Finkelhor, Ph.D., Crimes against Children Research Center, University of New Hampshire, 126 Horton Social Science Center, 20 Academic Way, Durham, NH 03824.

E-mail address: david.finkelhor@unh.edu (D. Finkelhor).

disclosures from large numbers of youth, but because the samples are typically composed of youth with mixed ages from 14 to 17 years, these are not strictly measures of exposures for an entire childhood. Adolescence is a time when considerable numbers of sexual assaults occur [7], so lifetime experience estimates may vary considerably depending on the actual age of the youth in a sample. It is sometimes thought that much of the adolescent exposure consists of dating violence and peer sexual assaults [8,9], so that perhaps childhood estimates of adult-perpetrated abuse would be fully captured even in samples of mixed-age older youth. But some studies suggest that adult-perpetrated abuse continues at high rates throughout all of adolescence [10].

This points, as well, to a terminological ambiguity that exists in the field that has often not been addressed in the epidemiology literature. “Sexual abuse” in the child protection context often refers primarily to sexual acts by older caregivers and adults [11]. But population surveys and meta-analyses using the term “sexual abuse” have generally reported rates that include large numbers of offenses at the hands of same age peers. It is not clear whether consumers of these statistics from population surveys are aware that they generally amalgamate what is thought of as sexual abuse in the narrow child protection sense with what might more typically be labeled sexual assault.

We have data that casts light on these issues. In recent years, we have calculated and published findings from three studies with lifetime estimates for childhood sexual abuse and assault [12–14], but these reports did not focus exclusively on the older youth in the cohort, in part because the sample sizes for older youth were small, leading to estimates with broad confidence intervals (CIs). However, because all three studies used the same instrument and similar sampling methodologies, we are able to combine them to calculate a more contemporary lifetime estimate for older youth at single-year intervals that is based on a larger sample. The three surveys also collected information on whether the perpetrators were juveniles or adults. Thus the goal of this report is to present and compare national lifetime estimates of sexual abuse and sexual assault for youth aged 15, 16, and 17 years and also to present and compare rates of offenses at the hands of adults and juveniles. The findings will create the most contemporary estimates of sexual abuse and assault in childhood that are currently available for the United States.

Methods

Participants

This analysis draws on three very similarly designed national telephone surveys: the Developmental Victimization Survey (2003) [12] and the National Survey of Children Exposed to Violence I (NatSCEV I) (2008) [13] and II (2011) [14]. The primary foundation of the design for all three studies was a nationwide sampling frame of residential telephone numbers from which a sample of telephone households was drawn by random digit dialing. All regions and geographical settings had an equal chance of representation. NatSCEV I was supplemented with oversamples of households in areas with high concentrations of minorities and low-income families. NatSCEV II was supplemented with two additional samples (a random digit dialing of cell phones and an address-based sample) to represent the growing number of households that rely entirely or mostly on cell phones. NatSCEV I and II had information on children aged

1 month through 17 years, and Developmental Victimization Survey had information on children aged 2–17 years. For this study, we focused on youth aged 15–17 years. The sample sizes for this age range were 415 in 2003, 913 in 2008, and 965 in 2011, yielding a pooled sample of 2,293 15- to 17-year-olds. The age breakdown for this pooled sample is 781 15-year-olds, 804 16-year-olds, and 708 17-year-olds.

Procedure

In all three surveys, a short interview was conducted with an adult caregiver (usually a parent) to obtain family demographic information. One child was then 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, as all respondents in this analysis were, the main telephone interview was conducted with the child. Respondents were promised complete confidentiality and were paid \$20 for their participation. 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 appropriately addressed locally. Human subject participation was reviewed and approved by the University of New Hampshire Institutional Review Board.

Measurement

In each survey, demographic information was obtained in the initial parent interview, including the child’s gender and age (in years). Victimization information was obtained in the youth interview. All three surveys used versions of the Juvenile Victimization Questionnaire, an inventory of childhood victimization described in detail elsewhere [15]. The three versions of the Juvenile Victimization Questionnaire were slightly different because victimization questions were added and deleted over time. However, nearly all questions common to the three versions retained identical wording over time, and items were asked in the same order in all three surveys. For this analysis, we used four sexual assault questions common to all three surveys. If a child responded “yes” to any of the questions, he or she was asked follow-up questions to gather information about perpetrator, injury, and penetration. The four items were as follows:

- S1 At any time in your life, did a *grown-up you know* touch your private parts when they should not have or make you touch their private parts? Or did a *grown-up you know* force you to have sex?
- S2 At any time in your life, did a *grown-up you did not know* touch your private parts when they should not have, make you touch their private parts, or force you to have sex?
- S3 Now think about other kids, like from school, a boy friend or girl friend, or even a brother or sister. At any time in your life, did another child or teen make you do sexual things?
- S4 At any time in your life, did anyone TRY to force you to have sex, that is sexual intercourse of any kind, even if it did not happen?

These questions and their follow-up information were used to create variables for the seven categories listed in Table 1. To make clear that these include offenses at the hands of both adults (18 years and older) and juveniles (17 years and younger) who

Table 1

Percent of 15-, 16-, and 17-year-olds experiencing any lifetime sexual abuse/assault by perpetrator type and victim gender

N = 2,293	Age (years)		
	15 (n = 781) ^a	16 (n = 804) ^b	17 (n = 708) ^c
Sexual abuse/assault type			
Percent experiencing (95% CI)			
All perpetrators			
Females	16.8 ^c (11.5–22.2)	21.7 (16.3–27.0)	26.6 ^a (19.8–33.5)
Males	4.3 (1.9–6.8)	3.3 (1.6–5.0)	5.1 (2.6–7.6)
Adult perpetrator			
Females	6.1 (2.6–9.6)	7.7 (4.0–11.5)	11.2 (6.4–16.1)
Males	1.0 (–.4 to 2.5)	.6 (0–1.2)	1.9 (.5–3.4)
Juvenile perpetrator			
Females	12.1 (7.5–16.6)	13.4 (9.0–17.7)	17.8 (11.4–24.3)
Males	3.3 (1.3–5.3)	2.6 (1.1–4.2)	3.1 (1.3–4.9)
Family perpetrator			
Females	3.3 (.2–6.4)	2.3 (.6–4.1)	5.5 (2.25–8.7)
Males	.0	.4 (–.1 to 1.0)	.6 (–.2 to 1.4)
Acquaintance perpetrator			
Females	14.2 (9.2–19.2)	15.4 (10.7–20.0)	19.6 (13.1–26.1)
Males	2.3 (.6–4.0)	1.8 (.6–3.1)	3.1 (1.3–5.0)
Stranger perpetrator			
Females	.6 (.2–1.5)	2.3 (.1–4.6)	3.0 (.3–5.6)
Males	.7 (–.7 to 2.1)	.3 (–.1 to .1)	1.4 (.1–2.7)
With Penetration			
Females	2.4 (.9–3.9)	4.8 (1.8–7.7)	6.1 (2.3–9.9)
Males	.7 (–.1 to 1.6)	.4 (–.2 to .9)	.6 (–.3 to 1.0)

Estimates are weighted. Sample sizes are unweighted. Estimates with a superscript differ significantly from the estimate located in the column labeled with that superscript letter ($p < .05$).

may be peers, we are labeling this as “sexual abuse/assault.” Sexual abuse/assault encompasses forced and unwanted contact sexual acts with anyone including inappropriate contact sexual acts with adults. Only offenses occurring to victims before age 18 were counted, since this is the general demarcation for childhood in child welfare practice as well as in the epidemiology field. Family offenders comprise immediate and extended family members including uncles, cousins, and grandparents. Acquaintance perpetrator refers to anyone who was not categorized by the respondent as a stranger or family member. Juvenile perpetrator refers to offenders who were also under 18 and adult perpetrators refer to offenders who were 18 and older.

Weighting

Each sample had weights that were used to make the sample nationally representative of the sampled population in the year in which the survey was conducted by correcting for sample-population differences in race/ethnicity, age, and household income and for differential probability of selection within households. These weights were combined into a single variable in the pooled data set, and this variable was used to weigh the pooled analyses.

Results

Table 1 lists lifetime estimates for contact sexual abuse/assault for the 15-, 16-, and 17-year-olds from three combined national samples in 2003, 2008, and 2011.

The lifetime rate increased for each additional year of experience among this older youth cohort. So the experience of any sexual abuse/assault among females rose from 16.8% (95% CI

11.5–22.2) for 15-year-olds to 21.7% (95% CI 16.3–27.0) for 16-year-olds to 26.6% (95% CI 19.8–33.5) for 17-year-olds. For males, it rose from 4.3% (95% CI 1.9–6.8) at 15 years to 5.1% (95% CI 2.6–7.6) at 17 years (Figure 1). These increases by age occurred for almost every kind of abuse/assault—by adults, peers, family, acquaintances, and strangers. The increases with age strongly suggest that only the estimates from the 17-year-olds represent a nearly full childhood inventory, especially for girls.

For the 17-year-old females, the lifetime rate of sexual abuse/assault by adult perpetrators alone was 11.2% (95% CI 6.4–16.1), and for males 1.9% (95% CI .5–3.4). The lifetime rate of sexual abuse/assault for 17-year-old females by juvenile perpetrators alone was 17.8% (95% CI 11.4–24.3), and for males 3.1% (95% CI 1.3–4.9).

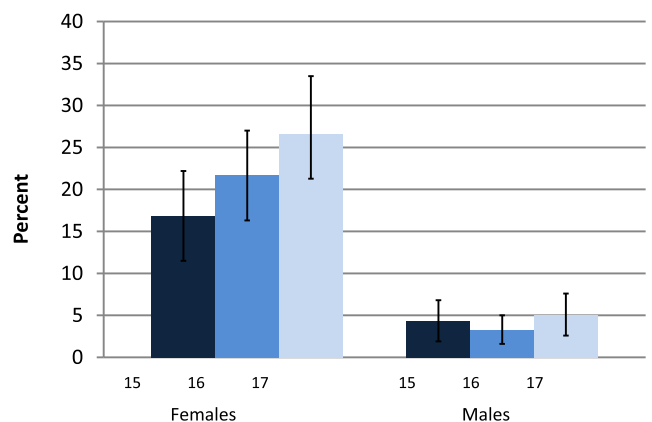
The breakdown by family, acquaintance, and stranger is also listed in Table 1. For 17-year-old females, the lifetime rate by family perpetrators was 5.5% (95% CI 2.3–8.7), acquaintances 19.6% (95% CI 13.1–26.1), and strangers 3.0% (95% CI .3–5.6).

The lifetime rate of sexual abuse/assault involving penetration was 6.1% (95% CI 2.3–9.9) for 17-year-old females and quite low for males (the CI includes 0).

Discussion

For those seeking an estimate of exposure for a recent cohort of young people to sexual abuse and sexual assault over the course of childhood, the findings here suggest that it is likely to be undercounted in a sample of mixed-age older youth. Given the rise with each additional year from 15 to 17, it would be best to base estimates on youth at the very end of childhood, which in this sample would be the 17-year-olds for whom this analysis provided an estimate of 26.6% for females and 5.1% for males or approximately 1 in 4 girls and 1 in 20 boys. The strength of this estimate is that it was based on a national sample and a four-question screener set that asked about a specific and diverse set of possible perpetrators.

However, even these 17-year-olds may experience some additional victimizations before they finish childhood. Moreover, there is a fairly large CI around the estimates with the true figure falling between 19.8% and 33.5% for females and 2.6% and 7.6% for males. A more complete and accurate lifetime estimate should probably be based on a large sample of 18-year-olds.



Note: Error bars show 95% confidence intervals of estimates.

Figure 1. Percent of 15- to 17-year-olds experiencing any lifetime child sexual abuse/assault by gender and age.

Despite the large CIs and the possibility of incomplete counting, the findings confirm the enormous exposure of young people to the experience of sexual abuse and assault in childhood. They also demonstrate that sexual abuse/assault, even at the hands of adults, continues at a high rate toward the end of adolescence.

An additional important point is made from the analysis of rates in this study broken down by perpetrator type. Estimates from studies of this sort are often cited as the lifetime prevalence of “child sexual abuse.” But this can be misleading. For many policy makers and members of the public in general, child sexual abuse connotes sexual offenses at the hands of an adult. But adult perpetrators in many such surveys do not even comprise the majority of episodes. In this study, the lifetime rate for adult perpetrator was 11.2% for 17-year-old girls and 1.9% for 17-year-old boys.

What this means is that over half of the total estimate of offenses included in the larger total estimate (1 in 4 girls and 1 in 20 boys) was at the hands of juvenile perpetrators, many of them acquaintance peers. Some members of the public and policy makers are surprised to hear that these are being counted as “sexual abuse.”

Possible confusion about how the problem is being defined suggests at least two conventions that might be useful in clarifying the dimensions of the problem in public discourse. One is that the total, when peer victimization is included, should be referred to as “childhood sexual abuse and assault,” making it clearer that the count includes more than just “sexual abuse” in the conservative child welfare sense. More important, however, may be the need to generally include alongside the total rate the specific rate of actual sexual abuse at the hands of adults. Based on this analysis, that rate of lifetime sexual abuse/assault at the hands of adults is 1 in 9 girls and 1 in 53 boys.

Three limitations apply to these findings. It is virtually certain that this and any assessment of sexual abuse/assault based on self-report will be incomplete because some offenses will not be remembered (forgotten as minor, or not understood as assaults, or occurring prior to memory consolidation). Some will not be disclosed because of discomfort or shame. Studies show that a considerable number of responders who disclose an episode at one assessment will fail to disclose at a subsequent assessment and vice versa [16,17].

Second, the study amalgamated three nationally representative surveys that used slightly different designs, in part to accommodate changes in the usage of cell phones and in part to obtain an oversample of some population segments. Although the literature does not suggest that this procedure, when properly accounted for by weighting as we did, should introduce any biases, it is possible that some bias does exist.

Third, it should also be considered that the data included in this analysis span the years 2003–2010. During this time period, some surveys such as the National Crime Victimization Survey showed a decline in sexual assault based on annual prevalence comparisons [7,18]. Our data do show significant declines in annual prevalence from 2003 to 2011 but detect no significant decline in lifetime rates for females, although there was a lifetime decline for males [19]. Such declines mean that while the estimate in the paper is valid for the period 2003–2010, it may be an overestimate for 2010 alone.

Some readers may see a contradiction between declines in sexual abuse/assault reported elsewhere [18], and the fact that the results from this analysis (one in four girls) seem nearly

identical to what has been cited frequently in the past from older studies and meta-analyses [3]. But such a comparison is not the best basis for drawing conclusions about trends. Trends are much better and more sensitively assessed on the basis of annual prevalence and from surveillance systems that use equivalent questions, samples, or measurement strategies over a period of years. These approaches do show declines in sexual abuse/assault to girls, using different data sets, reported cases [18,20], cases known to professionals [21], and victim surveys [18,22].

The experience of sexual abuse/assault in childhood and adolescence is very prevalent. This study confirms findings of many others that it affects considerable proportions of the youth population and especially teens. Nonetheless, care needs to be taken in conducting epidemiology about the problem. Lifetime prevalence should be assessed with children who have finished childhood. Distinctions need to be made between rates that include or exclude offenses by other children. Continuing efforts to improve such epidemiology are crucial to developing policy and practice to reduce the toll of this trauma.

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